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# Cover Page

**Order ID :** P3429

**Project ID :** Former Schlumberger Site Princeton NJ

**Client :** JACOBS Engineering Group, Inc.

| Lab Sample Number | Client Sample Number |
|---|---|
| P3429-01 | 926-K1-WS-073124 |
| P3429-02 | 931-K1-WS-073124 |
| P3429-03 | 925-K1-WS-073124 |
| P3429-04 | TB-01-073124 |

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

Signature : _____

Date: 8/15/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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# CASE NARRATIVE

**JACOBS Engineering Group, Inc.**
**Project Name: Former Schlumberger Site Princeton NJ**
**Project # N/A**
**Chemtech Project # P3429**
**Test Name: VOCMS Group6**

**A. Number of Samples and Date of Receipt:**
4 Water samples were received on 07/31/2024.

**B. Parameters**
According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, SVOC-SIMGroup1, SVOCMS Group3, SVOCMS Group6 and VOCMS Group6. This data package contains results for VOCMS Group6.

**C. Analytical Techniques:**
The analysis performed on instrument MSVOA_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868.The analysis of VOCMS Group6 was based on method 8260D.

**D. QA/ QC Samples:**
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

Sample 925-K1-WS-073124 was diluted due to high concentration.

**E. Additional Comments:**
Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount

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for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

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

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

Signature_____

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# DATA REPORTING QUALIFIERS- ORGANIC

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

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

# ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

## GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: P3429 MATRIX: Water

METHOD: 8260D

| | | NA | NO | YES |
|---|---|---|---|---|
| 1. | Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks) | | | ✓ |
| 2. | GC/MS Tuning Specifications<br>BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ) | | | ✓ |
| 3. | GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series. | | | ✓ |
| 4. | GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series. | | | ✓ |
| 5. | GC/MS Calibration Requirements. | | | ✓ |
| | The Initial Calibration met the requirements . | | | |
| | The Continuous Calibration met the requirements . | | | |
| 6. | Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 7. | Surrogate Recoveries Meet Criteria | | | ✓ |
| | If not met, list those compounds and their recoveries which fall outside the acceptable ranges. | | | |
| 8. | Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria | | | ✓ |
| | If not met, list those compounds and their recoveries which fall outside the acceptable range. | | | |
| | The Blank Spike met requirements for all samples . | | | |
| | The Blank Spike Duplicate met requirements for all samples . | | | |
| 9. | Internal Standard Area/Retention Time Shift Meet Criteria | | | ✓ |
| | Comments: | | | |
| 10. | Analysis Holding Time Met | | | ✓ |
| | If not met, list number of days exceeded for each sample: | | | |

**GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)**

NA NO YES

ADDITIONAL COMMENTS:

Sample 925-K1-WS-073124 was diluted due to high concentration.

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

_____ _____

QA REVIEW Date

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**APPENDIX A**

**QA REVIEW GENERAL DOCUMENTATION**

**Project #: P3429**

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

**1st Level QA Review Signature:** SOHIL JODHANI **Date:** 08/15/2024

**2nd Level QA Review Signature:** _____ **Date:** _____

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# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | P3429 | **OrderDate:** | 7/31/2024 4:38:00 PM |
| **Client:** | JACOBS Engineering Group, Inc. | **Project:** | Former Schlumberger Site Princeton NJ |
| **Contact:** | Mary I. Murphy | **Location:** | D31,VOA Ref. #3 Water |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **P3429-01** | **926-K1-WS-073124** | **Water** | | | **07/31/24** | | | **07/31/24** |
| | | | VOCMS Group6 | 8260-Low | | | 08/12/24 | |
| **P3429-02** | **931-K1-WS-073124** | **Water** | | | **07/31/24** | | | **07/31/24** |
| | | | VOCMS Group6 | 8260-Low | | | 08/13/24 | |
| **P3429-03** | **925-K1-WS-073124** | **Water** | | | **07/31/24** | | | **07/31/24** |
| | | | VOCMS Group6 | 8260-Low | | | 08/13/24 | |
| **P3429-03DL** | **925-K1-WS-073124DL** | **Water** | | | **07/31/24** | | | **07/31/24** |
| | | | VOCMS Group6 | 8260-Low | | | 08/14/24 | |
| **P3429-04** | **TB-01-073124** | **Water** | | | **07/31/24** | | | **07/31/24** |
| | | | VOCMS Group6 | 8260-Low | | | 08/13/24 | |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** P3429

**Client:** JACOBS Engineering Group, Inc.

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|
| **Client ID:** | **926-K1-WS-073124** | | | | | | | |
| P3429-01 | 926-K1-WS-073124 | Water | Vinyl Chloride | 23.1 | | 0.34 | 1.00 | ug/L |
| P3429-01 | 926-K1-WS-073124 | Water | 1,1,2-Trichlorotrifluoroethane | 17.3 | | 0.25 | 1.00 | ug/L |
| P3429-01 | 926-K1-WS-073124 | Water | Acetone | 10.1 | | 1.40 | 5.00 | ug/L |
| P3429-01 | 926-K1-WS-073124 | Water | cis-1,2-Dichloroethene | 68.8 | | 0.25 | 1.00 | ug/L |
| P3429-01 | 926-K1-WS-073124 | Water | Trichloroethene | 1.40 | | 0.32 | 1.00 | ug/L |
| P3429-01 | 926-K1-WS-073124 | Water | Toluene | 0.64 | J | 0.18 | 1.00 | ug/L |
| | | | **Total Voc :** | 121 | | | | |
| | | | **Total Concentration:** | 121 | | | | |
| **Client ID:** | **931-K1-WS-073124** | | | | | | | |
| P3429-02 | 931-K1-WS-073124 | Water | Acetone | 210 | | 1.40 | 5.00 | ug/L |
| P3429-02 | 931-K1-WS-073124 | Water | Toluene | 1.70 | | 0.18 | 1.00 | ug/L |
| | | | **Total Voc :** | 212 | | | | |
| | | | **Total Concentration:** | 212 | | | | |
| **Client ID:** | **925-K1-WS-073124** | | | | | | | |
| P3429-03 | 925-K1-WS-073124 | Water | Vinyl Chloride | 190 | E | 0.34 | 1.00 | ug/L |
| P3429-03 | 925-K1-WS-073124 | Water | 1,1,2-Trichlorotrifluoroethane | 50.7 | | 0.25 | 1.00 | ug/L |
| P3429-03 | 925-K1-WS-073124 | Water | Acetone | 12.4 | | 1.40 | 5.00 | ug/L |
| P3429-03 | 925-K1-WS-073124 | Water | trans-1,2-Dichloroethene | 7.60 | | 0.25 | 1.00 | ug/L |
| P3429-03 | 925-K1-WS-073124 | Water | cis-1,2-Dichloroethene | 1100 | E | 0.25 | 1.00 | ug/L |
| P3429-03 | 925-K1-WS-073124 | Water | Benzene | 0.57 | J | 0.16 | 1.00 | ug/L |
| P3429-03 | 925-K1-WS-073124 | Water | Trichloroethene | 7.80 | | 0.32 | 1.00 | ug/L |
| P3429-03 | 925-K1-WS-073124 | Water | Toluene | 1.10 | | 0.18 | 1.00 | ug/L |
| P3429-03 | 925-K1-WS-073124 | Water | Chlorobenzene | 0.26 | J | 0.13 | 1.00 | ug/L |
| | | | **Total Voc :** | 1370 | | | | |
| | | | **Total Concentration:** | 1370 | | | | |
| **Client ID:** | **925-K1-WS-073124DL** | | | | | | | |
| P3429-03DL | 925-K1-WS-073124 | Water | Vinyl Chloride | 220 | D | 6.80 | 20.0 | ug/L |
| P3429-03DL | 925-K1-WS-073124 | Water | 1,1,2-Trichlorotrifluoroethane | 62.2 | D | 5.00 | 20.0 | ug/L |
| P3429-03DL | 925-K1-WS-073124 | Water | cis-1,2-Dichloroethene | 1100 | D | 5.00 | 20.0 | ug/L |
| P3429-03DL | 925-K1-WS-073124 | Water | Trichloroethene | 10.1 | JD | 6.40 | 20.0 | ug/L |
| | | | **Total Voc :** | 1390 | | | | |
| | | | **Total Concentration:** | 1390 | | | | |

# QC SUMMARY

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# Surrogate Summary

**SDG No.:** P3429

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8260-Low

| Lab Sample ID | Client ID | Parameter | Spike | Result | RecoveryQual | Limits Low | Limits High |
|---|---|---|---|---|---|---|---|
| P3429-01 | 926-K1-WS-073124 | 1,2-Dichloroethane-d4 | 50 | 56.9 | 114 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 53.3 | 107 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 53.5 | 107 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 56.3 | 113 | 70 (77) | 130 (121) |
| P3429-02 | 931-K1-WS-073124 | 1,2-Dichloroethane-d4 | 50 | 56.9 | 114 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 54.6 | 109 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 55.5 | 111 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 59.3 | 119 | 70 (77) | 130 (121) |
| P3429-03 | 925-K1-WS-073124 | 1,2-Dichloroethane-d4 | 50 | 57.2 | 114 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 53.9 | 108 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 53.4 | 107 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 54.5 | 109 | 70 (77) | 130 (121) |
| P3429-03DL | 925-K1-WS-073124DL | 1,2-Dichloroethane-d4 | 50 | 56.4 | 113 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 52.7 | 105 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 53.1 | 106 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 57.4 | 115 | 70 (77) | 130 (121) |
| P3429-04 | TB-01-073124 | 1,2-Dichloroethane-d4 | 50 | 55.8 | 112 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 52.1 | 104 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 53.2 | 106 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 57.4 | 115 | 70 (77) | 130 (121) |
| VN0812WBL01 | VN0812WBL01 | 1,2-Dichloroethane-d4 | 50 | 56.6 | 113 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 53.6 | 107 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 53.9 | 108 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 59.1 | 118 | 70 (77) | 130 (121) |
| VN0812WBS01 | VN0812WBS01 | 1,2-Dichloroethane-d4 | 50 | 54.1 | 108 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 52.1 | 104 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 51.9 | 104 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 49.9 | 100 | 70 (77) | 130 (121) |
| VN0812WBSD0 | VN0812WBSD01 | 1,2-Dichloroethane-d4 | 50 | 48.8 | 98 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 46.0 | 92 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 46.4 | 93 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 45.3 | 91 | 70 (77) | 130 (121) |
| VN0813WBL01 | VN0813WBL01 | 1,2-Dichloroethane-d4 | 50 | 56.2 | 112 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 52.5 | 105 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 53.1 | 106 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 56.5 | 113 | 70 (77) | 130 (121) |
| VN0813WBS01 | VN0813WBS01 | 1,2-Dichloroethane-d4 | 50 | 48.6 | 97 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 47.4 | 95 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 46.7 | 93 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 45.5 | 91 | 70 (77) | 130 (121) |
| VN0814WBL01 | VN0814WBL01 | 1,2-Dichloroethane-d4 | 50 | 55.6 | 111 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 53.1 | 106 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 54.2 | 108 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 56.3 | 113 | 70 (77) | 130 (121) |
| VN0814WBS01 | VN0814WBS01 | 1,2-Dichloroethane-d4 | 50 | 56.3 | 113 | 70 (74) | 130 (125) |
| | | Dibromofluoromethane | 50 | 54.0 | 108 | 70 (75) | 130 (124) |
| | | Toluene-d8 | 50 | 53.1 | 106 | 70 (86) | 130 (113) |
| | | 4-Bromofluorobenzene | 50 | 52.3 | 105 | 70 (77) | 130 (121) |

( ) = LABORATORY INHOUSE LIMIT

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## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** P3429

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8260-Low **Datafile :** VN083228.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0812WBS01 | Dichlorodifluoromethane | 20 | 16.4 | ug/L | 82 | | | 40 (69) | 160 (116) | |
| | Chloromethane | 20 | 16.4 | ug/L | 82 | | | 40 (65) | 160 (116) | |
| | Vinyl chloride | 20 | 17.1 | ug/L | 86 | | | 70 (65) | 130 (117) | |
| | Bromomethane | 20 | 17.4 | ug/L | 87 | | | 40 (58) | 160 (125) | |
| | 1,1,2-Trichlorotrifluoroethane | 20 | 16.8 | ug/L | 84 | | | 70 (80) | 130 (112) | |
| | Acetone | 100 | 83.8 | ug/L | 84 | | | 40 (60) | 160 (125) | |
| | Carbon disulfide | 20 | 14.5 | ug/L | 73 | | | 40 (64) | 160 (112) | |
| | Methyl tert-butyl Ether | 20 | 16.8 | ug/L | 84 | | | 70 (78) | 130 (114) | |
| | Methylene Chloride | 20 | 15.9 | ug/L | 79 | | | 70 (72) | 130 (114) | |
| | trans-1,2-Dichloroethene | 20 | 16.5 | ug/L | 83 | | | 70 (75) | 130 (108) | |
| | Cyclohexane | 20 | 16.3 | ug/L | 81 | | | 70 (75) | 130 (110) | |
| | 2-Butanone | 100 | 81.0 | ug/L | 81 | | | 40 (65) | 160 (122) | |
| | Carbon Tetrachloride | 20 | 17.2 | ug/L | 86 | | | 70 (77) | 130 (113) | |
| | cis-1,2-Dichloroethene | 20 | 16.5 | ug/L | 83 | | | 70 (77) | 130 (110) | |
| | Chloroform | 20 | 17.5 | ug/L | 88 | | | 70 (79) | 130 (113) | |
| | 1,1,1-Trichloroethane | 20 | 17.3 | ug/L | 86 | | | 70 (80) | 130 (108) | |
| | Methylcyclohexane | 20 | 16.2 | ug/L | 81 | | | 70 (72) | 130 (115) | |
| | Benzene | 20 | 17.1 | ug/L | 86 | | | 70 (82) | 130 (109) | |
| | 1,2-Dichloroethane | 20 | 18.3 | ug/L | 92 | | | 70 (80) | 130 (115) | |
| | Trichloroethene | 20 | 17.2 | ug/L | 86 | | | 70 (77) | 130 (113) | |
| | Bromodichloromethane | 20 | 16.9 | ug/L | 85 | | | 70 (83) | 130 (110) | |
| | Toluene | 20 | 17.2 | ug/L | 86 | | | 70 (82) | 130 (110) | |
| | 1,1,2-Trichloroethane | 20 | 17.6 | ug/L | 88 | | | 70 (83) | 130 (112) | |
| | Dibromochloromethane | 20 | 17.3 | ug/L | 86 | | | 70 (82) | 130 (110) | |
| | Tetrachloroethene | 20 | 17.3 | ug/L | 86 | | | 70 (67) | 130 (123) | |
| | Chlorobenzene | 20 | 17.1 | ug/L | 86 | | | 70 (82) | 130 (109) | |
| | Ethyl Benzene | 20 | 16.9 | ug/L | 85 | | | 70 (83) | 130 (109) | |
| | m/p-Xylenes | 40 | 33.9 | ug/L | 85 | | | 70 (82) | 130 (110) | |
| | o-Xylene | 20 | 17.0 | ug/L | 85 | | | 70 (83) | 130 (109) | |
| | Isopropylbenzene | 20 | 17.2 | ug/L | 86 | | | 70 (83) | 130 (112) | |
| | 1,4-Dichlorobenzene | 20 | 16.6 | ug/L | 83 | | | 70 (82) | 130 (107) | |
| | 1,2-Dichlorobenzene | 20 | 16.9 | ug/L | 85 | | | 70 (82) | 130 (109) | |

( ) = LABORATORY INHOUSE LIMIT

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## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** P3429

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8260-Low **Datafile :** VN083229.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0812WBSD01 | Dichlorodifluoromethane | 20 | 18.7 | ug/L | 94 | 14 | | 40 (69) | 160 (116) | 20 (20) |
| | Chloromethane | 20 | 18.0 | ug/L | 90 | 9 | | 40 (65) | 160 (116) | 20 (20) |
| | Vinyl chloride | 20 | 18.6 | ug/L | 93 | 8 | | 70 (65) | 130 (117) | 20 (20) |
| | Bromomethane | 20 | 19.2 | ug/L | 96 | 10 | | 40 (58) | 160 (125) | 20 (20) |
| | 1,1,2-Trichlorotrifluoroethane | 20 | 19.3 | ug/L | 97 | 14 | | 70 (80) | 130 (112) | 20 (20) |
| | Acetone | 100 | 97.8 | ug/L | 98 | 15 | | 40 (60) | 160 (125) | 20 (20) |
| | Carbon disulfide | 20 | 16.5 | ug/L | 83 | 13 | | 40 (64) | 160 (112) | 20 (20) |
| | Methyl tert-butyl Ether | 20 | 18.5 | ug/L | 93 | 10 | | 70 (78) | 130 (114) | 20 (20) |
| | Methylene Chloride | 20 | 17.3 | ug/L | 86 | 8 | | 70 (72) | 130 (114) | 20 (20) |
| | trans-1,2-Dichloroethene | 20 | 17.4 | ug/L | 87 | 5 | | 70 (75) | 130 (108) | 20 (20) |
| | Cyclohexane | 20 | 17.1 | ug/L | 86 | 6 | | 70 (75) | 130 (110) | 20 (20) |
| | 2-Butanone | 100 | 91.7 | ug/L | 92 | 13 | | 40 (65) | 160 (122) | 20 (20) |
| | Carbon Tetrachloride | 20 | 19.0 | ug/L | 95 | 10 | | 70 (77) | 130 (113) | 20 (20) |
| | cis-1,2-Dichloroethene | 20 | 18.4 | ug/L | 92 | 10 | | 70 (77) | 130 (110) | 20 (20) |
| | Chloroform | 20 | 19.3 | ug/L | 97 | 10 | | 70 (79) | 130 (113) | 20 (20) |
| | 1,1,1-Trichloroethane | 20 | 19.2 | ug/L | 96 | 11 | | 70 (80) | 130 (108) | 20 (20) |
| | Methylcyclohexane | 20 | 18.1 | ug/L | 91 | 12 | | 70 (72) | 130 (115) | 20 (20) |
| | Benzene | 20 | 18.7 | ug/L | 94 | 9 | | 70 (82) | 130 (109) | 20 (20) |
| | 1,2-Dichloroethane | 20 | 19.7 | ug/L | 99 | 7 | | 70 (80) | 130 (115) | 20 (20) |
| | Trichloroethene | 20 | 19.2 | ug/L | 96 | 11 | | 70 (77) | 130 (113) | 20 (20) |
| | Bromodichloromethane | 20 | 18.3 | ug/L | 92 | 8 | | 70 (83) | 130 (110) | 20 (20) |
| | Toluene | 20 | 18.8 | ug/L | 94 | 9 | | 70 (82) | 130 (110) | 20 (20) |
| | 1,1,2-Trichloroethane | 20 | 19.4 | ug/L | 97 | 10 | | 70 (83) | 130 (112) | 20 (20) |
| | Dibromochloromethane | 20 | 18.8 | ug/L | 94 | 9 | | 70 (82) | 130 (110) | 20 (20) |
| | Tetrachloroethene | 20 | 18.7 | ug/L | 94 | 9 | | 70 (67) | 130 (123) | 20 (20) |
| | Chlorobenzene | 20 | 18.6 | ug/L | 93 | 8 | | 70 (82) | 130 (109) | 20 (20) |
| | Ethyl Benzene | 20 | 18.6 | ug/L | 93 | 9 | | 70 (83) | 130 (109) | 20 (20) |
| | m/p-Xylenes | 40 | 37.3 | ug/L | 93 | 9 | | 70 (82) | 130 (110) | 20 (20) |
| | o-Xylene | 20 | 18.7 | ug/L | 94 | 10 | | 70 (83) | 130 (109) | 20 (20) |
| | Isopropylbenzene | 20 | 18.4 | ug/L | 92 | 7 | | 70 (83) | 130 (112) | 20 (20) |
| | 1,4-Dichlorobenzene | 20 | 18.2 | ug/L | 91 | 9 | | 70 (82) | 130 (107) | 20 (20) |
| | 1,2-Dichlorobenzene | 20 | 18.2 | ug/L | 91 | 7 | | 70 (82) | 130 (109) | 20 (20) |

( ) = LABORATORY INHOUSE LIMIT

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## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** P3429

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8260-Low **Datafile :** VN083249.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0813WBS01 | Dichlorodifluoromethane | 20 | 17.1 | ug/L | 86 | | | 40 (69) | 160 (116) | |
| | Chloromethane | 20 | 17.1 | ug/L | 86 | | | 40 (65) | 160 (116) | |
| | Vinyl chloride | 20 | 18.1 | ug/L | 91 | | | 70 (65) | 130 (117) | |
| | Bromomethane | 20 | 18.2 | ug/L | 91 | | | 40 (58) | 160 (125) | |
| | 1,1,2-Trichlorotrifluoroethane | 20 | 18.5 | ug/L | 93 | | | 70 (80) | 130 (112) | |
| | Acetone | 100 | 90.0 | ug/L | 90 | | | 40 (60) | 160 (125) | |
| | Carbon disulfide | 20 | 15.1 | ug/L | 76 | | | 40 (64) | 160 (112) | |
| | Methyl tert-butyl Ether | 20 | 17.4 | ug/L | 87 | | | 70 (78) | 130 (114) | |
| | Methylene Chloride | 20 | 16.9 | ug/L | 85 | | | 70 (72) | 130 (114) | |
| | trans-1,2-Dichloroethene | 20 | 16.6 | ug/L | 83 | | | 70 (75) | 130 (108) | |
| | Cyclohexane | 20 | 17.0 | ug/L | 85 | | | 70 (75) | 130 (110) | |
| | 2-Butanone | 100 | 85.3 | ug/L | 85 | | | 40 (65) | 160 (122) | |
| | Carbon Tetrachloride | 20 | 18.0 | ug/L | 90 | | | 70 (77) | 130 (113) | |
| | cis-1,2-Dichloroethene | 20 | 17.3 | ug/L | 86 | | | 70 (77) | 130 (110) | |
| | Chloroform | 20 | 18.8 | ug/L | 94 | | | 70 (79) | 130 (113) | |
| | 1,1,1-Trichloroethane | 20 | 17.9 | ug/L | 90 | | | 70 (80) | 130 (108) | |
| | Methylcyclohexane | 20 | 16.9 | ug/L | 85 | | | 70 (72) | 130 (115) | |
| | Benzene | 20 | 17.8 | ug/L | 89 | | | 70 (82) | 130 (109) | |
| | 1,2-Dichloroethane | 20 | 18.8 | ug/L | 94 | | | 70 (80) | 130 (115) | |
| | Trichloroethene | 20 | 17.6 | ug/L | 88 | | | 70 (77) | 130 (113) | |
| | Bromodichloromethane | 20 | 18.0 | ug/L | 90 | | | 70 (83) | 130 (110) | |
| | Toluene | 20 | 17.7 | ug/L | 89 | | | 70 (82) | 130 (110) | |
| | 1,1,2-Trichloroethane | 20 | 18.8 | ug/L | 94 | | | 70 (83) | 130 (112) | |
| | Dibromochloromethane | 20 | 18.3 | ug/L | 92 | | | 70 (82) | 130 (110) | |
| | Tetrachloroethene | 20 | 18.0 | ug/L | 90 | | | 70 (67) | 130 (123) | |
| | Chlorobenzene | 20 | 17.8 | ug/L | 89 | | | 70 (82) | 130 (109) | |
| | Ethyl Benzene | 20 | 17.9 | ug/L | 90 | | | 70 (83) | 130 (109) | |
| | m/p-Xylenes | 40 | 35.7 | ug/L | 89 | | | 70 (82) | 130 (110) | |
| | o-Xylene | 20 | 17.8 | ug/L | 89 | | | 70 (83) | 130 (109) | |
| | Isopropylbenzene | 20 | 18.1 | ug/L | 91 | | | 70 (83) | 130 (112) | |
| | 1,4-Dichlorobenzene | 20 | 17.8 | ug/L | 89 | | | 70 (82) | 130 (107) | |
| | 1,2-Dichlorobenzene | 20 | 17.7 | ug/L | 89 | | | 70 (82) | 130 (109) | |

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## Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

**SW-846**

**SDG No.:** P3429

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** SW8260-Low **Datafile :** VN083298.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VN0814WBS01 | Dichlorodifluoromethane | 20 | 18.6 | ug/L | 93 | | | 40 (69) | 160 (116) | |
| | Chloromethane | 20 | 19.1 | ug/L | 96 | | | 40 (65) | 160 (116) | |
| | Vinyl chloride | 20 | 20.2 | ug/L | 101 | | | 70 (65) | 130 (117) | |
| | Bromomethane | 20 | 18.6 | ug/L | 93 | | | 40 (58) | 160 (125) | |
| | 1,1,2-Trichlorotrifluoroethane | 20 | 20.8 | ug/L | 104 | | | 70 (80) | 130 (112) | |
| | Acetone | 100 | 100 | ug/L | 100 | | | 40 (60) | 160 (125) | |
| | Carbon disulfide | 20 | 16.3 | ug/L | 81 | | | 40 (64) | 160 (112) | |
| | Methyl tert-butyl Ether | 20 | 20.0 | ug/L | 100 | | | 70 (78) | 130 (114) | |
| | Methylene Chloride | 20 | 19.0 | ug/L | 95 | | | 70 (72) | 130 (114) | |
| | trans-1,2-Dichloroethene | 20 | 18.7 | ug/L | 94 | | | 70 (75) | 130 (108) | |
| | Cyclohexane | 20 | 18.5 | ug/L | 93 | | | 70 (75) | 130 (110) | |
| | 2-Butanone | 100 | 100 | ug/L | 100 | | | 40 (65) | 160 (122) | |
| | Carbon Tetrachloride | 20 | 20.1 | ug/L | 101 | | | 70 (77) | 130 (113) | |
| | cis-1,2-Dichloroethene | 20 | 19.6 | ug/L | 98 | | | 70 (77) | 130 (110) | |
| | Chloroform | 20 | 21.3 | ug/L | 106 | | | 70 (79) | 130 (113) | |
| | 1,1,1-Trichloroethane | 20 | 20.7 | ug/L | 104 | | | 70 (80) | 130 (108) | |
| | Methylcyclohexane | 20 | 18.2 | ug/L | 91 | | | 70 (72) | 130 (115) | |
| | Benzene | 20 | 20.4 | ug/L | 102 | | | 70 (82) | 130 (109) | |
| | 1,2-Dichloroethane | 20 | 21.5 | ug/L | 108 | | | 70 (80) | 130 (115) | |
| | Trichloroethene | 20 | 20.1 | ug/L | 101 | | | 70 (77) | 130 (113) | |
| | Bromodichloromethane | 20 | 20.7 | ug/L | 104 | | | 70 (83) | 130 (110) | |
| | Toluene | 20 | 20.3 | ug/L | 102 | | | 70 (82) | 130 (110) | |
| | 1,1,2-Trichloroethane | 20 | 21.5 | ug/L | 108 | | | 70 (83) | 130 (112) | |
| | Dibromochloromethane | 20 | 20.6 | ug/L | 103 | | | 70 (82) | 130 (110) | |
| | Tetrachloroethene | 20 | 19.6 | ug/L | 98 | | | 70 (67) | 130 (123) | |
| | Chlorobenzene | 20 | 19.8 | ug/L | 99 | | | 70 (82) | 130 (109) | |
| | Ethyl Benzene | 20 | 19.6 | ug/L | 98 | | | 70 (83) | 130 (109) | |
| | m/p-Xylenes | 40 | 38.6 | ug/L | 97 | | | 70 (82) | 130 (110) | |
| | o-Xylene | 20 | 19.5 | ug/L | 98 | | | 70 (83) | 130 (109) | |
| | Isopropylbenzene | 20 | 19.3 | ug/L | 97 | | | 70 (83) | 130 (112) | |
| | 1,4-Dichlorobenzene | 20 | 19.1 | ug/L | 96 | | | 70 (82) | 130 (107) | |
| | 1,2-Dichlorobenzene | 20 | 19.1 | ug/L | 96 | | | 70 (82) | 130 (109) | |

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# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0812WBL01

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083227.D Lab Sample ID: VN0812WBL01

Date Analyzed: 08/12/2024 Time Analyzed: 10:46

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| VN0812WBS01 | VN0812WBS01 | VN083228.D | 08/12/2024 |
| VN0812WBSD01 | VN0812WBSD01 | VN083229.D | 08/12/2024 |
| 926-K1-WS-073124 | P3429-01 | VN083244.D | 08/12/2024 |

COMMENTS:

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# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0813WBL01

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083248.D Lab Sample ID: VN0813WBL01

Date Analyzed: 08/13/2024 Time Analyzed: 11:16

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| VN0813WBS01 | VN0813WBS01 | VN083249.D | 08/13/2024 |
| 931-K1-WS-073124 | P3429-02 | VN083250.D | 08/13/2024 |
| TB-01-073124 | P3429-04 | VN083256.D | 08/13/2024 |
| 925-K1-WS-073124 | P3429-03 | VN083269.D | 08/13/2024 |

COMMENTS:

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# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0814WBL01

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083297.D Lab Sample ID: VN0814WBL01

Date Analyzed: 08/14/2024 Time Analyzed: 13:39

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_N

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| VN0814WBS01 | VN0814WBS01 | VN083298.D | 08/14/2024 |
| 925-K1-WS-073124DL | P3429-03DL | VN083299.D | 08/14/2024 |

COMMENTS:

Raw Data: **VN083134.D**

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# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083134.D BFB Injection Date: 08/07/2024

Instrument ID: MSVOA_N BFB Injection Time: 10:09

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 19.7 |
| 75 | 30.0 - 60.0% of mass 95 | 52.6 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 7.5 |
| 173 | Less than 2.0% of mass 174 | 0.2 ( 0.3 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 66.5 |
| 175 | 5.0 - 9.0% of mass 174 | 4.9 ( 7.4 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 64.4 ( 96.9 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.1 ( 6.3 ) 2 |

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

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| VSTDICC100 | VSTDICC100 | VN083135.D | 08/07/2024 | 10:33 |
| VSTDICCC050 | VSTDICCC050 | VN083136.D | 08/07/2024 | 10:58 |
| VSTDICC020 | VSTDICC020 | VN083137.D | 08/07/2024 | 11:22 |
| VSTDICC010 | VSTDICC010 | VN083138.D | 08/07/2024 | 11:46 |
| VSTDICC005 | VSTDICC005 | VN083139.D | 08/07/2024 | 12:10 |
| VSTDICC001 | VSTDICC001 | VN083140.D | 08/07/2024 | 12:34 |

Raw Data: **VN083224.D**

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# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083224.D BFB Injection Date: 08/12/2024

Instrument ID: MSVOA_N BFB Injection Time: 08:44

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 21 |
| 75 | 30.0 - 60.0% of mass 95 | 58.2 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.1 |
| 173 | Less than 2.0% of mass 174 | 0.3 ( 0.4 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 68.4 |
| 175 | 5.0 - 9.0% of mass 174 | 5.3 ( 7.7 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 67 ( 97.9 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 3.8 ( 5.6 ) 2 |

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

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| VSTDCCC050 | VSTDCCC050 | VN083225.D | 08/12/2024 | 09:48 |
| VN0812WBL01 | VN0812WBL01 | VN083227.D | 08/12/2024 | 10:46 |
| VN0812WBS01 | VN0812WBS01 | VN083228.D | 08/12/2024 | 11:10 |
| VN0812WBSD01 | VN0812WBSD01 | VN083229.D | 08/12/2024 | 11:46 |
| 926-K1-WS-073124 | P3429-01 | VN083244.D | 08/12/2024 | 17:49 |

Raw Data: **VN083245.D**

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# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083245.D BFB Injection Date: 08/13/2024

Instrument ID: MSVOA_N BFB Injection Time: 09:54

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 19.8 |
| 75 | 30.0 - 60.0% of mass 95 | 55.6 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.5 |
| 173 | Less than 2.0% of mass 174 | 0.4 ( 0.6 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 69.5 |
| 175 | 5.0 - 9.0% of mass 174 | 5.3 ( 7.6 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 67 ( 96.5 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.1 ( 6.1 ) 2 |

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| VSTDCCC050 | VSTDCCC050 | VN083246.D | 08/13/2024 | 10:18 |
| VN0813WBL01 | VN0813WBL01 | VN083248.D | 08/13/2024 | 11:16 |
| VN0813WBS01 | VN0813WBS01 | VN083249.D | 08/13/2024 | 11:40 |
| 931-K1-WS-073124 | P3429-02 | VN083250.D | 08/13/2024 | 12:06 |
| TB-01-073124 | P3429-04 | VN083256.D | 08/13/2024 | 14:31 |
| 925-K1-WS-073124 | P3429-03 | VN083269.D | 08/13/2024 | 19:45 |

Raw Data: **VN083294.D**

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# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083294.D BFB Injection Date: 08/14/2024

Instrument ID: MSVOA_N BFB Injection Time: 12:07

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 20.6 |
| 75 | 30.0 - 60.0% of mass 95 | 54.1 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 7.1 |
| 173 | Less than 2.0% of mass 174 | 0.5 ( 0.8 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 70.5 |
| 175 | 5.0 - 9.0% of mass 174 | 5.2 ( 7.4 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 67.6 ( 95.9 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.7 ( 6.9 ) 2 |

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

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| VSTDCCC050 | VSTDCCC050 | VN083295.D | 08/14/2024 | 12:41 |
| VN0814WBL01 | VN0814WBL01 | VN083297.D | 08/14/2024 | 13:39 |
| VN0814WBS01 | VN0814WBS01 | VN083298.D | 08/14/2024 | 14:03 |
| 925-K1-WS-073124DL | P3429-03DL | VN083299.D | 08/14/2024 | 14:27 |

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083225.D Date Analyzed: 08/12/2024

Instrument ID: MSVOA_N Time Analyzed: 09:48

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS1 AREA # | RT # | IS2 AREA # | RT # | IS3 AREA # | RT # |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 179688 | 8.22 | 304896 | 9.10 | 267164 | 11.87 |
| UPPER LIMIT | 359376 | 8.724 | 609792 | 9.6 | 534328 | 12.365 |
| LOWER LIMIT | 89844 | 7.724 | 152448 | 8.6 | 133582 | 11.365 |
| EPA SAMPLE NO. | | | | | | |
| 926-K1-WS-073124 | 132573 | 8.23 | 252049 | 9.10 | 255948 | 11.87 |
| VN0812WBL01 | 155185 | 8.22 | 297997 | 9.10 | 309712 | 11.87 |
| VN0812WBS01 | 193104 | 8.22 | 331101 | 9.10 | 283776 | 11.87 |
| VN0812WBSD01 | 186747 | 8.22 | 319813 | 9.10 | 275661 | 11.87 |

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Fax : 908 789 8922

# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083225.D Date Analyzed: 08/12/2024

Instrument ID: MSVOA_N Time Analyzed: 09:48

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS4 AREA # | RT # | | | | |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 128278 | 13.788 | | | | |
| UPPER LIMIT | 256556 | 14.288 | | | | |
| LOWER LIMIT | 64139 | 13.288 | | | | |
| EPA SAMPLE NO. | | | | | | |
| 926-K1-WS-073124 | 111123 | 13.79 | | | | |
| VN0812WBL01 | 137198 | 13.79 | | | | |
| VN0812WBS01 | 130523 | 13.79 | | | | |
| VN0812WBSD01 | 129761 | 13.79 | | | | |

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083246.D Date Analyzed: 08/13/2024

Instrument ID: MSVOA_N Time Analyzed: 10:18

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS1 AREA # | RT # | IS2 AREA # | RT # | IS3 AREA # | RT # |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 178090 | 8.22 | 308255 | 9.10 | 271780 | 11.87 |
| UPPER LIMIT | 356180 | 8.724 | 616510 | 9.6 | 543560 | 12.365 |
| LOWER LIMIT | 89045 | 7.724 | 154128 | 8.6 | 135890 | 11.365 |
| EPA SAMPLE NO. | | | | | | |
| 931-K1-WS-073124 | 136049 | 8.22 | 260779 | 9.10 | 272432 | 11.87 |
| 925-K1-WS-073124 | 131513 | 8.22 | 255536 | 9.10 | 257054 | 11.87 |
| TB-01-073124 | 147065 | 8.22 | 284471 | 9.10 | 291862 | 11.87 |
| VN0813WBL01 | 151482 | 8.22 | 289244 | 9.10 | 291555 | 11.87 |
| VN0813WBS01 | 178353 | 8.22 | 306441 | 9.10 | 263797 | 11.87 |

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083246.D Date Analyzed: 08/13/2024

Instrument ID: MSVOA_N Time Analyzed: 10:18

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS4 AREA # | RT # | | | | |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 132143 | 13.794 | | | | |
| UPPER LIMIT | 264286 | 14.294 | | | | |
| LOWER LIMIT | 66071.5 | 13.294 | | | | |
| EPA SAMPLE NO. | | | | | | |
| 931-K1-WS-073124 | 121082 | 13.79 | | | | |
| 925-K1-WS-073124 | 110153 | 13.79 | | | | |
| TB-01-073124 | 130851 | 13.79 | | | | |
| VN0813WBL01 | 128023 | 13.79 | | | | |
| VN0813WBS01 | 120363 | 13.79 | | | | |

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083295.D Date Analyzed: 08/14/2024

Instrument ID: MSVOA_N Time Analyzed: 12:41

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS1 AREA # | RT # | IS2 AREA # | RT # | IS3 AREA # | RT # |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 165534 | 8.22 | 282606 | 9.10 | 250996 | 11.87 |
| UPPER LIMIT | 331068 | 8.724 | 565212 | 9.6 | 501992 | 12.365 |
| LOWER LIMIT | 82767 | 7.724 | 141303 | 8.6 | 125498 | 11.365 |
| EPA SAMPLE NO. | | | | | | |
| 925-K1-WS-073124DL | 130132 | 8.22 | 253353 | 9.10 | 260285 | 11.87 |
| VN0814WBL01 | 145129 | 8.23 | 276647 | 9.10 | 286871 | 11.87 |
| VN0814WBS01 | 164632 | 8.22 | 284346 | 9.10 | 250581 | 11.87 |

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG NO.: P3429

Lab File ID: VN083295.D Date Analyzed: 08/14/2024

Instrument ID: MSVOA_N Time Analyzed: 12:41

GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

| | IS4 AREA # | RT # | | | | |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 122669 | 13.794 | | | | |
| UPPER LIMIT | 245338 | 14.294 | | | | |
| LOWER LIMIT | 61334.5 | 13.294 | | | | |
| EPA SAMPLE NO. | | | | | | |
| 925-K1-WS-073124DL | 115317 | 13.79 | | | | |
| VN0814WBL01 | 128230 | 13.79 | | | | |
| VN0814WBS01 | 117869 | 13.79 | | | | |

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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# SAMPLE DATA

Raw Data: **VN083244.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 07/31/24 |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | 07/31/24 |
| Client Sample ID: | 926-K1-WS-073124 | SDG No.: | P3429 |
| Lab Sample ID: | P3429-01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083244.D | 1 | | 08/12/24 17:49 | VN081224 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 0.35 | U | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 23.1 | | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 1.40 | U | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 17.3 | | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 10.1 | | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.32 | U | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.16 | U | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.32 | U | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 68.8 | | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 1.40 | | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 0.64 | J | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.31 | U | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 0.45 | U | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 0.14 | U | 0.14 | 1.00 | ug/L |

Raw Data: **VN083244.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 07/31/24 |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | 07/31/24 |
| Client Sample ID: | 926-K1-WS-073124 | SDG No.: | P3429 |
| Lab Sample ID: | P3429-01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083244.D | 1 | | 08/12/24 17:49 | VN081224 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.19 | U | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 56.9 | | 70 (74) - 130 (125) | 114% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 53.3 | | 70 (75) - 130 (124) | 107% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.5 | | 70 (86) - 130 (113) | 107% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 56.3 | | 70 (77) - 130 (121) | 113% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 133000 | 8.23 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 252000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 256000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 111000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Sample Results: **VN083244.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083244.D
Acq On : 12 Aug 2024 17:49
Operator : JC\MD
Sample : P3429-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
926-K1-WS-073124

Quant Time: Aug 13 04:23:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 132573 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 252049 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 255948 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 111123 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.582 | 65 | 107359 | 56.893 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 113.780% | | | |
| 35) Dibromofluoromethane | 8.171 | 113 | 83806 | 53.270 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 106.540% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 314255 | 53.549 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 107.100% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 128801 | 56.297 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 112.600% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Vinyl Chloride | 2.512 | 62 | 36262 | 23.089 | ug/l | 99 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 24806 | 17.341 | ug/l | 97 |
| 16) Acetone | 4.447 | 43 | 7480 | 10.130 | ug/l # | 88 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 126110 | 68.805 | ug/l | 83 |
| 44) Trichloroethene | 9.353 | 130 | 2389 | 1.416 | ug/l | 98 |
| 52) Toluene | 10.635 | 92 | 2848 | 0.636 | ug/l | 94 |

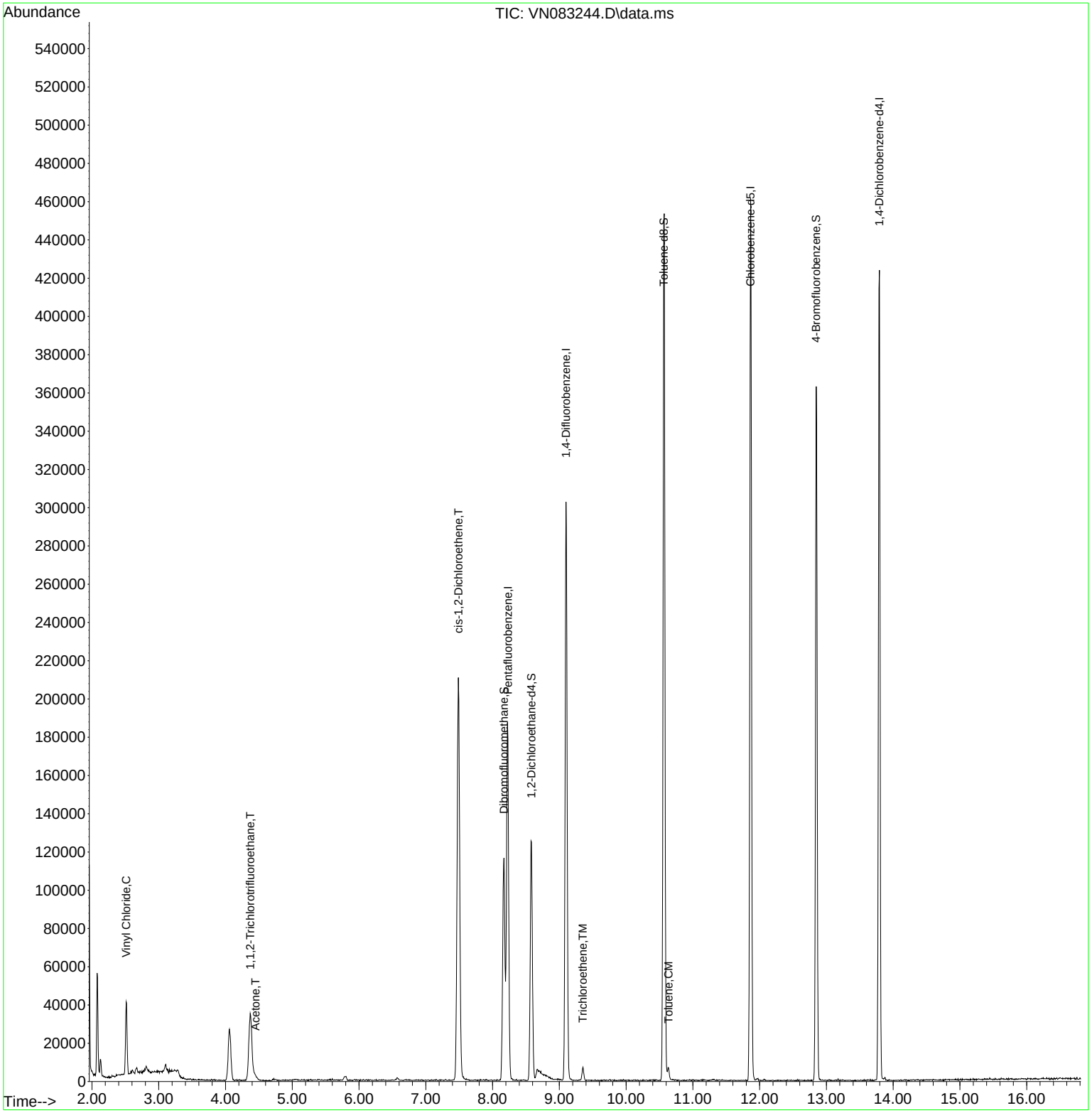
(#) = qualifier out of range (m) = manual integration (+) = signals summed

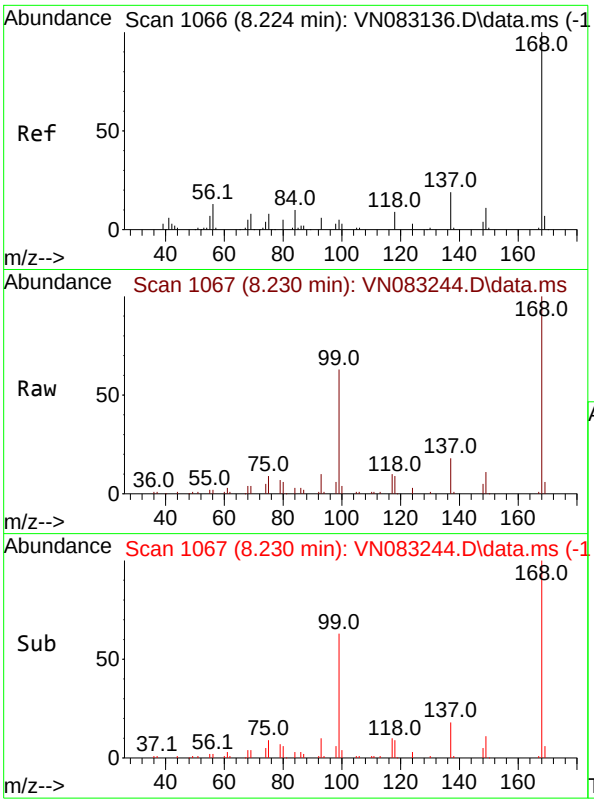
Sample Results: **VN083244.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083244.D
Acq On : 12 Aug 2024 17:49
Operator : JC\MD
Sample : P3429-01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 22 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
926-K1-WS-073124

Quant Time: Aug 13 04:23:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



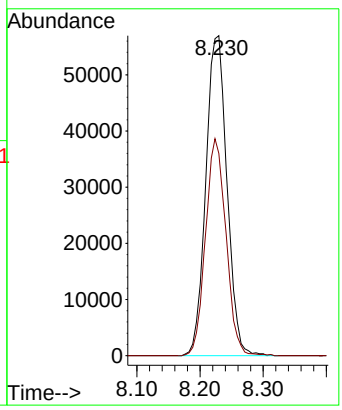


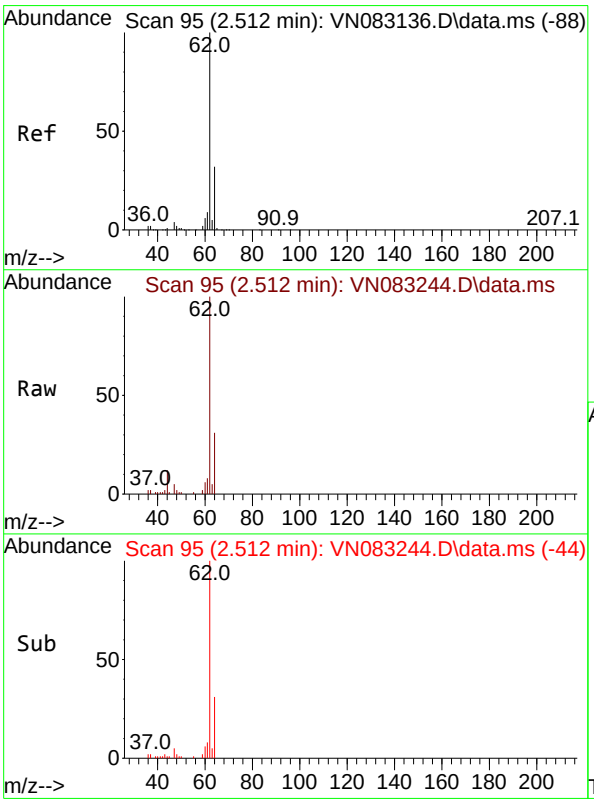

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
926-K1-WS-073124

Tgt Ion:168 Resp: 132573

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 63.2 | 48.2 | 72.4 |

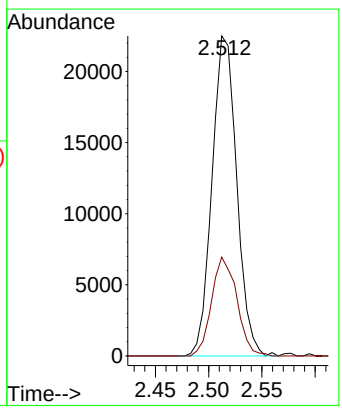


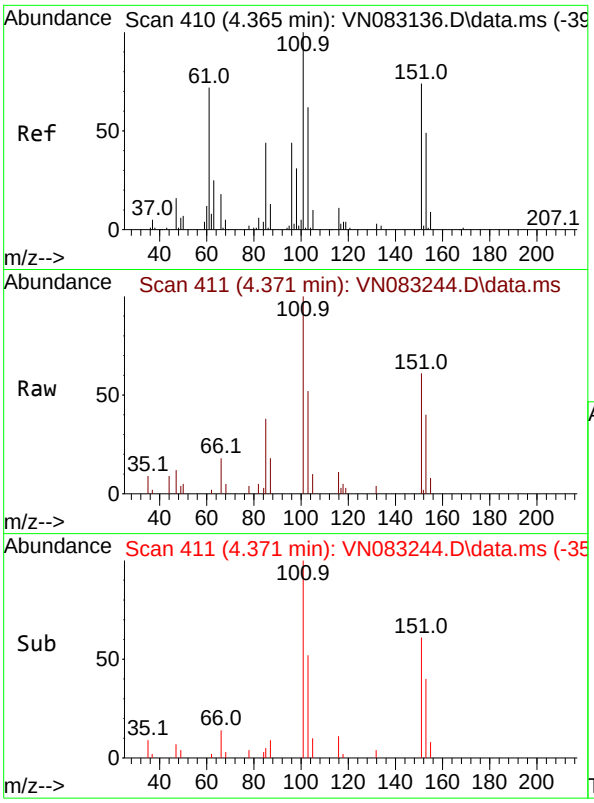




#4
Vinyl Chloride
Concen: 23.089 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

Tgt Ion: 62 Resp: 36262

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 30.9 | 25.0 | 37.6 |



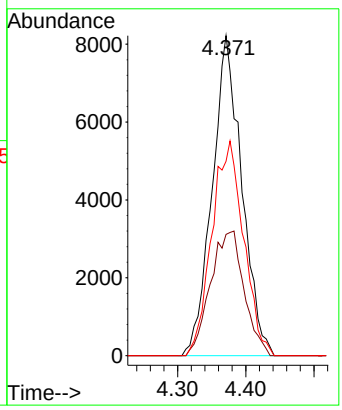


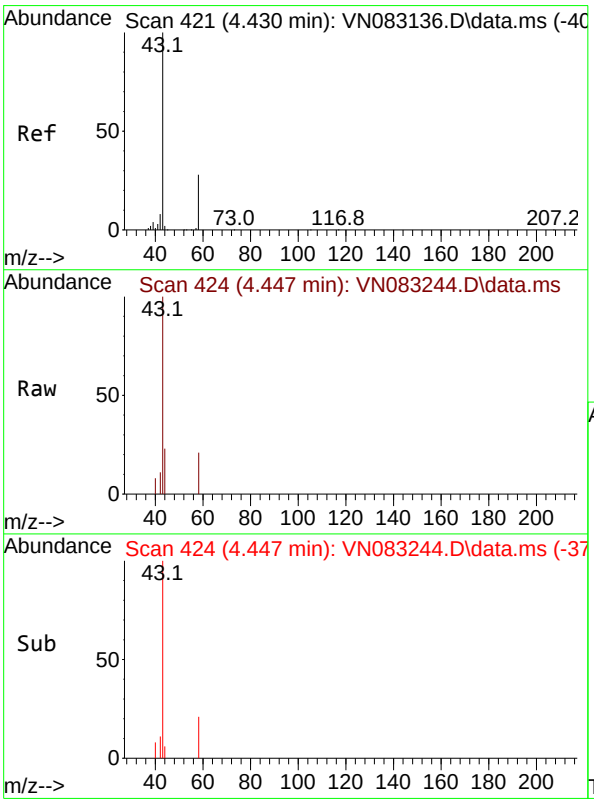

#9
1,1,2-Trichlorotrifluoroethane
Concen: 17.341 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
926-K1-WS-073124

Tgt Ion:101 Resp: 24806

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 44.2 | 38.3 | 57.5 |
| 151 | 72.2 | 59.3 | 88.9 |

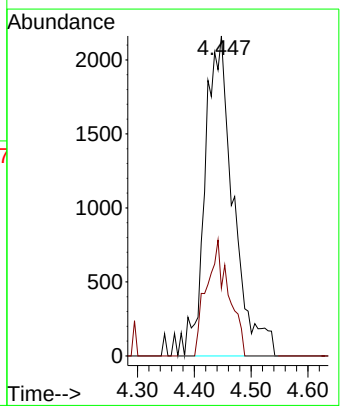


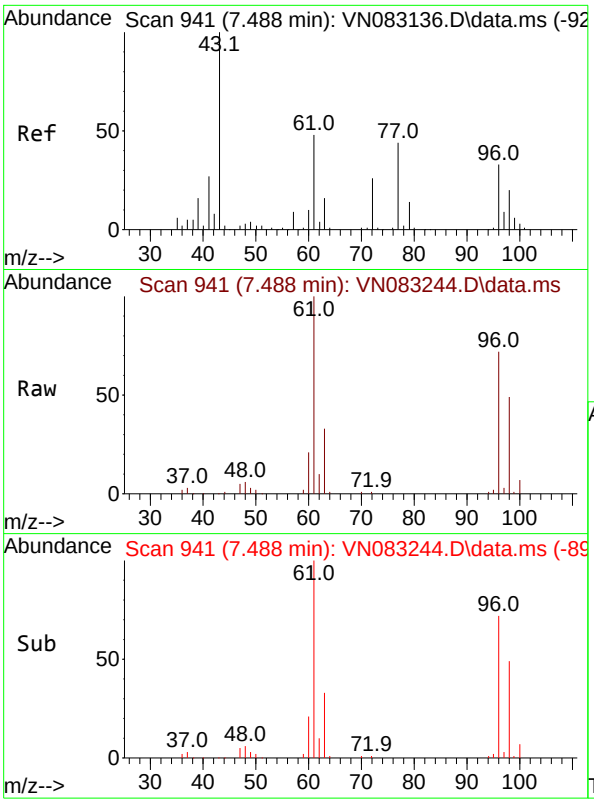




#16
Acetone
Concen: 10.130 ug/l
RT: 4.447 min Scan# 424
Delta R.T. 0.018 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

Tgt Ion: 43 Resp: 7480

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 21.2 | 21.8 | 32.6# |



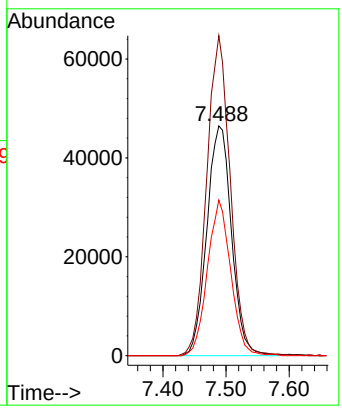


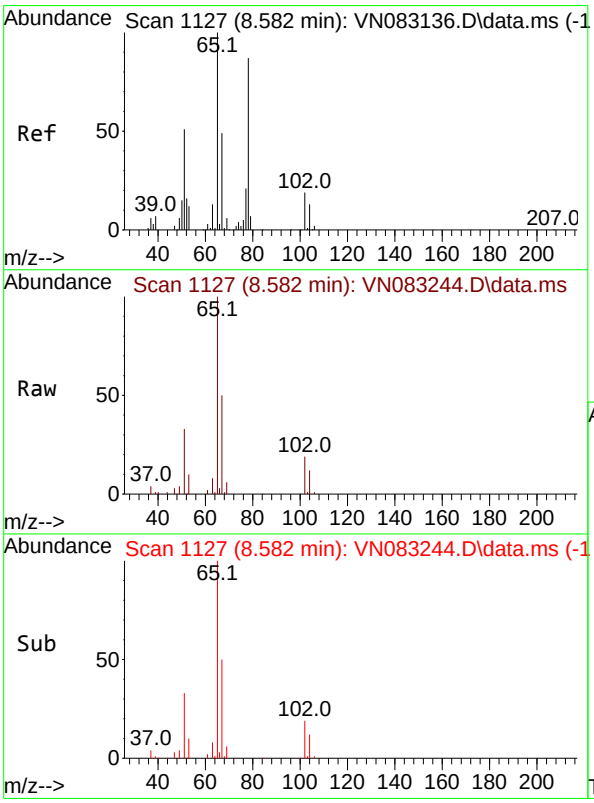

#27
cis-1,2-Dichloroethene
Concen: 68.805 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
926-K1-WS-073124

Tgt Ion: 96 Resp: 126110

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 133.1 | 0.0 | 329.6 |
| 98 | 63.8 | 0.0 | 128.6 |

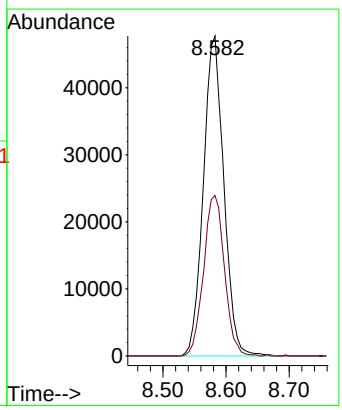


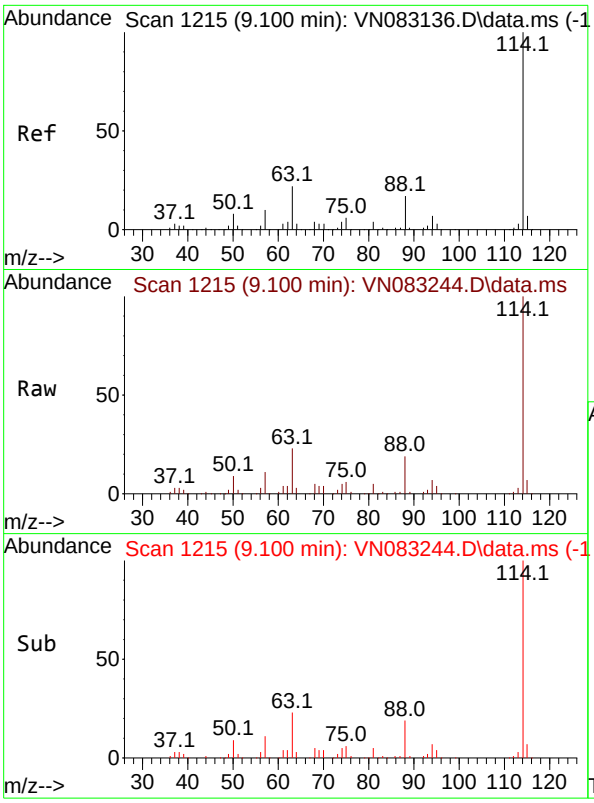




#33
1,2-Dichloroethane-d4
Concen: 56.893 ug/l
RT: 8.582 min Scan# 1127
Delta R.T. -0.000 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

Tgt Ion: 65 Resp: 107359

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.1 | 0.0 | 104.4 |



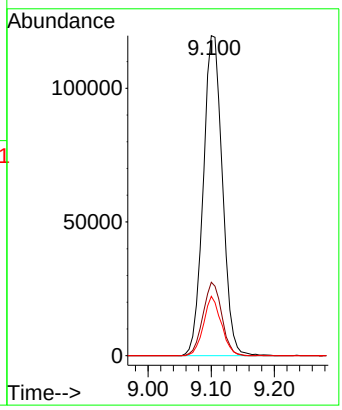


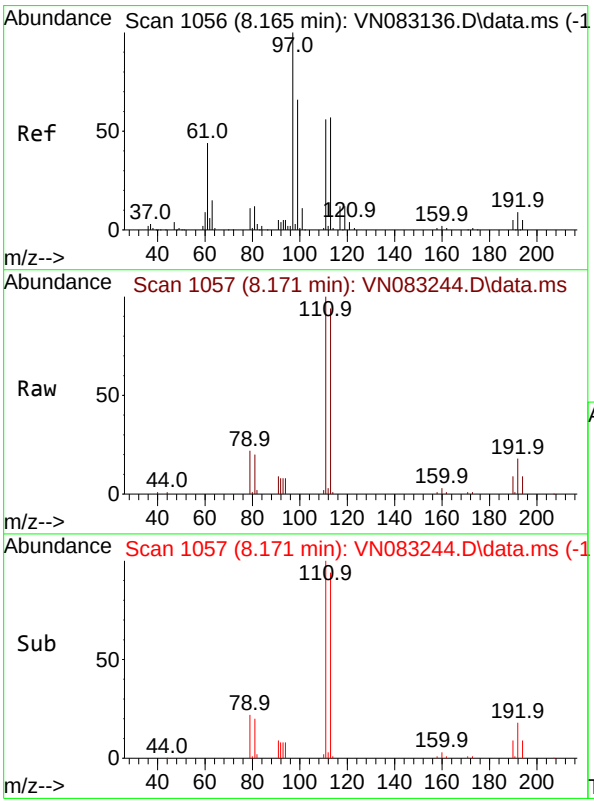

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
926-K1-WS-073124

Tgt Ion:114 Resp: 252049

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.0 | 0.0 | 44.6 |
| 88 | 18.6 | 0.0 | 31.4 |

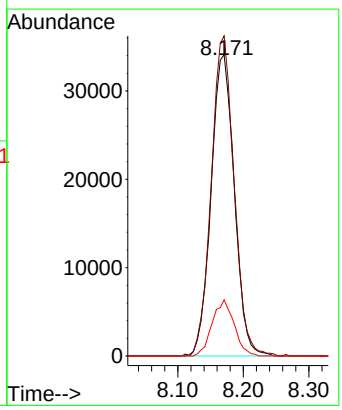


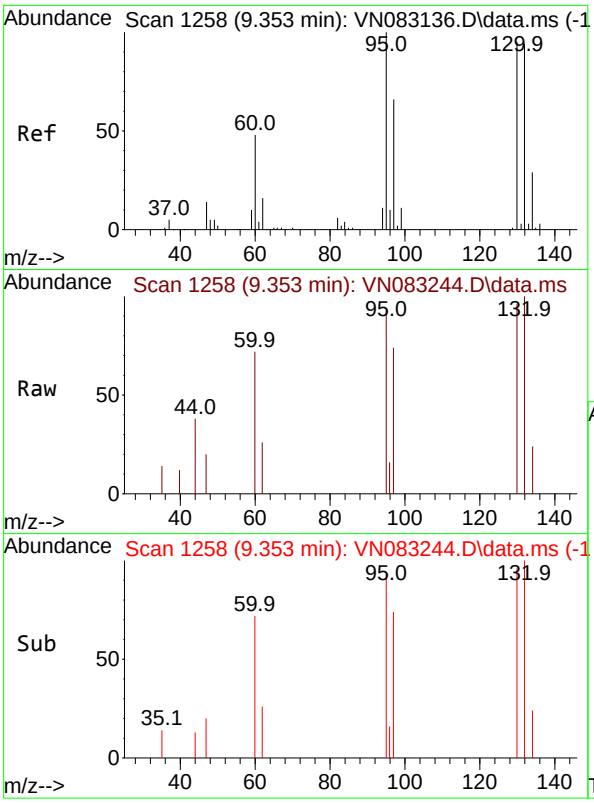




#35
Dibromofluoromethane
Concen: 53.270 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. 0.006 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

Tgt Ion:113 Resp: 83806

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 104.2 | 82.4 | 123.6 |
| 192 | 17.6 | 14.9 | 22.3 |



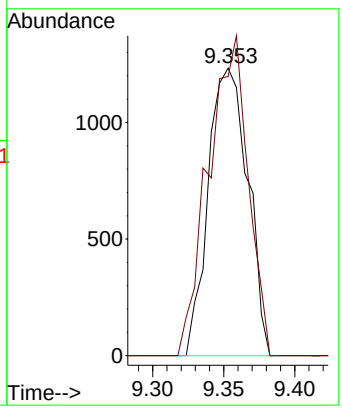


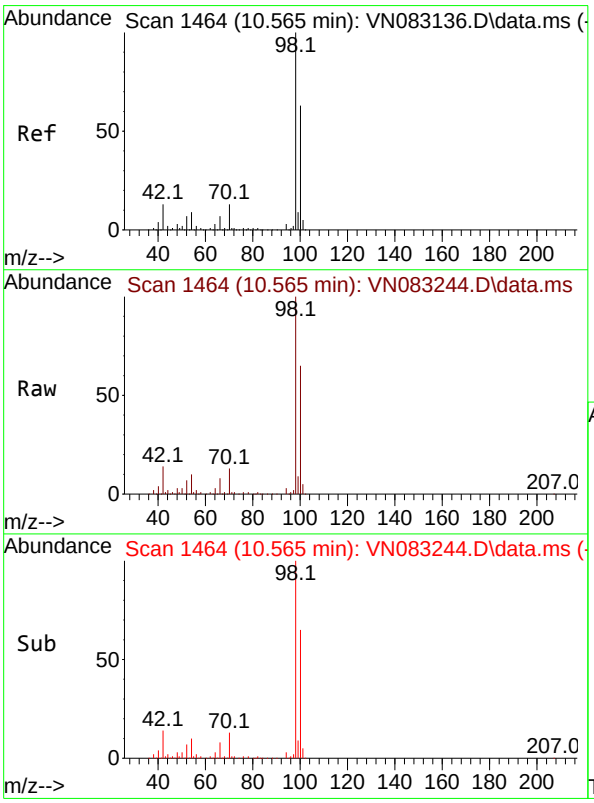

#44
Trichloroethene
Concen: 1.416 ug/l
RT: 9.353 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
926-K1-WS-073124

Tgt Ion:130 Resp: 2389

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 97.1 | 0.0 | 197.8 |

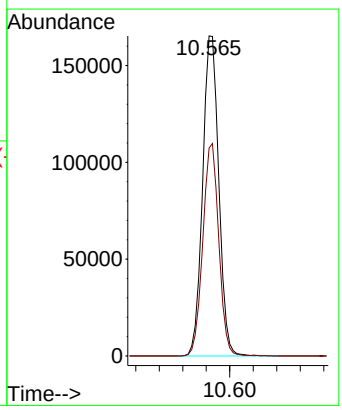


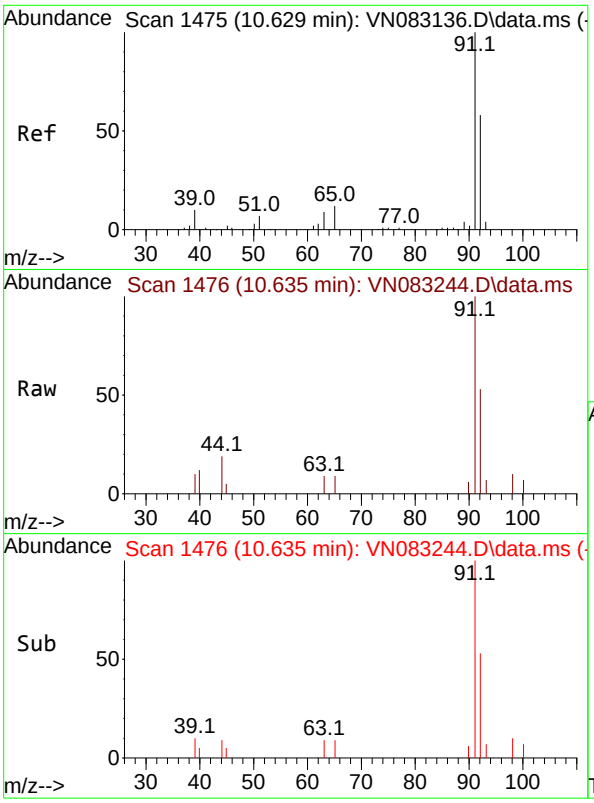




#50
Toluene-d8
Concen: 53.549 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

Tgt Ion: 98 Resp: 314255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.6 | 51.5 | 77.3 |



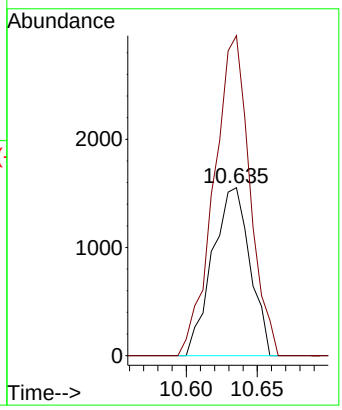


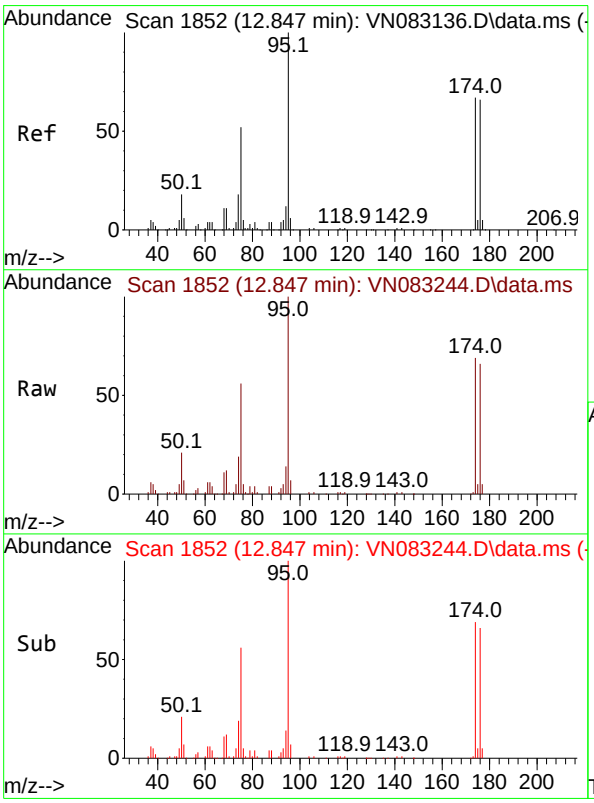

#52
Toluene
Concen: 0.636 ug/l
RT: 10.635 min Scan# 14
Delta R.T. 0.006 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
926-K1-WS-073124

Tgt Ion: 92 Resp: 2848

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 182.7 | 139.4 | 209.0 |

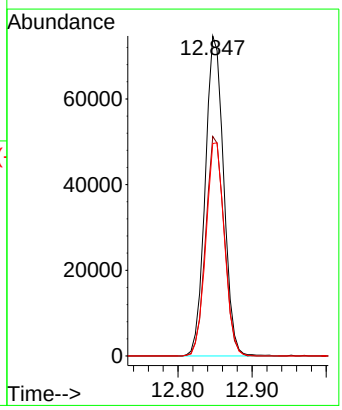


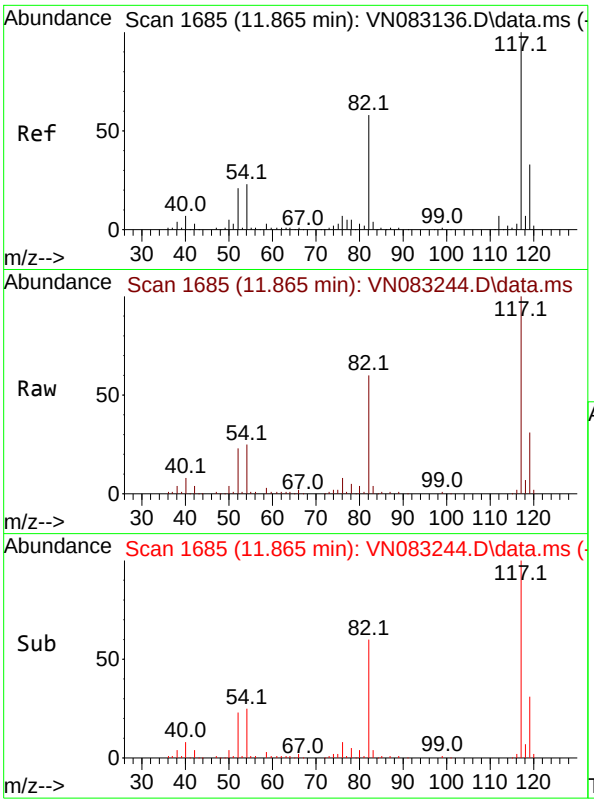




#62
4-Bromofluorobenzene
Concen: 56.297 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

Tgt Ion: 95 Resp: 128801

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 68.9 | 0.0 | 159.2 |
| 176 | 67.0 | 0.0 | 147.6 |



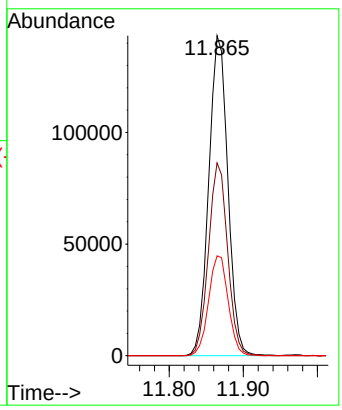


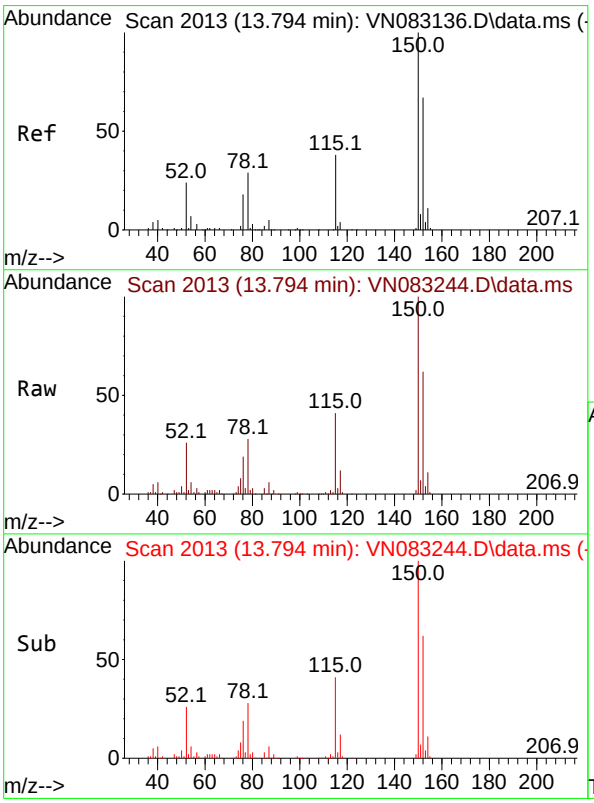

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

**Instrument :**
MSVOA_N
**ClientSampleId :**
926-K1-WS-073124

Tgt Ion:117 Resp: 255948

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.2 | 47.5 | 71.3 |
| 119 | 31.2 | 25.6 | 38.4 |

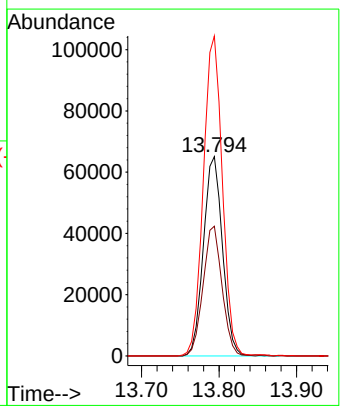



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083244.D
Acq: 12 Aug 2024 17:49

Tgt Ion:152 Resp: 111123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.6 | 30.6 | 91.6 |
| 150 | 159.8 | 0.0 | 348.6 |



Raw Data: **VN083250.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 07/31/24 |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | 07/31/24 |
| Client Sample ID: | 931-K1-WS-073124 | SDG No.: | P3429 |
| Lab Sample ID: | P3429-02 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083250.D | 1 | | 08/13/24 12:06 | VN081324 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 0.35 | U | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 0.34 | U | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 1.40 | U | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 210 | | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.32 | U | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.16 | U | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.32 | U | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.32 | U | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 1.70 | | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.31 | U | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 0.45 | U | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 0.14 | U | 0.14 | 1.00 | ug/L |

Raw Data: **VN083250.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 07/31/24 |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | 07/31/24 |
| Client Sample ID: | 931-K1-WS-073124 | SDG No.: | P3429 |
| Lab Sample ID: | P3429-02 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083250.D | 1 | | 08/13/24 12:06 | VN081324 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.19 | U | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 56.9 | | 70 (74) - 130 (125) | 114% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 54.6 | | 70 (75) - 130 (124) | 109% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 55.5 | | 70 (86) - 130 (113) | 111% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 59.3 | | 70 (77) - 130 (121) | 119% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 136000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 261000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 272000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 121000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Sample Results: **VN083250.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083250.D
Acq On : 13 Aug 2024 12:06
Operator : JC\MD
Sample : P3429-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
931-K1-WS-073124

Quant Time: Aug 14 01:40:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 136049 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 260779 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 272432 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 121082 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 110189 | 56.901 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 113.800% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 88840 | 54.579 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 109.160% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 336719 | 55.456 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 110.920% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 140365 | 59.297 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 118.600% | | | |
| Target Compounds | | | | | | Qvalue |
| 16) Acetone | 4.430 | 43 | 160843 | 212.264 | ug/l | 94 |
| 52) Toluene | 10.629 | 92 | 7899 | 1.704 | ug/l | 93 |

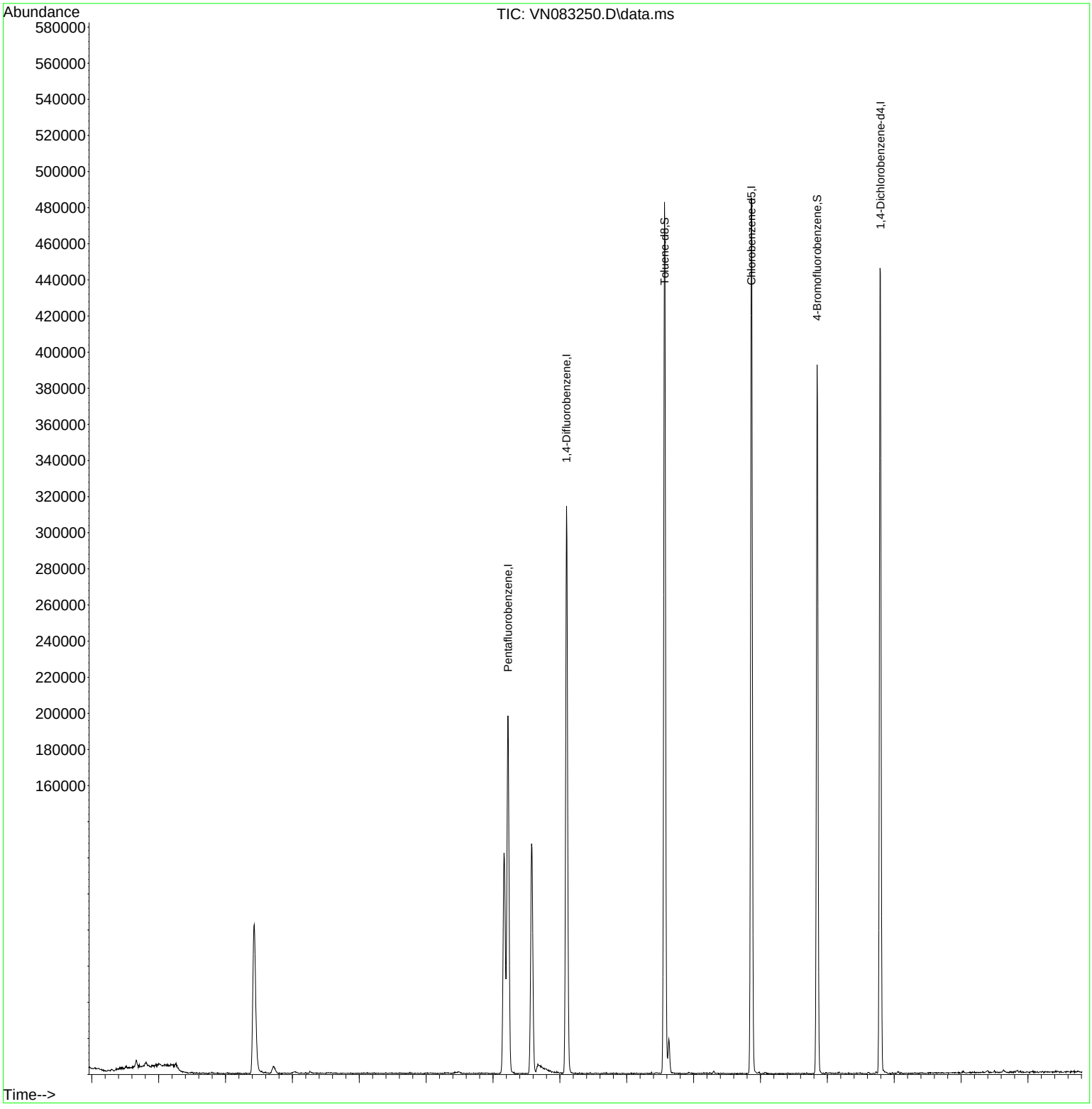
(#) = qualifier out of range (m) = manual integration (+) = signals summed

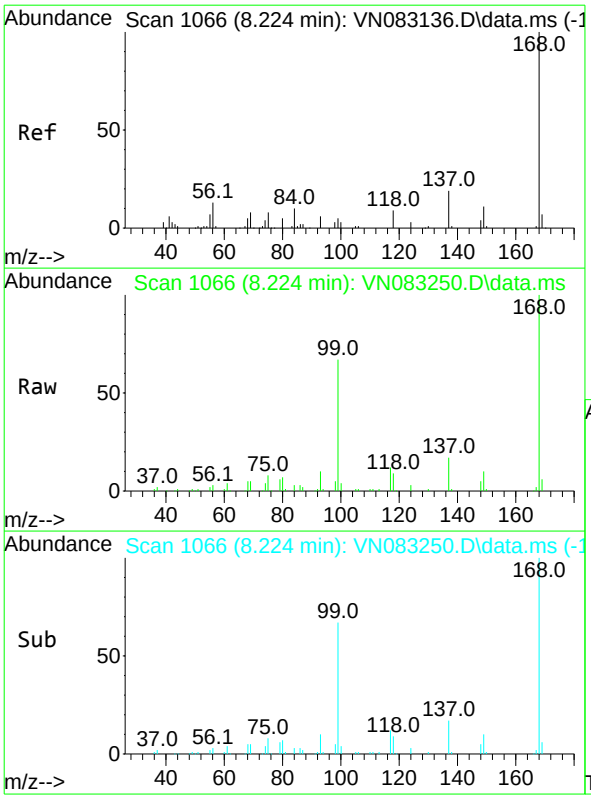
Sample Results: **VN083250.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083250.D
Acq On : 13 Aug 2024 12:06
Operator : JC\MD
Sample : P3429-02
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
931-K1-WS-073124

Quant Time: Aug 14 01:40:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



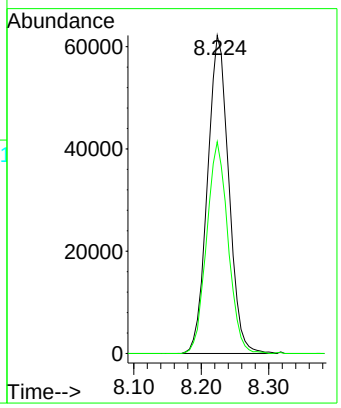


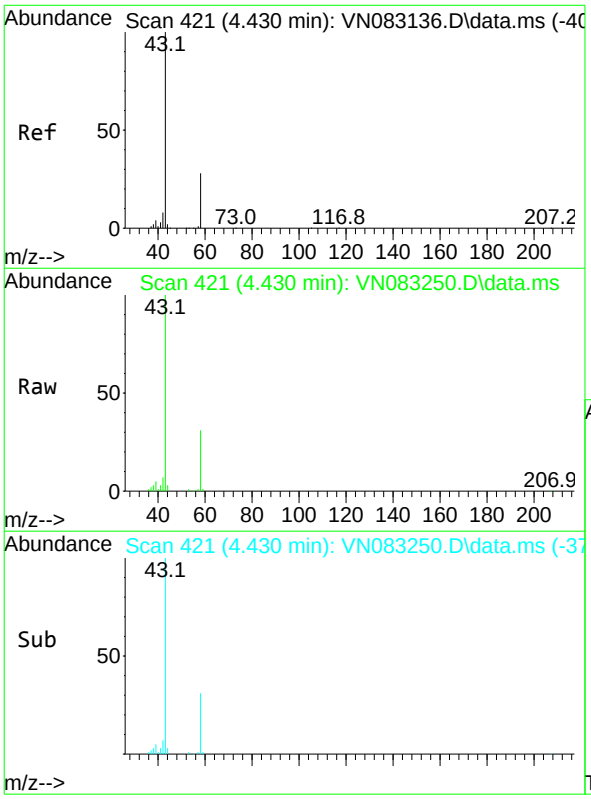

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083250.D
Acq: 13 Aug 2024 12:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
931-K1-WS-073124

Tgt Ion:168 Resp: 136049

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 66.6 | 48.2 | 72.4 |

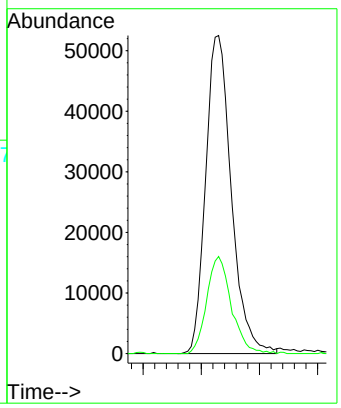


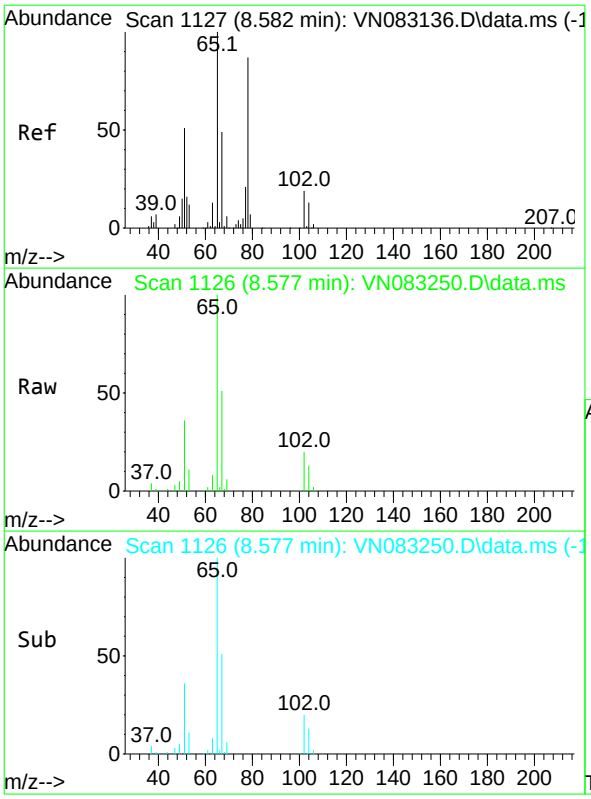




#16
Acetone
Concen: 212.264 ug/l
RT: 4.430 min Scan# 421
Delta R.T. -0.000 min
Lab File: VN083250.D
Acq: 13 Aug 2024 12:06

Tgt Ion: 43 Resp: 160843

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.5 | 21.8 | 32.6 |



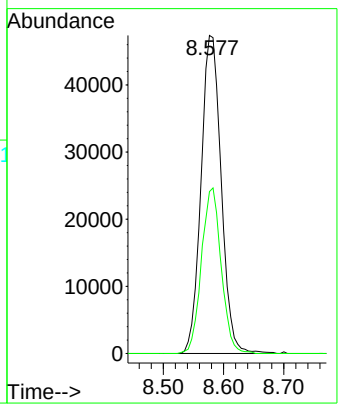


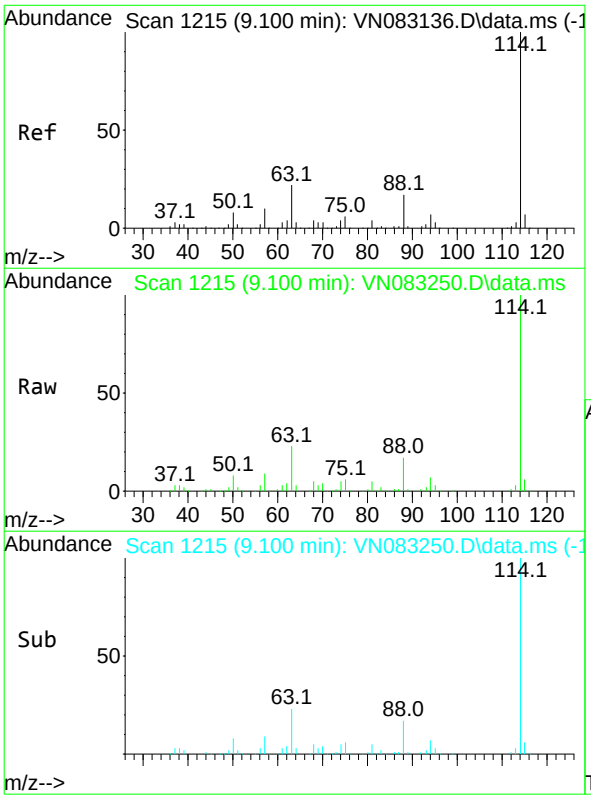

#33
1,2-Dichloroethane-d4
Concen: 56.901 ug/l
RT: 8.577 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN083250.D
Acq: 13 Aug 2024 12:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
931-K1-WS-073124

Tgt Ion: 65 Resp: 110189

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.8 | 0.0 | 104.4 |

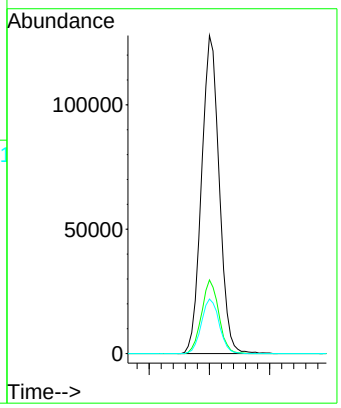


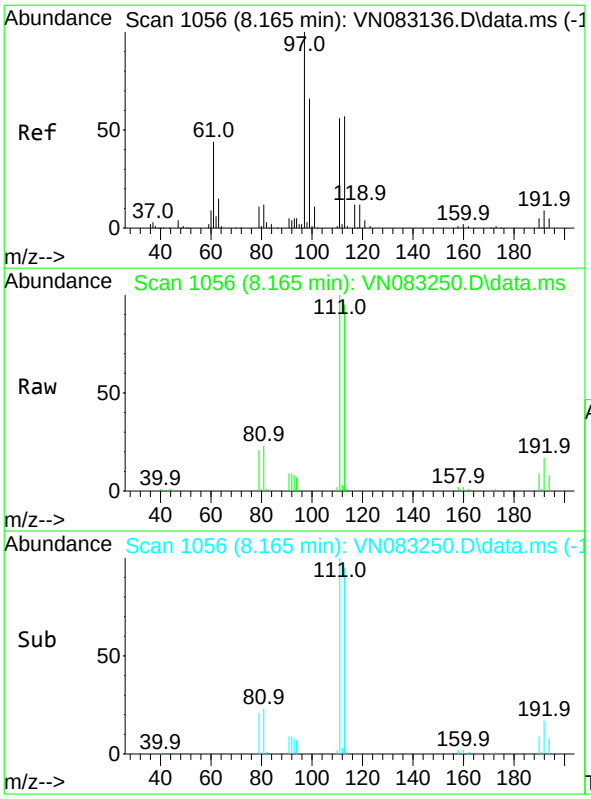




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083250.D
Acq: 13 Aug 2024 12:06

Tgt Ion:114 Resp: 260779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.2 | 0.0 | 44.6 |
| 88 | 17.1 | 0.0 | 31.4 |



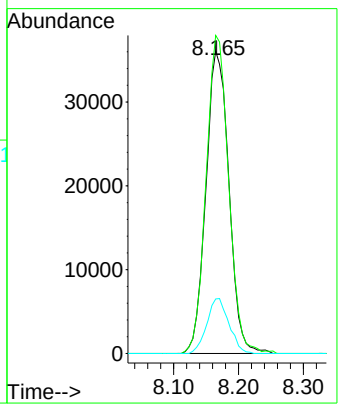


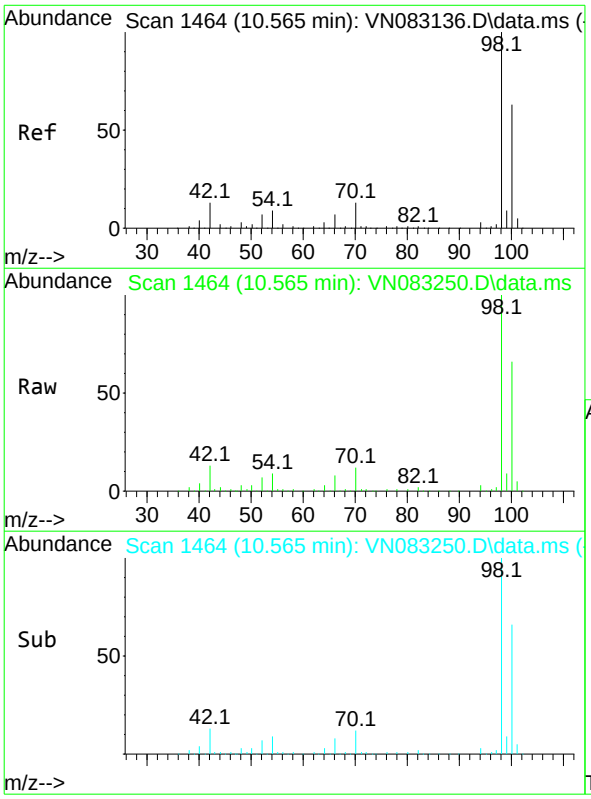

#35
Dibromofluoromethane
Concen: 54.579 ug/l
RT: 8.165 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083250.D
Acq: 13 Aug 2024 12:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
931-K1-WS-073124

Tgt Ion:113 Resp: 88840

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.1 | 82.4 | 123.6 |
| 192 | 17.4 | 14.9 | 22.3 |

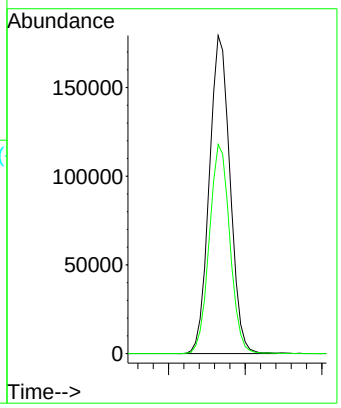


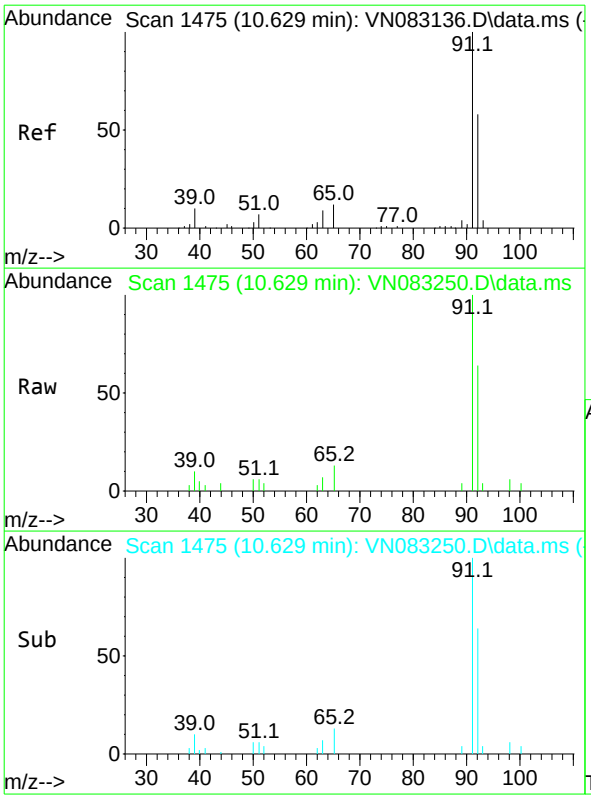




#50
Toluene-d8
Concen: 55.456 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083250.D
Acq: 13 Aug 2024 12:06

Tgt Ion: 98 Resp: 336719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.1 | 51.5 | 77.3 |



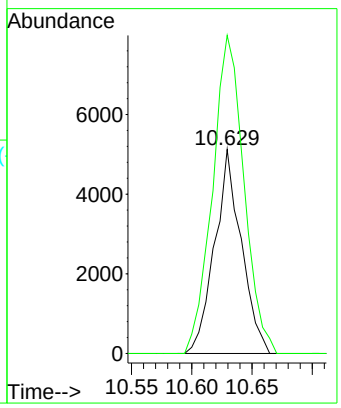


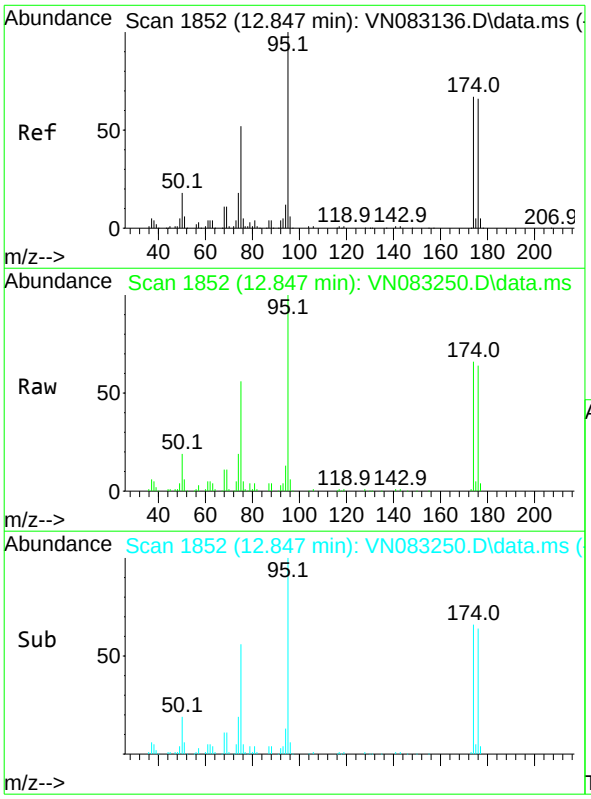

#52
Toluene
Concen: 1.704 ug/l
RT: 10.629 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083250.D
Acq: 13 Aug 2024 12:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
931-K1-WS-073124

Tgt Ion: 92 Resp: 7899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 183.4 | 139.4 | 209.0 |

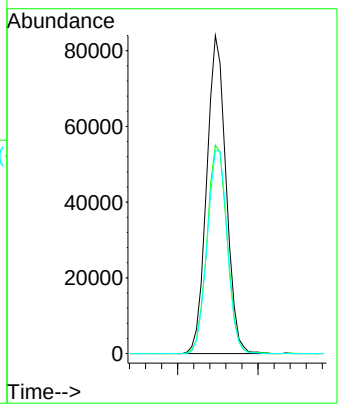


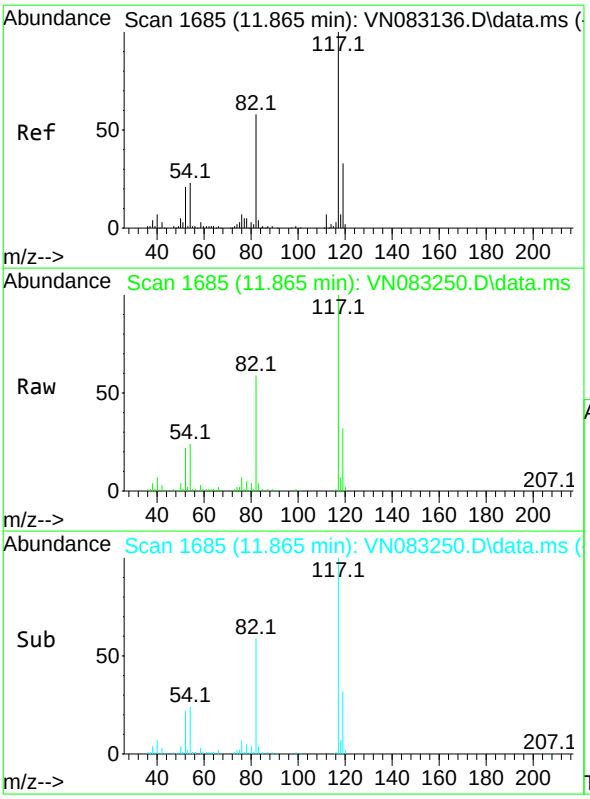




#62
4-Bromofluorobenzene
Concen: 59.297 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083250.D
Acq: 13 Aug 2024 12:06

Tgt Ion: 95 Resp: 140365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 68.2 | 0.0 | 159.2 |
| 176 | 66.5 | 0.0 | 147.6 |



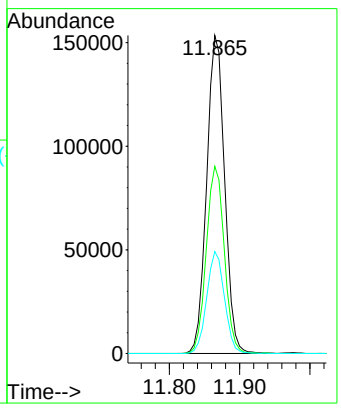


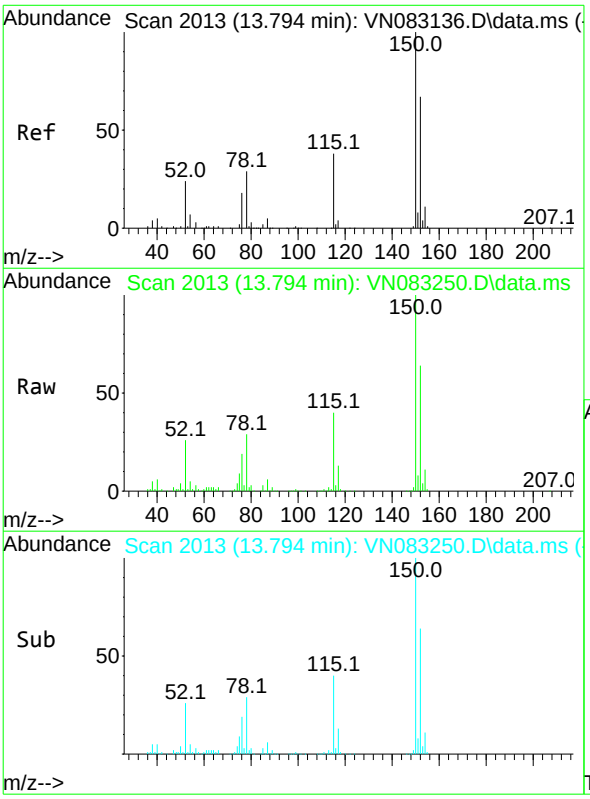

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083250.D
Acq: 13 Aug 2024 12:06

**Instrument :**
MSVOA_N
**ClientSampleId :**
931-K1-WS-073124

Tgt Ion:117 Resp: 272432

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.9 | 47.5 | 71.3 |
| 119 | 32.1 | 25.6 | 38.4 |

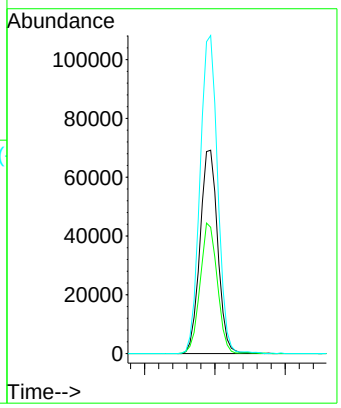



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083250.D
Acq: 13 Aug 2024 12:06

Tgt Ion:152 Resp: 121082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.0 | 30.6 | 91.6 |
| 150 | 155.9 | 0.0 | 348.6 |



Raw Data: **VN083269.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 07/31/24 |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | 07/31/24 |
| Client Sample ID: | 925-K1-WS-073124 | SDG No.: | P3429 |
| Lab Sample ID: | P3429-03 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083269.D | 1 | | 08/13/24 19:45 | VN081324 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 0.35 | U | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 190 | E | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 1.40 | U | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 50.7 | | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 12.4 | | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.32 | U | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.16 | U | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.32 | U | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 7.60 | | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 1100 | E | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.57 | J | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 7.80 | | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 1.10 | | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.26 | J | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.31 | U | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 0.45 | U | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 0.14 | U | 0.14 | 1.00 | ug/L |

Raw Data: **VN083269.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 07/31/24 |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | 07/31/24 |
| Client Sample ID: | 925-K1-WS-073124 | SDG No.: | P3429 |
| Lab Sample ID: | P3429-03 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083269.D | 1 | | 08/13/24 19:45 | VN081324 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.19 | U | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 57.2 | | 70 (74) - 130 (125) | 114% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 53.9 | | 70 (75) - 130 (124) | 108% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.4 | | 70 (86) - 130 (113) | 107% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 54.5 | | 70 (77) - 130 (121) | 109% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 132000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 256000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 257000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 110000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083269.D
Acq On : 13 Aug 2024 19:45
Operator : JC\MD
Sample : P3429-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 26 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Quant Time: Aug 14 01:49:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

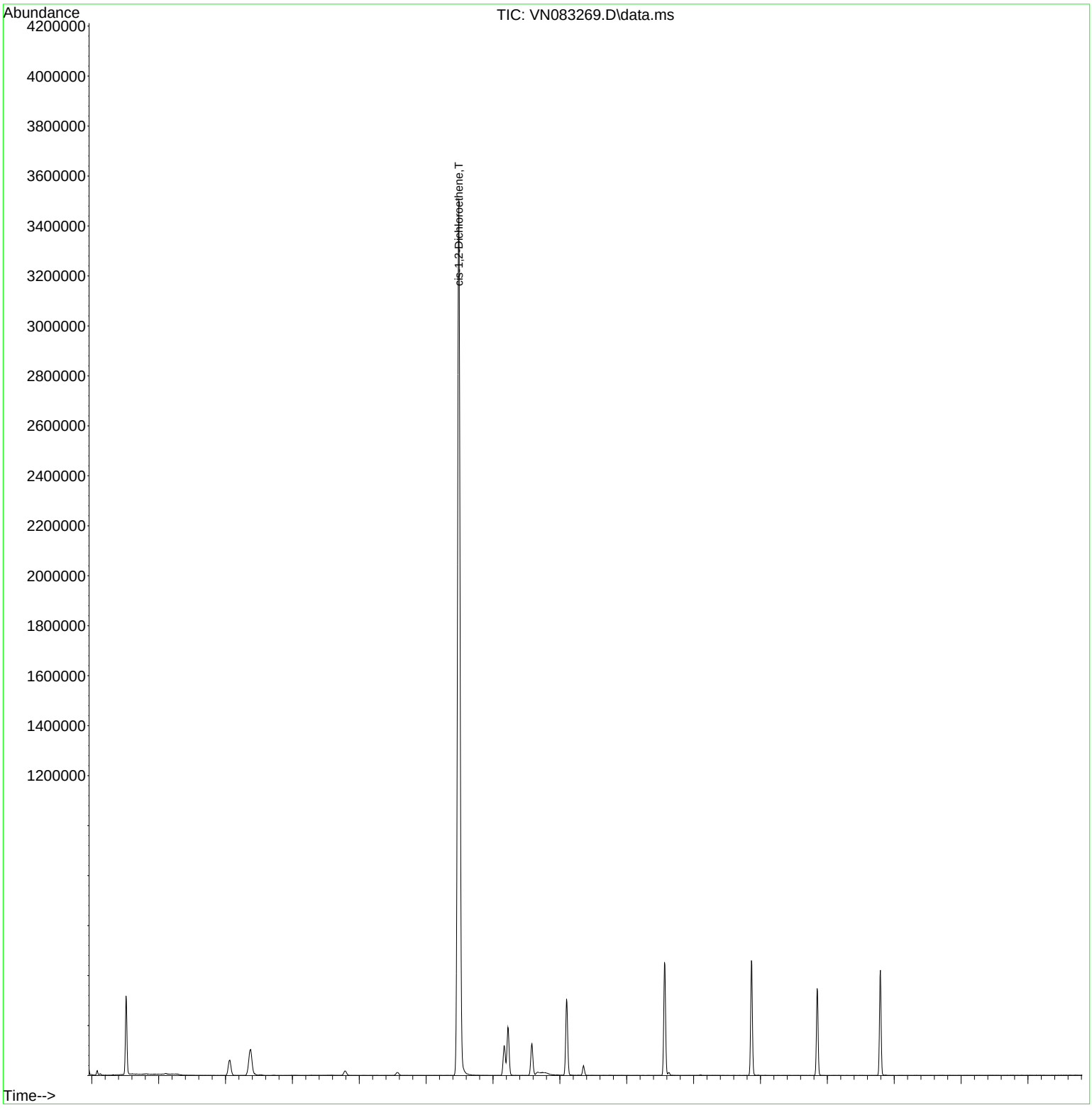
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 131513 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 255536 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 257054 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 110153 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.582 | 65 | 106997 | 57.158 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 114.320% | | | |
| 35) Dibromofluoromethane | 8.171 | 113 | 85905 | 53.859 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 107.720% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 317651 | 53.389 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 106.780% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 126373 | 54.482 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 108.960% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Vinyl Chloride | 2.512 | 62 | 300019 | 192.568 | ug/l | 98 |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 71936 | 50.695 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.347 | 96 | 5493 | 3.768 | ug/l # | 77 |
| 16) Acetone | 4.436 | 43 | 9117 | 12.447 | ug/l | 99 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 11501 | 7.633 | ug/l | 91 |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 18791 | 6.657 | ug/l | 96 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 2080407 | 1144.206 | ug/l | 84 |
| 40) Benzene | 8.606 | 78 | 4133 | 0.575 | ug/l | 91 |
| 44) Trichloroethene | 9.353 | 130 | 13314 | 7.782 | ug/l | 86 |
| 52) Toluene | 10.629 | 92 | 5037 | 1.109 | ug/l | 99 |
| 65) Chlorobenzene | 11.888 | 112 | 1490 | 0.262 | ug/l | 97 |

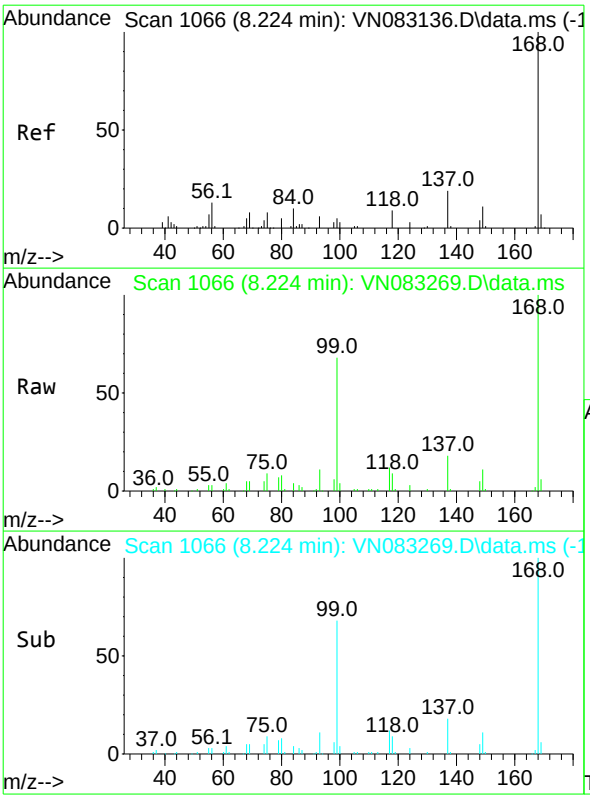
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083269.D
Acq On : 13 Aug 2024 19:45
Operator : JC\MD
Sample : P3429-03
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 26 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Quant Time: Aug 14 01:49:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



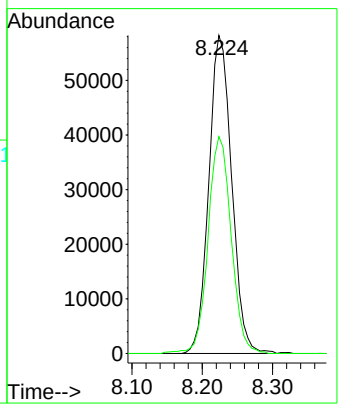


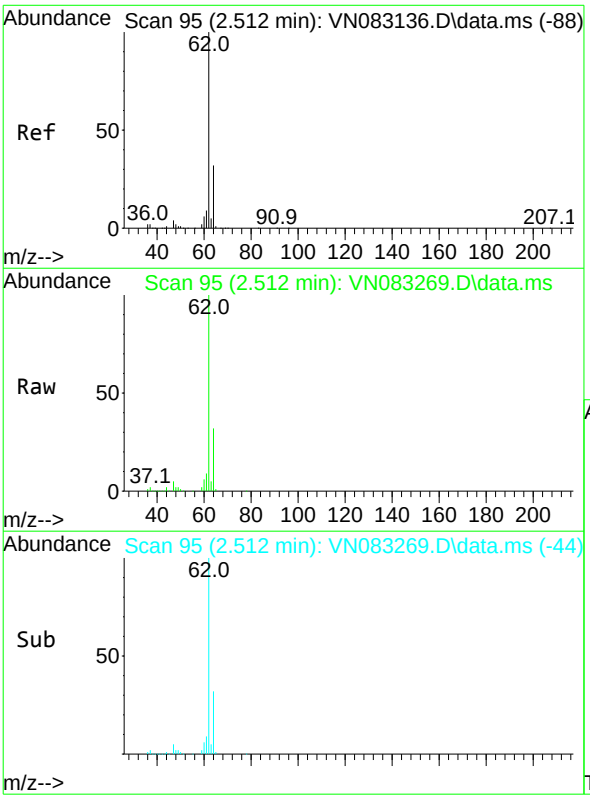

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Tgt Ion:168 Resp: 131513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 68.2 | 48.2 | 72.4 |

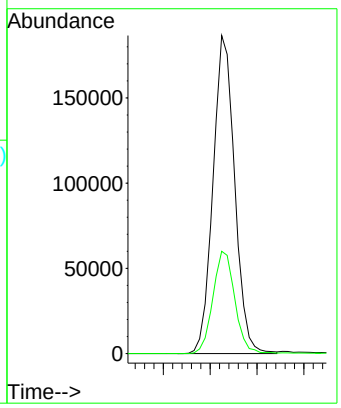


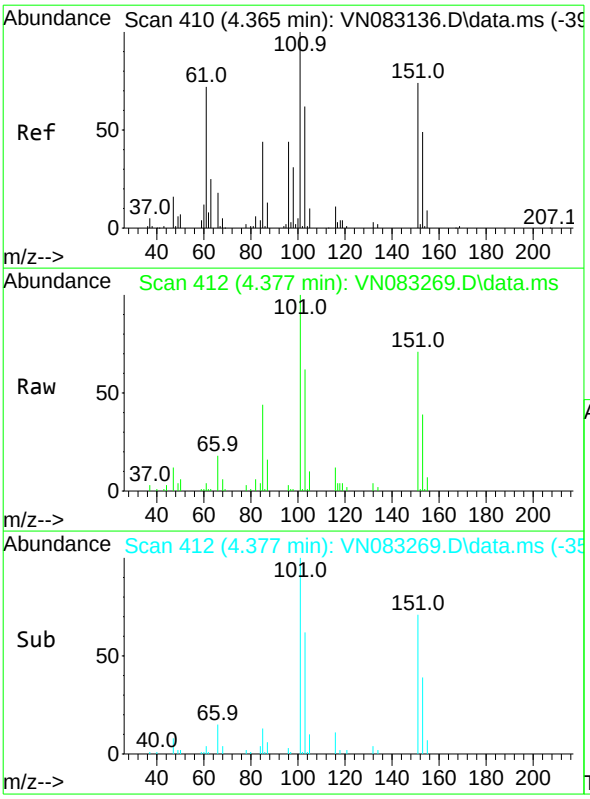




#4
Vinyl Chloride
Concen: 192.568 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

Tgt Ion: 62 Resp: 300019

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.2 | 25.0 | 37.6 |



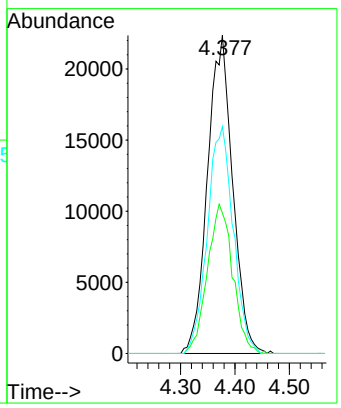


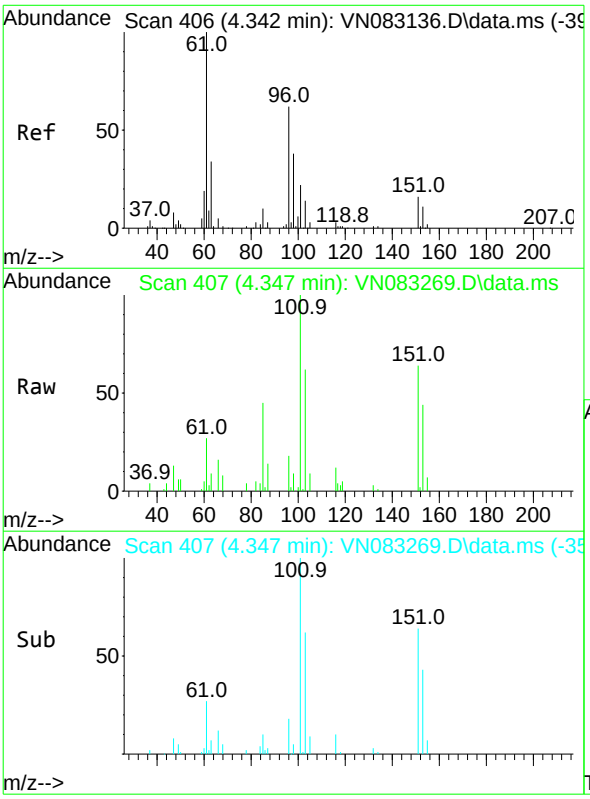

#9
1,1,2-Trichlorotrifluoroethane
Concen: 50.695 ug/l
RT: 4.377 min Scan# 41
Delta R.T. 0.012 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Tgt Ion:101 Resp: 71936

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 47.2 | 38.3 | 57.5 |
| 151 | 73.2 | 59.3 | 88.9 |

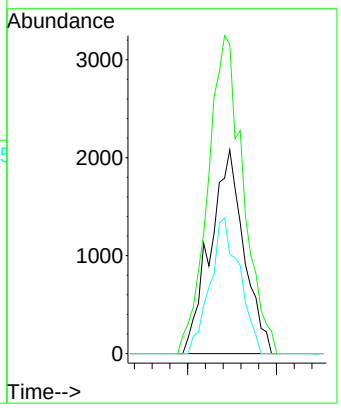


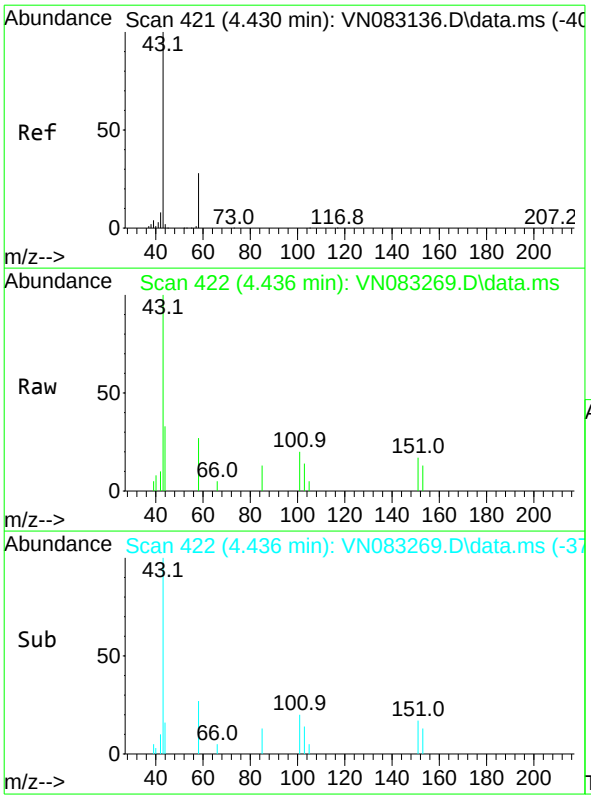




#12
1,1-Dichloroethene
Concen: 3.768 ug/l
RT: 4.347 min Scan# 407
Delta R.T. 0.006 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

Tgt Ion: 96 Resp: 5493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 151.9 | 149.7 | 224.5 |
| 98 | 48.8 | 50.1 | 75.1# |



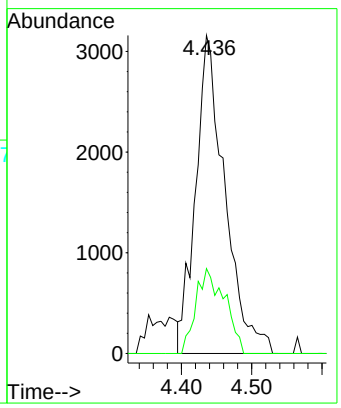


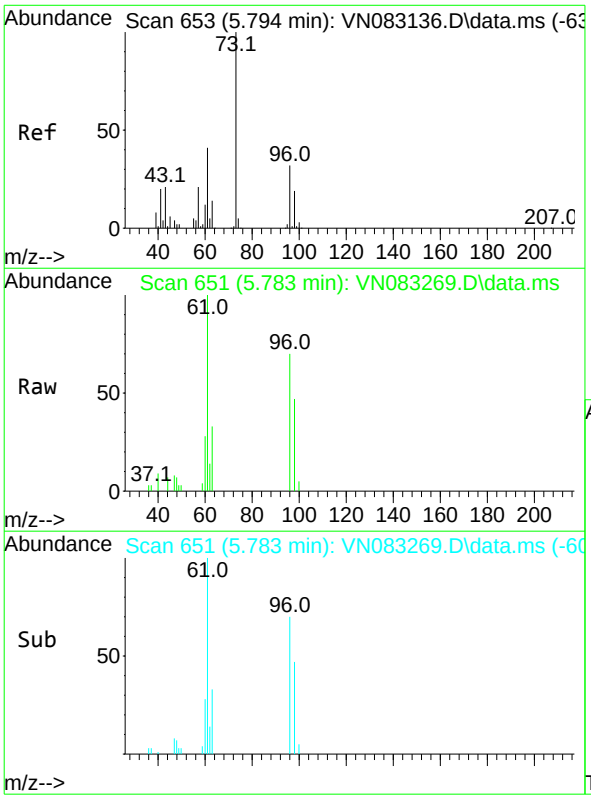

#16
Acetone
Concen: 12.447 ug/l
RT: 4.436 min Scan# 42
Delta R.T. 0.006 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Tgt Ion: 43 Resp: 9117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 26.7 | 21.8 | 32.6 |

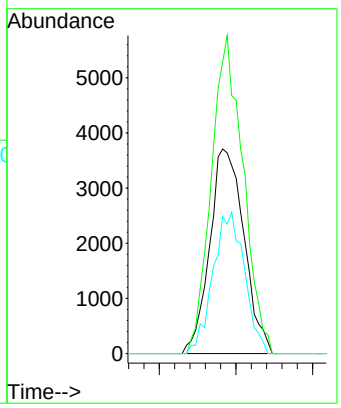


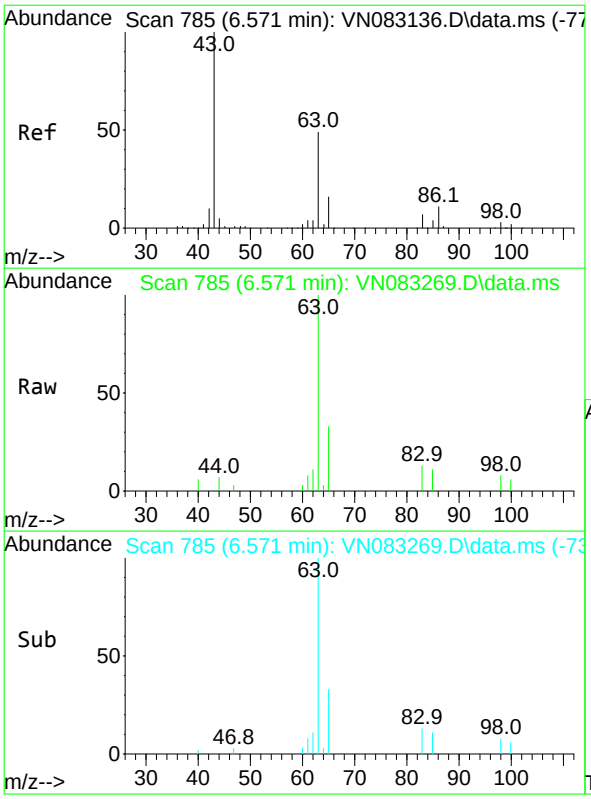




#21
trans-1,2-Dichloroethene
Concen: 7.633 ug/l
RT: 5.783 min Scan# 651
Delta R.T. -0.012 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

Tgt Ion: 96 Resp: 11501

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 142.5 | 123.4 | 185.2 |
| 98 | 67.1 | 49.3 | 73.9 |



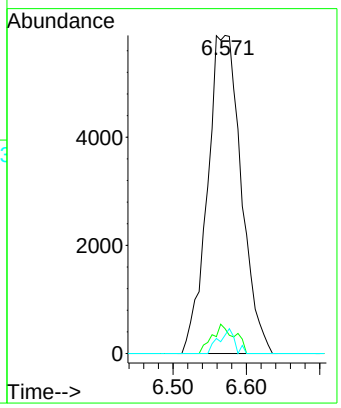


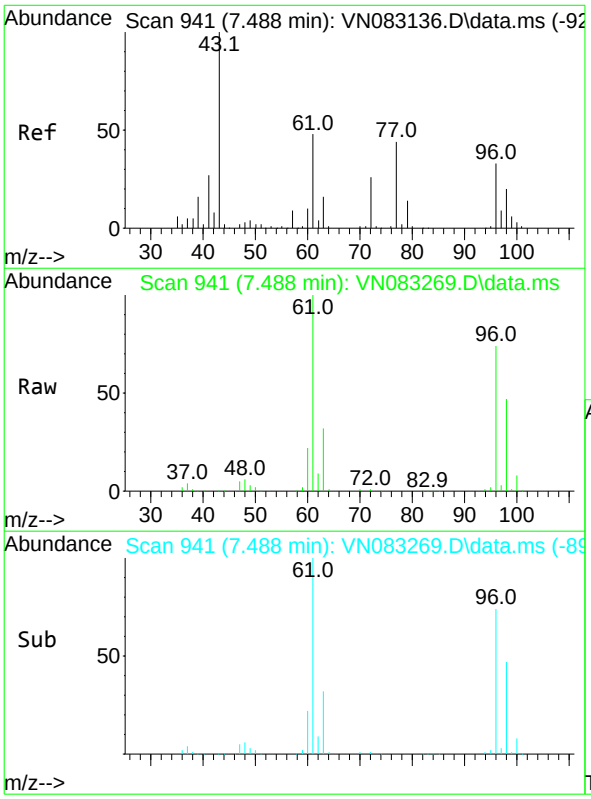

#24
1,1-Dichloroethane
Concen: 6.657 ug/l
RT: 6.571 min Scan# 78
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Tgt Ion: 63 Resp: 18791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.8 | 3.3 | 9.9 |
| 100 | 5.7 | 2.0 | 6.0 |

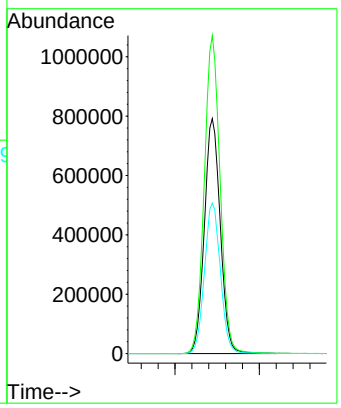


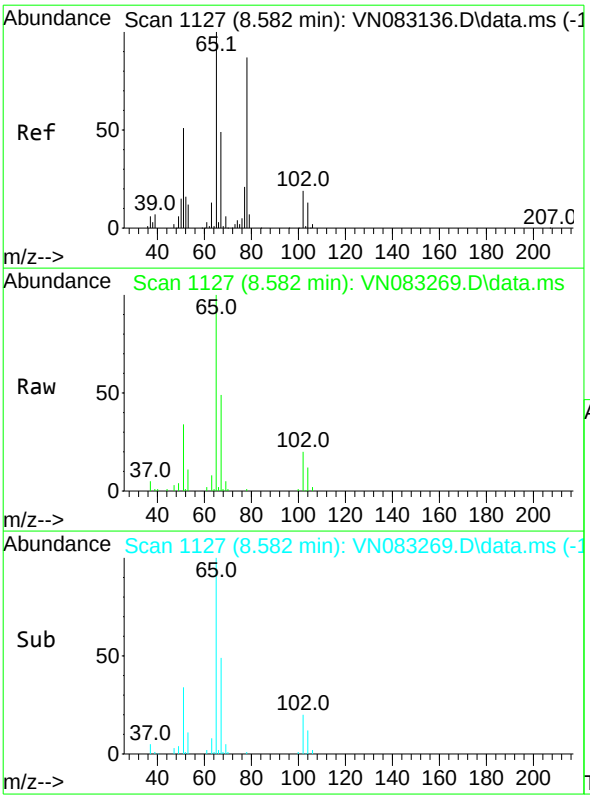




#27
cis-1,2-Dichloroethene
Concen: 1144.206 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

Tgt Ion: 96 Resp: 2080407

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 134.3 | 0.0 | 329.6 |
| 98 | 64.1 | 0.0 | 128.6 |



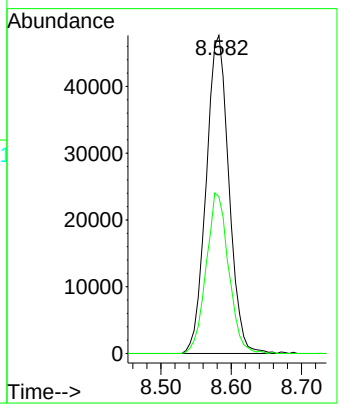


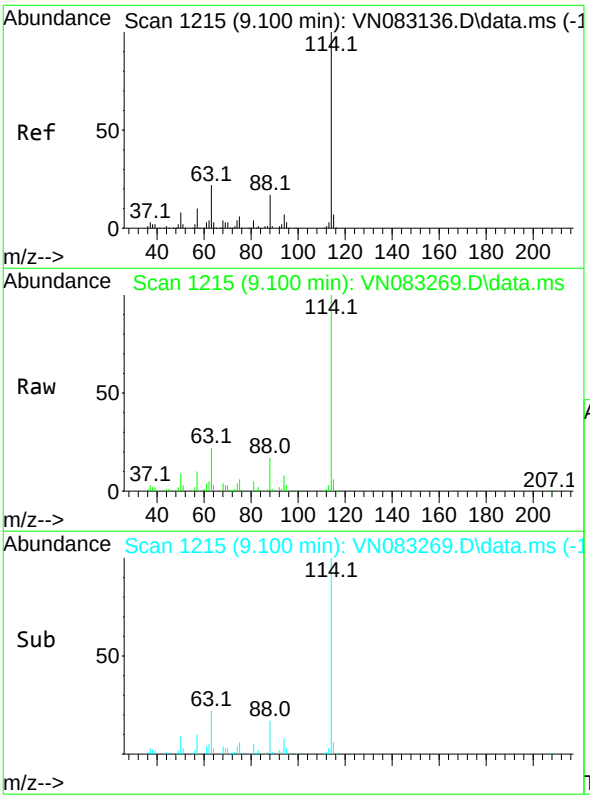

#33
1,2-Dichloroethane-d4
Concen: 57.158 ug/l
RT: 8.582 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Tgt Ion: 65 Resp: 106997

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.9 | 0.0 | 104.4 |

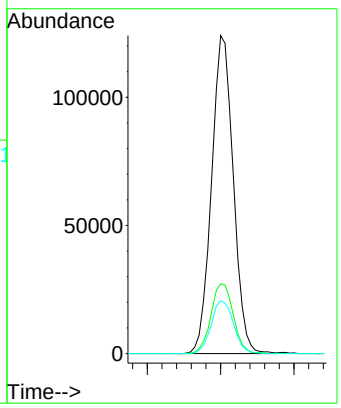


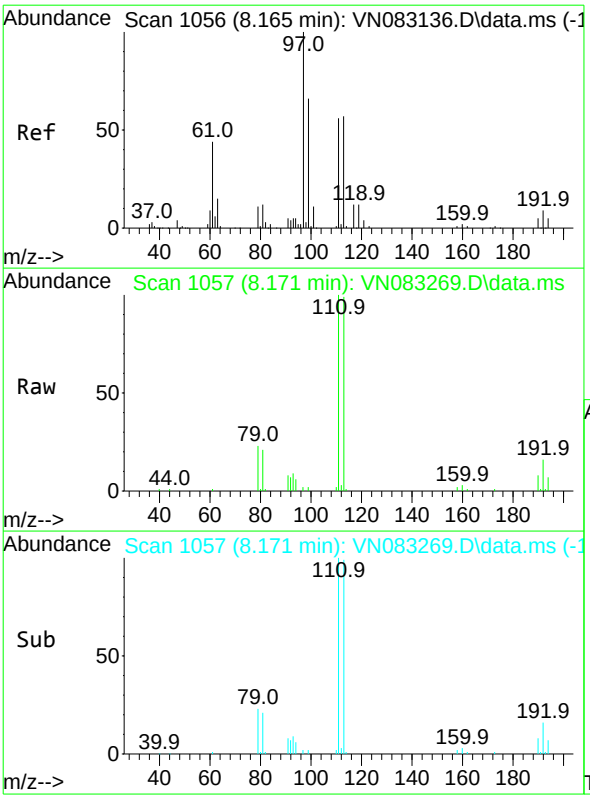




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

Tgt Ion:114 Resp: 255536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.0 | 0.0 | 44.6 |
| 88 | 16.6 | 0.0 | 31.4 |



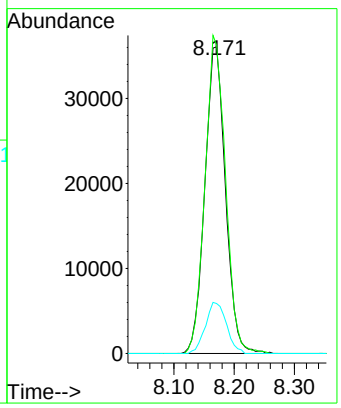


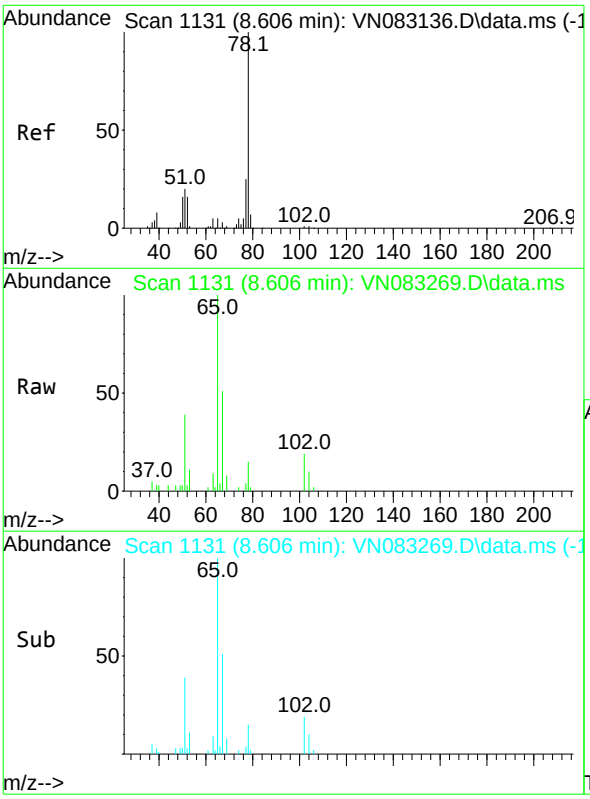

#35
Dibromofluoromethane
Concen: 53.859 ug/l
RT: 8.171 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Tgt Ion:113 Resp: 85905

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.9 | 82.4 | 123.6 |
| 192 | 17.0 | 14.9 | 22.3 |

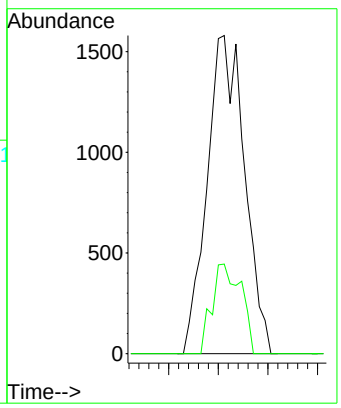


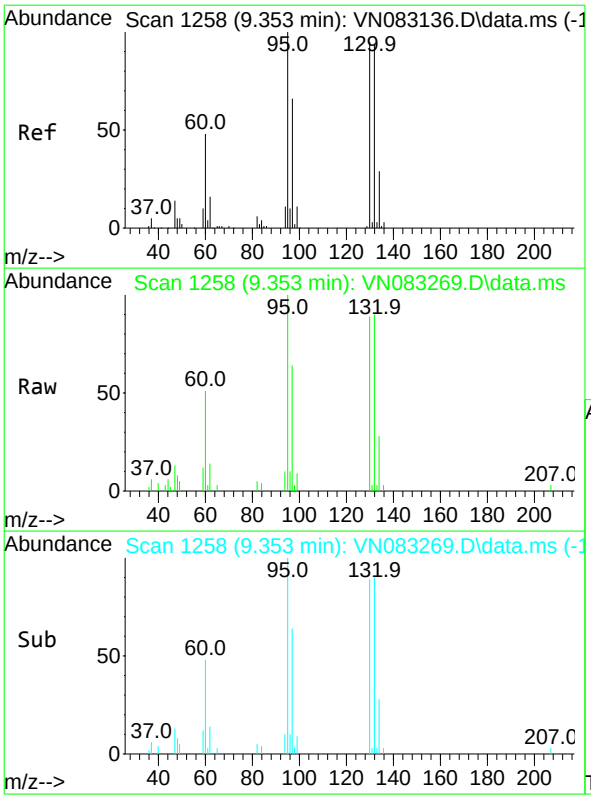




#40
Benzene
Concen: 0.575 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

Tgt Ion: 78 Resp: 4133

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 28.2 | 19.0 | 28.4 |



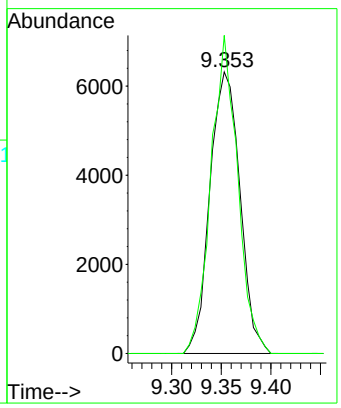


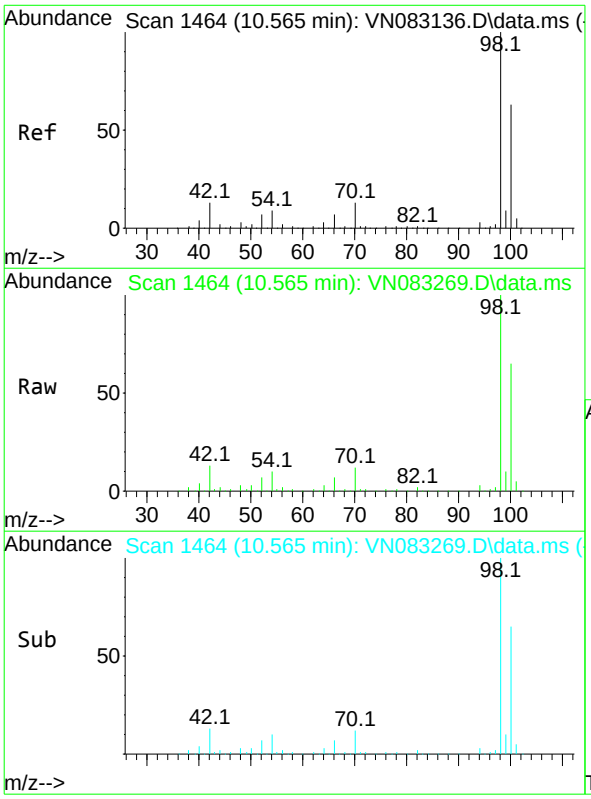

#44
Trichloroethene
Concen: 7.782 ug/l
RT: 9.353 min Scan# 12
Delta R.T. 0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Tgt Ion:130 Resp: 13314

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 113.0 | 0.0 | 197.8 |

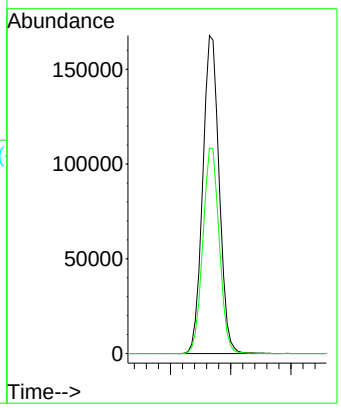


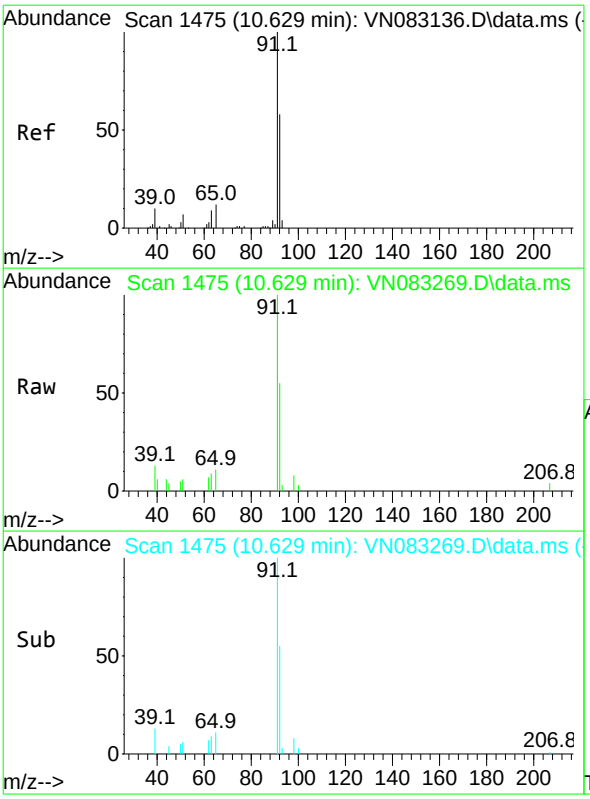




#50
Toluene-d8
Concen: 53.389 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

Tgt Ion: 98 Resp: 317651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.7 | 51.5 | 77.3 |



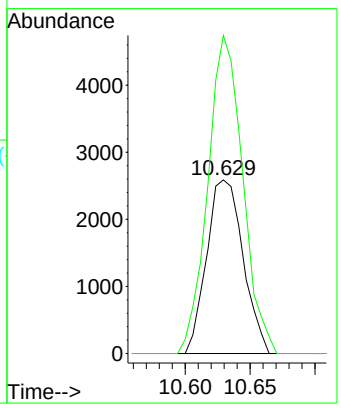


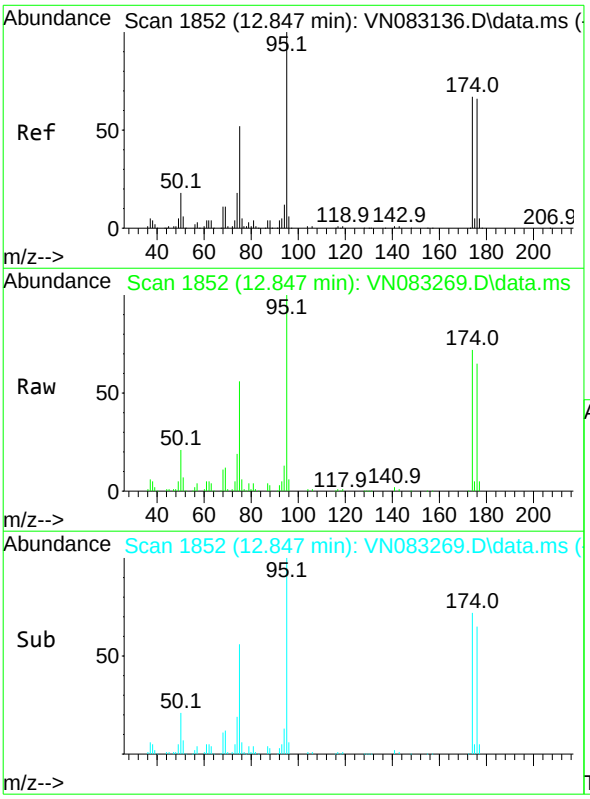

#52
Toluene
Concen: 1.109 ug/l
RT: 10.629 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Tgt Ion: 92 Resp: 5037

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 176.1 | 139.4 | 209.0 |

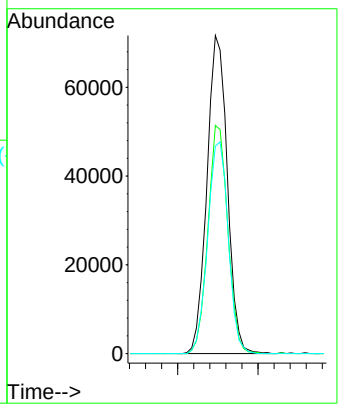


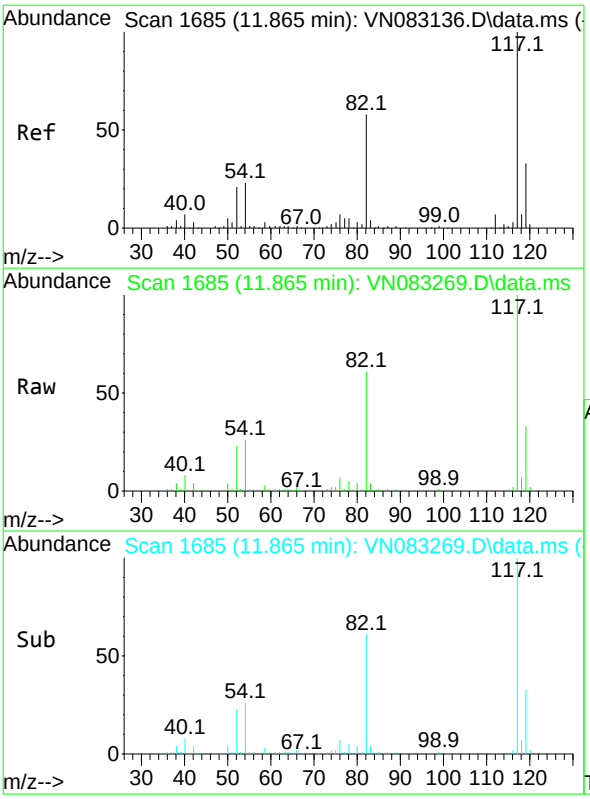




#62
4-Bromofluorobenzene
Concen: 54.482 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

Tgt Ion: 95 Resp: 126373

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.9 | 0.0 | 159.2 |
| 176 | 66.9 | 0.0 | 147.6 |



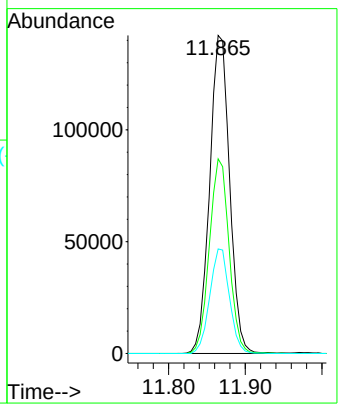


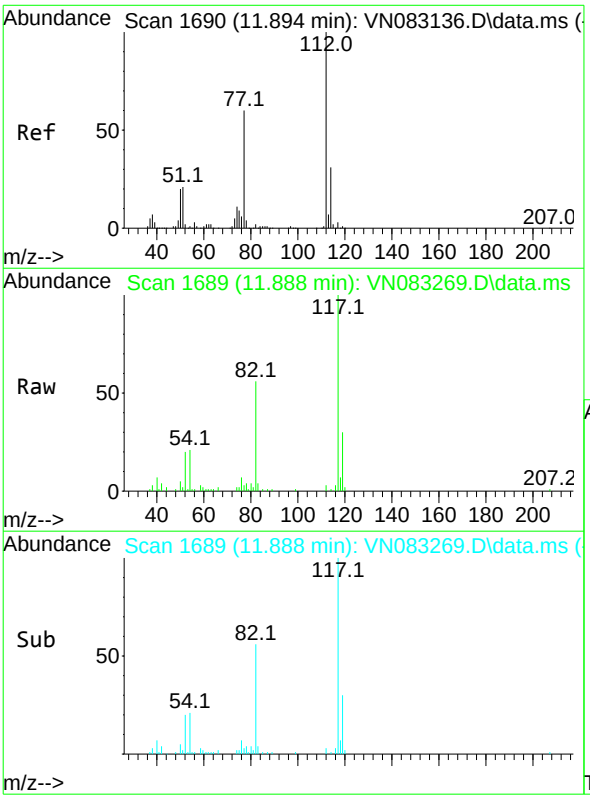

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Tgt Ion:117 Resp: 257054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.2 | 47.5 | 71.3 |
| 119 | 32.9 | 25.6 | 38.4 |

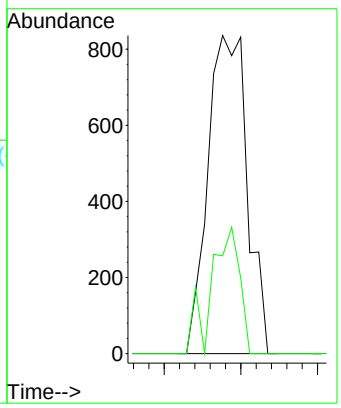


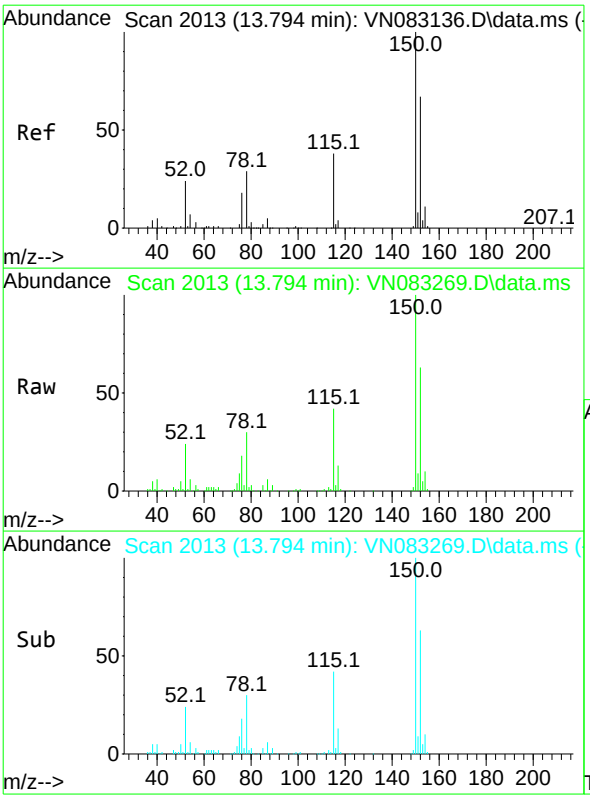




#65
Chlorobenzene
Concen: 0.262 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. -0.006 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

Tgt Ion:112 Resp: 1490

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 30.7 | 26.2 | 39.2 |



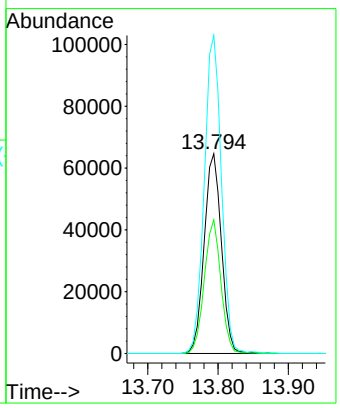



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083269.D
Acq: 13 Aug 2024 19:45

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124

Tgt Ion:152 Resp: 110153

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.2 | 30.6 | 91.6 |
| 150 | 158.2 | 0.0 | 348.6 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 07/31/24 |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | 07/31/24 |
| Client Sample ID: | 925-K1-WS-073124DL | SDG No.: | P3429 |
| Lab Sample ID: | P3429-03DL | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083299.D | 20 | | 08/14/24 14:27 | VN081424 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 4.20 | UD | 4.20 | 20.0 | ug/L |
| 74-87-3 | Chloromethane | 7.00 | UD | 7.00 | 20.0 | ug/L |
| 75-01-4 | Vinyl Chloride | 220 | D | 6.80 | 20.0 | ug/L |
| 74-83-9 | Bromomethane | 27.2 | UD | 27.2 | 100 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 62.2 | D | 5.00 | 20.0 | ug/L |
| 67-64-1 | Acetone | 27.8 | UD | 27.8 | 100 | ug/L |
| 75-15-0 | Carbon Disulfide | 6.40 | UD | 6.40 | 20.0 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 3.20 | UD | 3.20 | 20.0 | ug/L |
| 75-09-2 | Methylene Chloride | 6.40 | UD | 6.40 | 20.0 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 5.00 | UD | 5.00 | 20.0 | ug/L |
| 110-82-7 | Cyclohexane | 32.4 | UD | 32.4 | 100 | ug/L |
| 78-93-3 | 2-Butanone | 26.0 | UD | 26.0 | 100 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 5.00 | UD | 5.00 | 20.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 1100 | D | 5.00 | 20.0 | ug/L |
| 67-66-3 | Chloroform | 5.20 | UD | 5.20 | 20.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 3.80 | UD | 3.80 | 20.0 | ug/L |
| 108-87-2 | Methylcyclohexane | 3.80 | UD | 3.80 | 20.0 | ug/L |
| 71-43-2 | Benzene | 3.20 | UD | 3.20 | 20.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 4.80 | UD | 4.80 | 20.0 | ug/L |
| 79-01-6 | Trichloroethene | 10.1 | JD | 6.40 | 20.0 | ug/L |
| 75-27-4 | Bromodichloromethane | 4.80 | UD | 4.80 | 20.0 | ug/L |
| 108-88-3 | Toluene | 3.60 | UD | 3.60 | 20.0 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 4.20 | UD | 4.20 | 20.0 | ug/L |
| 124-48-1 | Dibromochloromethane | 3.60 | UD | 3.60 | 20.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 5.00 | UD | 5.00 | 20.0 | ug/L |
| 108-90-7 | Chlorobenzene | 2.60 | UD | 2.60 | 20.0 | ug/L |
| 100-41-4 | Ethyl Benzene | 3.20 | UD | 3.20 | 20.0 | ug/L |
| 179601-23-1 | m/p-Xylenes | 6.20 | UD | 6.20 | 40.0 | ug/L |
| 1330-20-7 | Total Xylenes | 9.00 | UD | 9.00 | 60.0 | ug/L |
| 95-47-6 | o-Xylene | 2.80 | UD | 2.80 | 20.0 | ug/L |

Raw Data: **VN083299.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 07/31/24 |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | 07/31/24 |
| Client Sample ID: | 925-K1-WS-073124DL | SDG No.: | P3429 |
| Lab Sample ID: | P3429-03DL | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083299.D | 20 | | 08/14/24 14:27 | VN081424 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 2.60 | UD | 2.60 | 20.0 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 5.40 | UD | 5.40 | 20.0 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 3.80 | UD | 3.80 | 20.0 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 56.4 | | 70 (74) - 130 (125) | 113% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 52.7 | | 70 (75) - 130 (124) | 105% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.1 | | 70 (86) - 130 (113) | 106% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 57.4 | | 70 (77) - 130 (121) | 115% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 130000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 253000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 260000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 115000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083299.D
Acq On : 14 Aug 2024 14:27
Operator : JC\MD
Sample : P3429-03DL 20X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124DL

Quant Time: Aug 14 23:23:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

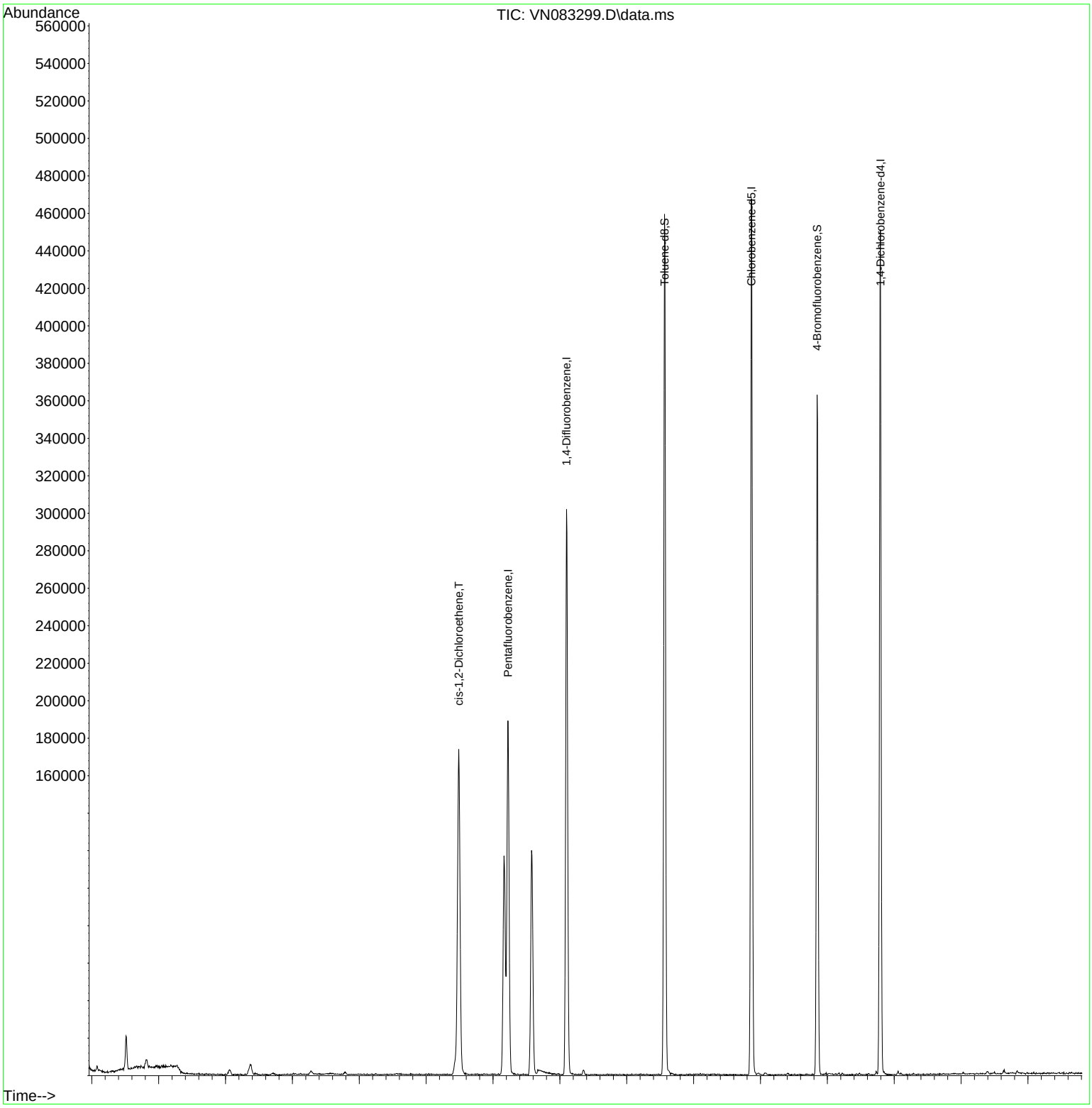
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 130132 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 253353 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 260285 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 115317 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 104430 | 56.379 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 112.760% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 83334 | 52.697 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 105.400% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 313451 | 53.137 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 106.280% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 131983 | 57.391 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 114.780% | | | |
| Target Compounds | | | | | | Qvalue |
| 4) Vinyl Chloride | 2.512 | 62 | 16972 | 11.009 | ug/l | 94 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 4370 | 3.112 | ug/l | 94 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 102086 | 56.742 | ug/l | 83 |
| 44) Trichloroethene | 9.353 | 130 | 859 | 0.506 | ug/l | 79 |

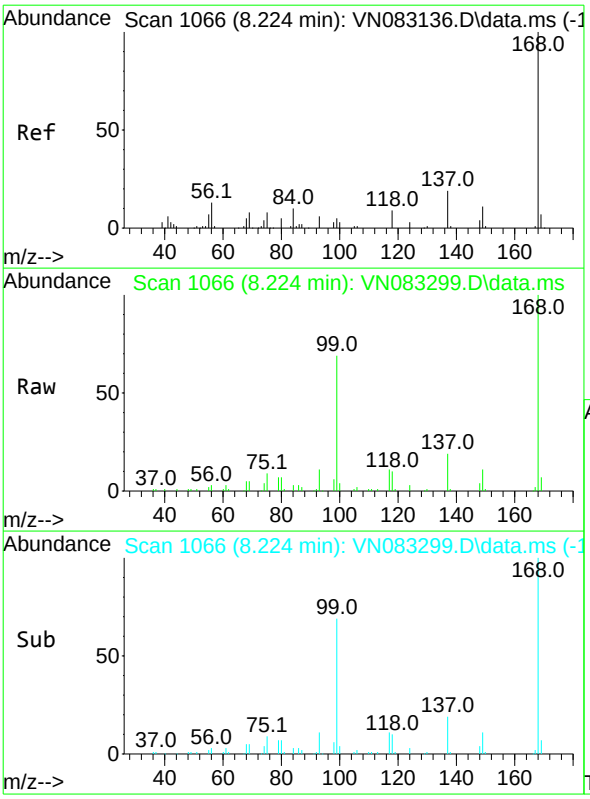
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083299.D
Acq On : 14 Aug 2024 14:27
Operator : JC\MD
Sample : P3429-03DL 20X
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124DL

Quant Time: Aug 14 23:23:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



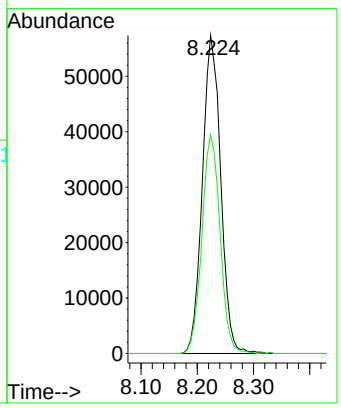


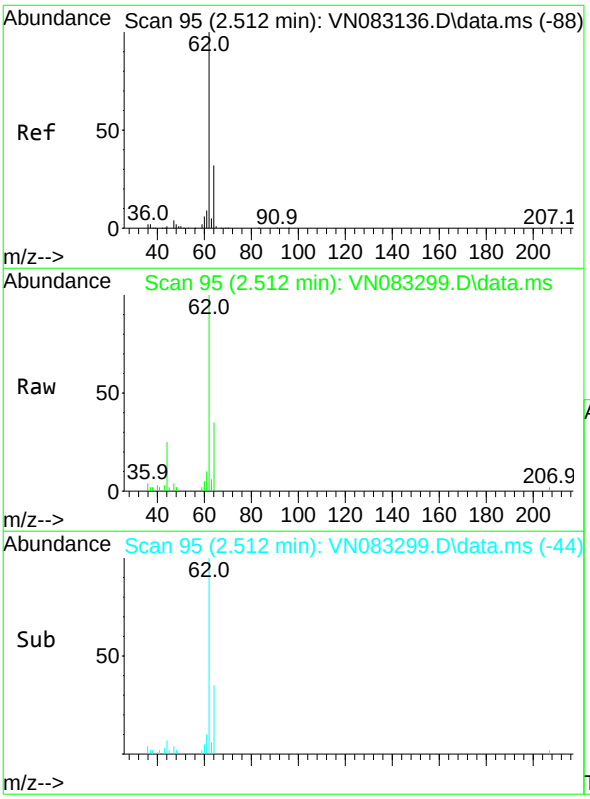

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124DL

Tgt Ion:168 Resp: 130132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 68.8 | 48.2 | 72.4 |

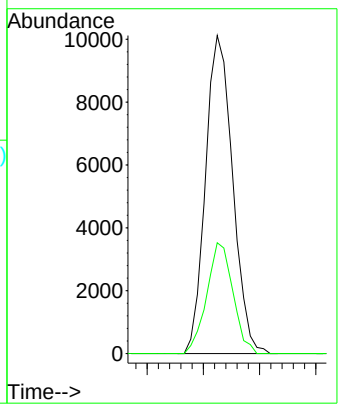


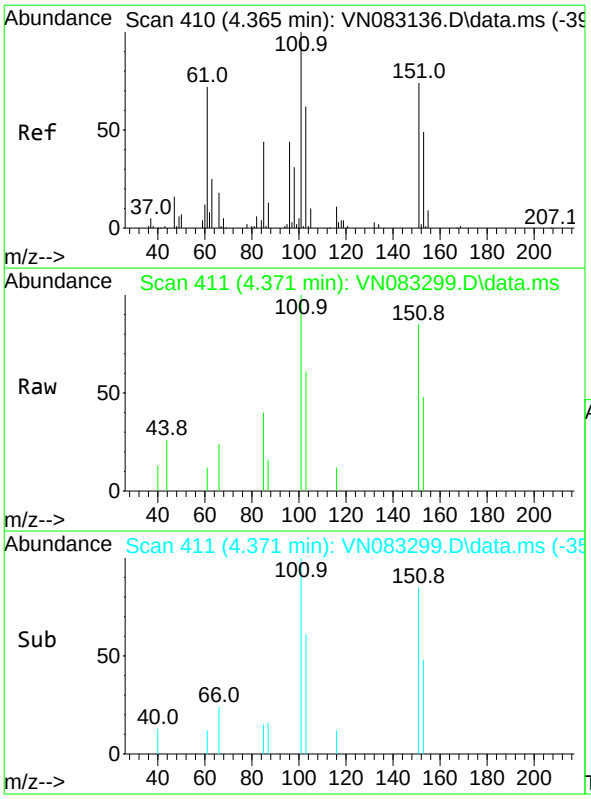




#4
Vinyl Chloride
Concen: 11.009 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

Tgt Ion: 62 Resp: 16972

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 34.8 | 25.0 | 37.6 |



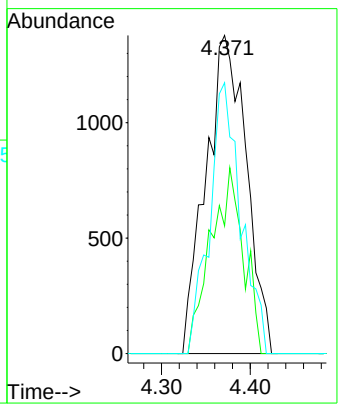


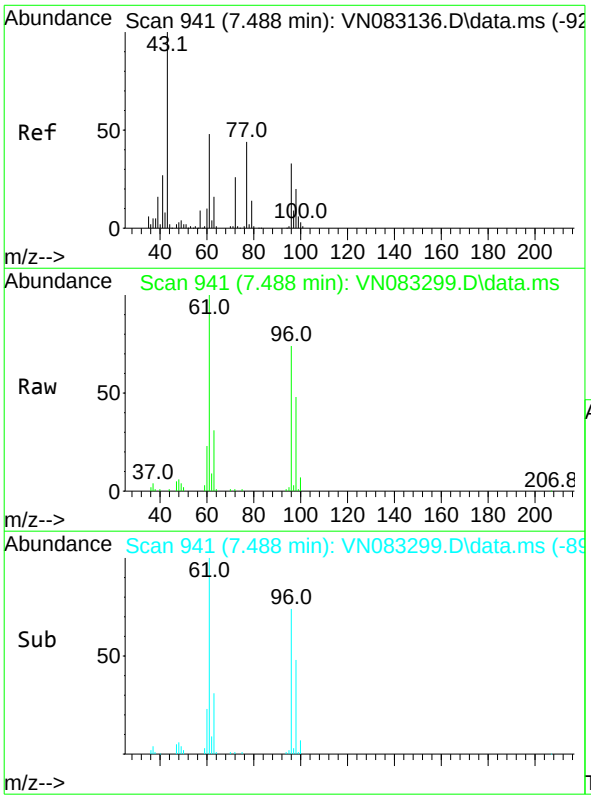

#9
1,1,2-Trichlorotrifluoroethane
Concen: 3.112 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124DL

Tgt Ion:101 Resp: 4370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.9 | 38.3 | 57.5 |
| 151 | 65.9 | 59.3 | 88.9 |

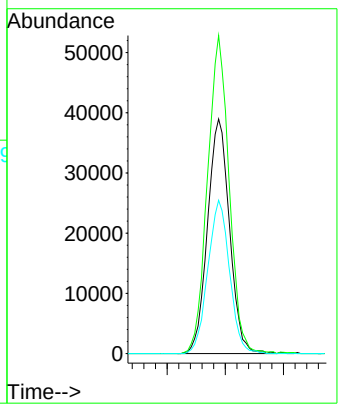


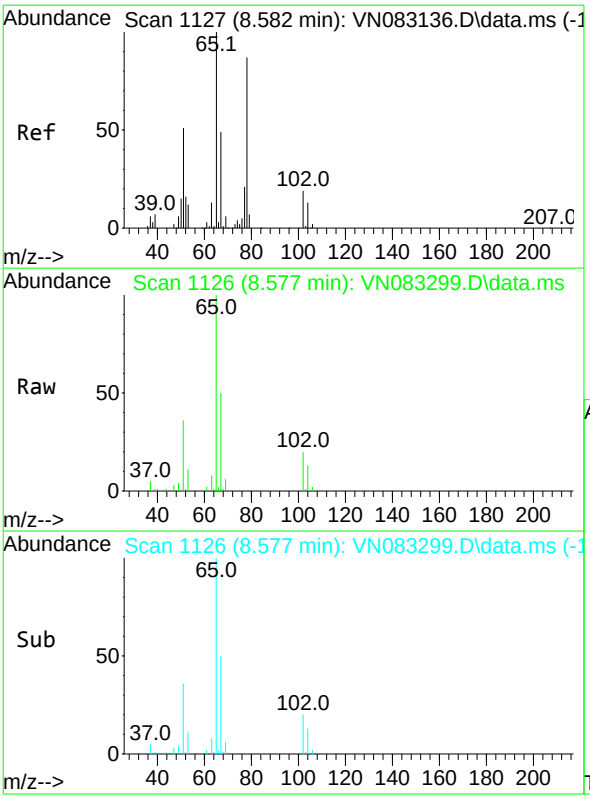




#27
cis-1,2-Dichloroethene
Concen: 56.742 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

Tgt Ion: 96 Resp: 102086

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 133.3 | 0.0 | 329.6 |
| 98 | 64.5 | 0.0 | 128.6 |



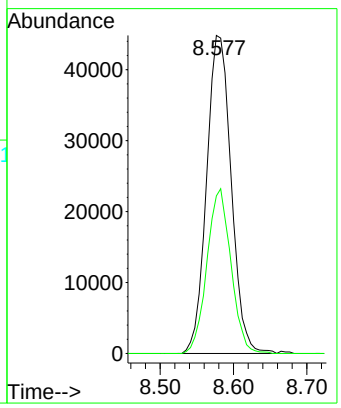


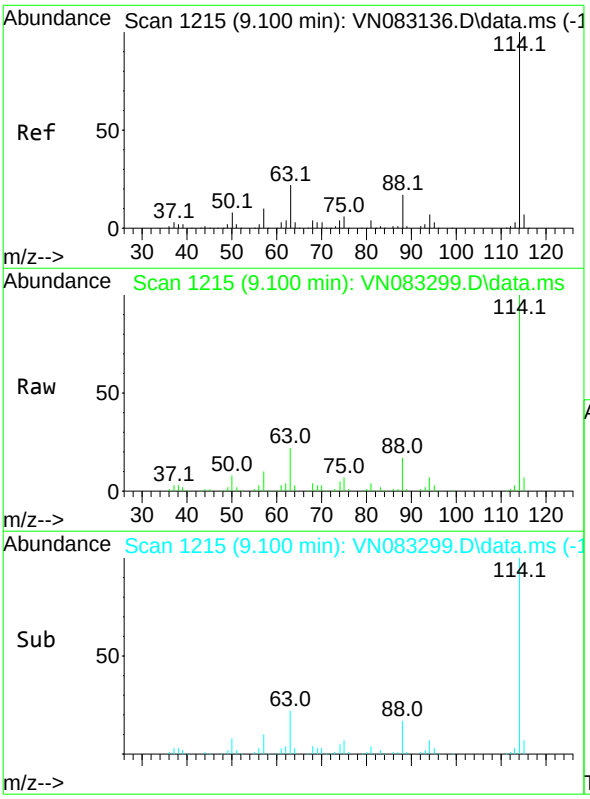

#33
1,2-Dichloroethane-d4
Concen: 56.379 ug/l
RT: 8.577 min Scan# 11
Delta R.T. -0.005 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124DL

Tgt Ion: 65 Resp: 104430

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.5 | 0.0 | 104.4 |

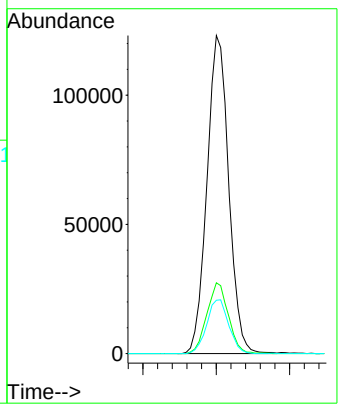


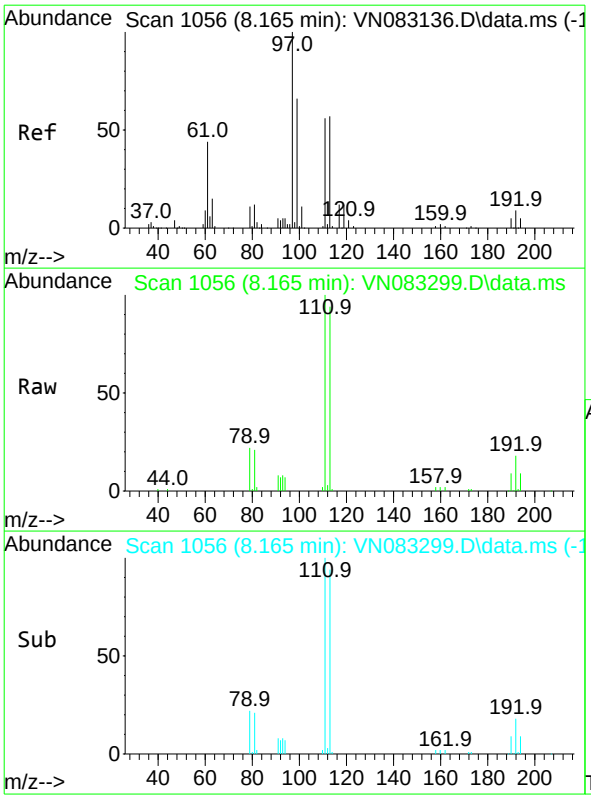




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

Tgt Ion:114 Resp: 253353

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.3 | 0.0 | 44.6 |
| 88 | 16.8 | 0.0 | 31.4 |



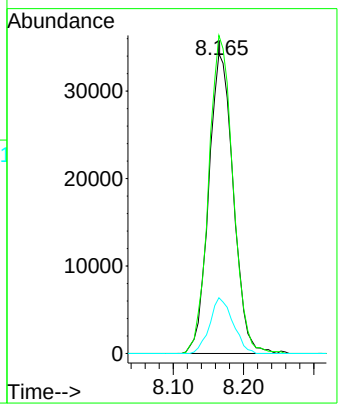


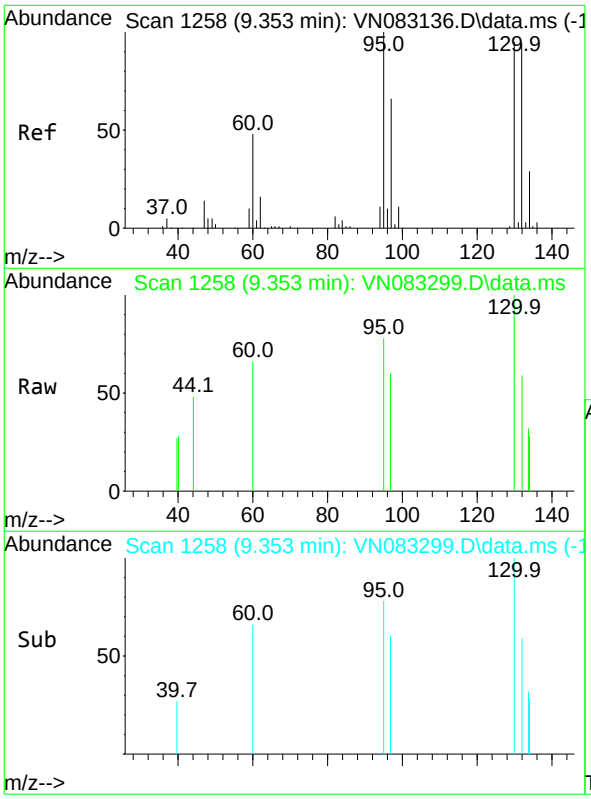

#35
Dibromofluoromethane
Concen: 52.697 ug/l
RT: 8.165 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124DL

Tgt Ion:113 Resp: 83334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 104.8 | 82.4 | 123.6 |
| 192 | 17.6 | 14.9 | 22.3 |

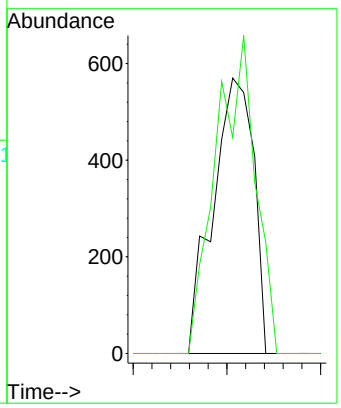


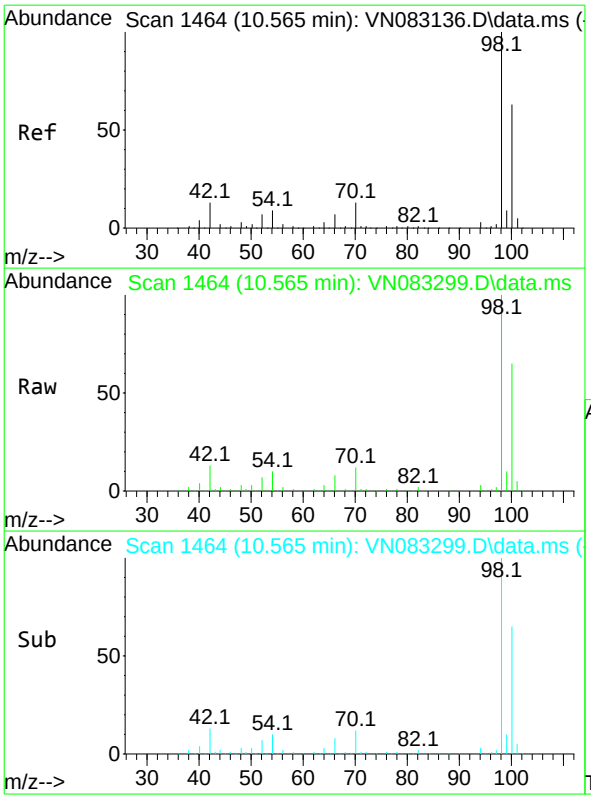




#44
Trichloroethene
Concen: 0.506 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

Tgt Ion:130 Resp: 859

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 78.4 | 0.0 | 197.8 |



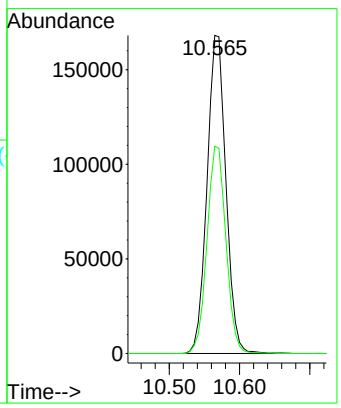


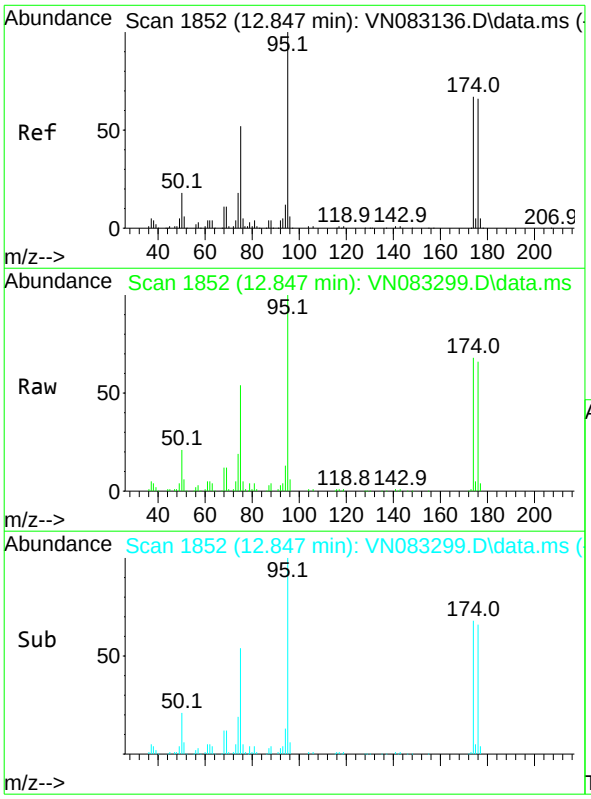

#50
Toluene-d8
Concen: 53.137 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124DL

Tgt Ion: 98 Resp: 313451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 51.5 | 77.3 |

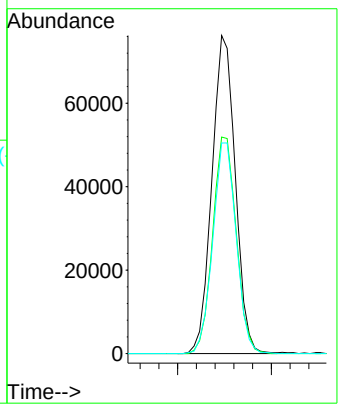


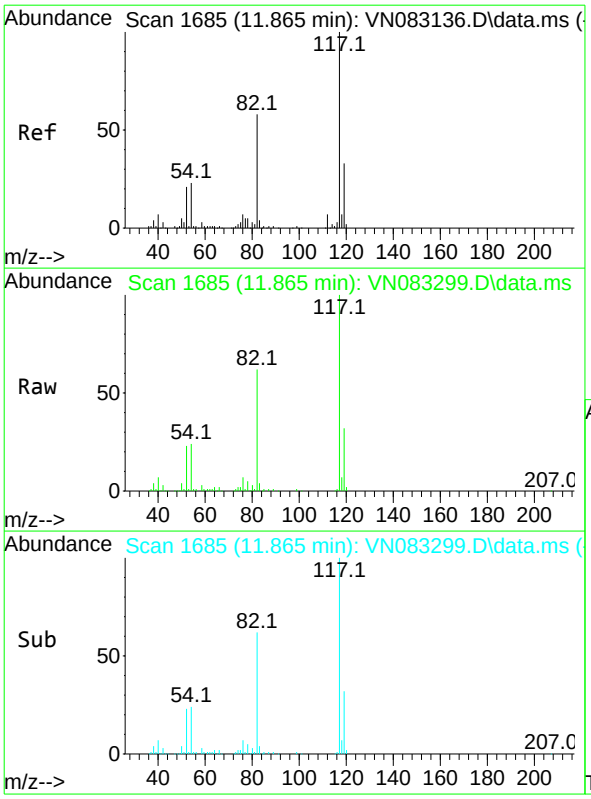




#62
4-Bromofluorobenzene
Concen: 57.391 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

Tgt Ion: 95 Resp: 131983

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 68.7 | 0.0 | 159.2 |
| 176 | 66.4 | 0.0 | 147.6 |



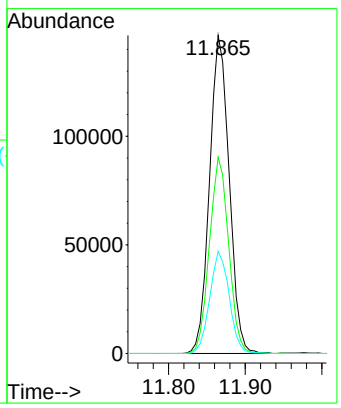


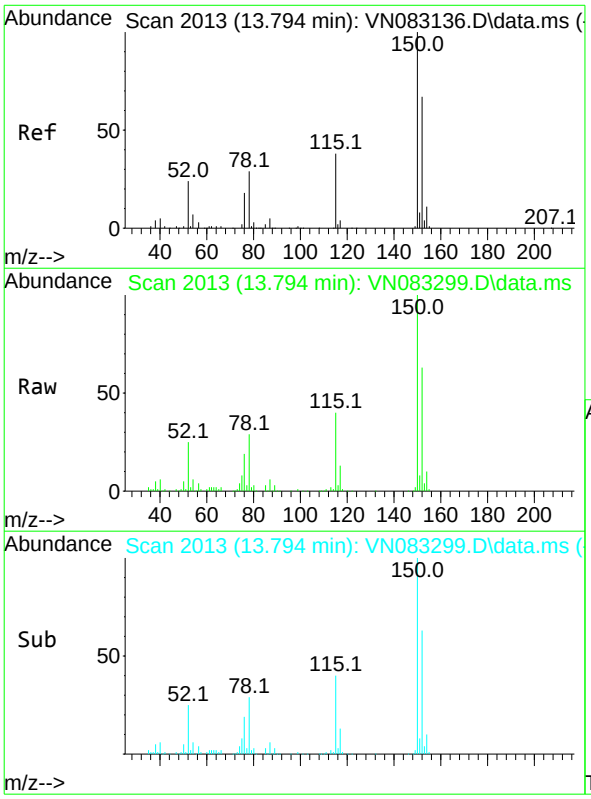

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

**Instrument :**
MSVOA_N
**ClientSampleId :**
925-K1-WS-073124DL

Tgt Ion:117 Resp: 260285

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.8 | 47.5 | 71.3 |
| 119 | 32.1 | 25.6 | 38.4 |

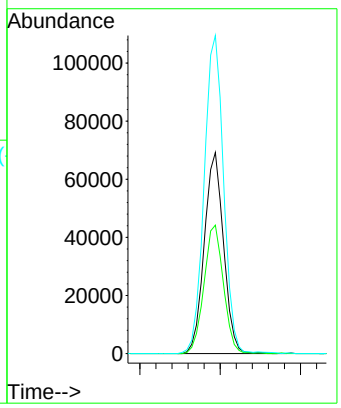



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083299.D
Acq: 14 Aug 2024 14:27

Tgt Ion:152 Resp: 115317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.3 | 30.6 | 91.6 |
| 150 | 159.2 | 0.0 | 348.6 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 07/31/24 |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | 07/31/24 |
| Client Sample ID: | TB-01-073124 | SDG No.: | P3429 |
| Lab Sample ID: | P3429-04 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083256.D | 1 | | 08/13/24 14:31 | VN081324 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 0.35 | U | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 0.34 | U | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 1.40 | U | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 1.40 | U | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.32 | U | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.16 | U | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.32 | U | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.32 | U | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 0.18 | U | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.31 | U | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 0.45 | U | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 0.14 | U | 0.14 | 1.00 | ug/L |

Raw Data: **VN083256.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | 07/31/24 |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | 07/31/24 |
| Client Sample ID: | TB-01-073124 | SDG No.: | P3429 |
| Lab Sample ID: | P3429-04 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083256.D | 1 | | 08/13/24 14:31 | VN081324 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.19 | U | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 55.8 | | 70 (74) - 130 (125) | 112% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 52.1 | | 70 (75) - 130 (124) | 104% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.2 | | 70 (86) - 130 (113) | 106% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 57.4 | | 70 (77) - 130 (121) | 115% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 147000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 284000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 292000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 131000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083256.D
Acq On : 13 Aug 2024 14:31
Operator : JC\MD
Sample : P3429-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 13 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-073124

Quant Time: Aug 14 01:44:50 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 147065 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 284471 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 291862 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 130851 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.583 | 65 | 116829 | 55.811 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 111.620% | | | |
| 35) Dibromofluoromethane | 8.171 | 113 | 92438 | 52.060 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 104.120% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 352167 | 53.170 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 106.340% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 148227 | 57.403 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 114.800% | | | |
| Target Compounds | | | | | | Qvalue |

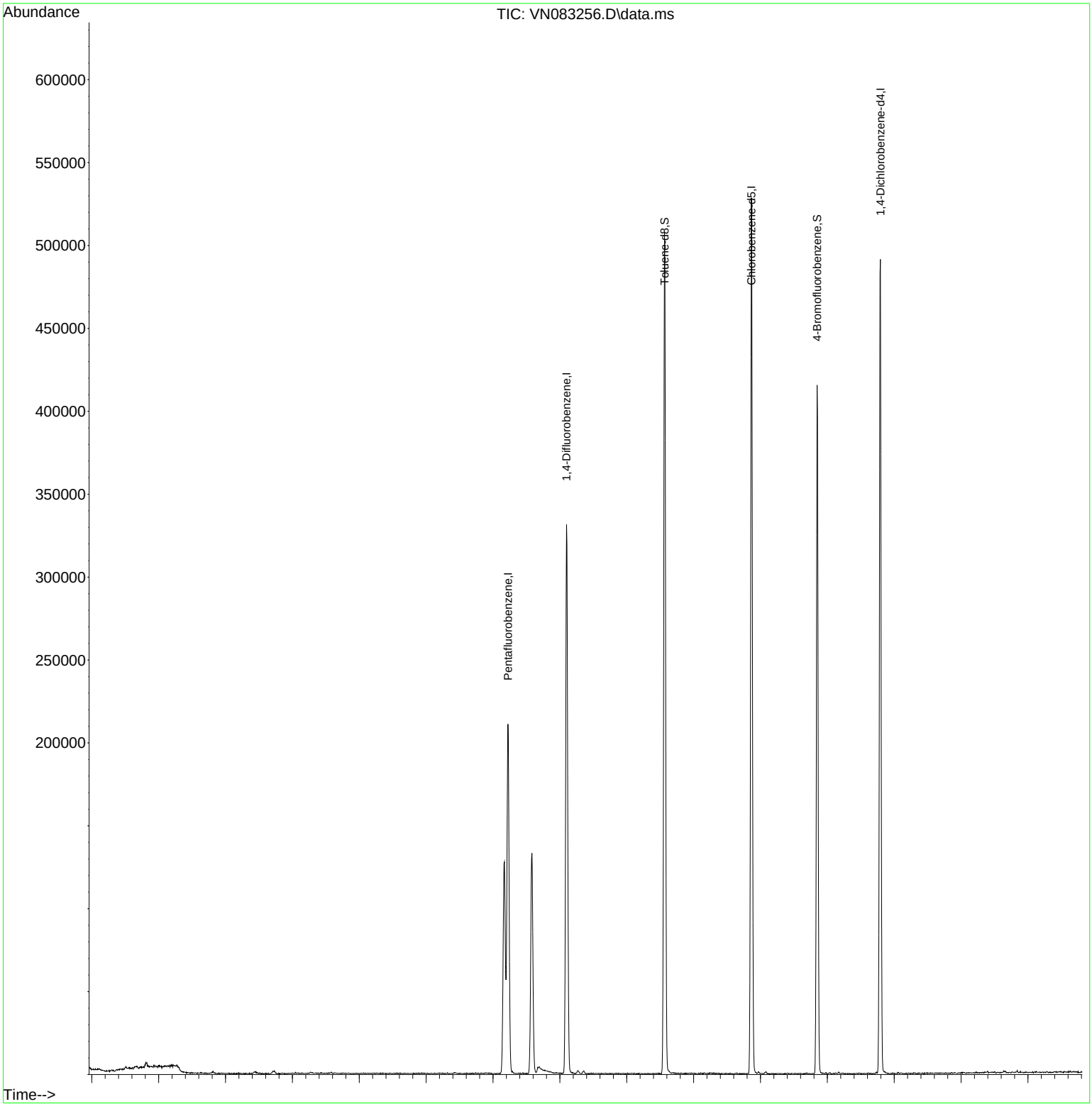
(#) = qualifier out of range (m) = manual integration (+) = signals summed

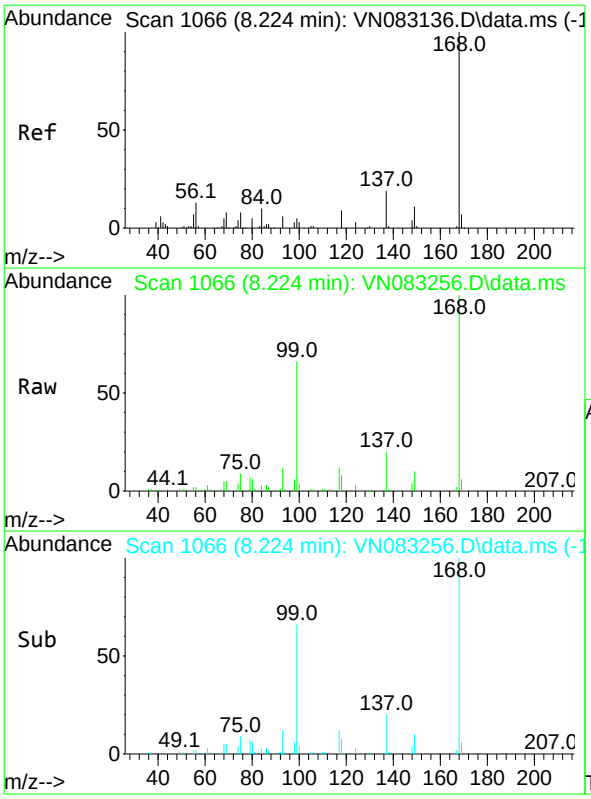
Sample Results: **VN083256.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083256.D
Acq On : 13 Aug 2024 14:31
Operator : JC\MD
Sample : P3429-04
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 13 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-073124

Quant Time: Aug 14 01:44:50 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



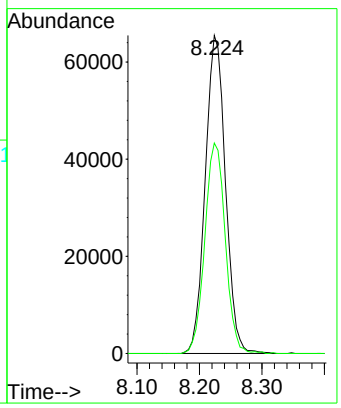


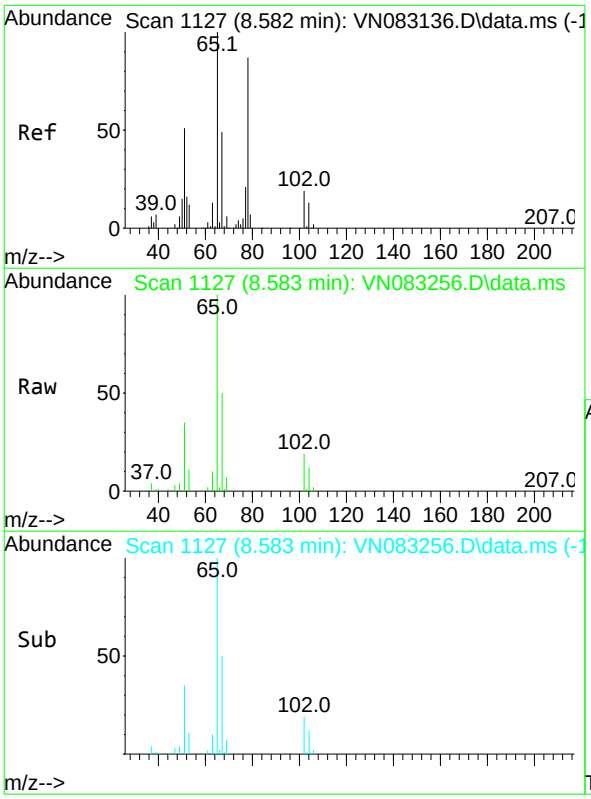

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083256.D
Acq: 13 Aug 2024 14:31

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-073124

Tgt Ion:168 Resp: 147065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 66.2 | 48.2 | 72.4 |

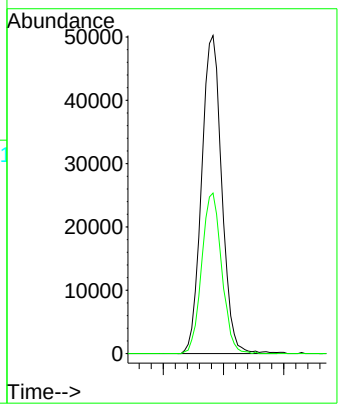


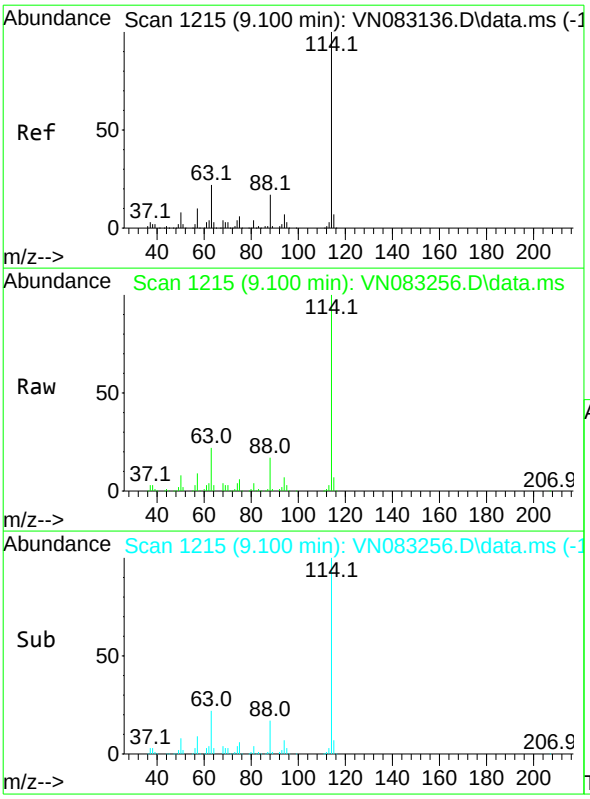




#33
1,2-Dichloroethane-d4
Concen: 55.811 ug/l
RT: 8.583 min Scan# 1127
Delta R.T. 0.000 min
Lab File: VN083256.D
Acq: 13 Aug 2024 14:31

Tgt Ion: 65 Resp: 116829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.0 | 0.0 | 104.4 |



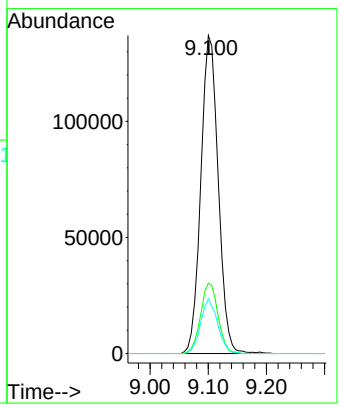


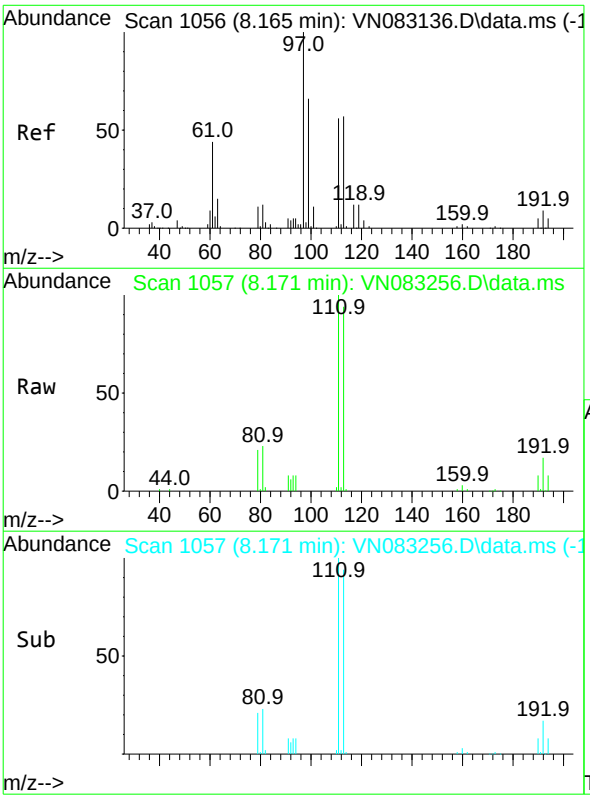

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 12
Delta R.T. 0.000 min
Lab File: VN083256.D
Acq: 13 Aug 2024 14:31

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-073124

Tgt Ion:114 Resp: 284471

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.1 | 0.0 | 44.6 |
| 88 | 17.2 | 0.0 | 31.4 |

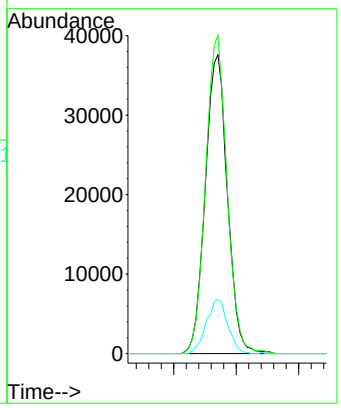


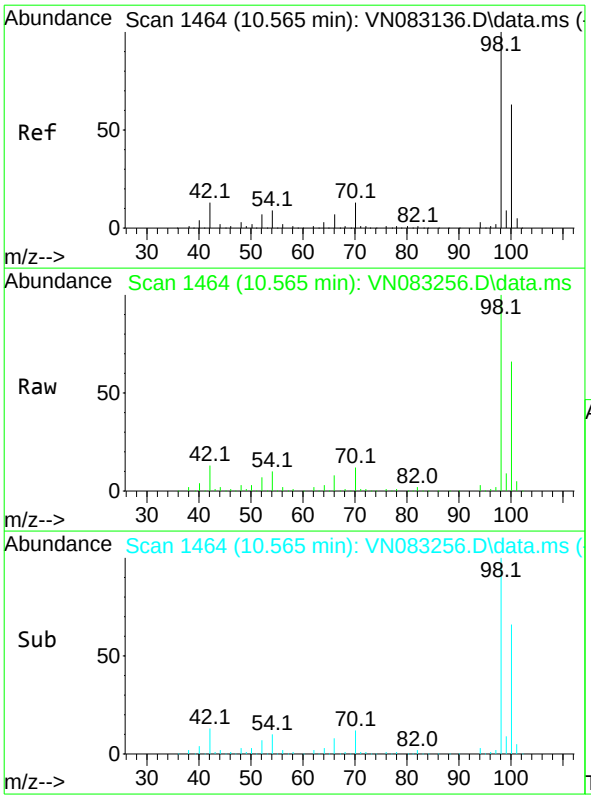




#35
Dibromofluoromethane
Concen: 52.060 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. 0.006 min
Lab File: VN083256.D
Acq: 13 Aug 2024 14:31

Tgt Ion:113 Resp: 92438

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.4 | 82.4 | 123.6 |
| 192 | 17.6 | 14.9 | 22.3 |



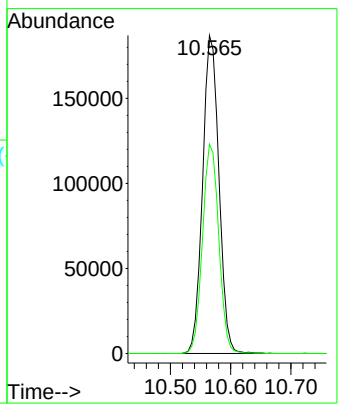


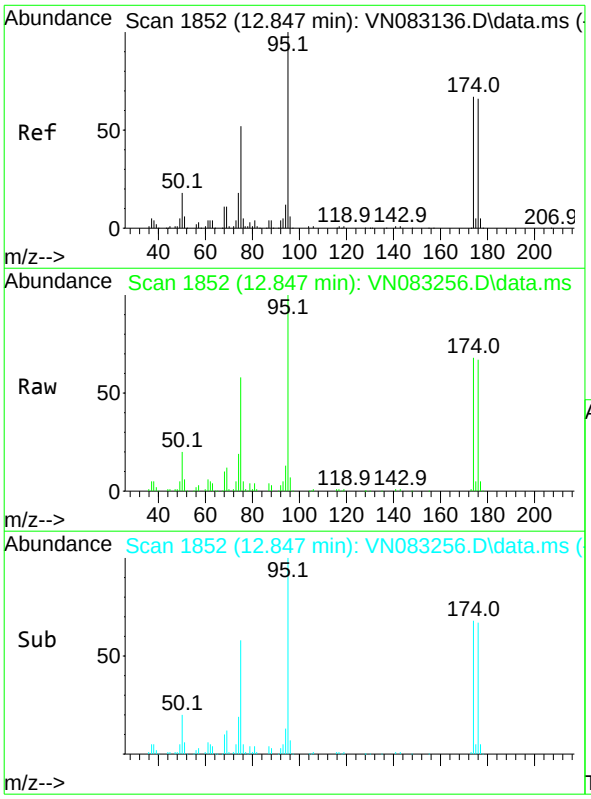

#50
Toluene-d8
Concen: 53.170 ug/l
RT: 10.565 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083256.D
Acq: 13 Aug 2024 14:31

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-073124

Tgt Ion: 98 Resp: 352167

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.6 | 51.5 | 77.3 |

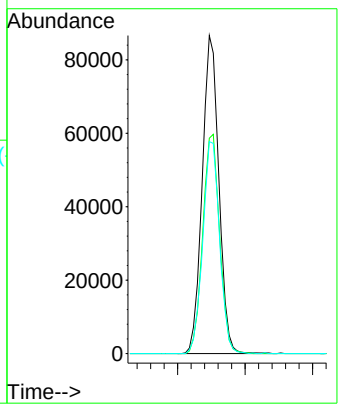


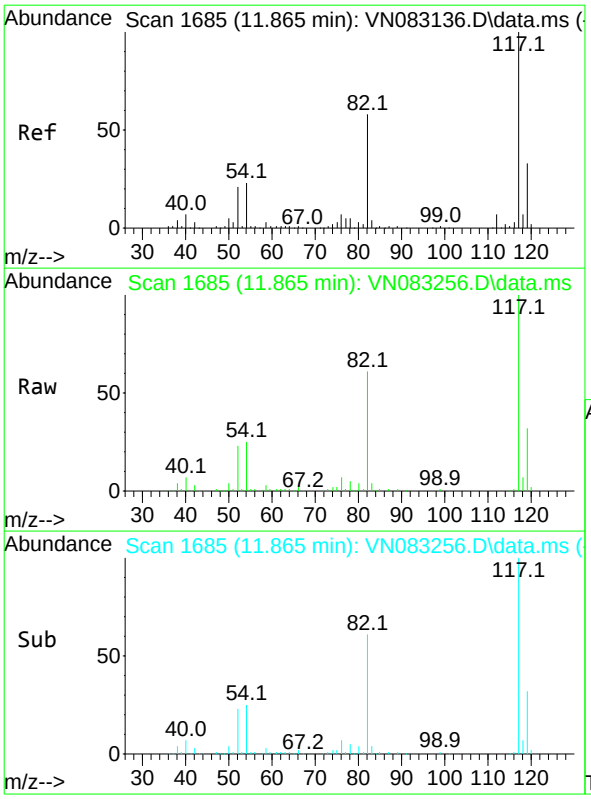




#62
4-Bromofluorobenzene
Concen: 57.403 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083256.D
Acq: 13 Aug 2024 14:31

Tgt Ion: 95 Resp: 148227

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.0 | 0.0 | 159.2 |
| 176 | 67.4 | 0.0 | 147.6 |



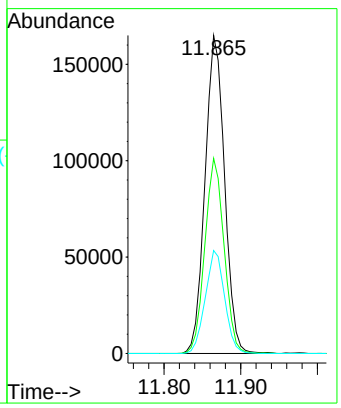


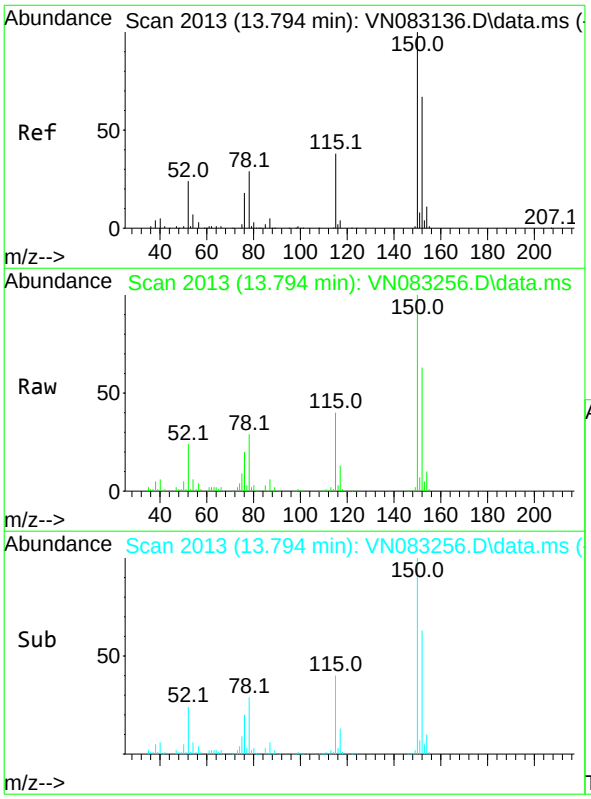

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN083256.D
Acq: 13 Aug 2024 14:31

**Instrument :**
MSVOA_N
**ClientSampleId :**
TB-01-073124

Tgt Ion:117 Resp: 291862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.4 | 47.5 | 71.3 |
| 119 | 32.4 | 25.6 | 38.4 |

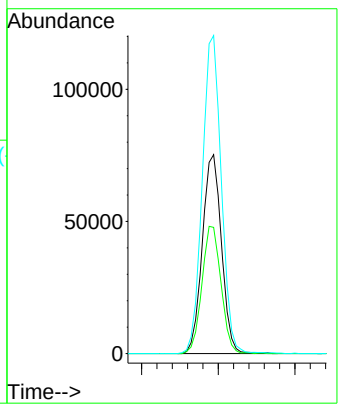



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083256.D
Acq: 13 Aug 2024 14:31

Tgt Ion:152 Resp: 130851

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.6 | 30.6 | 91.6 |
| 150 | 158.5 | 0.0 | 348.6 |



# CALIBRATION SUMMARY

Alliance TECHNICAL GROUP

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

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG No.: P3429

Instrument ID: MSVOA_N Calibration Date(s): 08/07/2024 08/07/2024

Heated Purge: (Y/N) N Calibration Time(s): 10:33 12:34

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF100 = VN083135.D RRF050 = VN083136.D RRF020 = VN083137.D
RRF010 = VN083138.D RRF005 = VN083139.D RRF001 = VN083140.D

| COMPOUND | RRF100 | RRF050 | RRF020 | RRF010 | RRF005 | RRF001 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.548 | 0.571 | 0.566 | 0.579 | 0.597 | 0.542 | 0.567 | 3.6 |
| Chloromethane | 0.547 | 0.591 | 0.584 | 0.589 | 0.595 | 0.576 | 0.581 | 3.1 |
| Vinyl Chloride | 0.562 | 0.598 | 0.588 | 0.612 | 0.586 | 0.607 | 0.592 | 3 |
| Bromomethane | 0.313 | 0.357 | 0.370 | 0.385 | 0.413 | | 0.368 | 10.1 |
| 1,1,2-Trichlorotrifluoroethane | 0.524 | 0.548 | 0.548 | 0.550 | 0.558 | 0.510 | 0.539 | 3.4 |
| Acetone | 0.302 | 0.286 | 0.260 | 0.284 | 0.274 | 0.265 | 0.278 | 5.5 |
| Carbon Disulfide | 1.466 | 1.560 | 1.596 | 1.599 | 1.630 | 1.879 | 1.622 | 8.5 |
| Methyl tert-butyl Ether | 1.927 | 2.028 | 2.028 | 2.015 | 2.053 | 1.953 | 2.001 | 2.5 |
| Methylene Chloride | 0.569 | 0.599 | 0.619 | 0.614 | 0.640 | 0.805 | 0.641 | 13 |
| trans-1,2-Dichloroethene | 0.533 | 0.574 | 0.577 | 0.586 | 0.568 | 0.599 | 0.573 | 3.9 |
| Cyclohexane | 0.933 | 0.982 | 1.010 | 1.110 | 1.238 | | 1.055 | 11.5 |
| 2-Butanone | 0.418 | 0.427 | 0.424 | 0.430 | 0.414 | 0.453 | 0.428 | 3.2 |
| Carbon Tetrachloride | 0.524 | 0.546 | 0.548 | 0.541 | 0.539 | 0.493 | 0.532 | 3.9 |
| cis-1,2-Dichloroethene | 0.658 | 0.689 | 0.691 | 0.701 | 0.687 | 0.721 | 0.691 | 3 |
| Chloroform | 1.087 | 1.137 | 1.110 | 1.132 | 1.122 | 1.102 | 1.115 | 1.7 |
| 1,1,1-Trichloroethane | 1.027 | 1.075 | 1.066 | 1.076 | 1.081 | 1.007 | 1.055 | 2.9 |
| Methylcyclohexane | 0.565 | 0.597 | 0.587 | 0.583 | 0.575 | 0.572 | 0.580 | 2 |
| Benzene | 1.386 | 1.447 | 1.431 | 1.429 | 1.403 | 1.343 | 1.406 | 2.7 |
| 1,2-Dichloroethane | 0.494 | 0.520 | 0.514 | 0.524 | 0.524 | 0.498 | 0.512 | 2.6 |
| Trichloroethene | 0.331 | 0.344 | 0.343 | 0.341 | 0.340 | 0.310 | 0.335 | 3.9 |
| Bromodichloromethane | 0.521 | 0.539 | 0.540 | 0.533 | 0.541 | 0.544 | 0.537 | 1.6 |
| Toluene | 0.892 | 0.926 | 0.905 | 0.900 | 0.885 | 0.824 | 0.889 | 3.9 |
| 1,1,2-Trichloroethane | 0.322 | 0.334 | 0.331 | 0.327 | 0.314 | 0.283 | 0.318 | 6 |
| Dibromochloromethane | 0.400 | 0.413 | 0.397 | 0.388 | 0.383 | 0.329 | 0.385 | 7.7 |
| Tetrachloroethene | 0.319 | 0.343 | 0.338 | 0.343 | 0.324 | 0.320 | 0.331 | 3.5 |
| Chlorobenzene | 1.070 | 1.142 | 1.101 | 1.153 | 1.094 | 1.069 | 1.105 | 3.2 |
| Ethyl Benzene | 1.967 | 2.075 | 2.061 | 2.070 | 2.032 | 1.957 | 2.027 | 2.6 |
| m/p-Xylenes | 0.747 | 0.787 | 0.771 | 0.785 | 0.759 | 0.706 | 0.759 | 4 |
| o-Xylene | 0.735 | 0.773 | 0.759 | 0.773 | 0.750 | 0.703 | 0.749 | 3.6 |
| Isopropylbenzene | 3.822 | 4.249 | 4.133 | 4.386 | 4.249 | 4.254 | 4.182 | 4.6 |

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG No.: P3429

Instrument ID: MSVOA_N Calibration Date(s): 08/07/2024 08/07/2024

Heated Purge: (Y/N) N Calibration Time(s): 10:33 12:34

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF100 = VN083135.D RRF050 = VN083136.D RRF020 = VN083137.D
RRF010 = VN083138.D RRF005 = VN083139.D RRF001 = VN083140.D

| COMPOUND | RRF100 | RRF050 | RRF020 | RRF010 | RRF005 | RRF001 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | 1.655 | 1.783 | 1.728 | 1.751 | 1.795 | 1.862 | 1.762 | 4 |
| 1,2-Dichlorobenzene | 1.571 | 1.704 | 1.664 | 1.739 | 1.731 | 1.741 | 1.692 | 3.9 |
| 1,2-Dichloroethane-d4 | 0.717 | 0.745 | 0.601 | 0.710 | 0.786 | | 0.712 | 9.7 |
| Dibromofluoromethane | 0.311 | 0.332 | 0.264 | 0.307 | 0.346 | | 0.312 | 10 |
| Toluene-d8 | 1.201 | 1.261 | 0.985 | 1.133 | 1.240 | | 1.164 | 9.6 |
| 4-Bromofluorobenzene | 0.473 | 0.492 | 0.390 | 0.432 | 0.483 | | 0.454 | 9.4 |

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

# Response Factor Report MSVOA_N_NEW

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N080724W.M
Title : SW846 8260
Last Update : Thu Aug 08 06:30:41 2024
Response Via : Initial Calibration

Calibration Files
1 =VN083140.D 5 =VN083139.D 10 =VN083138.D 20 =VN083137.D 50 =VN083136.D 100 =VN083135.D

| | | Compound | 1 | 5 | 10 | 20 | 50 | 100 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Pentafluorobenzene | ----------ISTD---------- | | | | | | | |
| 2) | T | Dichlorodifluo... | 0.542 | 0.597 | 0.579 | 0.566 | 0.571 | 0.548 | 0.567 | 3.55 |
| 3) | P | Chloromethane | 0.576 | 0.595 | 0.589 | 0.584 | 0.591 | 0.547 | 0.581 | 3.06 |
| 4) | C | Vinyl Chloride | 0.607 | 0.586 | 0.612 | 0.588 | 0.598 | 0.562 | 0.592 | 3.02# |
| 5) | T | Bromomethane | | 0.413 | 0.385 | 0.370 | 0.357 | 0.313 | 0.368 | 10.07 |
| 6) | T | Chloroethane | 0.436 | 0.381 | 0.355 | 0.356 | 0.356 | 0.340 | 0.371 | 9.33 |
| 7) | T | Trichlorofluor... | 0.901 | 1.003 | 1.013 | 1.005 | 0.995 | 0.955 | 0.979 | 4.42 |
| 8) | T | Diethyl Ether | 0.338 | 0.380 | 0.385 | 0.367 | 0.366 | 0.348 | 0.364 | 4.97 |
| 9) | T | 1,1,2-Trichlor... | 0.510 | 0.558 | 0.550 | 0.548 | 0.548 | 0.524 | 0.539 | 3.41 |
| 10) | T | Methyl Iodide | | 0.688 | 0.710 | 0.703 | 0.740 | 0.707 | 0.710 | 2.72 |
| 11) | T | Tert butyl alc... | | 0.155 | 0.155 | 0.146 | 0.147 | 0.136 | 0.148 | 5.22 |
| 12) | CM | 1,1-Dichloroet... | 0.575 | 0.581 | 0.564 | 0.538 | 0.544 | 0.524 | 0.554 | 4.08# |
| 13) | T | Acrolein | | 0.095 | 0.101 | 0.083 | 0.102 | 0.100 | 0.096 | 7.99 |
| 14) | T | Allyl chloride | 1.210 | 1.099 | 1.083 | 1.063 | 0.933 | 0.896 | 1.047 | 11.00 |
| 15) | T | Acrylonitrile | 0.306 | 0.311 | 0.306 | 0.304 | 0.306 | 0.293 | 0.304 | 1.95 |
| 16) | T | Acetone | 0.265 | 0.274 | 0.284 | 0.260 | 0.286 | 0.302 | 0.278 | 5.51 |
| 17) | T | Carbon Disulfide | 1.879 | 1.630 | 1.599 | 1.596 | 1.560 | 1.466 | 1.622 | 8.52 |
| 18) | T | Methyl Acetate | 0.985 | 0.844 | 0.842 | 0.773 | 0.776 | 0.758 | 0.830 | 10.20 |
| 19) | T | Methyl tert-bu... | 1.953 | 2.053 | 2.015 | 2.028 | 2.028 | 1.927 | 2.001 | 2.46 |
| 20) | T | Methylene Chlo... | 0.805 | 0.640 | 0.614 | 0.619 | 0.599 | 0.569 | 0.641 | 13.03 |
| 21) | T | trans-1,2-Dich... | 0.599 | 0.568 | 0.586 | 0.577 | 0.574 | 0.533 | 0.573 | 3.93 |
| 22) | T | Diisopropyl ether | 1.945 | 1.966 | 2.009 | 1.976 | 2.008 | 1.909 | 1.969 | 1.94 |
| 23) | T | Vinyl Acetate | 1.930 | 2.006 | 2.040 | 2.046 | 2.096 | 1.990 | 2.018 | 2.80 |
| 24) | P | 1,1-Dichloroet... | 1.035 | 1.093 | 1.096 | 1.093 | 1.084 | 1.038 | 1.073 | 2.65 |
| 25) | T | 2-Butanone | 0.453 | 0.414 | 0.430 | 0.424 | 0.427 | 0.418 | 0.428 | 3.22 |
| 26) | T | 2,2-Dichloropr... | 0.925 | 0.984 | 1.032 | 1.019 | 1.023 | 0.997 | 0.997 | 3.95 |
| 27) | T | cis-1,2-Dichlo... | 0.721 | 0.687 | 0.701 | 0.691 | 0.689 | 0.658 | 0.691 | 2.99 |
| 28) | T | Bromochloromet... | 0.465 | 0.489 | 0.391 | 0.420 | 0.439 | 0.427 | 0.439 | 7.91 |
| 29) | T | Tetrahydrofuran | 0.271 | 0.280 | 0.286 | 0.272 | 0.279 | 0.270 | 0.276 | 2.24 |
| 30) | C | Chloroform | 1.102 | 1.122 | 1.132 | 1.110 | 1.137 | 1.087 | 1.115 | 1.71# |
| 31) | T | Cyclohexane | | 1.238 | 1.110 | 1.010 | 0.982 | 0.933 | 1.055 | 11.50 |
| 32) | T | 1,1,1-Trichlor... | 1.007 | 1.081 | 1.076 | 1.066 | 1.075 | 1.027 | 1.055 | 2.89 |
| 33) | S | 1,2-Dichloroet... | | 0.786 | 0.710 | 0.601 | 0.745 | 0.717 | 0.712 | 9.68 |
| 34) | I | 1,4-Difluorobenzene | ----------ISTD---------- | | | | | | | |
| 35) | S | Dibromofluorom... | | 0.346 | 0.307 | 0.264 | 0.332 | 0.311 | 0.312 | 9.99 |
| 36) | T | 1,1-Dichloropr... | 0.488 | 0.463 | 0.477 | 0.472 | 0.475 | 0.457 | 0.472 | 2.33 |
| 37) | T | Ethyl Acetate | 0.665 | 0.515 | 0.512 | 0.502 | 0.499 | 0.479 | 0.529 | 12.83 |
| 38) | T | Carbon Tetrach... | 0.493 | 0.539 | 0.541 | 0.548 | 0.546 | 0.524 | 0.532 | 3.93 |
| 39) | T | Methylcyclohexane | 0.572 | 0.575 | 0.583 | 0.587 | 0.597 | 0.565 | 0.580 | 1.96 |
| 40) | TM | Benzene | 1.343 | 1.403 | 1.429 | 1.431 | 1.447 | 1.386 | 1.406 | 2.68 |
| 41) | T | Methacrylonitrile | 0.377 | 0.290 | 0.277 | 0.300 | 0.283 | 0.276 | 0.301 | 12.78 |
| 42) | TM | 1,2-Dichloroet... | 0.498 | 0.524 | 0.524 | 0.514 | 0.520 | 0.494 | 0.512 | 2.63 |
| 43) | T | Isopropyl Acetate | 2.156 | 1.289 | 1.075 | 0.956 | 0.921 | 0.869 | 1.211 | 40.18 |
| 44) | TM | Trichloroethene | 0.310 | 0.340 | 0.341 | 0.343 | 0.344 | 0.331 | 0.335 | 3.94 |
| 45) | C | 1,2-Dichloropr... | 0.316 | 0.326 | 0.341 | 0.344 | 0.346 | 0.331 | 0.334 | 3.50# |
| 46) | T | Dibromomethane | 0.218 | 0.243 | 0.240 | 0.245 | 0.251 | 0.238 | 0.239 | 4.73 |
| 47) | T | Bromodichlorom... | 0.544 | 0.541 | 0.533 | 0.540 | 0.539 | 0.521 | 0.537 | 1.55 |
| 48) | T | Methyl methacr... | 0.506 | 0.423 | 0.432 | 0.421 | 0.425 | 0.415 | 0.437 | 7.88 |
| 49) | T | 1,4-Dioxane | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 2.64 |
| 50) | S | Toluene-d8 | | 1.240 | 1.133 | 0.985 | 1.261 | 1.201 | 1.164 | 9.56 |
| 51) | T | 4-Methyl-2-Pen... | 0.457 | 0.499 | 0.516 | 0.516 | 0.517 | 0.495 | 0.500 | 4.62 |
| 52) | CM | Toluene | 0.824 | 0.885 | 0.900 | 0.905 | 0.926 | 0.892 | 0.889 | 3.91# |
| 53) | T | t-1,3-Dichloro... | 0.469 | 0.546 | 0.552 | 0.573 | 0.597 | 0.569 | 0.551 | 7.99 |
| 54) | T | cis-1,3-Dichlo... | 0.546 | 0.588 | 0.595 | 0.597 | 0.606 | 0.586 | 0.586 | 3.54 |
| 55) | T | 1,1,2-Trichlor... | 0.283 | 0.314 | 0.327 | 0.331 | 0.334 | 0.322 | 0.318 | 5.95 |
| 56) | T | Ethyl methacry... | 0.553 | 0.594 | 0.612 | 0.617 | 0.624 | 0.601 | 0.600 | 4.24 |

Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\
Method File : 82N080724W.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57) | T | 1,3-Dichloropr... | 0.552 | 0.545 | 0.575 | 0.581 | 0.592 | 0.561 | 0.568 | 3.17 |
| 58) | T | 2-Chloroethyl ... | 0.243 | 0.250 | 0.262 | 0.242 | 0.261 | 0.264 | 0.254 | 3.91 |
| 59) | T | 2-Hexanone | 0.367 | 0.385 | 0.389 | 0.395 | 0.397 | 0.388 | 0.387 | 2.70 |
| 60) | T | Dibromochlorom... | 0.329 | 0.383 | 0.388 | 0.397 | 0.413 | 0.400 | 0.385 | 7.68 |
| 61) | T | 1,2-Dibromoethane | 0.317 | 0.332 | 0.342 | 0.336 | 0.347 | 0.334 | 0.335 | 3.13 |
| 62) | S | 4-Bromofluorob... | | 0.483 | 0.432 | 0.390 | 0.492 | 0.473 | 0.454 | 9.36 |
| 63) | I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | |
| 64) | T | Tetrachloroethene | 0.320 | 0.324 | 0.343 | 0.338 | 0.343 | 0.319 | 0.331 | 3.46 |
| 65) | PM | Chlorobenzene | 1.069 | 1.094 | 1.153 | 1.101 | 1.142 | 1.070 | 1.105 | 3.23 |
| 66) | T | 1,1,1,2-Tetrac... | 0.370 | 0.401 | 0.403 | 0.385 | 0.399 | 0.380 | 0.390 | 3.37 |
| 67) | C | Ethyl Benzene | 1.957 | 2.032 | 2.070 | 2.061 | 2.075 | 1.967 | 2.027 | 2.59# |
| 68) | T | m/p-Xylenes | 0.706 | 0.759 | 0.785 | 0.771 | 0.787 | 0.747 | 0.759 | 3.99 |
| 69) | T | o-Xylene | 0.703 | 0.750 | 0.773 | 0.759 | 0.773 | 0.735 | 0.749 | 3.60 |
| 70) | T | Styrene | 1.100 | 1.261 | 1.300 | 1.288 | 1.336 | 1.261 | 1.258 | 6.51 |
| 71) | P | Bromoform | 0.267 | 0.275 | 0.292 | 0.309 | 0.318 | 0.310 | 0.295 | 7.01 |
| 72) | I | 1,4-Dichlorobenzen... | ----------ISTD---------- | | | | | | | |
| 73) | T | Isopropylbenzene | 4.254 | 4.249 | 4.386 | 4.133 | 4.249 | 3.822 | 4.182 | 4.63 |
| 74) | T | N-amyl acetate | 2.341 | 2.051 | 2.108 | 1.945 | 2.003 | 1.826 | 2.046 | 8.50 |
| 75) | P | 1,1,2,2-Tetrac... | 1.234 | 1.237 | 1.210 | 1.163 | 1.167 | 1.085 | 1.183 | 4.85 |
| 76) | T | 1,2,3-Trichlor... | 1.233 | 1.083 | 1.128 | 1.094 | 1.063 | 0.984 | 1.097 | 7.47 |
| 77) | T | Bromobenzene | 0.900 | 0.975 | 0.946 | 0.927 | 0.959 | 0.868 | 0.929 | 4.27 |
| 78) | T | n-propylbenzene | 4.800 | 4.849 | 4.998 | 4.753 | 4.968 | 4.526 | 4.816 | 3.55 |
| 79) | T | 2-Chlorotoluene | 3.146 | 3.083 | 3.184 | 3.027 | 3.076 | 2.802 | 3.053 | 4.42 |
| 80) | T | 1,3,5-Trimethy... | 3.479 | 3.563 | 3.641 | 3.490 | 3.589 | 3.245 | 3.501 | 3.98 |
| 81) | T | trans-1,4-Dich... | | 0.530 | 0.468 | 0.524 | 0.493 | 0.508 | 0.504 | 4.97 |
| 82) | T | 4-Chlorotoluene | 3.261 | 3.081 | 3.116 | 3.014 | 3.104 | 2.799 | 3.062 | 4.99 |
| 83) | T | tert-Butylbenzene | 3.103 | 3.199 | 3.192 | 3.098 | 3.162 | 2.850 | 3.101 | 4.19 |
| 84) | T | 1,2,4-Trimethy... | 3.416 | 3.592 | 3.679 | 3.526 | 3.654 | 3.305 | 3.529 | 4.10 |
| 85) | T | sec-Butylbenzene | 4.235 | 4.265 | 4.325 | 4.202 | 4.384 | 3.976 | 4.231 | 3.33 |
| 86) | T | p-Isopropyltol... | 3.355 | 3.569 | 3.510 | 3.491 | 3.682 | 3.354 | 3.493 | 3.62 |
| 87) | T | 1,3-Dichlorobe... | 1.870 | 1.708 | 1.757 | 1.739 | 1.771 | 1.643 | 1.748 | 4.29 |
| 88) | T | 1,4-Dichlorobe... | 1.862 | 1.795 | 1.751 | 1.728 | 1.783 | 1.655 | 1.762 | 3.96 |
| 89) | T | n-Butylbenzene | 2.851 | 3.017 | 3.045 | 3.023 | 3.216 | 3.011 | 3.027 | 3.84 |
| 90) | T | Hexachloroethane | 0.620 | 0.696 | 0.708 | 0.686 | 0.689 | 0.650 | 0.675 | 4.92 |
| 91) | T | 1,2-Dichlorobe... | 1.741 | 1.731 | 1.739 | 1.664 | 1.704 | 1.571 | 1.692 | 3.90 |
| 92) | T | 1,2-Dibromo-3-... | 0.310 | 0.307 | 0.289 | 0.277 | 0.281 | 0.258 | 0.287 | 6.84 |
| 93) | T | 1,2,4-Trichlor... | 1.014 | 0.893 | 0.938 | 0.943 | 0.984 | 0.914 | 0.948 | 4.72 |
| 94) | T | Hexachlorobuta... | 0.480 | 0.445 | 0.429 | 0.397 | 0.409 | 0.368 | 0.421 | 9.32 |
| 95) | T | Naphthalene | 3.429 | 3.230 | 3.435 | 3.365 | 3.481 | 3.202 | 3.357 | 3.44 |
| 96) | T | 1,2,3-Trichlor... | 0.972 | 0.920 | 0.974 | 0.920 | 0.963 | 0.877 | 0.938 | 4.09 |

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083135.D
Acq On : 07 Aug 2024 10:33
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 08 06:14:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 217317 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 373033 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 329850 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 162834 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 311531 | 100.713 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 201.420%# | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 231805 | 99.556 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 199.120%# | | | |
| 50) Toluene-d8 | 10.565 | 98 | 896022 | 103.163 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 206.320%# | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 352947 | 104.234 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 208.460%# | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 238119 | 96.624 | ug/l | 99 |
| 3) Chloromethane | 2.359 | 50 | 237633 | 94.185 | ug/l | 98 |
| 4) Vinyl Chloride | 2.512 | 62 | 244329 | 94.904 | ug/l | 100 |
| 5) Bromomethane | 2.924 | 94 | 135920 | 85.085 | ug/l | 96 |
| 6) Chloroethane | 3.100 | 64 | 147611 | 91.645 | ug/l | 99 |
| 7) Trichlorofluoromethane | 3.489 | 101 | 414913 | 97.558 | ug/l | 96 |
| 8) Diethyl Ether | 3.959 | 74 | 151291 | 95.597 | ug/l | 83 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 227550 | 97.044 | ug/l | 98 |
| 10) Methyl Iodide | 4.583 | 142 | 307476 | 99.686 | ug/l | 97 |
| 11) Tert butyl alcohol | 5.524 | 59 | 296420 | 461.112 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 4.336 | 96 | 227537 | 94.453 | ug/l | 90 |
| 13) Acrolein | 4.177 | 56 | 218130 | 520.640 | ug/l | 98 |
| 14) Allyl chloride | 5.018 | 41 | 389580 | 85.577 | ug/l | 93 |
| 15) Acrylonitrile | 5.718 | 53 | 636894 | 481.734 | ug/l | 99 |
| 16) Acetone | 4.424 | 43 | 656348 | 542.264 | ug/l | 95 |
| 17) Carbon Disulfide | 4.712 | 76 | 637255 | 90.406 | ug/l | 99 |
| 18) Methyl Acetate | 5.024 | 43 | 329457 | 91.357 | ug/l | 92 |
| 19) Methyl tert-butyl Ether | 5.794 | 73 | 837562 | 96.324 | ug/l | 99 |
| 20) Methylene Chloride | 5.277 | 84 | 247283 | 88.771 | ug/l | 88 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 231530 | 92.991 | ug/l | 95 |
| 22) Diisopropyl ether | 6.671 | 45 | 829706 | 96.959 | ug/l | 96 |
| 23) Vinyl Acetate | 6.600 | 43 | 4324915 | 493.177 | ug/l | 95 |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 451253 | 96.746 | ug/l | 99 |
| 25) 2-Butanone | 7.482 | 43 | 908992 | 489.098 | ug/l | 91 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 433489 | 100.075 | ug/l | 98 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 286100 | 95.225 | ug/l | 93 |
| 28) Bromochloromethane | 7.812 | 49 | 185533 | 97.333 | ug/l | 85 |
| 29) Tetrahydrofuran | 7.841 | 42 | 587324 | 488.865 | ug/l | 88 |
| 30) Chloroform | 7.965 | 83 | 472257 | 97.456 | ug/l | 99 |
| 31) Cyclohexane | 8.259 | 56 | 405666 | 88.496 | ug/l | 98 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 446446 | 97.332 | ug/l | 95 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 340980 | 96.808 | ug/l | 98 |
| 37) Ethyl Acetate | 7.559 | 43 | 357308 | 90.602 | ug/l # | 93 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 391148 | 98.597 | ug/l | 96 |
| 39) Methylcyclohexane | 9.600 | 83 | 421743 | 97.486 | ug/l | 97 |
| 40) Benzene | 8.606 | 78 | 1034059 | 98.550 | ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083135.D
Acq On : 07 Aug 2024 10:33
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 08 06:14:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 205844 | 91.799 | ug/l | | 95 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 368412 | 96.385 | ug/l | | 97 |
| 43) Isopropyl Acetate | 8.688 | 43 | 648582 | 99.962 | ug/l | # | 93 |
| 44) Trichloroethene | 9.353 | 130 | 246689 | 98.774 | ug/l | | 93 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 247262 | 99.275 | ug/l | | 98 |
| 46) Dibromomethane | 9.712 | 93 | 177294 | 99.449 | ug/l | | 98 |
| 47) Bromodichloromethane | 9.888 | 83 | 389020 | 97.184 | ug/l | | 100 |
| 48) Methyl methacrylate | 9.682 | 41 | 309367 | 94.886 | ug/l | | 91 |
| 49) 1,4-Dioxane | 9.694 | 88 | 117342 | 1994.879 | ug/l | | 94 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 1846346 | 495.091 | ug/l | | 92 |
| 52) Toluene | 10.629 | 92 | 665274 | 100.347 | ug/l | | 97 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 424825 | 103.317 | ug/l | | 98 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 436928 | 99.903 | ug/l | | 90 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 240237 | 101.114 | ug/l | | 96 |
| 56) Ethyl methacrylate | 10.876 | 69 | 448632 | 100.164 | ug/l | # | 84 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 418505 | 98.824 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 984478 | 519.987 | ug/l | | 96 |
| 59) 2-Hexanone | 11.194 | 43 | 1447307 | 501.642 | ug/l | | 92 |
| 60) Dibromochloromethane | 11.359 | 129 | 298498 | 103.914 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 249072 | 99.794 | ug/l | | 96 |
| 64) Tetrachloroethene | 11.106 | 164 | 210334 | 96.284 | ug/l | | 96 |
| 65) Chlorobenzene | 11.894 | 112 | 705635 | 96.805 | ug/l | | 100 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 250772 | 97.546 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 1297632 | 97.041 | ug/l | | 99 |
| 68) m/p-Xylenes | 12.070 | 106 | 984984 | 196.641 | ug/l | | 99 |
| 69) o-Xylene | 12.400 | 106 | 484673 | 98.107 | ug/l | | 97 |
| 70) Styrene | 12.412 | 104 | 831903 | 100.261 | ug/l | | 99 |
| 71) Bromoform | 12.576 | 173 | 204380 | 104.942 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 1244845 | 91.399 | ug/l | | 100 |
| 74) N-amyl acetate | 12.494 | 43 | 594797 | 89.282 | ug/l | | 94 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 353346 | 91.727 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 320302m | 89.478 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 282676 | 93.431 | ug/l | | 96 |
| 78) n-propylbenzene | 13.035 | 91 | 1473868 | 93.979 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 912618 | 91.785 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 1056912 | 92.690 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 165326 | 100.628 | ug/l | | 89 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 911384 | 91.381 | ug/l | | 98 |
| 83) tert-Butylbenzene | 13.441 | 119 | 928195 | 91.918 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 1076449 | 93.675 | ug/l | | 99 |
| 85) sec-Butylbenzene | 13.617 | 105 | 1294900 | 93.978 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 1092439 | 96.022 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 535193 | 94.009 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.811 | 146 | 538924 | 93.900 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.059 | 91 | 980482 | 99.461 | ug/l | | 98 |
| 90) Hexachloroethane | 14.335 | 117 | 211710 | 96.320 | ug/l | | 95 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 511584 | 92.863 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.723 | 75 | 83930 | 89.788 | ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 297699 | 96.456 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 119783 | 87.268 | ug/l | | 98 |
| 95) Naphthalene | 15.641 | 128 | 1042864 | 95.391 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 285769 | 93.575 | ug/l | | 97 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083135.D
Acq On : 07 Aug 2024 10:33
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:14:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

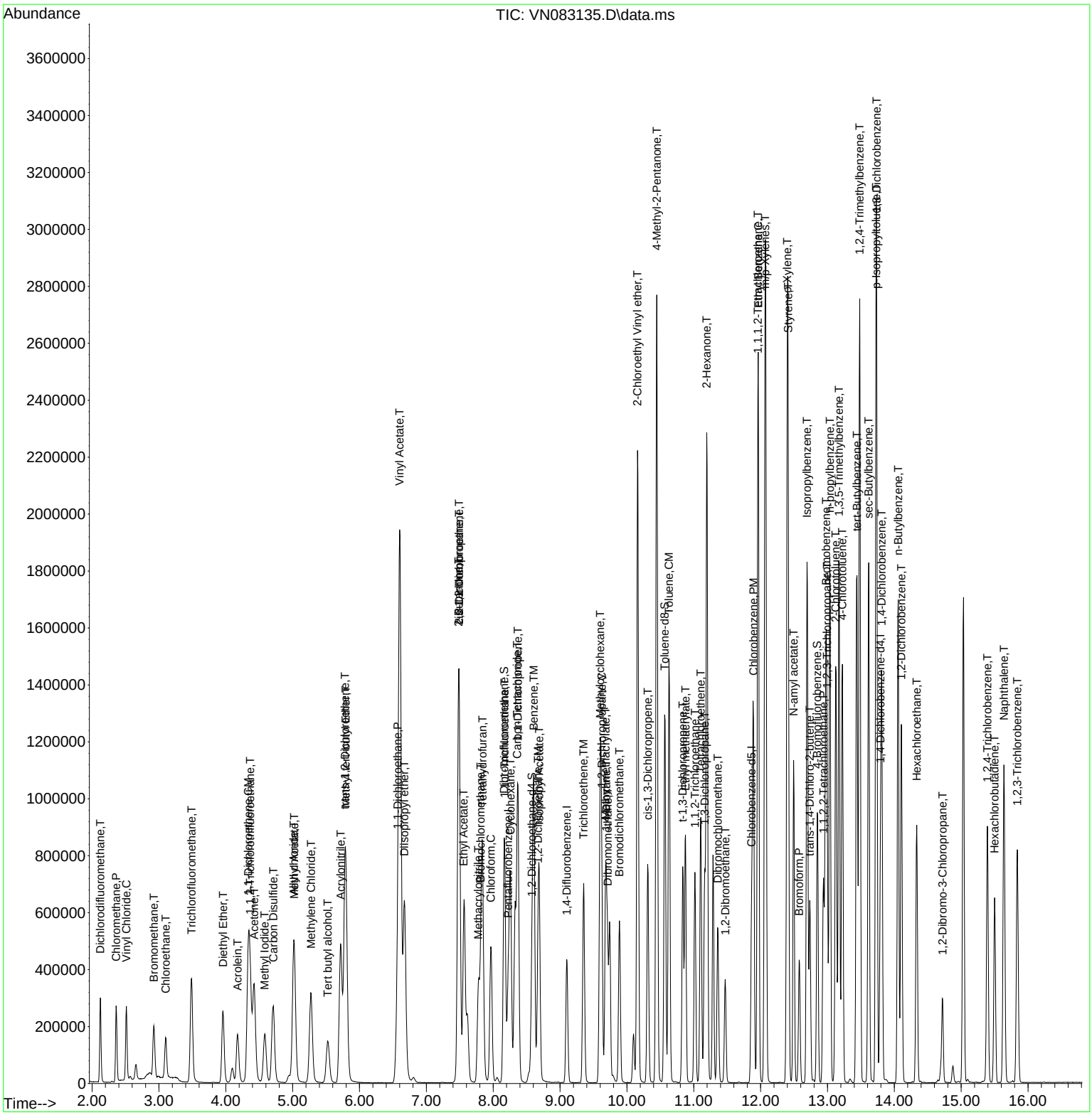
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083135.D
Acq On : 07 Aug 2024 10:33
Operator : JC\MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

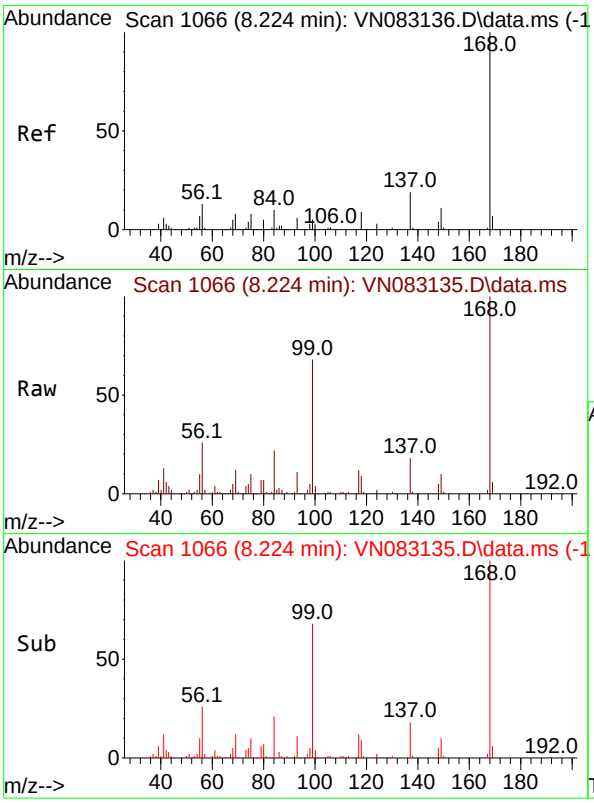
Quant Time: Aug 08 06:14:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

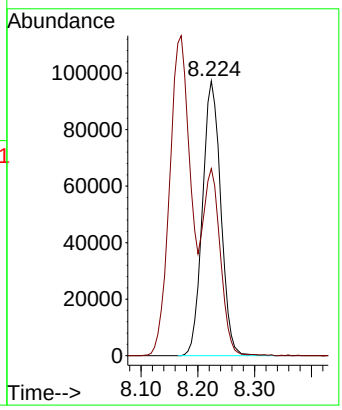





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:168 Resp: 21731

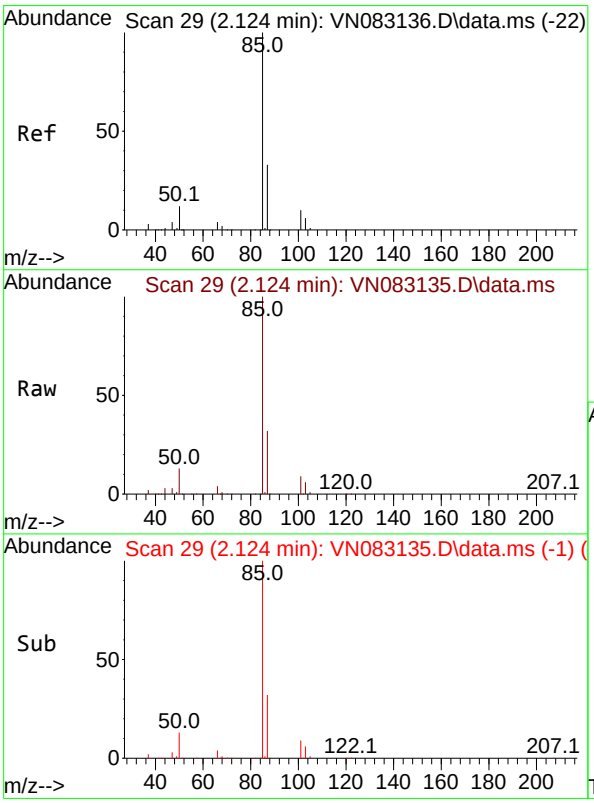
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 68.1 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

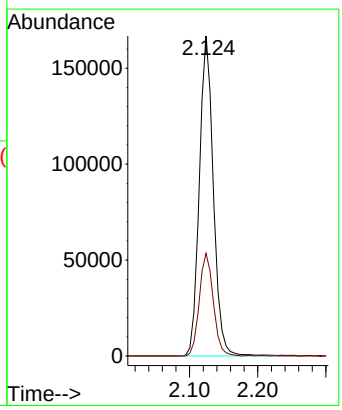
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

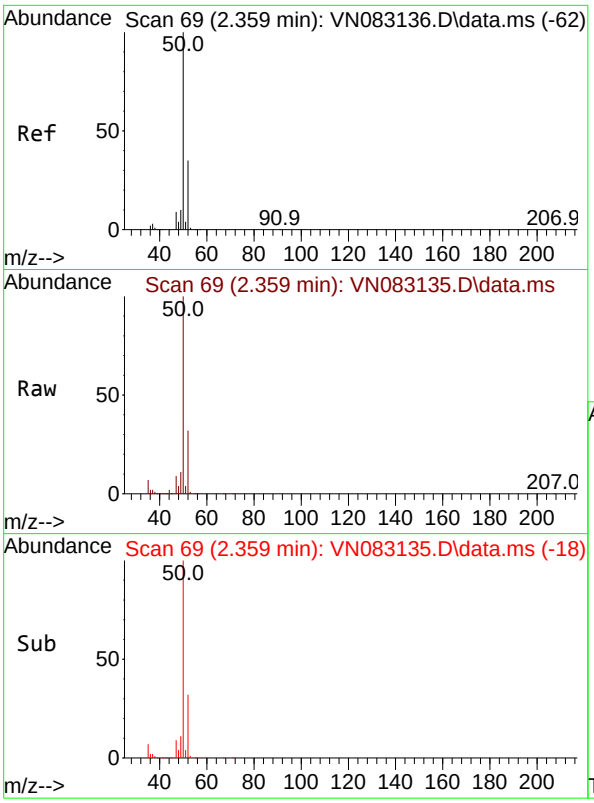



#2
Dichlorodifluoromethane
Concen: 96.624 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 85 Resp: 238119

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.1 | 15.7 | 47.0 |

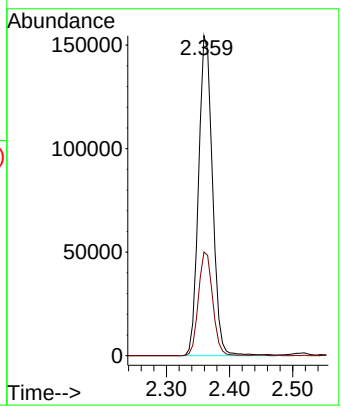





#3
Chloromethane
Concen: 94.185 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 50 Resp: 23763

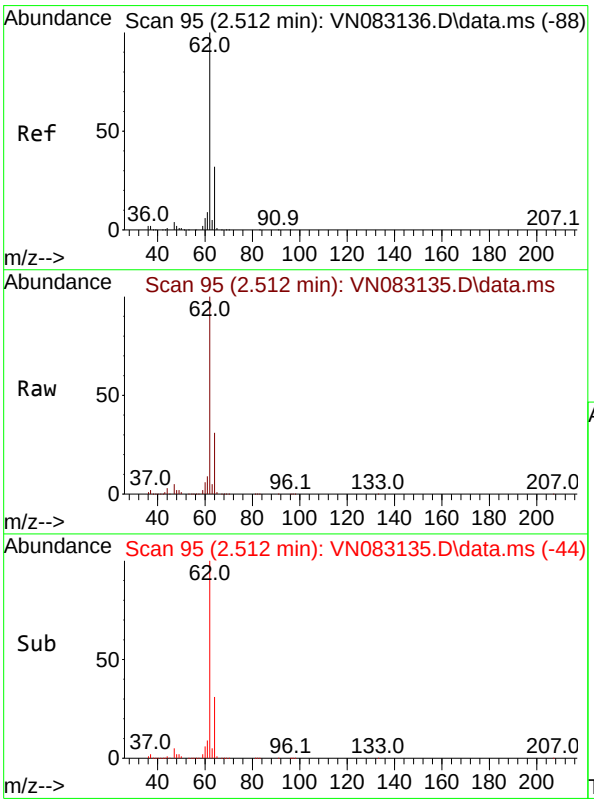
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.4 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

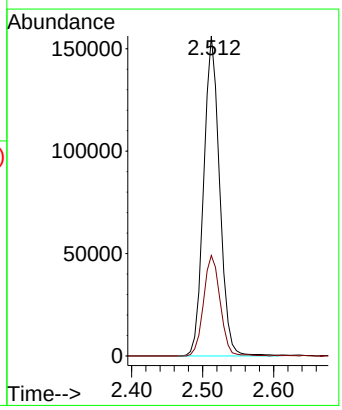
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

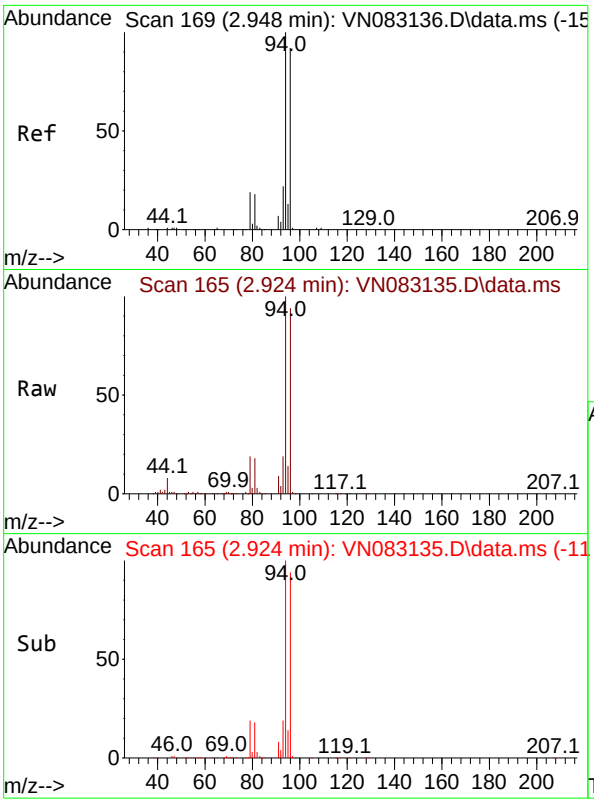



#4
Vinyl Chloride
Concen: 94.904 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 62 Resp: 244329

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.4 | 25.0 | 37.6 |

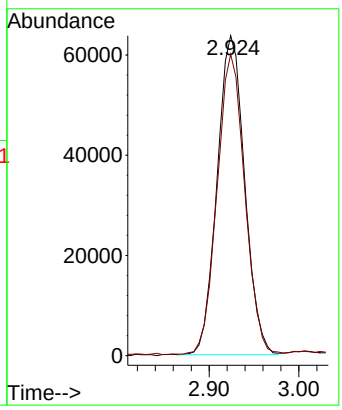





#5
Bromomethane
Concen: 85.085 ug/l
RT: 2.924 min Scan# 1
Delta R.T. -0.024 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 94 Resp: 13592

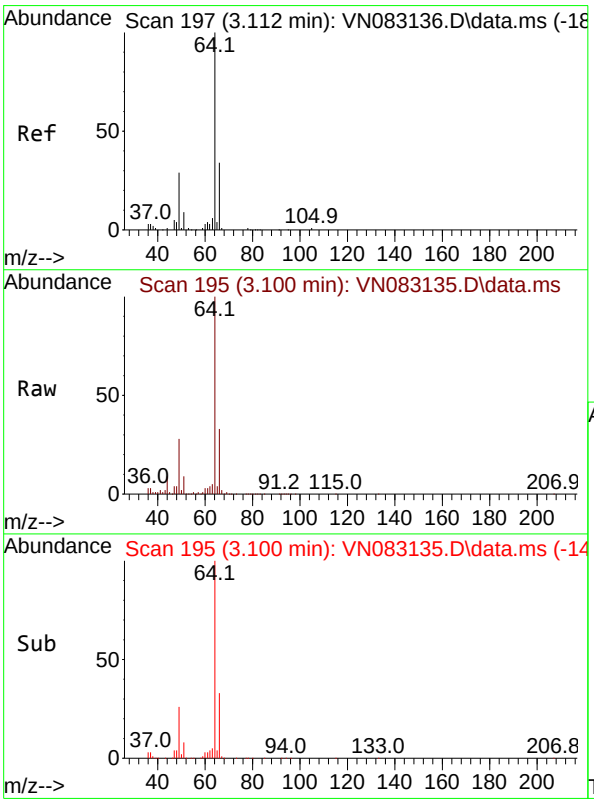
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 94.0 | 78.0 | 117.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

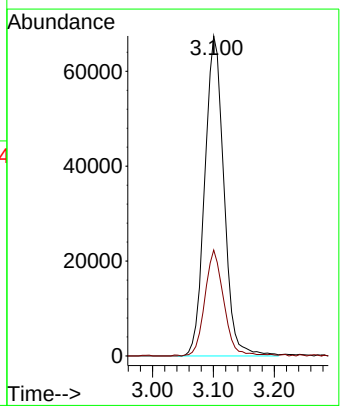
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

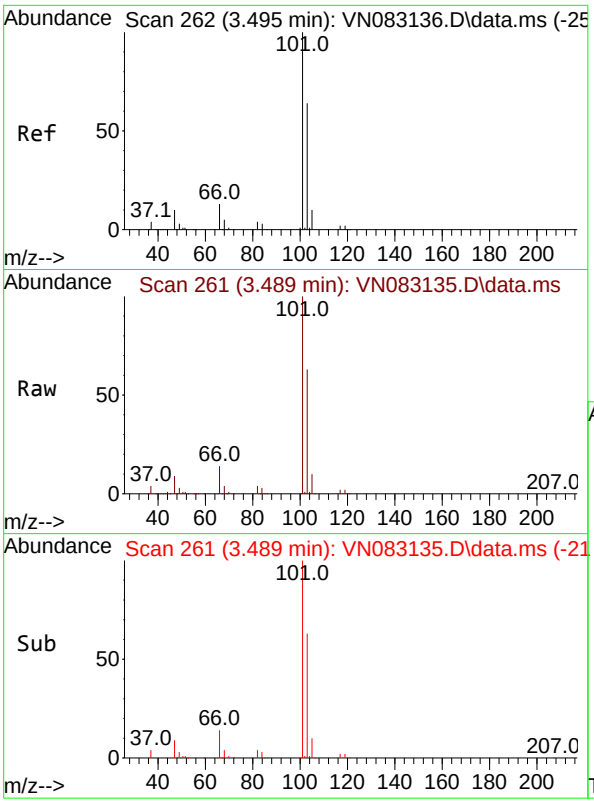



#6
Chloroethane
Concen: 91.645 ug/l
RT: 3.100 min Scan# 195
Delta R.T. -0.012 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 64 Resp: 147611

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.9 | 26.6 | 40.0 |

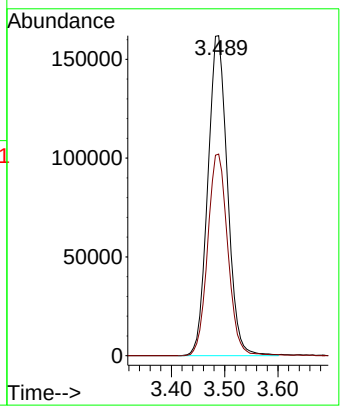





#7
Trichlorofluoromethane
Concen: 97.558 ug/l
RT: 3.489 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:101 Resp: 41491

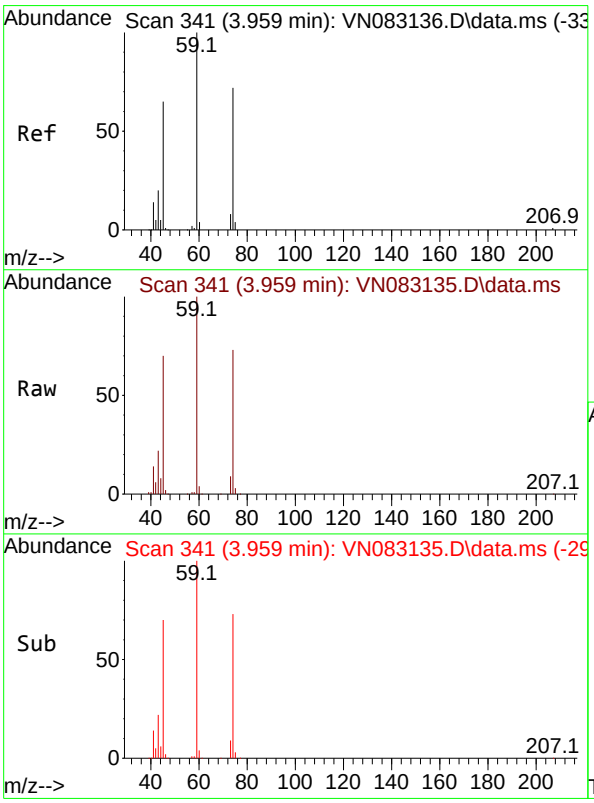
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 63.0 | 52.7 | 79.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

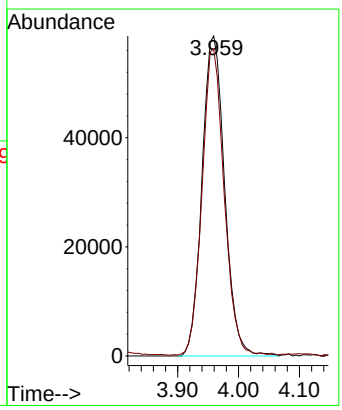
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

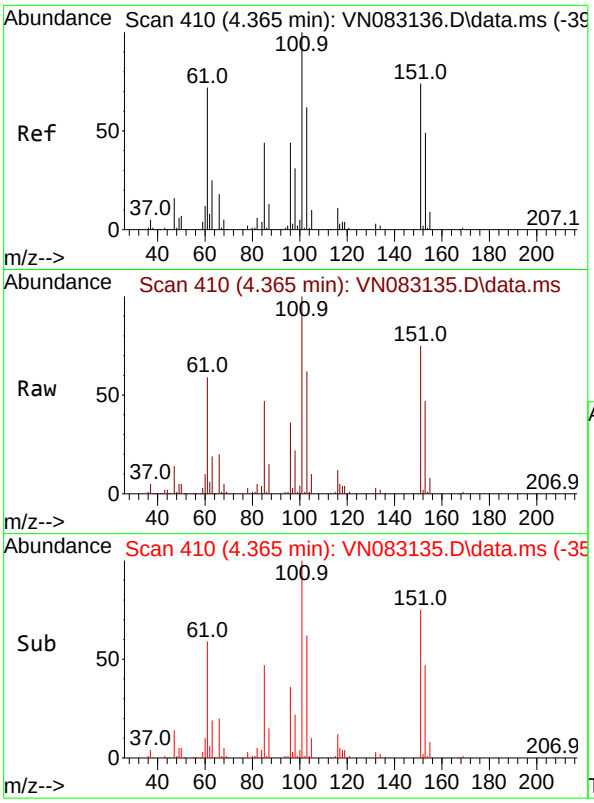



#8
Diethyl Ether
Concen: 95.597 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 74 Resp: 151291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 93.4 | 55.5 | 166.3 |

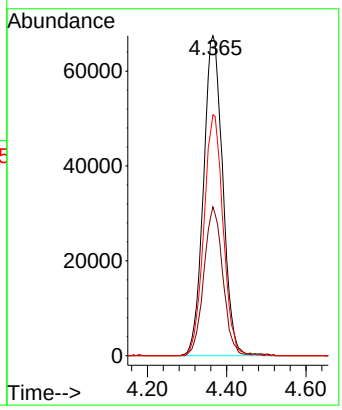





#9
1,1,2-Trichlorotrifluoroethane
Concen: 97.044 ug/l
RT: 4.365 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:101 Resp: 22755

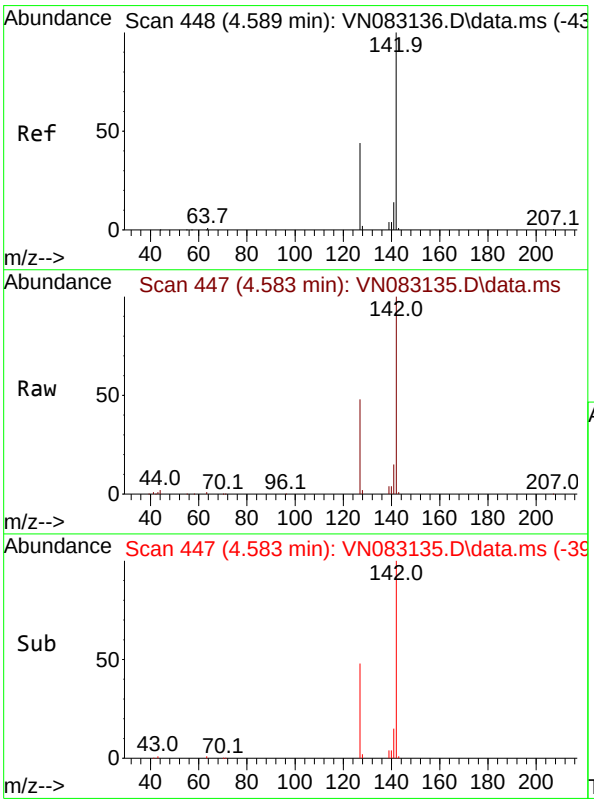
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.6 | 38.3 | 57.5 |
| 151 | 75.2 | 59.3 | 88.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

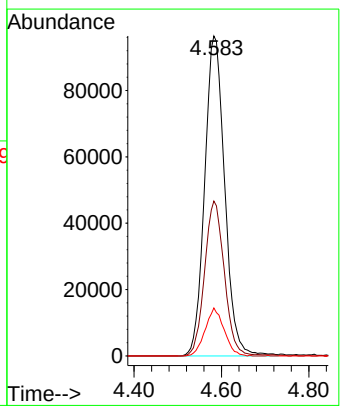
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

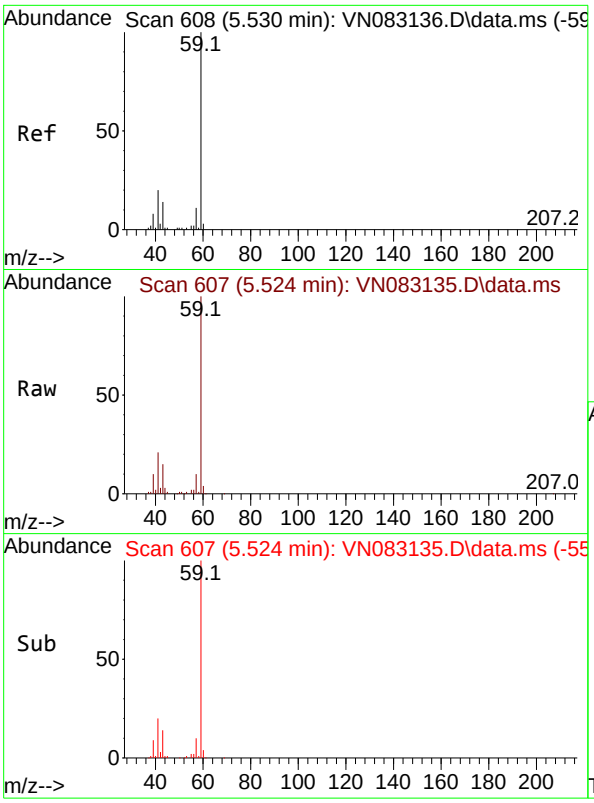



#10
Methyl Iodide
Concen: 99.686 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:142 Resp: 307476

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 48.4 | 37.5 | 56.3 |
| 141 | 15.0 | 13.1 | 19.7 |

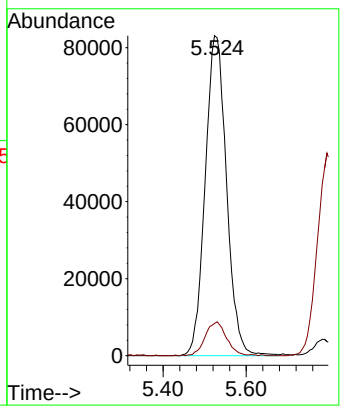





#11
Tert butyl alcohol
Concen: 461.112 ug/l
RT: 5.524 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 59 Resp: 29642

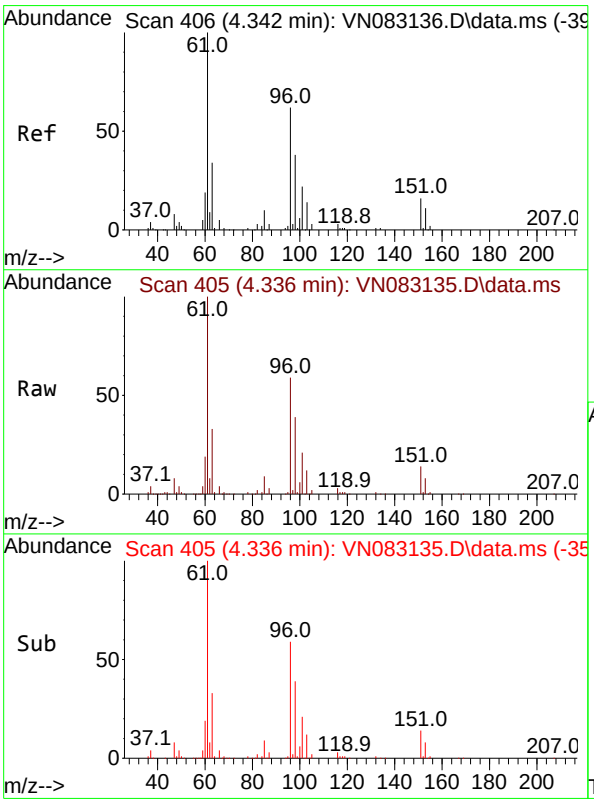
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.5 | 8.9 | 13.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

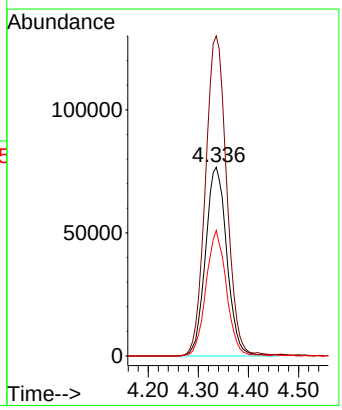
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

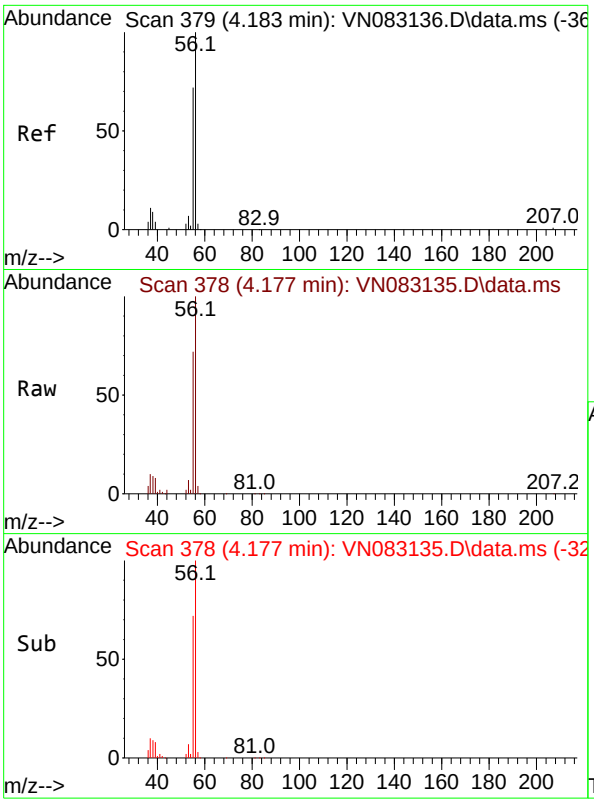



#12
1,1-Dichloroethene
Concen: 94.453 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 96 Resp: 227537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 169.4 | 149.7 | 224.5 |
| 98 | 66.5 | 50.1 | 75.1 |

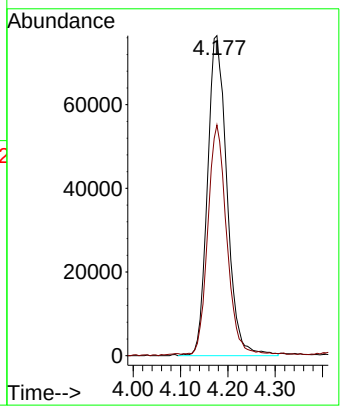





#13
Acrolein
Concen: 520.640 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 56 Resp: 21813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 68.5 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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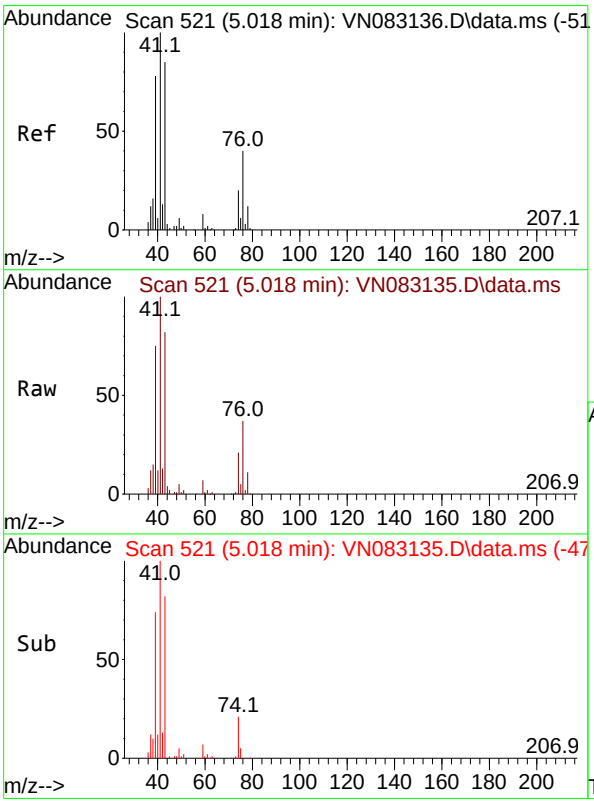
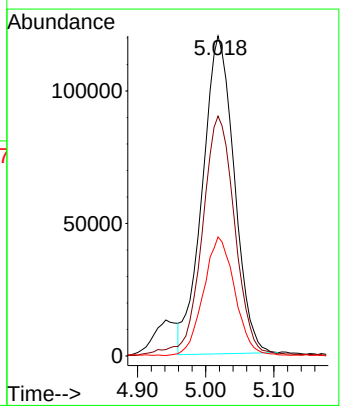
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

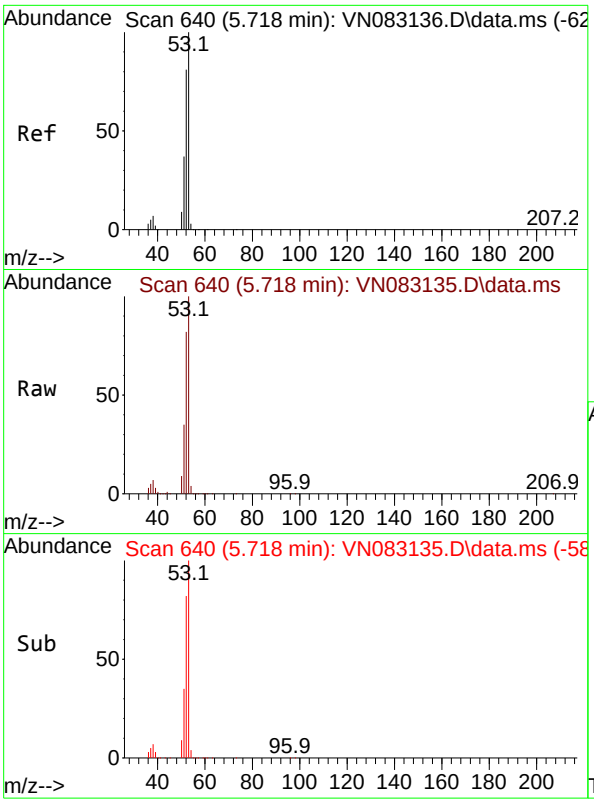



#14
Allyl chloride
Concen: 85.577 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 41 Resp: 389580

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 78.4 | 67.8 | 101.6 |
| 76 | 36.6 | 25.8 | 38.8 |

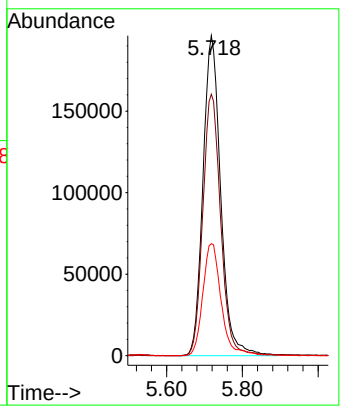





#15
Acrylonitrile
Concen: 481.734 ug/l
RT: 5.718 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 53 Resp: 63689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.5 | 66.6 | 100.0 |
| 51 | 36.4 | 30.1 | 45.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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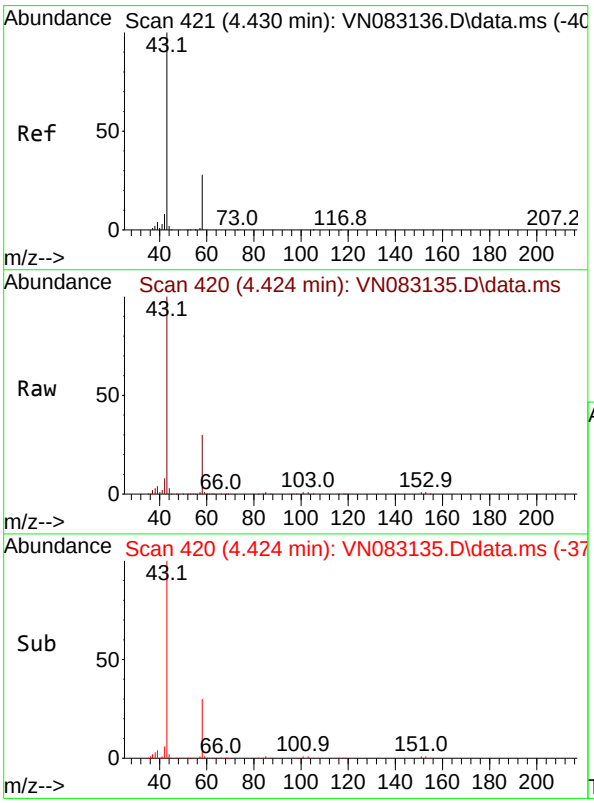
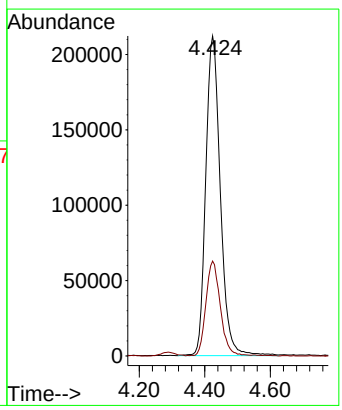
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

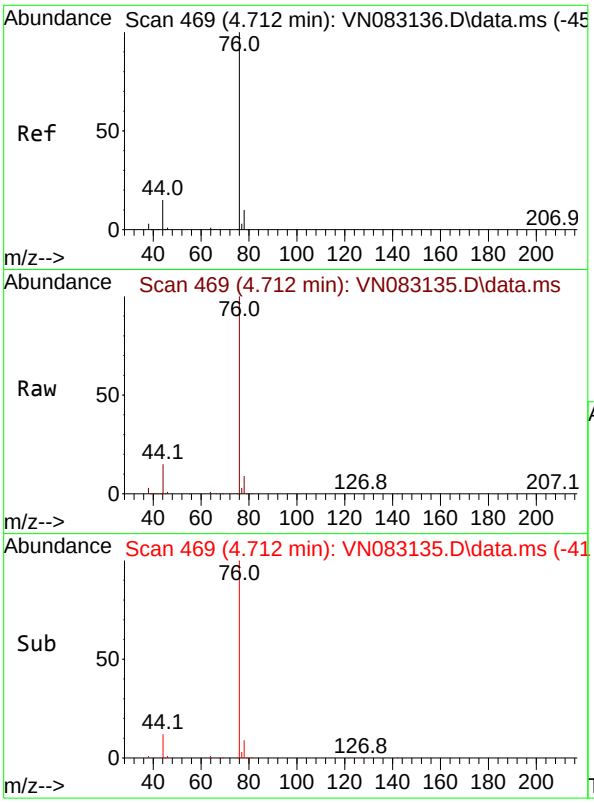



#16
Acetone
Concen: 542.264 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 656348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 29.7 | 21.8 | 32.6 |






#17
Carbon Disulfide
Concen: 90.406 ug/l
RT: 4.712 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 76 Resp: 63725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.2 | 7.2 | 10.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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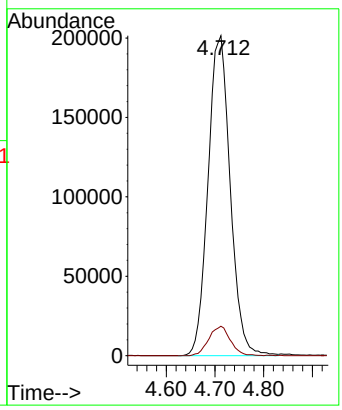
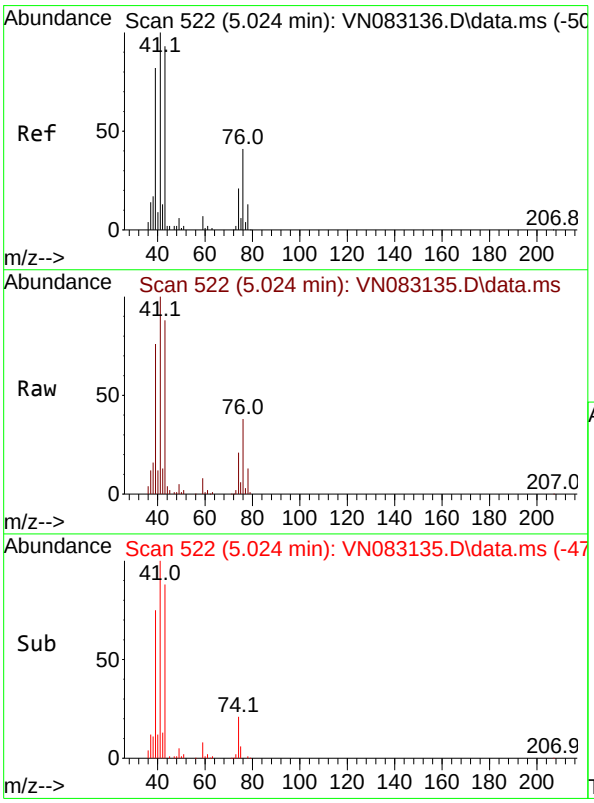
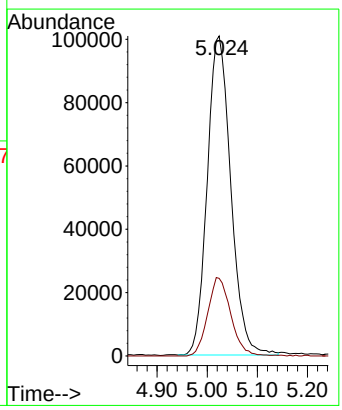


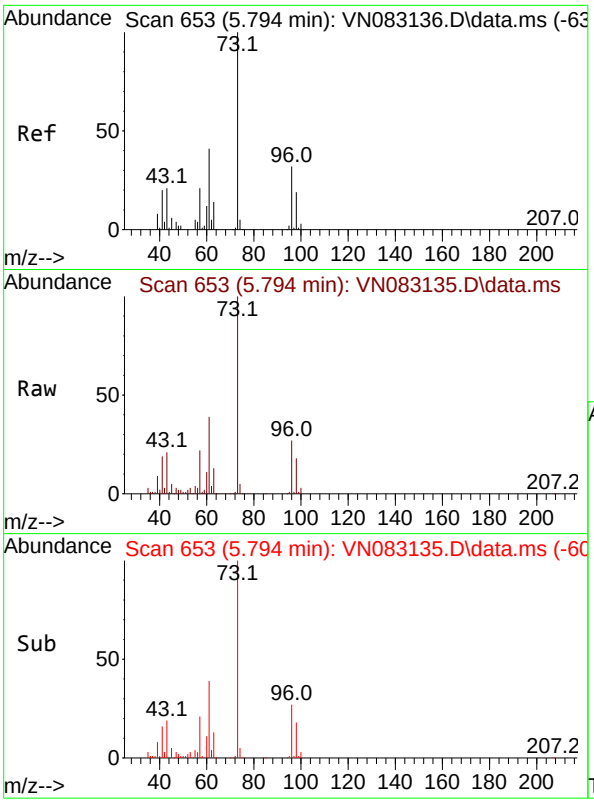




#18
Methyl Acetate
Concen: 91.357 ug/l
RT: 5.024 min Scan# 522
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 329457

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 24.0 | 16.3 | 24.5 |

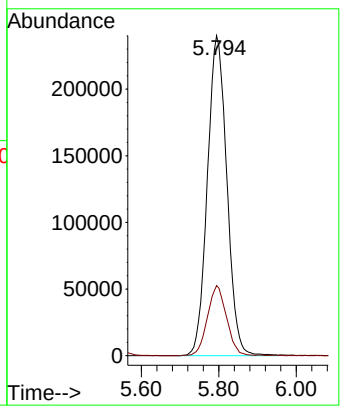





#19
Methyl tert-butyl Ether
Concen: 96.324 ug/l
RT: 5.794 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 73 Resp: 83756

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.9 | 17.9 | 26.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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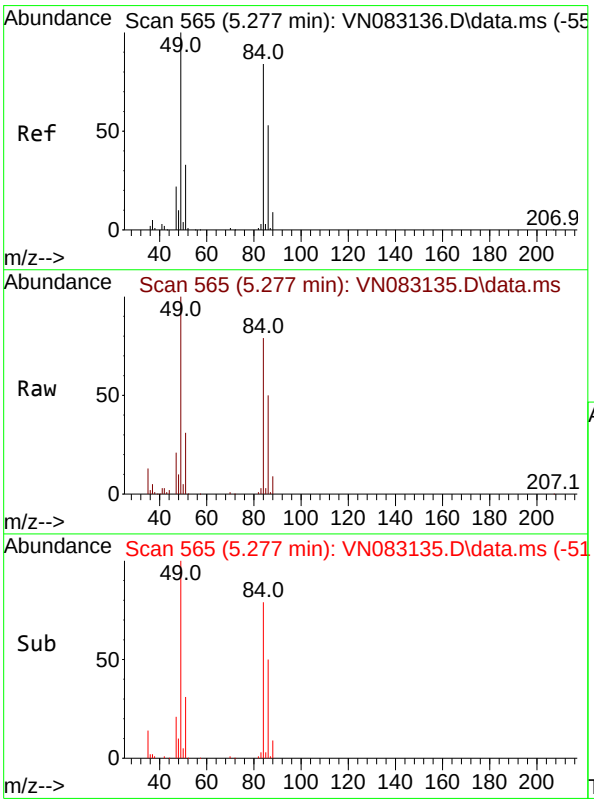
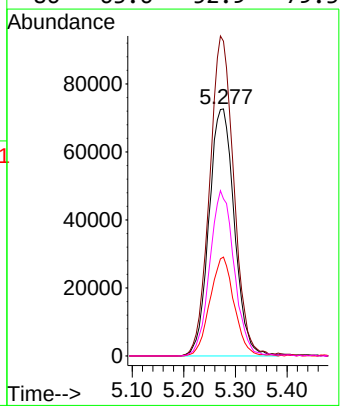
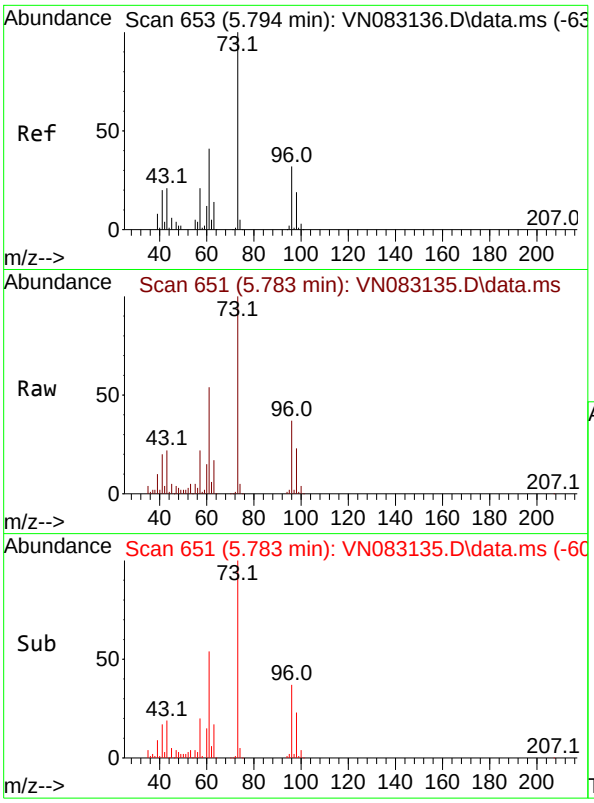



#20
Methylene Chloride
Concen: 88.771 ug/l
RT: 5.277 min Scan# 565
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 84 Resp: 247283

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 127.4 | 119.6 | 179.4 |
| 51 | 40.0 | 34.8 | 52.2 |
| 86 | 63.6 | 52.9 | 79.3 |

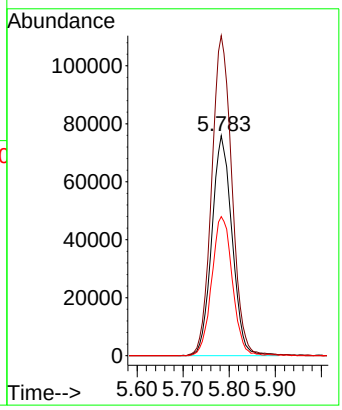





#21
trans-1,2-Dichloroethene
Concen: 92.991 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 96 Resp: 23153

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 145.4 | 123.4 | 185.2 |
| 98 | 63.2 | 49.3 | 73.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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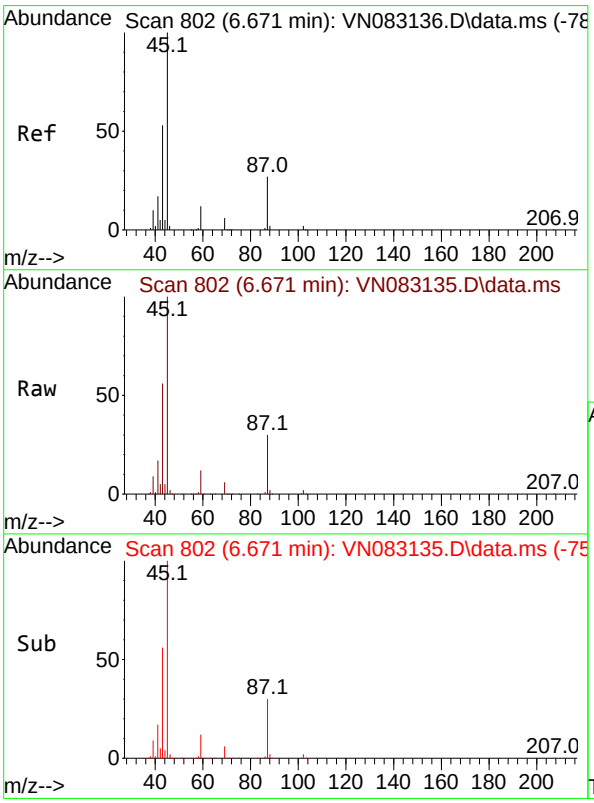
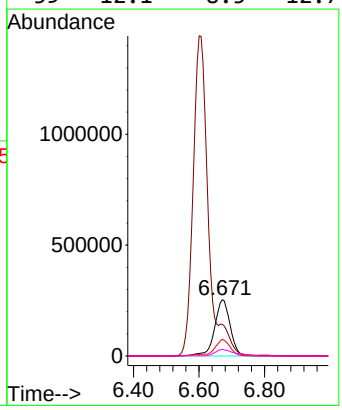
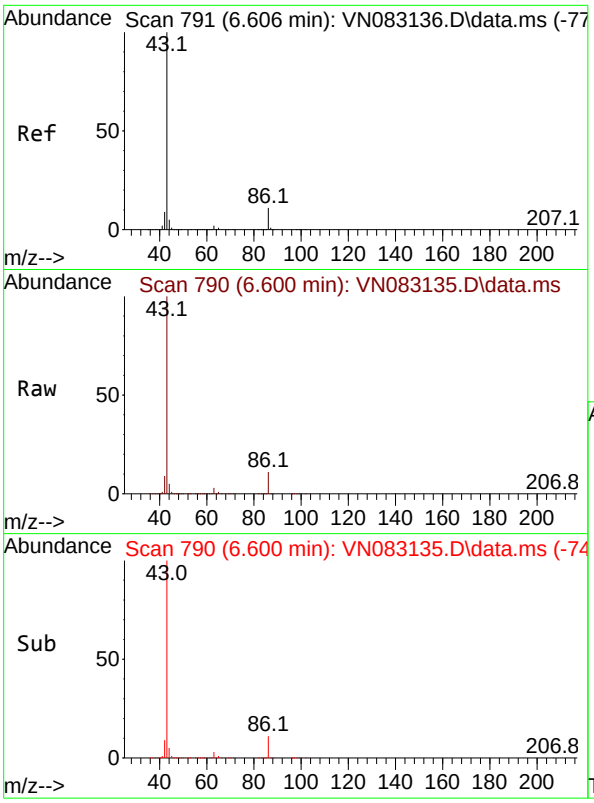



#22
Diisopropyl ether
Concen: 96.959 ug/l
RT: 6.671 min Scan# 802
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 45 Resp: 829706

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 55.8 | 44.0 | 66.0 |
| 87 | 29.5 | 19.7 | 29.5 |
| 59 | 12.1 | 8.5 | 12.7 |






#23
Vinyl Acetate
Concen: 493.177 ug/l
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 432491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.9 | 7.3 | 10.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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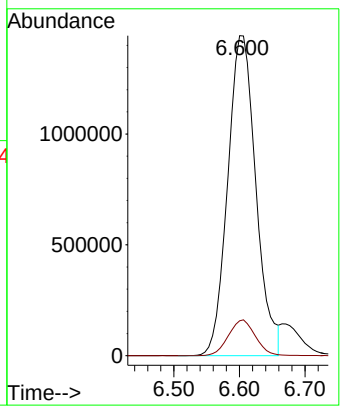
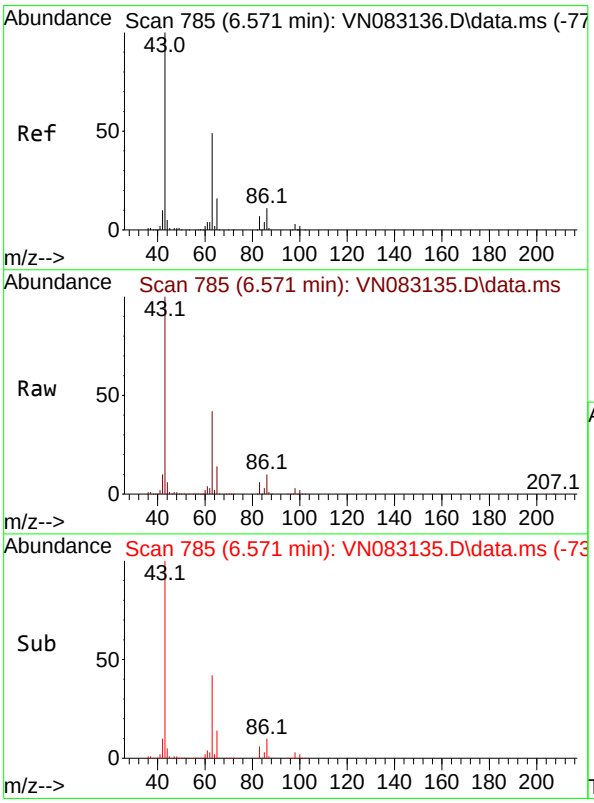
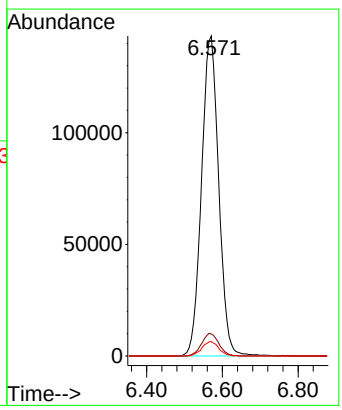


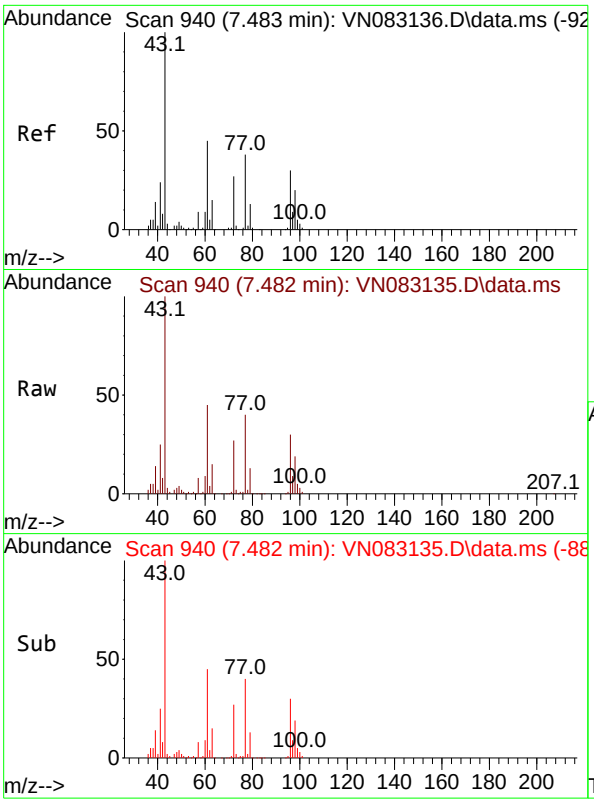




#24
1,1-Dichloroethane
Concen: 96.746 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 63 Resp: 451253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.8 | 3.3 | 9.9 |
| 100 | 4.5 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 489.098 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 90899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 27.2 | 18.2 | 27.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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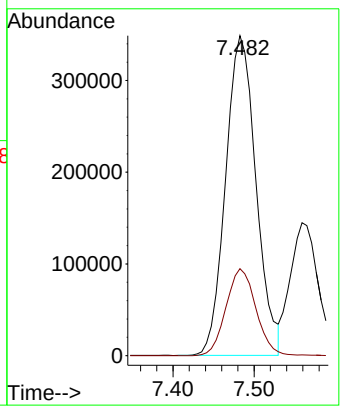
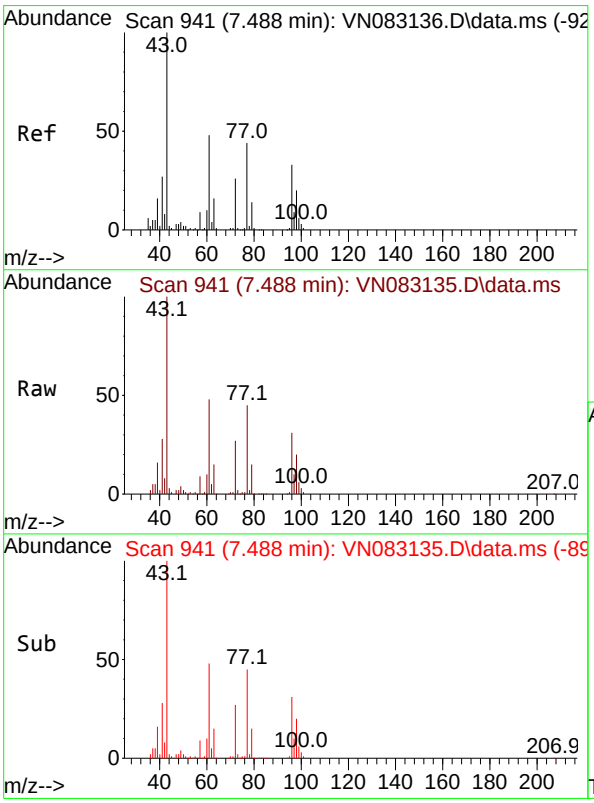
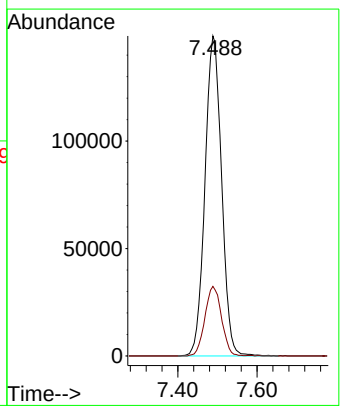


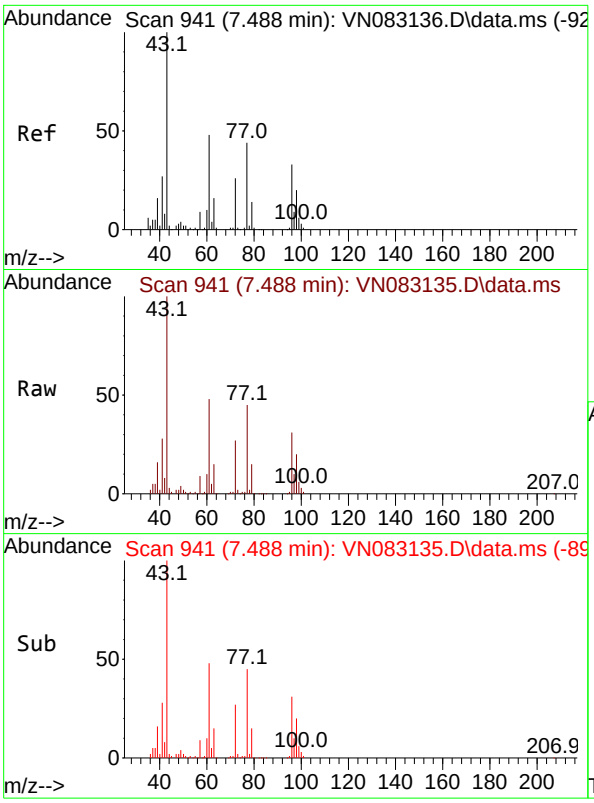




#26
2,2-Dichloropropane
Concen: 100.075 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 77 Resp: 433489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.7 | 10.3 | 30.9 |






#27
cis-1,2-Dichloroethene
Concen: 95.225 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 96 Resp: 28610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 151.6 | 0.0 | 329.6 |
| 98 | 64.3 | 0.0 | 128.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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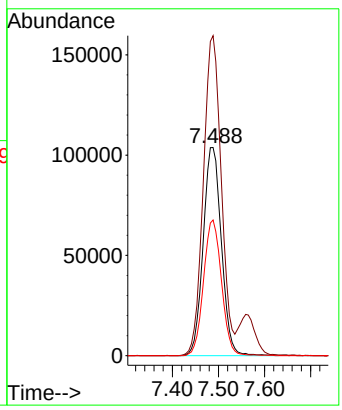
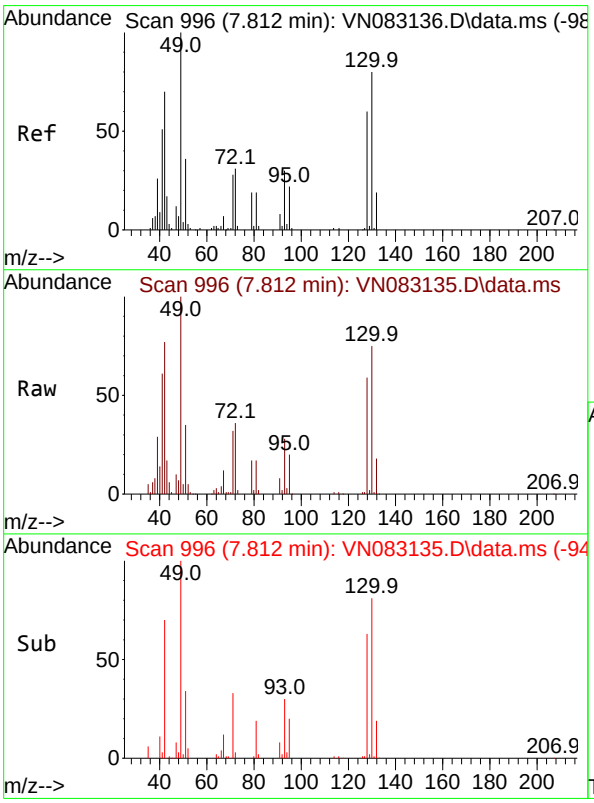
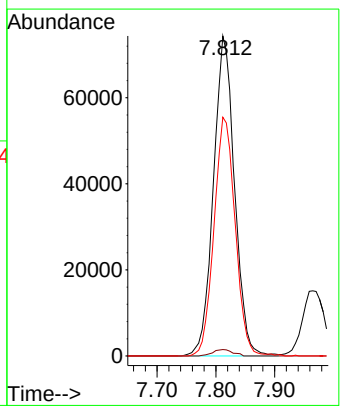


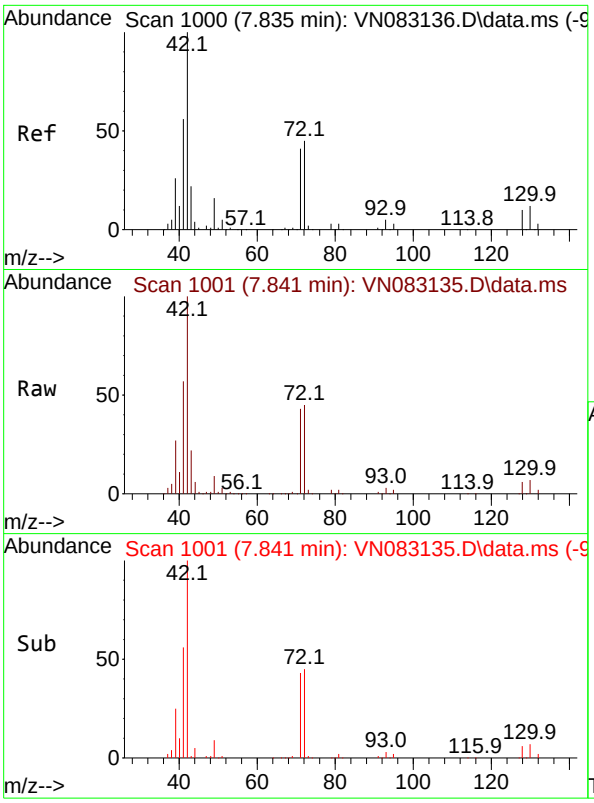




#28
Bromochloromethane
Concen: 97.333 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 49 Resp: 185533

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 3.8 |
| 130 | 74.9 | 50.5 | 75.7 |






#29
Tetrahydrofuran
Concen: 488.865 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 42 Resp: 58732

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 44.6 | 30.0 | 45.0 |
| 71 | 41.9 | 28.3 | 42.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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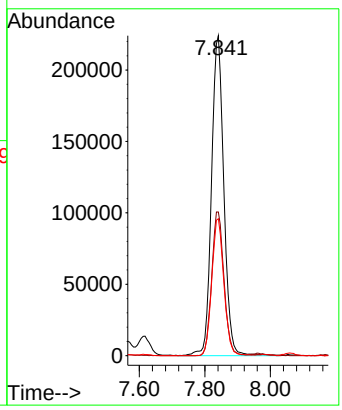
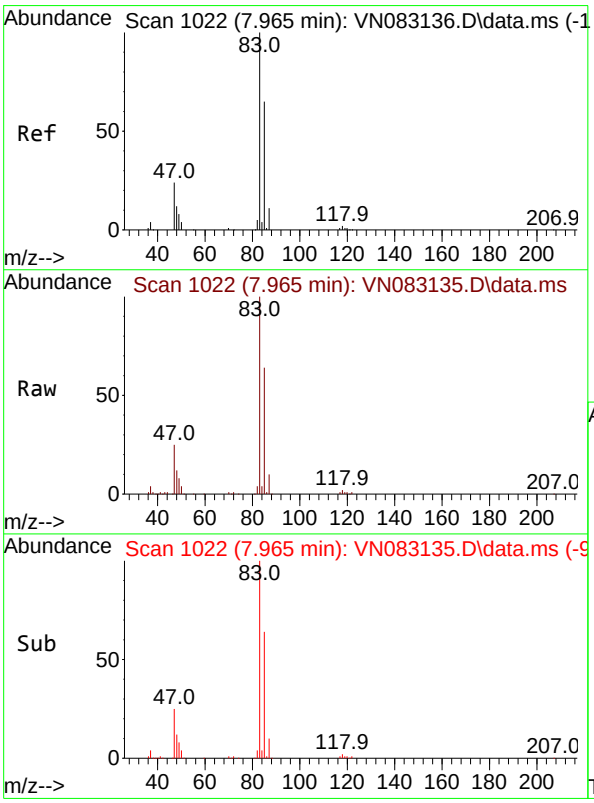
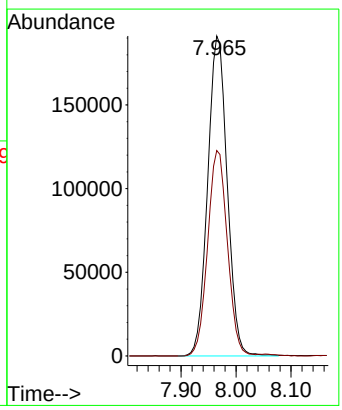


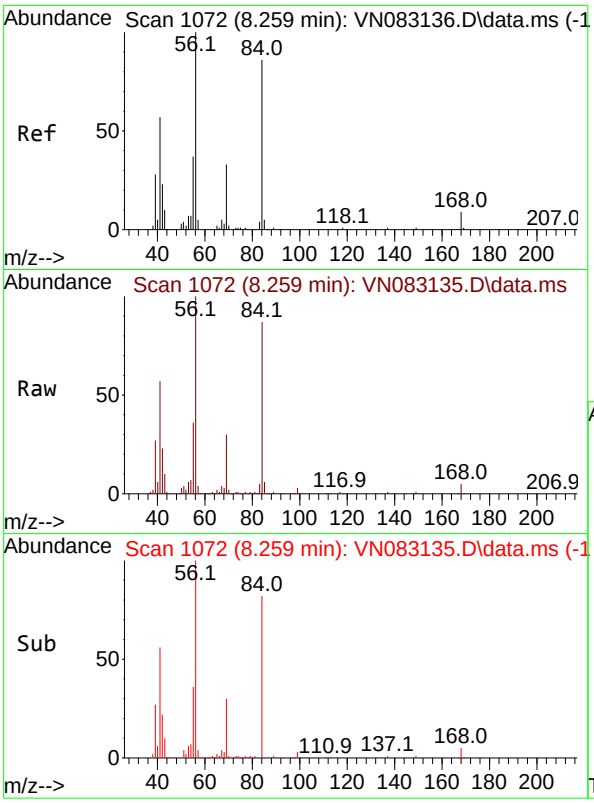




#30
Chloroform
Concen: 97.456 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 83 Resp: 472257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.2 | 50.9 | 76.3 |

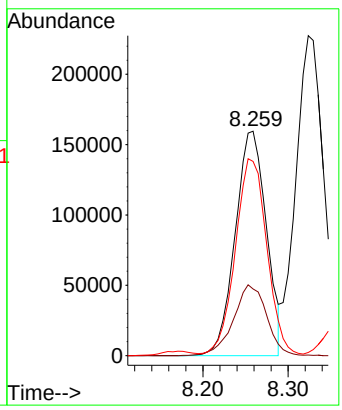





#31
Cyclohexane
Concen: 88.496 ug/l
RT: 8.259 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 56 Resp: 40566

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 29.7 | 24.5 | 36.7 |
| 84 | 84.5 | 66.0 | 99.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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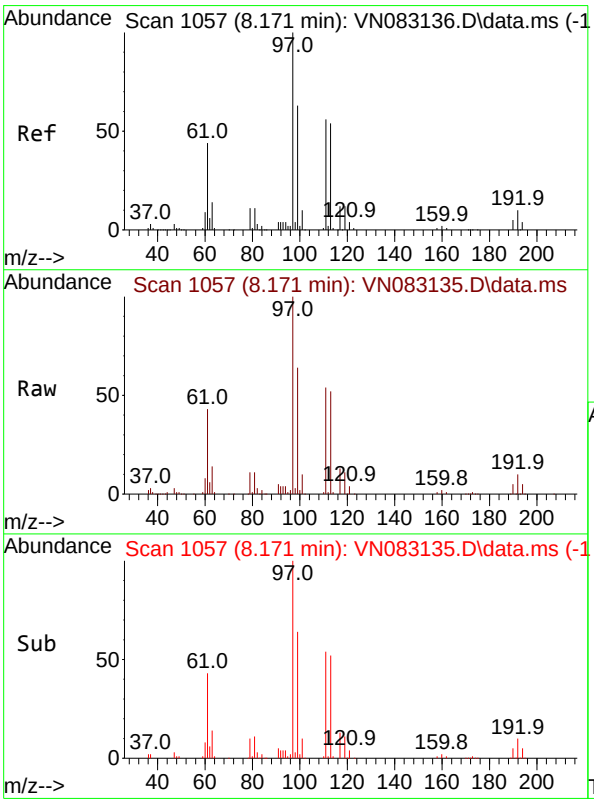
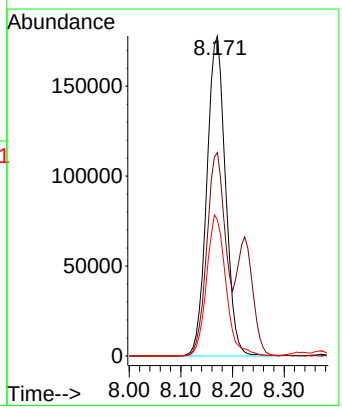
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

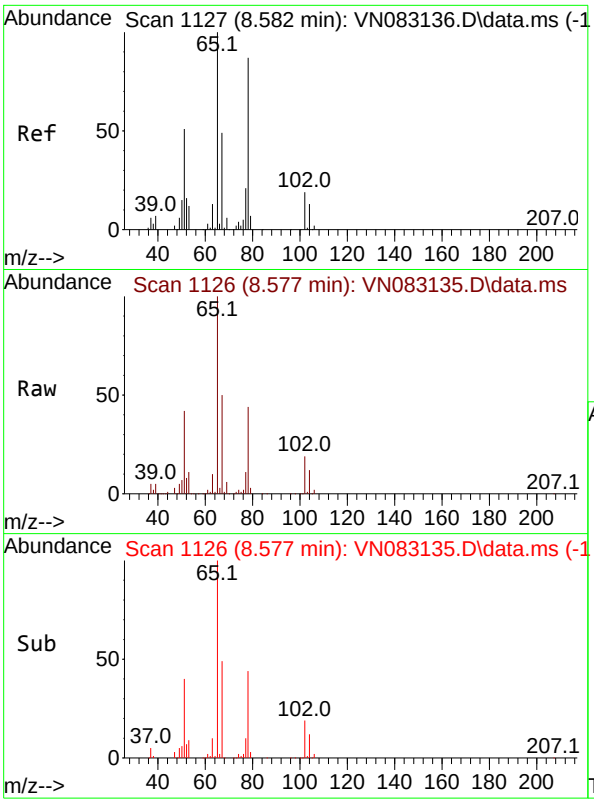



#32
1,1,1-Trichloroethane
Concen: 97.332 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 97 Resp: 446446

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.7 | 52.0 | 78.0 |
| 61 | 45.7 | 42.1 | 63.1 |






#33
1,2-Dichloroethane-d4
Concen: 100.713 ug/l
RT: 8.577 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 65 Resp: 31153

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.6 | 0.0 | 104.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

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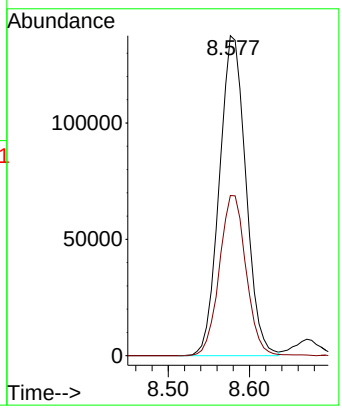
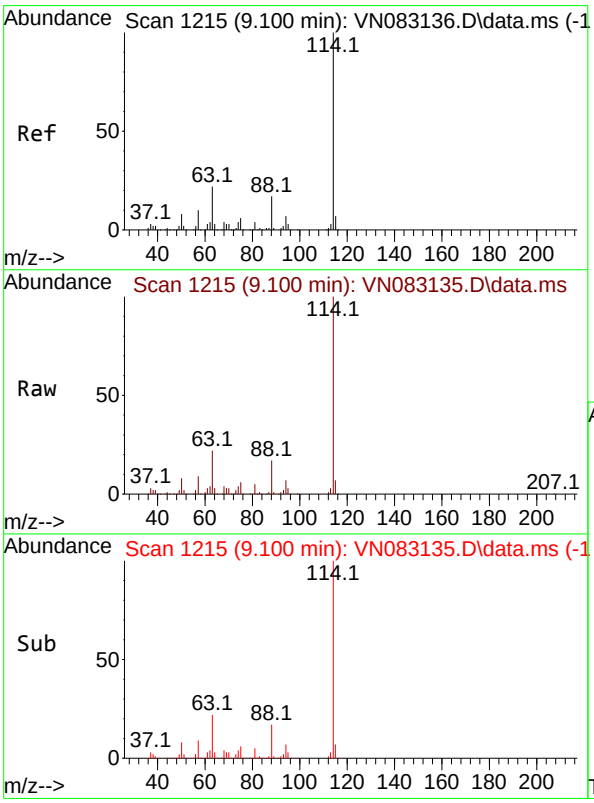
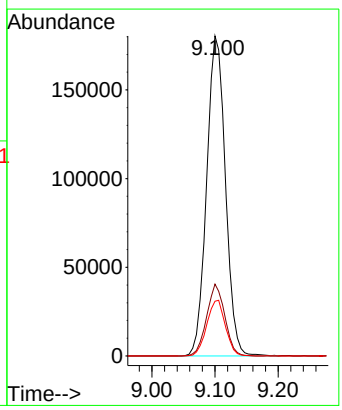


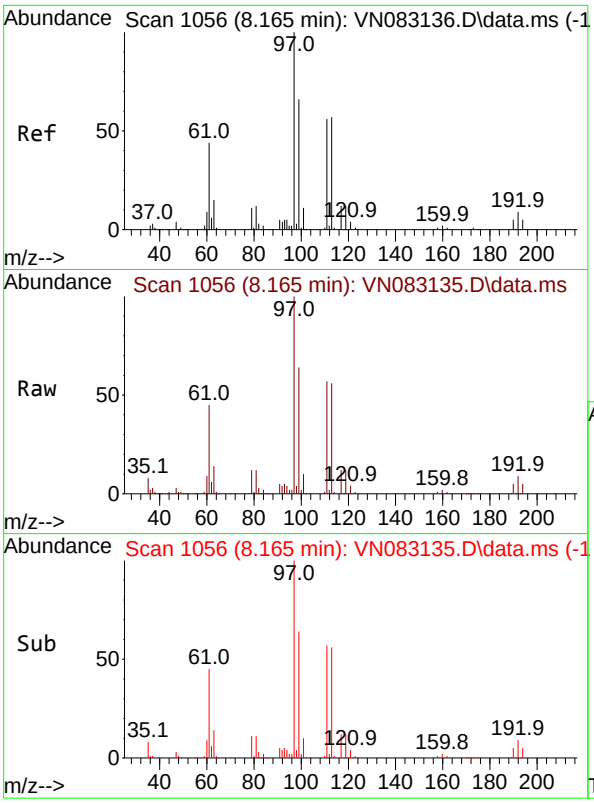




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:114 Resp: 373033

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.5 | 0.0 | 44.6 |
| 88 | 17.1 | 0.0 | 31.4 |

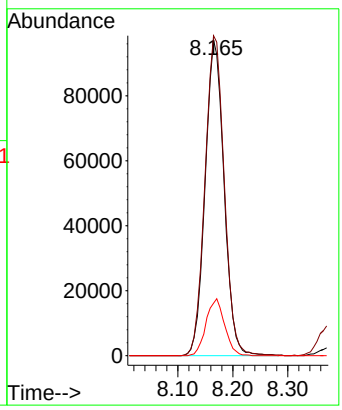





#35
Dibromofluoromethane
Concen: 99.556 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:113 Resp: 23180

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.7 | 82.4 | 123.6 |
| 192 | 17.7 | 14.9 | 22.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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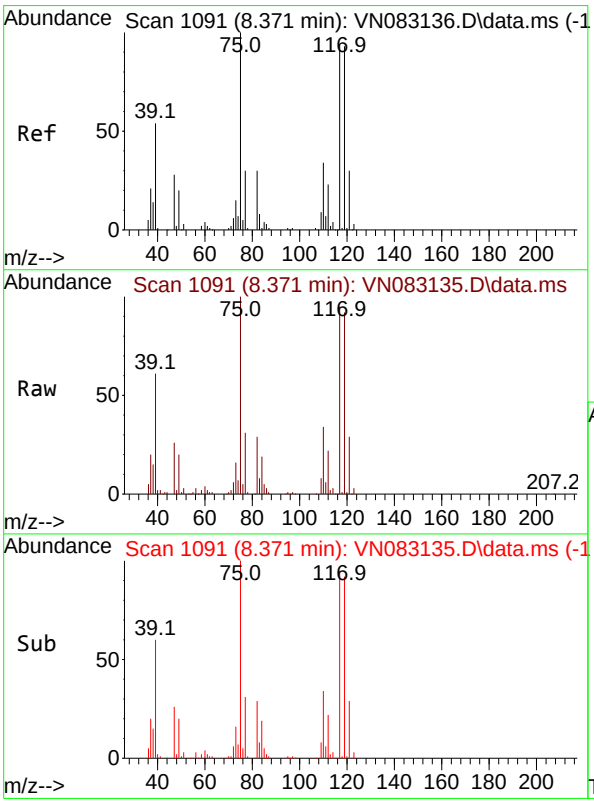
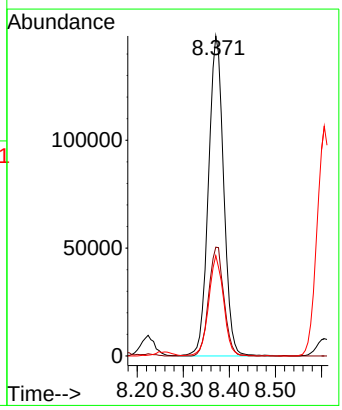
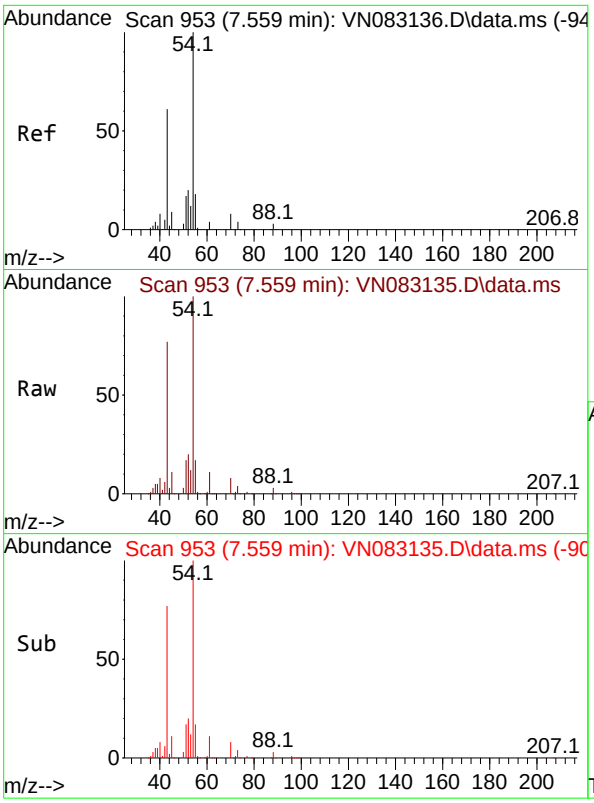



#36
1,1-Dichloropropene
Concen: 96.808 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 340980

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.1 | 16.3 | 48.9 |
| 77 | 30.6 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 90.602 ug/l
RT: 7.559 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 35730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 14.4 | 9.3 | 13.9# |
| 70 | 11.4 | 7.0 | 10.6# |

**Instrument :**
MSVOA_N
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VSTDICC100

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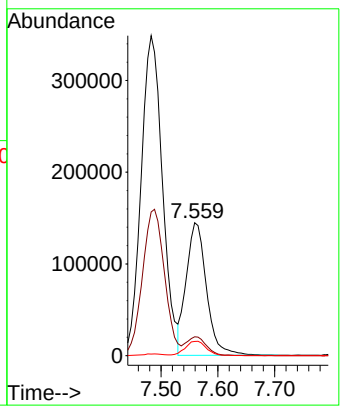
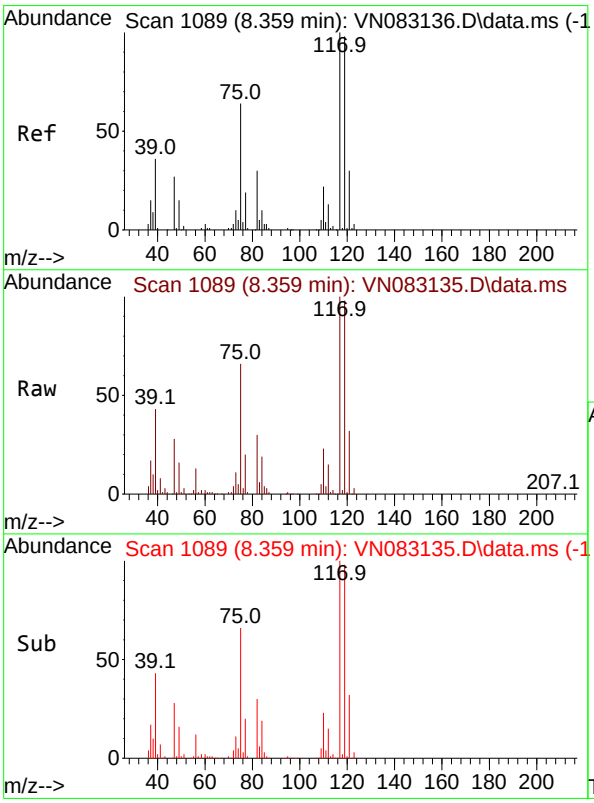
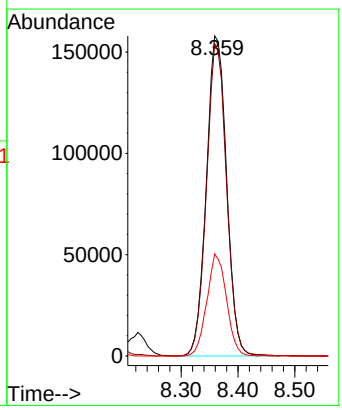


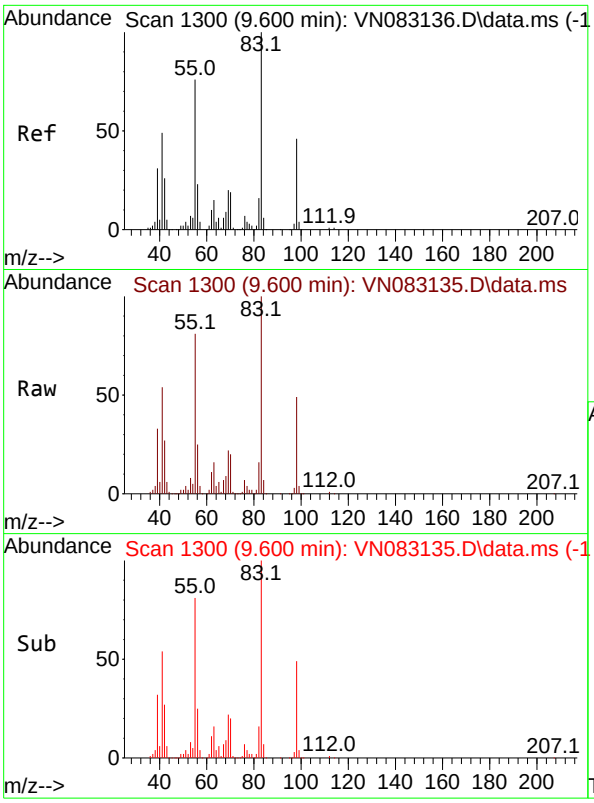




#38
Carbon Tetrachloride
Concen: 98.597 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:117 Resp: 391148

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 97.5 | 74.9 | 112.3 |
| 121 | 31.9 | 24.3 | 36.5 |






#39
Methylcyclohexane
Concen: 97.486 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 83 Resp: 42174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 80.6 | 66.4 | 99.6 |
| 98 | 49.2 | 40.7 | 61.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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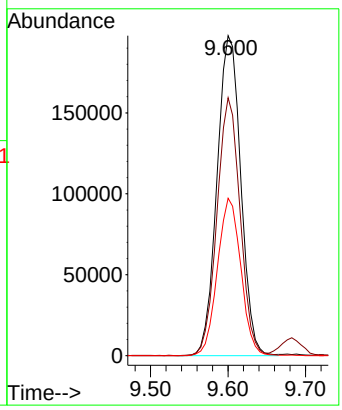
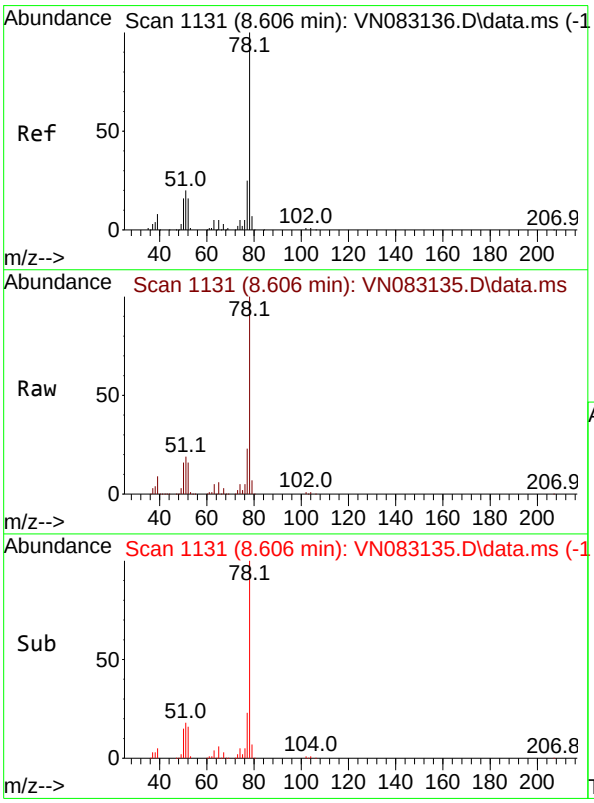
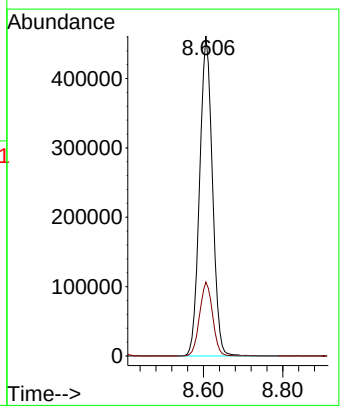


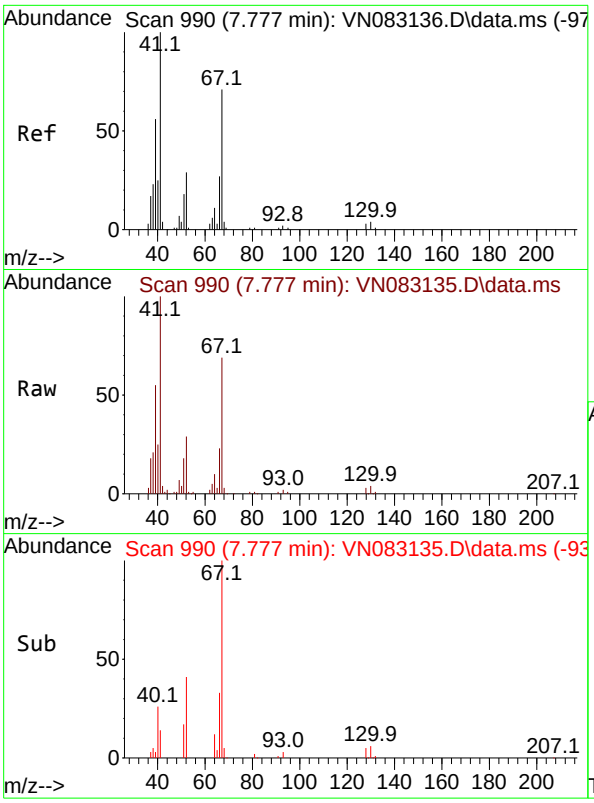




#40
Benzene
Concen: 98.550 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 78 Resp: 1034059

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.1 | 19.0 | 28.4 |

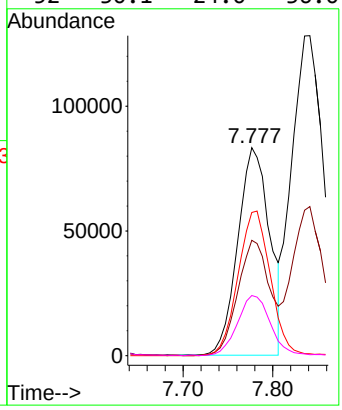





#41
Methacrylonitrile
Concen: 91.799 ug/l
RT: 7.777 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 41 Resp: 20584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 55.7 | 45.5 | 68.3 |
| 67 | 70.9 | 50.5 | 75.7 |
| 52 | 30.1 | 24.0 | 36.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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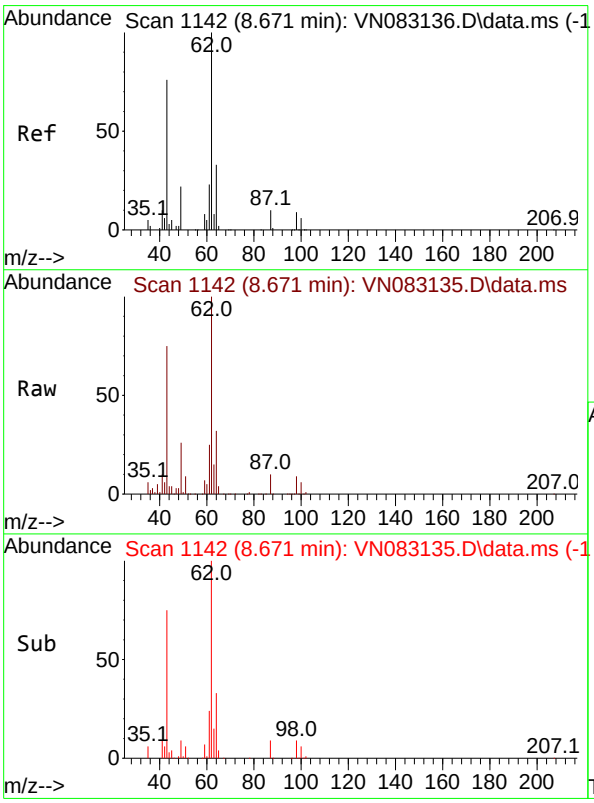
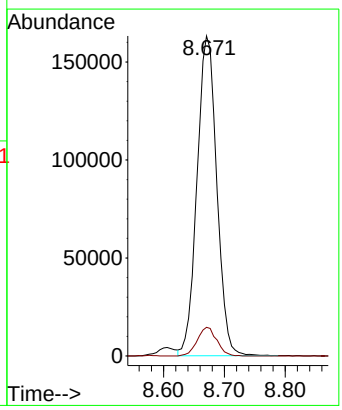
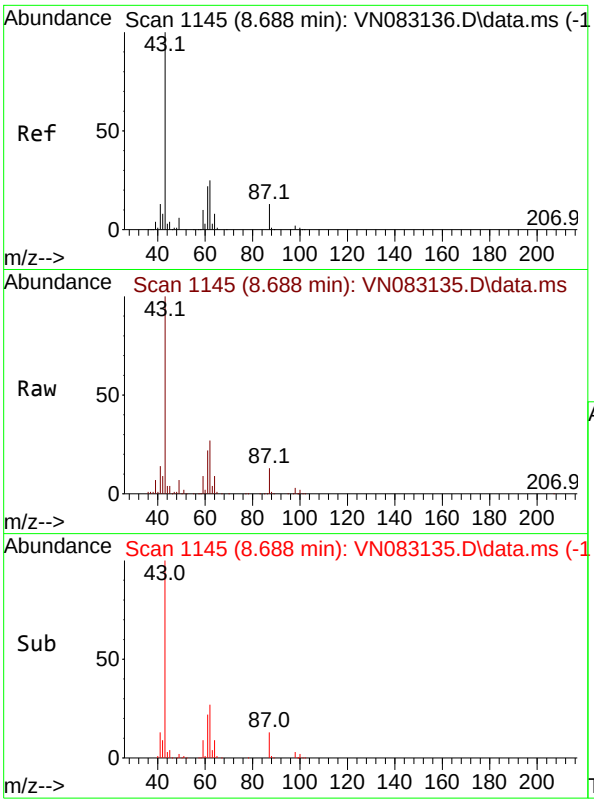



#42
1,2-Dichloroethane
Concen: 96.385 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 62 Resp: 368412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.8 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 99.962 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 64858

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 25.2 | 17.8 | 26.6 |
| 87 | 13.0 | 8.2 | 12.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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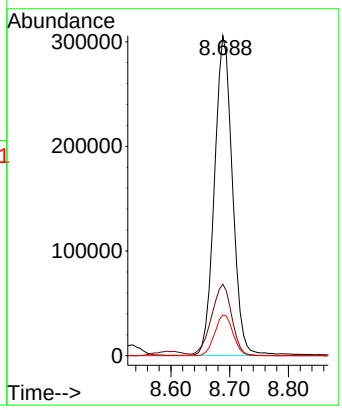
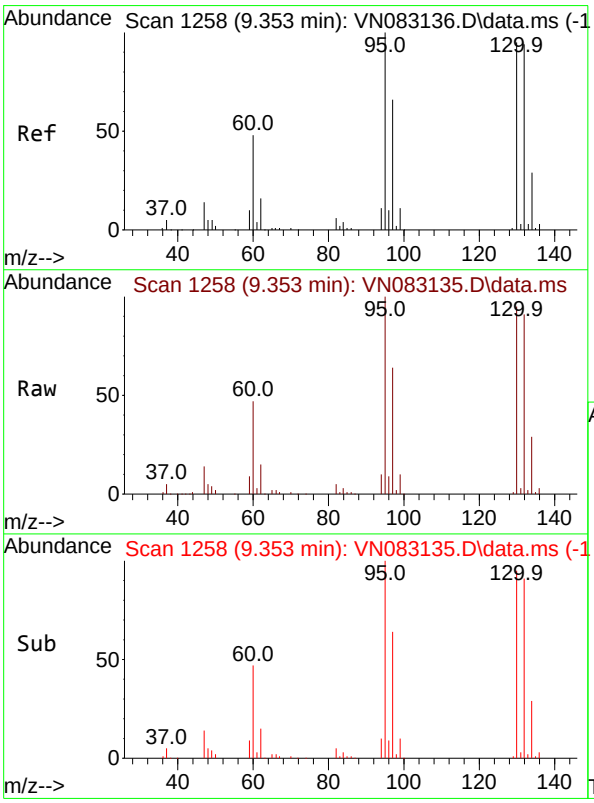
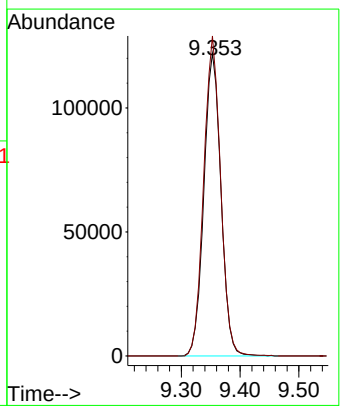


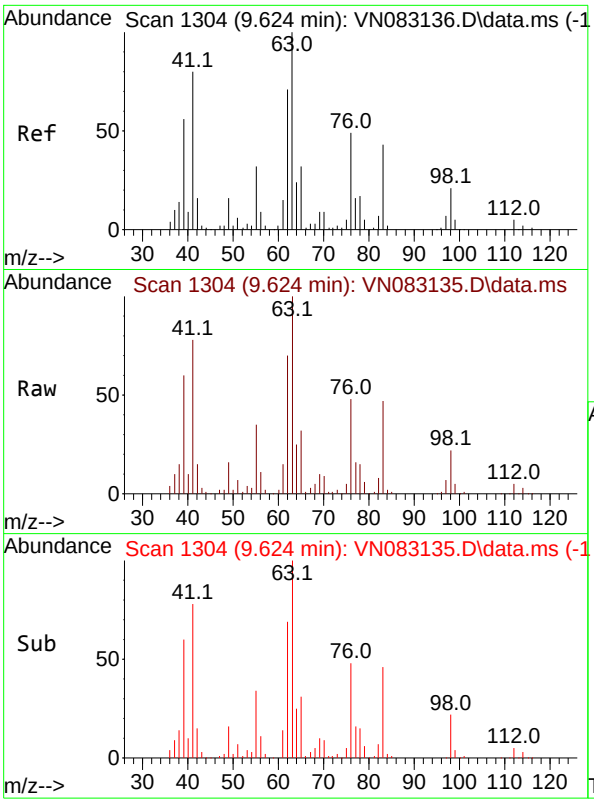




#44
Trichloroethene
Concen: 98.774 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:130 Resp: 246689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 105.7 | 0.0 | 197.8 |

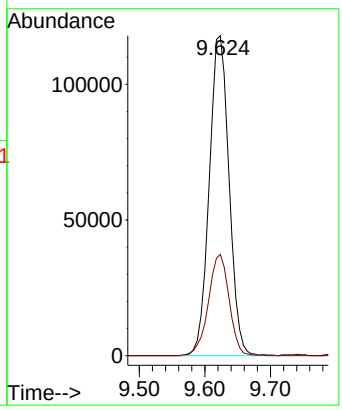





#45
1,2-Dichloropropane
Concen: 99.275 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 63 Resp: 24726

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.6 | 24.4 | 36.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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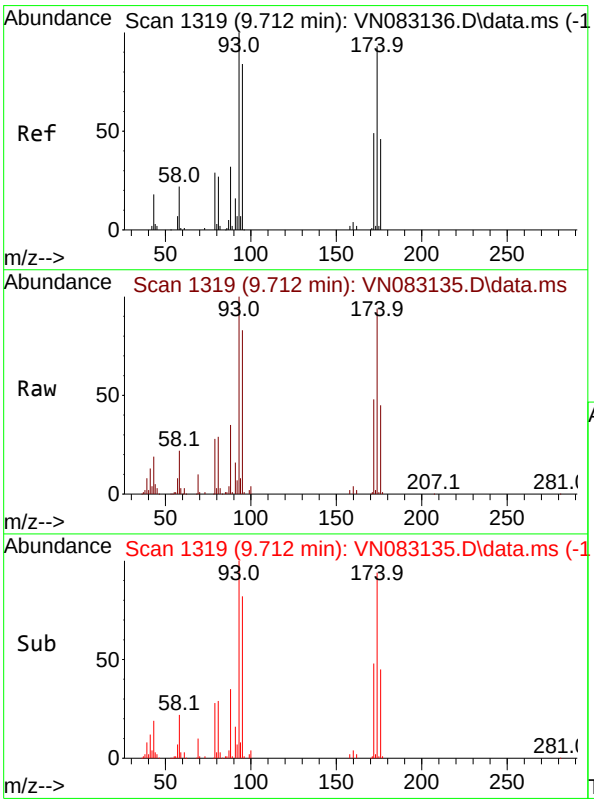
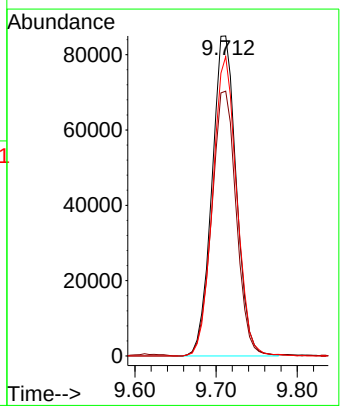
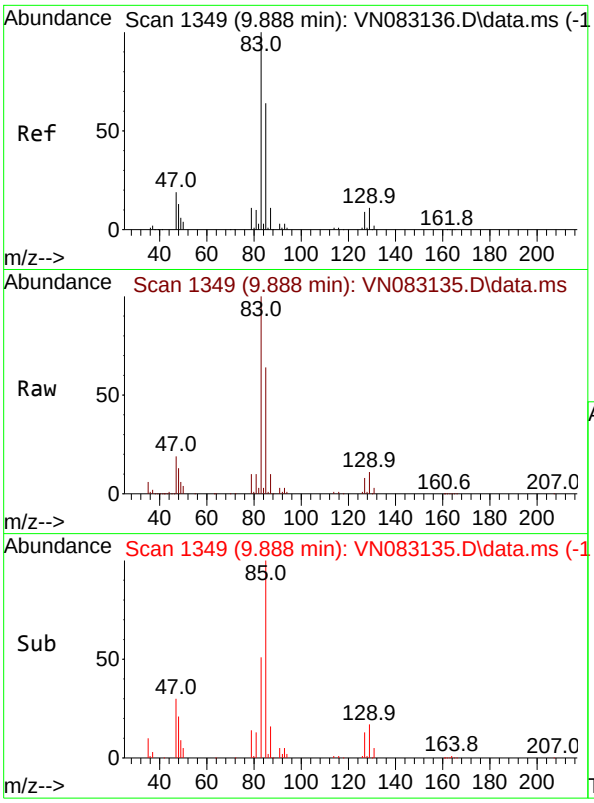



#46
Dibromomethane
Concen: 99.449 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 93 Resp: 177294

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.4 | 65.8 | 98.6 |
| 174 | 92.1 | 71.7 | 107.5 |

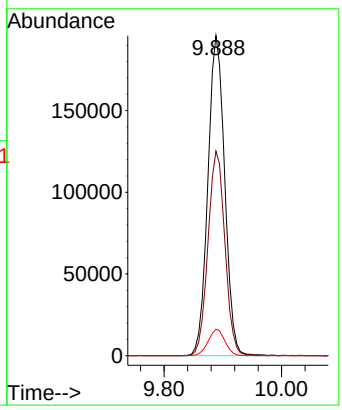





#47
Bromodichloromethane
Concen: 97.184 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 83 Resp: 38902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.9 | 51.1 | 76.7 |
| 127 | 8.3 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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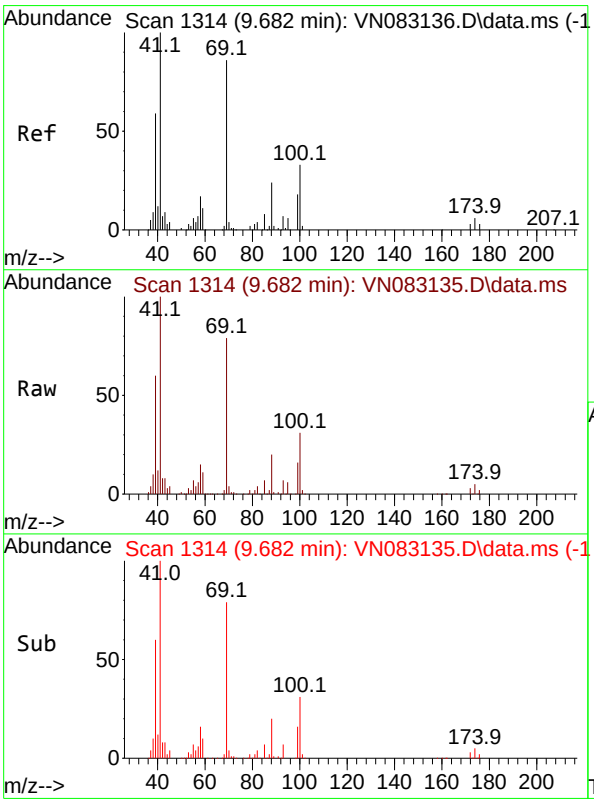
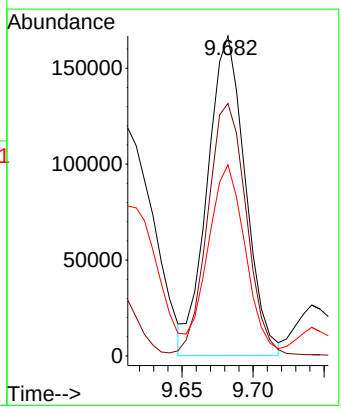
Supervised By :Mahesh Dadoda 08/09/2024

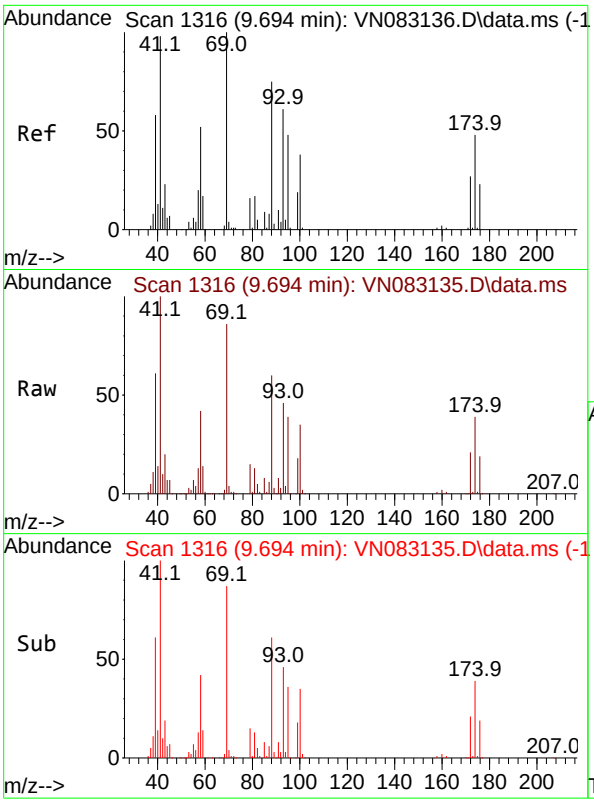



#48
Methyl methacrylate
Concen: 94.886 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 41 Resp: 309367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 81.0 | 56.3 | 84.5 |
| 39 | 58.7 | 50.3 | 75.5 |






#49
1,4-Dioxane
Concen: 1994.879 ug/l
RT: 9.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 88 Resp: 11734

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 28.2 | 27.8 | 41.8 |
| 58 | 71.8 | 59.4 | 89.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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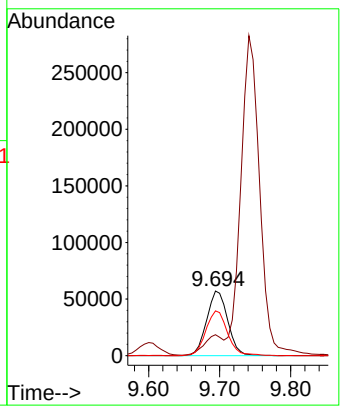
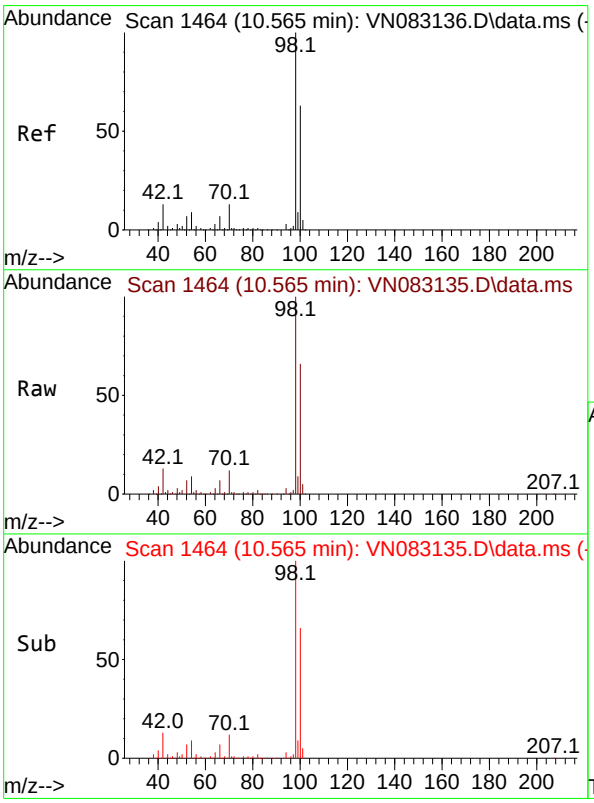
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

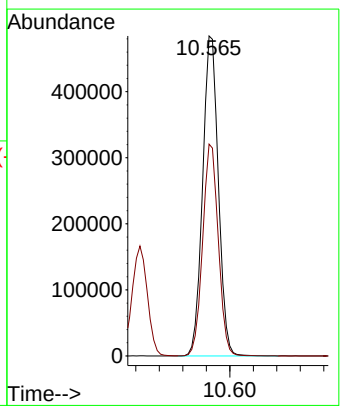


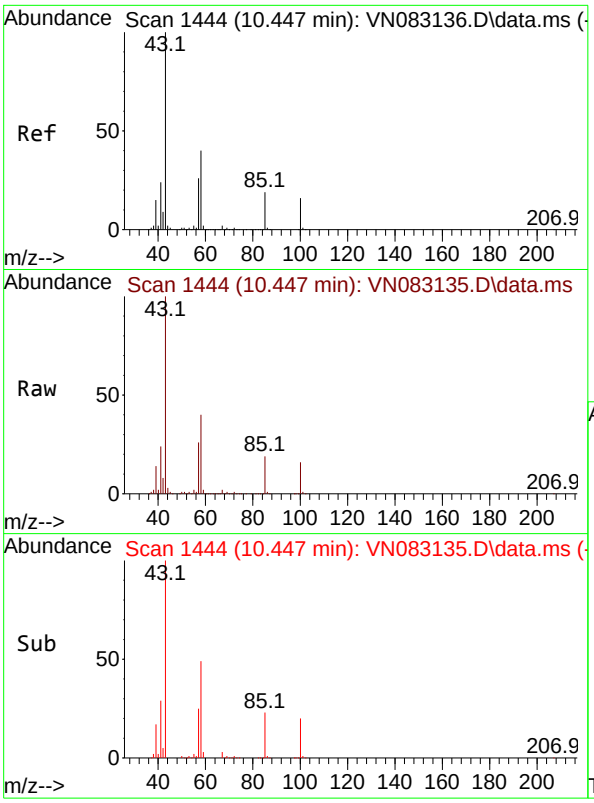




#50
Toluene-d8
Concen: 103.163 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 98 Resp: 896022

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 51.5 | 77.3 |






#51
4-Methyl-2-Pentanone
Concen: 495.091 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 184634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 39.7 | 28.2 | 42.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

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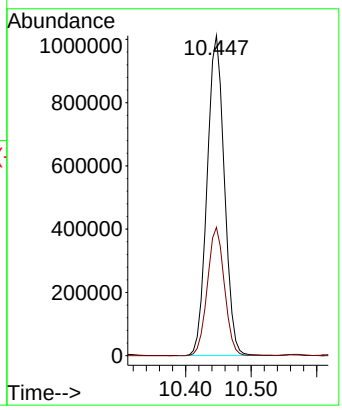
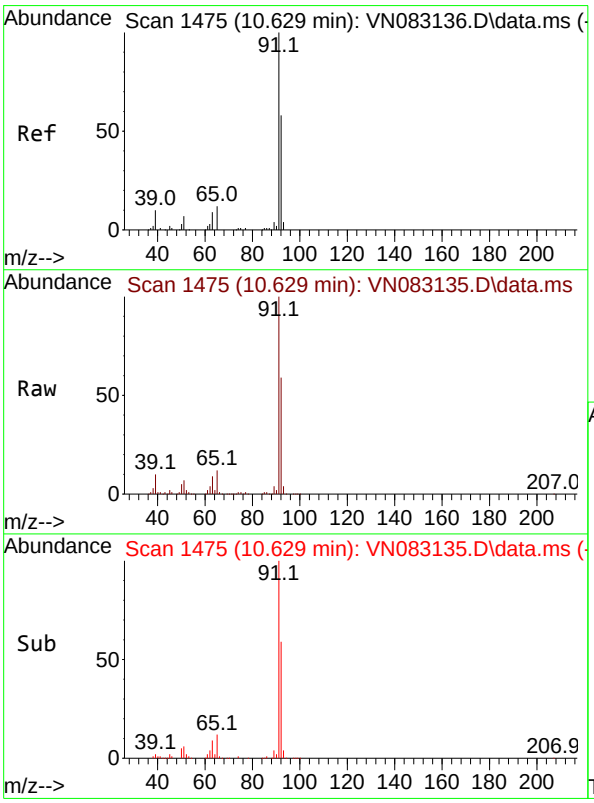
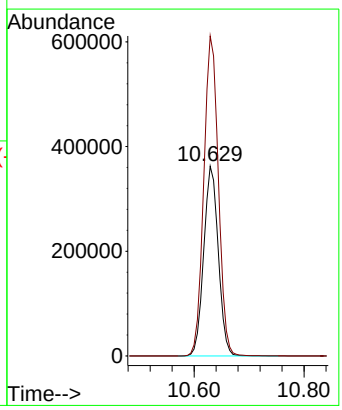


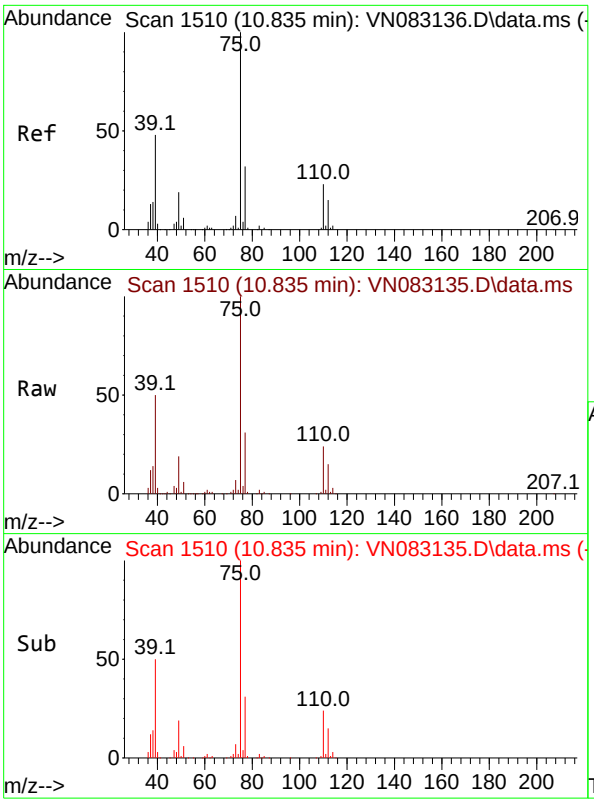




#52
Toluene
Concen: 100.347 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 92 Resp: 665274

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 169.4 | 139.4 | 209.0 |






#53
t-1,3-Dichloropropene
Concen: 103.317 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 42482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.9 | 25.7 | 38.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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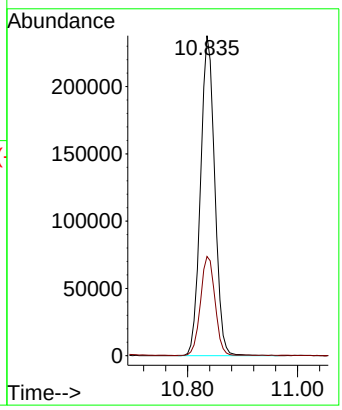
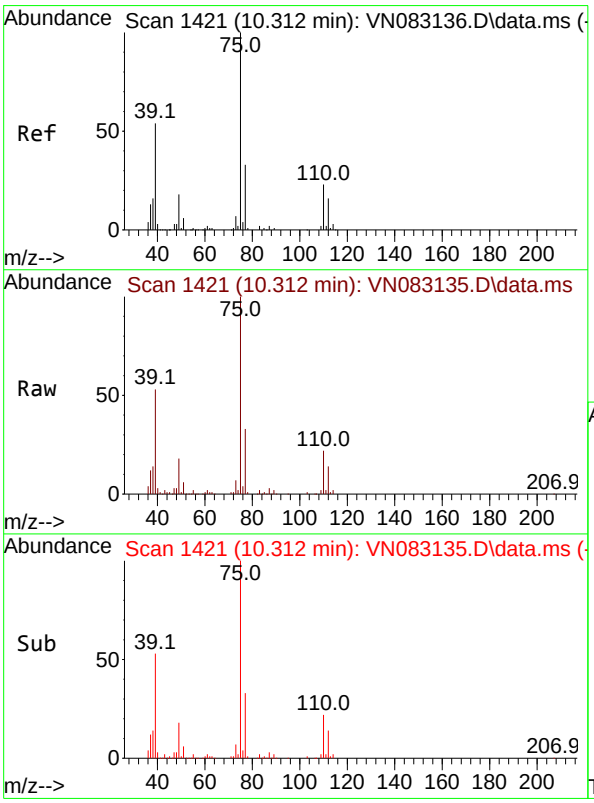
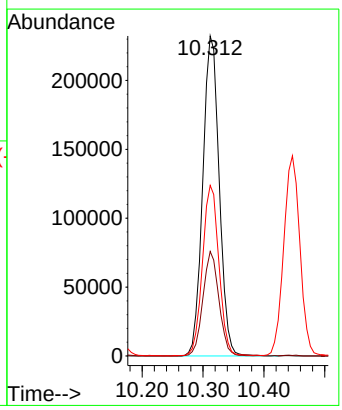


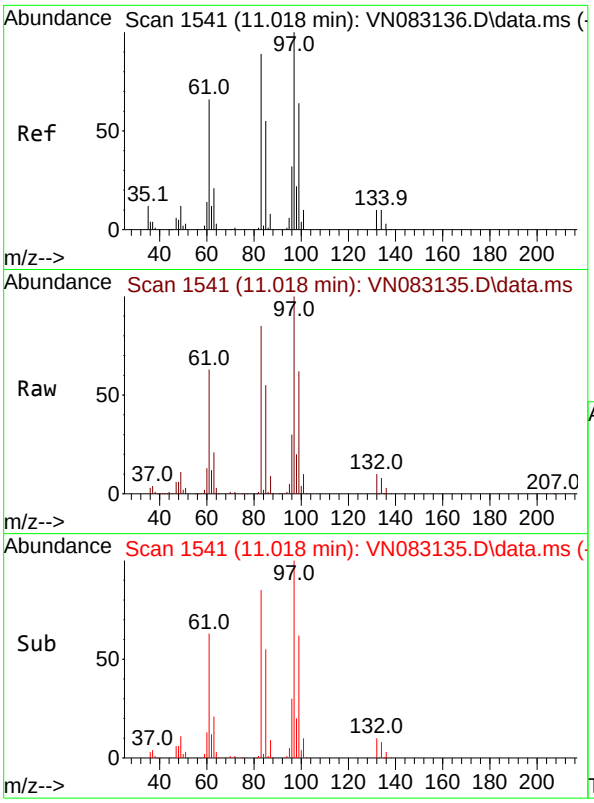




#54
cis-1,3-Dichloropropene
Concen: 99.903 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 436928

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.7 | 24.3 | 36.5 |
| 39 | 53.2 | 50.5 | 75.7 |

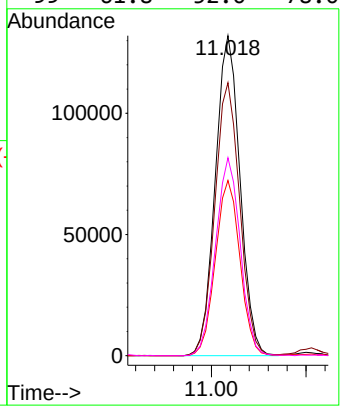





#55
1,1,2-Trichloroethane
Concen: 101.114 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 97 Resp: 24023

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 85.3 | 71.4 | 107.0 |
| 85 | 54.8 | 45.8 | 68.6 |
| 99 | 61.8 | 52.0 | 78.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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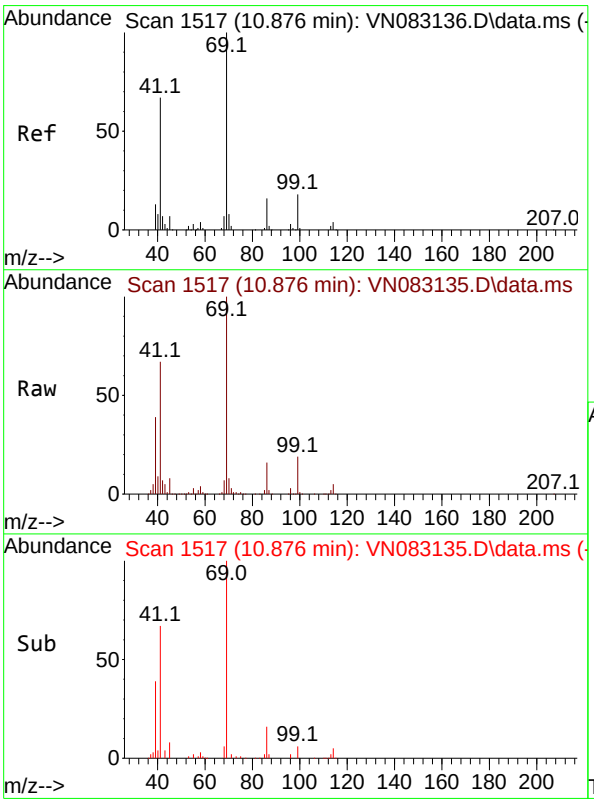
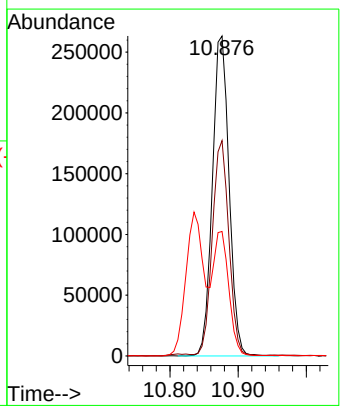
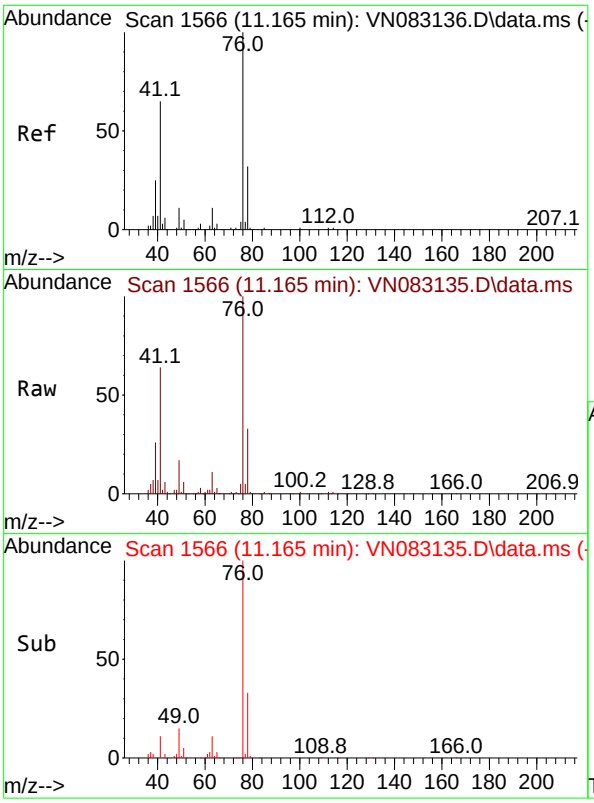



#56
Ethyl methacrylate
Concen: 100.164 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 69 Resp: 448632

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 66.4 | 63.4 | 95.2 |
| 39 | 34.5 | 37.4 | 56.0# |

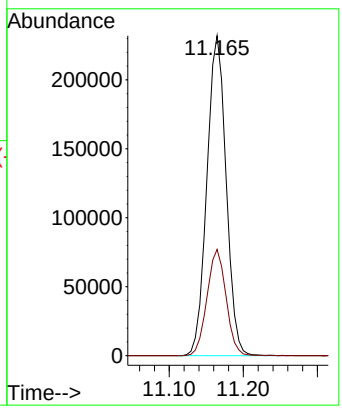





#57
1,3-Dichloropropane
Concen: 98.824 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 76 Resp: 41850

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.9 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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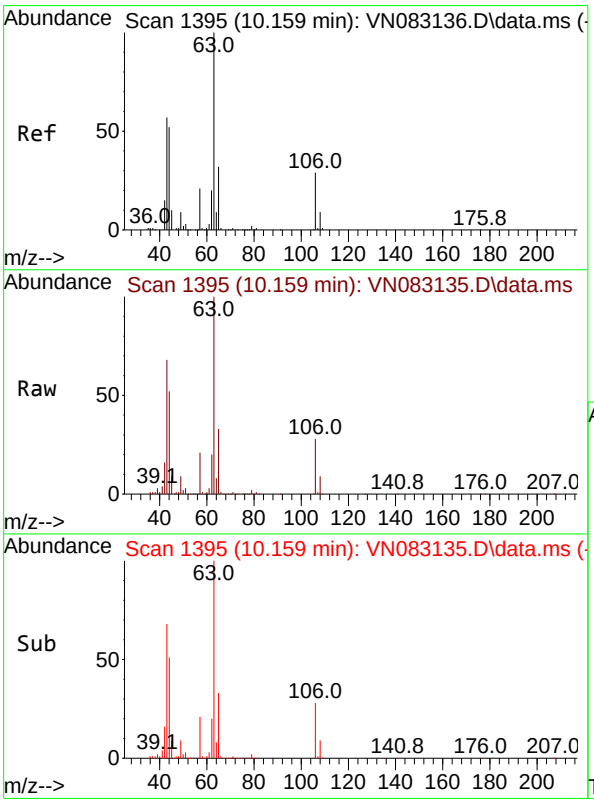
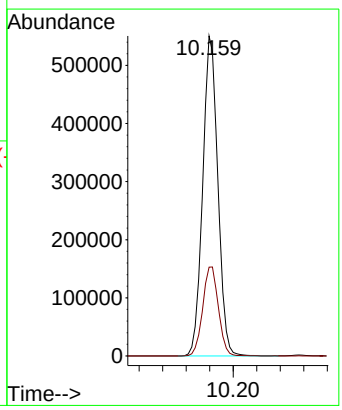
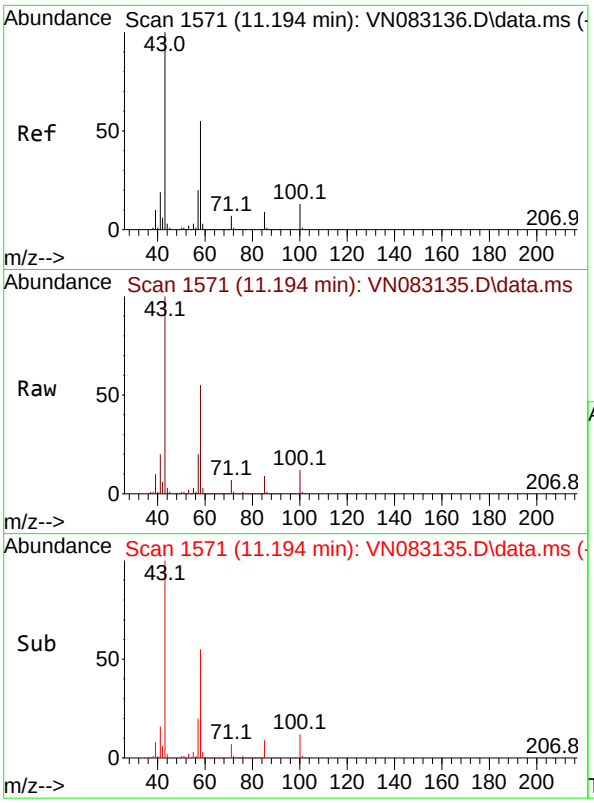



#58
2-Chloroethyl Vinyl ether
Concen: 519.987 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 63 Resp: 984478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.8 | 21.4 | 32.0 |

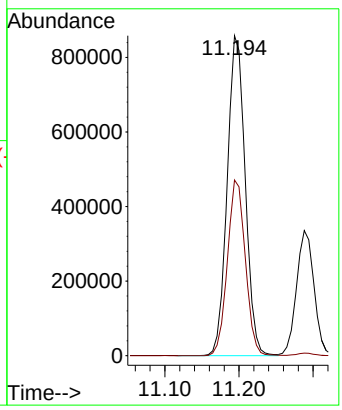





#59
2-Hexanone
Concen: 501.642 ug/l
RT: 11.194 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 144730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 54.7 | 24.6 | 73.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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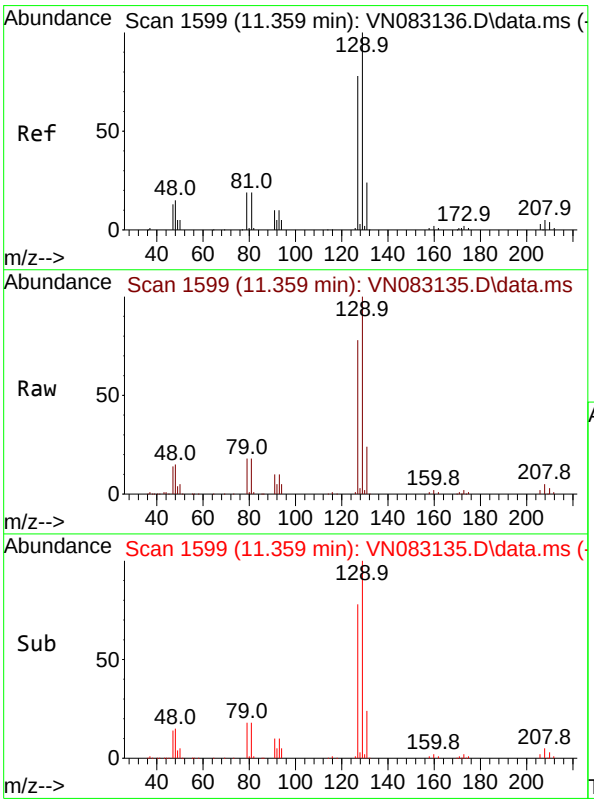
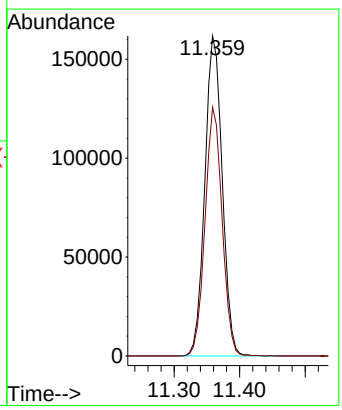
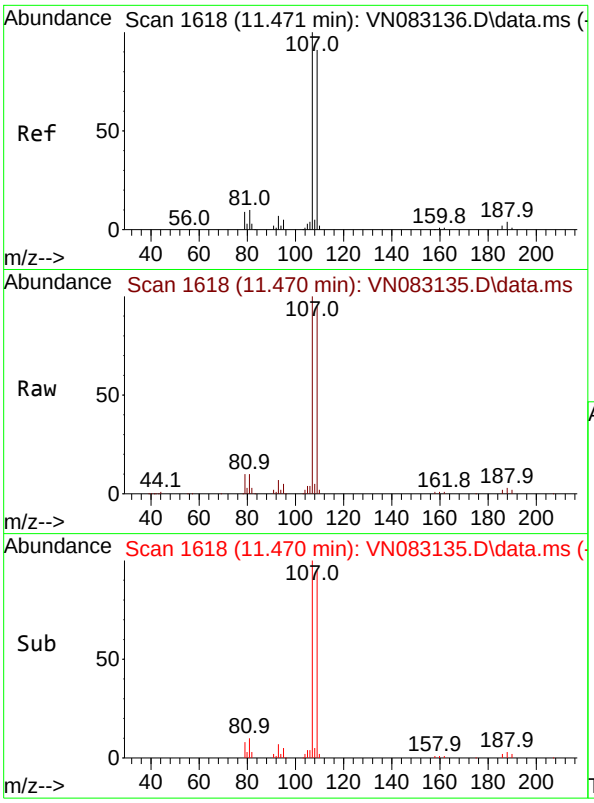



#60
Dibromochloromethane
Concen: 103.914 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:129 Resp: 298498

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.3 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 99.794 ug/l
RT: 11.470 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:107 Resp: 24907

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 95.5 | 73.7 | 110.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

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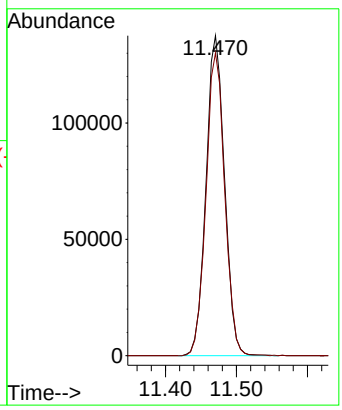
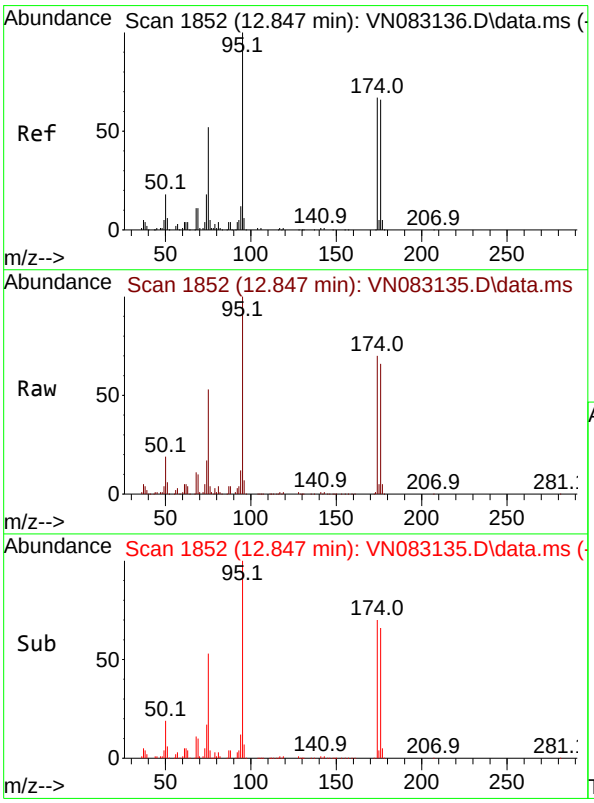
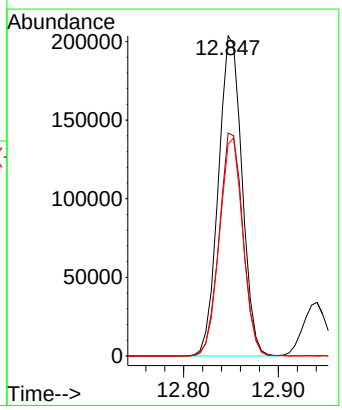


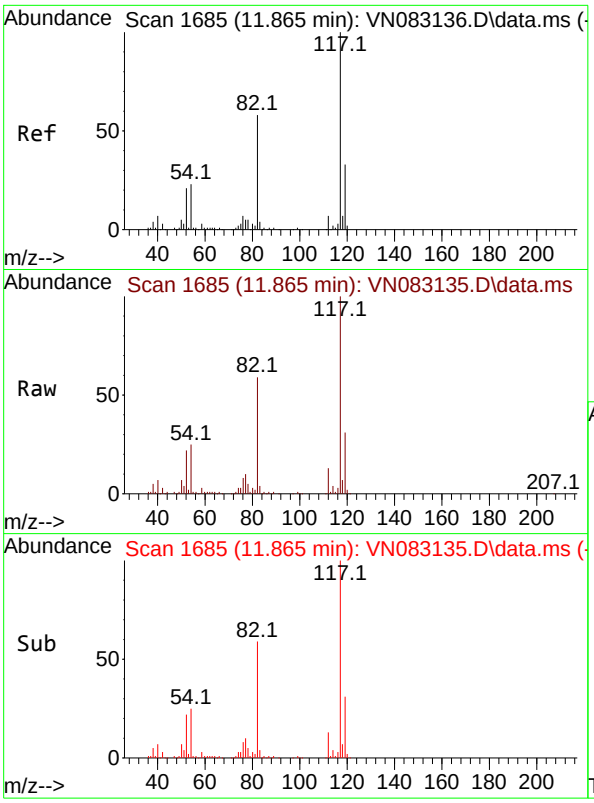




#62
4-Bromofluorobenzene
Concen: 104.234 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 95 Resp: 352947

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.9 | 0.0 | 159.2 |
| 176 | 67.6 | 0.0 | 147.6 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

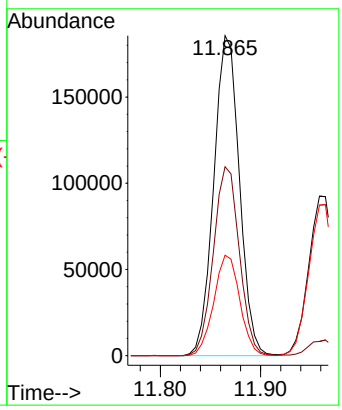
Tgt Ion:117 Resp: 32985

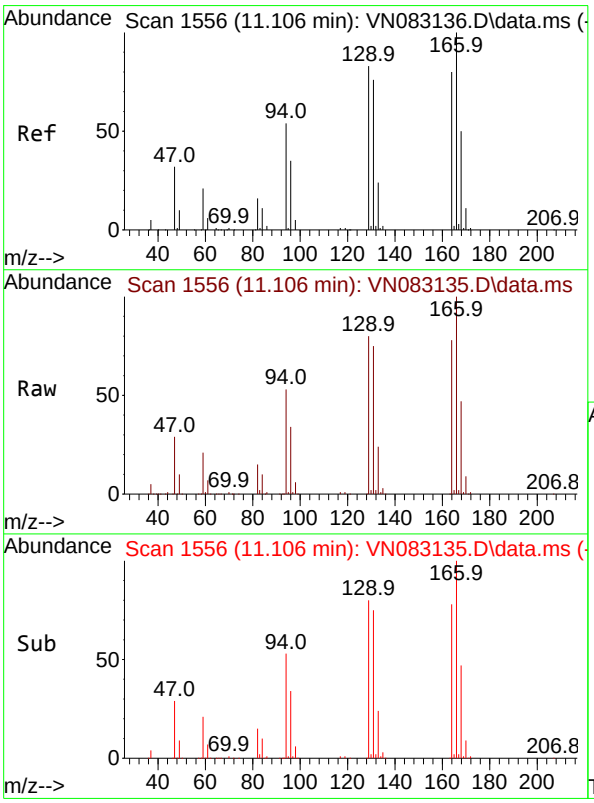
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.0 | 47.5 | 71.3 |
| 119 | 31.4 | 25.6 | 38.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

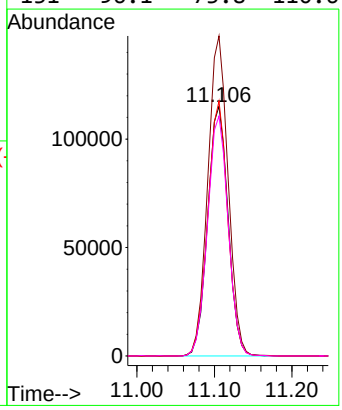


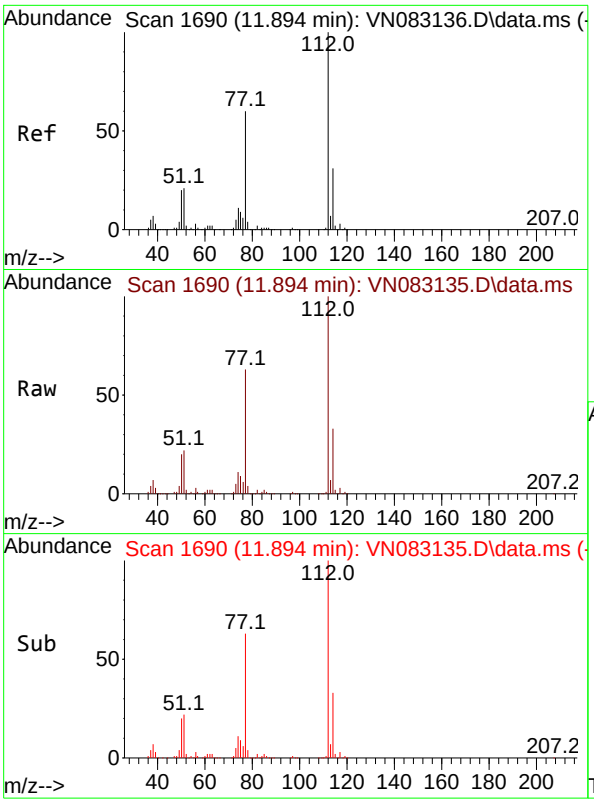




#64
Tetrachloroethene
Concen: 96.284 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:164 Resp: 210334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 128.2 | 101.4 | 152.0 |
| 129 | 102.1 | 75.7 | 113.5 |
| 131 | 96.1 | 73.8 | 110.6 |

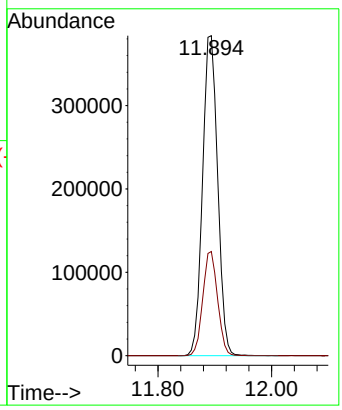





#65
Chlorobenzene
Concen: 96.805 ug/l
RT: 11.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:112 Resp: 70563

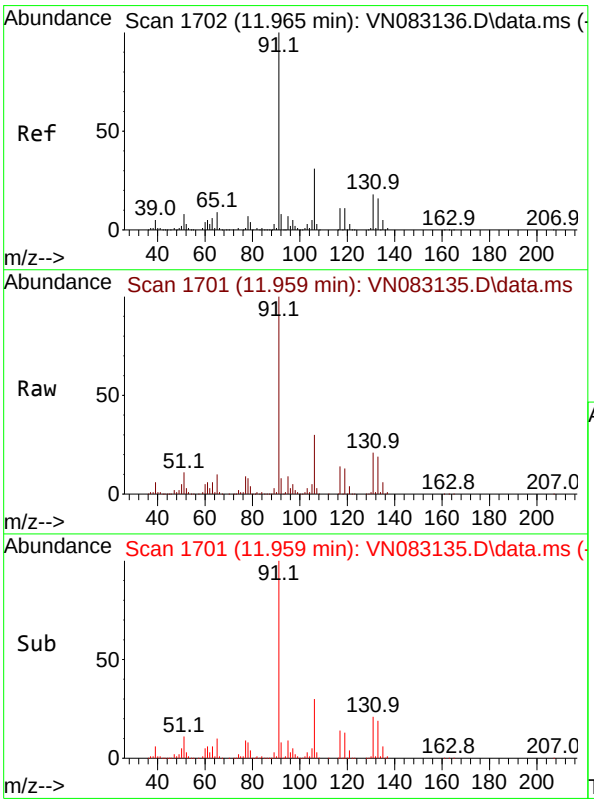
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.5 | 26.2 | 39.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

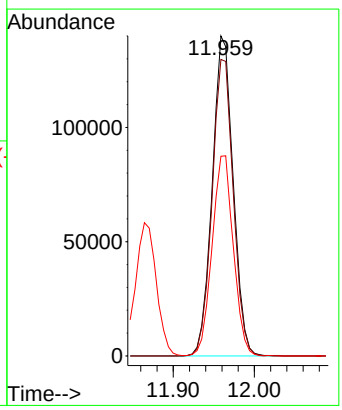
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

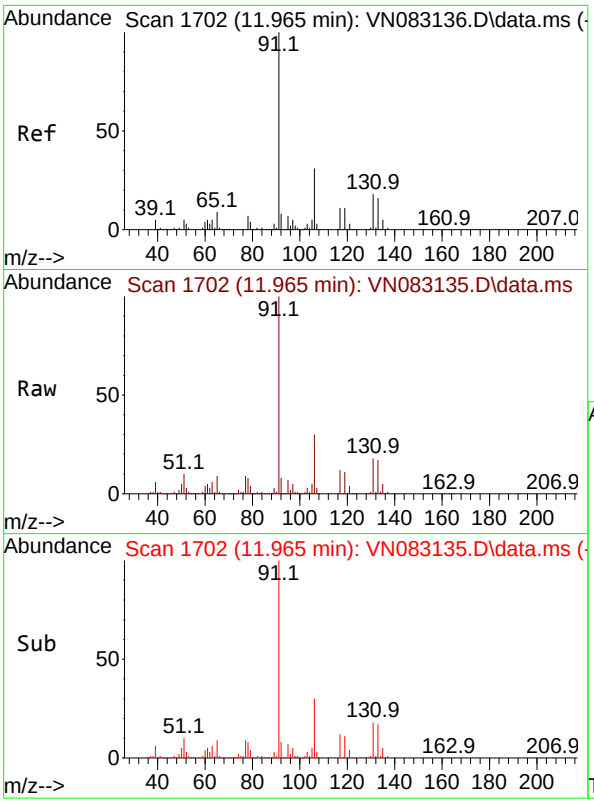



#66
1,1,1,2-Tetrachloroethane
Concen: 97.546 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:131 Resp: 250772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 93.9 | 47.3 | 142.0 |
| 119 | 63.6 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 97.041 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 91 Resp: 129763

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.5 | 24.0 | 36.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

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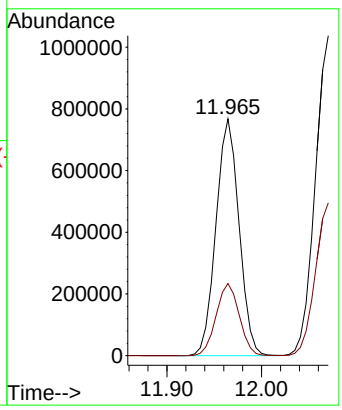
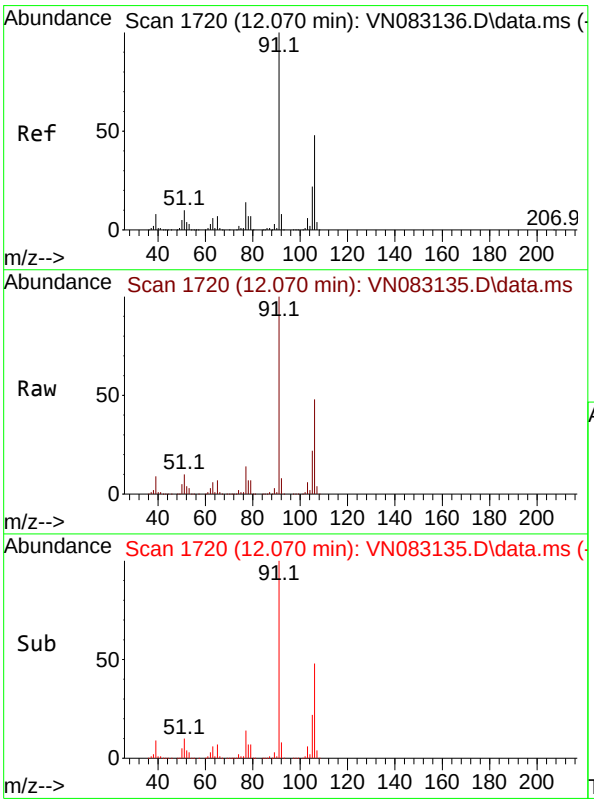
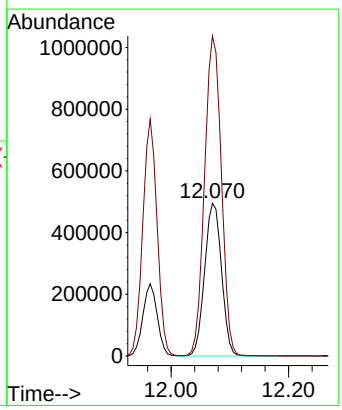


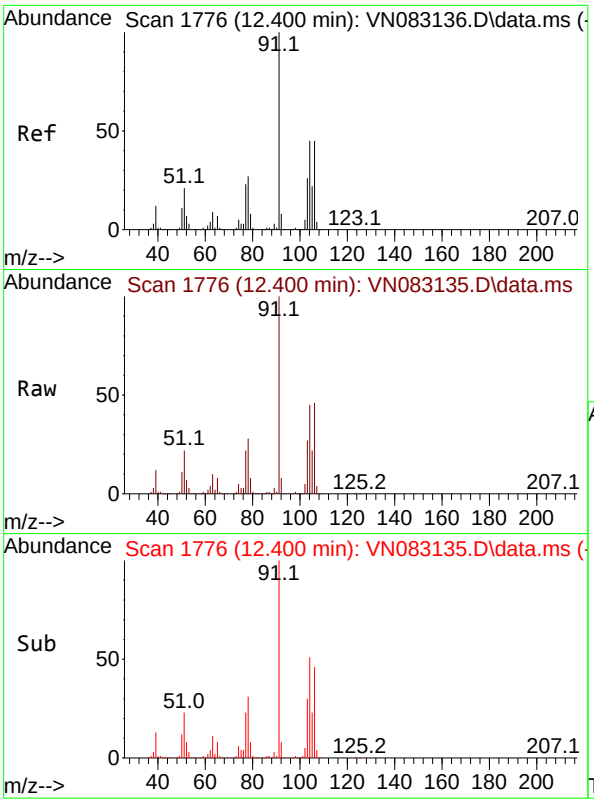




#68
m/p-Xylenes
Concen: 196.641 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:106 Resp: 984984

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 208.8 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 98.107 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:106 Resp: 48467

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 218.1 | 111.3 | 333.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

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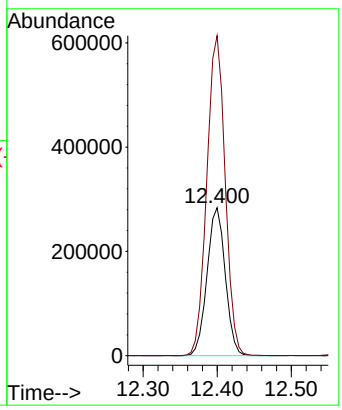
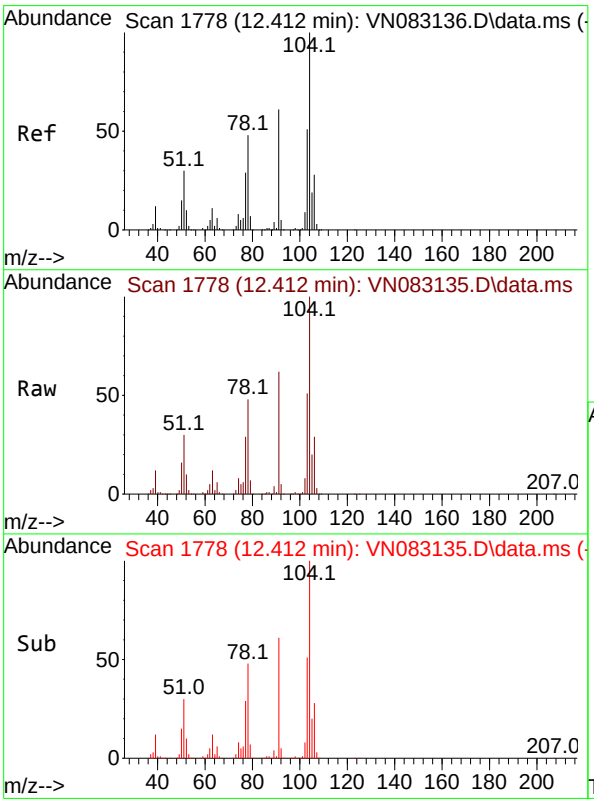
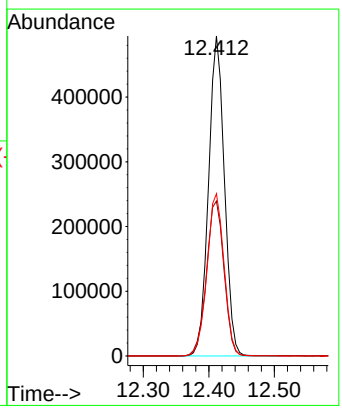


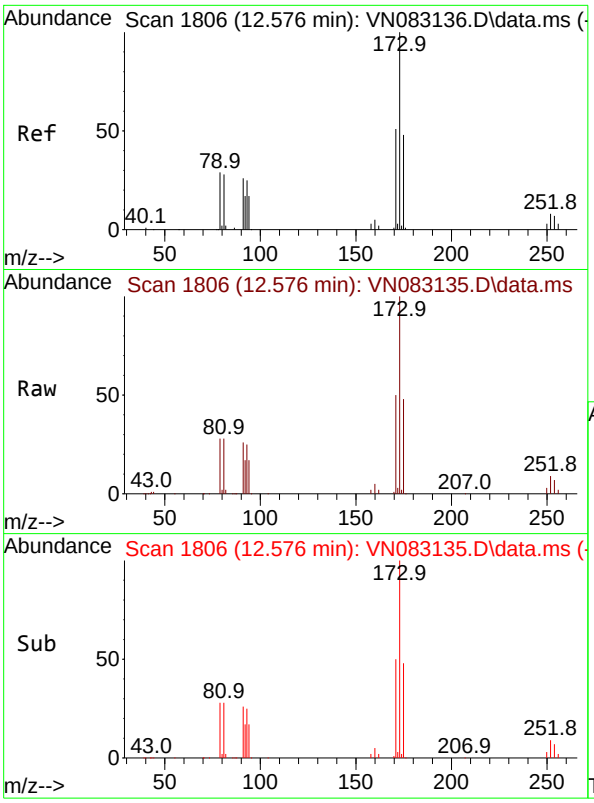




#70
Styrene
Concen: 100.261 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:104 Resp: 831903

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.5 | 41.6 | 62.4 |
| 103 | 54.4 | 44.0 | 66.0 |

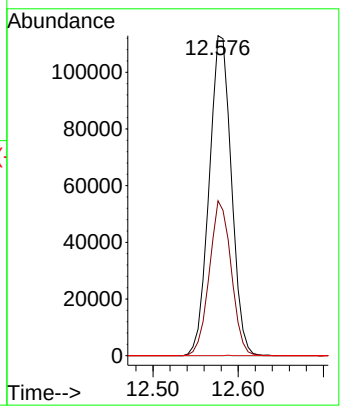





#71
Bromoform
Concen: 104.942 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:173 Resp: 20438

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.6 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

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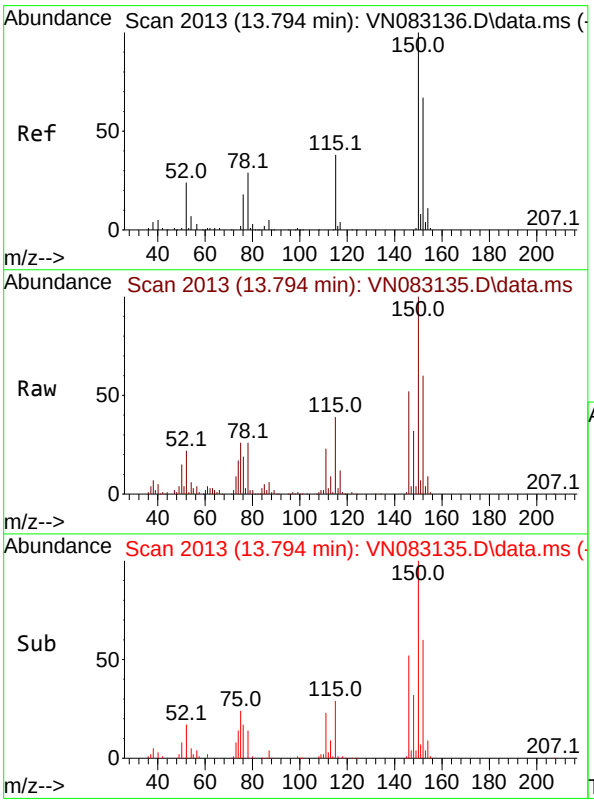
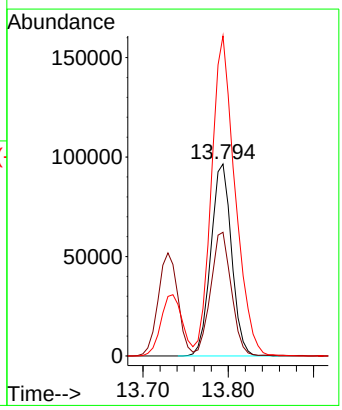
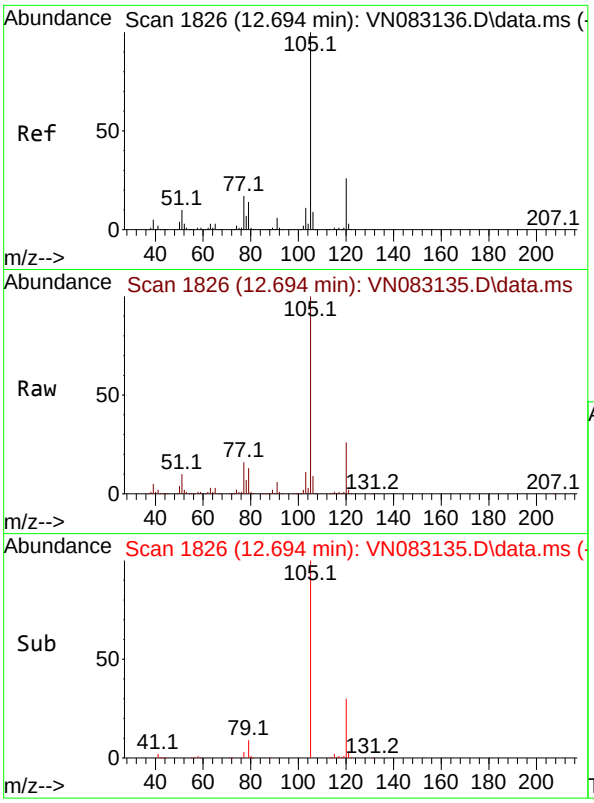



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:152 Resp: 162834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.9 | 30.6 | 91.6 |
| 150 | 189.9 | 0.0 | 348.6 |






#73
Isopropylbenzene
Concen: 91.399 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:105 Resp: 124484

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.9 | 12.9 | 38.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

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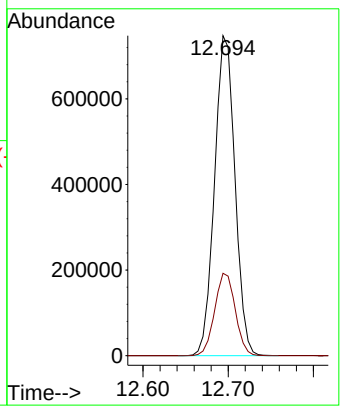
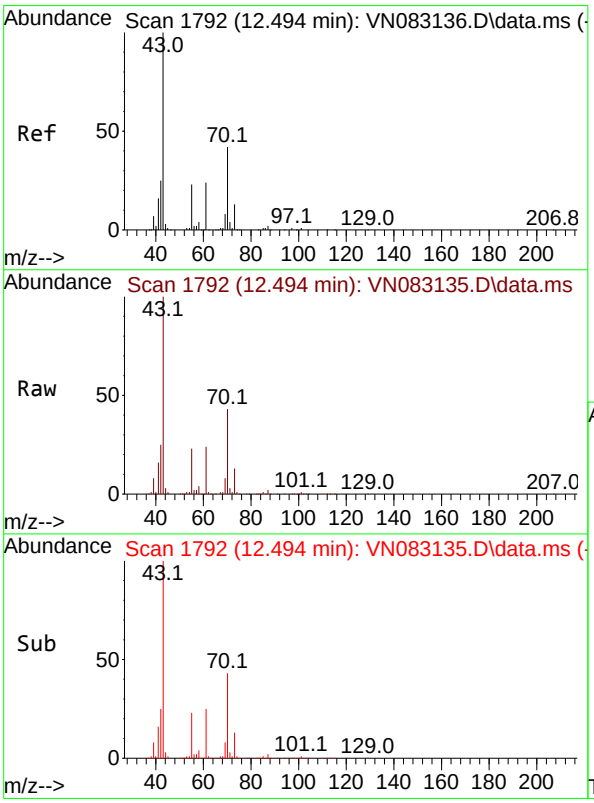
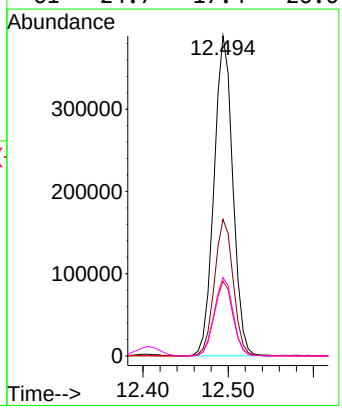


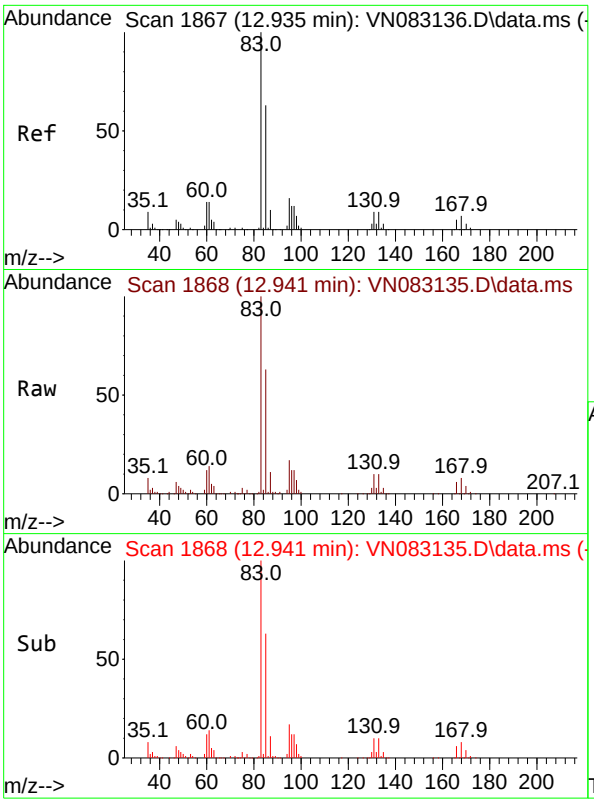




#74
N-amyl acetate
Concen: 89.282 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 43 Resp: 594797

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 42.7 | 29.8 | 44.6 |
| 55 | 23.4 | 18.7 | 28.1 |
| 61 | 24.7 | 17.4 | 26.0 |






#75
1,1,2,2-Tetrachloroethane
Concen: 91.727 ug/l
RT: 12.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 83 Resp: 35334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.3 | 5.0 | 14.9 |
| 85 | 64.2 | 31.9 | 95.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

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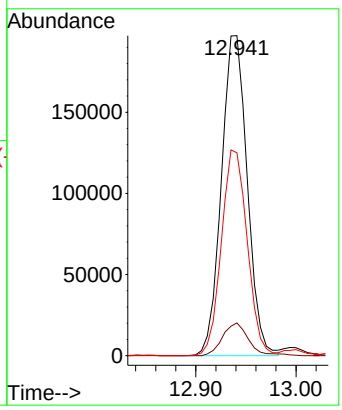
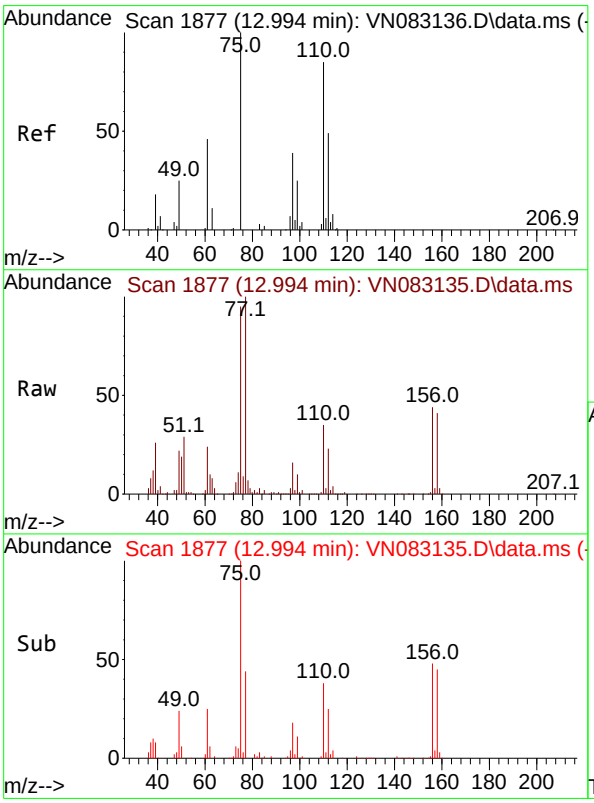
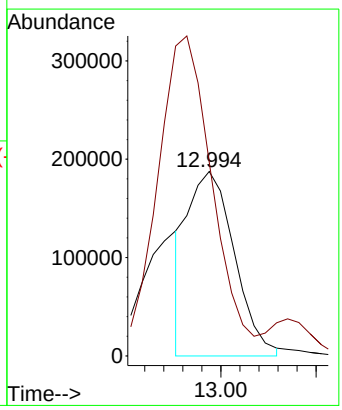


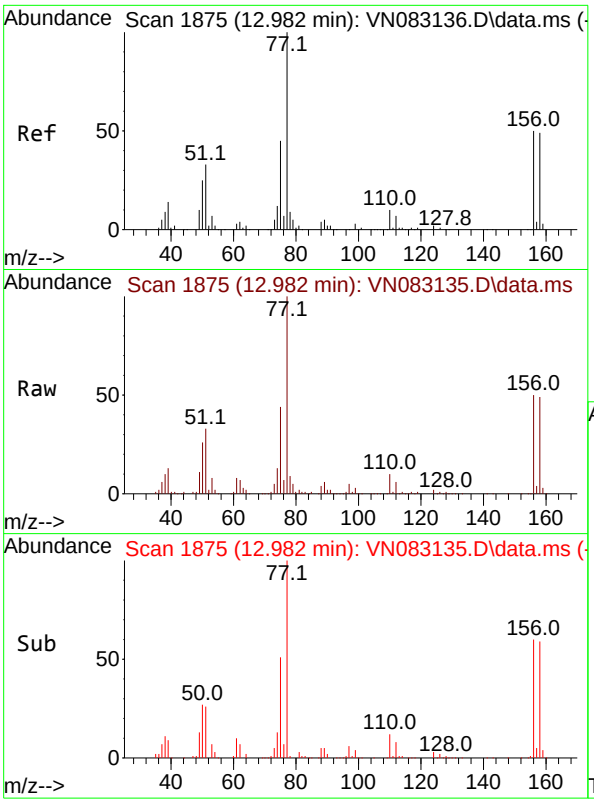




#76
1,2,3-Trichloropropane
Concen: 89.478 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 320302

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 203.7 | 110.9 | 332.6 |

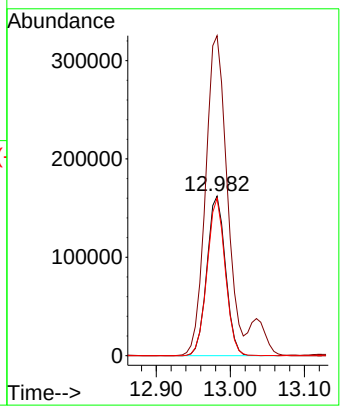





#77
Bromobenzene
Concen: 93.431 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:156 Resp: 28267

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 230.9 | 111.3 | 333.8 |
| 158 | 96.4 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

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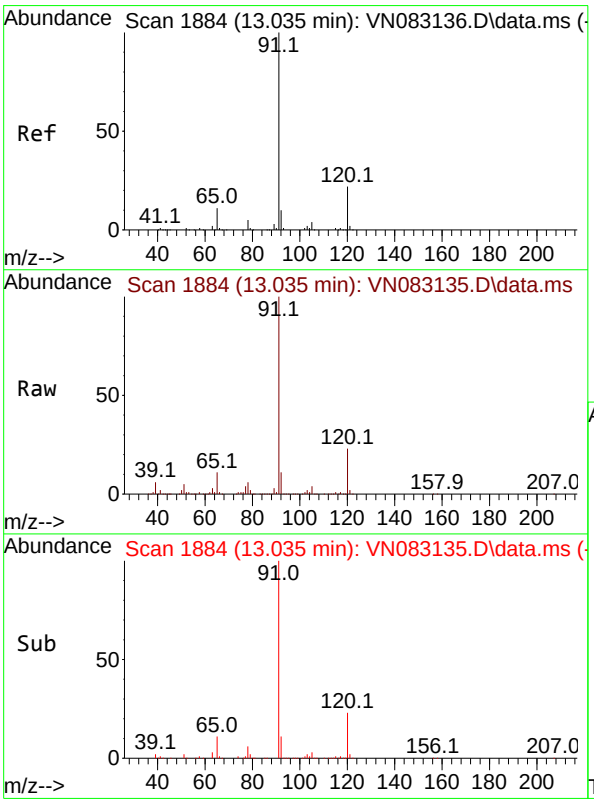
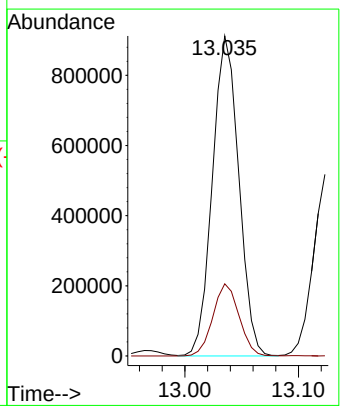
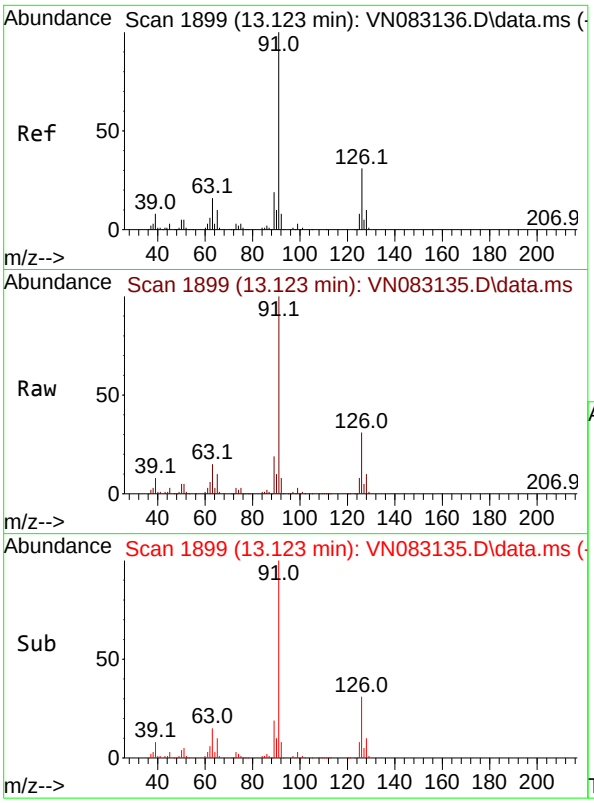



#78
n-propylbenzene
Concen: 93.979 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 91 Resp: 1473868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.3 | 10.9 | 32.9 |

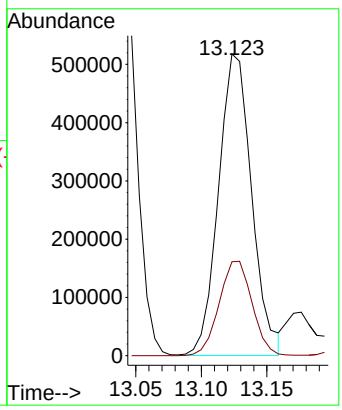





#79
2-Chlorotoluene
Concen: 91.785 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 91 Resp: 91261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.1 | 16.2 | 48.6 |




**Instrument :**
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VSTDICC100

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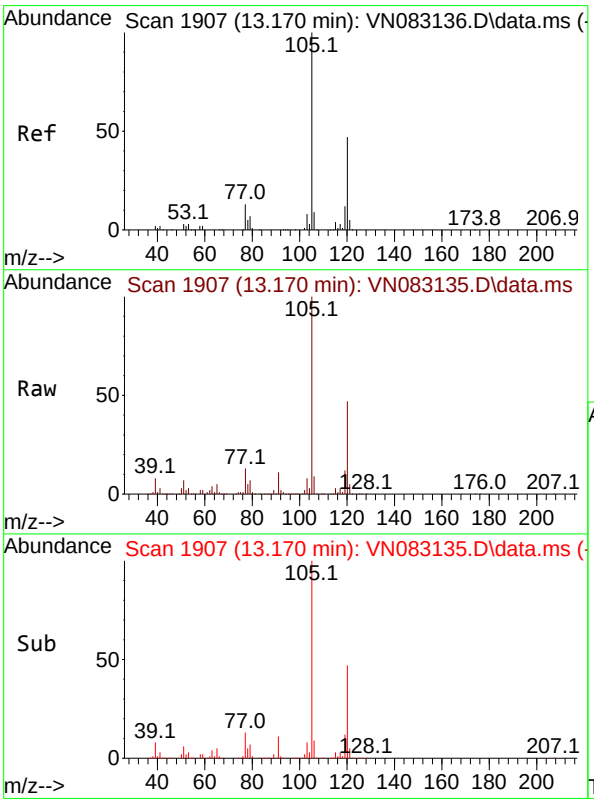
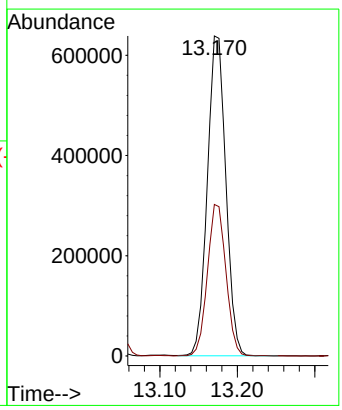
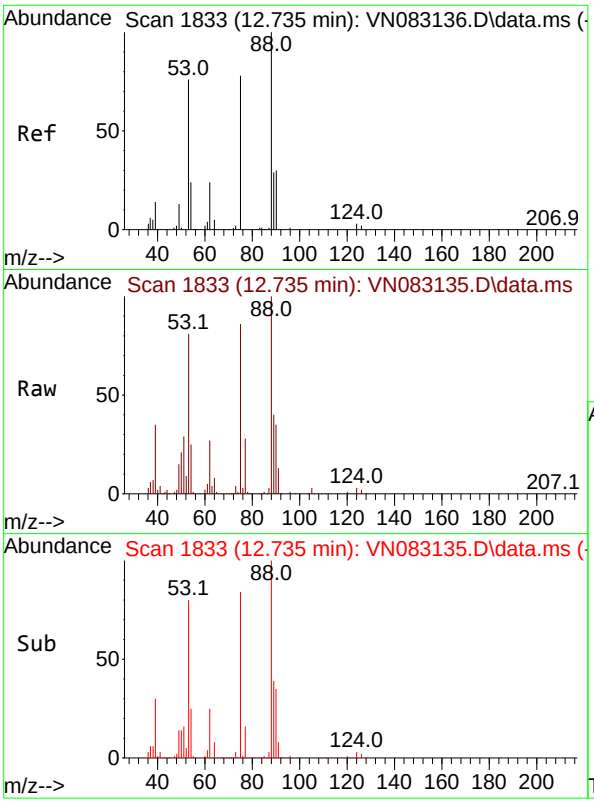



#80
1,3,5-Trimethylbenzene
Concen: 92.690 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:105 Resp: 1056912

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.4 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 100.628 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 16532

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 96.5 | 88.4 | 132.6 |
| 89 | 41.9 | 36.3 | 54.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

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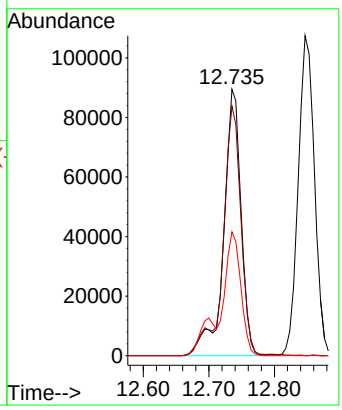
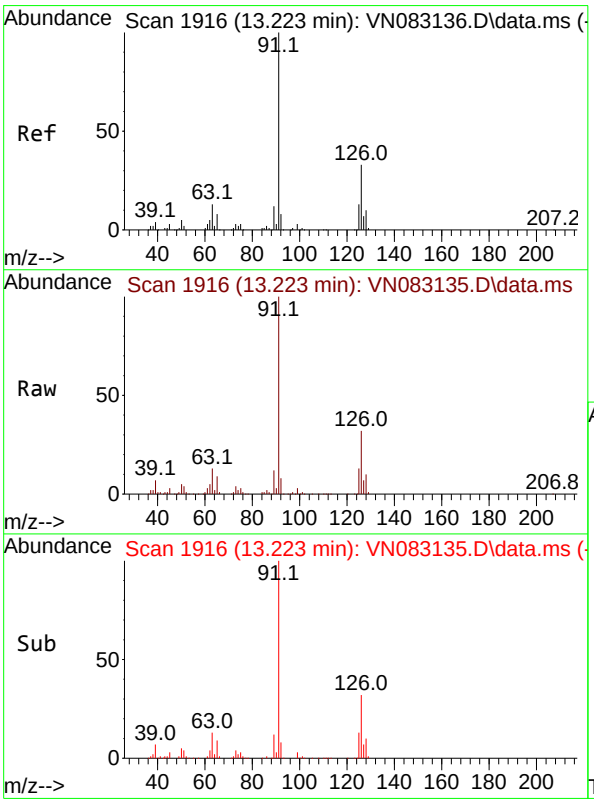
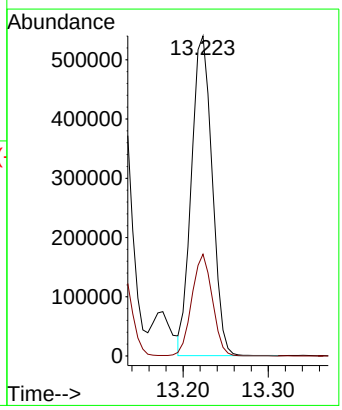


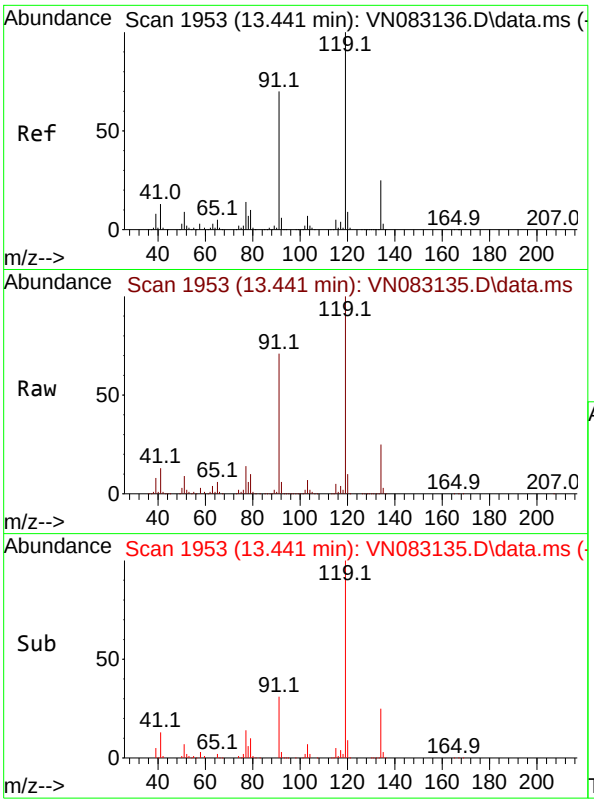




#82
4-Chlorotoluene
Concen: 91.381 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 91 Resp: 911384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.4 | 16.2 | 48.6 |

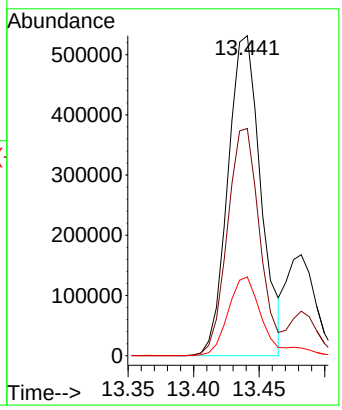





#83
tert-Butylbenzene
Concen: 91.918 ug/l
RT: 13.441 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:119 Resp: 92819

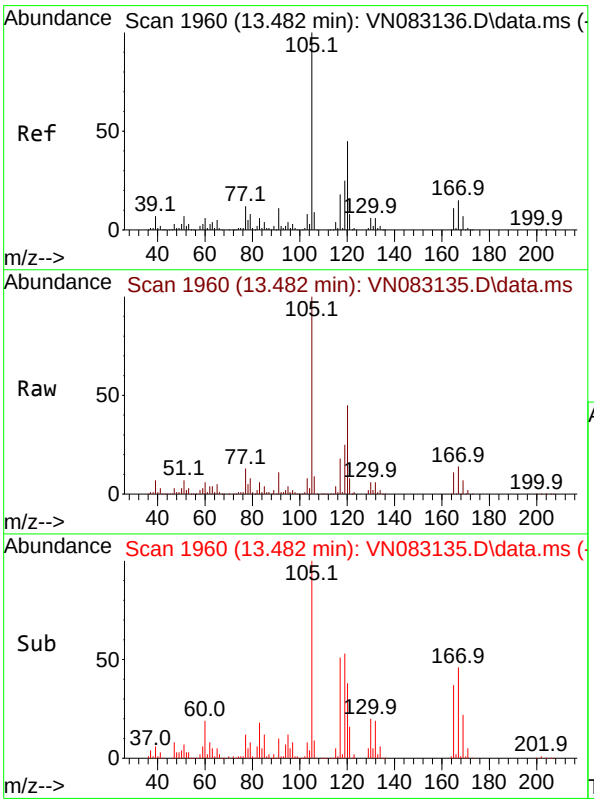
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 69.3 | 35.0 | 105.1 |
| 134 | 26.1 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

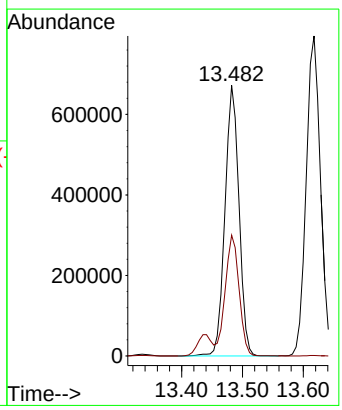
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

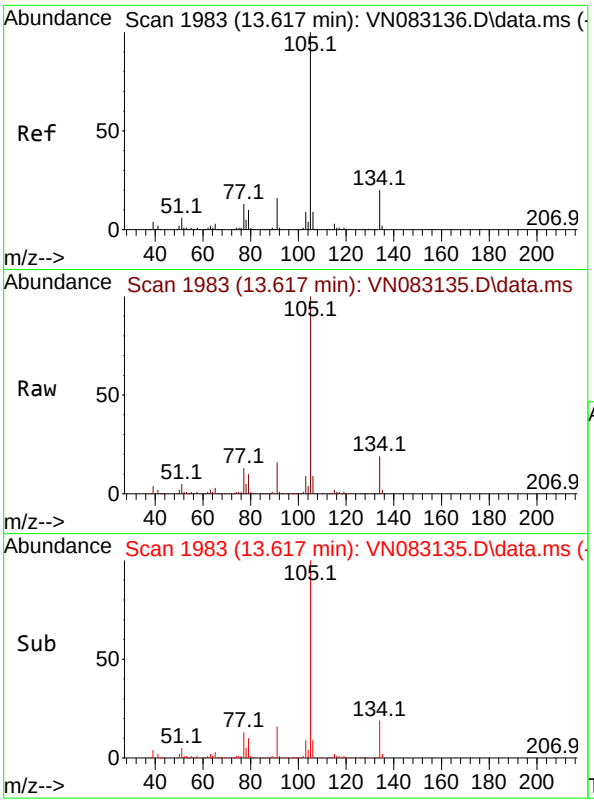



#84
1,2,4-Trimethylbenzene
Concen: 93.675 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:105 Resp: 1076449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.4 | 21.9 | 65.8 |






#85
sec-Butylbenzene
Concen: 93.978 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

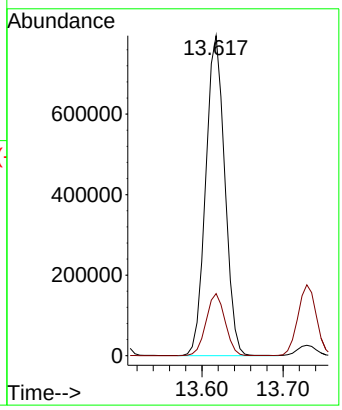
Tgt Ion:105 Resp: 129490

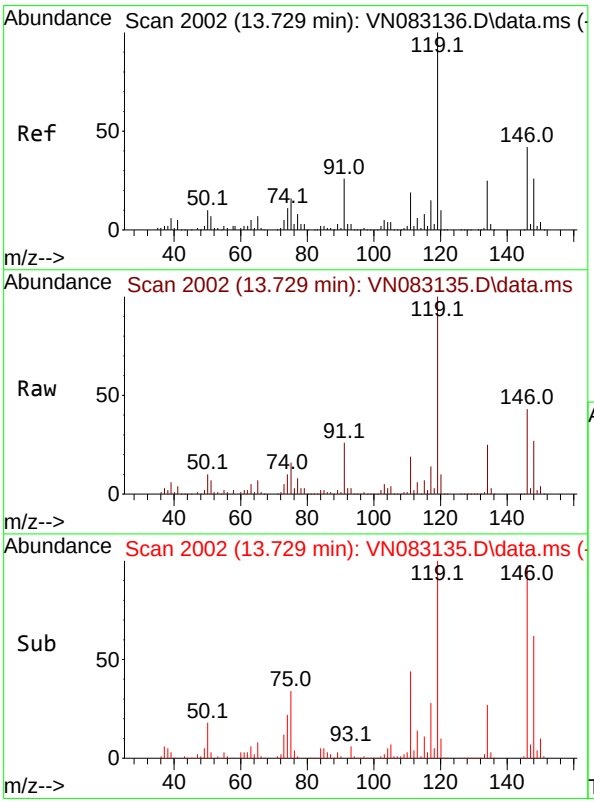
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.4 | 9.8 | 29.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

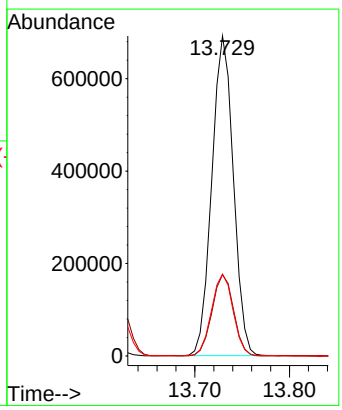


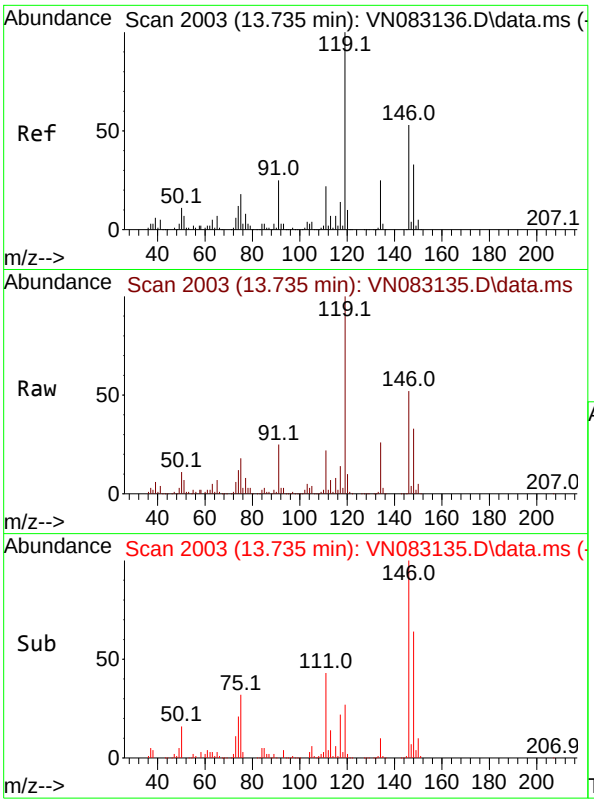




#86
p-Isopropyltoluene
Concen: 96.022 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:119 Resp: 1092439

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.5 | 13.0 | 39.0 |
| 91 | 25.5 | 12.3 | 36.9 |






#87
1,3-Dichlorobenzene
Concen: 94.009 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:146 Resp: 53519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.5 | 20.6 | 61.9 |
| 148 | 63.6 | 31.8 | 95.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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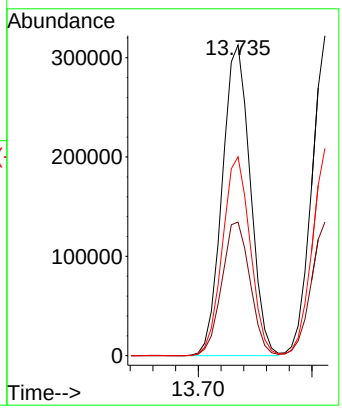
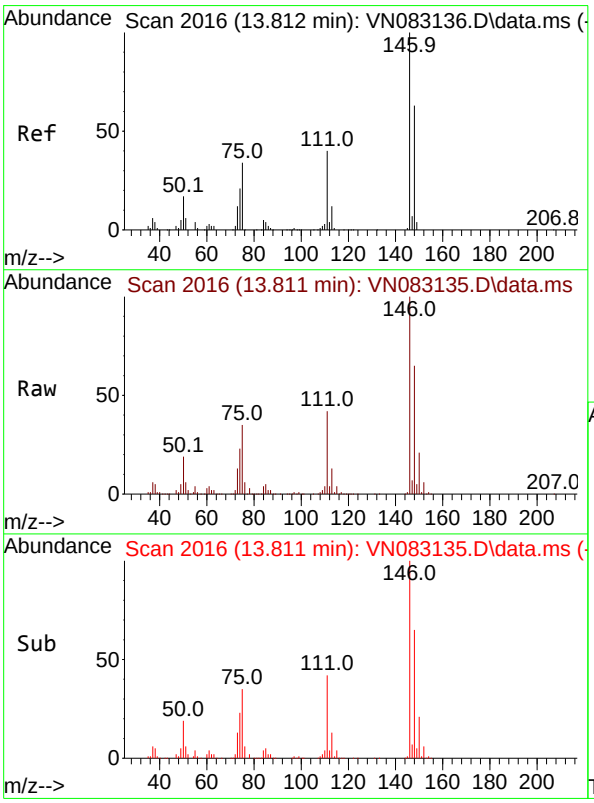
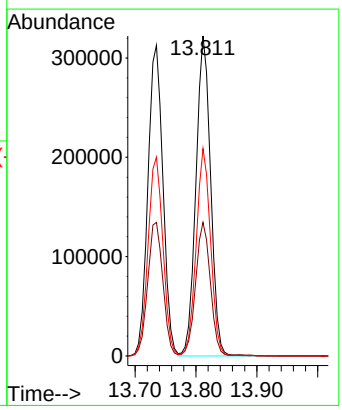


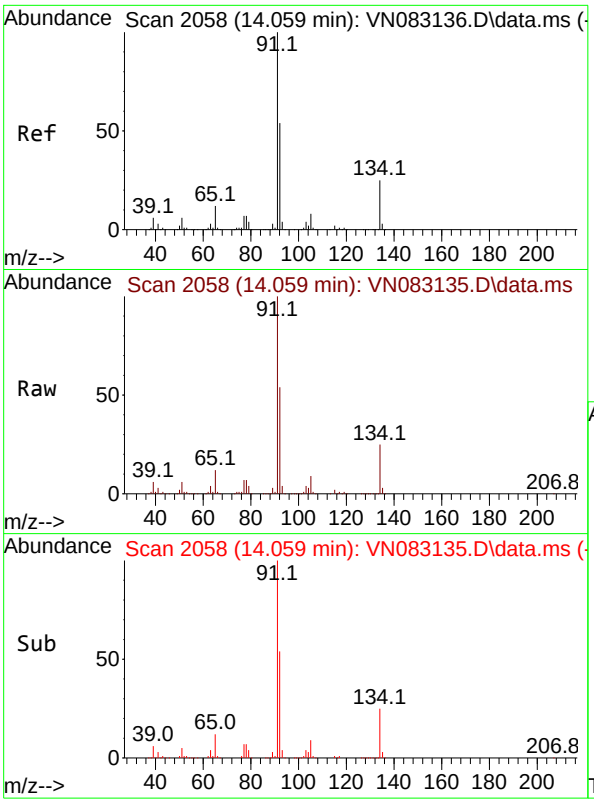




#88
1,4-Dichlorobenzene
Concen: 93.900 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:146 Resp: 538924

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.5 | 20.1 | 60.3 |
| 148 | 63.6 | 32.2 | 96.6 |






#89
n-Butylbenzene
Concen: 99.461 ug/l
RT: 14.059 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 91 Resp: 98048

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.8 | 26.1 | 78.3 |
| 134 | 25.2 | 12.1 | 36.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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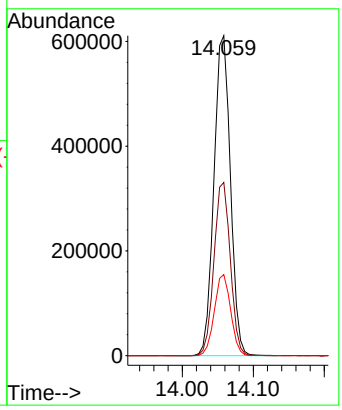
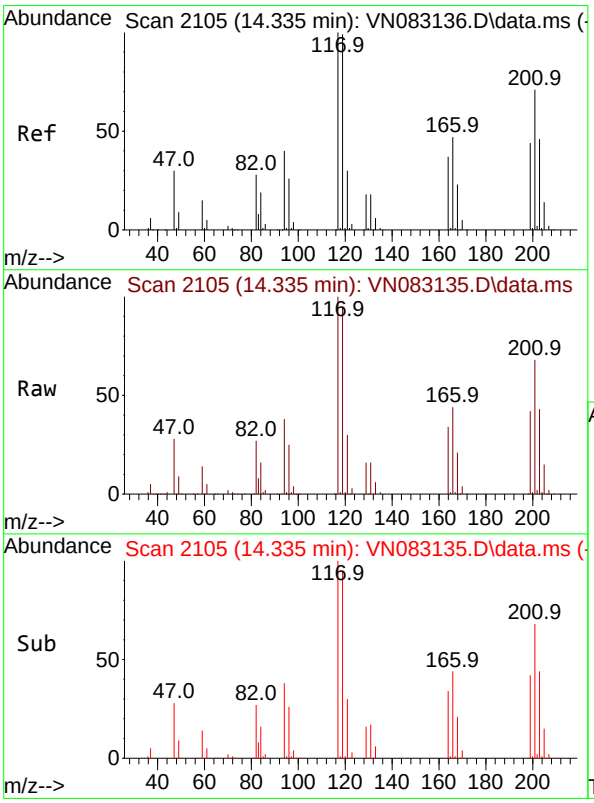
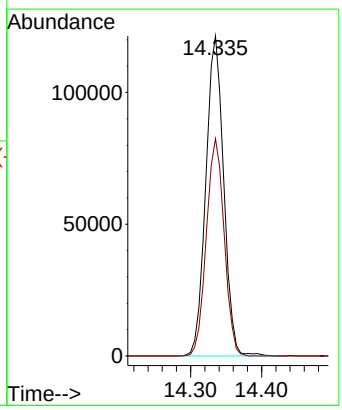


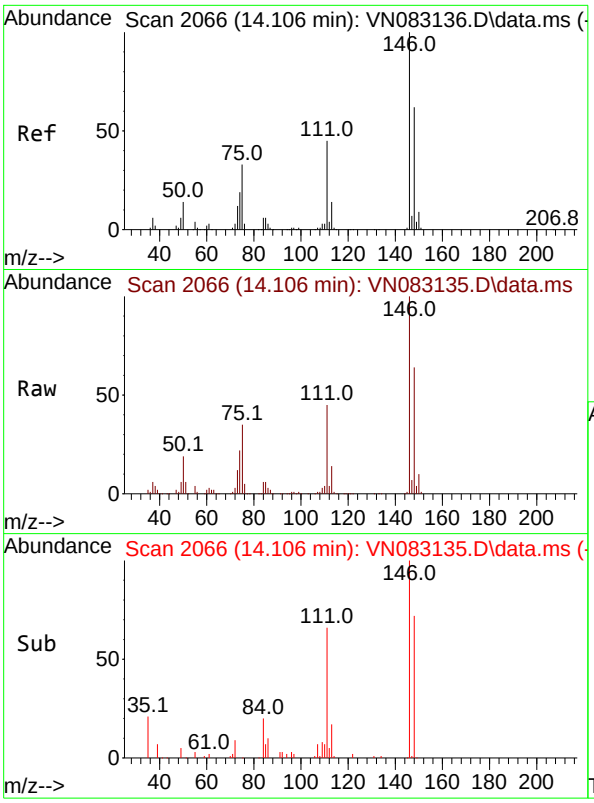




#90
Hexachloroethane
Concen: 96.320 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:117 Resp: 211710

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.7 | 35.8 | 107.3 |

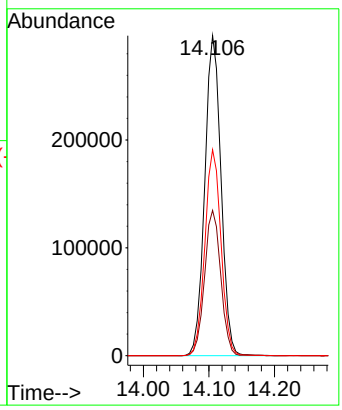





#91
1,2-Dichlorobenzene
Concen: 92.863 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:146 Resp: 51158

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.4 | 21.4 | 64.2 |
| 148 | 63.9 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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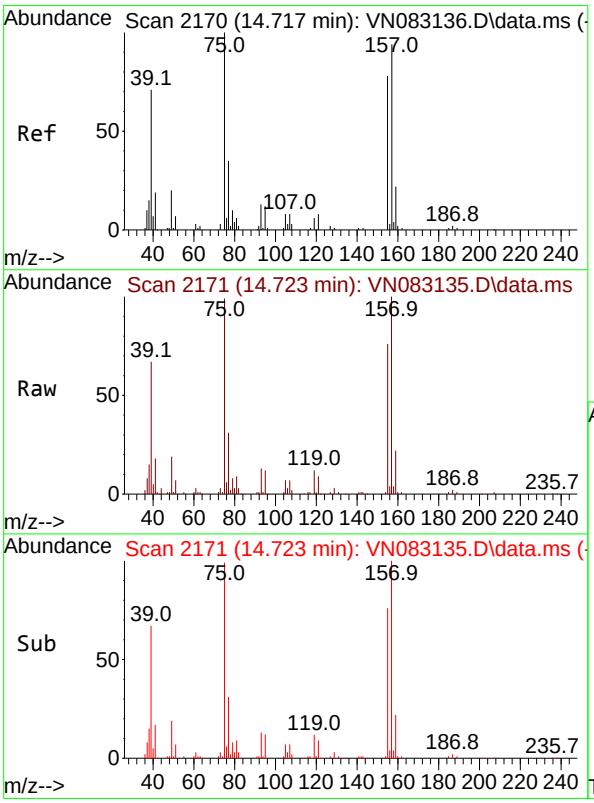
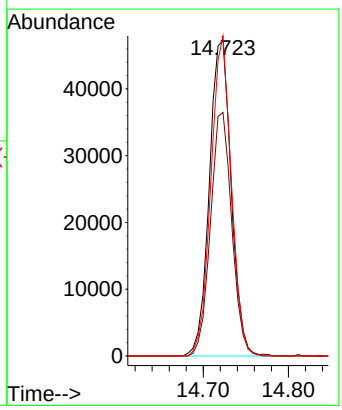
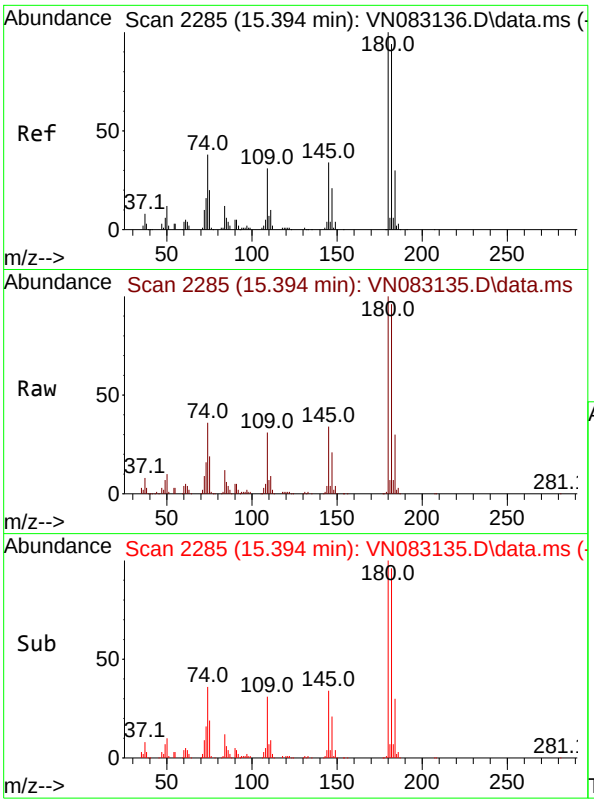



#92
1,2-Dibromo-3-Chloropropane
Concen: 89.788 ug/l
RT: 14.723 min Scan# 2171
Delta R.T. 0.006 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion: 75 Resp: 83930

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 75.2 | 36.6 | 109.8 |
| 157 | 95.1 | 46.9 | 140.6 |

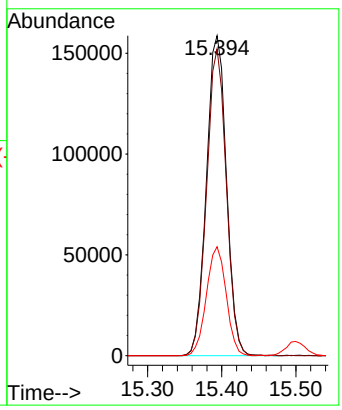





#93
1,2,4-Trichlorobenzene
Concen: 96.456 ug/l
RT: 15.394 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:180 Resp: 29769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.1 | 47.3 | 141.8 |
| 145 | 33.6 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
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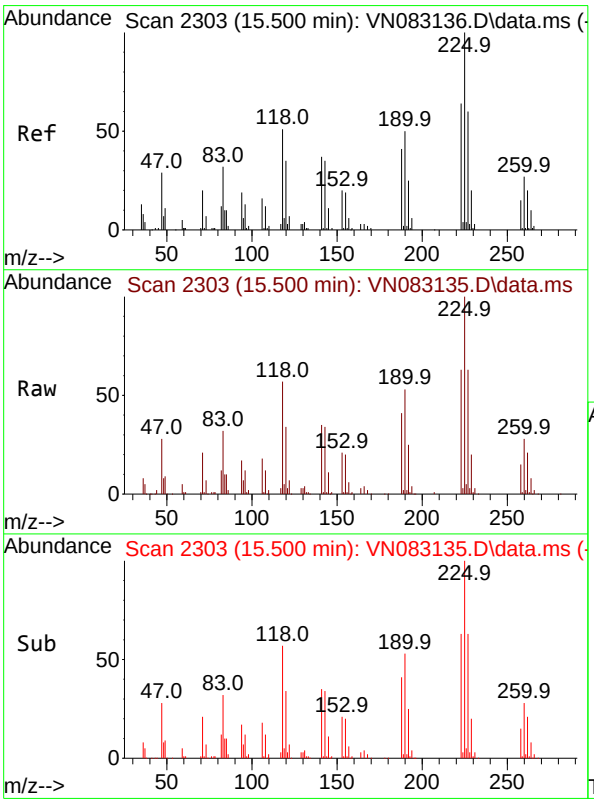
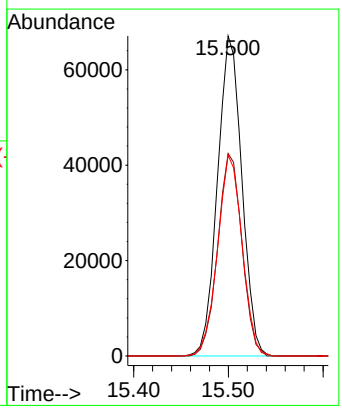
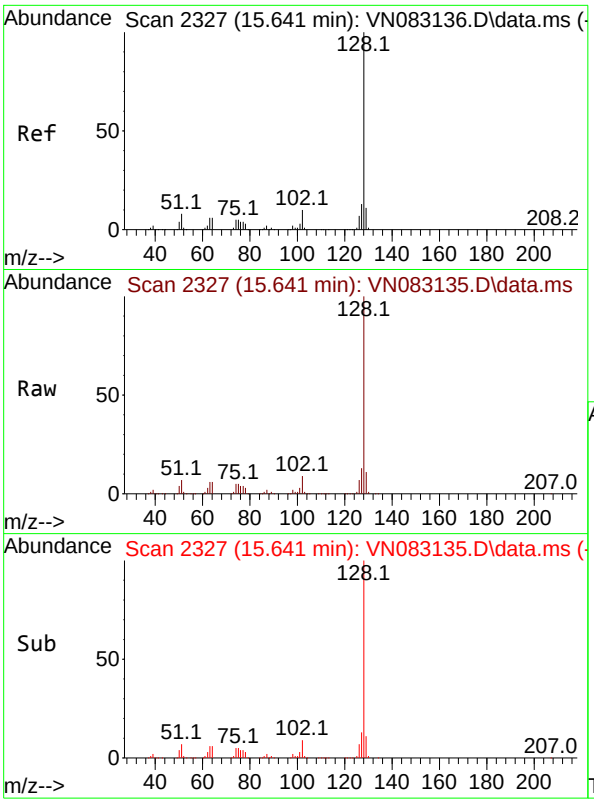



#94
Hexachlorobutadiene
Concen: 87.268 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:225 Resp: 119783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.0 | 31.9 | 95.7 |
| 227 | 63.3 | 32.5 | 97.5 |

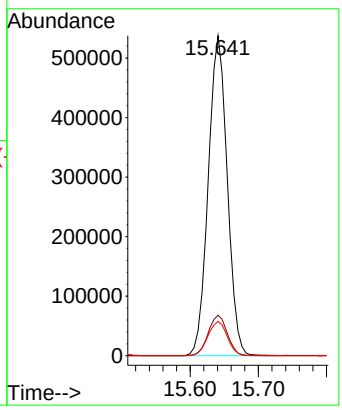





#95
Naphthalene
Concen: 95.391 ug/l
RT: 15.641 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:128 Resp: 104286

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.7 | 10.6 | 16.0 |
| 129 | 10.9 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC100

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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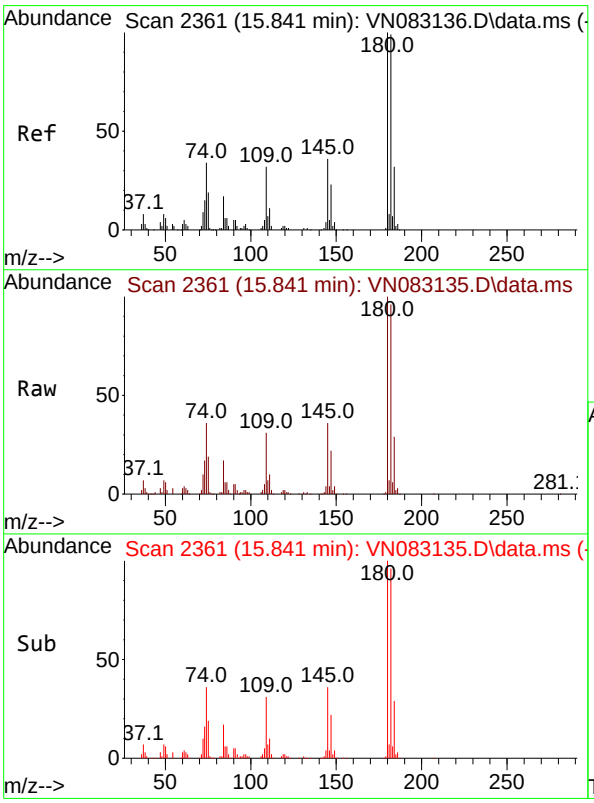
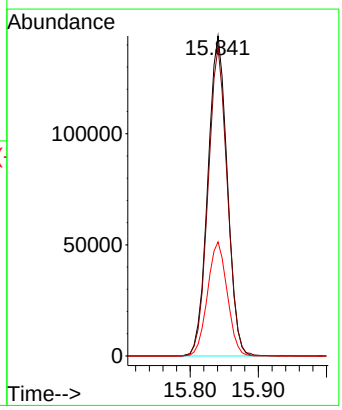



#96
1,2,3-Trichlorobenzene
Concen: 93.575 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083135.D
Acq: 07 Aug 2024 10:33

Tgt Ion:180 Resp: 285769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.1 | 48.9 | 146.8 |
| 145 | 36.0 | 16.8 | 50.4 |



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083136.D
Acq On : 07 Aug 2024 10:58
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:15:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 204914 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 348813 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 303118 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 143466 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.582 | 65 | 152684 | 52.348 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 104.700% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 115863 | 53.216 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 106.440% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 439976 | 54.174 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 108.340% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 171524 | 54.173 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 108.340% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 116913 | 50.312 | ug/l | 97 |
| 3) Chloromethane | 2.359 | 50 | 121130 | 50.915 | ug/l | 93 |
| 4) Vinyl Chloride | 2.512 | 62 | 122548 | 50.482 | ug/l | 98 |
| 5) Bromomethane | 2.948 | 94 | 73113 | 48.538 | ug/l | 95 |
| 6) Chloroethane | 3.112 | 64 | 72966 | 48.043 | ug/l | 98 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 203848 | 50.832 | ug/l | 98 |
| 8) Diethyl Ether | 3.959 | 74 | 75087 | 50.318 | ug/l | 84 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 112201 | 50.747 | ug/l | 98 |
| 10) Methyl Iodide | 4.589 | 142 | 151731 | 52.170 | ug/l | 96 |
| 11) Tert butyl alcohol | 5.530 | 59 | 150267 | 247.904 | ug/l | 100 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 111564 | 49.114 | ug/l | 87 |
| 13) Acrolein | 4.183 | 56 | 104276 | 263.954 | ug/l | 98 |
| 14) Allyl chloride | 5.018 | 41 | 191195 | 44.541 | ug/l | 93 |
| 15) Acrylonitrile | 5.718 | 53 | 313090 | 251.149 | ug/l | 98 |
| 16) Acetone | 4.430 | 43 | 293091 | 256.804 | ug/l | 97 |
| 17) Carbon Disulfide | 4.712 | 76 | 319654 | 48.094 | ug/l | 98 |
| 18) Methyl Acetate | 5.024 | 43 | 159022 | 46.765 | ug/l | 91 |
| 19) Methyl tert-butyl Ether | 5.794 | 73 | 415489 | 50.676 | ug/l | 97 |
| 20) Methylene Chloride | 5.277 | 84 | 122780 | 46.744 | ug/l | 85 |
| 21) trans-1,2-Dichloroethene | 5.794 | 96 | 117685 | 50.127 | ug/l | 85 |
| 22) Diisopropyl ether | 6.671 | 45 | 411409 | 50.987 | ug/l | 96 |
| 23) Vinyl Acetate | 6.606 | 43 | 2147591m | 259.716 | ug/l | |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 222071 | 50.493 | ug/l | 99 |
| 25) 2-Butanone | 7.483 | 43 | 437392 | 249.591 | ug/l | 91 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 209679 | 51.336 | ug/l | 97 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 141110 | 49.809 | ug/l | 92 |
| 28) Bromochloromethane | 7.812 | 49 | 89942 | 50.041 | ug/l # | 83 |
| 29) Tetrahydrofuran | 7.835 | 42 | 285853 | 252.334 | ug/l | 88 |
| 30) Chloroform | 7.965 | 83 | 232933 | 50.978 | ug/l | 99 |
| 31) Cyclohexane | 8.259 | 56 | 201273 | 46.565 | ug/l | 96 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 220296 | 50.935 | ug/l | 95 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 165826 | 50.349 | ug/l | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 174105 | 47.213 | ug/l # | 92 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 190357 | 51.315 | ug/l | 97 |
| 39) Methylcyclohexane | 9.600 | 83 | 208177 | 51.461 | ug/l | 93 |
| 40) Benzene | 8.606 | 78 | 504662 | 51.436 | ug/l | 98 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083136.D
Acq On : 07 Aug 2024 10:58
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 08 06:15:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 98869 | 47.154 | ug/l | | 94 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 181440 | 50.765 | ug/l | | 98 |
| 43) Isopropyl Acetate | 8.688 | 43 | 321088 | 50.219 | ug/l | # | 93 |
| 44) Trichloroethene | 9.353 | 130 | 119998 | 51.383 | ug/l | | 94 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 120518 | 51.747 | ug/l | | 97 |
| 46) Dibromomethane | 9.712 | 93 | 87411 | 52.436 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 188069 | 50.245 | ug/l | | 99 |
| 48) Methyl methacrylate | 9.682 | 41 | 148264 | 48.631 | ug/l | | 91 |
| 49) 1,4-Dioxane | 9.694 | 88 | 57033 | 1036.917 | ug/l | | 95 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 901412 | 258.493 | ug/l | | 92 |
| 52) Toluene | 10.629 | 92 | 323148 | 52.127 | ug/l | | 98 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 208411 | 54.205 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 211396 | 51.692 | ug/l | | 91 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 116384 | 52.387 | ug/l | | 99 |
| 56) Ethyl methacrylate | 10.876 | 69 | 217635 | 51.964 | ug/l | # | 85 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 206442 | 52.133 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 454871 | 256.939 | ug/l | | 95 |
| 59) 2-Hexanone | 11.194 | 43 | 691708 | 256.396 | ug/l | | 92 |
| 60) Dibromochloromethane | 11.359 | 129 | 144208 | 53.688 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 121153 | 51.912 | ug/l | | 98 |
| 64) Tetrachloroethene | 11.106 | 164 | 103955 | 51.784 | ug/l | | 96 |
| 65) Chlorobenzene | 11.894 | 112 | 346172 | 51.679 | ug/l | | 96 |
| 66) 1,1,1,2-Tetrachloroethane | 11.965 | 131 | 121057 | 51.242 | ug/l | | 100 |
| 67) Ethyl Benzene | 11.965 | 91 | 628906 | 51.179 | ug/l | | 98 |
| 68) m/p-Xylenes | 12.070 | 106 | 477261 | 103.683 | ug/l | | 99 |
| 69) o-Xylene | 12.400 | 106 | 234432 | 51.638 | ug/l | | 100 |
| 70) Styrene | 12.412 | 104 | 405002 | 53.115 | ug/l | | 98 |
| 71) Bromoform | 12.576 | 173 | 96377 | 53.850 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 609529 | 50.795 | ug/l | | 100 |
| 74) N-amyl acetate | 12.494 | 43 | 287319 | 48.950 | ug/l | | 94 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 167489 | 49.349 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 152531m | 48.363 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 137514 | 51.587 | ug/l | | 97 |
| 78) n-propylbenzene | 13.035 | 91 | 712768 | 51.584 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 441262 | 50.371 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 514918 | 51.254 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 70776 | 48.894 | ug/l | | 89 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 445369 | 50.684 | ug/l | | 99 |
| 83) tert-Butylbenzene | 13.441 | 119 | 453597 | 50.983 | ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 524226 | 51.778 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.617 | 105 | 628959 | 51.809 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 528236 | 52.699 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 254058 | 50.651 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 255814 | 50.589 | ug/l | | 99 |
| 89) n-Butylbenzene | 14.059 | 91 | 461372 | 53.120 | ug/l | | 97 |
| 90) Hexachloroethane | 14.335 | 117 | 98836 | 51.037 | ug/l | | 98 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 244462 | 50.365 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 40369 | 49.017 | ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 141229 | 51.937 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 58664 | 48.509 | ug/l | | 98 |
| 95) Naphthalene | 15.641 | 128 | 499372 | 51.844 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 138125 | 51.335 | ug/l | | 97 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083136.D
Acq On : 07 Aug 2024 10:58
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:15:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

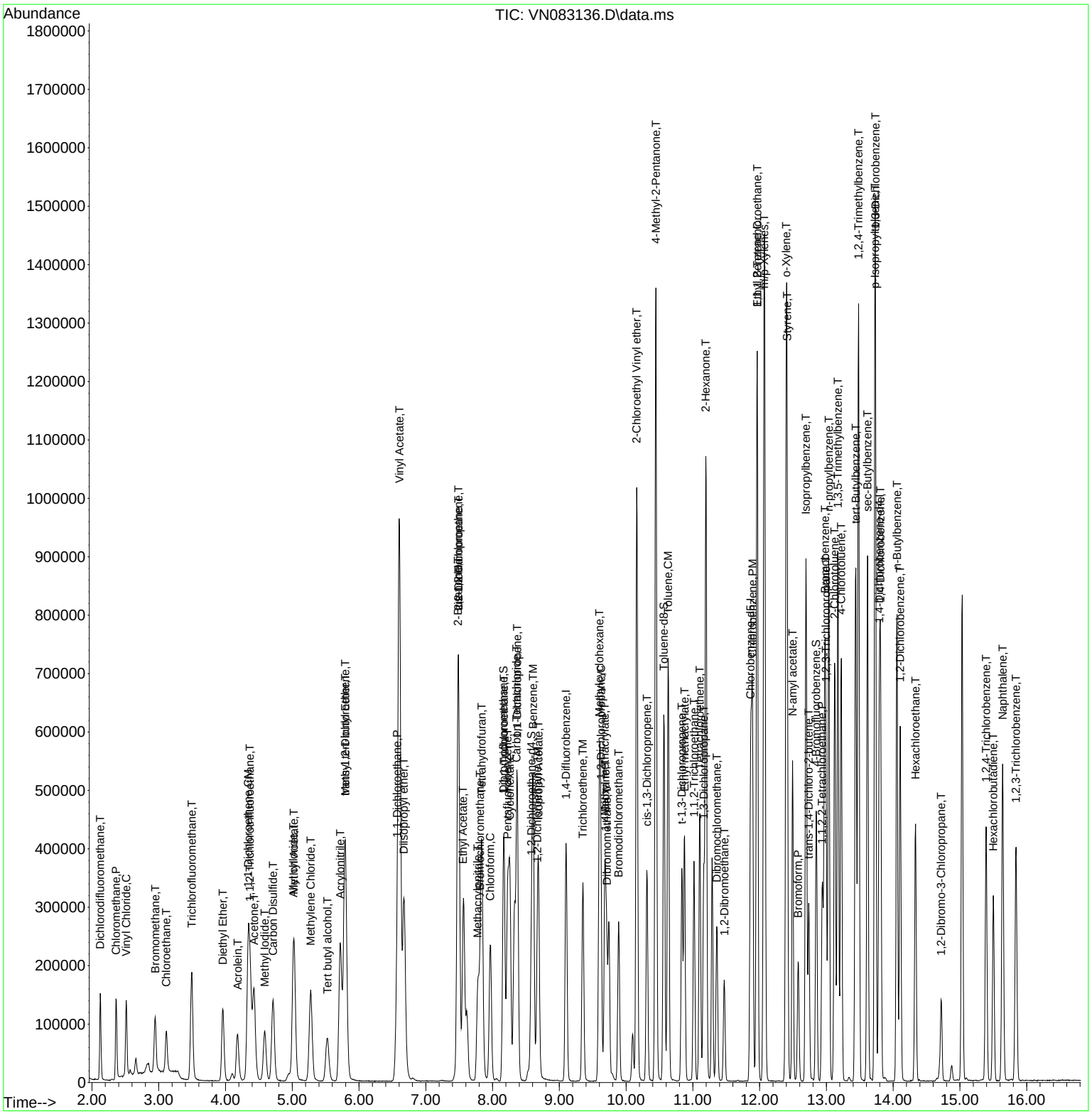
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083136.D
Acq On : 07 Aug 2024 10:58
Operator : JC\MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 4 Sample Multiplier: 1

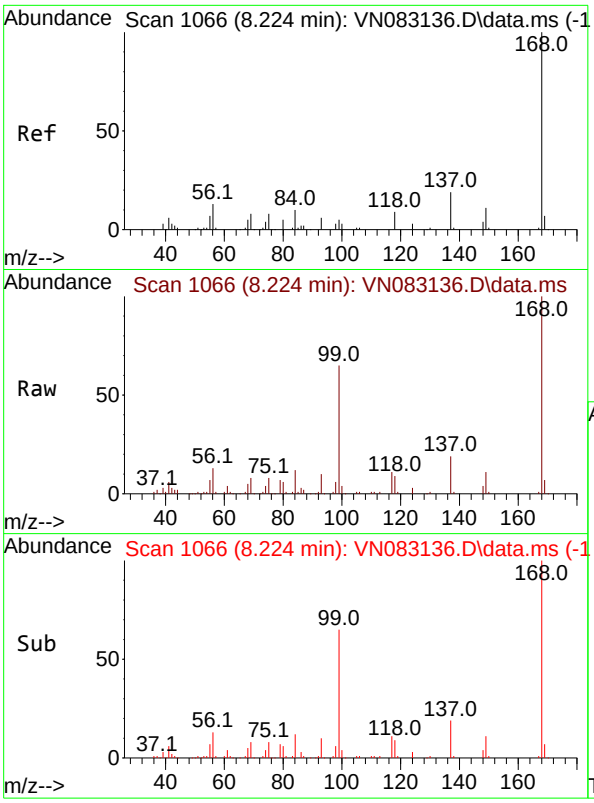
Quant Time: Aug 08 06:15:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

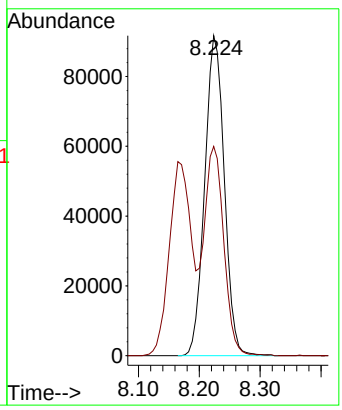





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:168 Resp: 20491

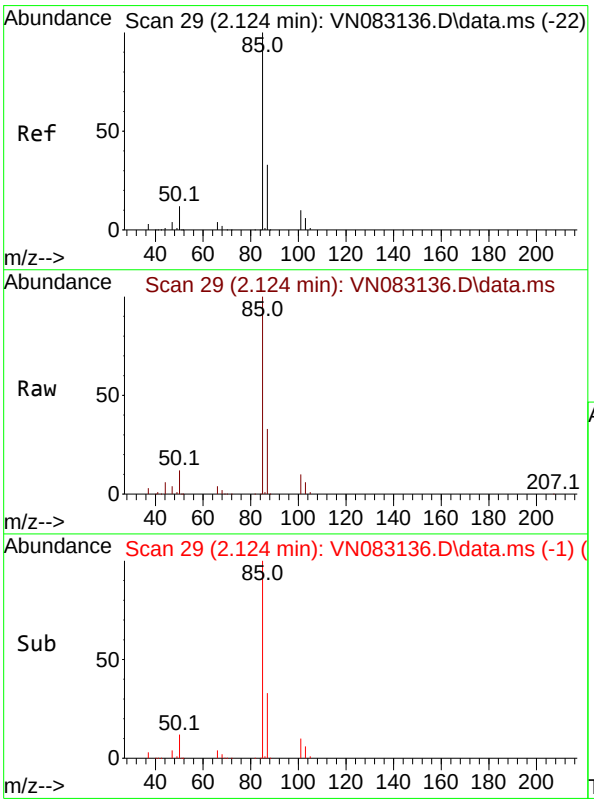
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 65.4 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

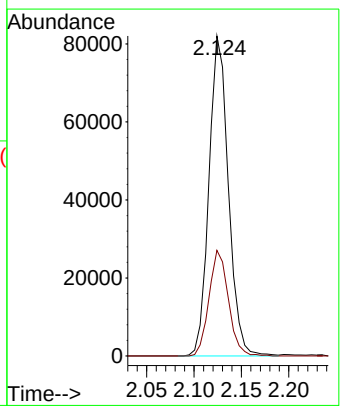
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

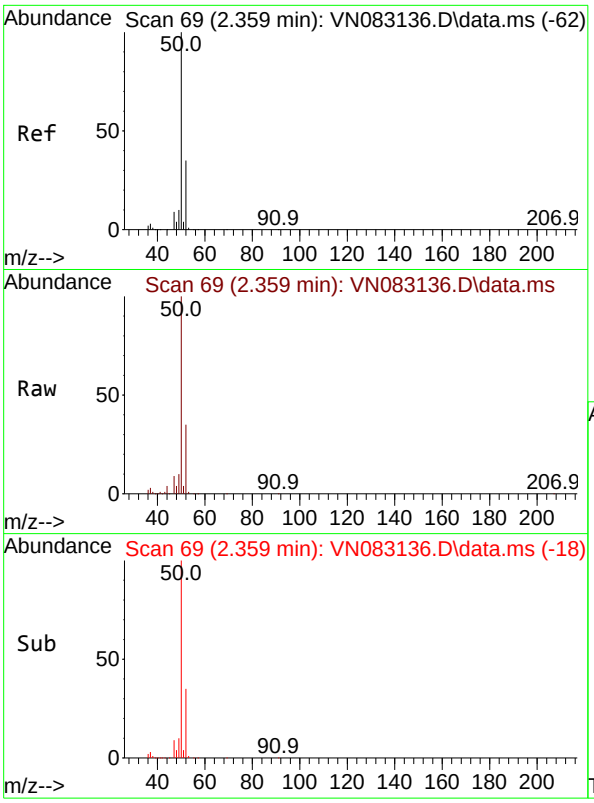



#2
Dichlorodifluoromethane
Concen: 50.312 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 85 Resp: 116913

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.0 | 15.7 | 47.0 |

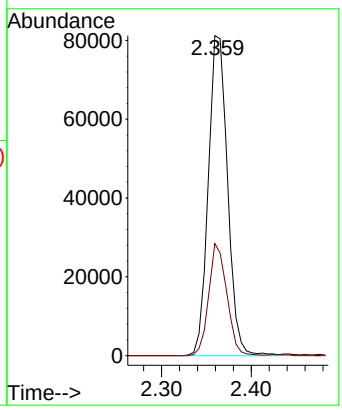





#3
Chloromethane
Concen: 50.915 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 50 Resp: 12113

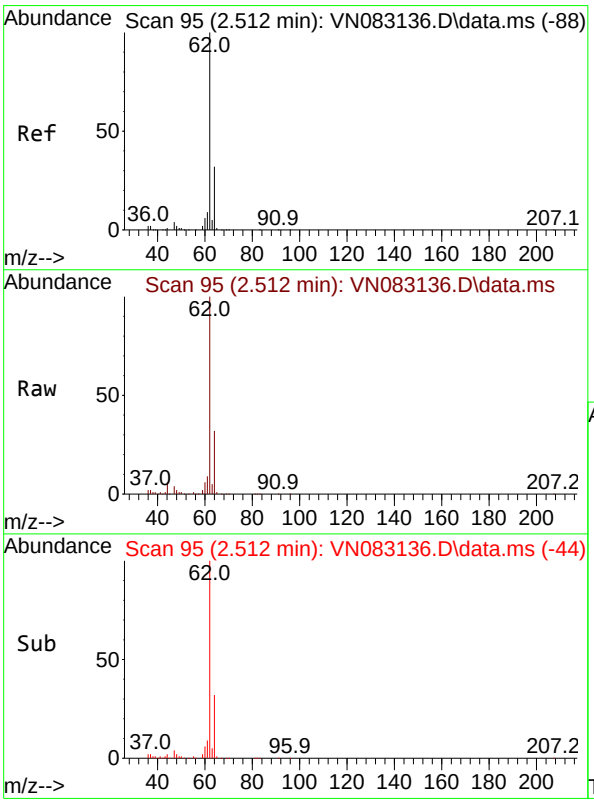
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 35.1 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

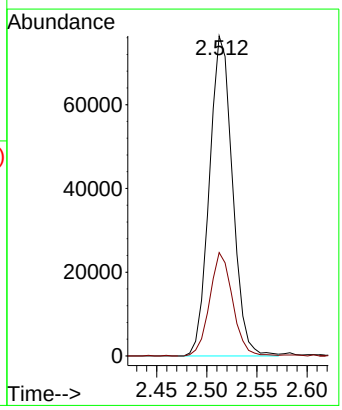
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

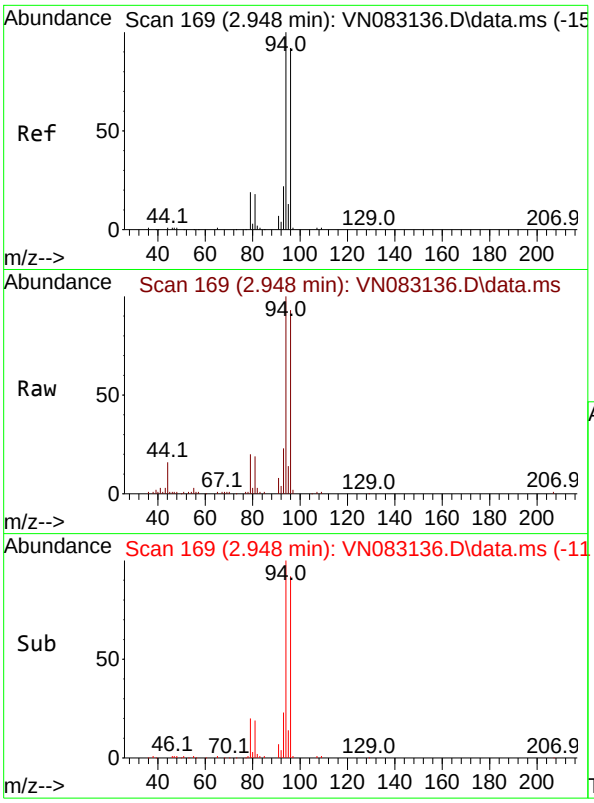



#4
Vinyl Chloride
Concen: 50.482 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 62 Resp: 122548

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.3 | 25.0 | 37.6 |

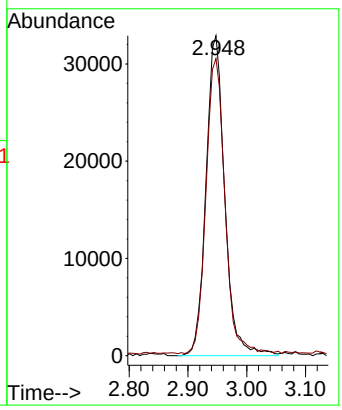





#5
Bromomethane
Concen: 48.538 ug/l
RT: 2.948 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 94 Resp: 7311

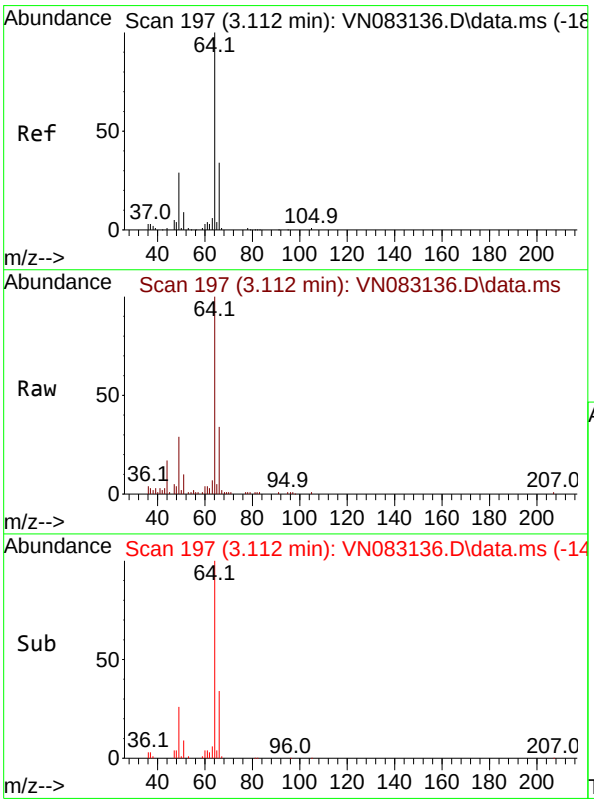
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 92.2 | 78.0 | 117.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

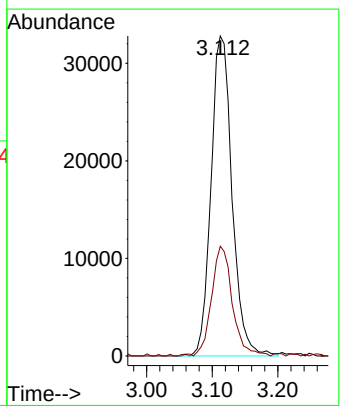
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

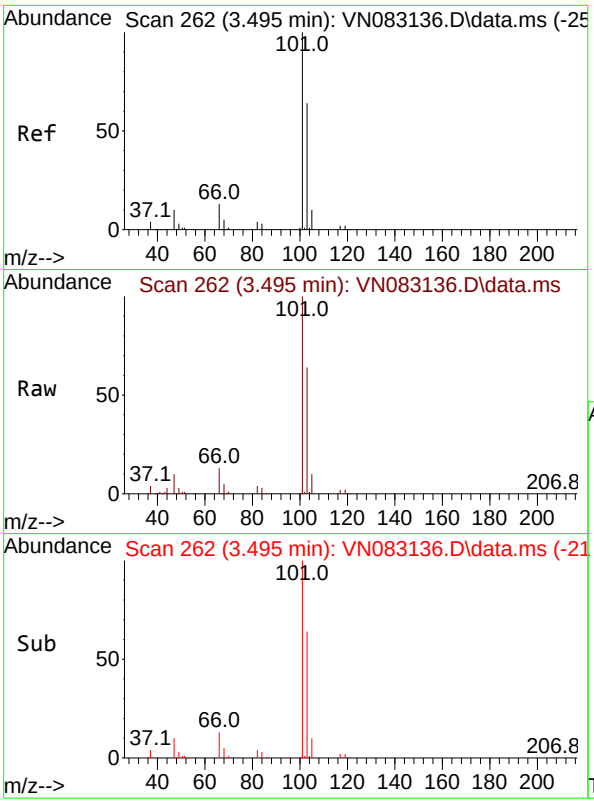



#6
Chloroethane
Concen: 48.043 ug/l
RT: 3.112 min Scan# 197
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 64 Resp: 72966

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 34.3 | 26.6 | 40.0 |

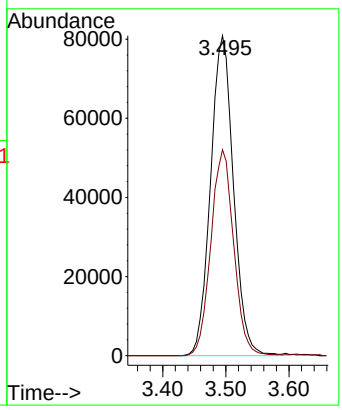





#7
Trichlorofluoromethane
Concen: 50.832 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:101 Resp: 20384

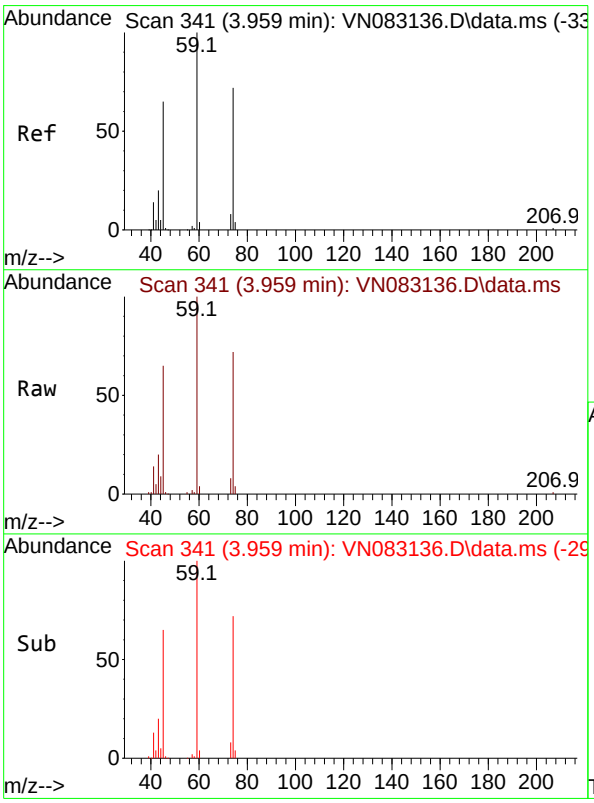
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.3 | 52.7 | 79.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

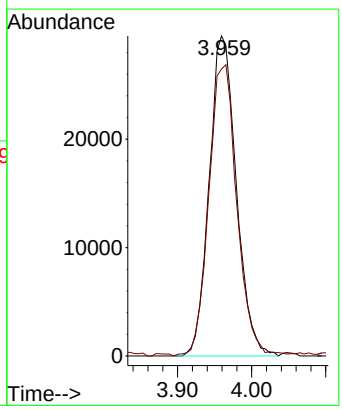
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

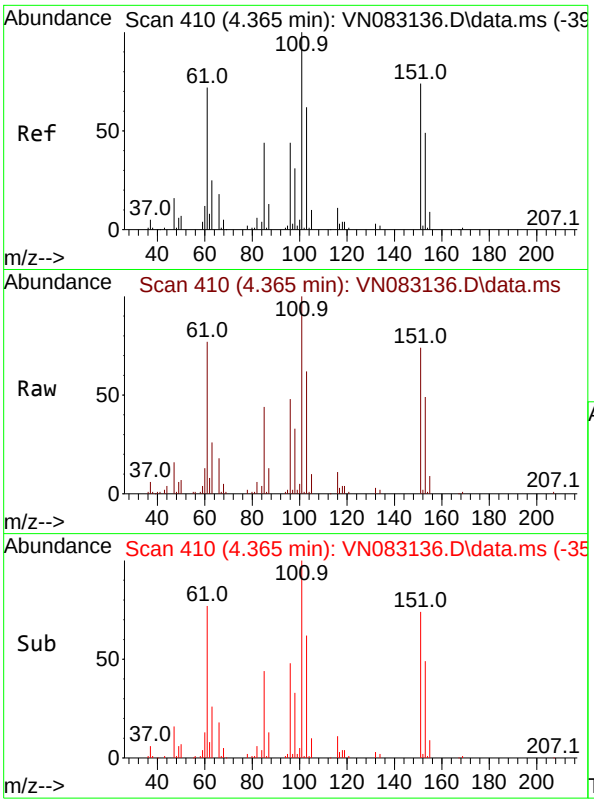



#8
Diethyl Ether
Concen: 50.318 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 74 Resp: 75087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 94.0 | 55.5 | 166.3 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 50.747 ug/l
RT: 4.365 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:101 Resp: 11220

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.9 | 38.3 | 57.5 |
| 151 | 75.1 | 59.3 | 88.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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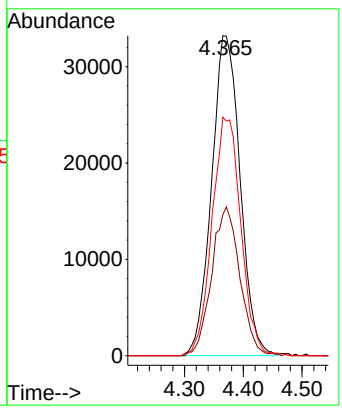
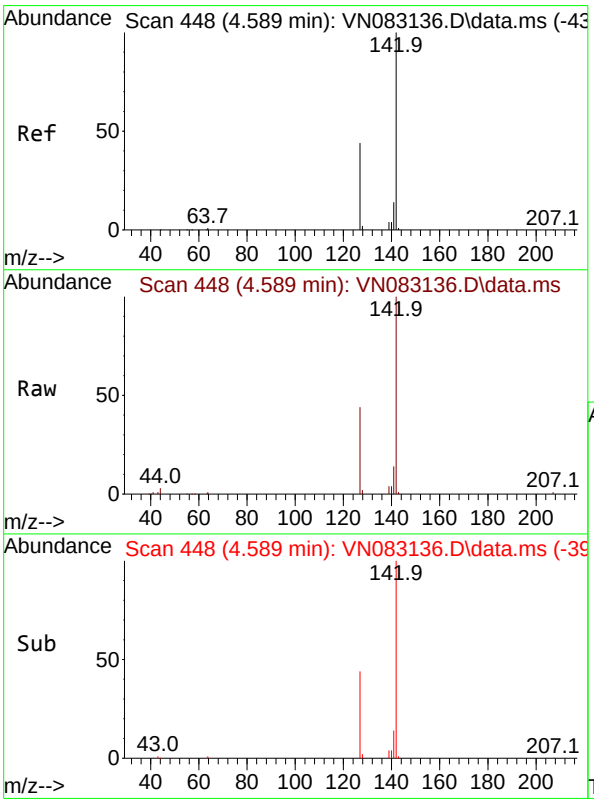
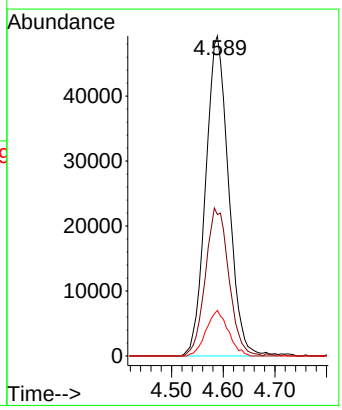


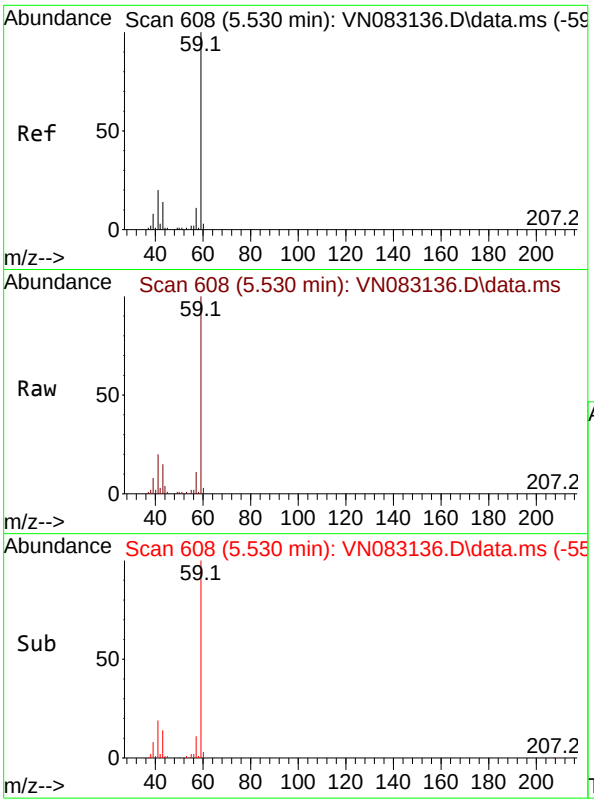




#10
Methyl Iodide
Concen: 52.170 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:142 Resp: 151731

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 44.2 | 37.5 | 56.3 |
| 141 | 14.3 | 13.1 | 19.7 |

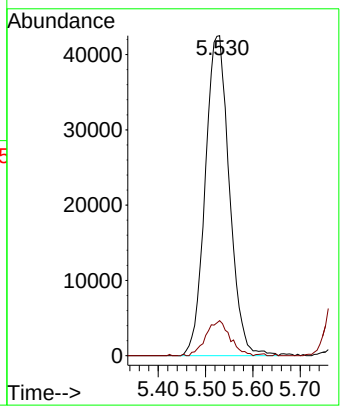





#11
Tert butyl alcohol
Concen: 247.904 ug/l
RT: 5.530 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 59 Resp: 15026

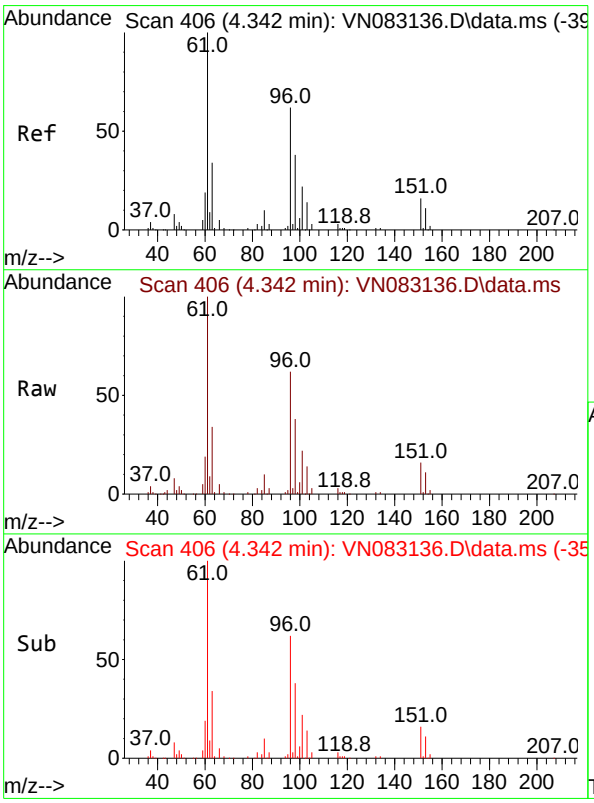
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.0 | 8.9 | 13.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

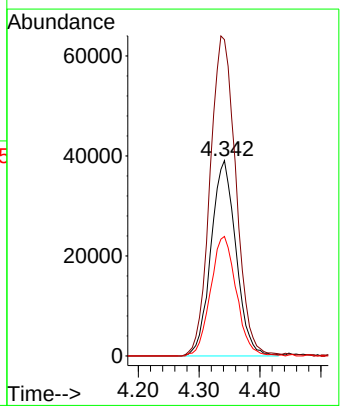
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

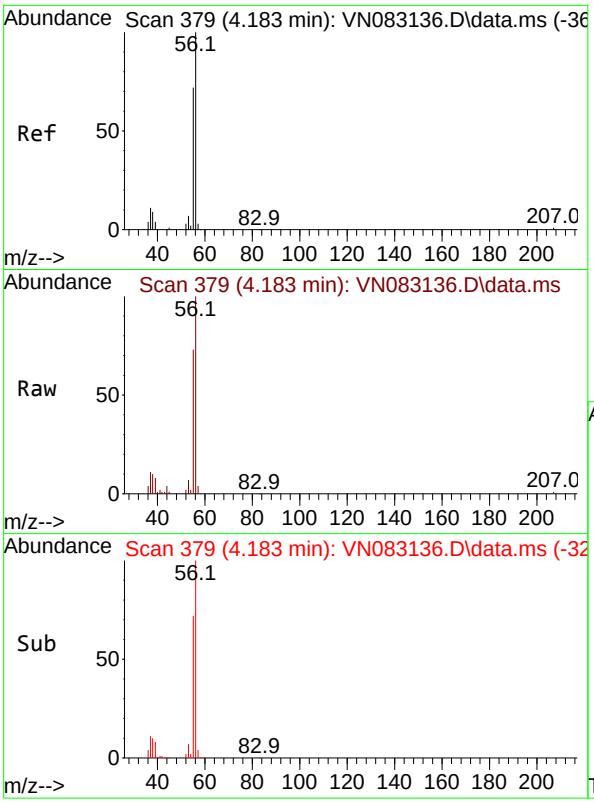



#12
1,1-Dichloroethene
Concen: 49.114 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 96 Resp: 111564

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 162.0 | 149.7 | 224.5 |
| 98 | 61.2 | 50.1 | 75.1 |

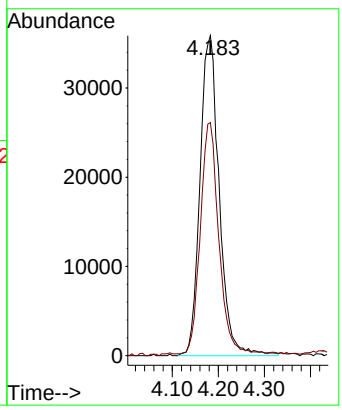





#13
Acrolein
Concen: 263.954 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 56 Resp: 10427

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 68.8 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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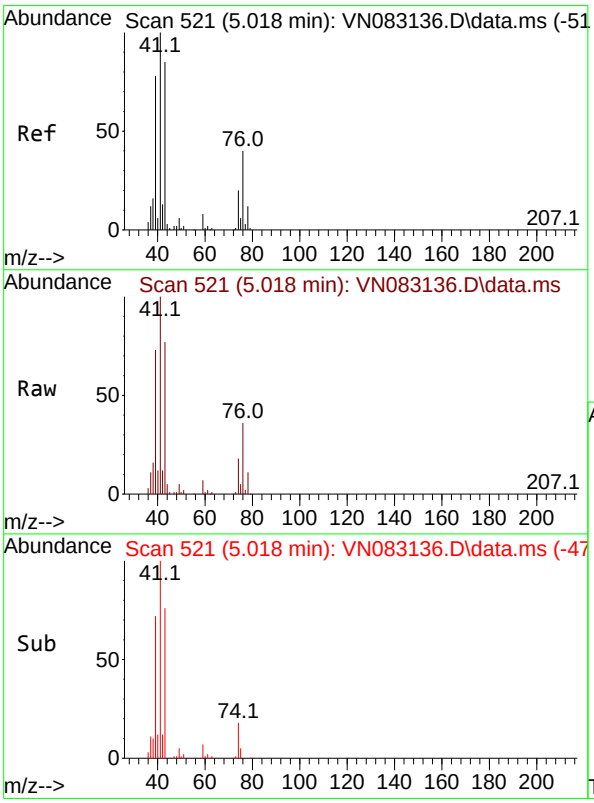
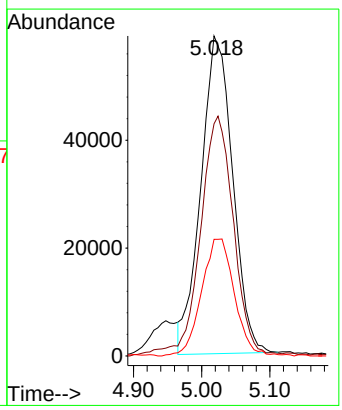
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

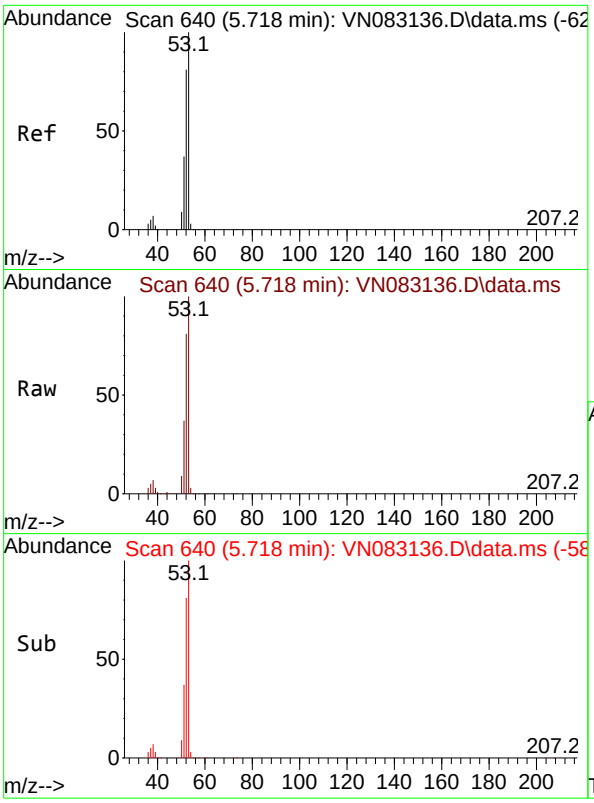



#14
Allyl chloride
Concen: 44.541 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 41 Resp: 191195

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 78.9 | 67.8 | 101.6 |
| 76 | 38.1 | 25.8 | 38.8 |

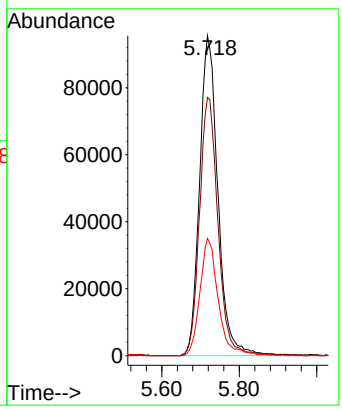





#15
Acrylonitrile
Concen: 251.149 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 53 Resp: 31309

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.2 | 66.6 | 100.0 |
| 51 | 36.5 | 30.1 | 45.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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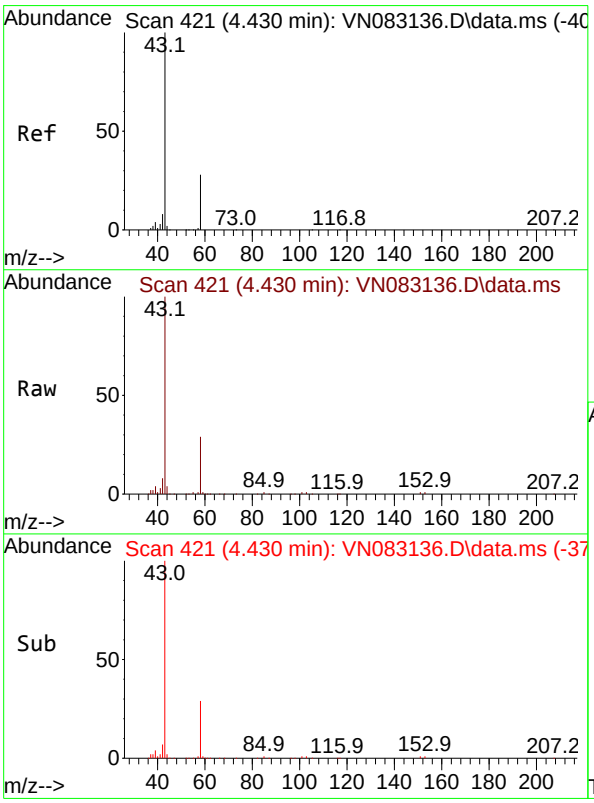
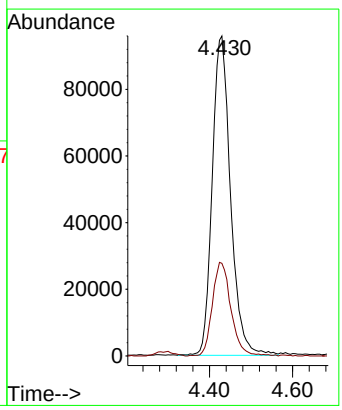
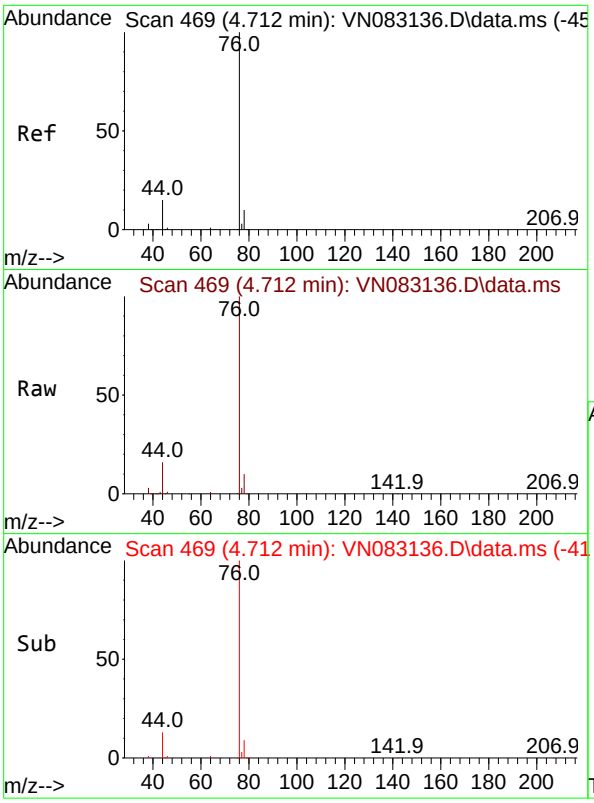



#16
Acetone
Concen: 256.804 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 293091

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 29.0 | 21.8 | 32.6 |






#17
Carbon Disulfide
Concen: 48.094 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 76 Resp: 31965

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.6 | 7.2 | 10.8 |

**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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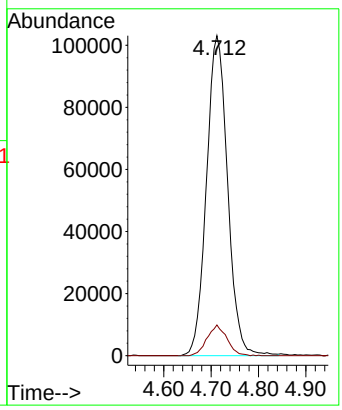
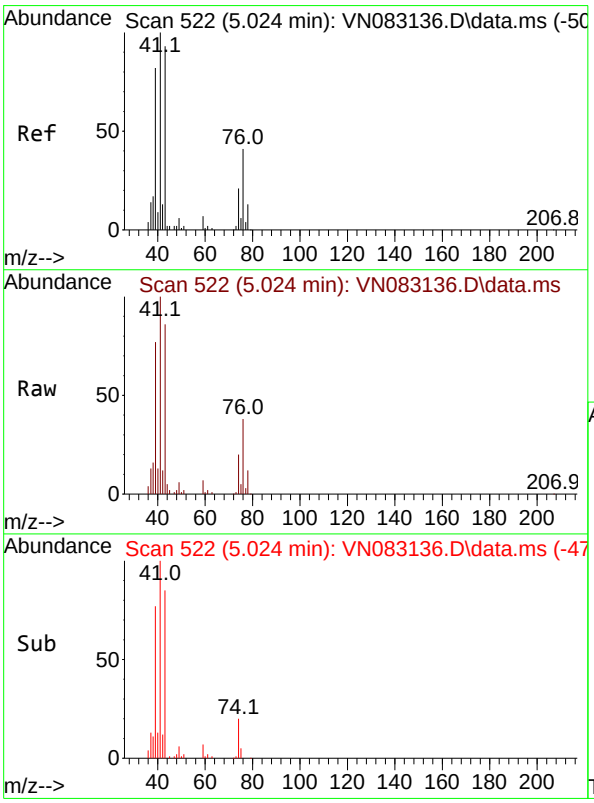
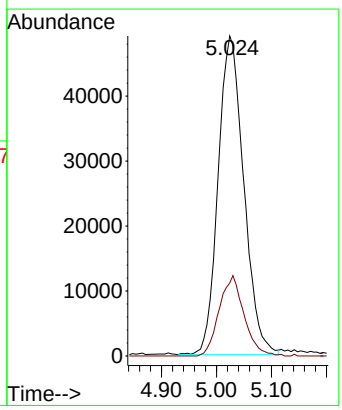


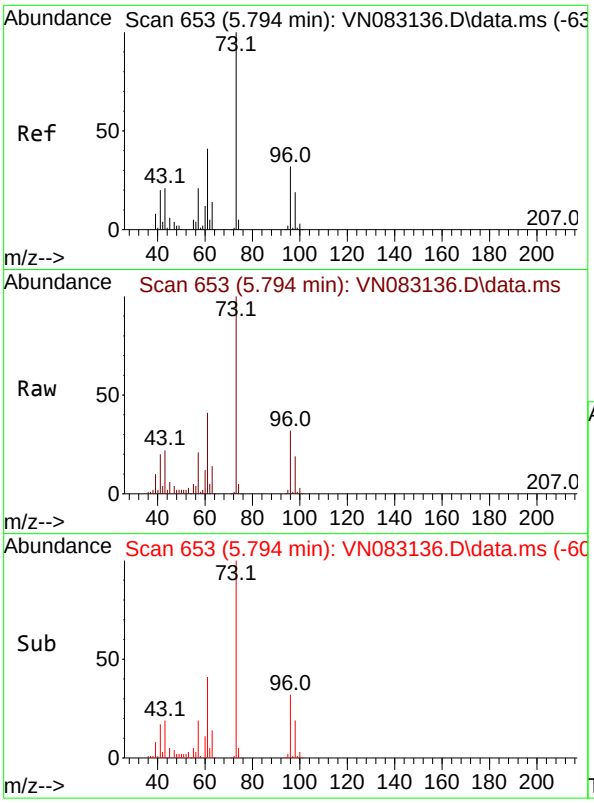




#18
Methyl Acetate
Concen: 46.765 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 159022

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 24.3 | 16.3 | 24.5 |

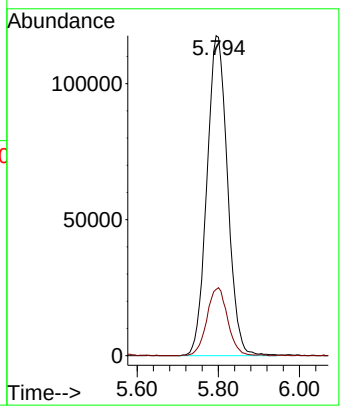





#19
Methyl tert-butyl Ether
Concen: 50.676 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 73 Resp: 41548

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 20.7 | 17.9 | 26.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

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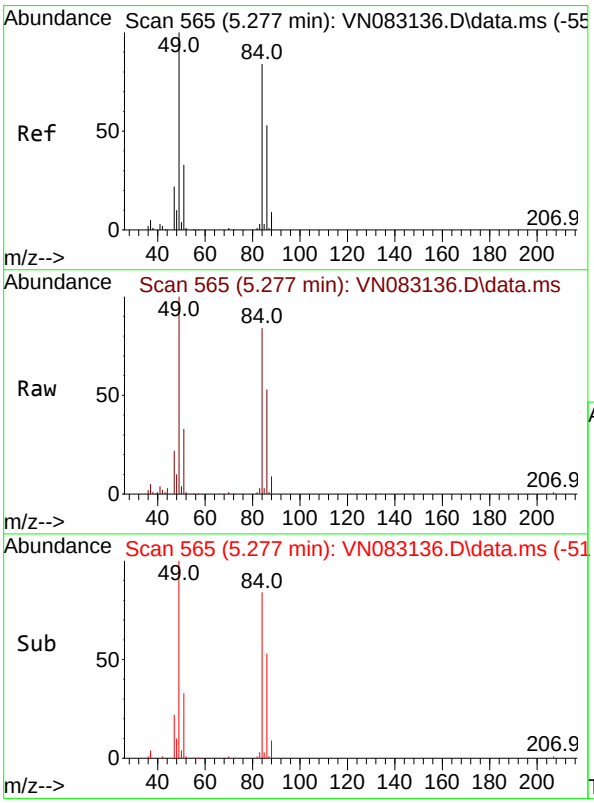
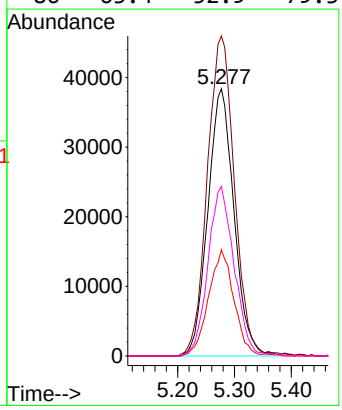
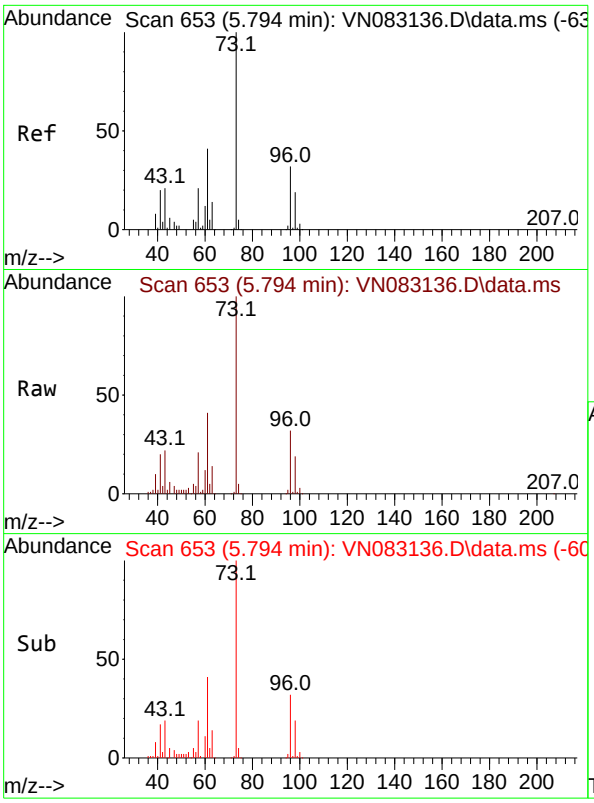



#20
Methylene Chloride
Concen: 46.744 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 84 Resp: 122780

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 119.8 | 119.6 | 179.4 |
| 51 | 39.8 | 34.8 | 52.2 |
| 86 | 63.4 | 52.9 | 79.3 |

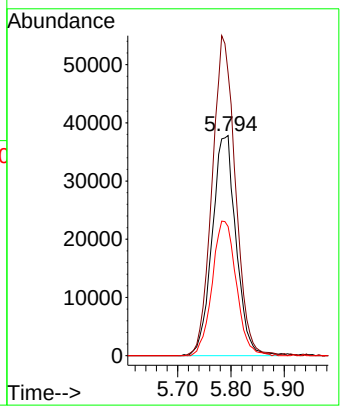





#21
trans-1,2-Dichloroethene
Concen: 50.127 ug/l
RT: 5.794 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 96 Resp: 11768

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 128.4 | 123.4 | 185.2 |
| 98 | 58.7 | 49.3 | 73.9 |




**Instrument :**
MSVOA_N
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VSTDICCC050

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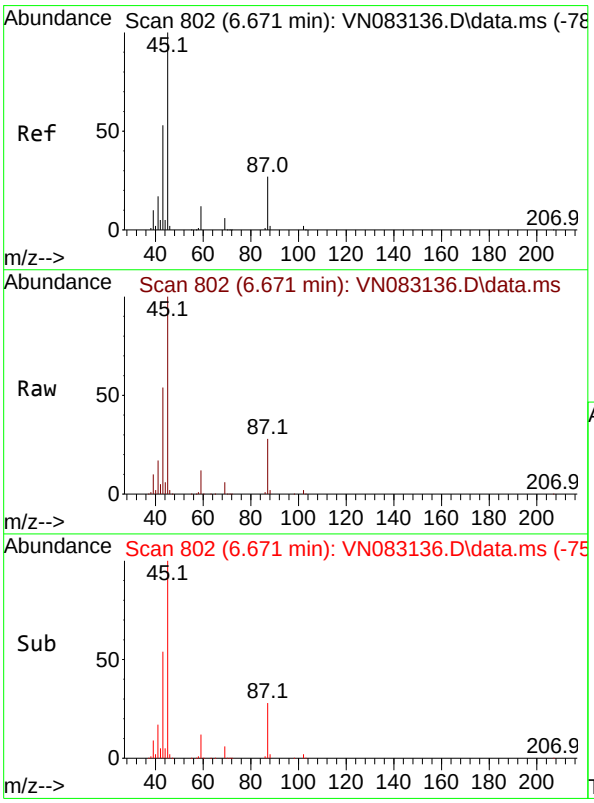
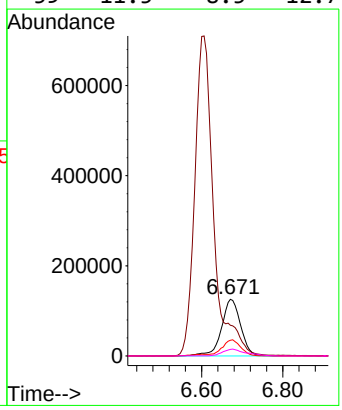
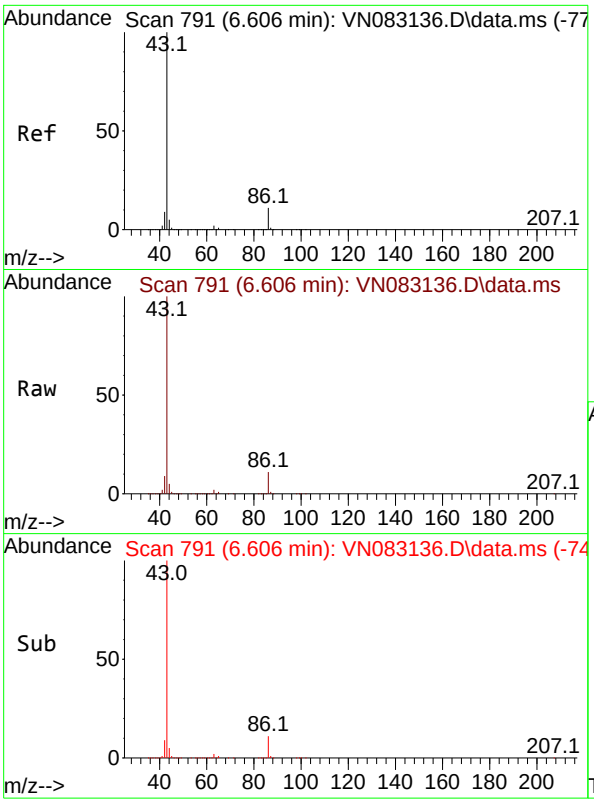



#22
Diisopropyl ether
Concen: 50.987 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 45 Resp: 411409

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 52.8 | 44.0 | 66.0 |
| 87 | 27.7 | 19.7 | 29.5 |
| 59 | 11.5 | 8.5 | 12.7 |

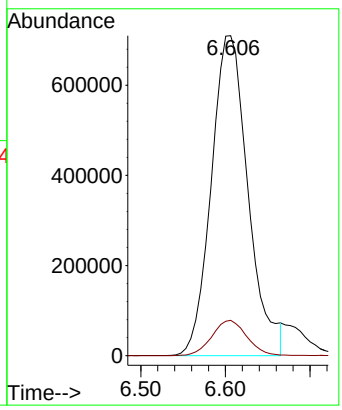





#23
Vinyl Acetate
Concen: 259.716 ug/l m
RT: 6.606 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 214759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 11.0 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
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VSTDICCC050

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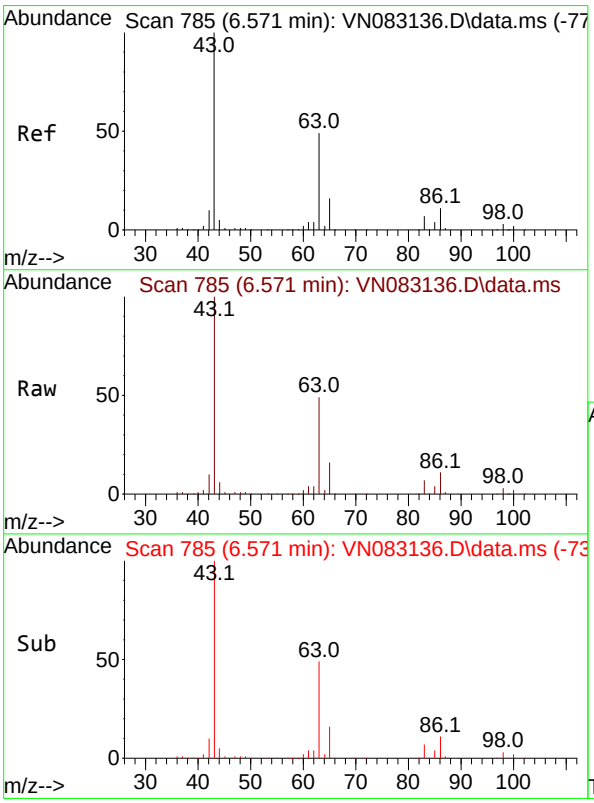
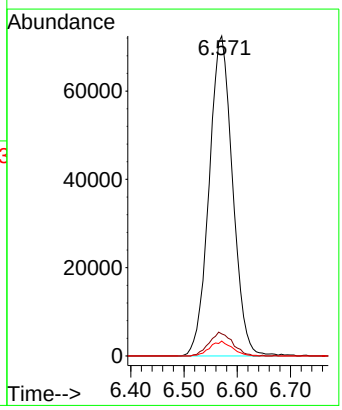
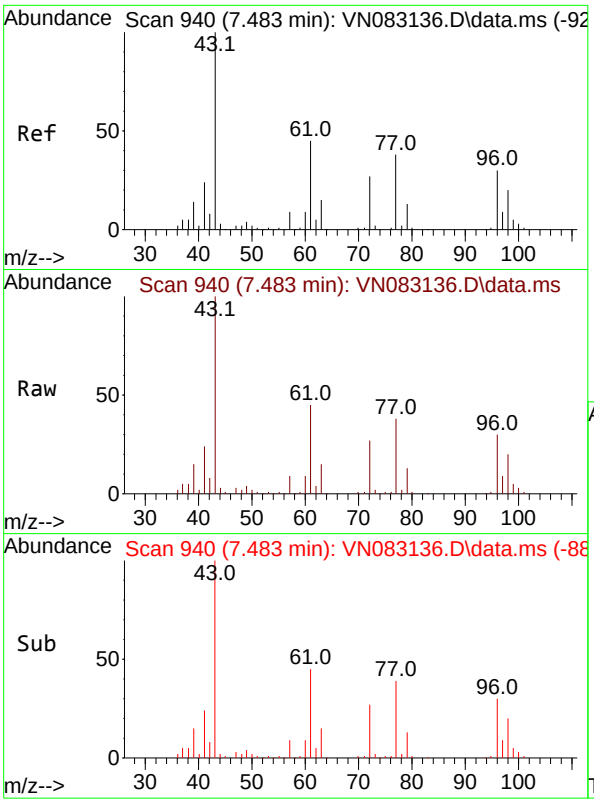



#24
1,1-Dichloroethane
Concen: 50.493 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 63 Resp: 222071

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.9 | 3.3 | 9.9 |
| 100 | 4.6 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 249.591 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 43739

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 27.1 | 18.2 | 27.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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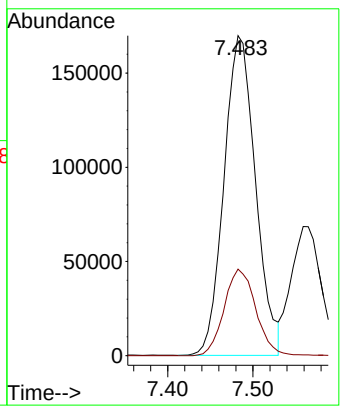
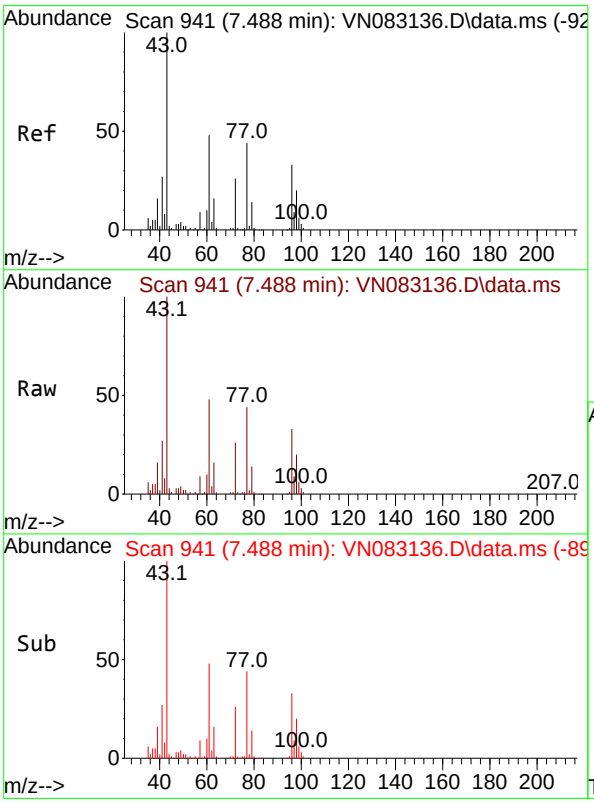
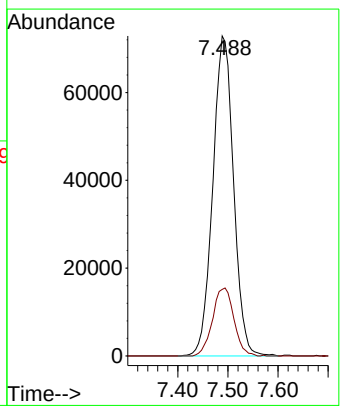


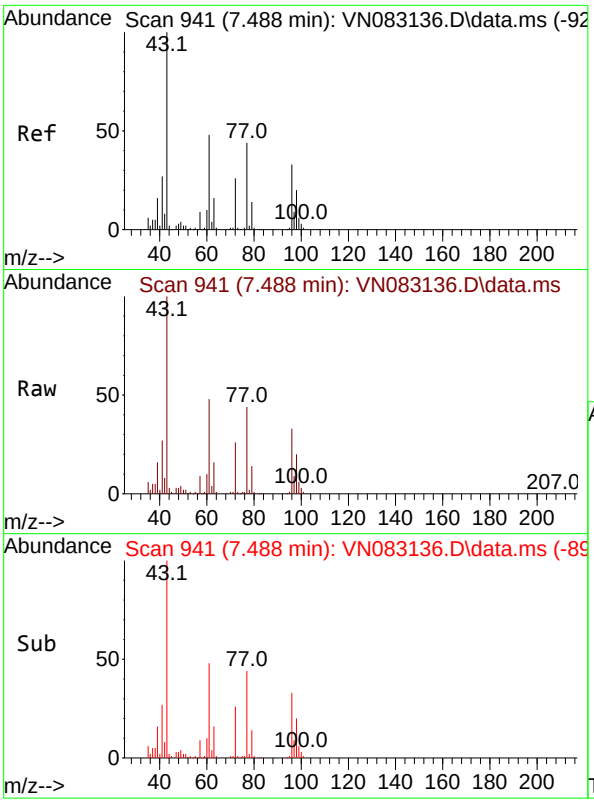




#26
2,2-Dichloropropane
Concen: 51.336 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 77 Resp: 209679

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.9 | 10.3 | 30.9 |






#27
cis-1,2-Dichloroethene
Concen: 49.809 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 96 Resp: 14111(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 150.4 | 0.0 | 329.6 |
| 98 | 64.5 | 0.0 | 128.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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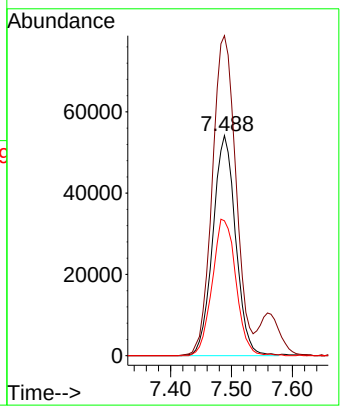
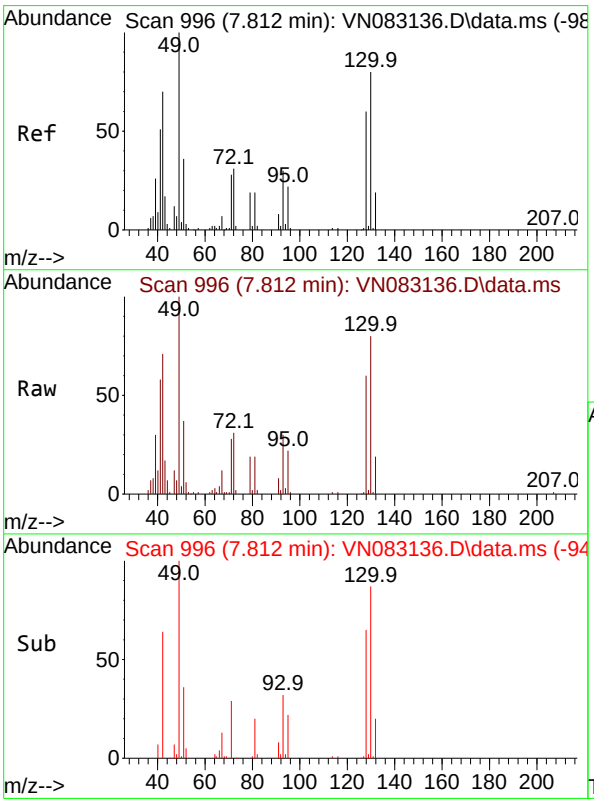
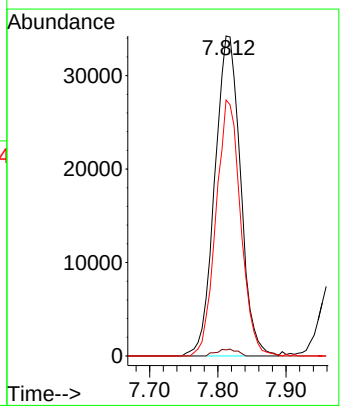


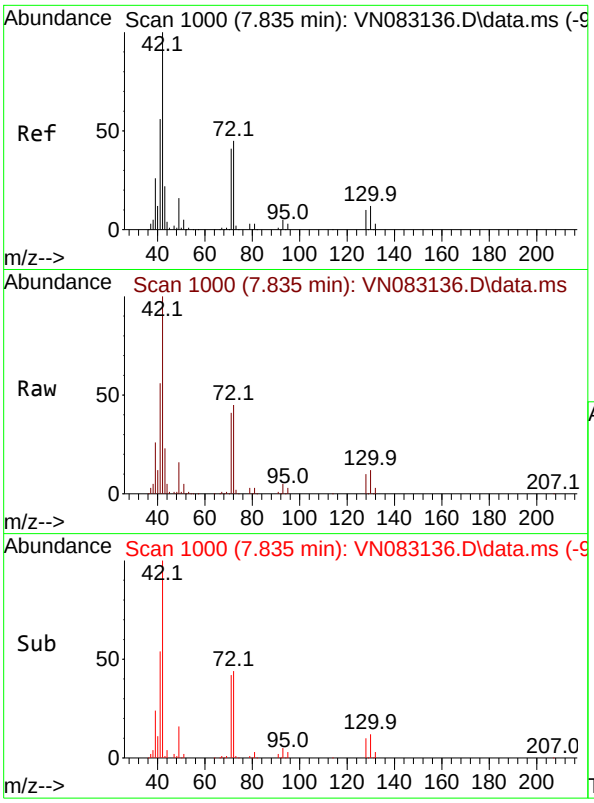




#28
Bromochloromethane
Concen: 50.041 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 49 Resp: 89942

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.8 | 0.0 | 3.8 |
| 130 | 76.7 | 50.5 | 75.7# |






#29
Tetrahydrofuran
Concen: 252.334 ug/l
RT: 7.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 42 Resp: 28585

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 44.6 | 30.0 | 45.0 |
| 71 | 42.4 | 28.3 | 42.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

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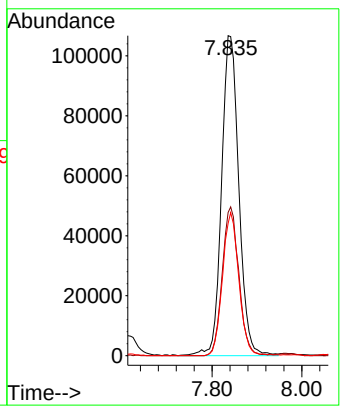
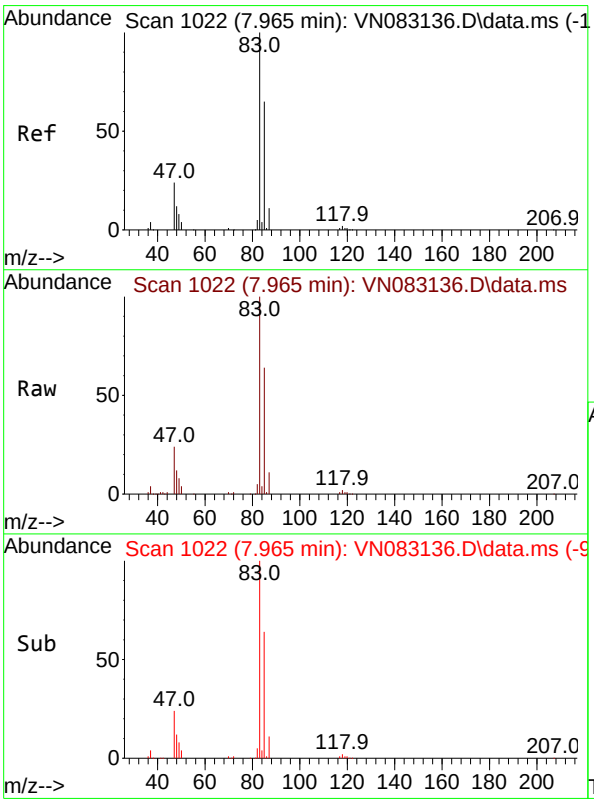
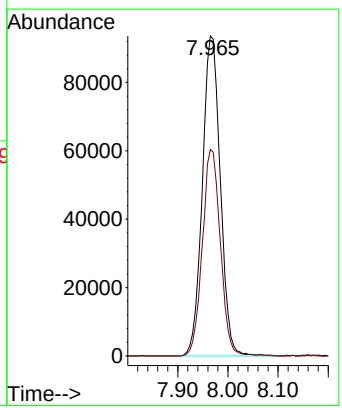


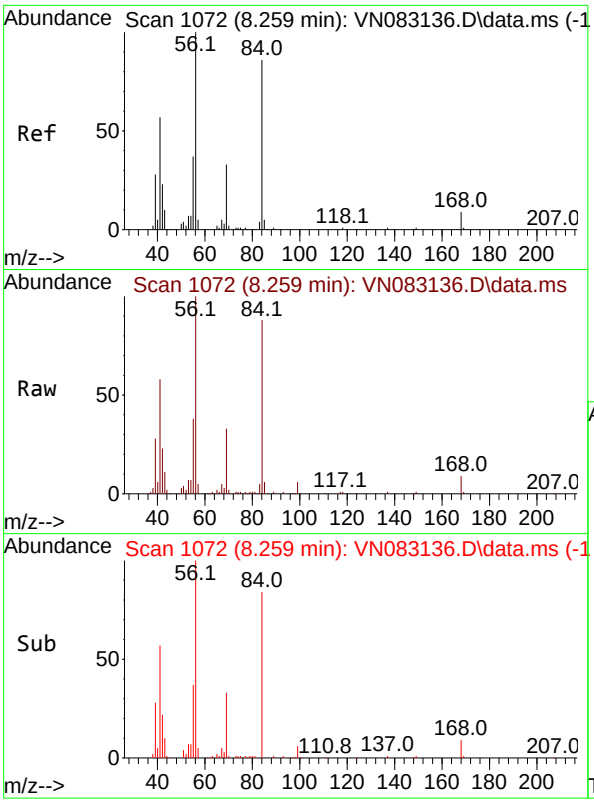




#30
Chloroform
Concen: 50.978 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 83 Resp: 232933

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.5 | 50.9 | 76.3 |

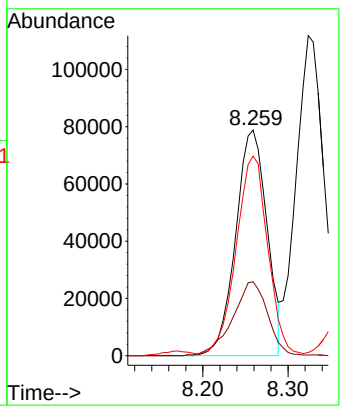





#31
Cyclohexane
Concen: 46.565 ug/l
RT: 8.259 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 56 Resp: 20127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 32.7 | 24.5 | 36.7 |
| 84 | 86.4 | 66.0 | 99.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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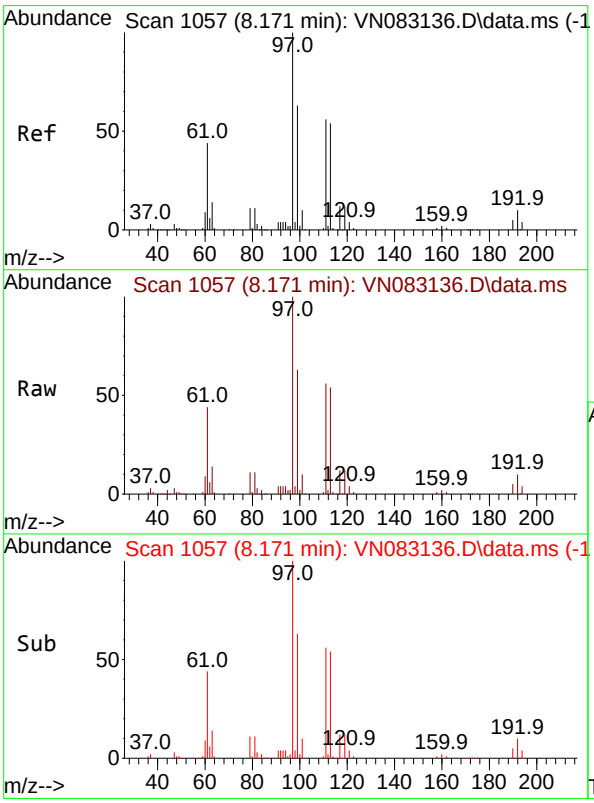
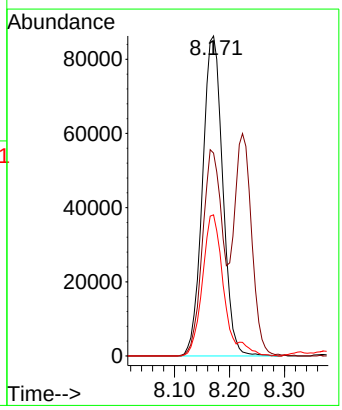
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

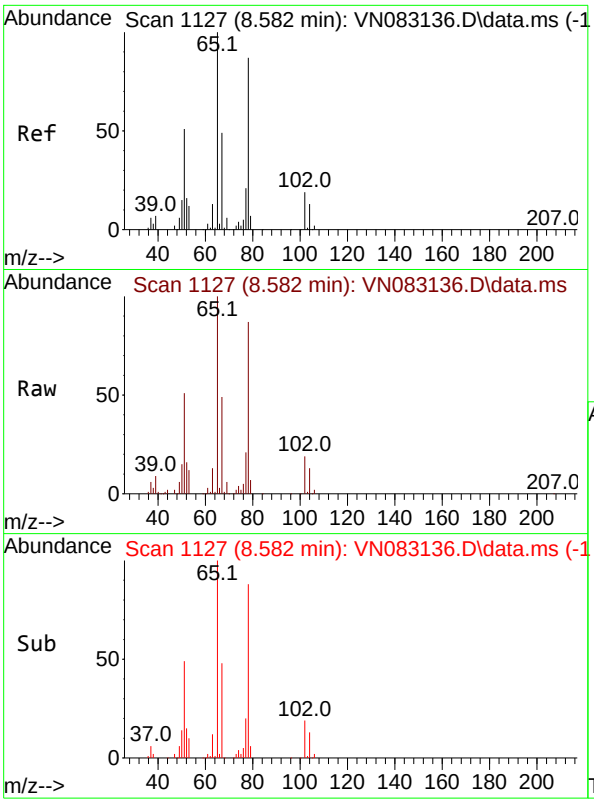



#32
1,1,1-Trichloroethane
Concen: 50.935 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 97 Resp: 220296

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 62.5 | 52.0 | 78.0 |
| 61 | 46.6 | 42.1 | 63.1 |

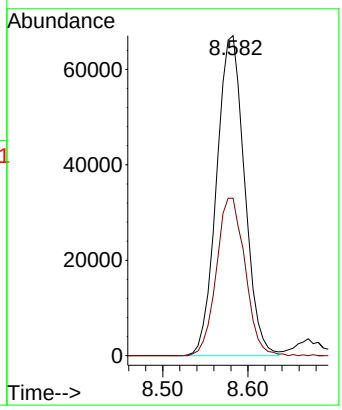





#33
1,2-Dichloroethane-d4
Concen: 52.348 ug/l
RT: 8.582 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 65 Resp: 15268

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.5 | 0.0 | 104.4 |




**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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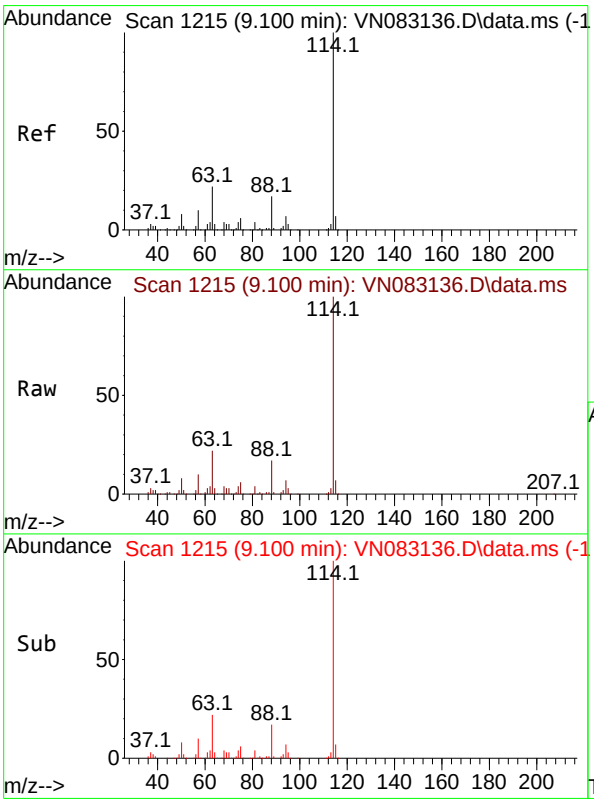
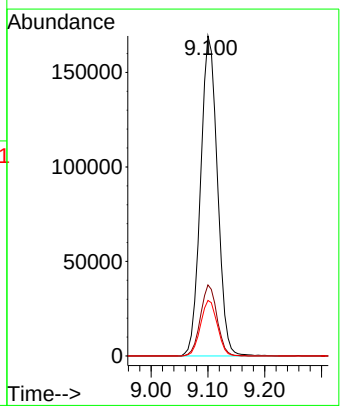
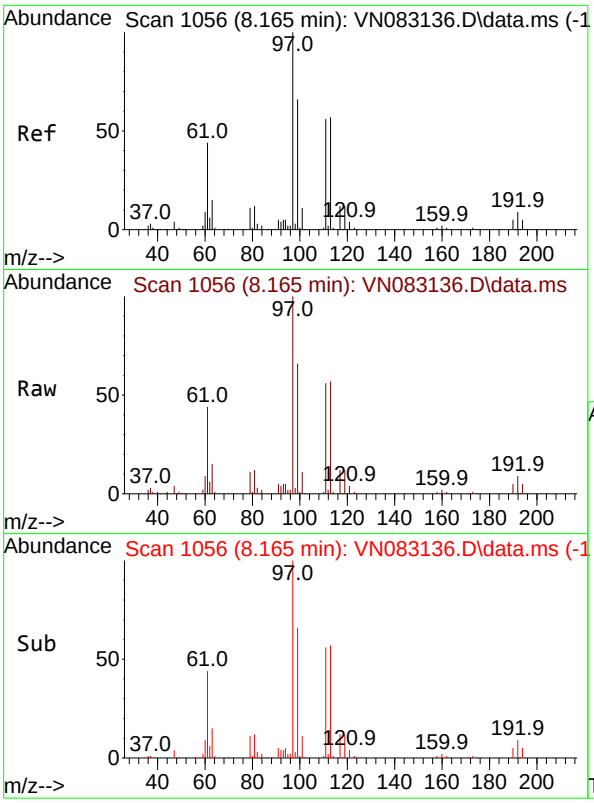



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:114 Resp: 348813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.2 | 0.0 | 44.6 |
| 88 | 17.3 | 0.0 | 31.4 |

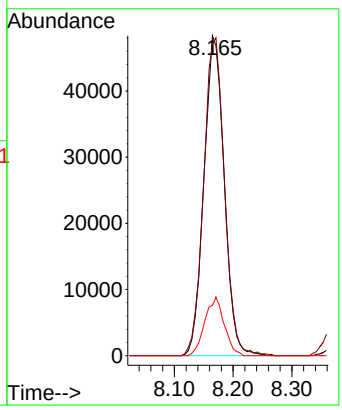





#35
Dibromofluoromethane
Concen: 53.216 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:113 Resp: 11586

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.9 | 82.4 | 123.6 |
| 192 | 17.5 | 14.9 | 22.3 |




**Instrument :**
MSVOA_N
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VSTDICCC050

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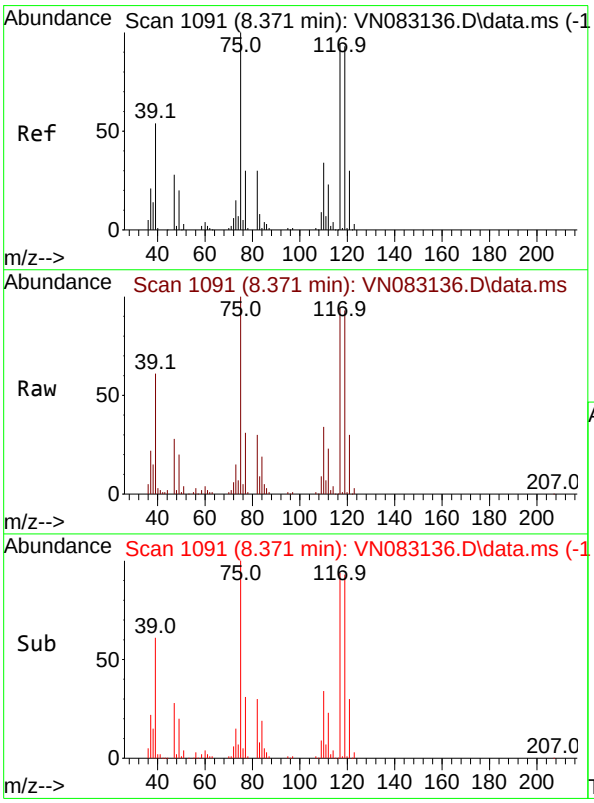
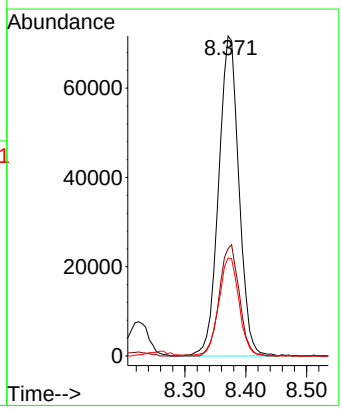
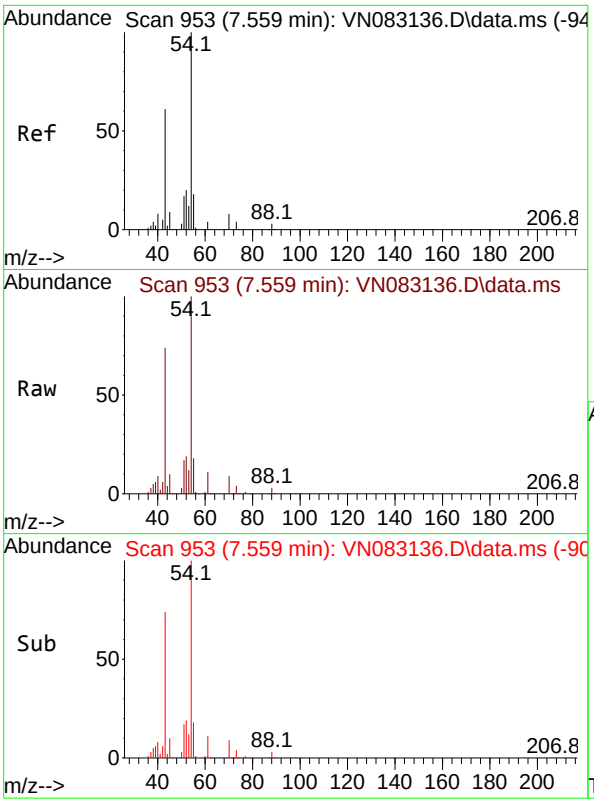



#36
1,1-Dichloropropene
Concen: 50.349 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 165826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.2 | 16.3 | 48.9 |
| 77 | 30.8 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 47.213 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 17410

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 14.4 | 9.3 | 13.9# |
| 70 | 12.1 | 7.0 | 10.6# |

**Instrument :**
MSVOA_N
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VSTDICCC050

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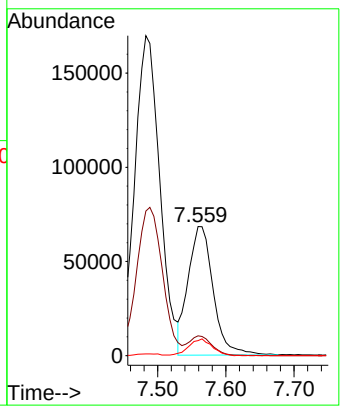
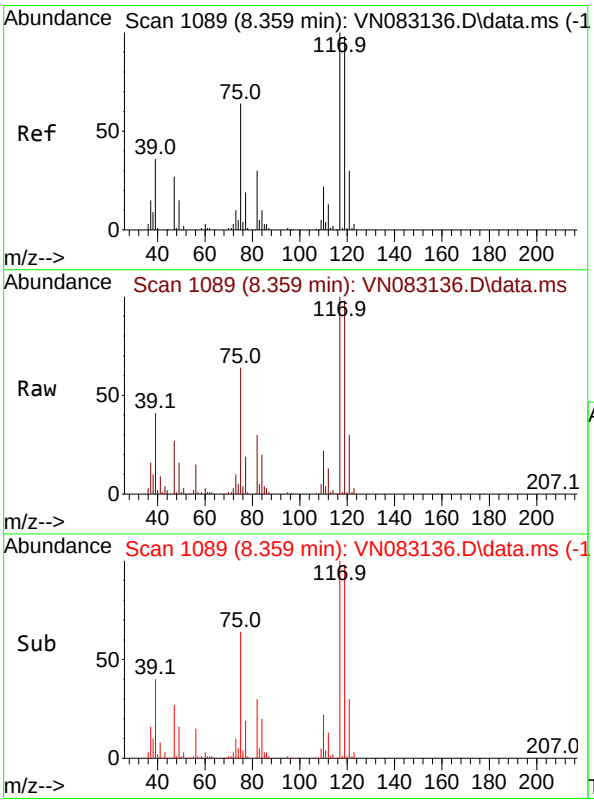
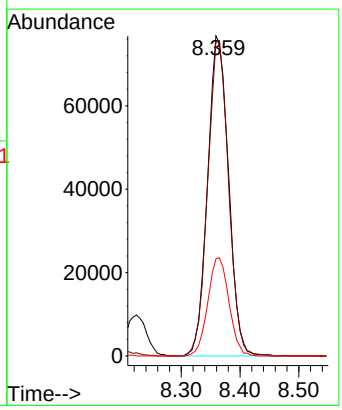


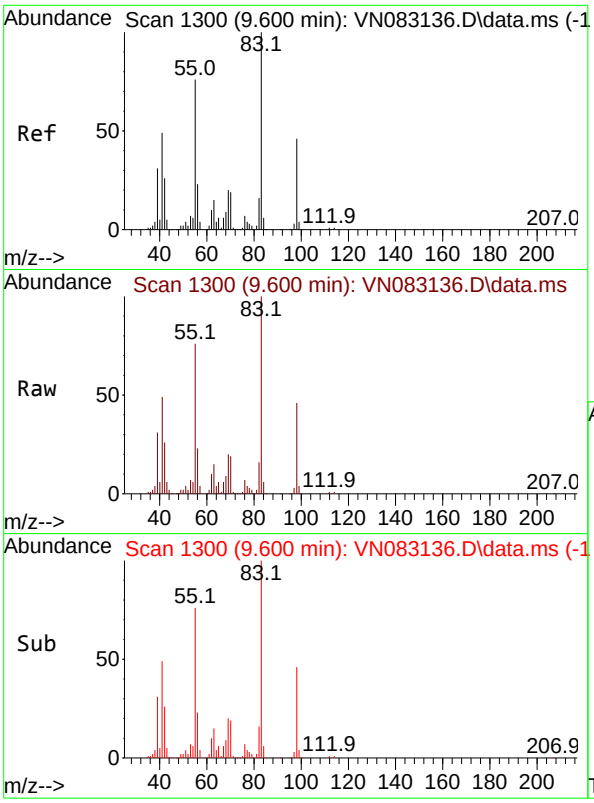




#38
Carbon Tetrachloride
Concen: 51.315 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:117 Resp: 190357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 98.0 | 74.9 | 112.3 |
| 121 | 30.3 | 24.3 | 36.5 |

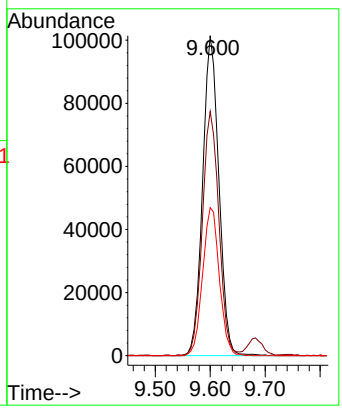





#39
Methylcyclohexane
Concen: 51.461 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 83 Resp: 20817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 76.0 | 66.4 | 99.6 |
| 98 | 46.3 | 40.7 | 61.1 |




**Instrument :**
MSVOA_N
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VSTDICCC050

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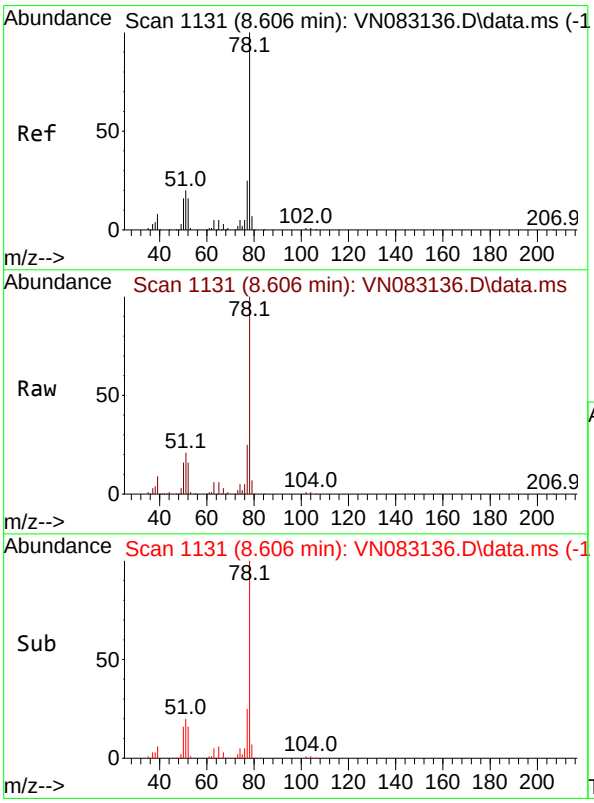
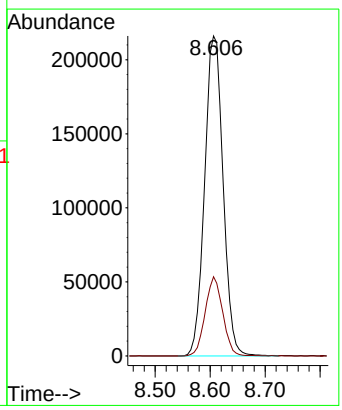
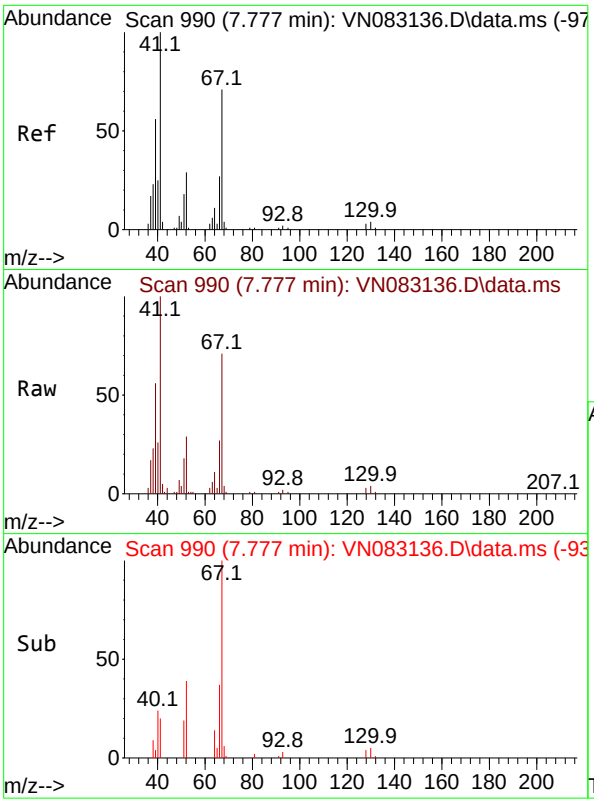



#40
Benzene
Concen: 51.436 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 78 Resp: 504662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.8 | 19.0 | 28.4 |

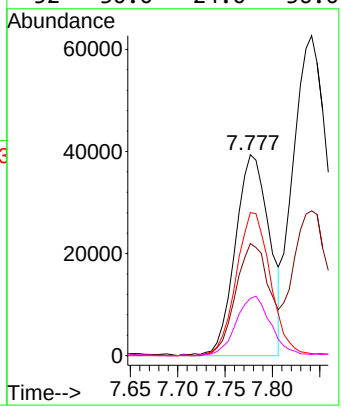





#41
Methacrylonitrile
Concen: 47.154 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 41 Resp: 9886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 55.4 | 45.5 | 68.3 |
| 67 | 72.0 | 50.5 | 75.7 |
| 52 | 30.0 | 24.0 | 36.0 |




**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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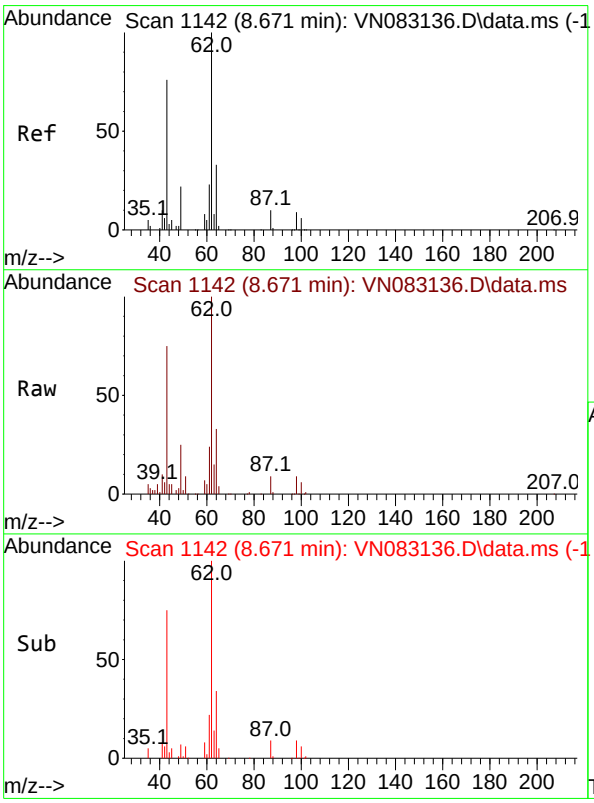
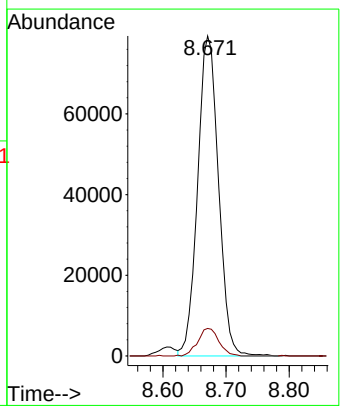
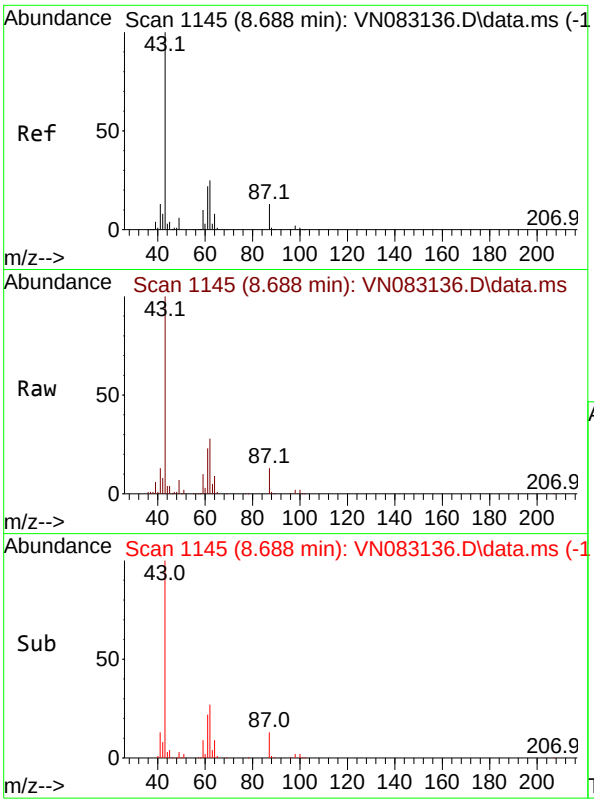



#42
1,2-Dichloroethane
Concen: 50.765 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 62 Resp: 181440

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.7 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 50.219 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 32108

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 25.3 | 17.8 | 26.6 |
| 87 | 13.0 | 8.2 | 12.2 |

**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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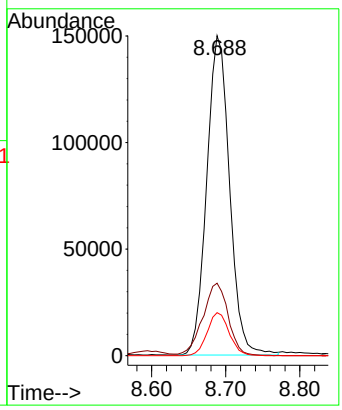
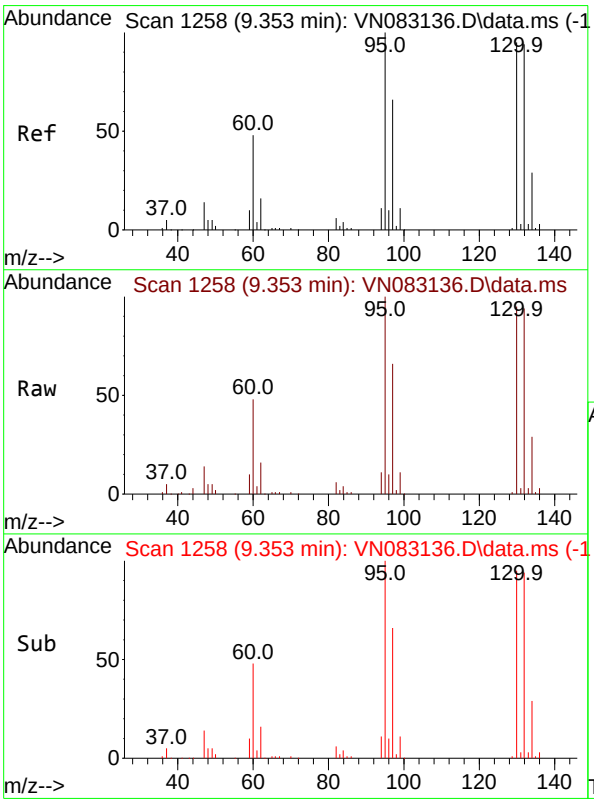
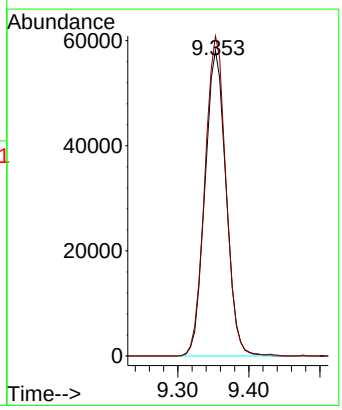


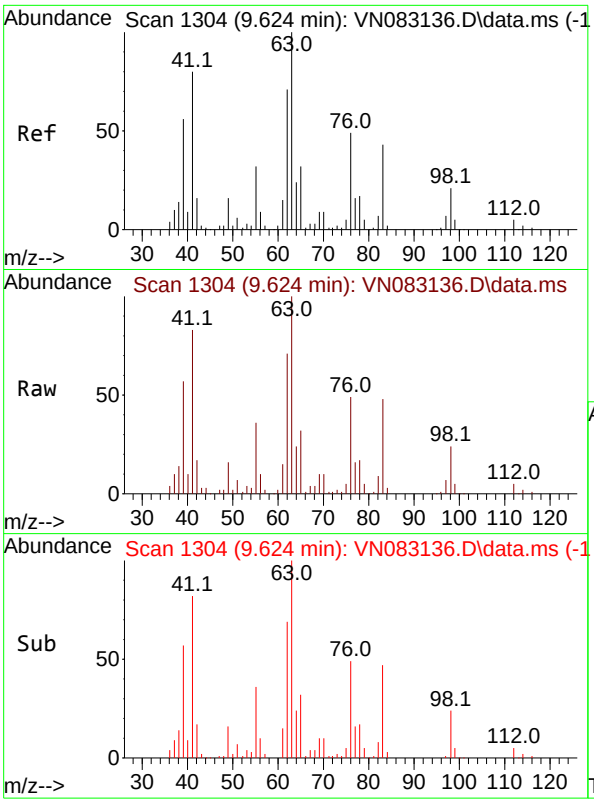




#44
Trichloroethene
Concen: 51.383 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:130 Resp: 119998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 104.7 | 0.0 | 197.8 |






#45
1,2-Dichloropropane
Concen: 51.747 ug/l
RT: 9.624 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 63 Resp: 12051

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 32.1 | 24.4 | 36.6 |

**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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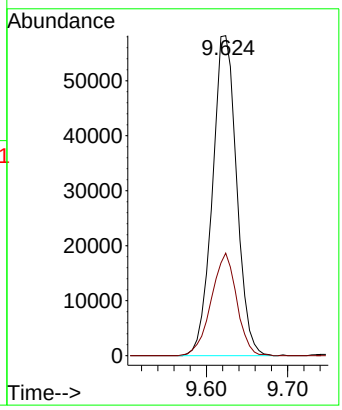
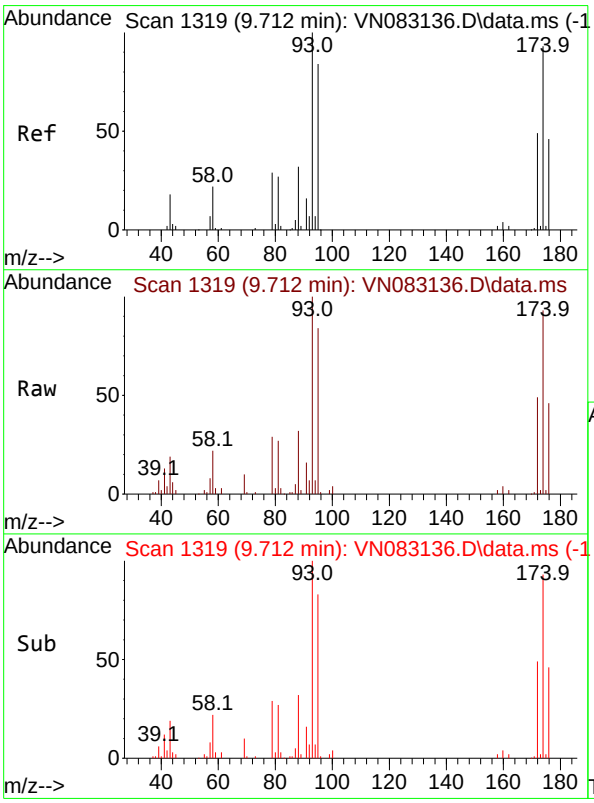
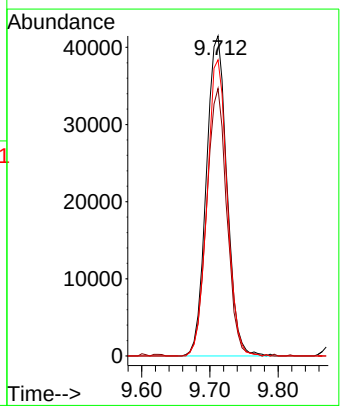


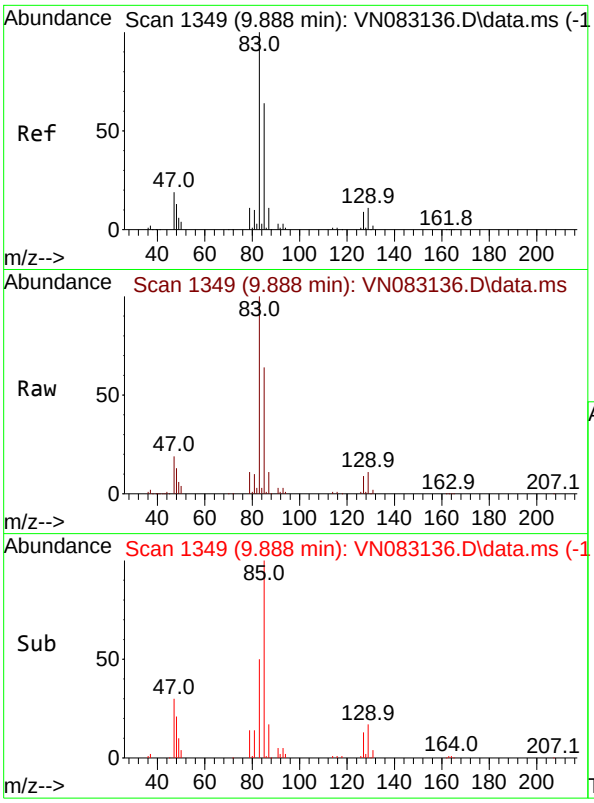




#46
Dibromomethane
Concen: 52.436 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 93 Resp: 87411

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 81.7 | 65.8 | 98.6 |
| 174 | 90.1 | 71.7 | 107.5 |

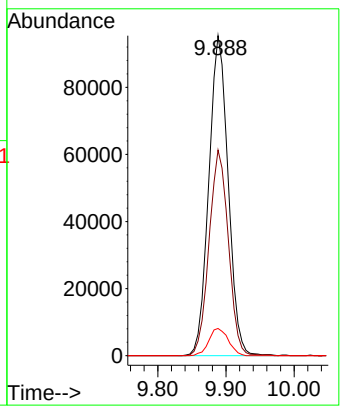





#47
Bromodichloromethane
Concen: 50.245 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 83 Resp: 18806

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.3 | 51.1 | 76.7 |
| 127 | 8.5 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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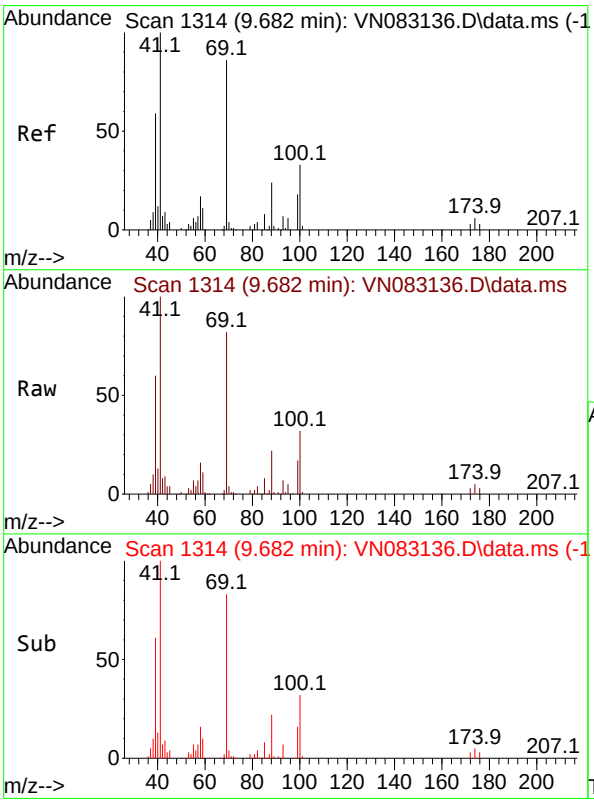
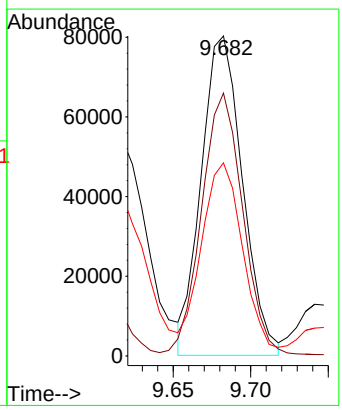
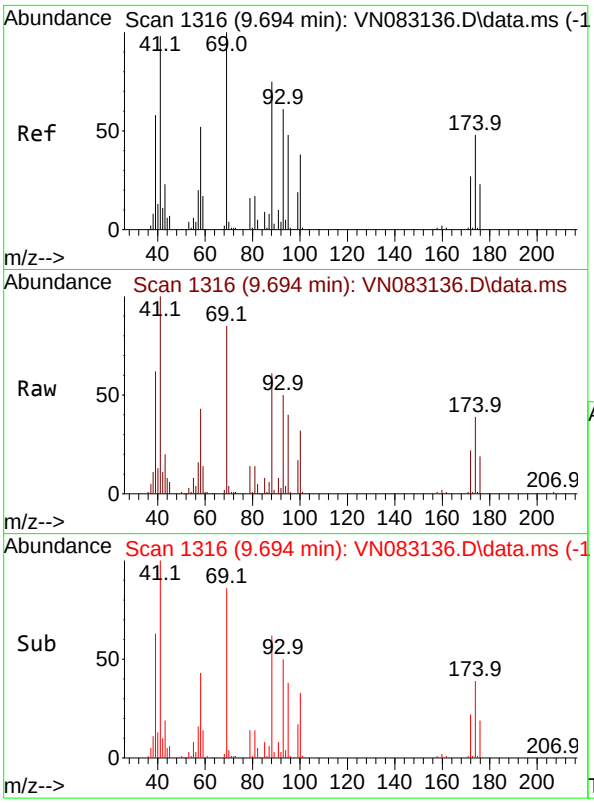



#48
Methyl methacrylate
Concen: 48.631 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 41 Resp: 148264

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 82.5 | 56.3 | 84.5 |
| 39 | 61.0 | 50.3 | 75.5 |

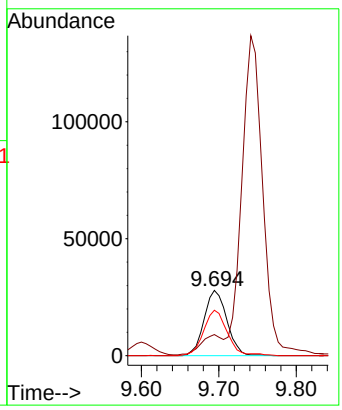





#49
1,4-Dioxane
Concen: 1036.917 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 88 Resp: 5703

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 29.1 | 27.8 | 41.8 |
| 58 | 72.4 | 59.4 | 89.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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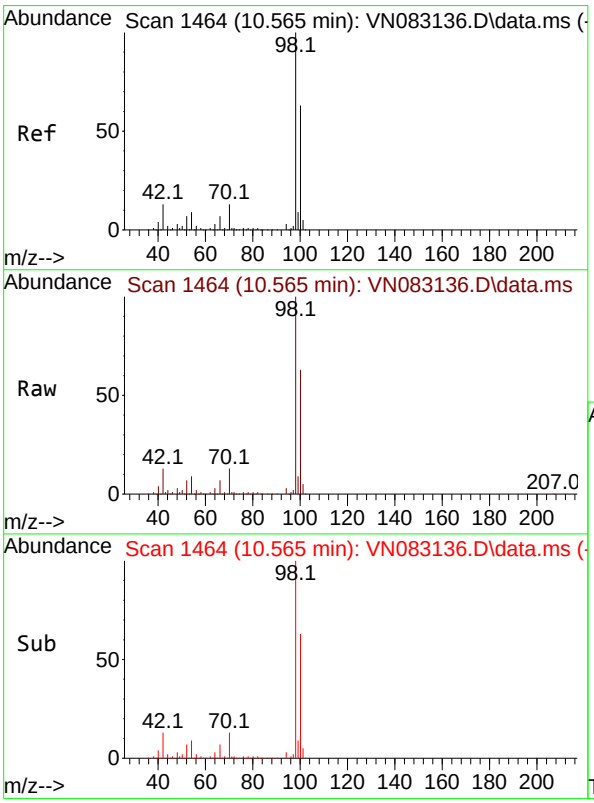
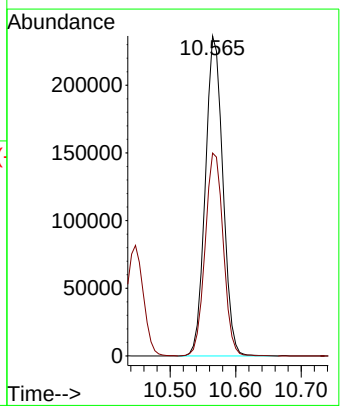
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

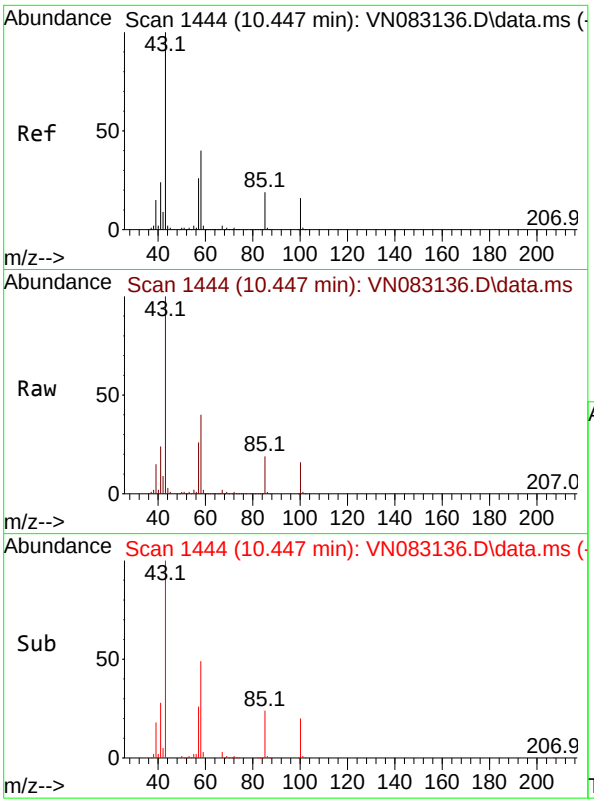



#50
Toluene-d8
Concen: 54.174 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 98 Resp: 439976

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 51.5 | 77.3 |






#51
4-Methyl-2-Pentanone
Concen: 258.493 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 90141

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 39.8 | 28.2 | 42.4 |

**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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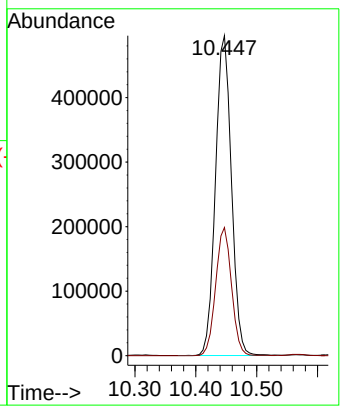
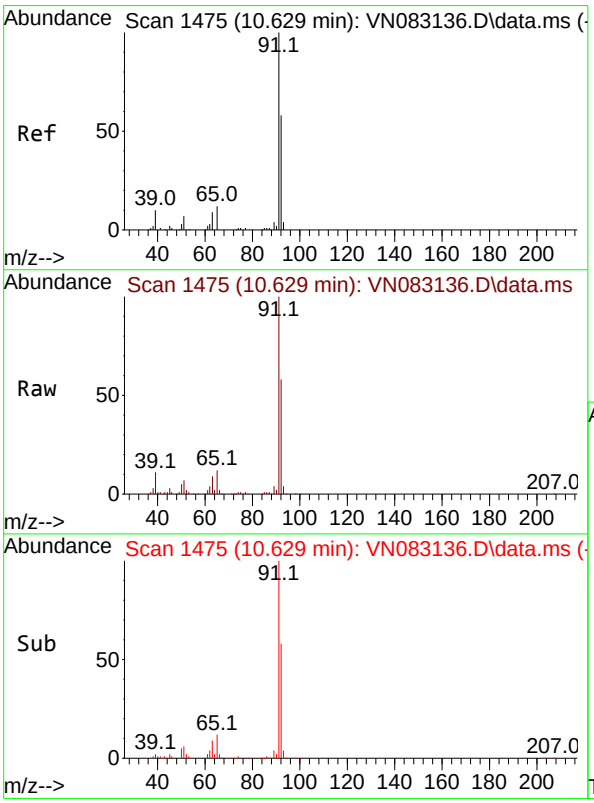
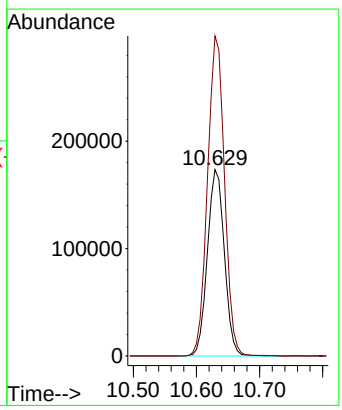


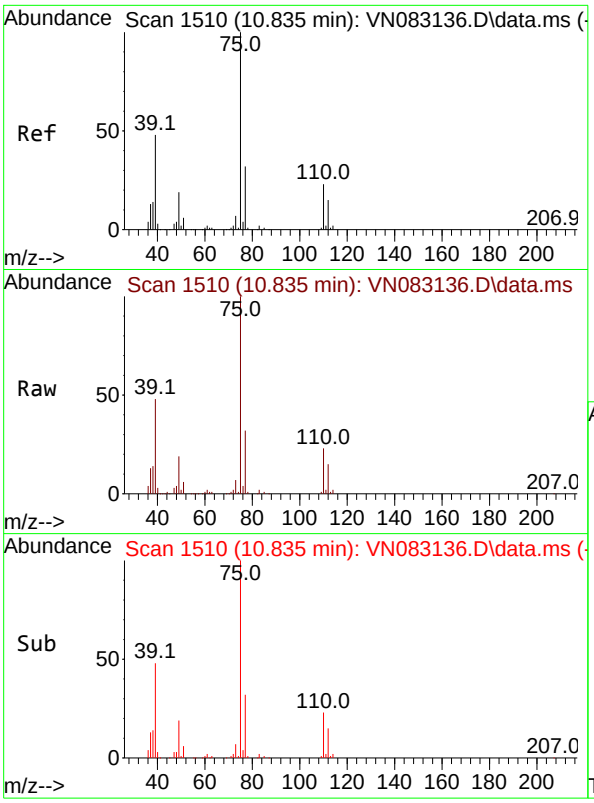




#52
Toluene
Concen: 52.127 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 92 Resp: 323148

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.1 | 139.4 | 209.0 |

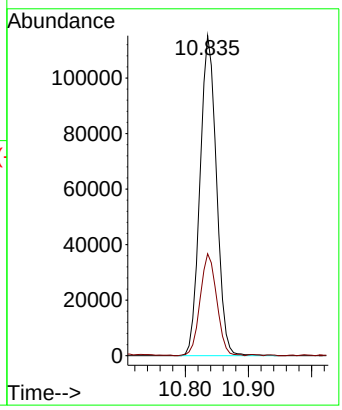





#53
t-1,3-Dichloropropene
Concen: 54.205 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 20841

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
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VSTDICCC050

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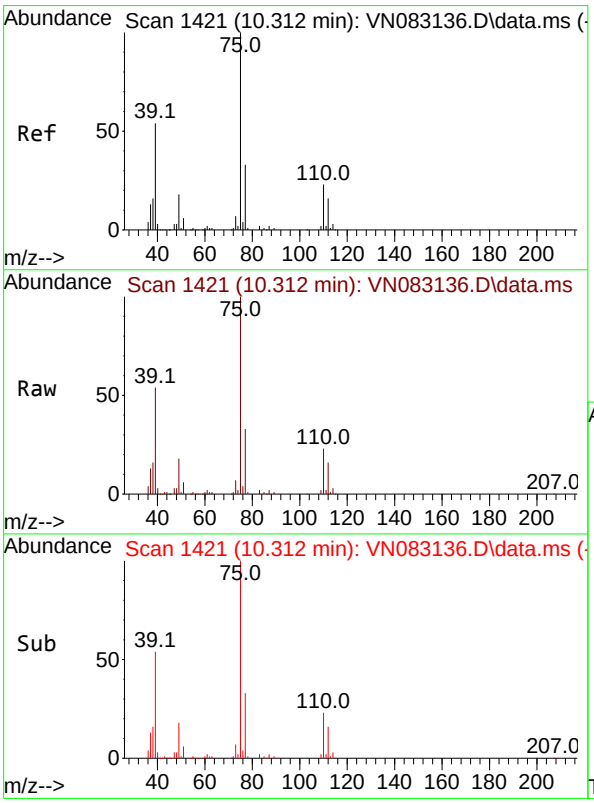
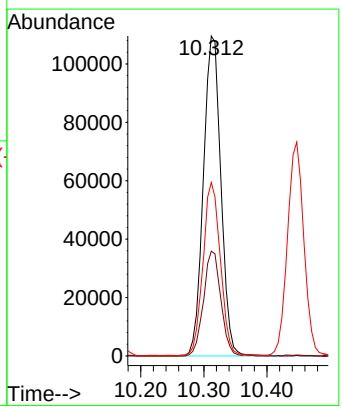
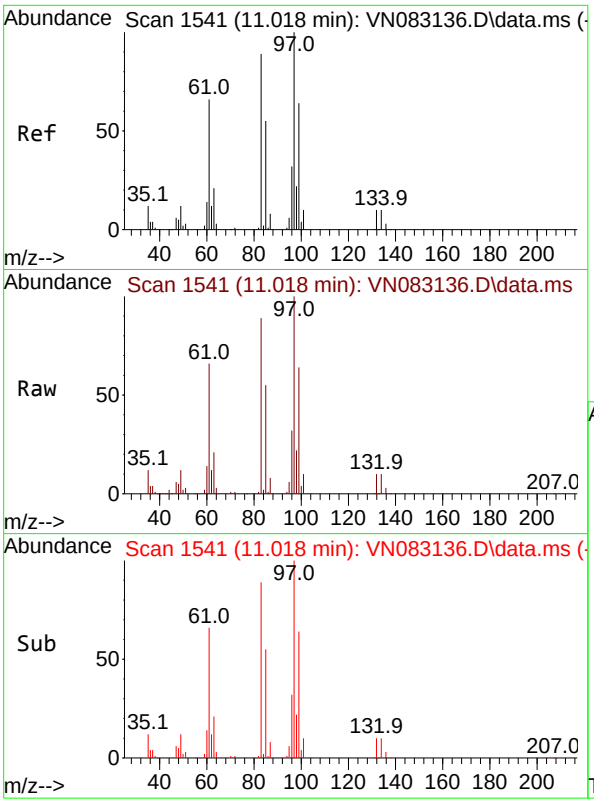



#54
cis-1,3-Dichloropropene
Concen: 51.692 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 211396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.8 | 24.3 | 36.5 |
| 39 | 54.0 | 50.5 | 75.7 |

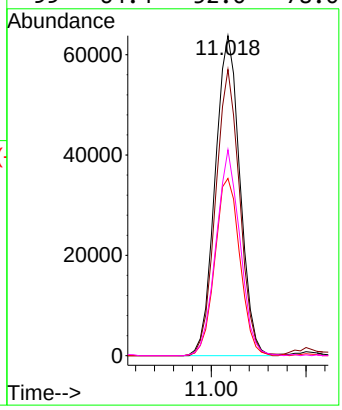





#55
1,1,2-Trichloroethane
Concen: 52.387 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 97 Resp: 11638

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 89.4 | 71.4 | 107.0 |
| 85 | 55.4 | 45.8 | 68.6 |
| 99 | 64.4 | 52.0 | 78.0 |




**Instrument :**
MSVOA_N
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VSTDICCC050

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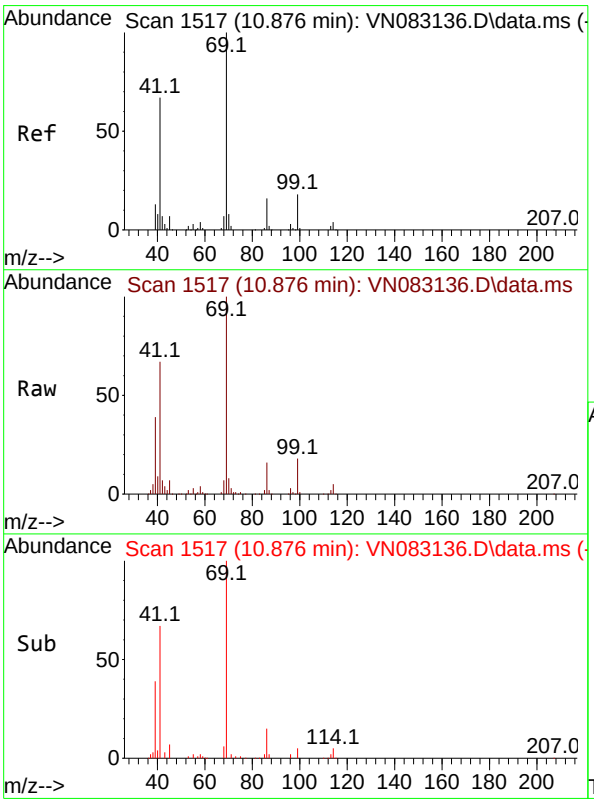
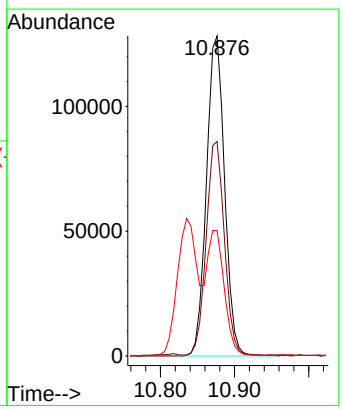
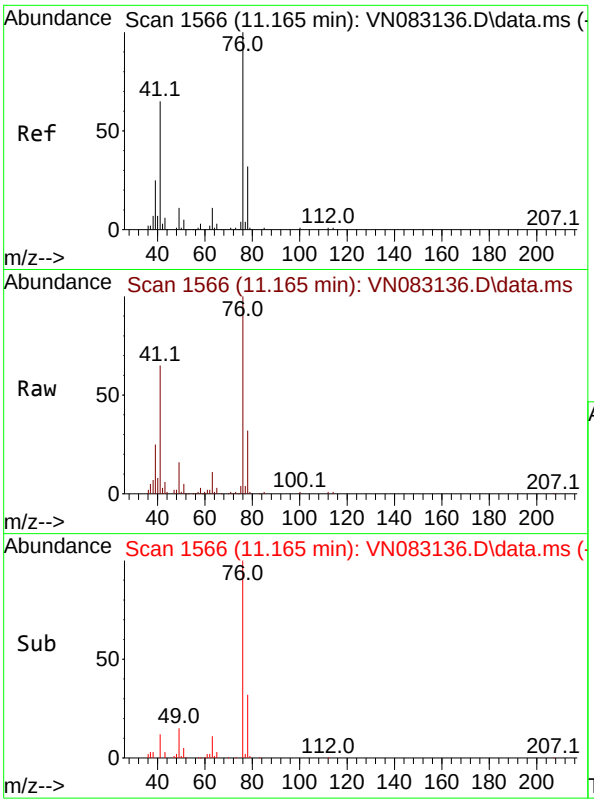



#56
Ethyl methacrylate
Concen: 51.964 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 69 Resp: 217635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 66.9 | 63.4 | 95.2 |
| 39 | 35.2 | 37.4 | 56.0# |

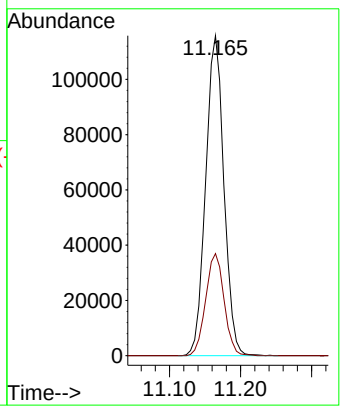





#57
1,3-Dichloropropane
Concen: 52.133 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 76 Resp: 20644

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.2 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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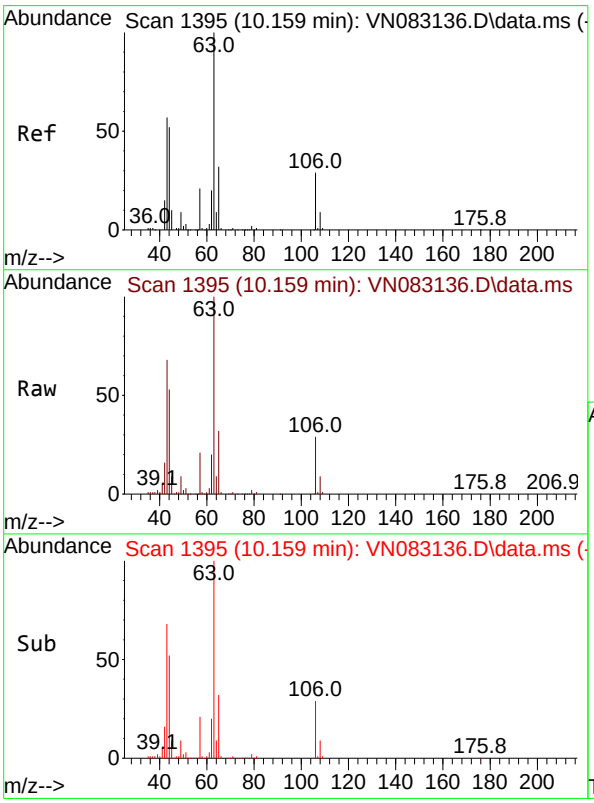
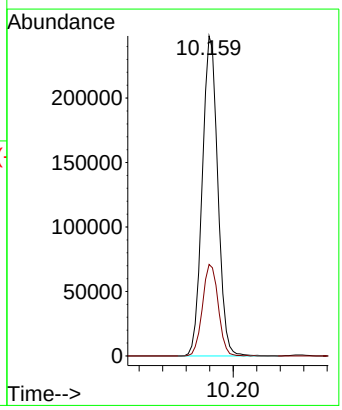
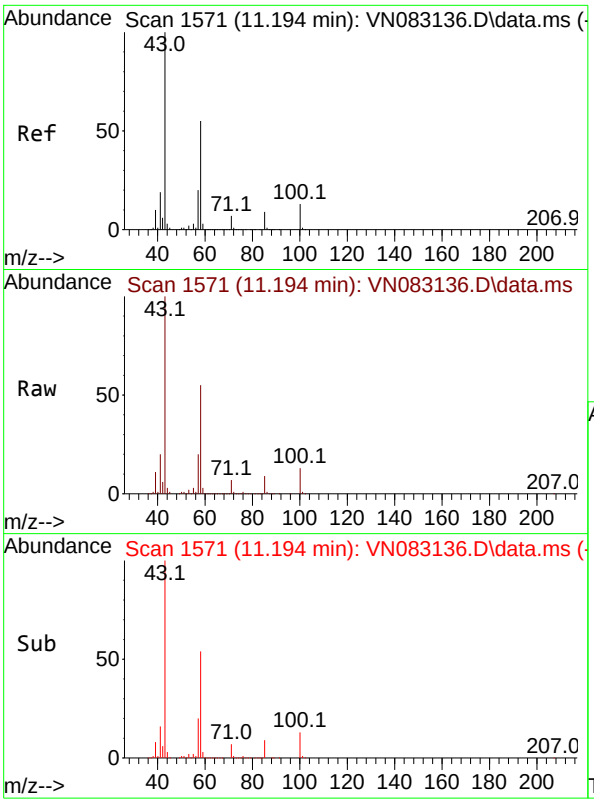



#58
2-Chloroethyl Vinyl ether
Concen: 256.939 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 63 Resp: 454871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 29.0 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 256.396 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 69170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 54.9 | 24.6 | 73.8 |

**Instrument :**
MSVOA_N
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VSTDICCC050

**Manual Integrations**
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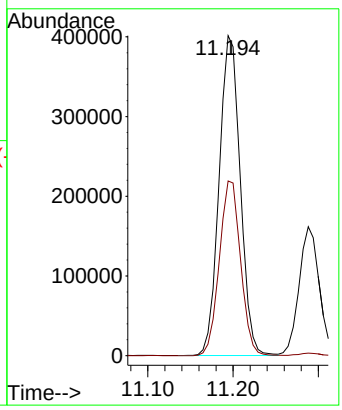
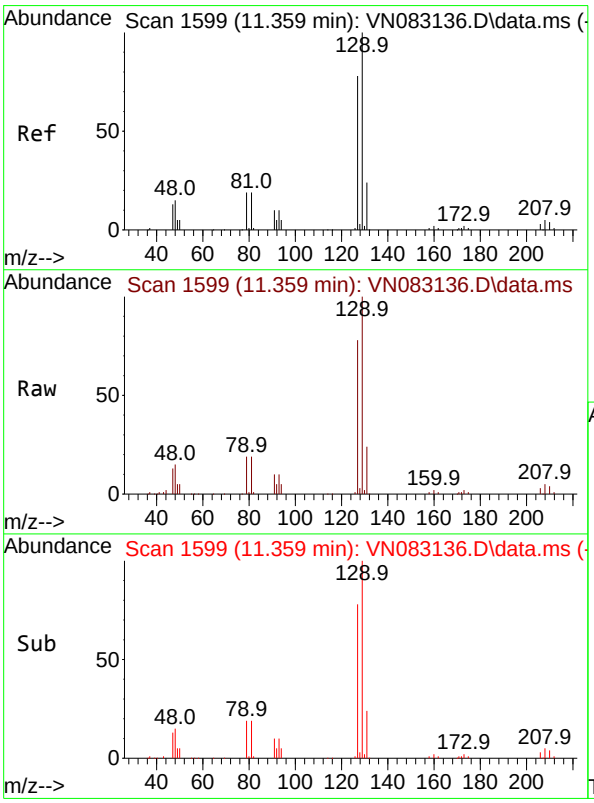
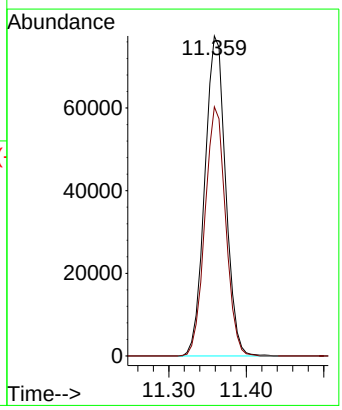


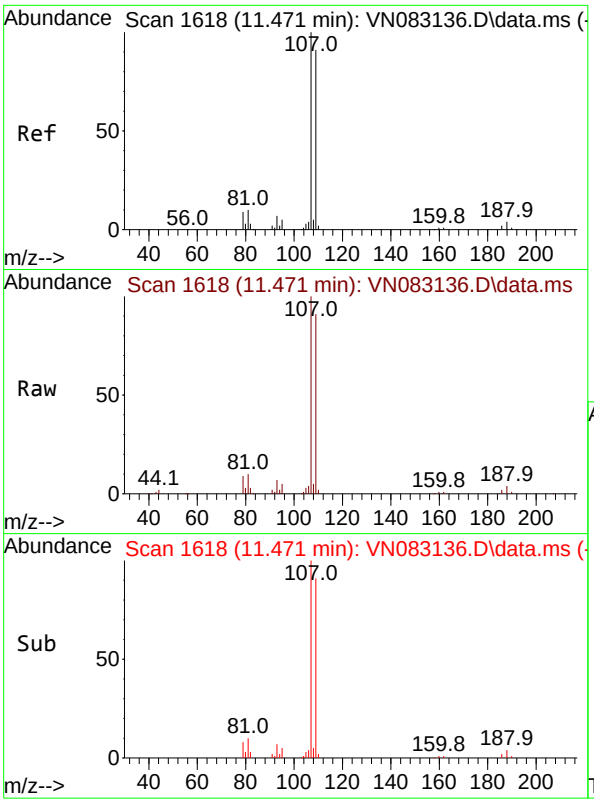




#60
Dibromochloromethane
Concen: 53.688 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:129 Resp: 144208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.4 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 51.912 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:107 Resp: 12115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.4 | 73.7 | 110.5 |

**Instrument :**
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VSTDICCC050

**Manual Integrations**
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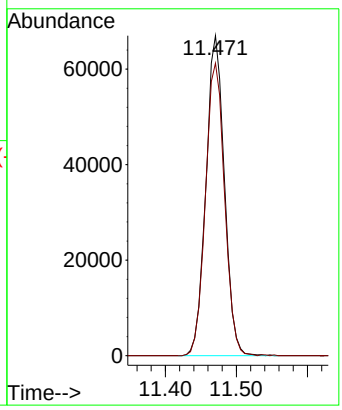
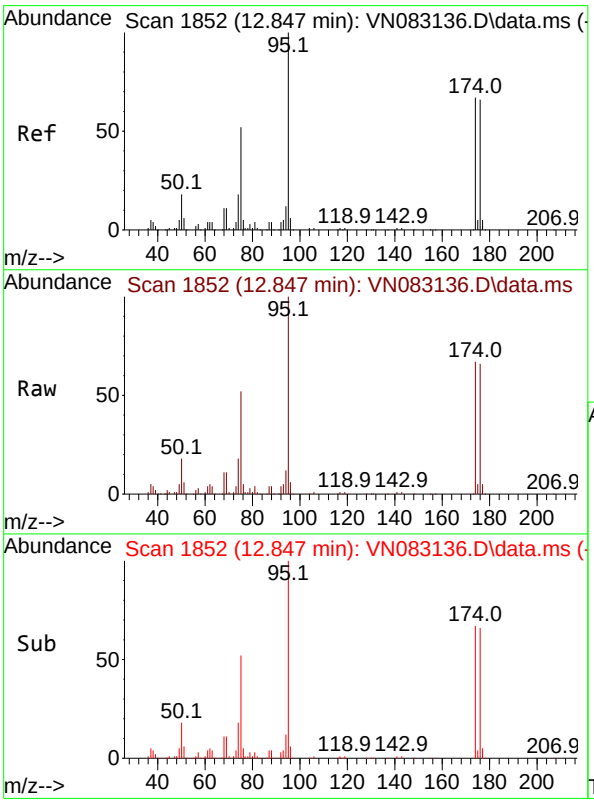
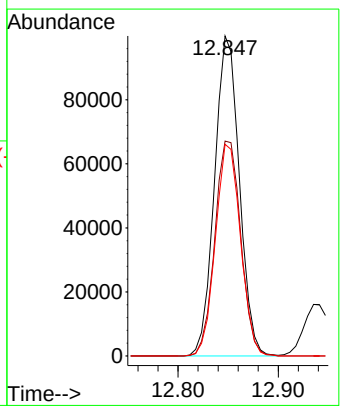


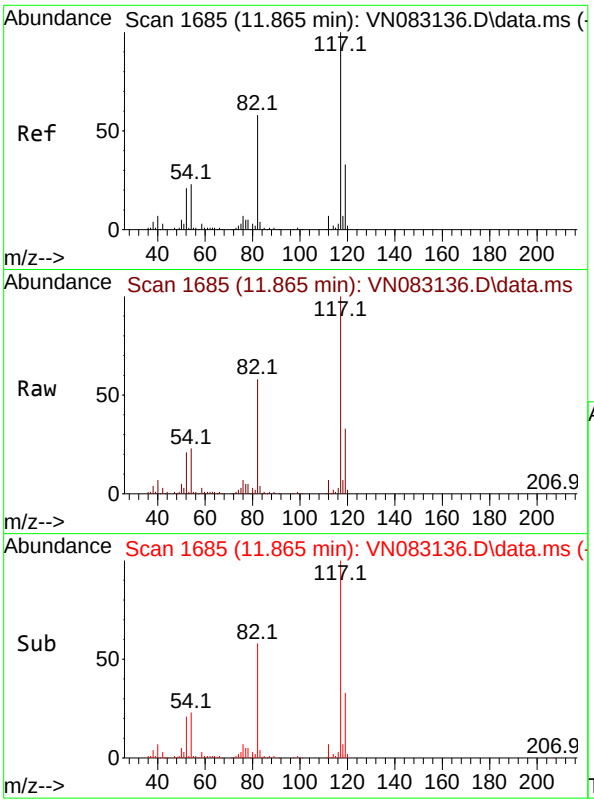




#62
4-Bromofluorobenzene
Concen: 54.173 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 95 Resp: 171524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.0 | 0.0 | 159.2 |
| 176 | 66.9 | 0.0 | 147.6 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:117 Resp: 30311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 57.9 | 47.5 | 71.3 |
| 119 | 32.7 | 25.6 | 38.4 |

**Instrument :**
MSVOA_N
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VSTDICCC050

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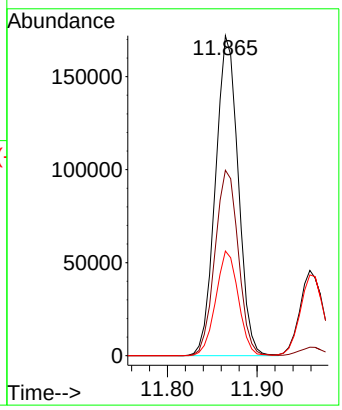
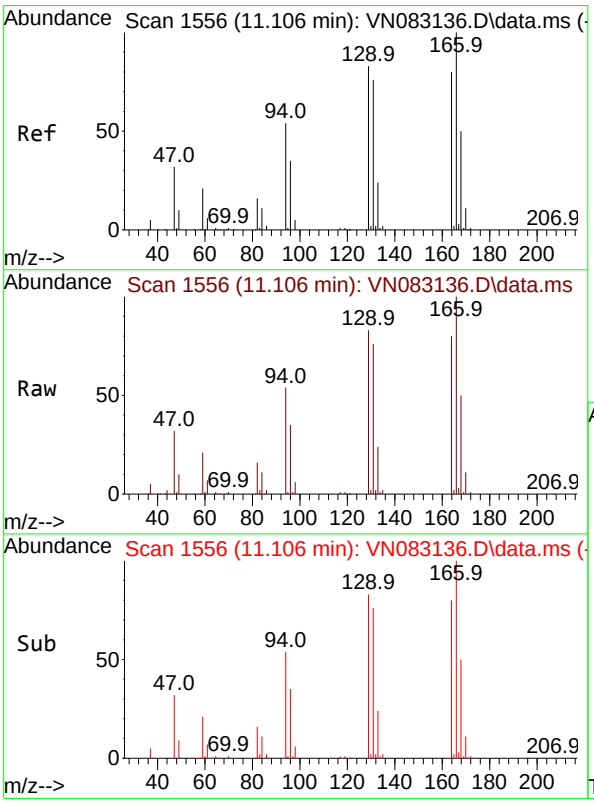
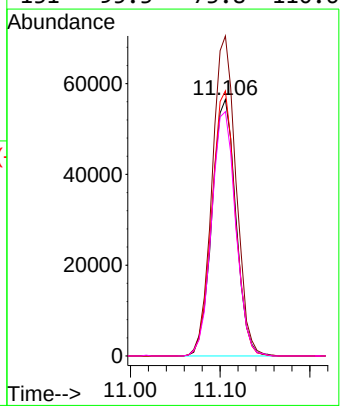


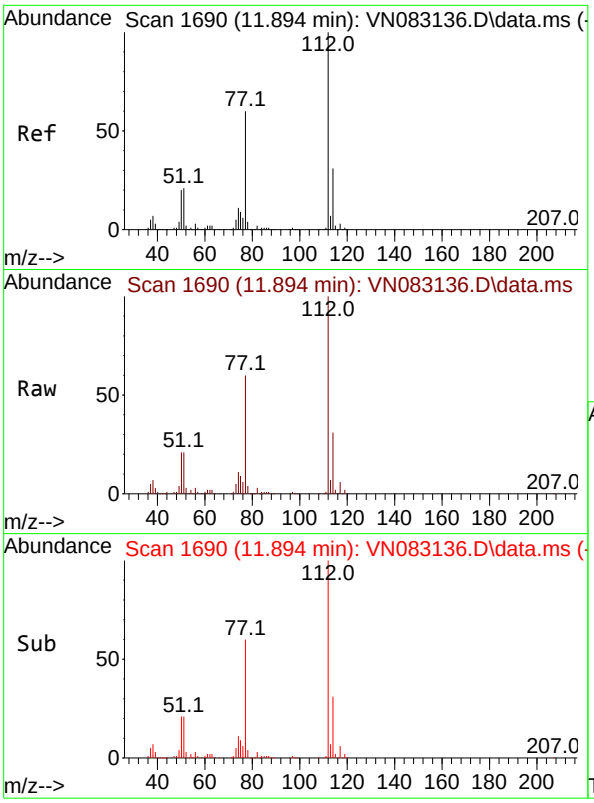




#64
Tetrachloroethene
Concen: 51.784 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:164 Resp: 103955

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 124.8 | 101.4 | 152.0 |
| 129 | 103.3 | 75.7 | 113.5 |
| 131 | 95.3 | 73.8 | 110.6 |






#65
Chlorobenzene
Concen: 51.679 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:112 Resp: 34617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 30.6 | 26.2 | 39.2 |

**Instrument :**
MSVOA_N
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VSTDICCC050

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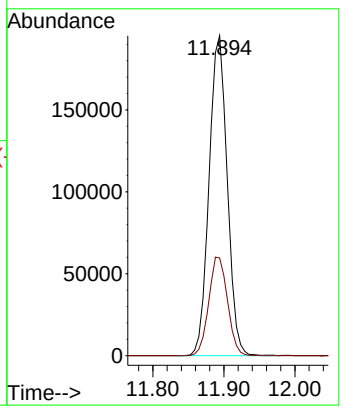
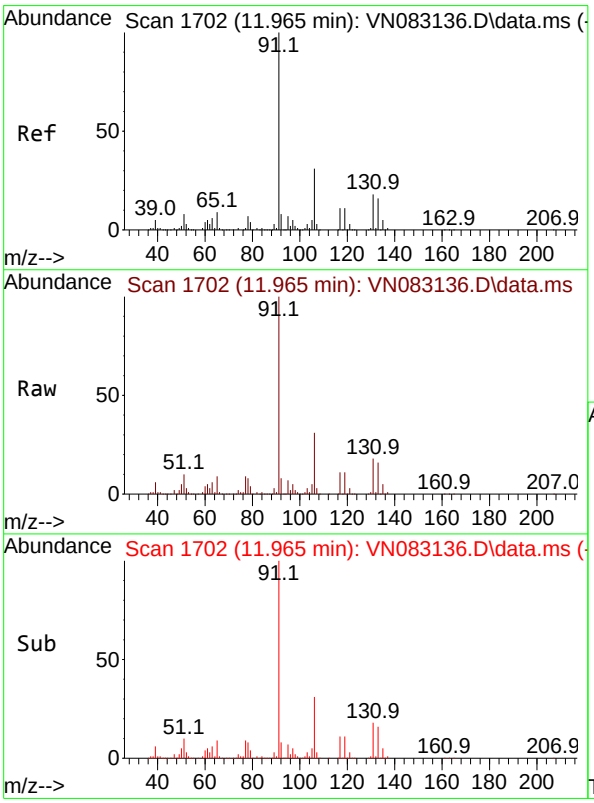
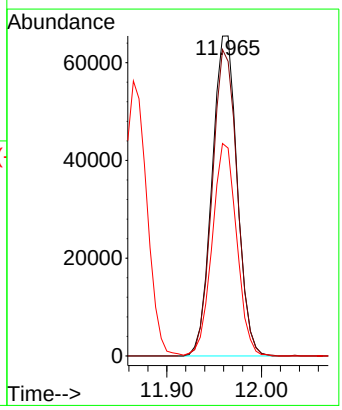


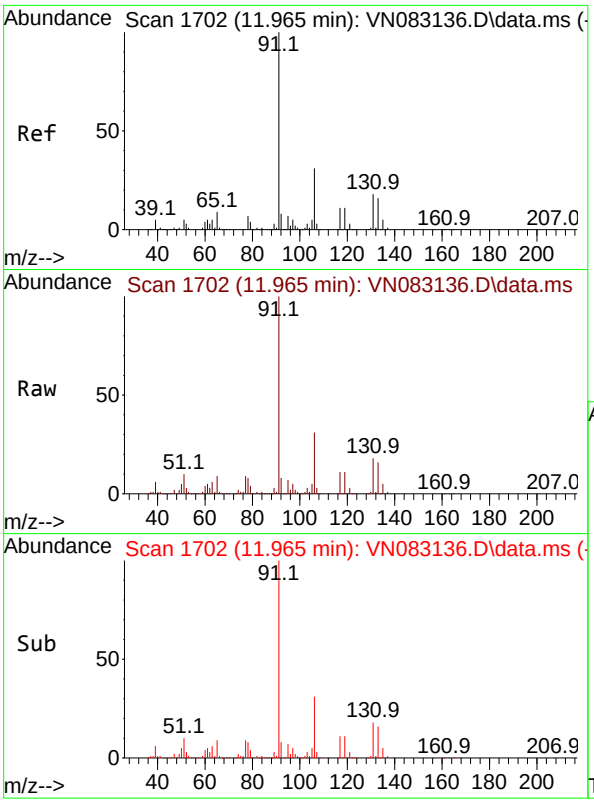




#66
1,1,1,2-Tetrachloroethane
Concen: 51.242 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:131 Resp: 121057

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.9 | 47.3 | 142.0 |
| 119 | 64.7 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 51.179 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

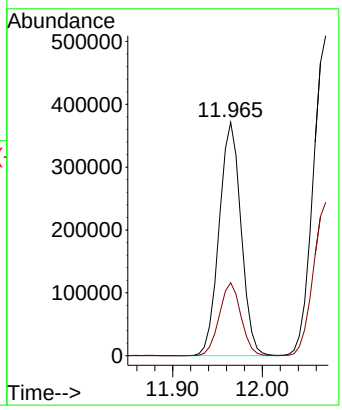
Tgt Ion: 91 Resp: 62890

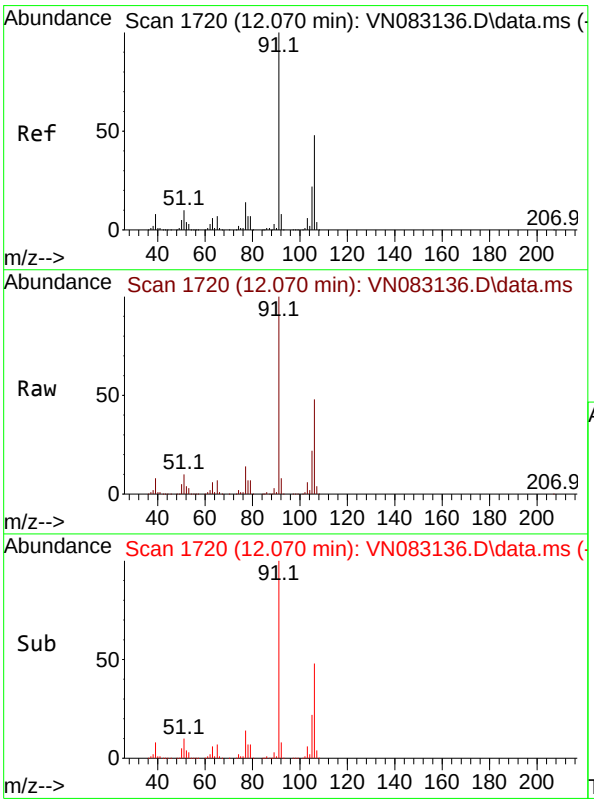
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.3 | 24.0 | 36.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

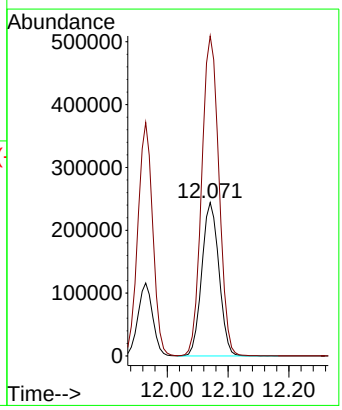


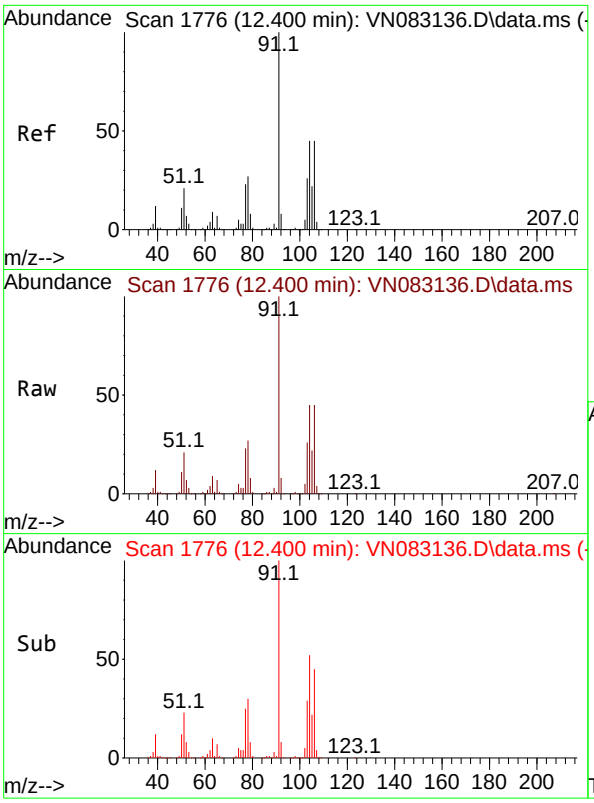




#68
m/p-Xylenes
Concen: 103.683 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:106 Resp: 477261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 209.9 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 51.638 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:106 Resp: 23443

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 222.4 | 111.3 | 333.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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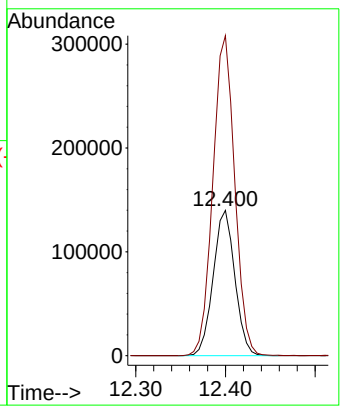
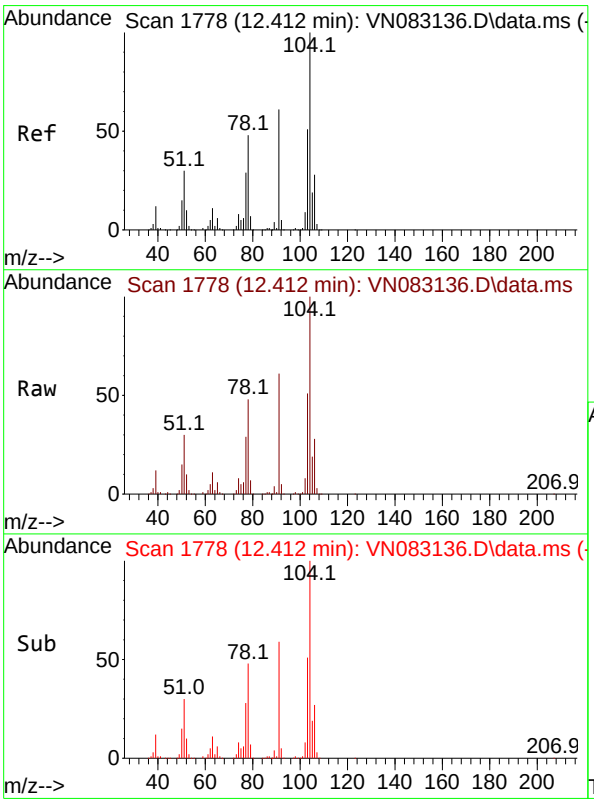
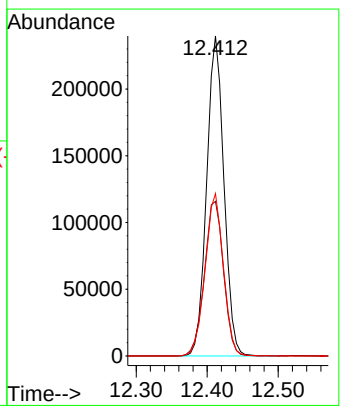


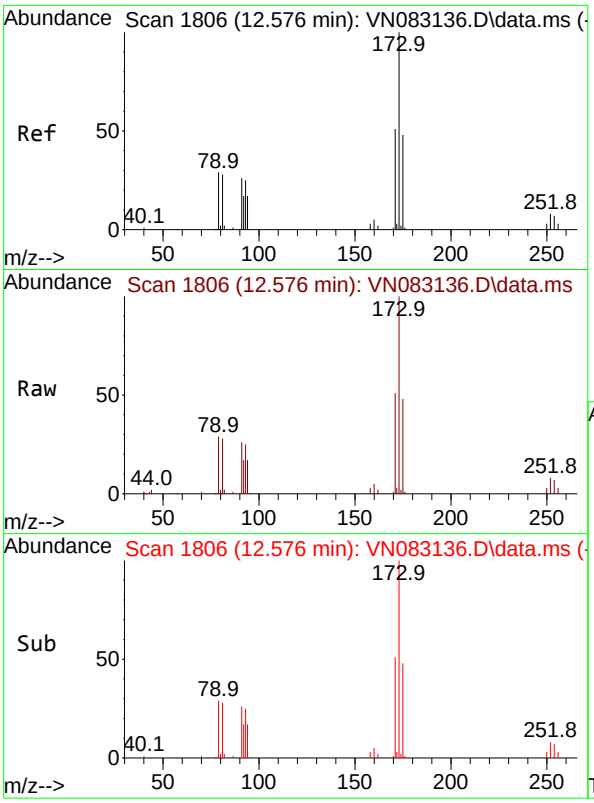




#70
Styrene
Concen: 53.115 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:104 Resp: 405002

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.4 | 41.6 | 62.4 |
| 103 | 53.7 | 44.0 | 66.0 |

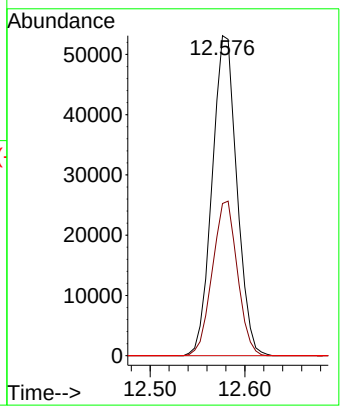





#71
Bromoform
Concen: 53.850 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:173 Resp: 9637

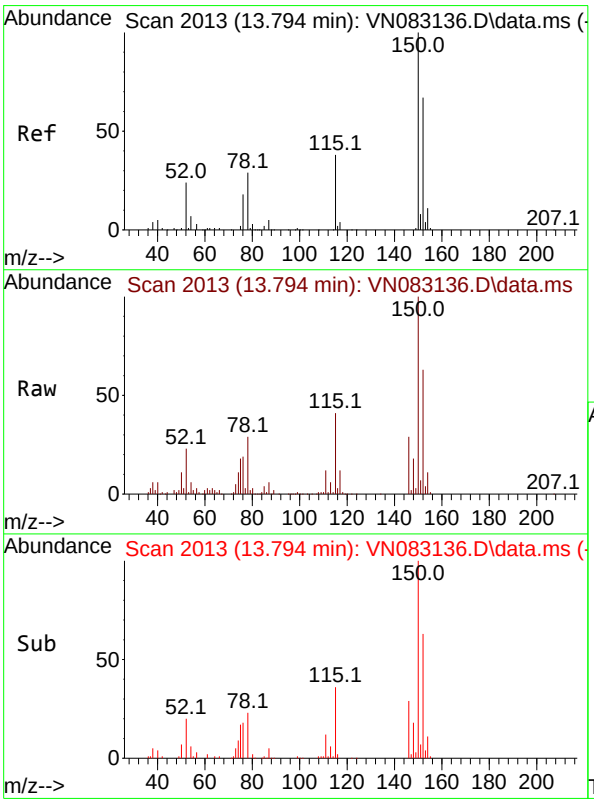
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.9 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

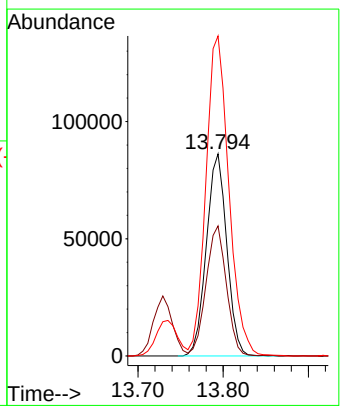
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

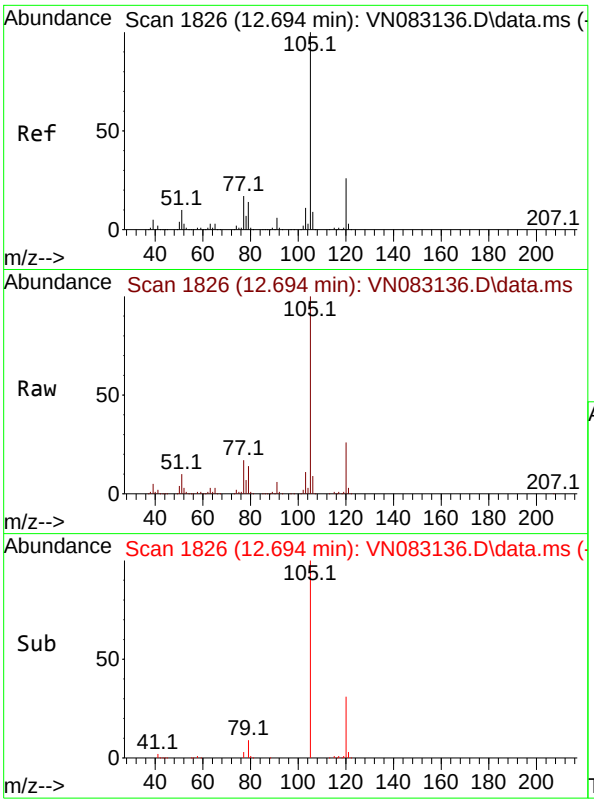



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:152 Resp: 143466

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.9 | 30.6 | 91.6 |
| 150 | 177.7 | 0.0 | 348.6 |






#73
Isopropylbenzene
Concen: 50.795 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

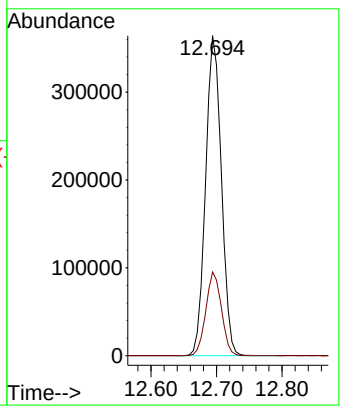
Tgt Ion:105 Resp: 60952

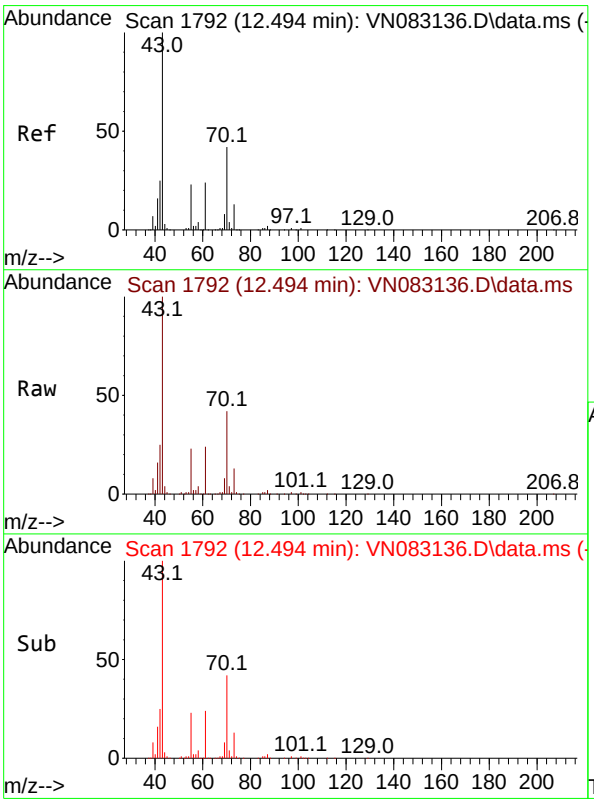
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.8 | 12.9 | 38.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

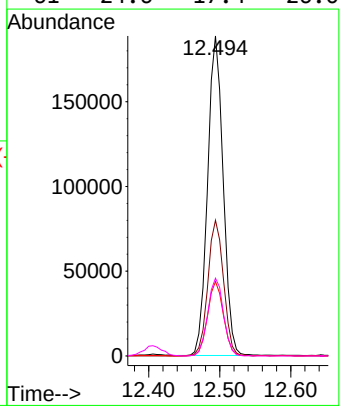


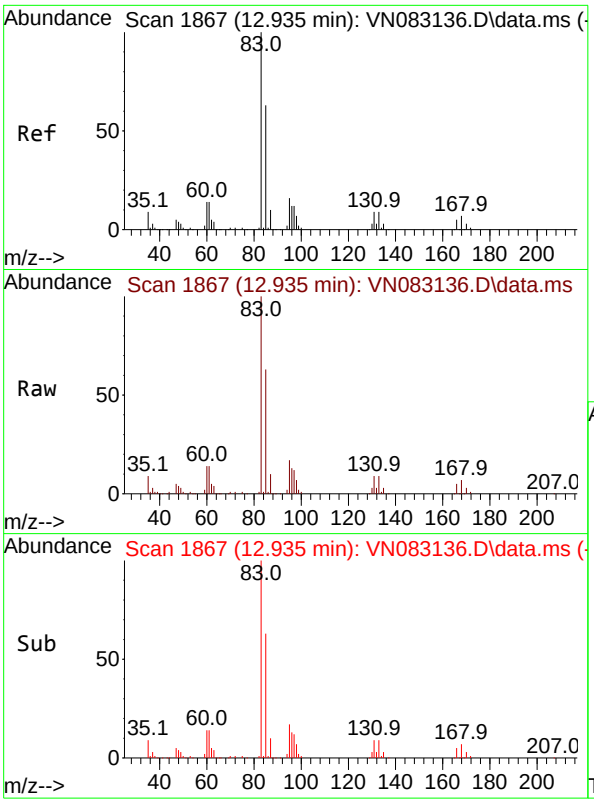




#74
N-amyl acetate
Concen: 48.950 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 43 Resp: 287319

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 42.7 | 29.8 | 44.6 |
| 55 | 23.8 | 18.7 | 28.1 |
| 61 | 24.6 | 17.4 | 26.0 |






#75
1,1,2,2-Tetrachloroethane
Concen: 49.349 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

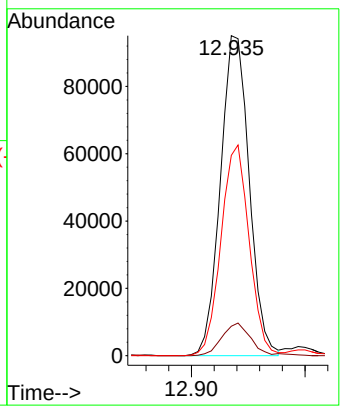
Tgt Ion: 83 Resp: 16748

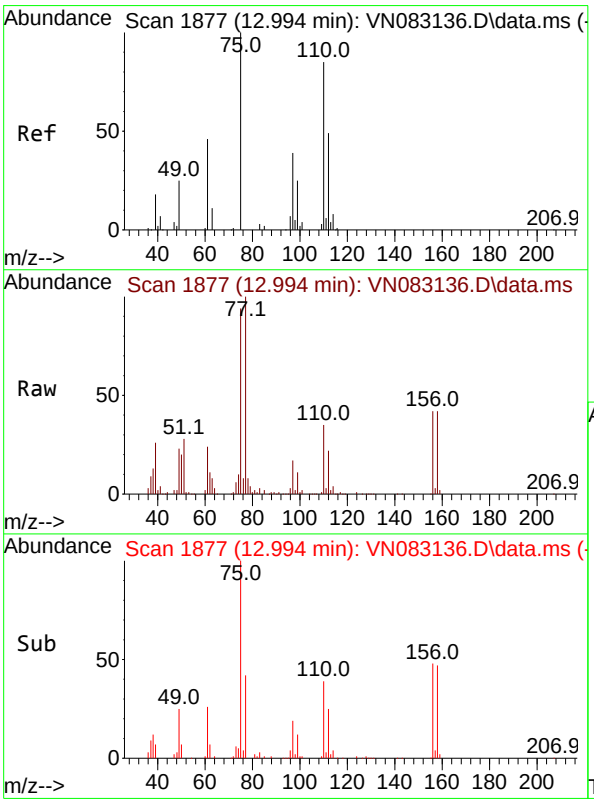
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.4 | 5.0 | 14.9 |
| 85 | 64.4 | 31.9 | 95.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

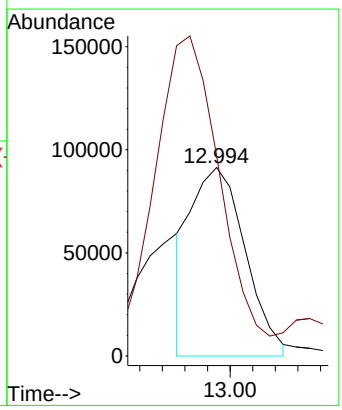


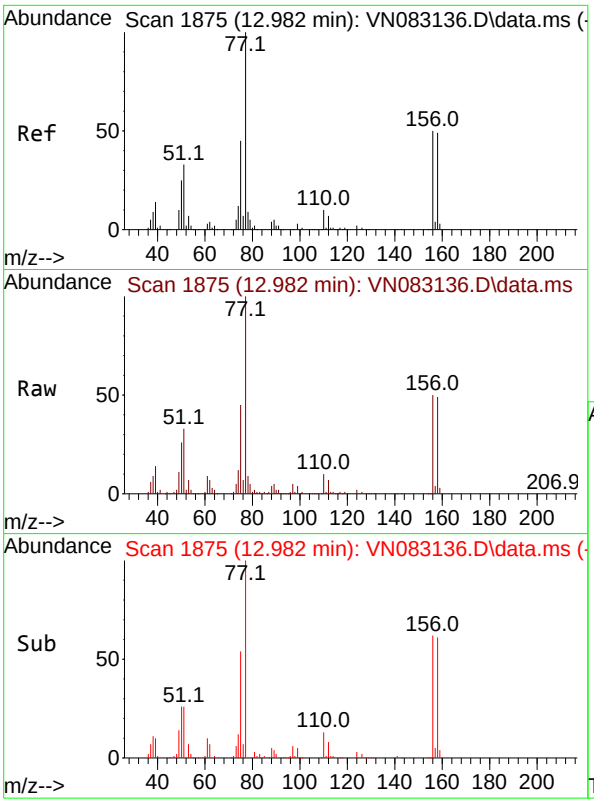




#76
1,2,3-Trichloropropane
Concen: 48.363 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 152531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 207.4 | 110.9 | 332.6 |

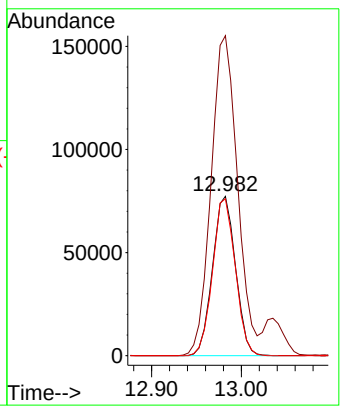





#77
Bromobenzene
Concen: 51.587 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:156 Resp: 13751

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 230.1 | 111.3 | 333.8 |
| 158 | 97.4 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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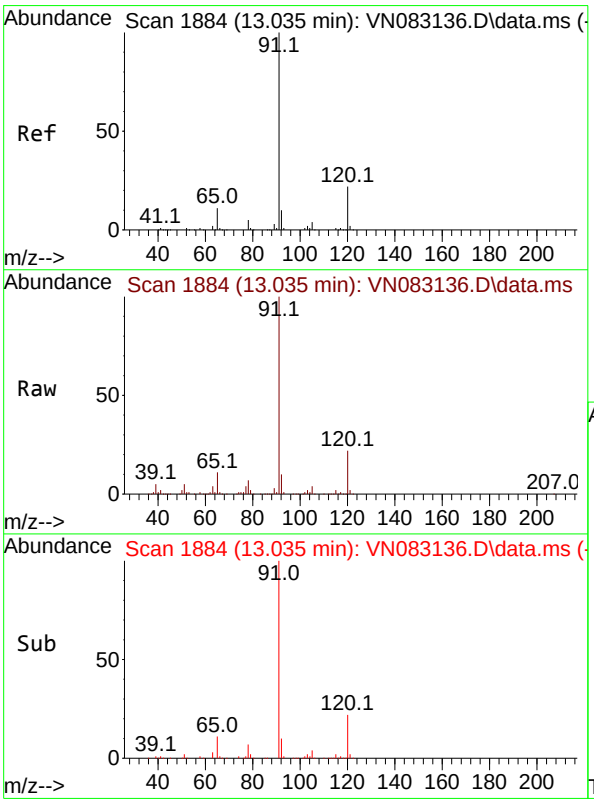
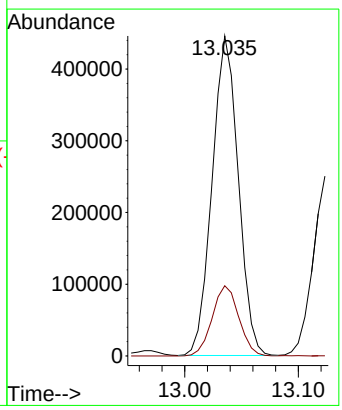
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

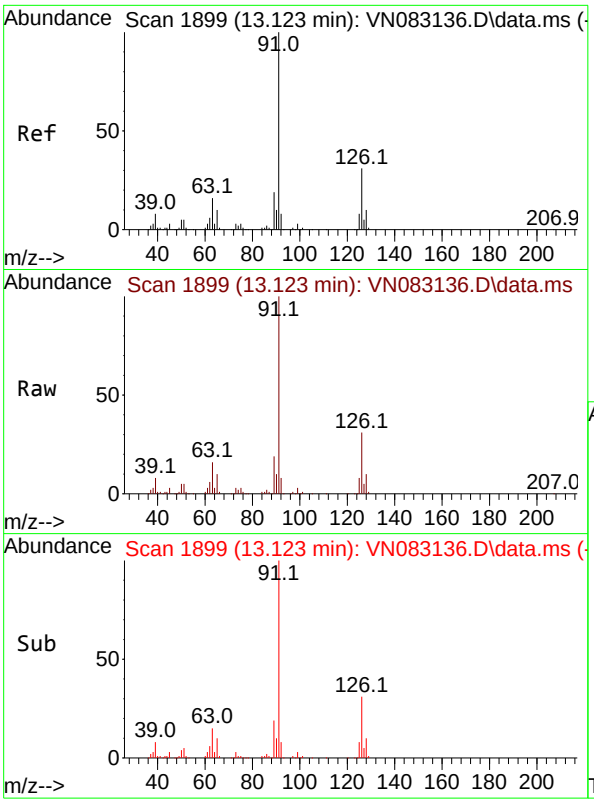



#78
n-propylbenzene
Concen: 51.584 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 91 Resp: 712768

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.3 | 10.9 | 32.9 |

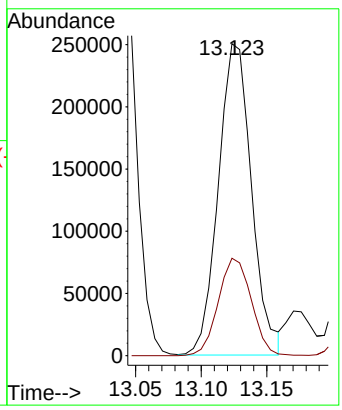





#79
2-Chlorotoluene
Concen: 50.371 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 91 Resp: 44126

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.1 | 16.2 | 48.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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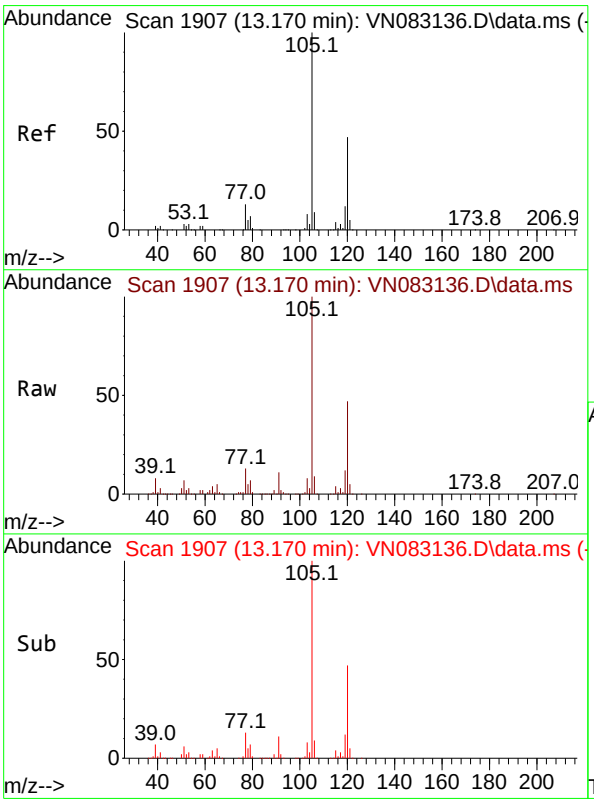
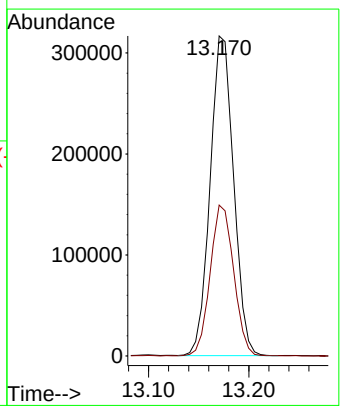
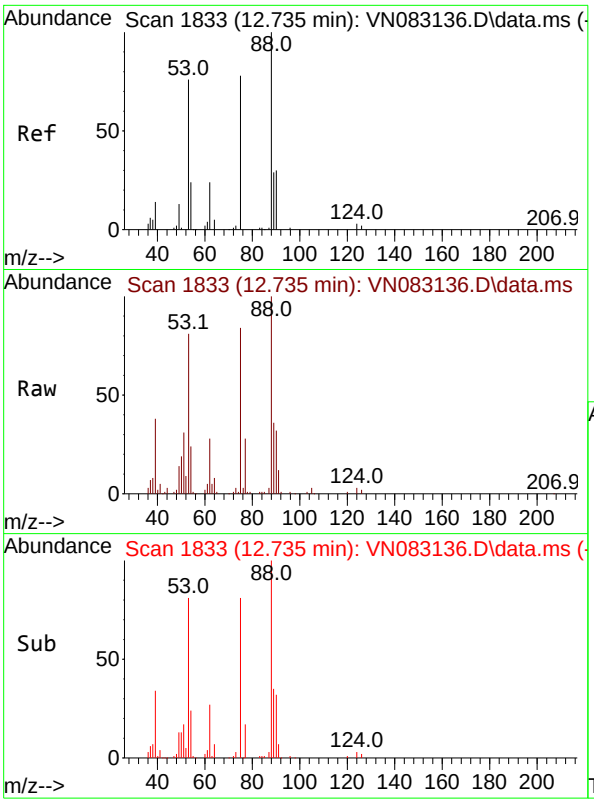



#80
1,3,5-Trimethylbenzene
Concen: 51.254 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:105 Resp: 514918

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.5 | 24.3 | 72.8 |

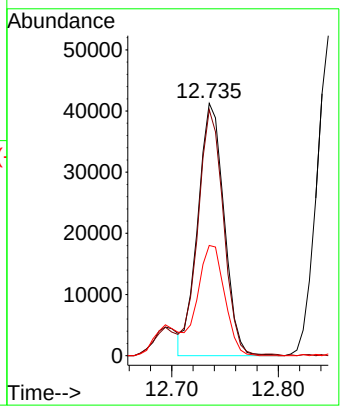





#81
trans-1,4-Dichloro-2-butene
Concen: 48.894 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 7077

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 94.2 | 88.4 | 132.6 |
| 89 | 44.3 | 36.3 | 54.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
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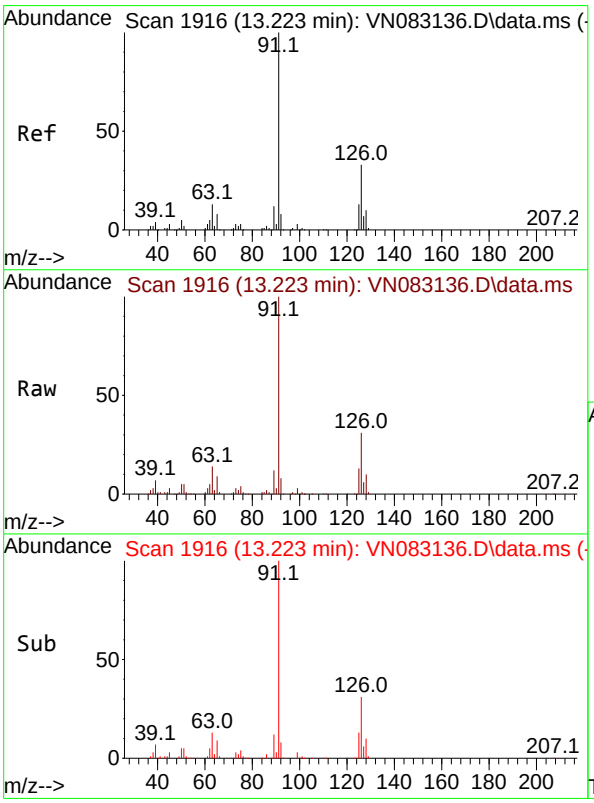
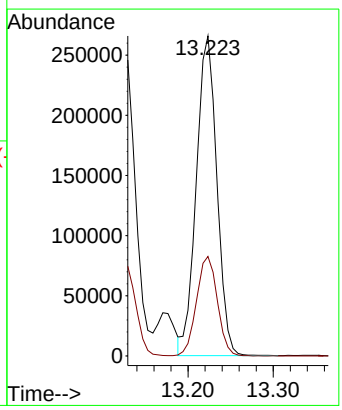
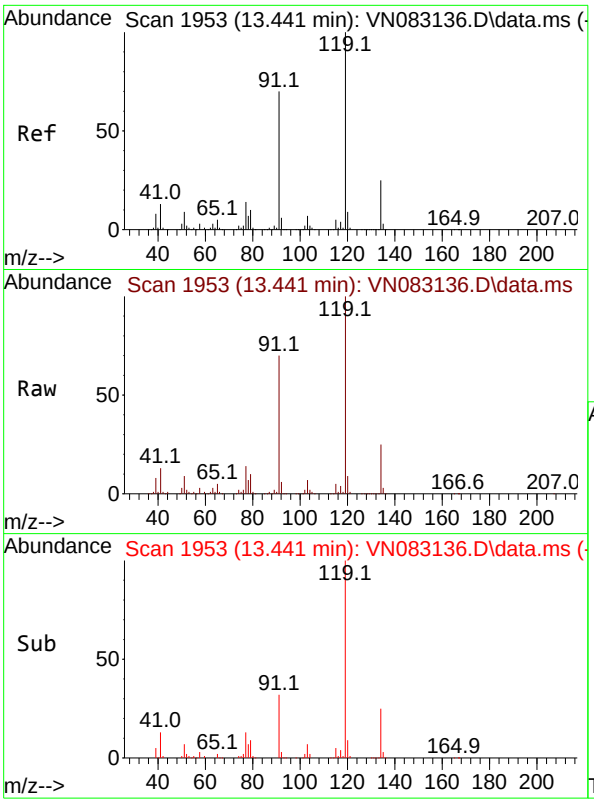



#82
4-Chlorotoluene
Concen: 50.684 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 91 Resp: 445369

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.6 | 16.2 | 48.6 |

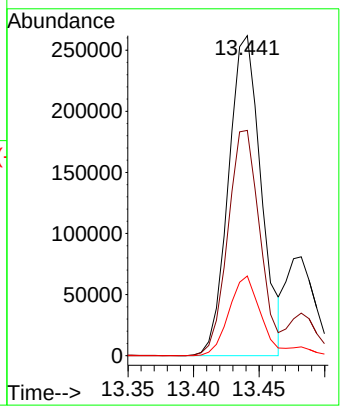





#83
tert-Butylbenzene
Concen: 50.983 ug/l
RT: 13.441 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:119 Resp: 45359

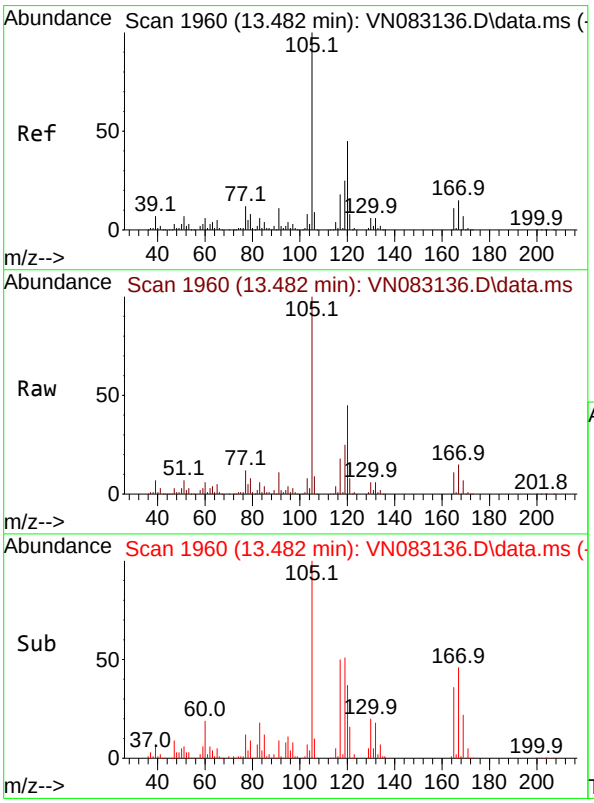
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 68.9 | 35.0 | 105.1 |
| 134 | 24.1 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

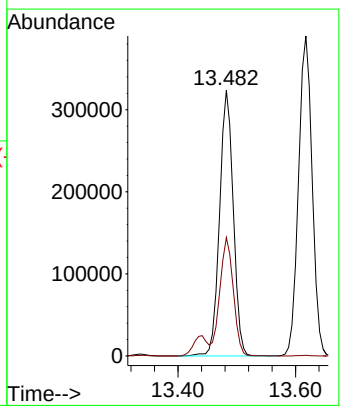
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

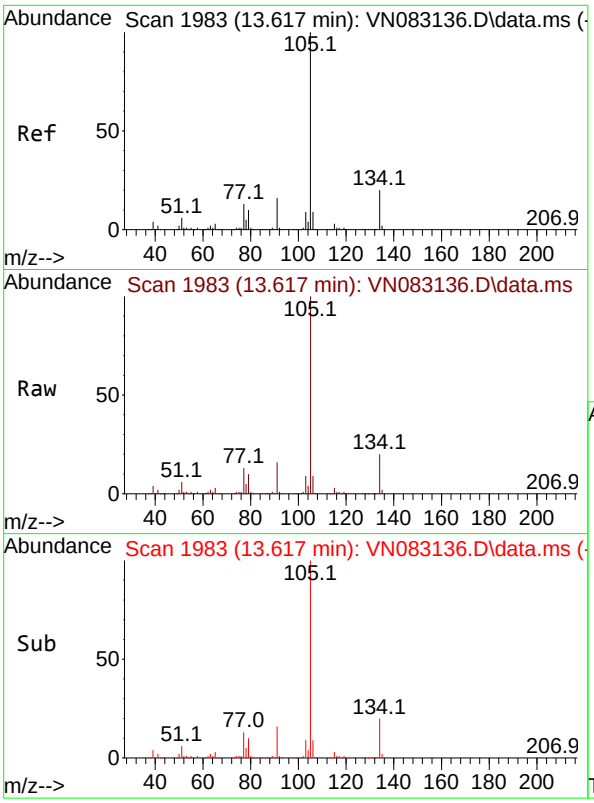



#84
1,2,4-Trimethylbenzene
Concen: 51.778 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:105 Resp: 524226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.1 | 21.9 | 65.8 |






#85
sec-Butylbenzene
Concen: 51.809 ug/l
RT: 13.617 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

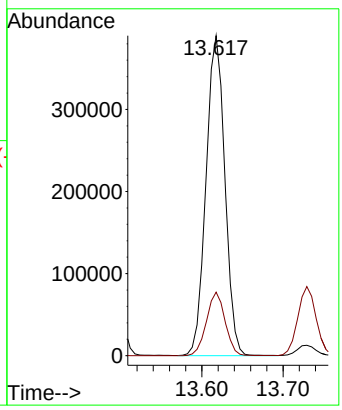
Tgt Ion:105 Resp: 62895

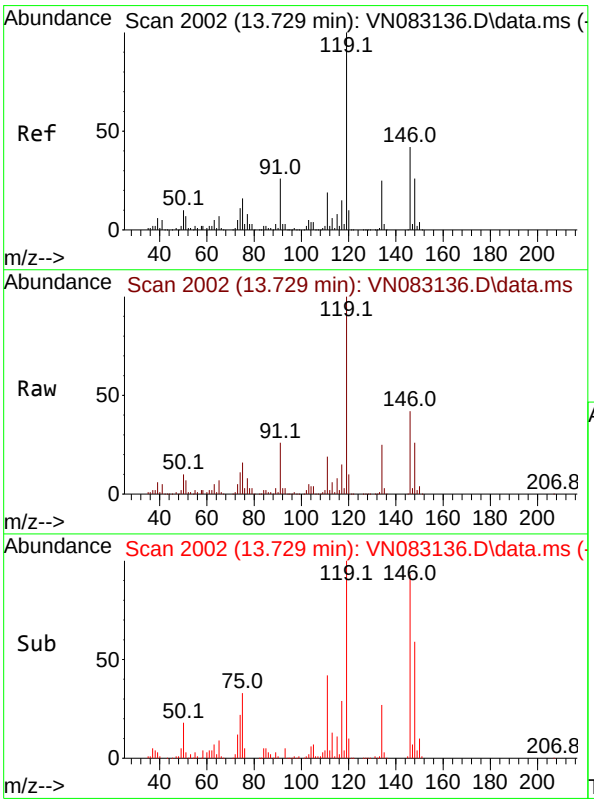
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.6 | 9.8 | 29.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

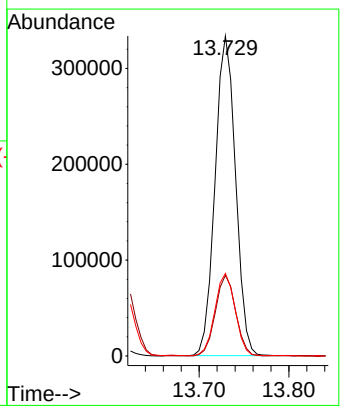


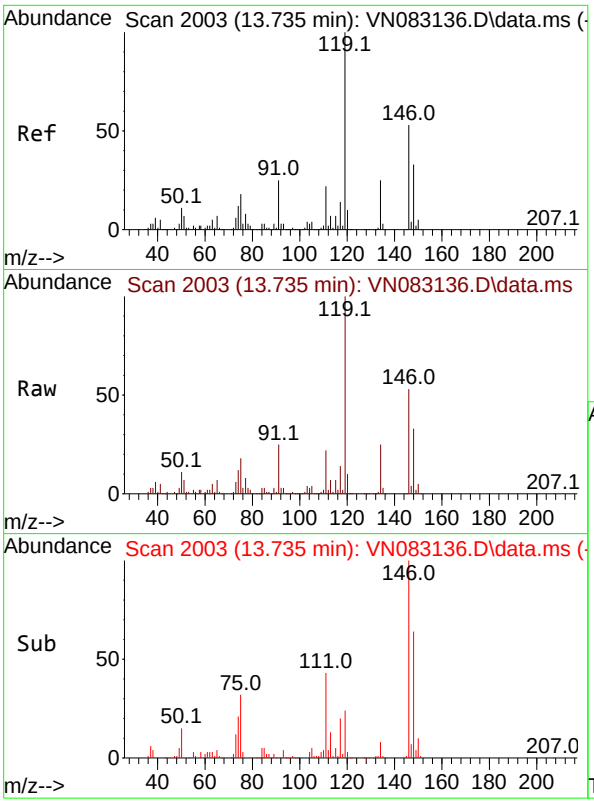




#86
p-Isopropyltoluene
Concen: 52.699 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:119 Resp: 528236

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 24.8 | 13.0 | 39.0 |
| 91 | 25.4 | 12.3 | 36.9 |

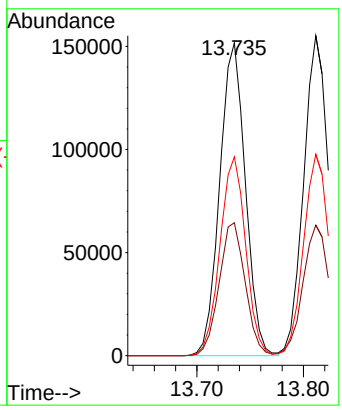





#87
1,3-Dichlorobenzene
Concen: 50.651 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:146 Resp: 25405

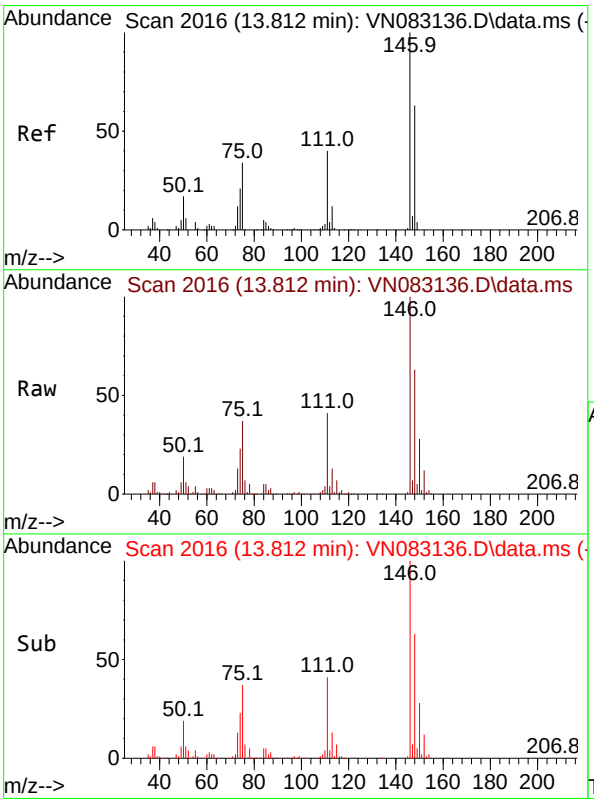
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.1 | 20.6 | 61.9 |
| 148 | 63.5 | 31.8 | 95.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

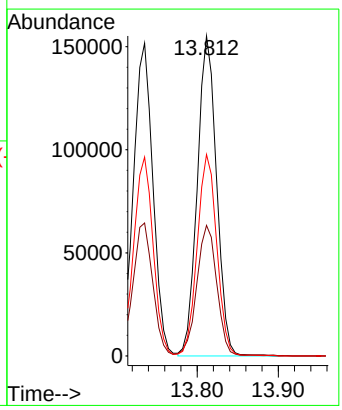
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

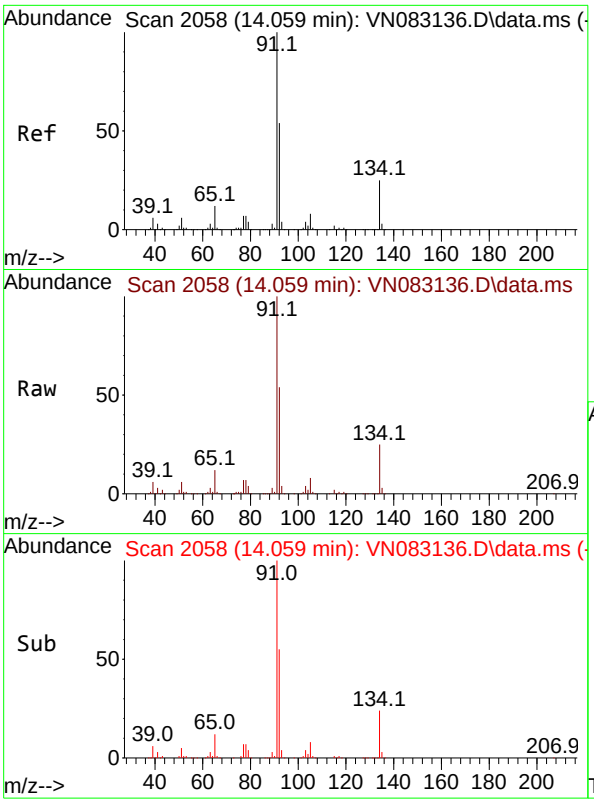



#88
1,4-Dichlorobenzene
Concen: 50.589 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:146 Resp: 255814

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.0 | 20.1 | 60.3 |
| 148 | 64.0 | 32.2 | 96.6 |






#89
n-Butylbenzene
Concen: 53.120 ug/l
RT: 14.059 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

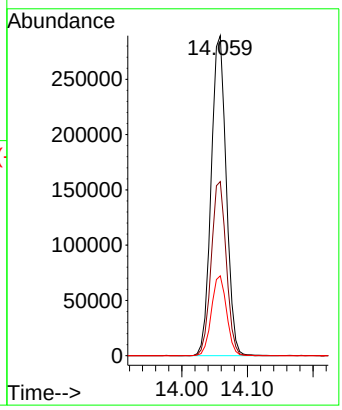
Tgt Ion: 91 Resp: 46137

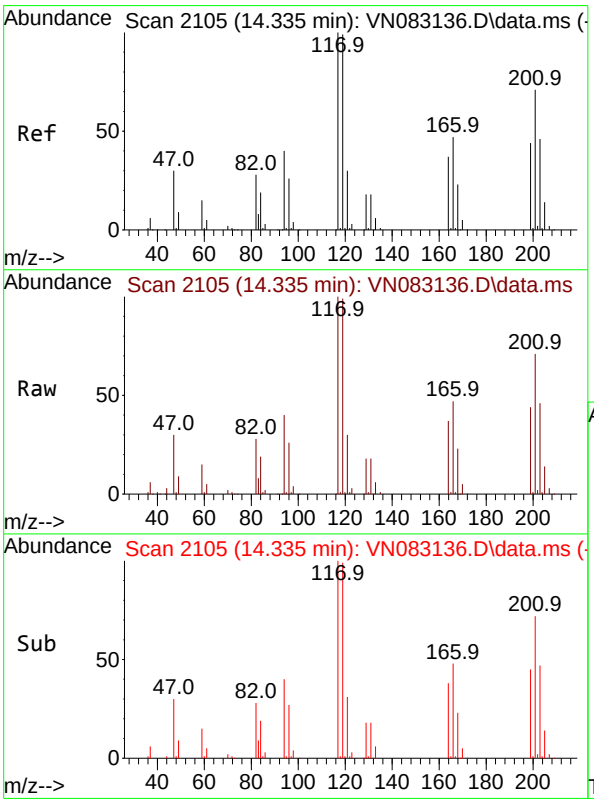
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.4 | 26.1 | 78.3 |
| 134 | 25.1 | 12.1 | 36.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

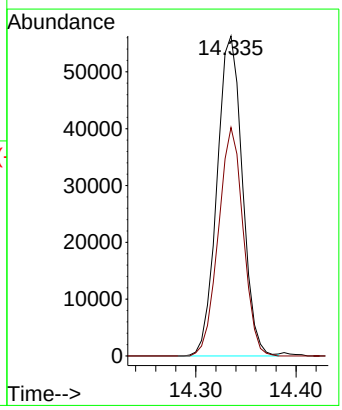


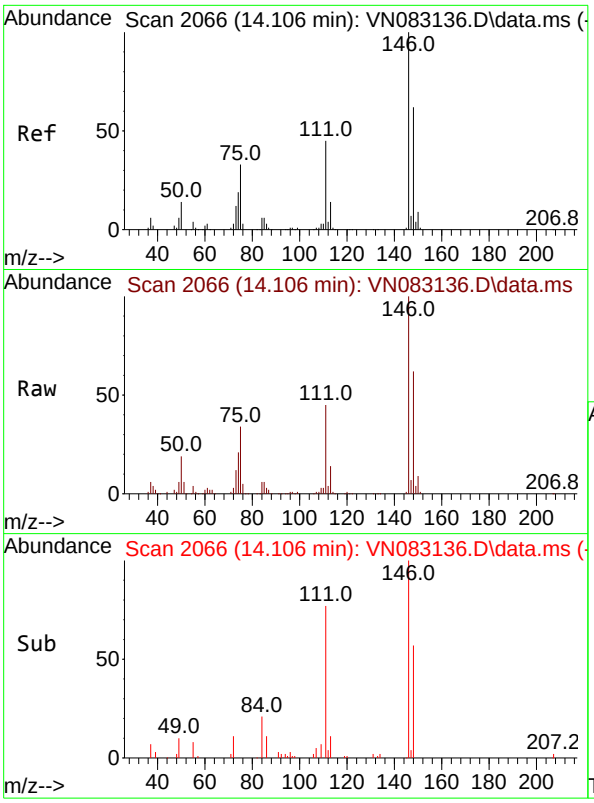




#90
Hexachloroethane
Concen: 51.037 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:117 Resp: 98836

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 69.9 | 35.8 | 107.3 |

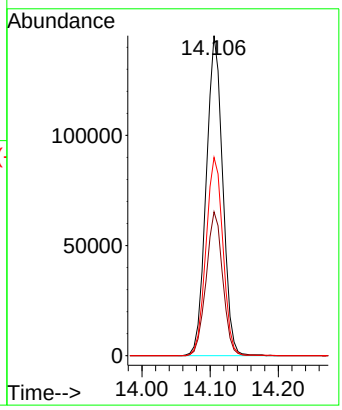





#91
1,2-Dichlorobenzene
Concen: 50.365 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:146 Resp: 24446

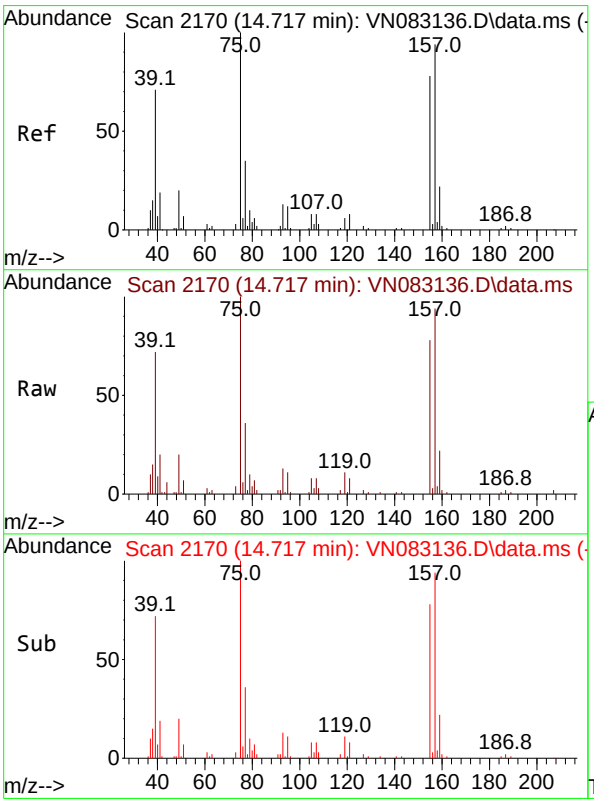
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.3 | 21.4 | 64.2 |
| 148 | 63.6 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

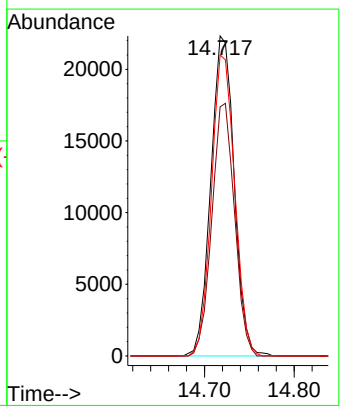
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

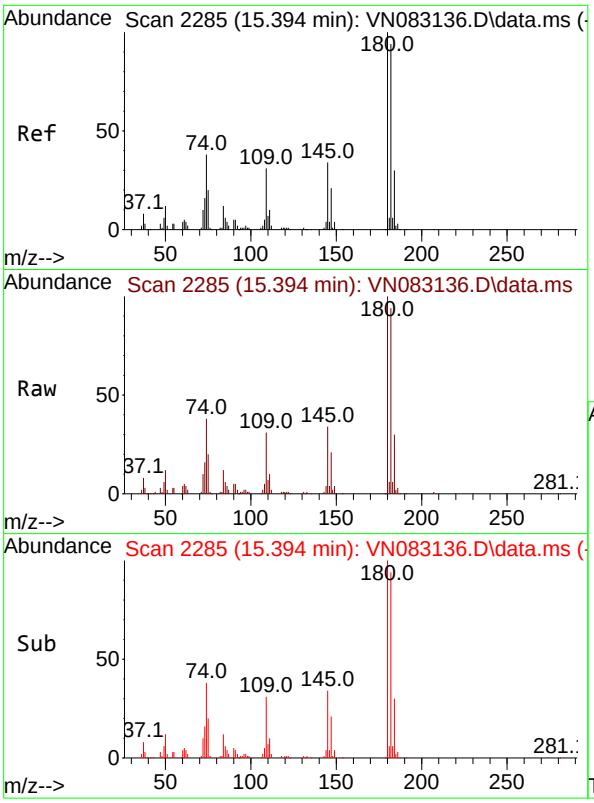



#92
1,2-Dibromo-3-Chloropropane
Concen: 49.017 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion: 75 Resp: 40369

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 76.6 | 36.6 | 109.8 |
| 157 | 93.4 | 46.9 | 140.6 |

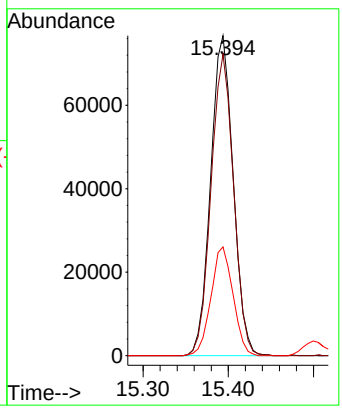





#93
1,2,4-Trichlorobenzene
Concen: 51.937 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:180 Resp: 14122

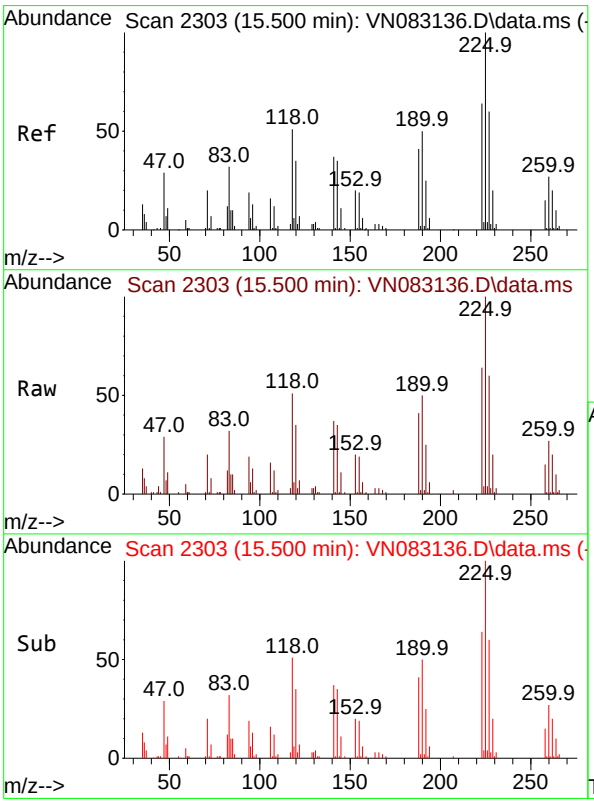
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.1 | 47.3 | 141.8 |
| 145 | 33.3 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**

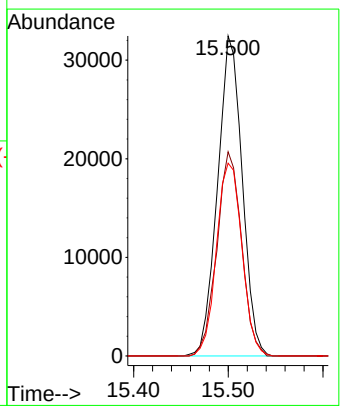
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

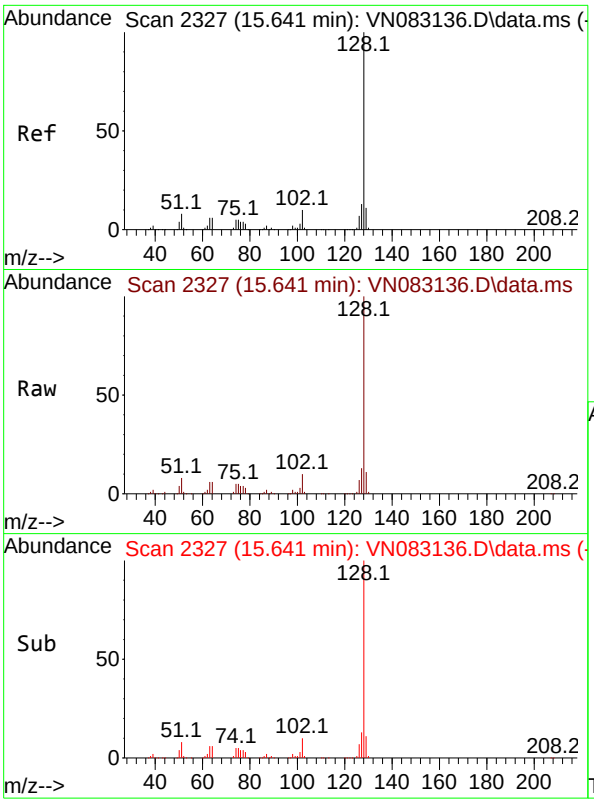



#94
Hexachlorobutadiene
Concen: 48.509 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:225 Resp: 58664

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.9 | 31.9 | 95.7 |
| 227 | 62.3 | 32.5 | 97.5 |

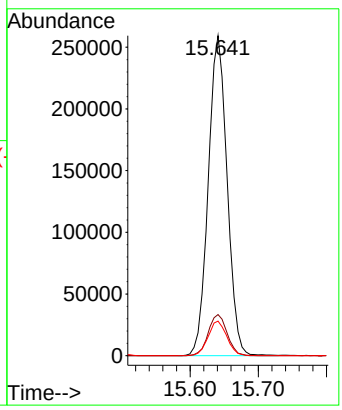





#95
Naphthalene
Concen: 51.844 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:128 Resp: 49937

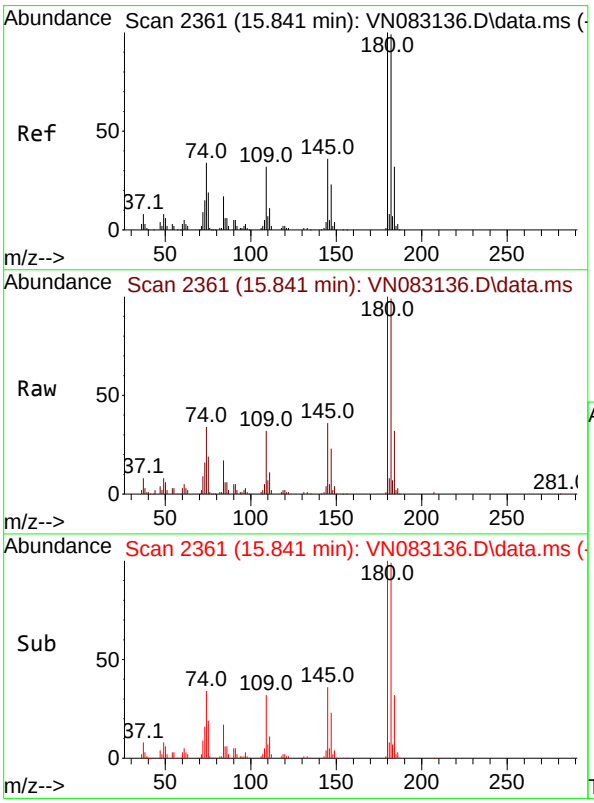
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.9 | 10.6 | 16.0 |
| 129 | 10.7 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICCC050

**Manual Integrations**
**APPROVED**

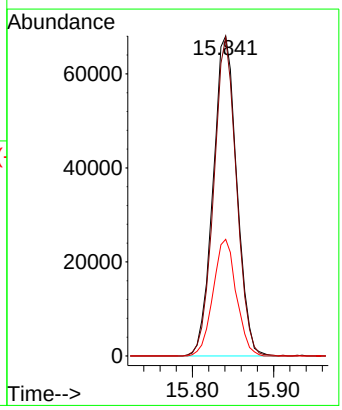
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024




#96
1,2,3-Trichlorobenzene
Concen: 51.335 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.000 min
Lab File: VN083136.D
Acq: 07 Aug 2024 10:58

Tgt Ion:180 Resp: 138125

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.2 | 48.9 | 146.8 |
| 145 | 35.8 | 16.8 | 50.4 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083137.D
Acq On : 07 Aug 2024 11:22
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:16:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 212913 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 362741 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 313255 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 149244 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.583 | 65 | 51159 | 16.881 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = | 33.760%# | | |
| 35) Dibromofluoromethane | 8.171 | 113 | 38354 | 16.940 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 33.880%# | | |
| 50) Toluene-d8 | 10.565 | 98 | 142952 | 16.926 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = | 33.860%# | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 56566 | 17.179 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = | 34.360%# | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 48191 | 19.959 | ug/l | 95 |
| 3) Chloromethane | 2.359 | 50 | 49777 | 20.137 | ug/l | 99 |
| 4) Vinyl Chloride | 2.512 | 62 | 50108 | 19.866 | ug/l | 97 |
| 5) Bromomethane | 2.942 | 94 | 31525 | 20.143 | ug/l | 89 |
| 6) Chloroethane | 3.112 | 64 | 30331 | 19.221 | ug/l | 100 |
| 7) Trichlorofluoromethane | 3.489 | 101 | 85550 | 20.531 | ug/l | 99 |
| 8) Diethyl Ether | 3.959 | 74 | 31256 | 20.158 | ug/l | 85 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 46683 | 20.321 | ug/l | 99 |
| 10) Methyl Iodide | 4.589 | 142 | 59865 | 19.810 | ug/l | 96 |
| 11) Tert butyl alcohol | 5.530 | 59 | 62317 | 98.946 | ug/l | 97 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 45786 | 19.399 | ug/l | 89 |
| 13) Acrolein | 4.183 | 56 | 35516 | 86.524 | ug/l | 97 |
| 14) Allyl chloride | 5.018 | 41 | 90544 | 20.301 | ug/l | 87 |
| 15) Acrylonitrile | 5.718 | 53 | 129316 | 99.835 | ug/l | 99 |
| 16) Acetone | 4.430 | 43 | 110676 | 93.330 | ug/l | 95 |
| 17) Carbon Disulfide | 4.712 | 76 | 135927 | 19.683 | ug/l | 97 |
| 18) Methyl Acetate | 5.030 | 43 | 65871 | 18.644 | ug/l # | 91 |
| 19) Methyl tert-butyl Ether | 5.800 | 73 | 172740 | 20.277 | ug/l | 97 |
| 20) Methylene Chloride | 5.271 | 84 | 52716 | 19.316 | ug/l | 84 |
| 21) trans-1,2-Dichloroethene | 5.789 | 96 | 49121 | 20.137 | ug/l | 94 |
| 22) Diisopropyl ether | 6.671 | 45 | 168267 | 20.070 | ug/l # | 95 |
| 23) Vinyl Acetate | 6.600 | 43 | 871215m | 101.401 | ug/l | |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 93066 | 20.366 | ug/l | 97 |
| 25) 2-Butanone | 7.488 | 43 | 180458 | 99.107 | ug/l | 93 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 86767 | 20.445 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 58852 | 19.993 | ug/l | 92 |
| 28) Bromochloromethane | 7.812 | 49 | 35768 | 19.153 | ug/l | 86 |
| 29) Tetrahydrofuran | 7.841 | 42 | 115821 | 98.399 | ug/l # | 86 |
| 30) Chloroform | 7.965 | 83 | 94560 | 19.917 | ug/l | 98 |
| 31) Cyclohexane | 8.253 | 56 | 85978 | 19.144 | ug/l | 96 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 90748 | 20.194 | ug/l | 91 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 68425 | 19.978 | ug/l | 98 |
| 37) Ethyl Acetate | 7.565 | 43 | 72806 | 18.985 | ug/l # | 93 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 79487 | 20.605 | ug/l | 98 |
| 39) Methylcyclohexane | 9.600 | 83 | 85173 | 20.246 | ug/l | 95 |
| 40) Benzene | 8.606 | 78 | 207581 | 20.345 | ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083137.D
Acq On : 07 Aug 2024 11:22
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 08 06:16:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 43539 | 19.968 | ug/l | | 97 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 74567 | 20.062 | ug/l | | 97 |
| 43) Isopropyl Acetate | 8.688 | 43 | 138715 | 19.459 | ug/l | # | 95 |
| 44) Trichloroethene | 9.353 | 130 | 49712 | 20.469 | ug/l | | 98 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 49878 | 20.594 | ug/l | | 100 |
| 46) Dibromomethane | 9.712 | 93 | 35560 | 20.512 | ug/l | | 98 |
| 47) Bromodichloromethane | 9.888 | 83 | 78421 | 20.147 | ug/l | | 99 |
| 48) Methyl methacrylate | 9.682 | 41 | 61044 | 19.254 | ug/l | | 92 |
| 49) 1,4-Dioxane | 9.694 | 88 | 23083 | 403.558 | ug/l | | 98 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 374332 | 103.224 | ug/l | | 93 |
| 52) Toluene | 10.629 | 92 | 131247 | 20.358 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 83139 | 20.793 | ug/l | | 97 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 86551 | 20.351 | ug/l | | 92 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 48081 | 20.811 | ug/l | | 94 |
| 56) Ethyl methacrylate | 10.877 | 69 | 89503 | 20.550 | ug/l | | 88 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 84272 | 20.464 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 175345 | 95.242 | ug/l | | 96 |
| 59) 2-Hexanone | 11.194 | 43 | 286222 | 102.020 | ug/l | | 92 |
| 60) Dibromochloromethane | 11.359 | 129 | 57571 | 20.610 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 48753 | 20.088 | ug/l | | 98 |
| 64) Tetrachloroethene | 11.106 | 164 | 42332 | 20.405 | ug/l | | 94 |
| 65) Chlorobenzene | 11.894 | 112 | 137984 | 19.933 | ug/l | | 100 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 48247 | 19.762 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 258237 | 20.335 | ug/l | | 98 |
| 68) m/p-Xylenes | 12.071 | 106 | 193256 | 40.625 | ug/l | | 99 |
| 69) o-Xylene | 12.400 | 106 | 95153 | 20.281 | ug/l | | 99 |
| 70) Styrene | 12.412 | 104 | 161342 | 20.475 | ug/l | | 98 |
| 71) Bromoform | 12.576 | 173 | 38761 | 20.957 | ug/l | # | 100 |
| 73) Isopropylbenzene | 12.694 | 105 | 246711 | 19.764 | ug/l | | 100 |
| 74) N-amyl acetate | 12.494 | 43 | 116100 | 19.014 | ug/l | | 94 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 69449 | 19.670 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 65295m | 19.901 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 55327 | 19.952 | ug/l | | 94 |
| 78) n-propylbenzene | 13.035 | 91 | 283745 | 19.740 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 180682 | 19.827 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 208367 | 19.938 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.741 | 75 | 31260 | 20.759 | ug/l | # | 83 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 179932 | 19.684 | ug/l | | 98 |
| 83) tert-Butylbenzene | 13.441 | 119 | 184965 | 19.985 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 210474 | 19.984 | ug/l | | 100 |
| 85) sec-Butylbenzene | 13.618 | 105 | 250829 | 19.862 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 208404 | 19.986 | ug/l | | 99 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 103819 | 19.897 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 103132 | 19.605 | ug/l | | 97 |
| 89) n-Butylbenzene | 14.053 | 91 | 180483 | 19.975 | ug/l | | 97 |
| 90) Hexachloroethane | 14.335 | 117 | 40982 | 20.343 | ug/l | | 94 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 99334 | 19.673 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.723 | 75 | 16552 | 19.320 | ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 56299 | 19.902 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 23725 | 18.859 | ug/l | | 99 |
| 95) Naphthalene | 15.641 | 128 | 200875 | 20.047 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 54944 | 19.630 | ug/l | | 96 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083137.D
Acq On : 07 Aug 2024 11:22
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:16:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083137.D
Acq On : 07 Aug 2024 11:22
Operator : JC\MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 08 06:16:37 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
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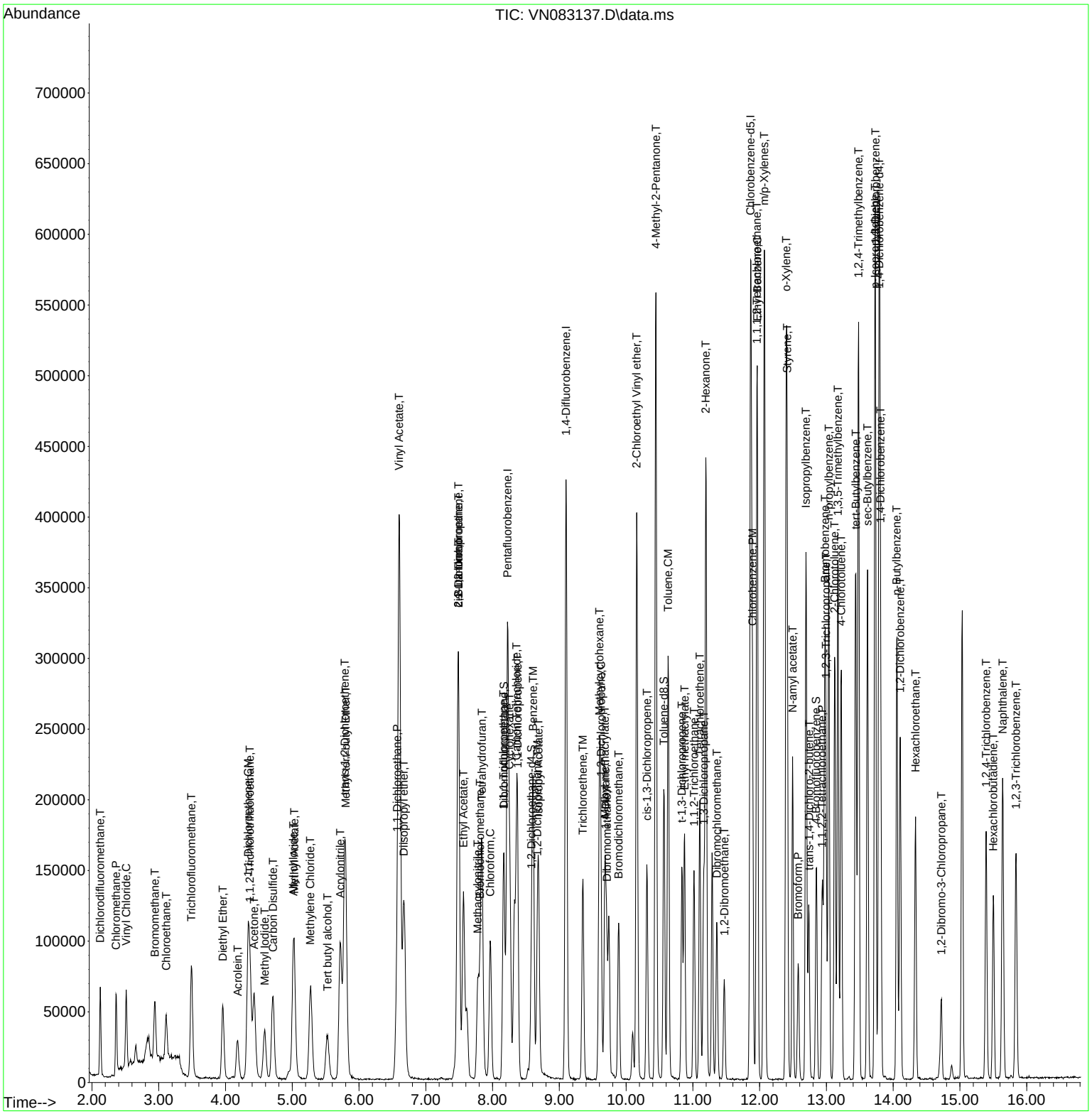
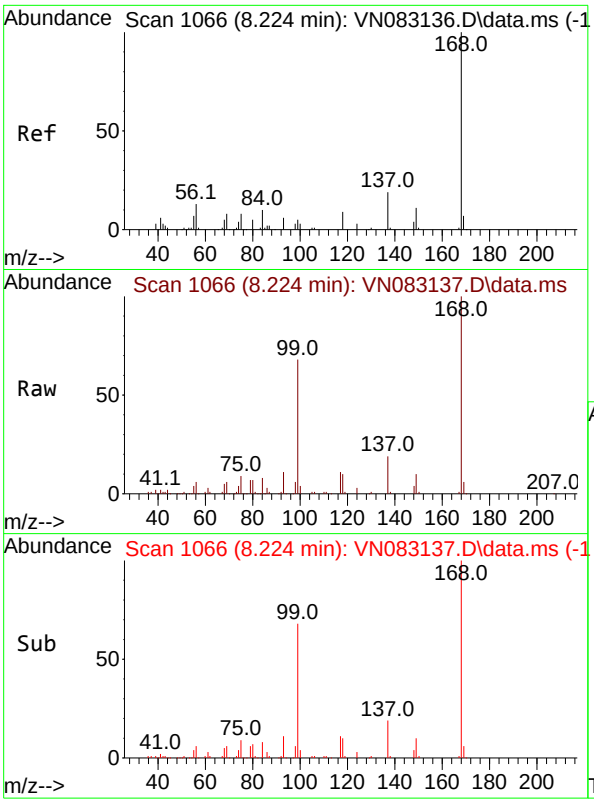
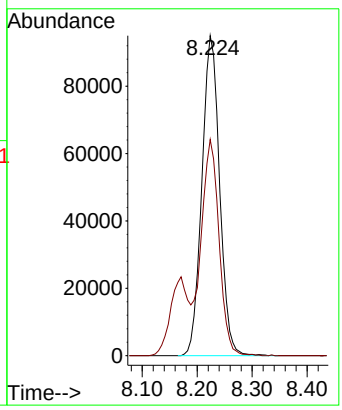





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:168 Resp: 21291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 67.5 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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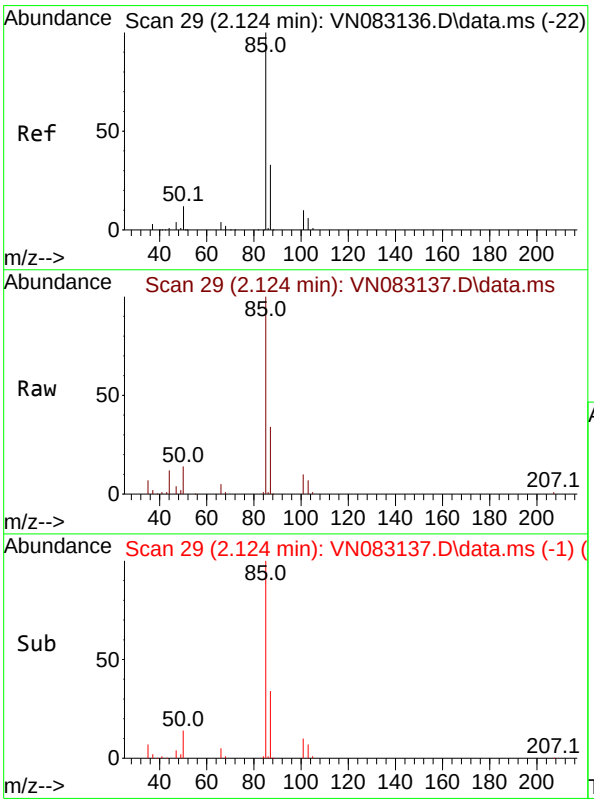
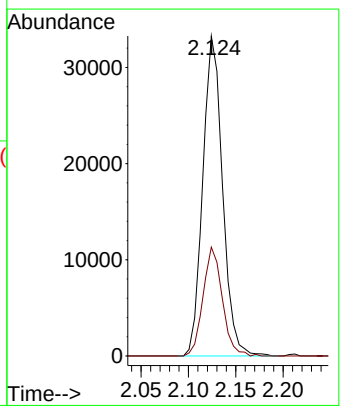
Supervised By :Mahesh Dadoda 08/09/2024

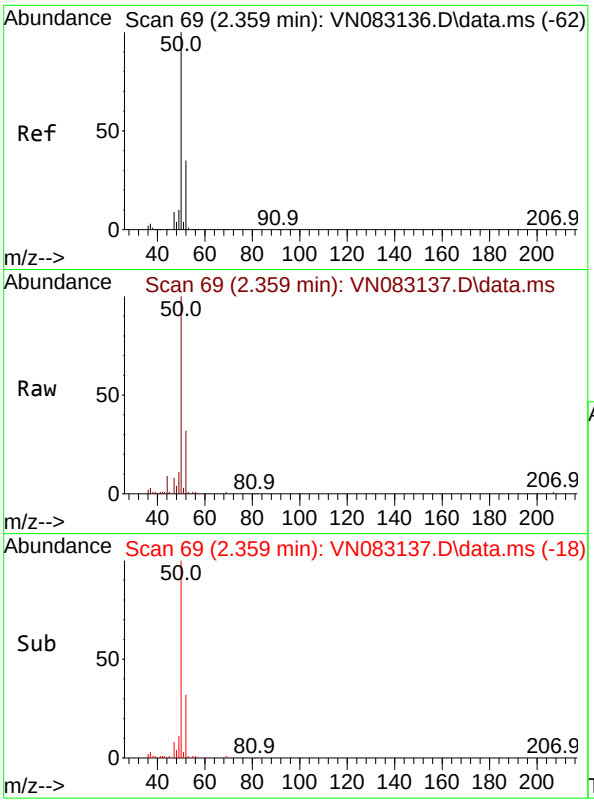



#2
Dichlorodifluoromethane
Concen: 19.959 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 85 Resp: 48191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 34.0 | 15.7 | 47.0 |

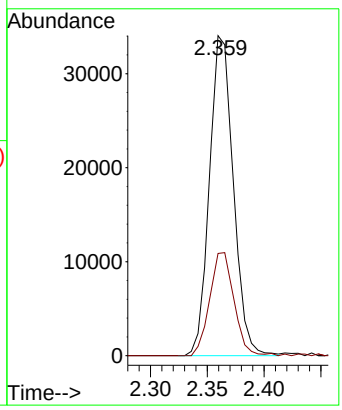





#3
Chloromethane
Concen: 20.137 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 50 Resp: 4977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.9 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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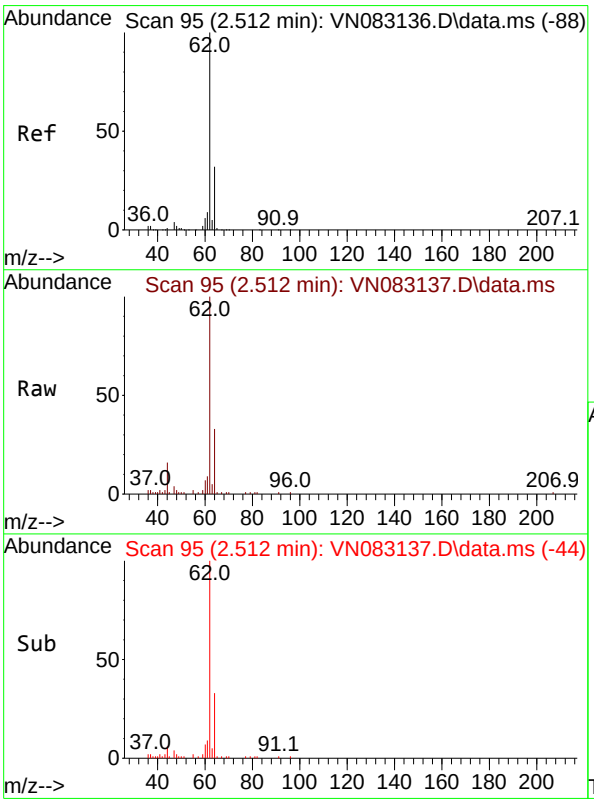
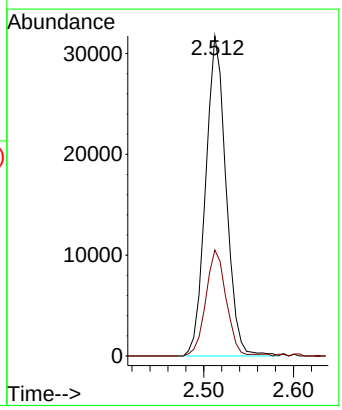
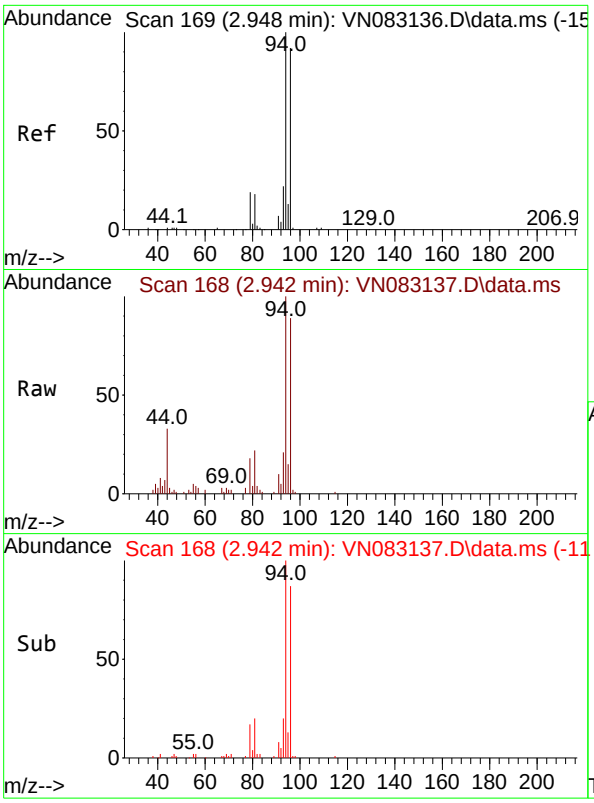



#4
Vinyl Chloride
Concen: 19.866 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 62 Resp: 50108

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 33.1 | 25.0 | 37.6 |






#5
Bromomethane
Concen: 20.143 ug/l
RT: 2.942 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

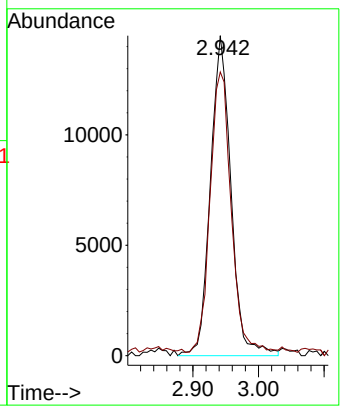
Tgt Ion: 94 Resp: 3152

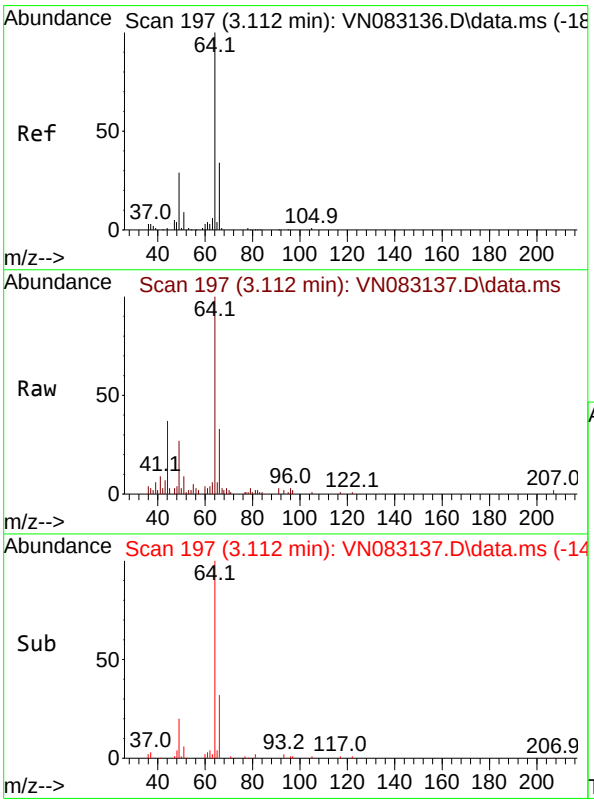
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 87.1 | 78.0 | 117.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

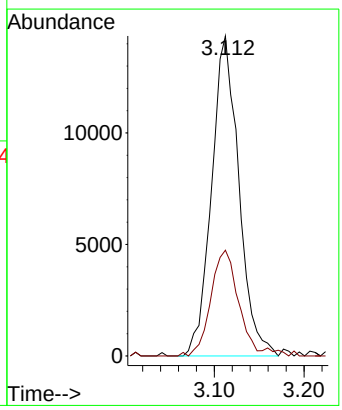


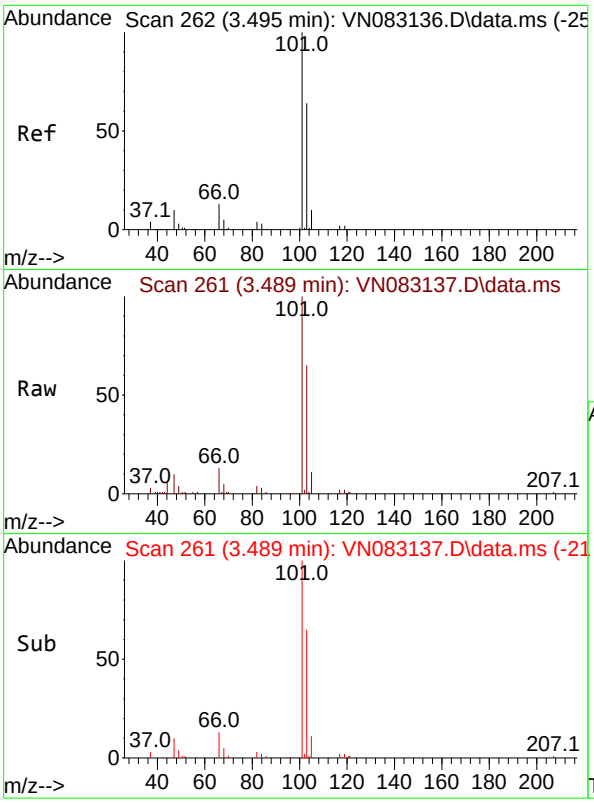




#6
Chloroethane
Concen: 19.221 ug/l
RT: 3.112 min Scan# 197
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 64 Resp: 30331

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 33.0 | 26.6 | 40.0 |






#7
Trichlorofluoromethane
Concen: 20.531 ug/l
RT: 3.489 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:101 Resp: 8555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.0 | 52.7 | 79.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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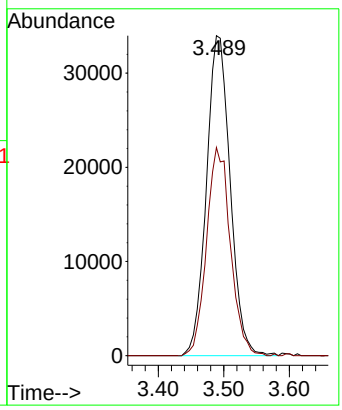
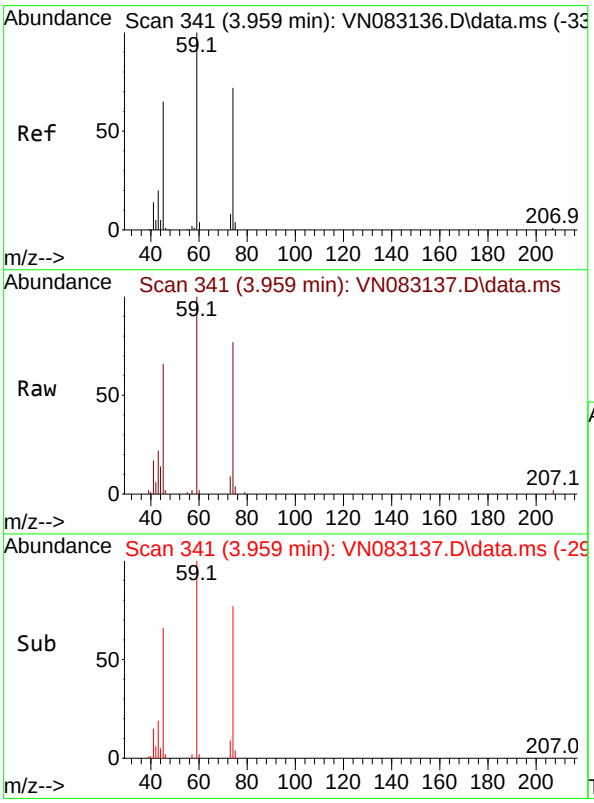
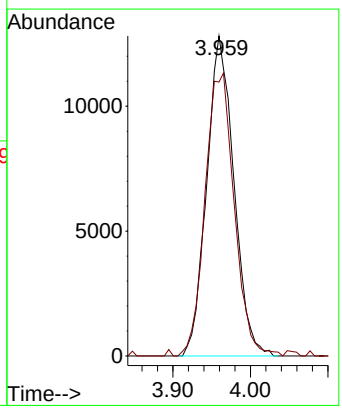


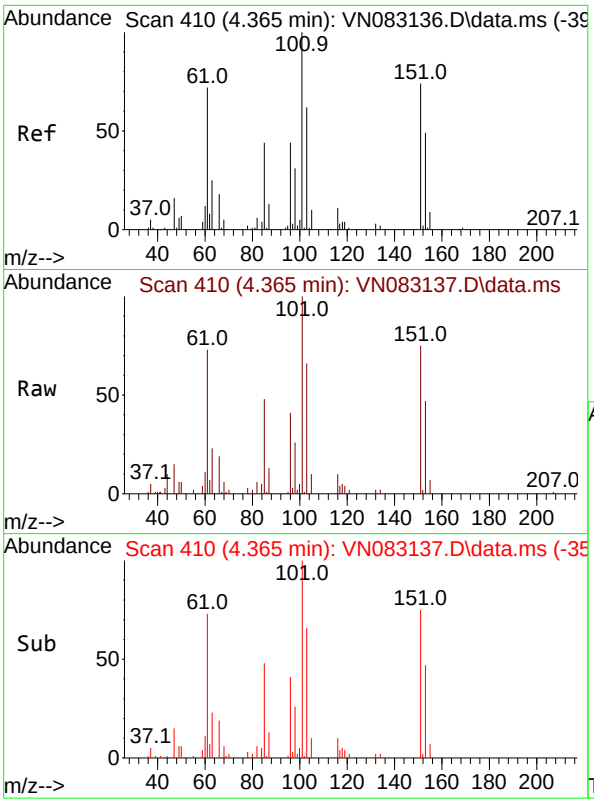




#8
Diethyl Ether
Concen: 20.158 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 74 Resp: 31256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 94.8 | 55.5 | 166.3 |

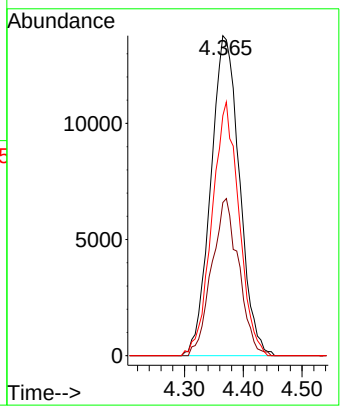





#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.321 ug/l
RT: 4.365 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:101 Resp: 4668

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.5 | 38.3 | 57.5 |
| 151 | 74.6 | 59.3 | 88.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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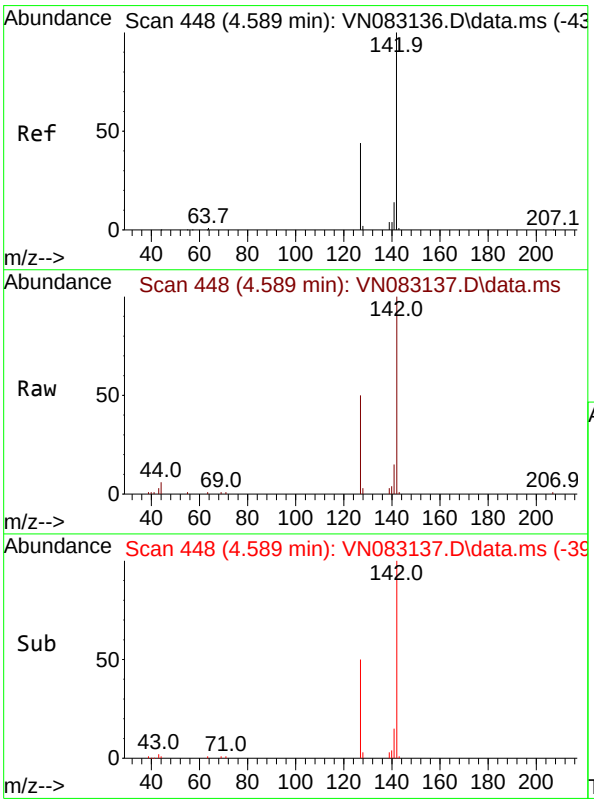
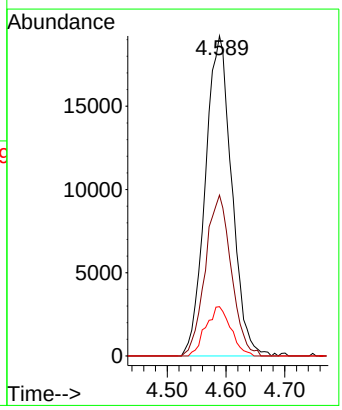
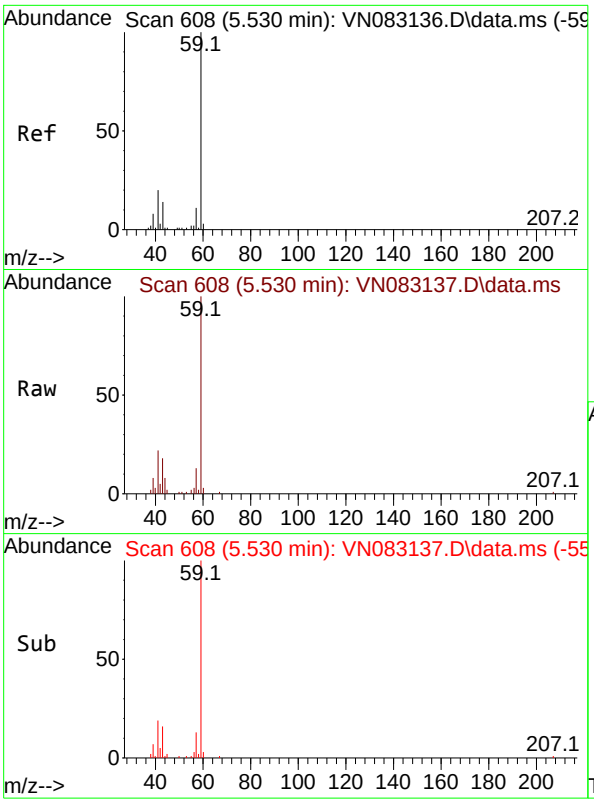



#10
Methyl Iodide
Concen: 19.810 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:142 Resp: 59865

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 50.3 | 37.5 | 56.3 |
| 141 | 15.4 | 13.1 | 19.7 |

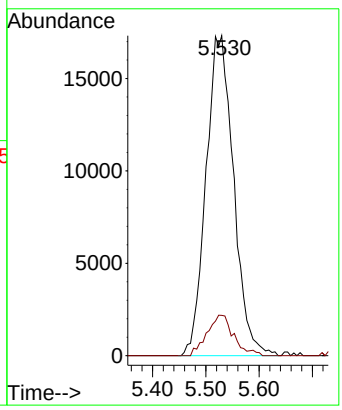





#11
Tert butyl alcohol
Concen: 98.946 ug/l
RT: 5.530 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 59 Resp: 6231

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 12.2 | 8.9 | 13.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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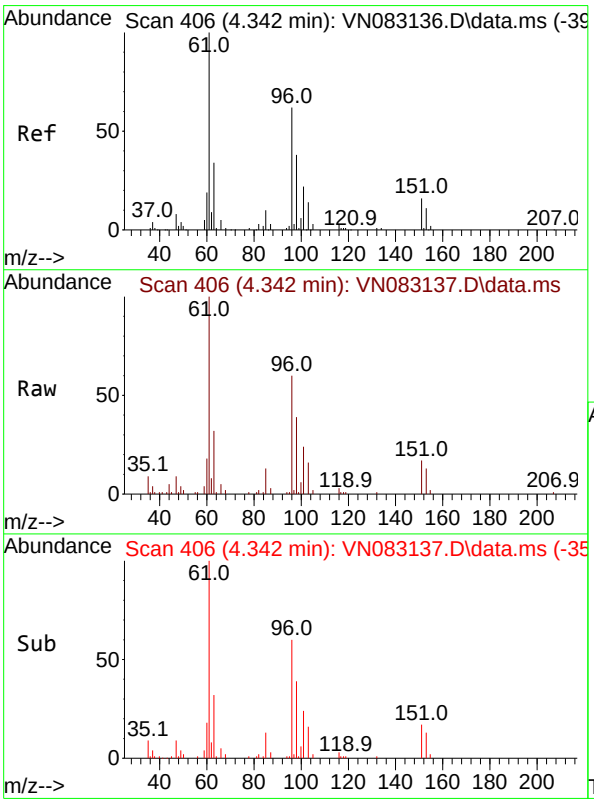
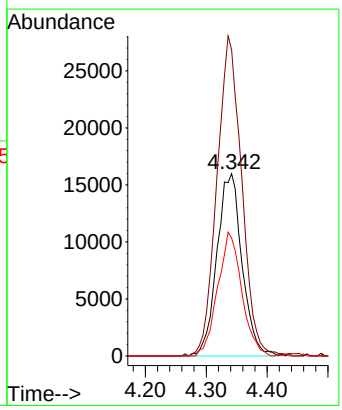
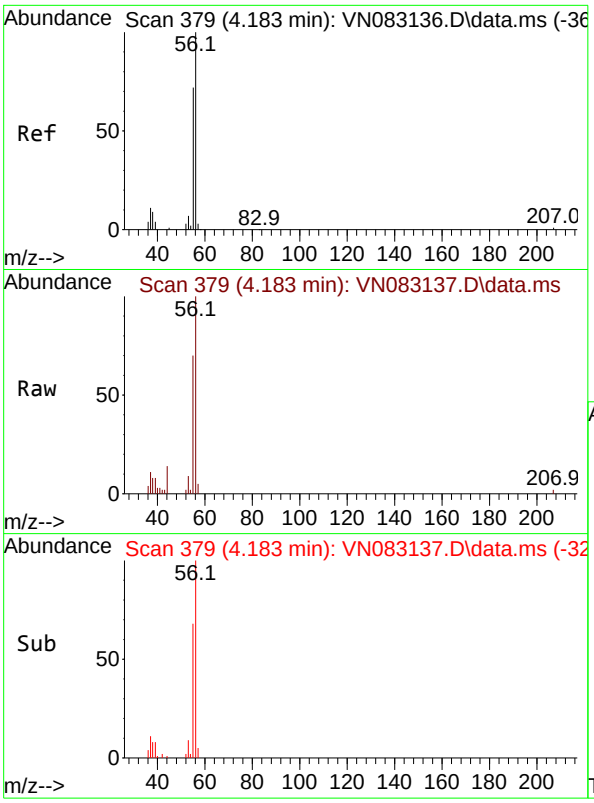



#12
1,1-Dichloroethene
Concen: 19.399 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 96 Resp: 45786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 167.8 | 149.7 | 224.5 |
| 98 | 64.7 | 50.1 | 75.1 |

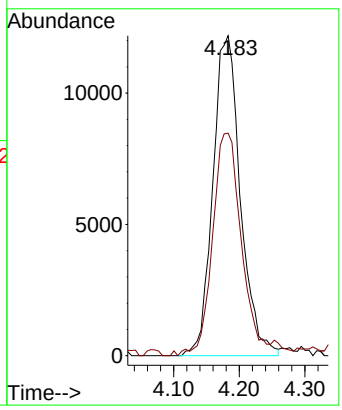





#13
Acrolein
Concen: 86.524 ug/l
RT: 4.183 min Scan# 3
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 56 Resp: 3551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 72.6 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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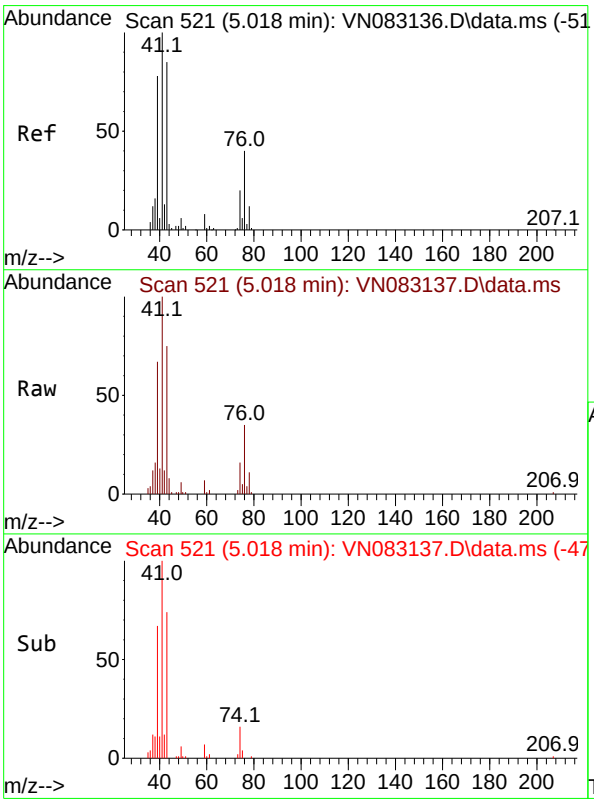
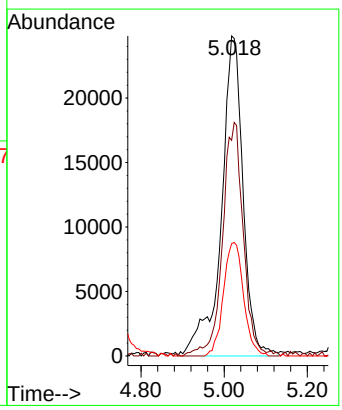
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

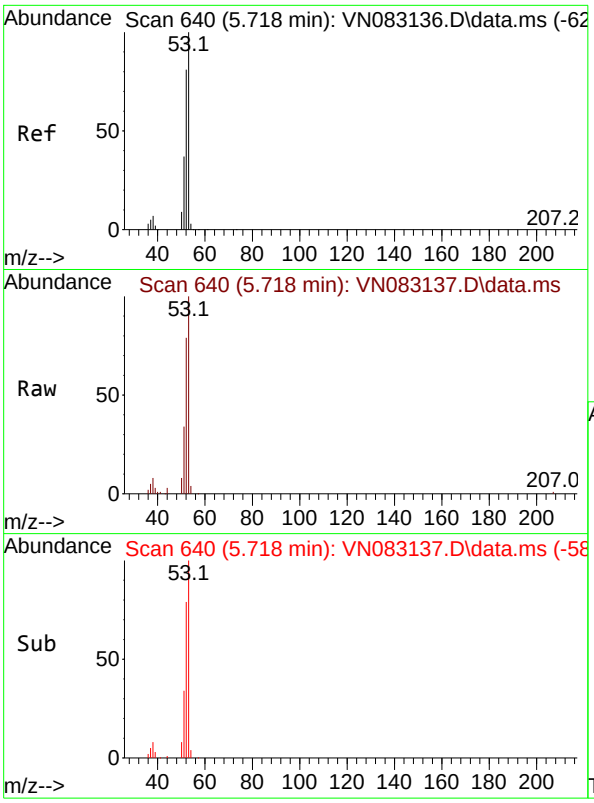



#14
Allyl chloride
Concen: 20.301 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 41 Resp: 90544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 69.0 | 67.8 | 101.6 |
| 76 | 32.7 | 25.8 | 38.8 |

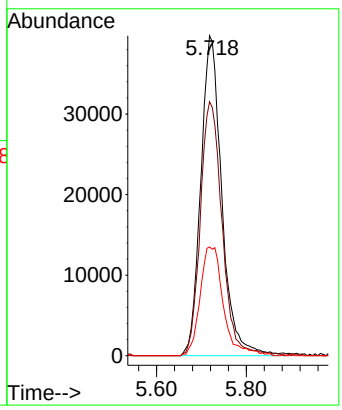





#15
Acrylonitrile
Concen: 99.835 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 53 Resp: 12931

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.1 | 66.6 | 100.0 |
| 51 | 37.7 | 30.1 | 45.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

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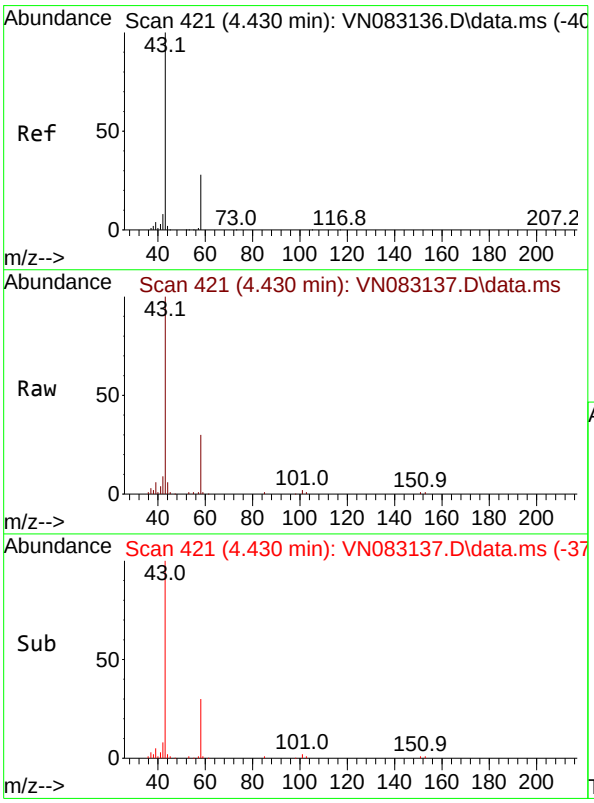
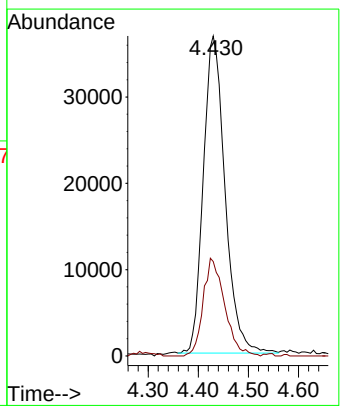
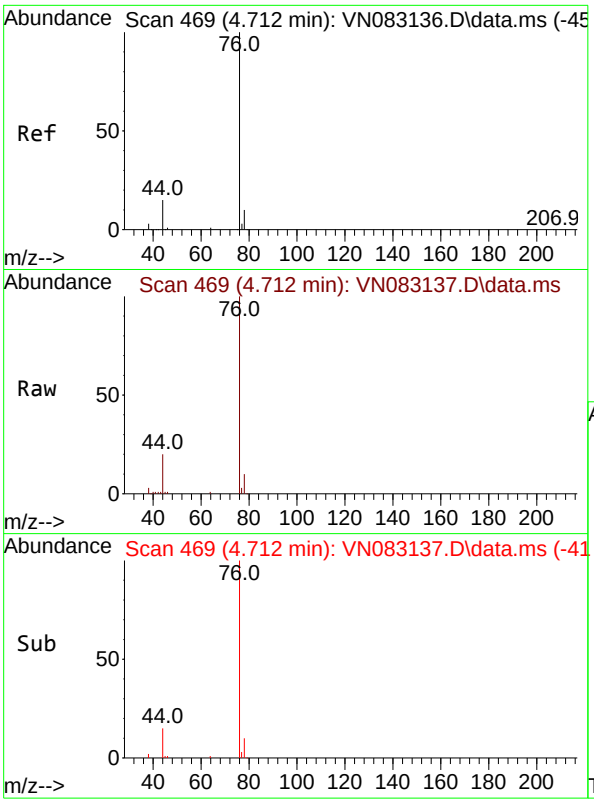



#16
Acetone
Concen: 93.330 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 110676

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 29.8 | 21.8 | 32.6 |

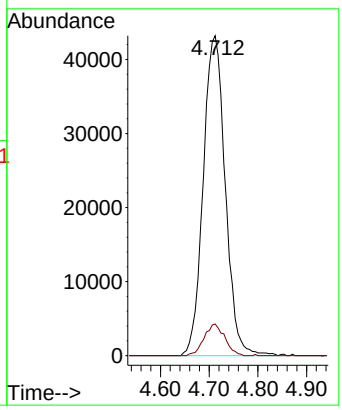





#17
Carbon Disulfide
Concen: 19.683 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 76 Resp: 13592

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.9 | 7.2 | 10.8 |

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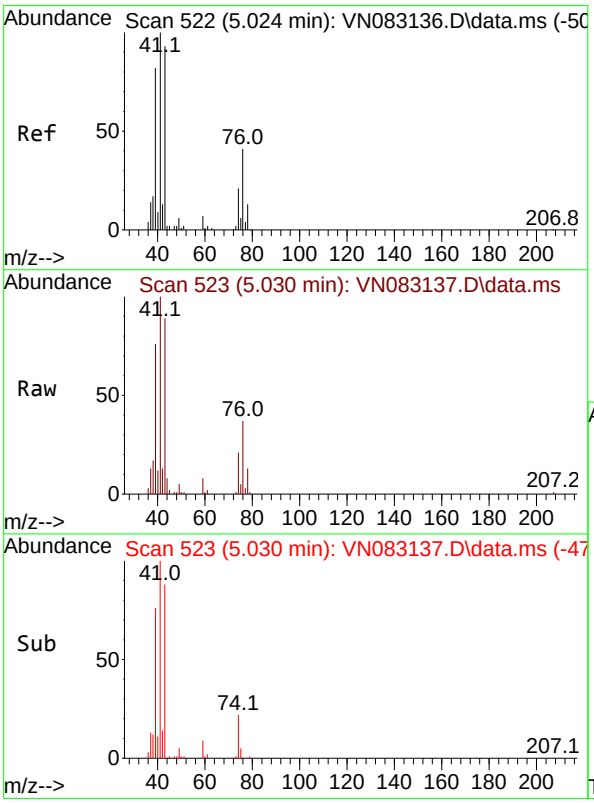
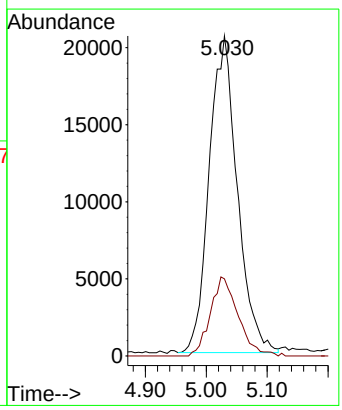
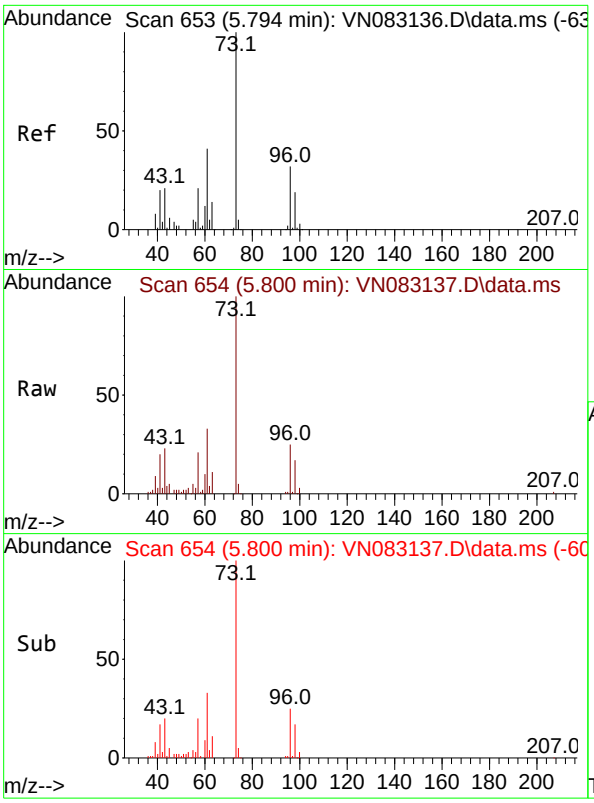



#18
Methyl Acetate
Concen: 18.644 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 65871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 24.5 | 16.3 | 24.5# |

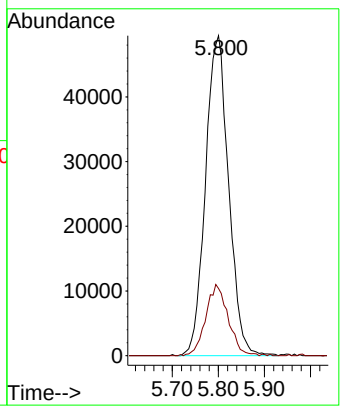





#19
Methyl tert-butyl Ether
Concen: 20.277 ug/l
RT: 5.800 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 73 Resp: 17274

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.0 | 17.9 | 26.9 |

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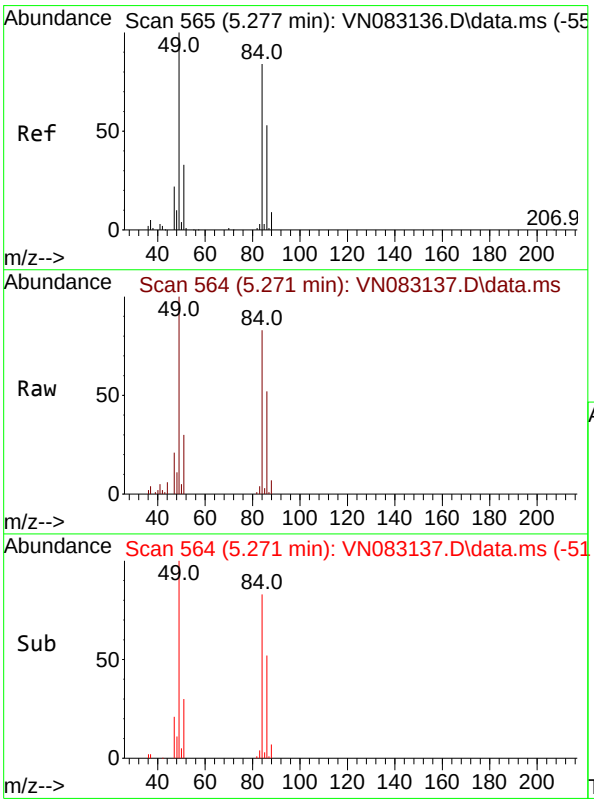
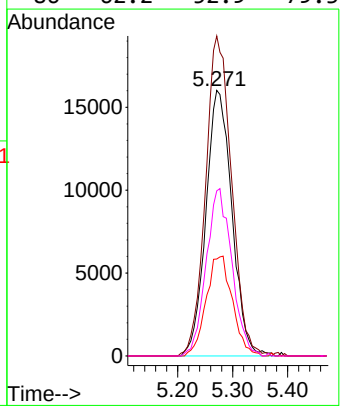
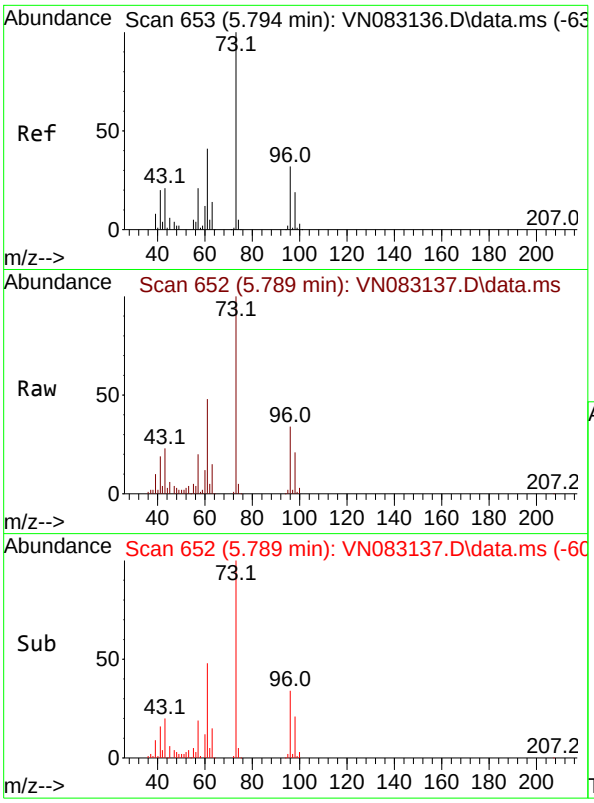



#20
Methylene Chloride
Concen: 19.316 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 84 Resp: 52716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 120.5 | 119.6 | 179.4 |
| 51 | 36.5 | 34.8 | 52.2 |
| 86 | 62.2 | 52.9 | 79.3 |

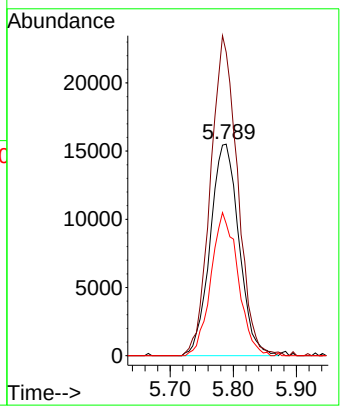





#21
trans-1,2-Dichloroethene
Concen: 20.137 ug/l
RT: 5.789 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 96 Resp: 4912

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 143.3 | 123.4 | 185.2 |
| 98 | 62.4 | 49.3 | 73.9 |

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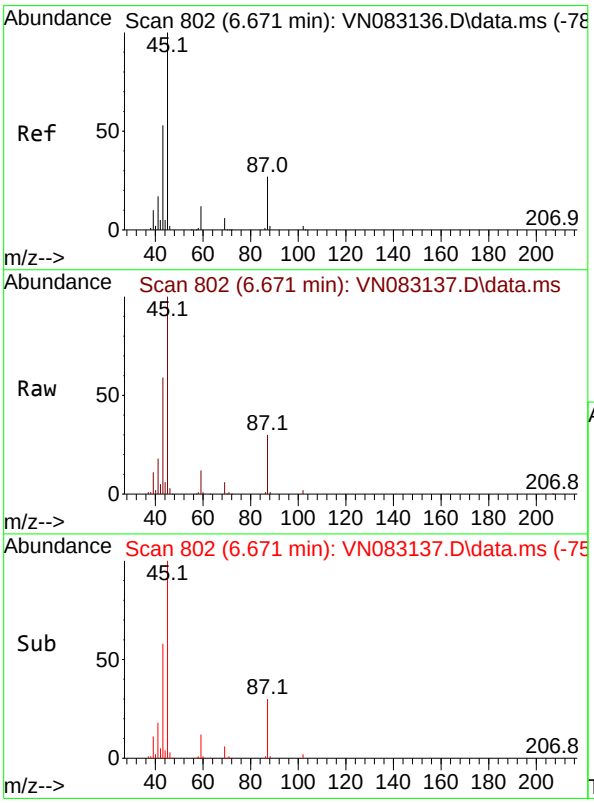
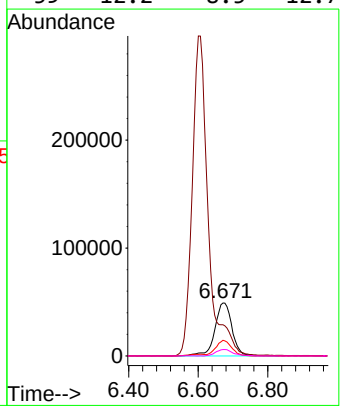
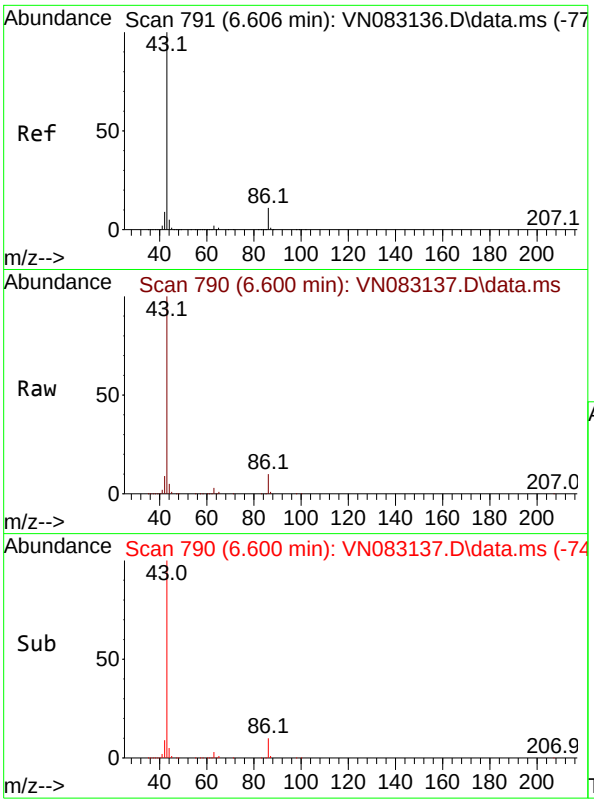



#22
Diisopropyl ether
Concen: 20.070 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 45 Resp: 168267

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 57.6 | 44.0 | 66.0 |
| 87 | 29.6 | 19.7 | 29.5# |
| 59 | 12.2 | 8.5 | 12.7 |






#23
Vinyl Acetate
Concen: 101.401 ug/l m
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 87121

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.4 | 7.3 | 10.9 |

**Instrument :**
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VSTDICC020

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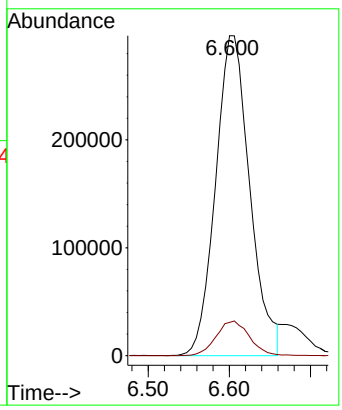
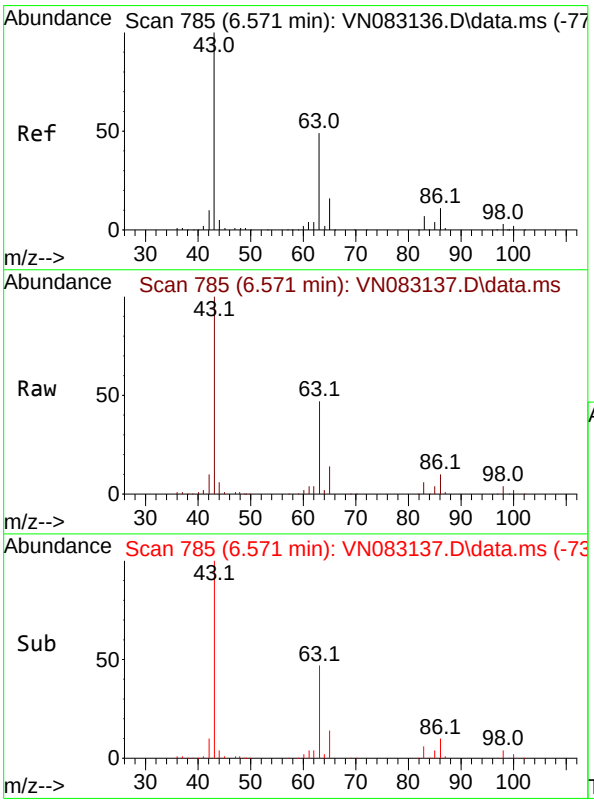
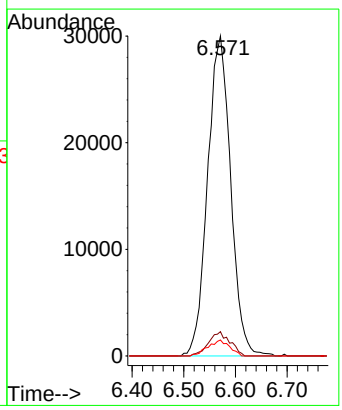


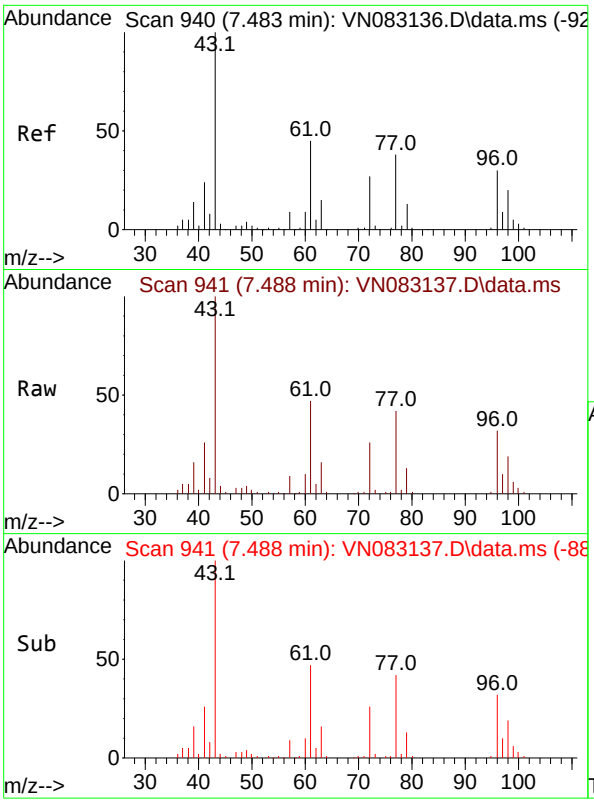




#24
1,1-Dichloroethane
Concen: 20.366 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 63 Resp: 93066

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.6 | 3.3 | 9.9 |
| 100 | 5.0 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 99.107 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 18045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 25.9 | 18.2 | 27.2 |

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VSTDICC020

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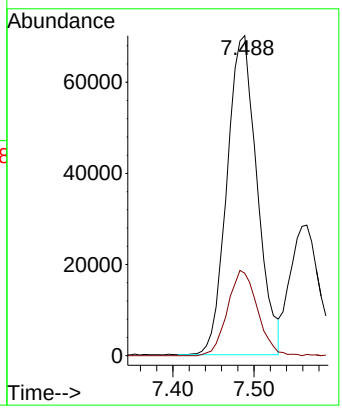
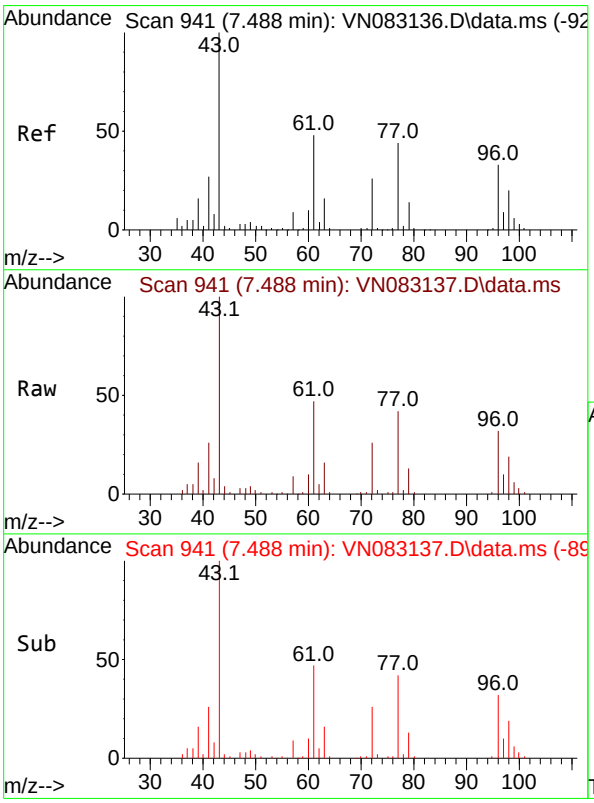
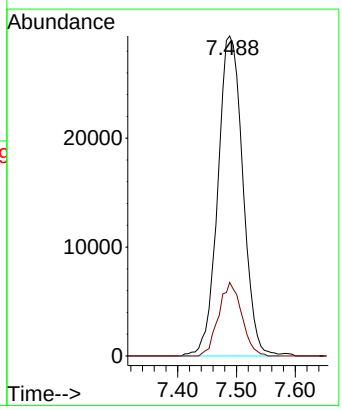


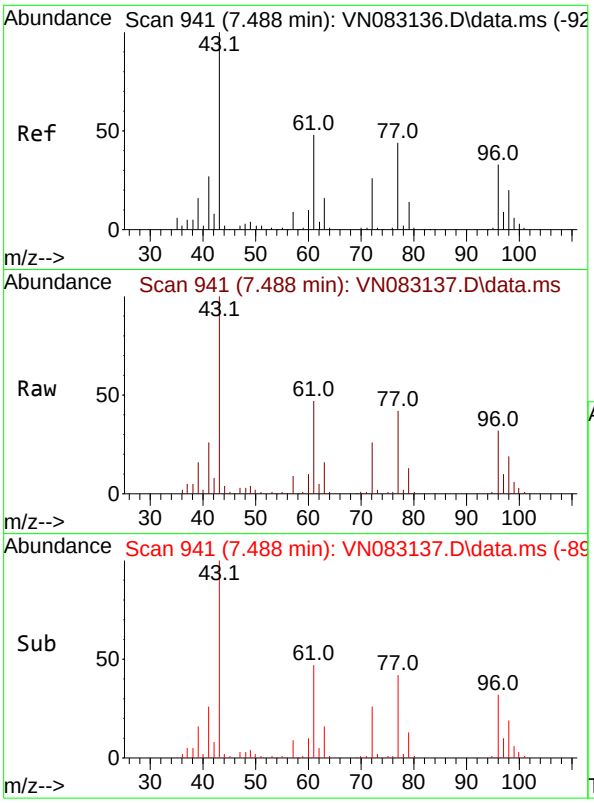




#26
2,2-Dichloropropane
Concen: 20.445 ug/l
RT: 7.488 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 77 Resp: 86767

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.3 | 10.3 | 30.9 |






#27
cis-1,2-Dichloroethene
Concen: 19.993 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 96 Resp: 5885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 149.6 | 0.0 | 329.6 |
| 98 | 63.7 | 0.0 | 128.6 |

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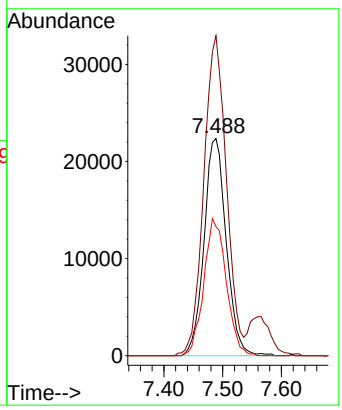
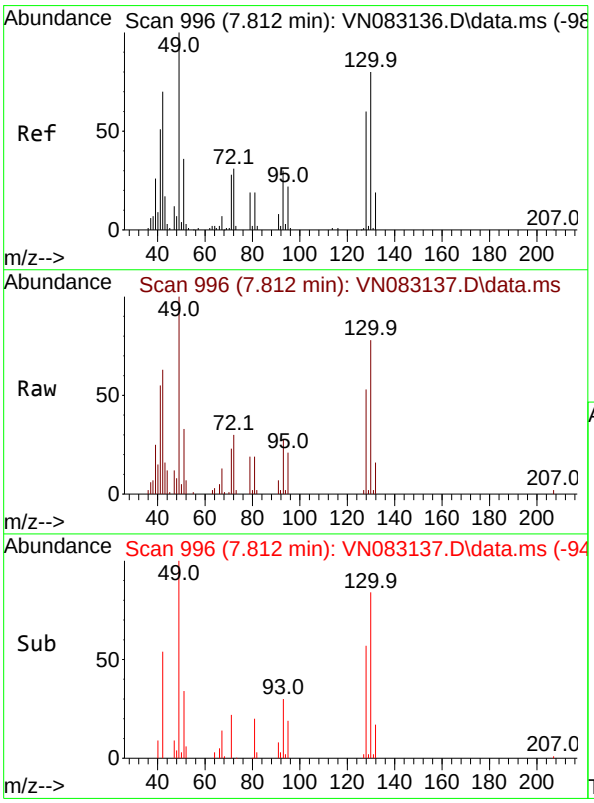
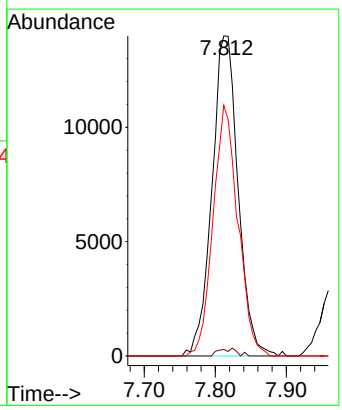


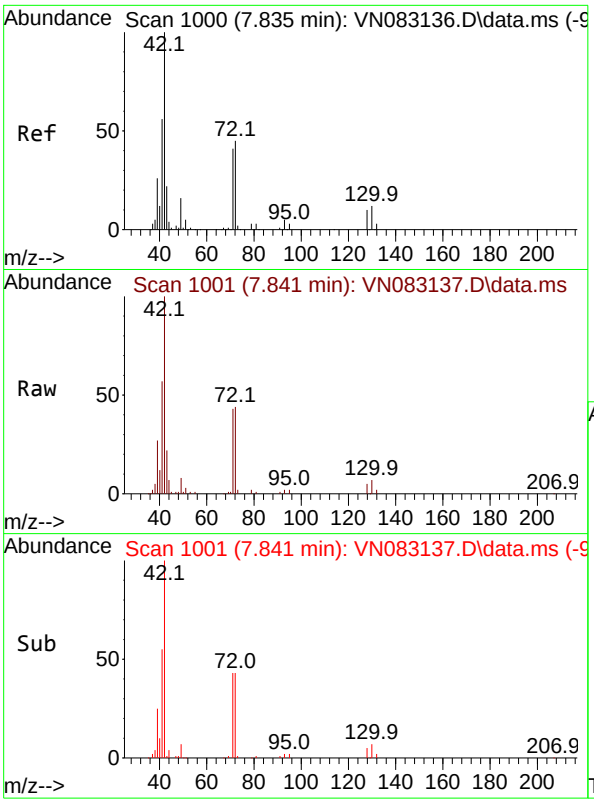




#28
Bromochloromethane
Concen: 19.153 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 49 Resp: 35768

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.6 | 0.0 | 3.8 |
| 130 | 74.4 | 50.5 | 75.7 |

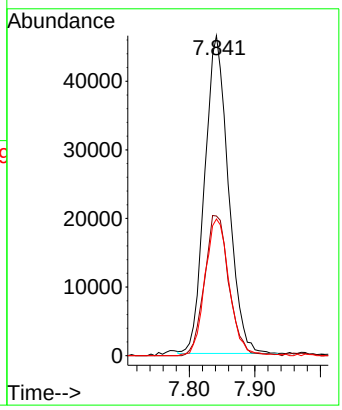





#29
Tetrahydrofuran
Concen: 98.399 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 42 Resp: 11582

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 45.8 | 30.0 | 45.0# |
| 71 | 44.0 | 28.3 | 42.5# |

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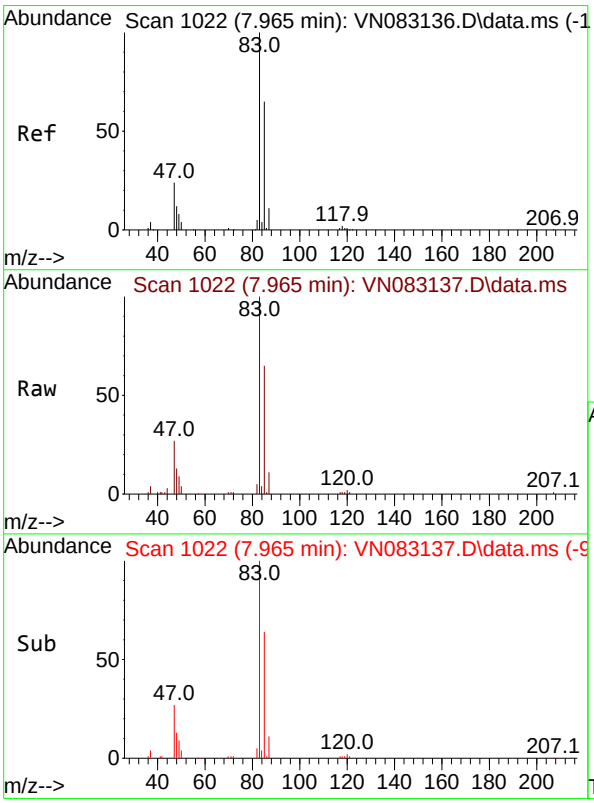
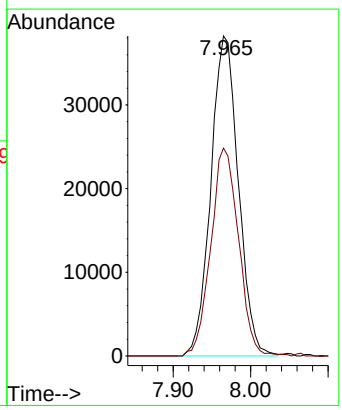
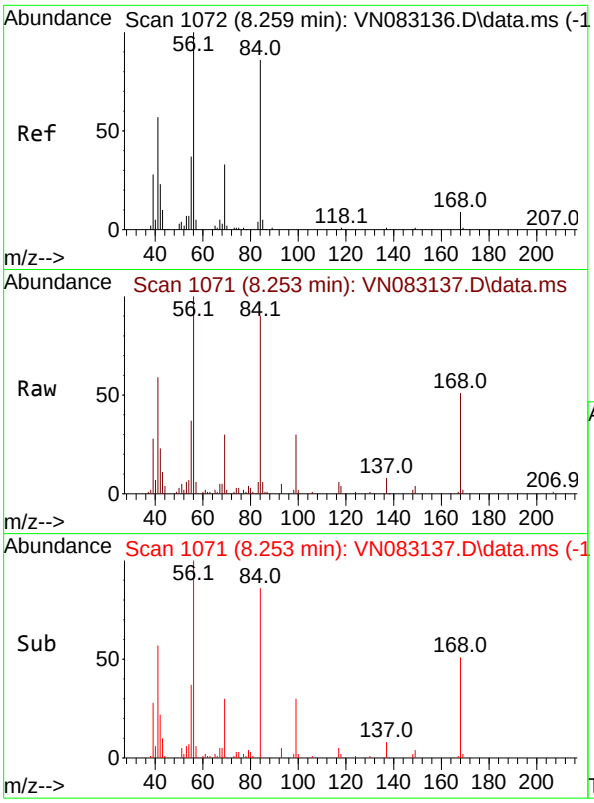



#30
Chloroform
Concen: 19.917 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 83 Resp: 94560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.9 | 50.9 | 76.3 |






#31
Cyclohexane
Concen: 19.144 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 56 Resp: 8597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.4 | 24.5 | 36.7 |
| 84 | 87.9 | 66.0 | 99.0 |

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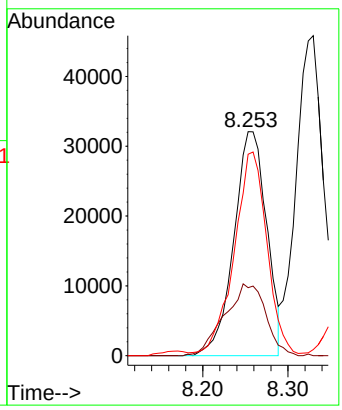
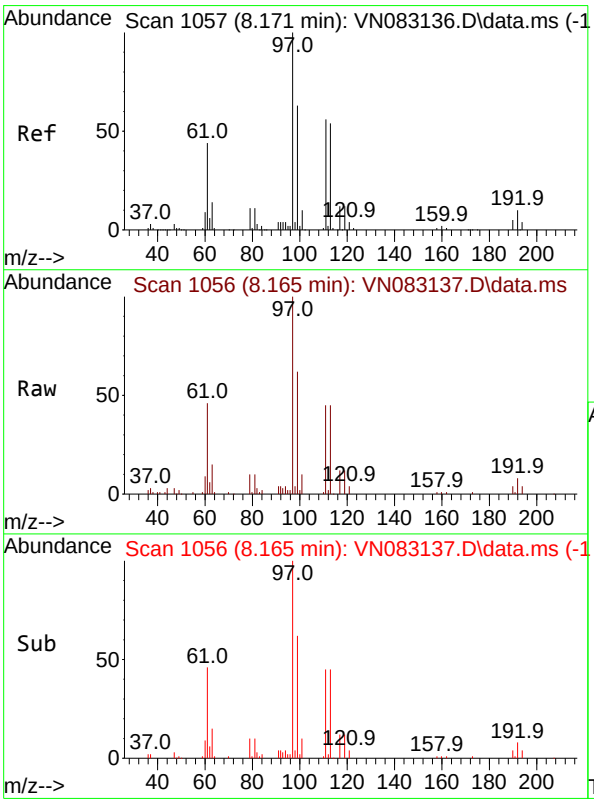
Supervised By :Mahesh Dadoda 08/09/2024

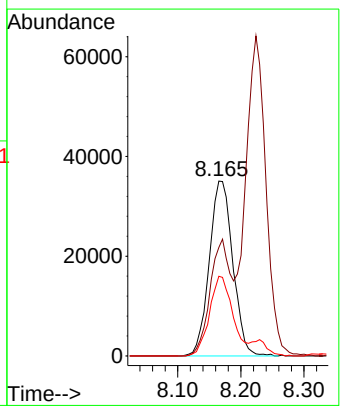


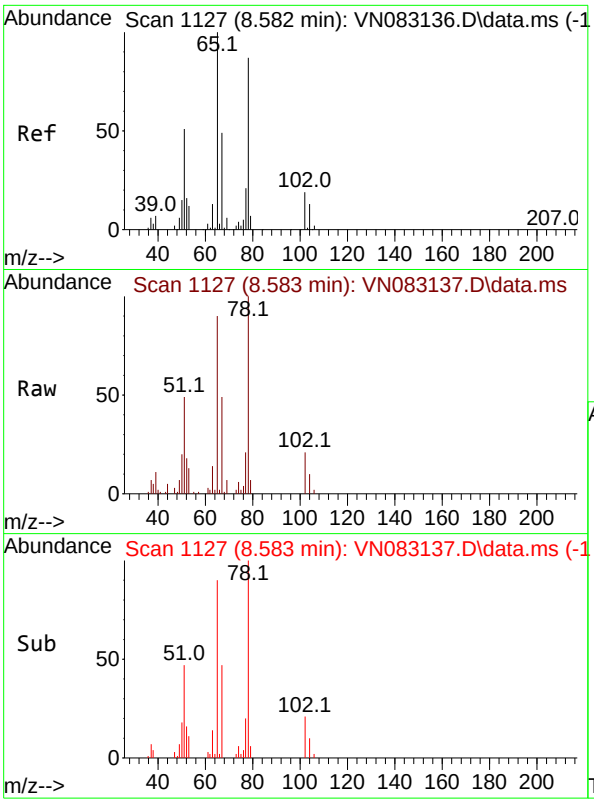




#32
1,1,1-Trichloroethane
Concen: 20.194 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 97 Resp: 90748

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 58.9 | 52.0 | 78.0 |
| 61 | 45.3 | 42.1 | 63.1 |

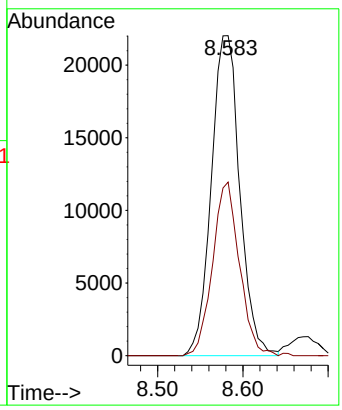





#33
1,2-Dichloroethane-d4
Concen: 16.881 ug/l
RT: 8.583 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 65 Resp: 5115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.1 | 0.0 | 104.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

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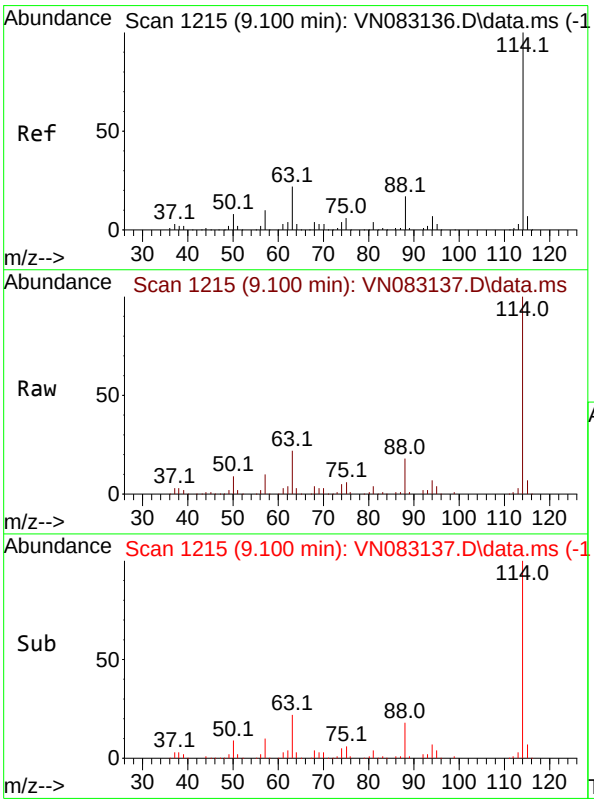
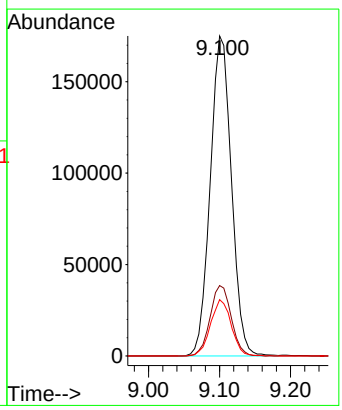
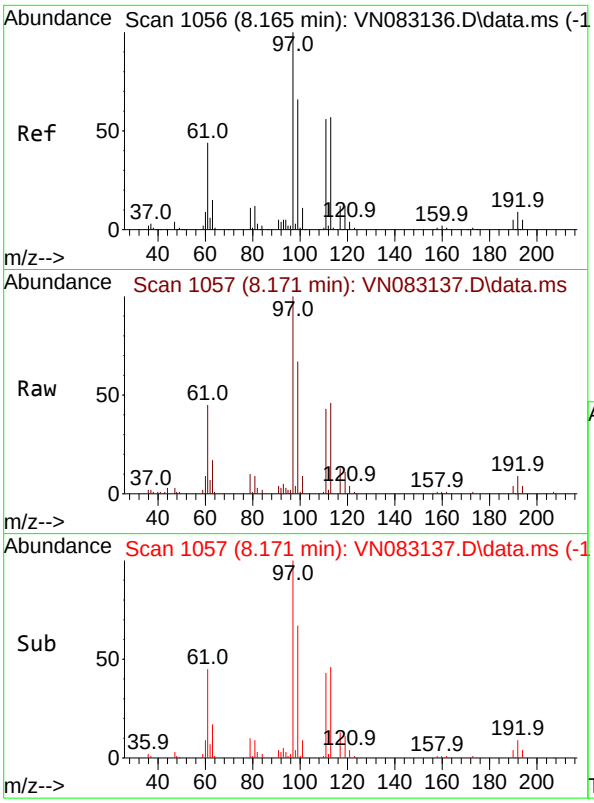



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:114 Resp: 362741

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.0 | 0.0 | 44.6 |
| 88 | 17.6 | 0.0 | 31.4 |

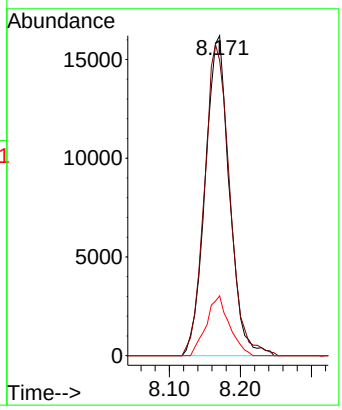





#35
Dibromofluoromethane
Concen: 16.940 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:113 Resp: 3835

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.3 | 82.4 | 123.6 |
| 192 | 17.8 | 14.9 | 22.3 |

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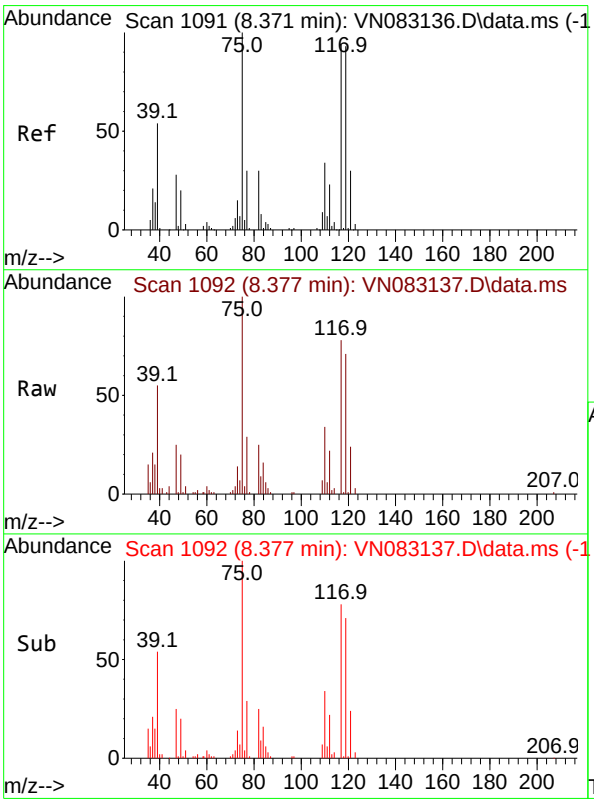
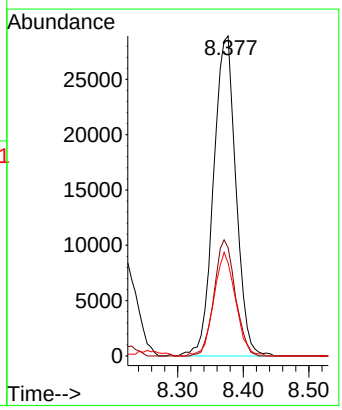
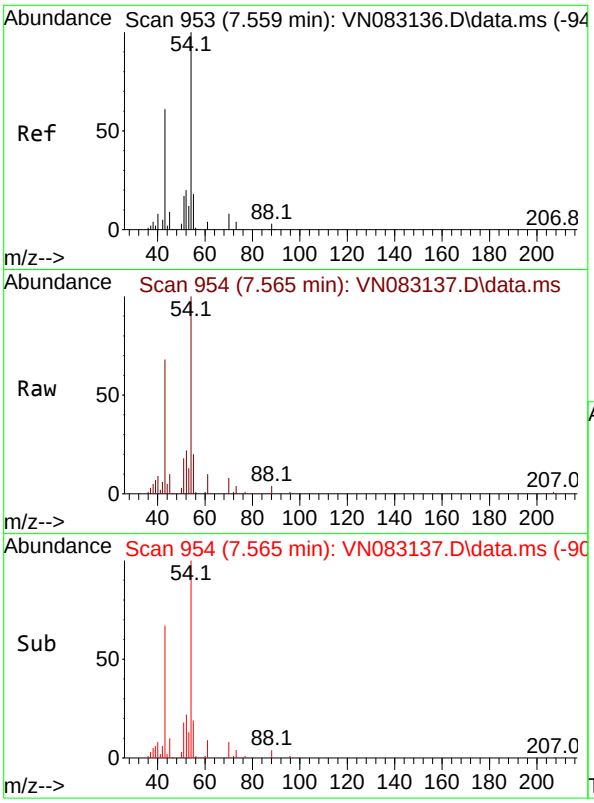



#36
1,1-Dichloropropene
Concen: 19.978 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 68425

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.3 | 16.3 | 48.9 |
| 77 | 31.3 | 24.6 | 37.0 |

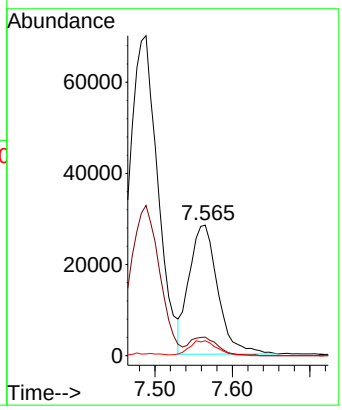





#37
Ethyl Acetate
Concen: 18.985 ug/l
RT: 7.565 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 7280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 14.3 | 9.3 | 13.9# |
| 70 | 11.2 | 7.0 | 10.6# |




**Instrument :**
MSVOA_N
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VSTDICC020

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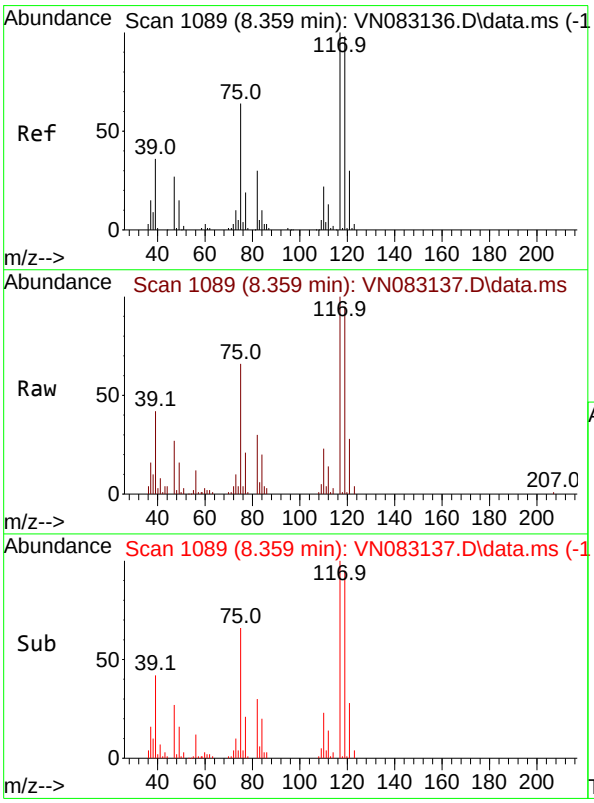
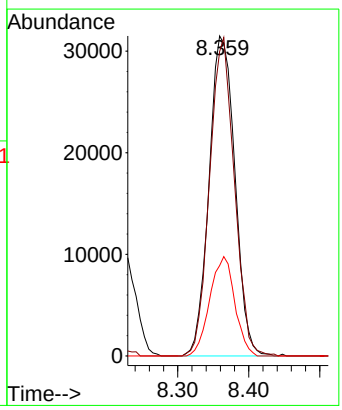
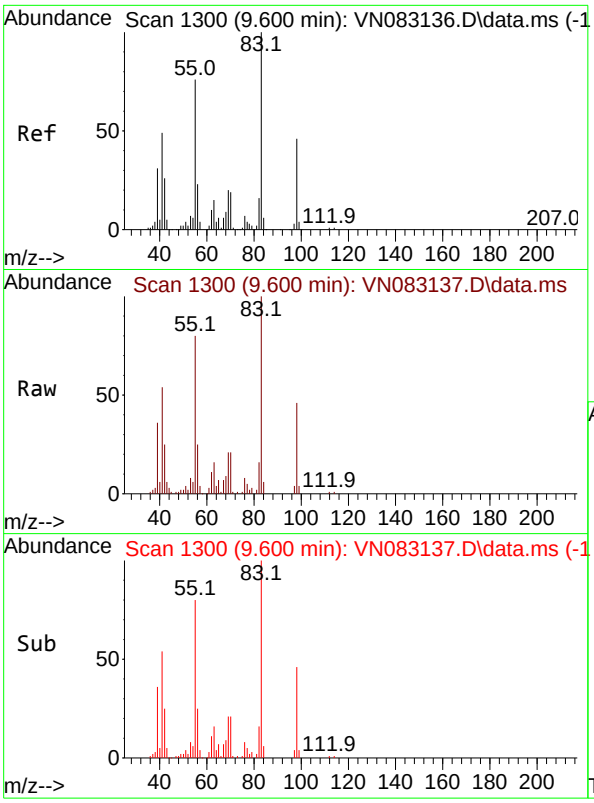



#38
Carbon Tetrachloride
Concen: 20.605 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:117 Resp: 79487

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 95.1 | 74.9 | 112.3 |
| 121 | 28.3 | 24.3 | 36.5 |

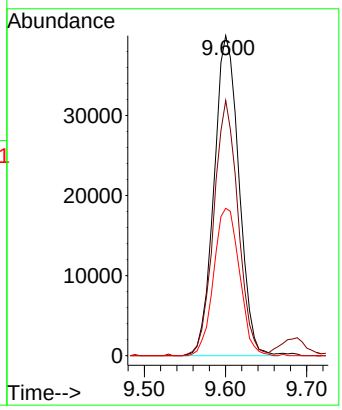





#39
Methylcyclohexane
Concen: 20.246 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 83 Resp: 8517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 79.7 | 66.4 | 99.6 |
| 98 | 46.1 | 40.7 | 61.1 |




**Instrument :**
MSVOA_N
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VSTDICC020

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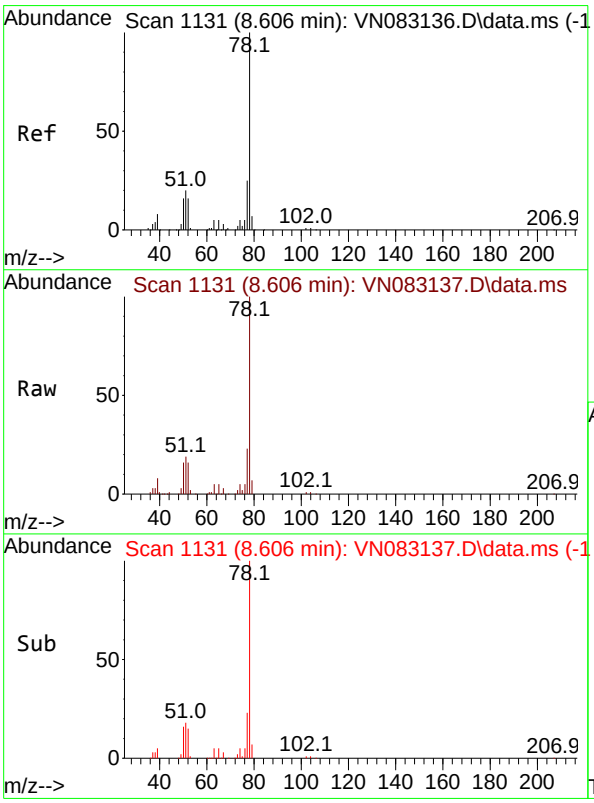
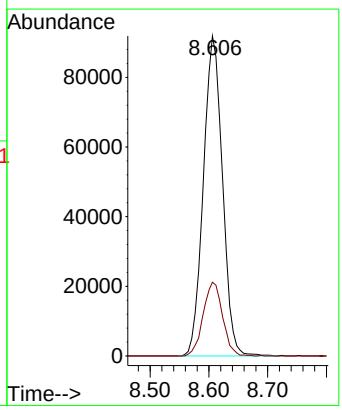
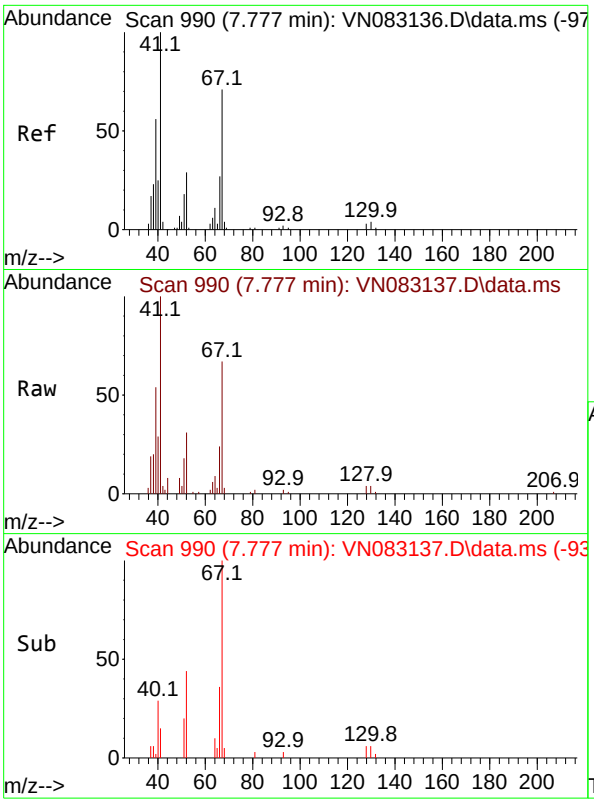



#40
Benzene
Concen: 20.345 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 78 Resp: 207581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.1 | 19.0 | 28.4 |

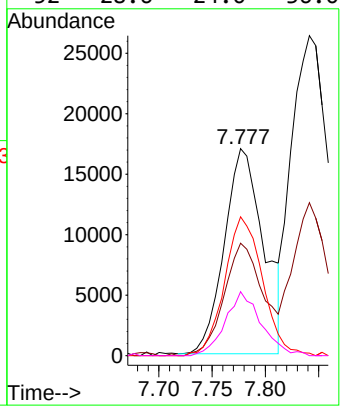





#41
Methacrylonitrile
Concen: 19.968 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 41 Resp: 4353

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 54.6 | 45.5 | 68.3 |
| 67 | 65.2 | 50.5 | 75.7 |
| 52 | 28.6 | 24.0 | 36.0 |




**Instrument :**
MSVOA_N
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VSTDICC020

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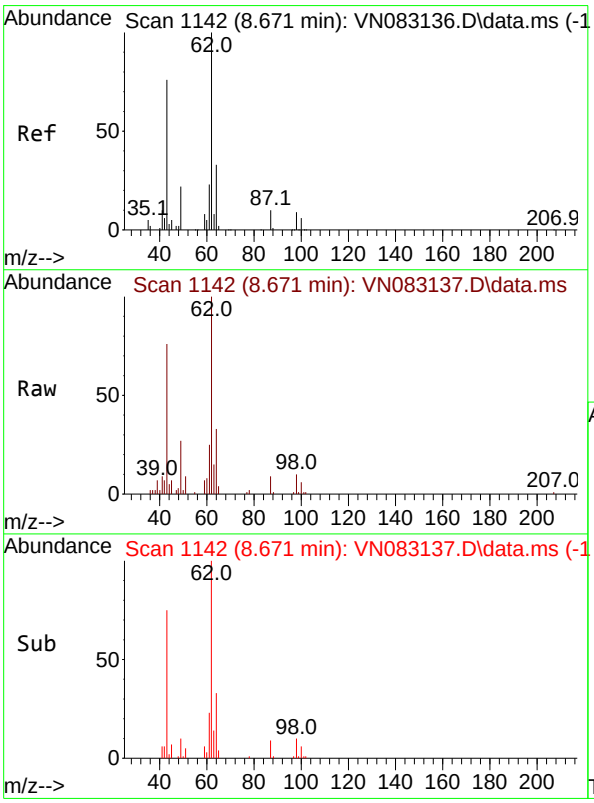
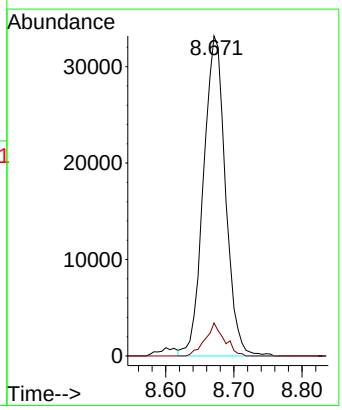
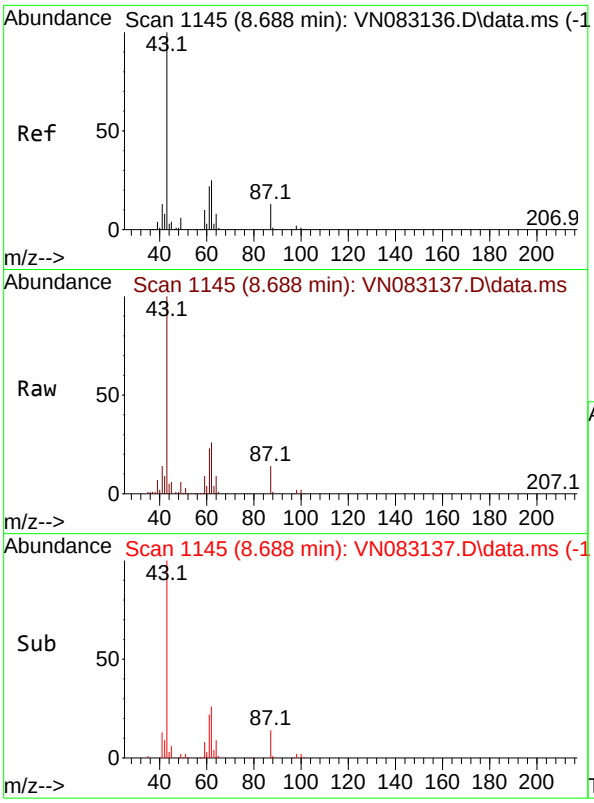



#42
1,2-Dichloroethane
Concen: 20.062 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 62 Resp: 74567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.0 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 19.459 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 13871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 24.5 | 17.8 | 26.6 |
| 87 | 12.7 | 8.2 | 12.2 |

**Instrument :**
MSVOA_N
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VSTDICC020

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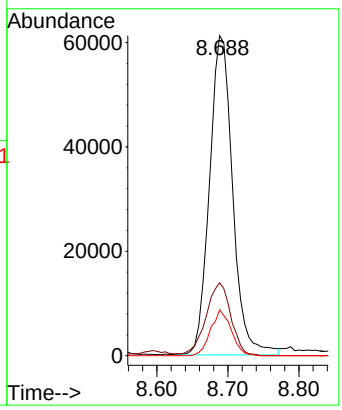
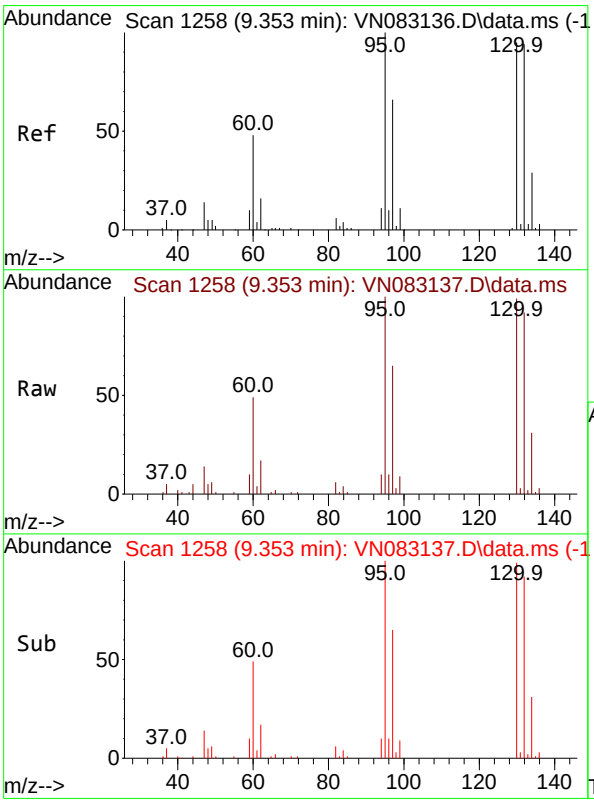
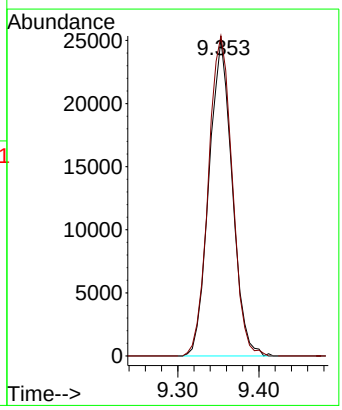


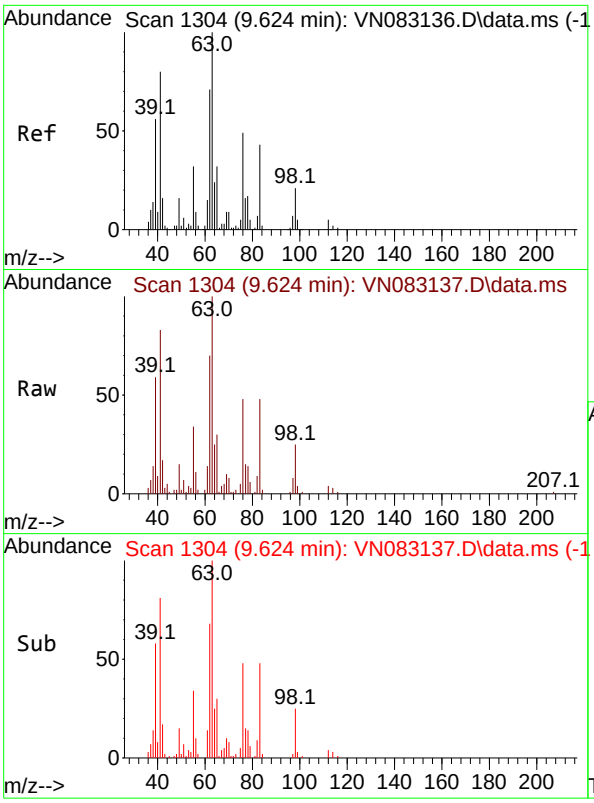




#44
Trichloroethene
Concen: 20.469 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:130 Resp: 49712

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 101.0 | 0.0 | 197.8 |






#45
1,2-Dichloropropane
Concen: 20.594 ug/l
RT: 9.624 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 63 Resp: 4987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.4 | 24.4 | 36.6 |

**Instrument :**
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VSTDICC020

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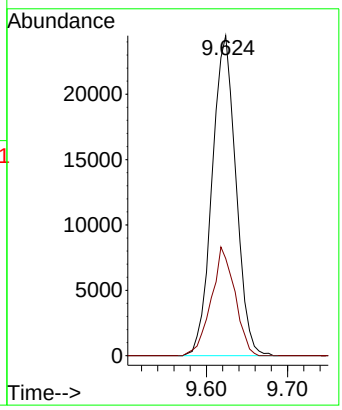
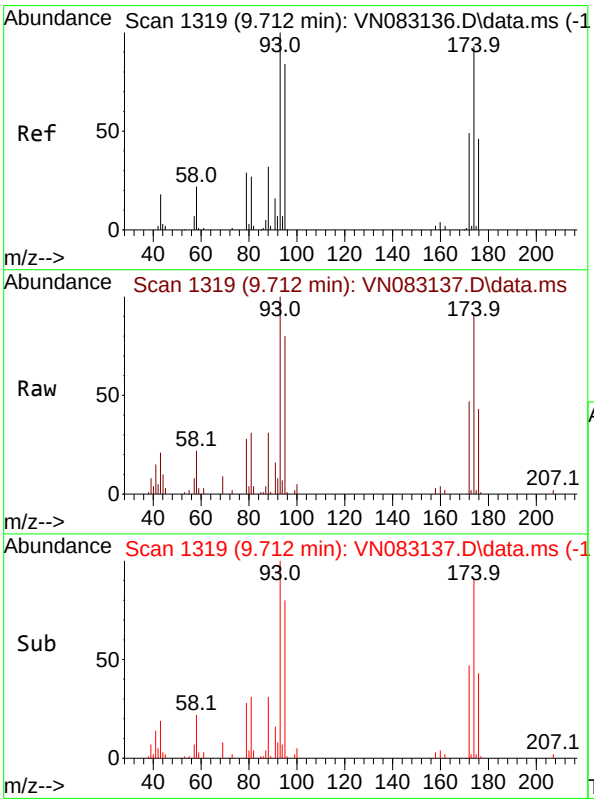
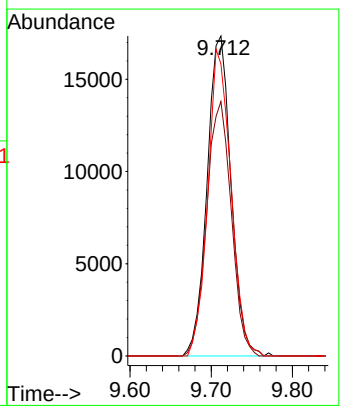


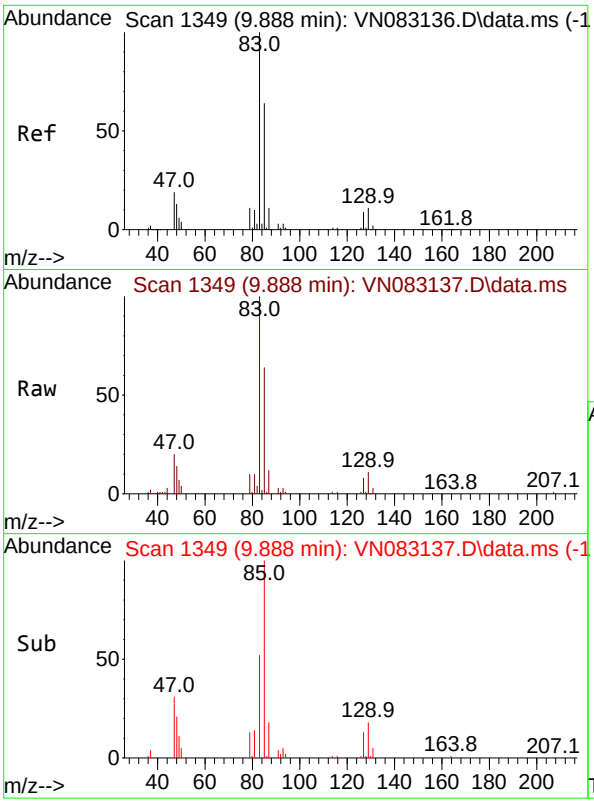




#46
Dibromomethane
Concen: 20.512 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 93 Resp: 35560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 81.8 | 65.8 | 98.6 |
| 174 | 92.9 | 71.7 | 107.5 |

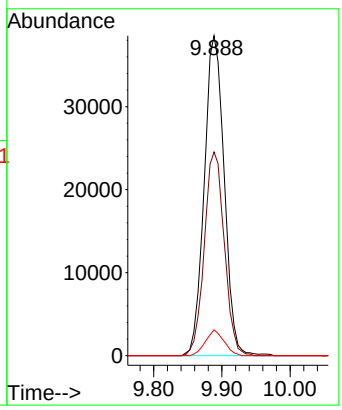





#47
Bromodichloromethane
Concen: 20.147 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 83 Resp: 7842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.7 | 51.1 | 76.7 |
| 127 | 8.1 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

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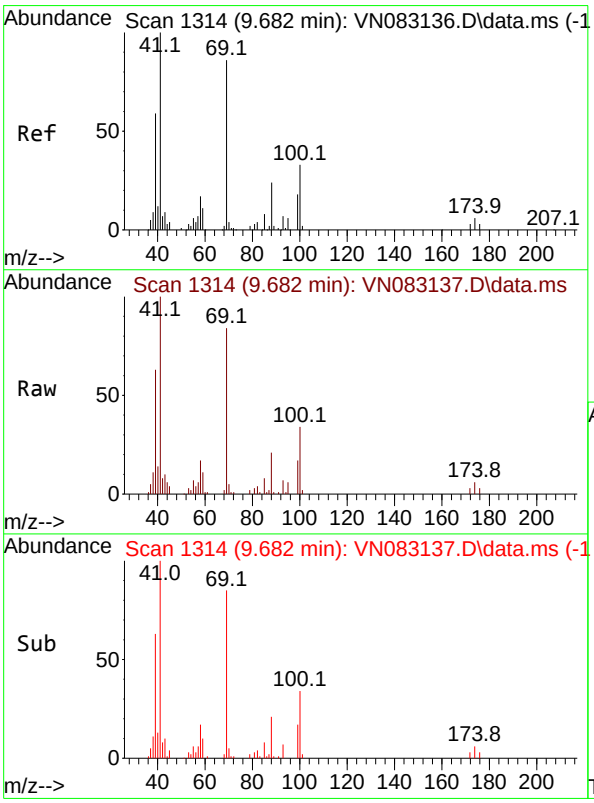
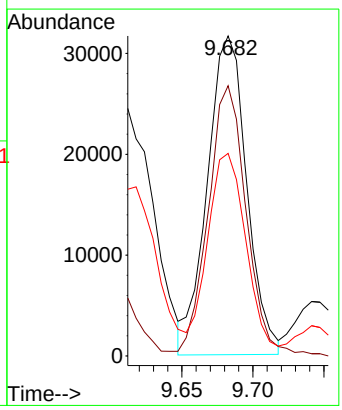
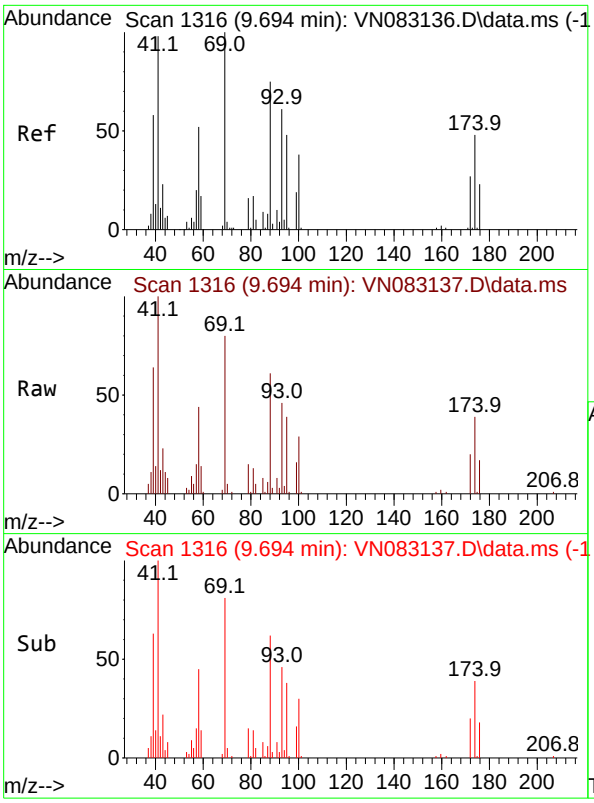



#48
Methyl methacrylate
Concen: 19.254 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 41 Resp: 61044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 82.1 | 56.3 | 84.5 |
| 39 | 62.5 | 50.3 | 75.5 |






#49
1,4-Dioxane
Concen: 403.558 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 88 Resp: 2308

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 32.7 | 27.8 | 41.8 |
| 58 | 75.6 | 59.4 | 89.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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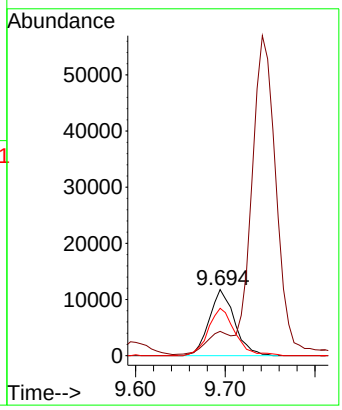
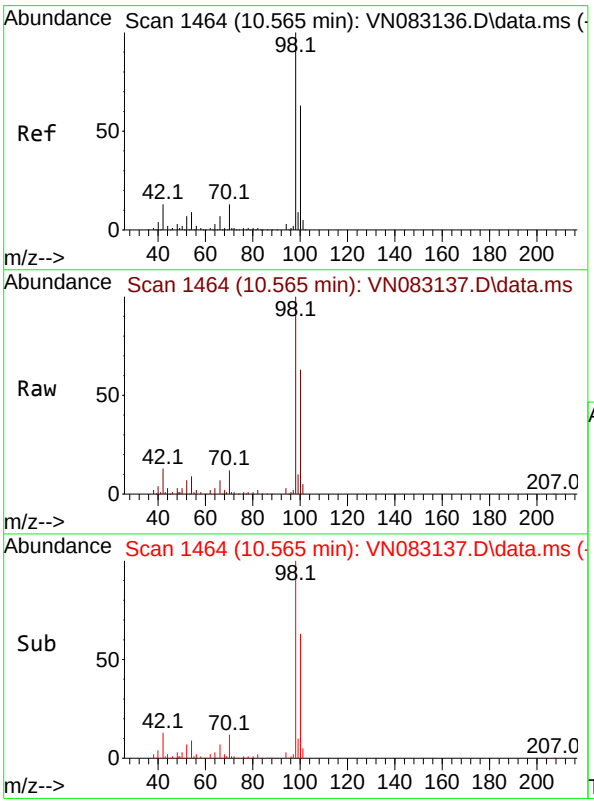
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

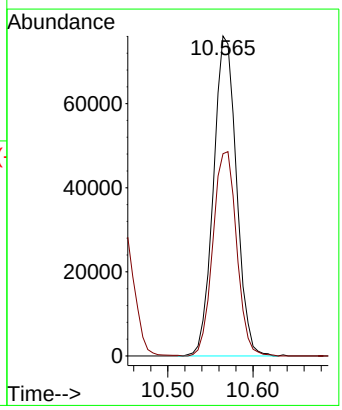


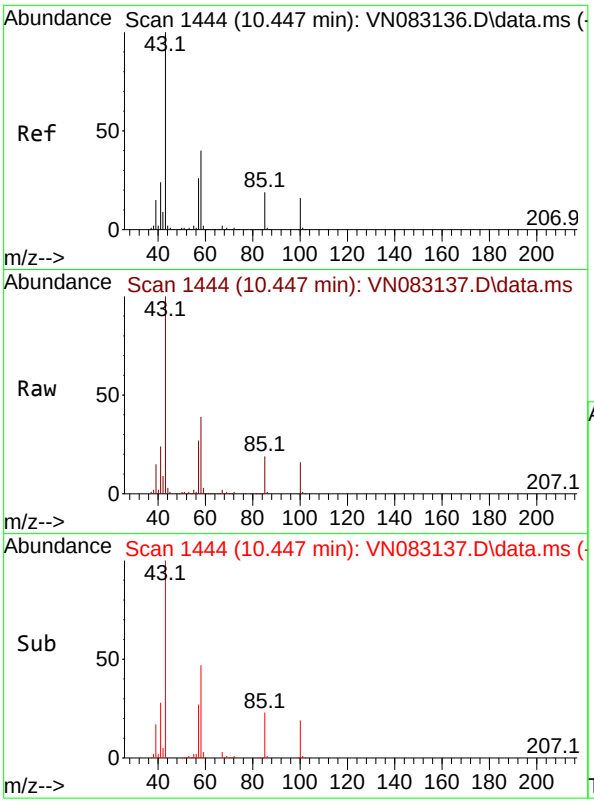




#50
Toluene-d8
Concen: 16.926 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 98 Resp: 142952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 51.5 | 77.3 |

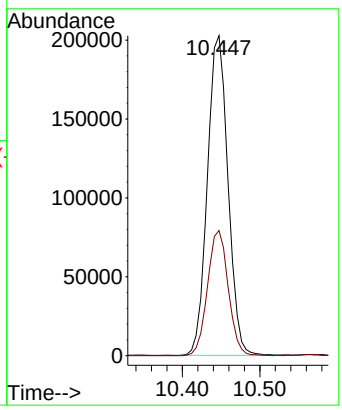





#51
4-Methyl-2-Pentanone
Concen: 103.224 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 37433

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 39.4 | 28.2 | 42.4 |




**Instrument :**
MSVOA_N
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VSTDICC020

**Manual Integrations**
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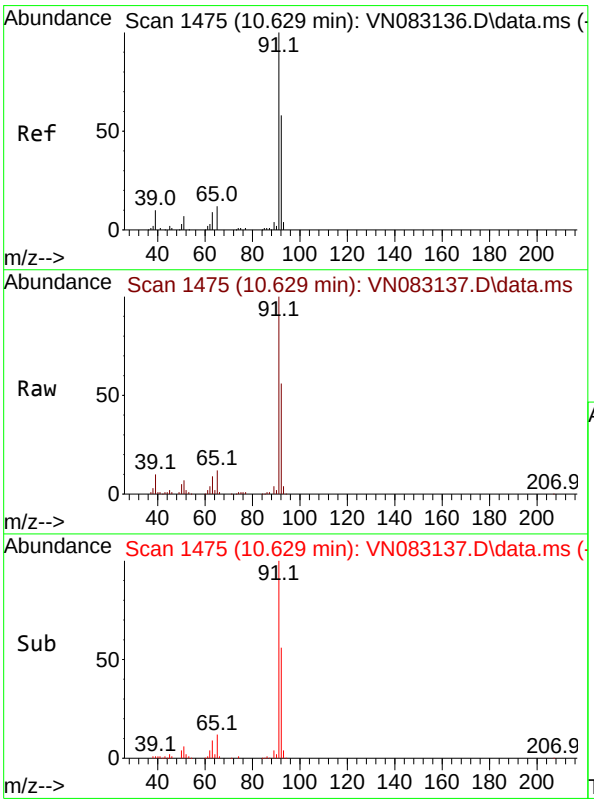
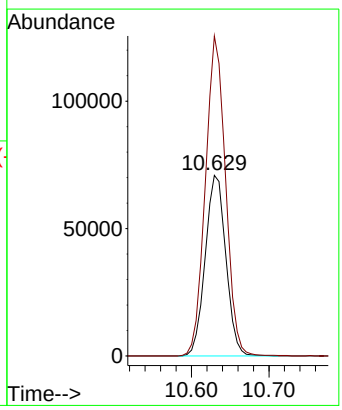
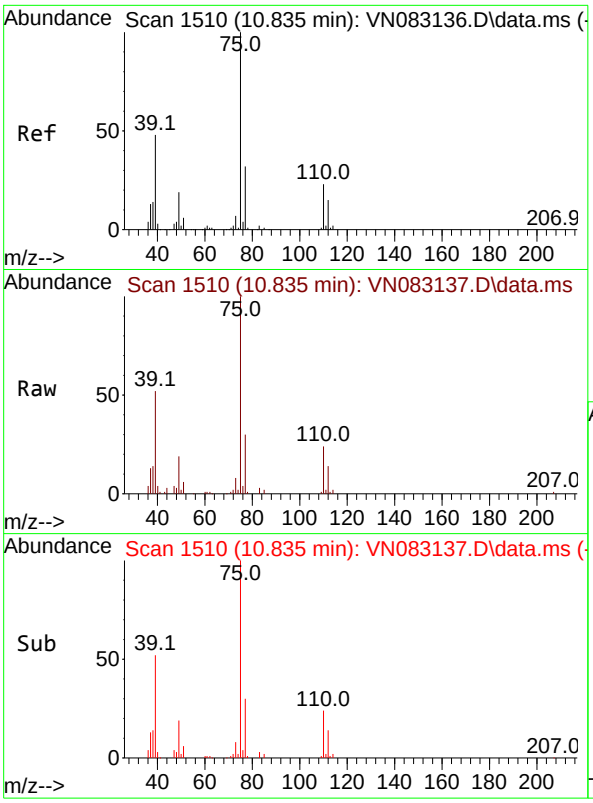



#52
Toluene
Concen: 20.358 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 92 Resp: 131247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.0 | 139.4 | 209.0 |

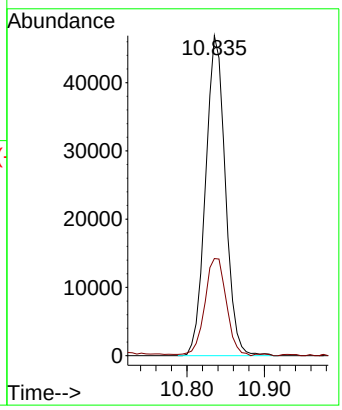





#53
t-1,3-Dichloropropene
Concen: 20.793 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 8313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.4 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
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VSTDICC020

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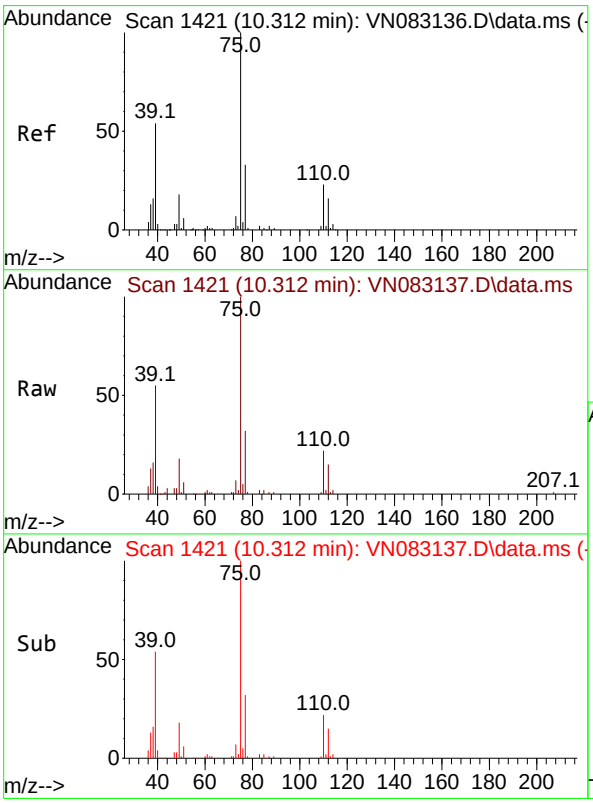
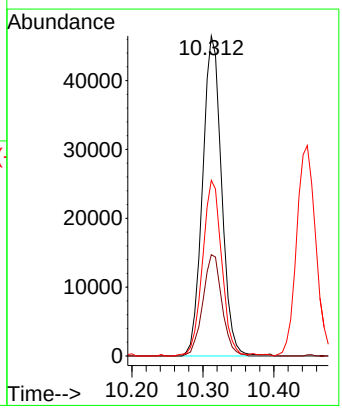
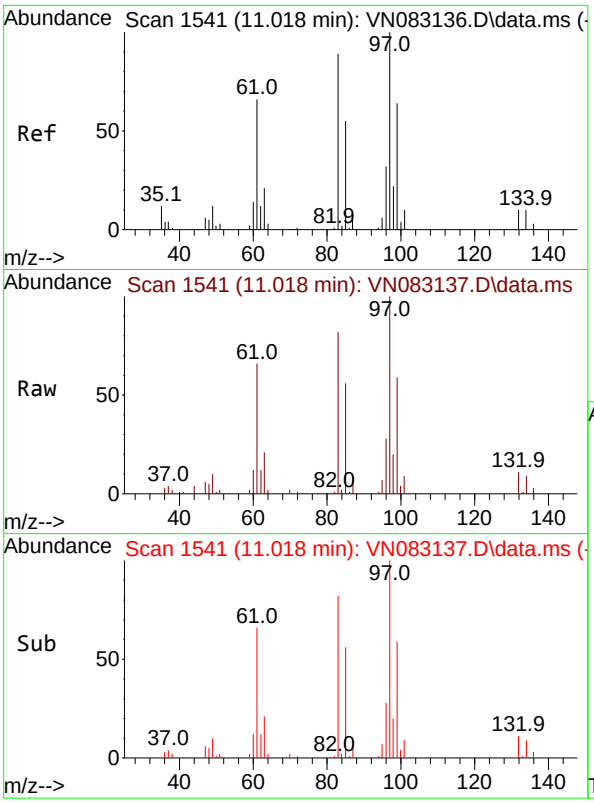



#54
cis-1,3-Dichloropropene
Concen: 20.351 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 86551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.7 | 24.3 | 36.5 |
| 39 | 54.5 | 50.5 | 75.7 |

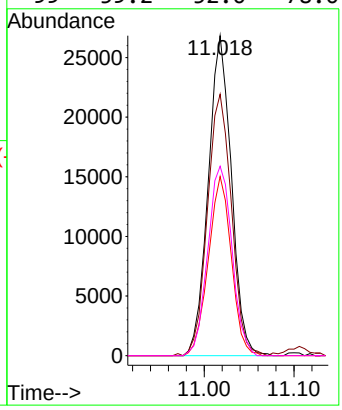





#55
1,1,2-Trichloroethane
Concen: 20.811 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 97 Resp: 4808

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 81.1 | 71.4 | 107.0 |
| 85 | 56.0 | 45.8 | 68.6 |
| 99 | 59.2 | 52.0 | 78.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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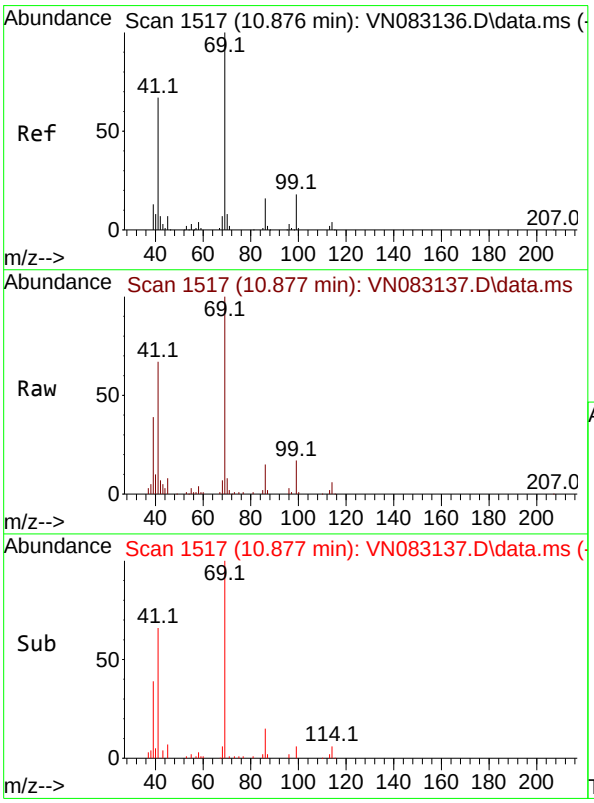
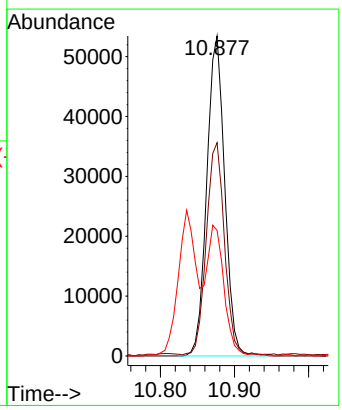
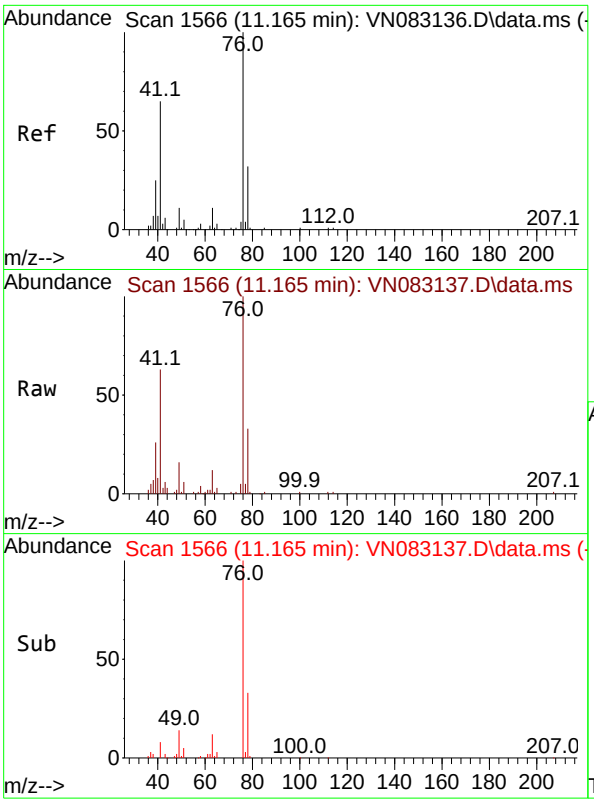



#56
Ethyl methacrylate
Concen: 20.550 ug/l
RT: 10.877 min Scan# 1517
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 69 Resp: 89503

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 67.5 | 63.4 | 95.2 |
| 39 | 41.2 | 37.4 | 56.0 |

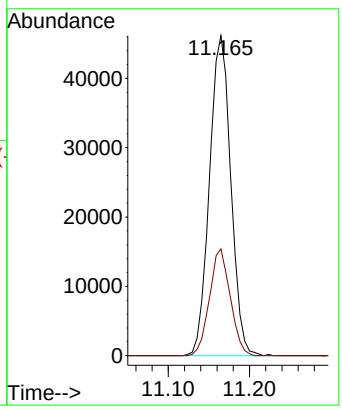





#57
1,3-Dichloropropane
Concen: 20.464 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 76 Resp: 8427

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.5 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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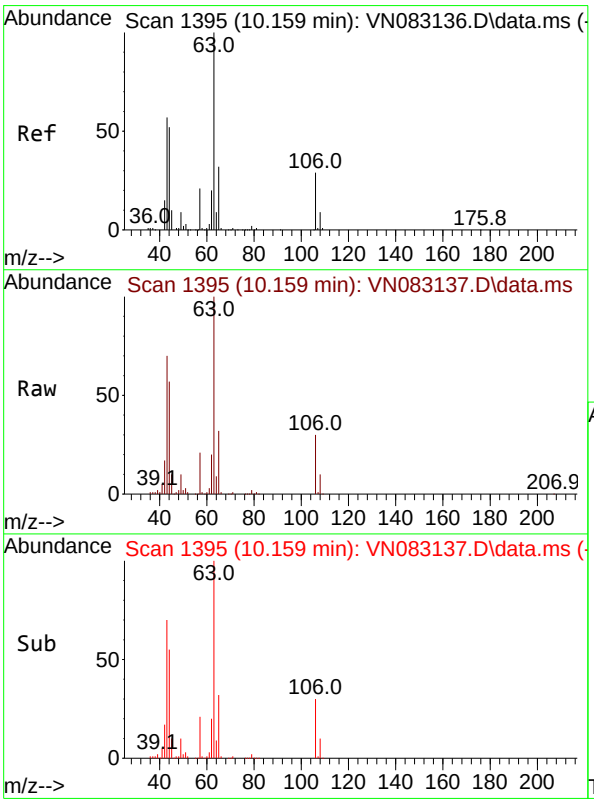
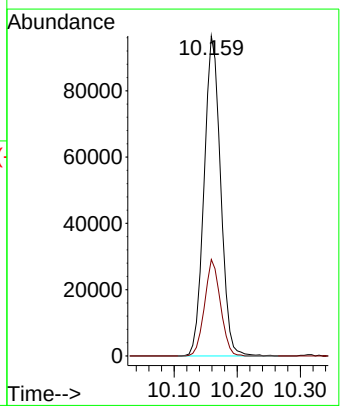
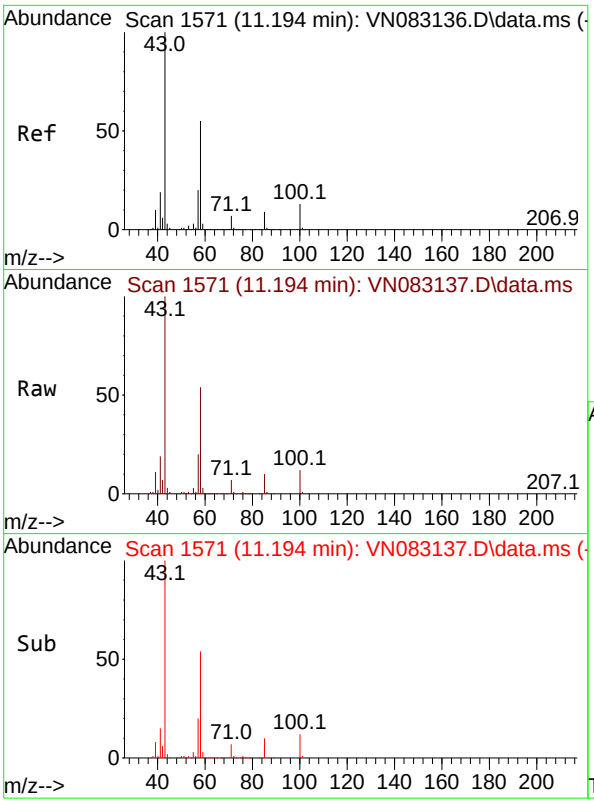



#58
2-Chloroethyl Vinyl ether
Concen: 95.242 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 63 Resp: 175345

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.9 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 102.020 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 28622

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 54.7 | 24.6 | 73.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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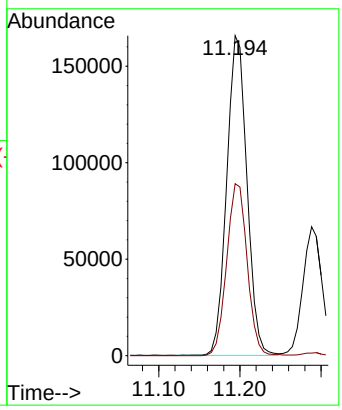
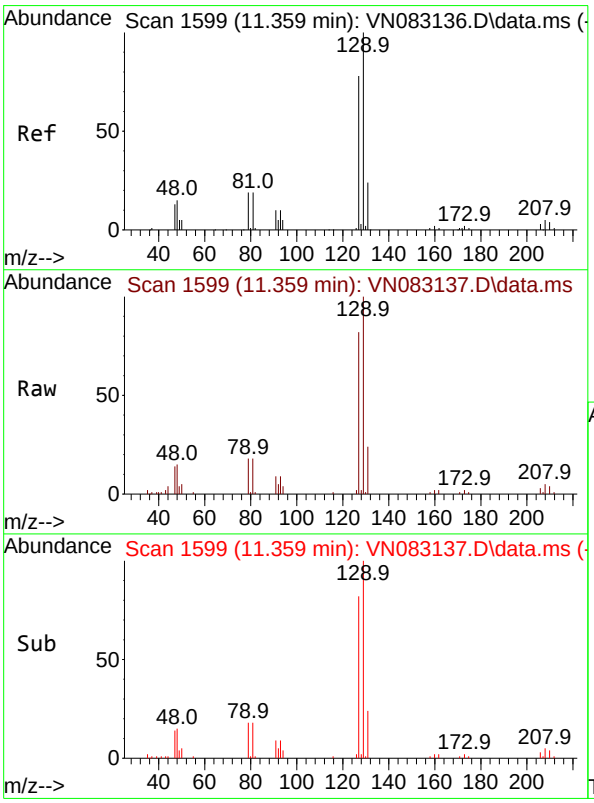
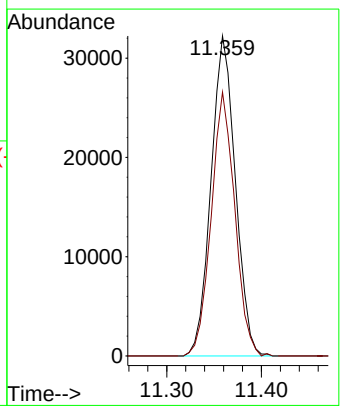


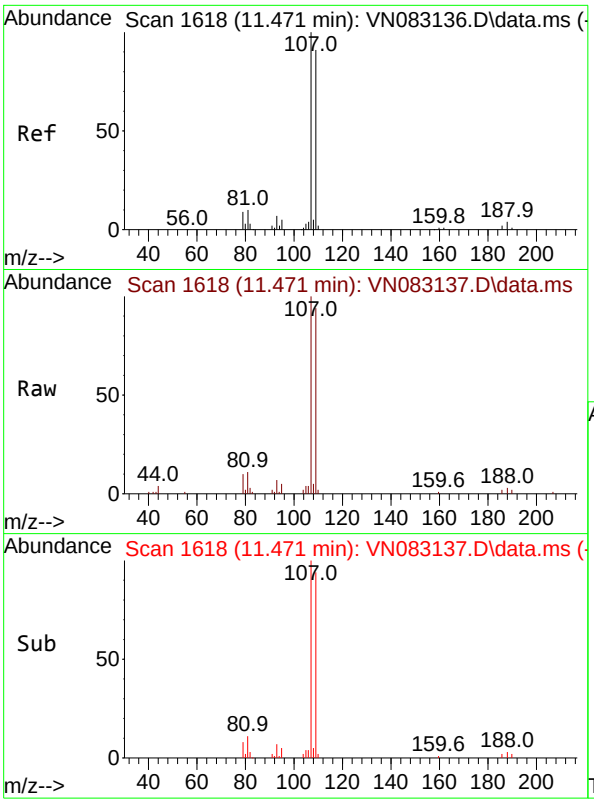




#60
Dibromochloromethane
Concen: 20.610 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:129 Resp: 57571

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 79.9 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 20.088 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:107 Resp: 4875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.4 | 73.7 | 110.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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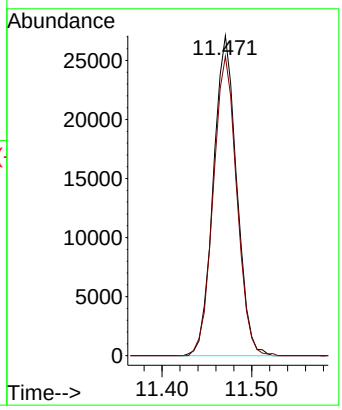
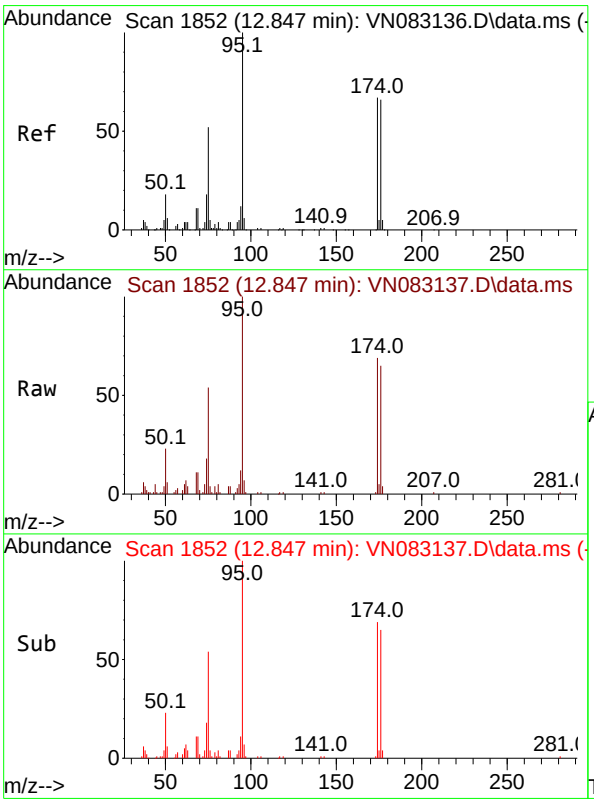
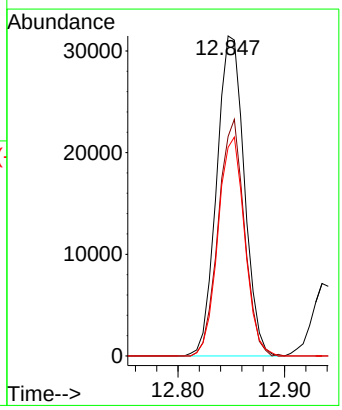


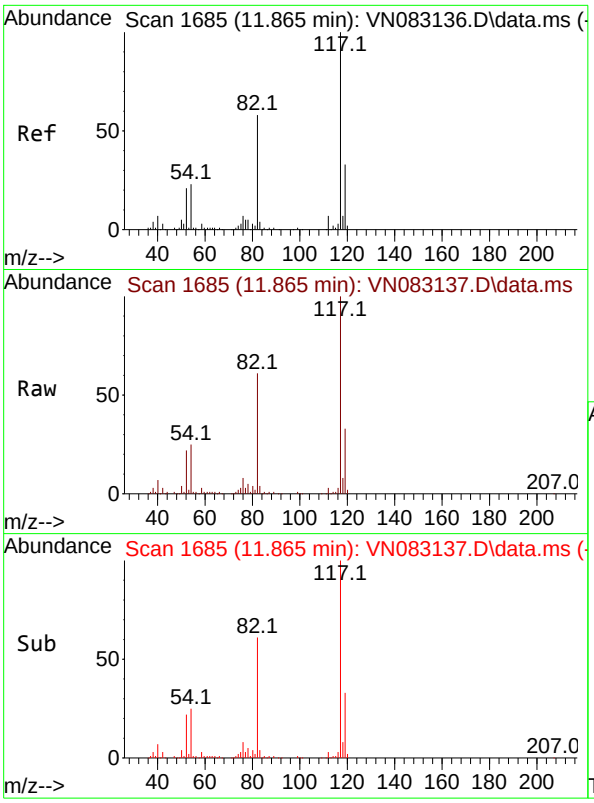




#62
4-Bromofluorobenzene
Concen: 17.179 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 95 Resp: 56566

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.8 | 0.0 | 159.2 |
| 176 | 66.2 | 0.0 | 147.6 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:117 Resp: 31325

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.1 | 47.5 | 71.3 |
| 119 | 33.4 | 25.6 | 38.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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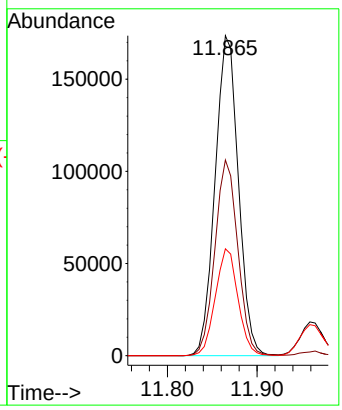
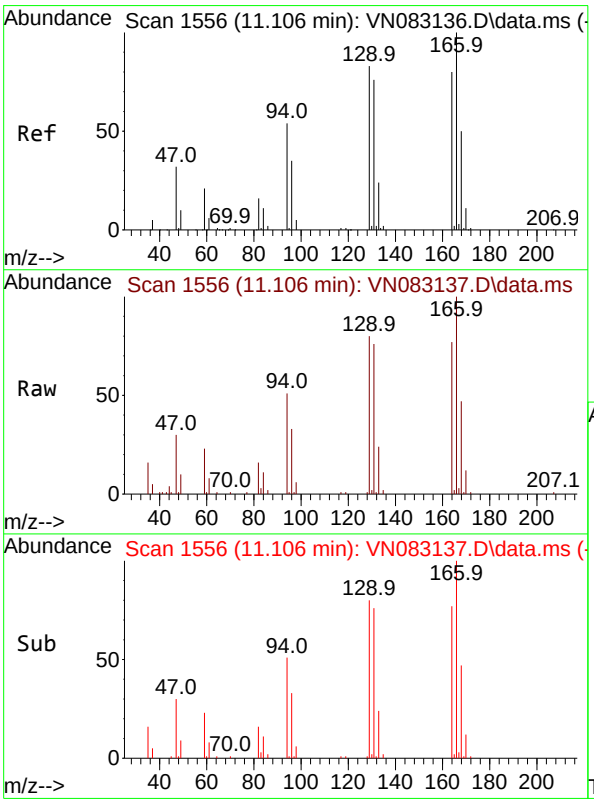
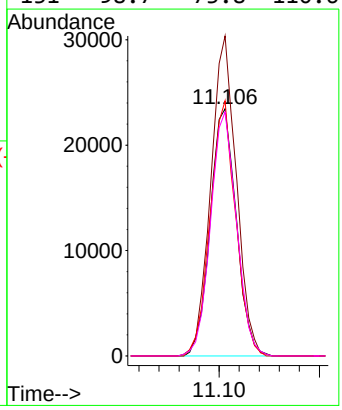


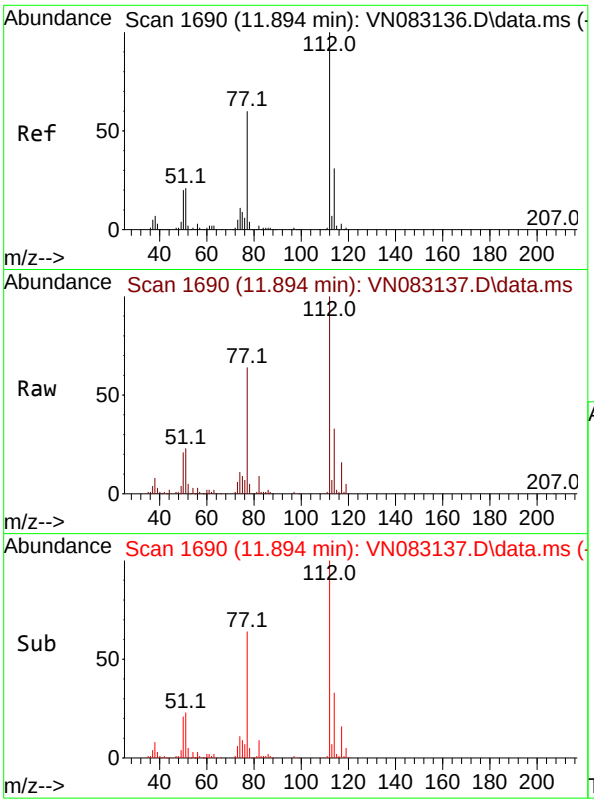




#64
Tetrachloroethene
Concen: 20.405 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:164 Resp: 42332

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 129.4 | 101.4 | 152.0 |
| 129 | 103.2 | 75.7 | 113.5 |
| 131 | 98.7 | 73.8 | 110.6 |

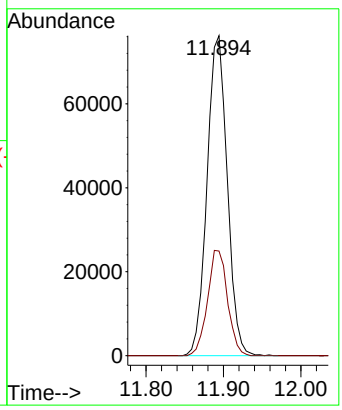





#65
Chlorobenzene
Concen: 19.933 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:112 Resp: 13798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.7 | 26.2 | 39.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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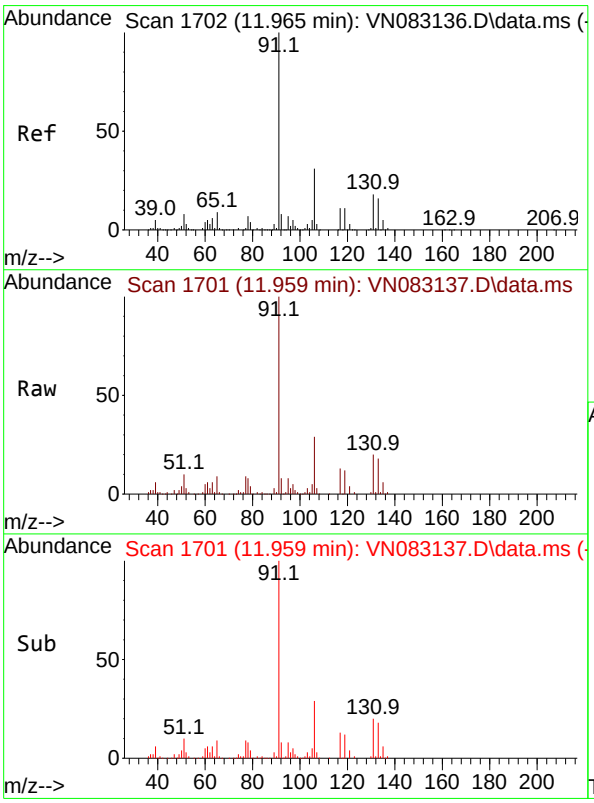
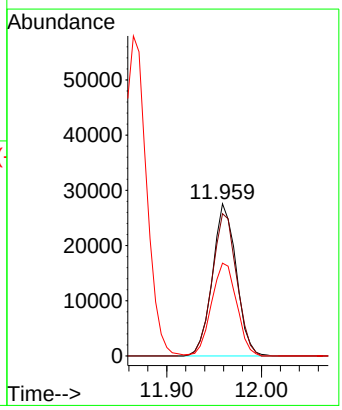
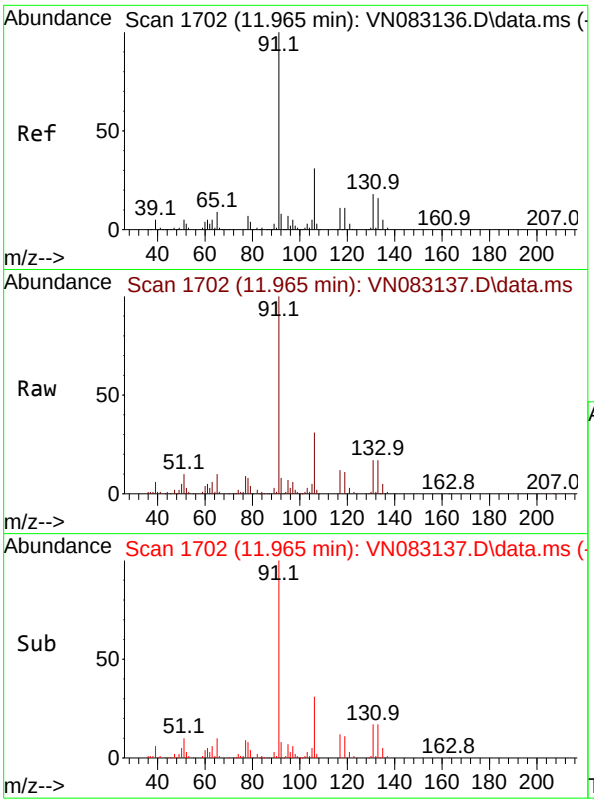



#66
1,1,1,2-Tetrachloroethane
Concen: 19.762 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:131 Resp: 48247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.1 | 47.3 | 142.0 |
| 119 | 64.5 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 20.335 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

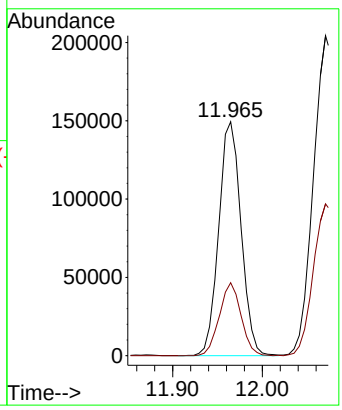
Tgt Ion: 91 Resp: 25823

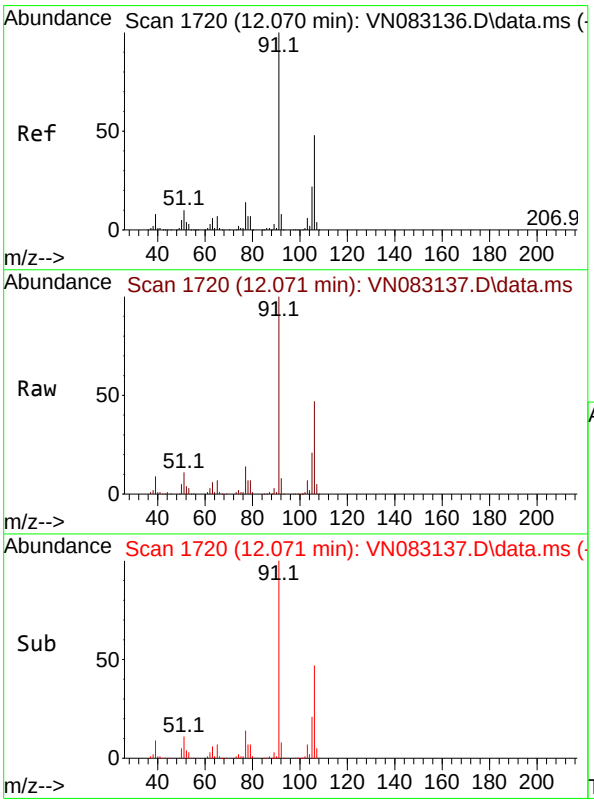
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.2 | 24.0 | 36.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

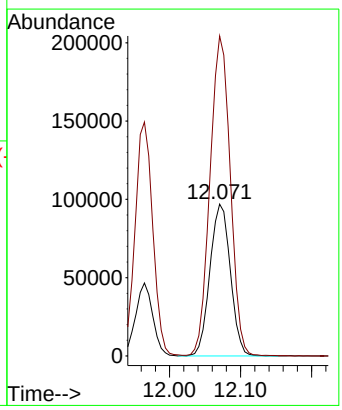


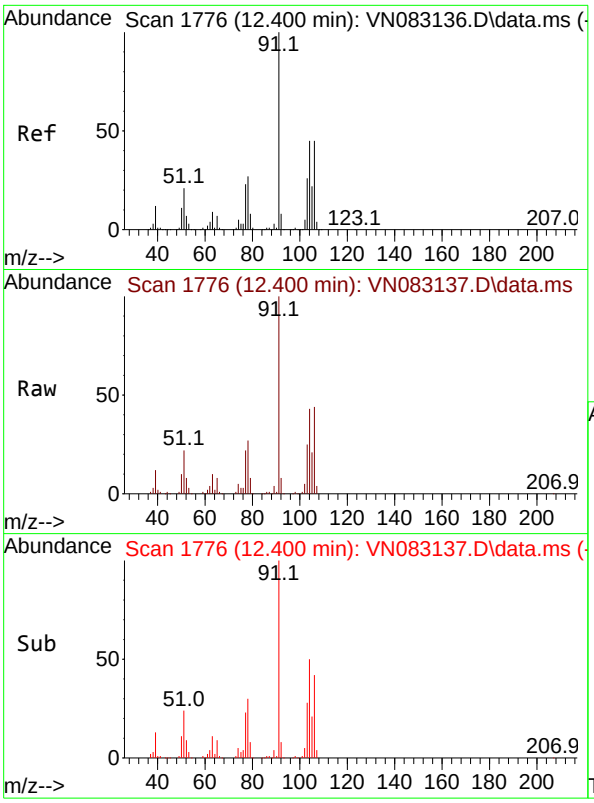




#68
m/p-Xylenes
Concen: 40.625 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:106 Resp: 193256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 209.9 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 20.281 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:106 Resp: 9515

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.3 | 111.3 | 333.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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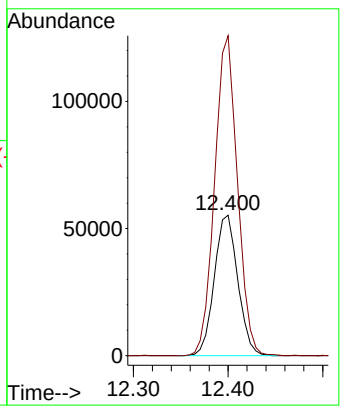
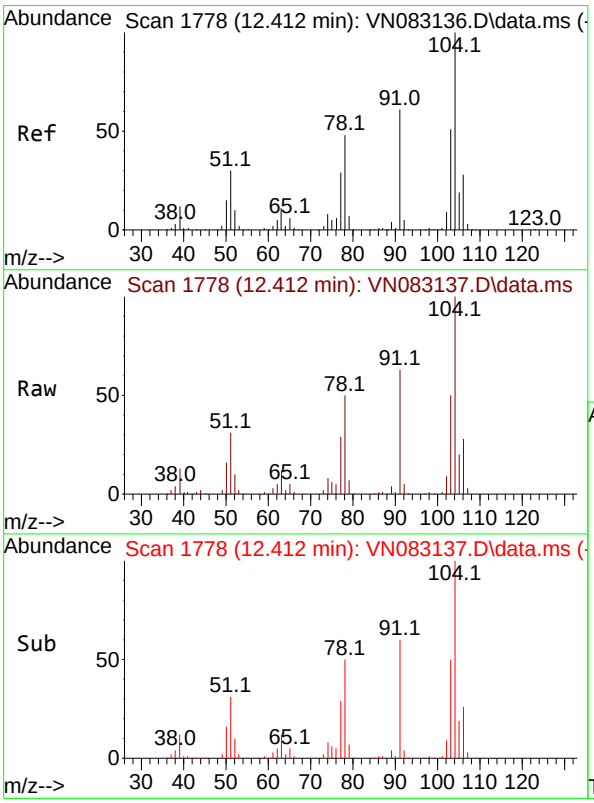
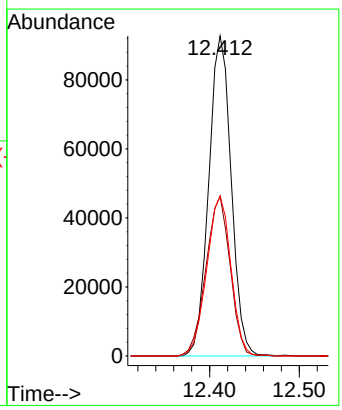


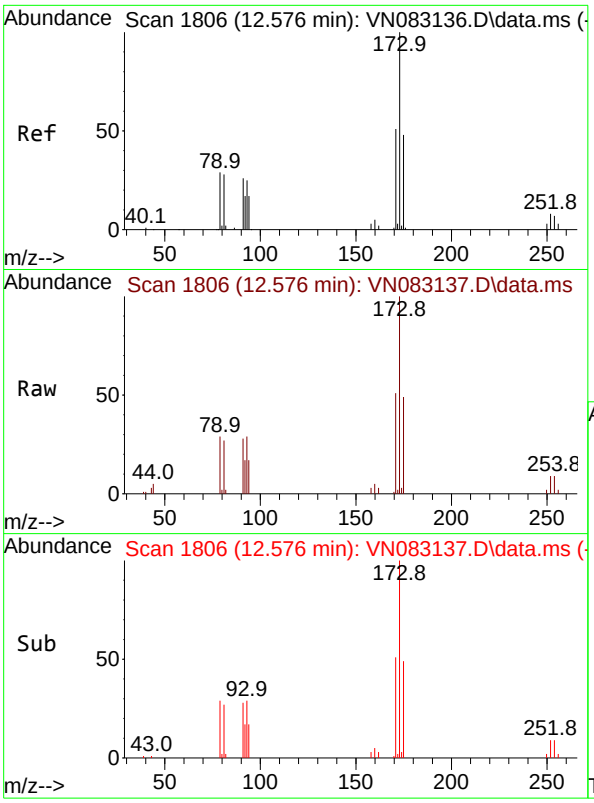




#70
Styrene
Concen: 20.475 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:104 Resp: 161342

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.7 | 41.6 | 62.4 |
| 103 | 53.8 | 44.0 | 66.0 |

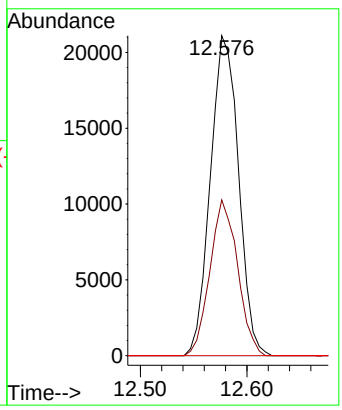





#71
Bromoform
Concen: 20.957 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:173 Resp: 3876

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.9 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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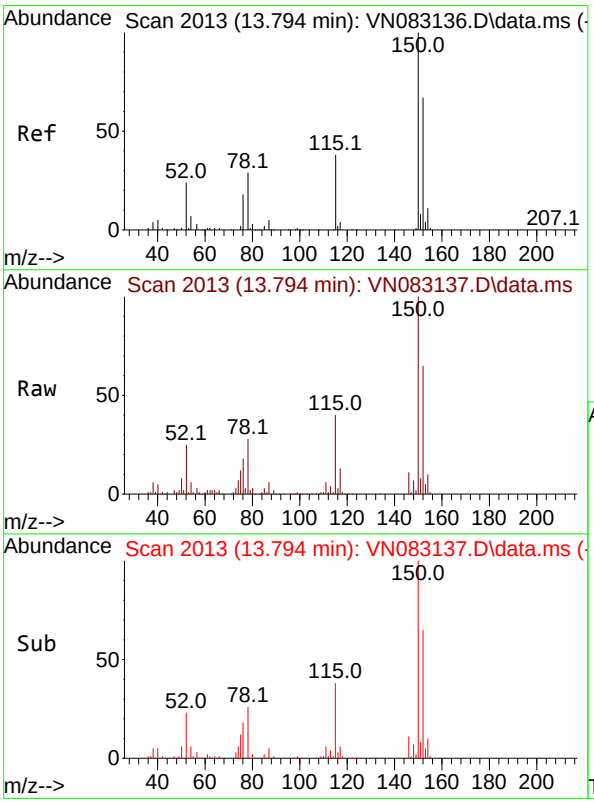
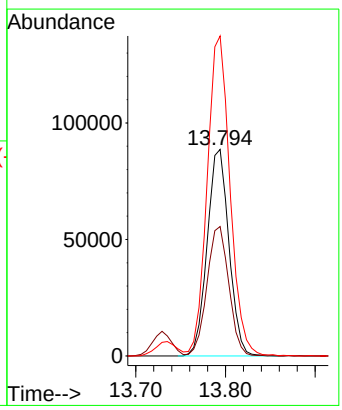
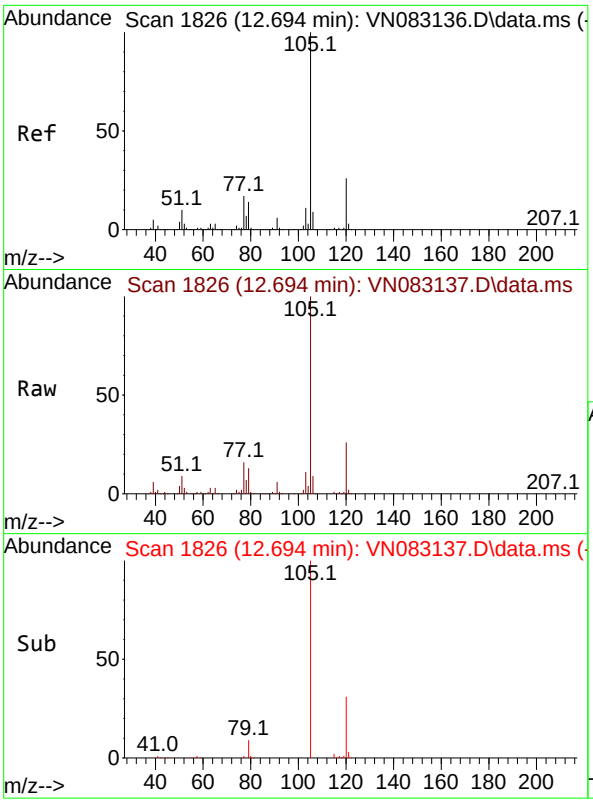



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:152 Resp: 149244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.1 | 30.6 | 91.6 |
| 150 | 162.7 | 0.0 | 348.6 |

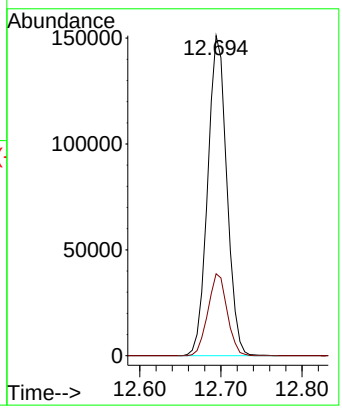





#73
Isopropylbenzene
Concen: 19.764 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:105 Resp: 24671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.8 | 12.9 | 38.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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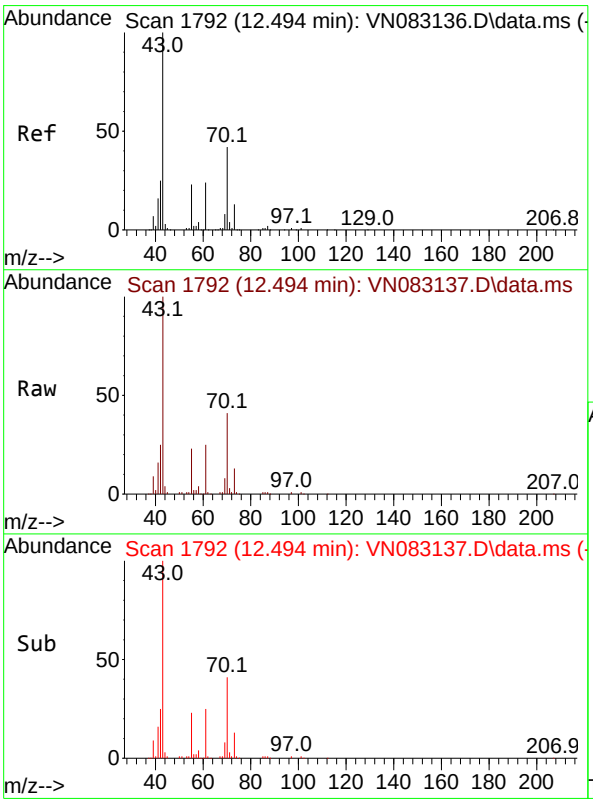
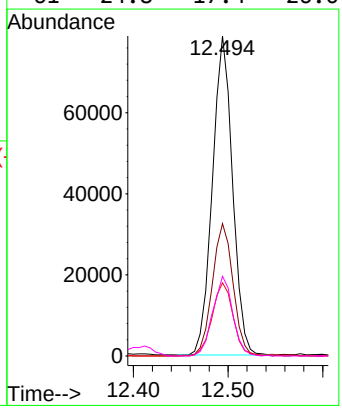
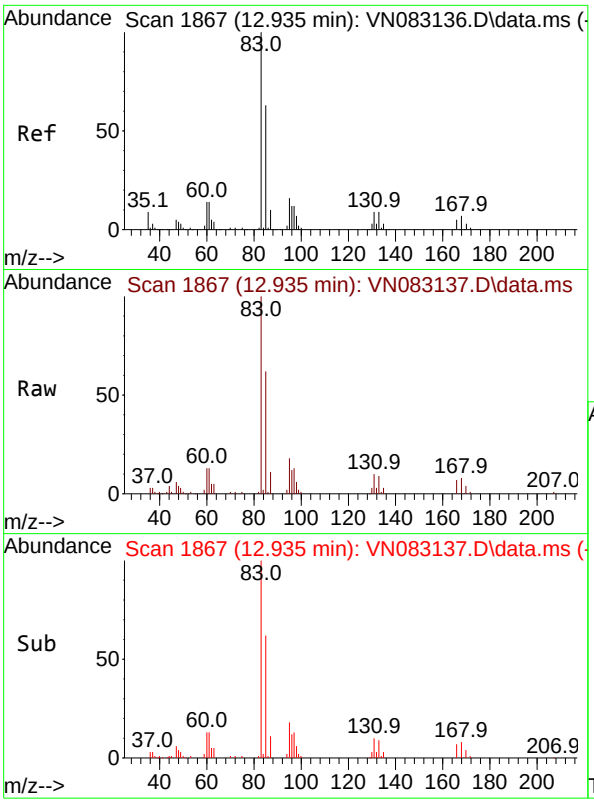



#74
N-amyl acetate
Concen: 19.014 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 43 Resp: 116100

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 42.8 | 29.8 | 44.6 |
| 55 | 24.0 | 18.7 | 28.1 |
| 61 | 24.8 | 17.4 | 26.0 |






#75
1,1,2,2-Tetrachloroethane
Concen: 19.670 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 83 Resp: 6944

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.6 | 5.0 | 14.9 |
| 85 | 64.6 | 31.9 | 95.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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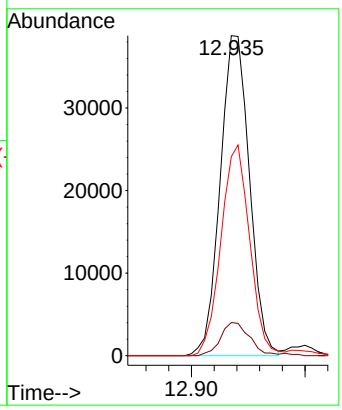
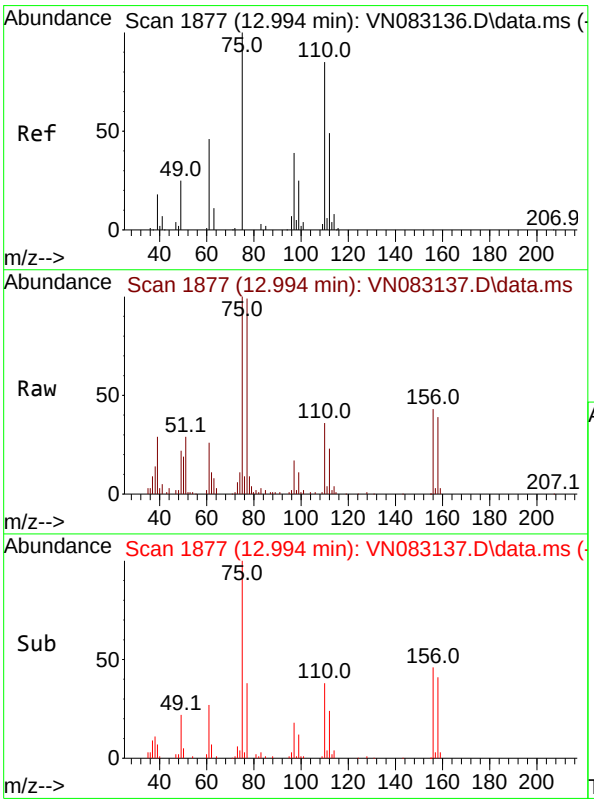
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

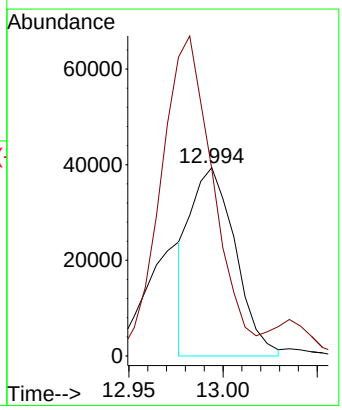


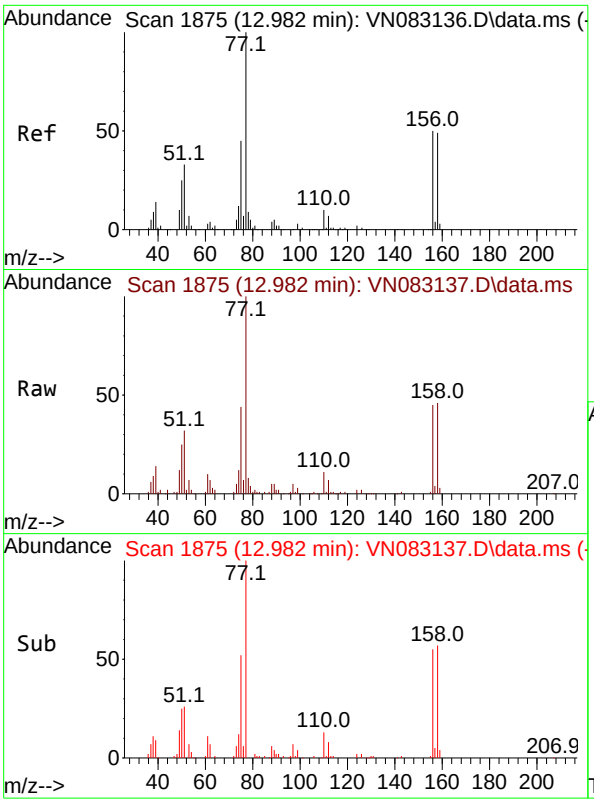




#76
1,2,3-Trichloropropane
Concen: 19.901 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 65295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 199.0 | 110.9 | 332.6 |

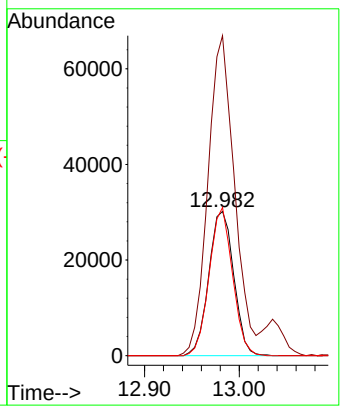





#77
Bromobenzene
Concen: 19.952 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:156 Resp: 5532

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 234.8 | 111.3 | 333.8 |
| 158 | 95.8 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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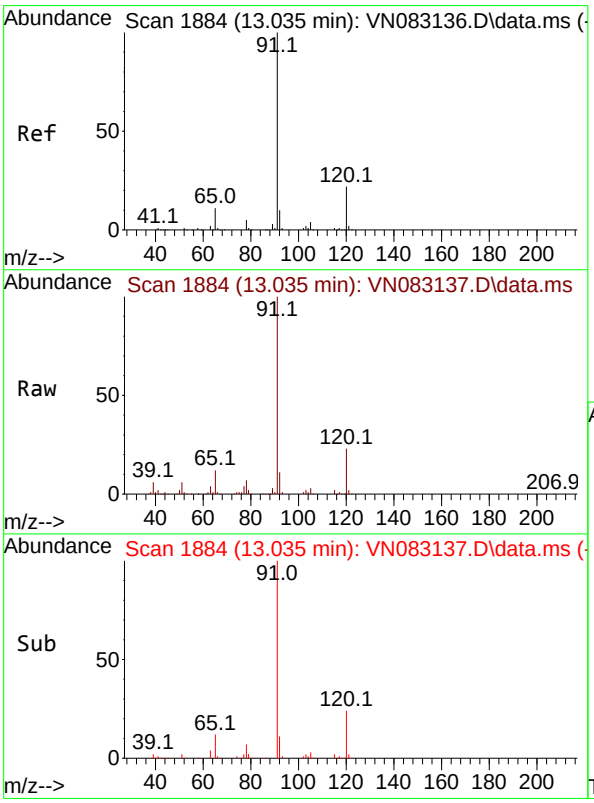
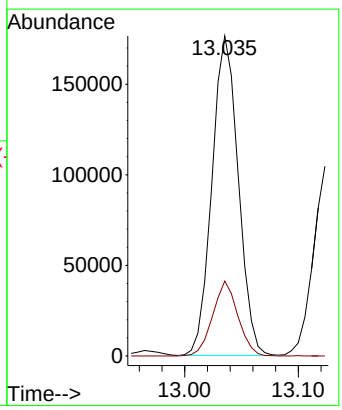
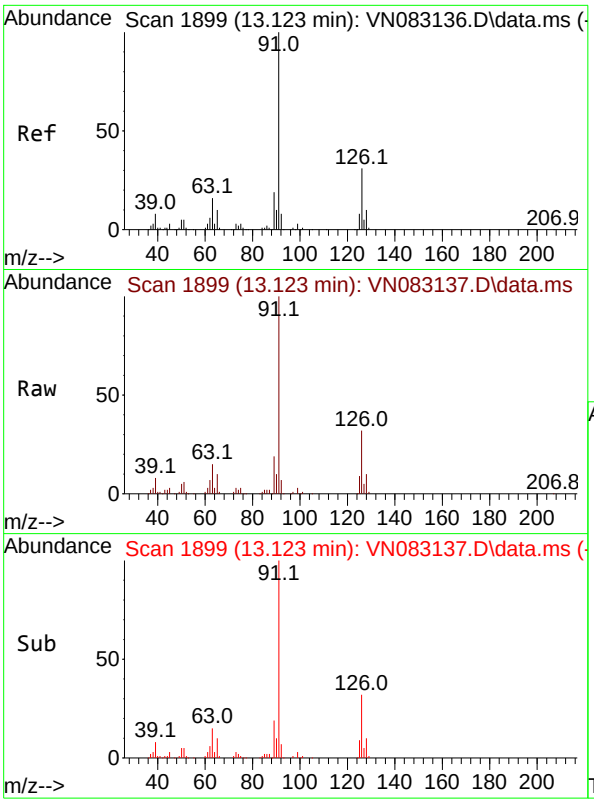



#78
n-propylbenzene
Concen: 19.740 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 91 Resp: 283745

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.4 | 10.9 | 32.9 |

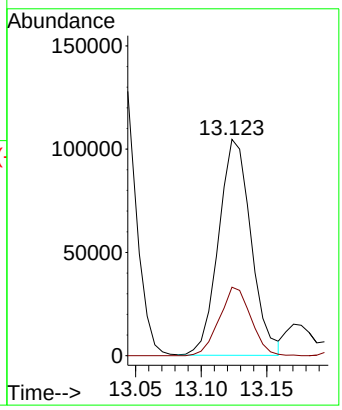





#79
2-Chlorotoluene
Concen: 19.827 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 91 Resp: 18068

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.7 | 16.2 | 48.6 |




**Instrument :**
MSVOA_N
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VSTDICC020

**Manual Integrations**
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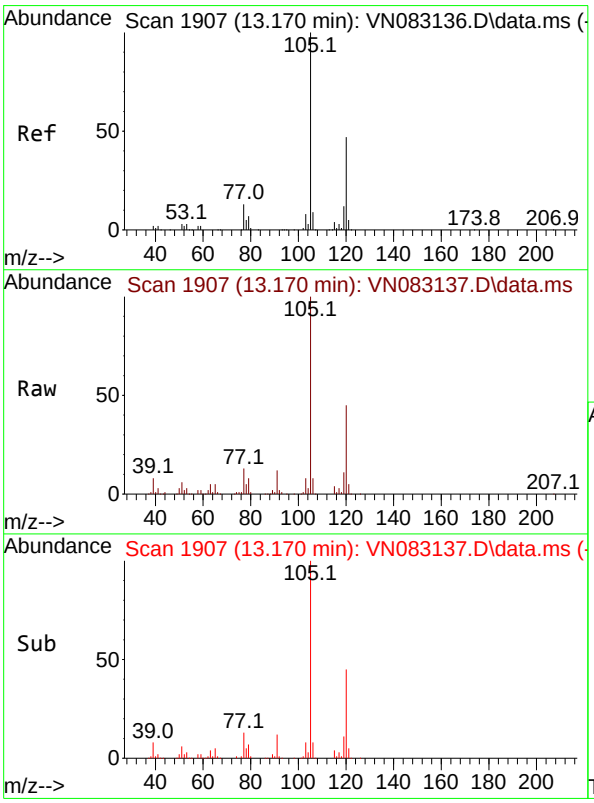
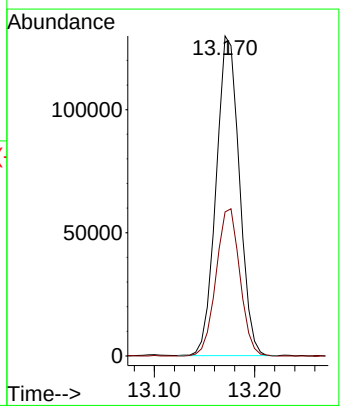
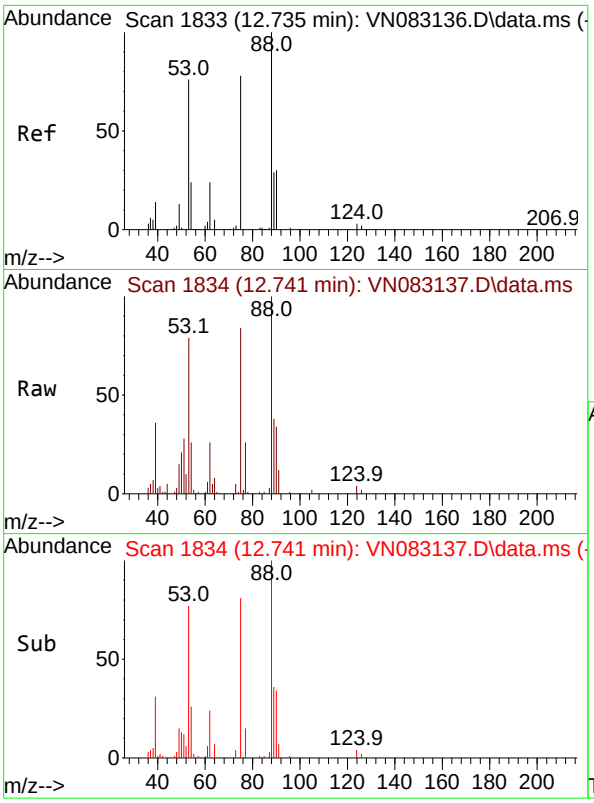



#80
1,3,5-Trimethylbenzene
Concen: 19.938 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:105 Resp: 208367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.2 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 20.759 ug/l
RT: 12.741 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 3126

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 88.0 | 88.4 | 132.6 |
| 89 | 41.4 | 36.3 | 54.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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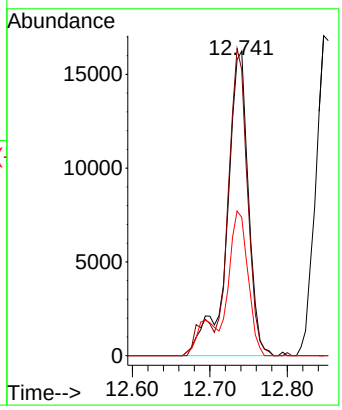
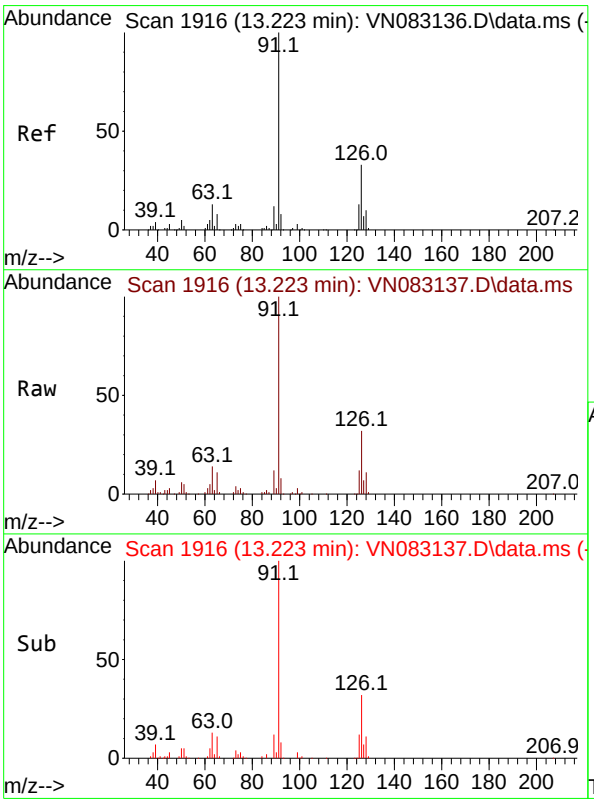
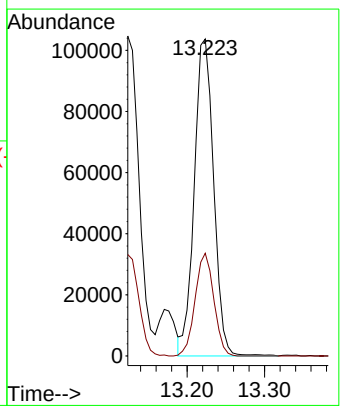


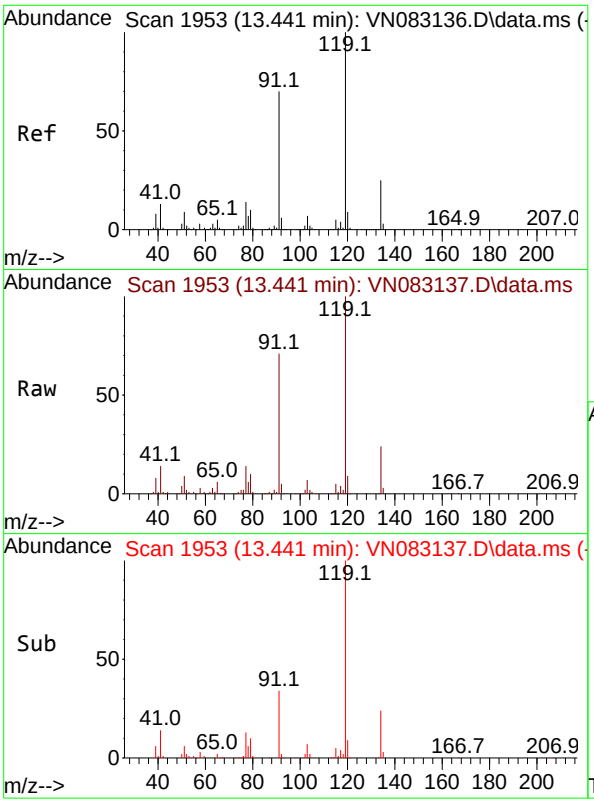




#82
4-Chlorotoluene
Concen: 19.684 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 91 Resp: 179932

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.3 | 16.2 | 48.6 |

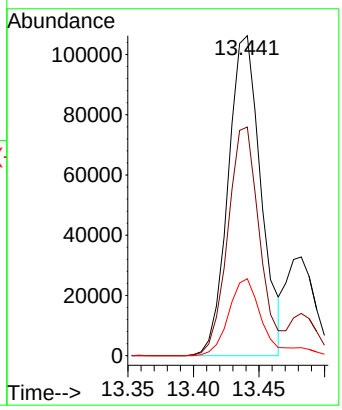





#83
tert-Butylbenzene
Concen: 19.985 ug/l
RT: 13.441 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:119 Resp: 18496

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.2 | 35.0 | 105.1 |
| 134 | 25.2 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
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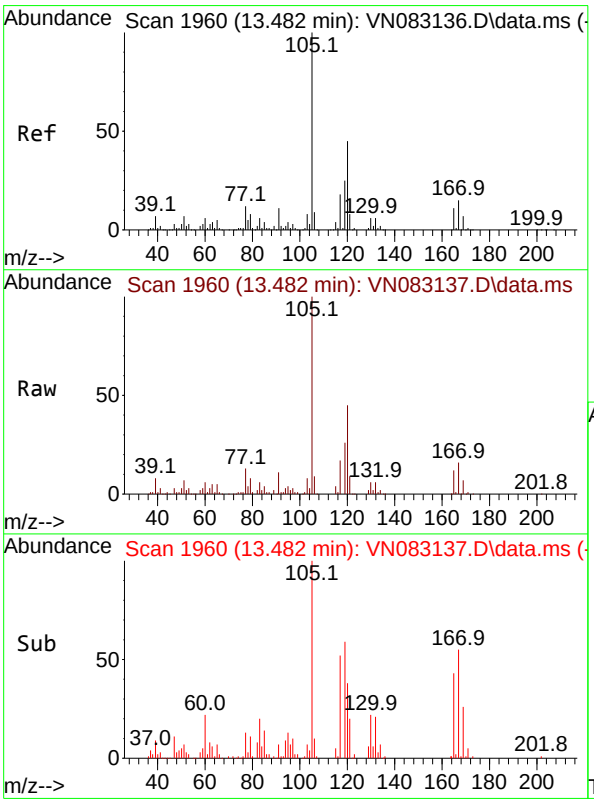
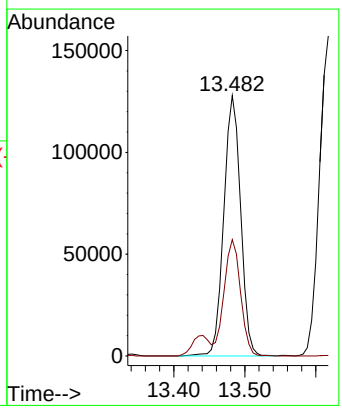
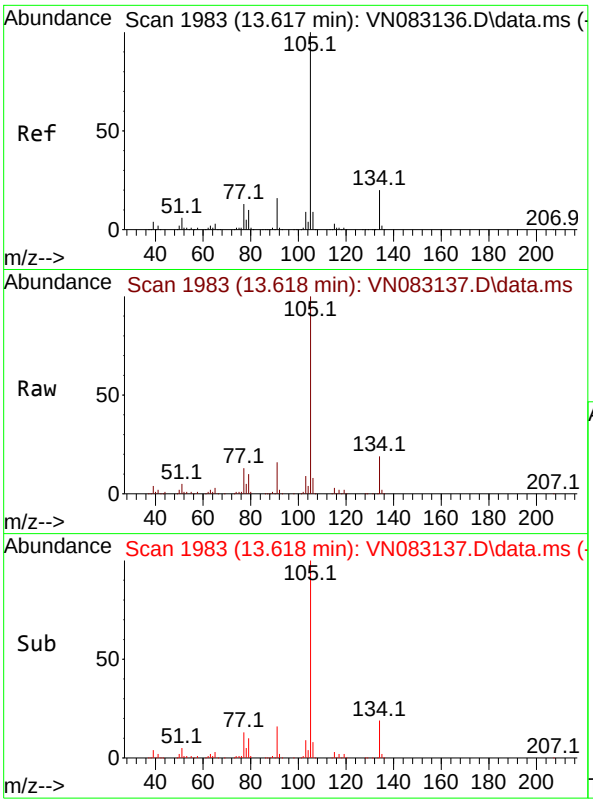



#84
1,2,4-Trimethylbenzene
Concen: 19.984 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:105 Resp: 210474

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.0 | 21.9 | 65.8 |






#85
sec-Butylbenzene
Concen: 19.862 ug/l
RT: 13.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

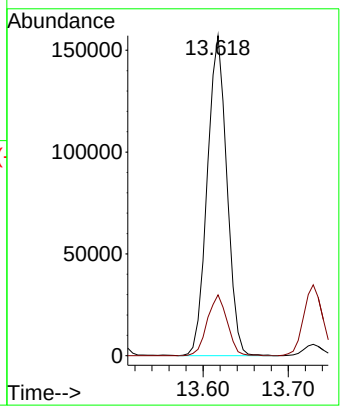
Tgt Ion:105 Resp: 25082

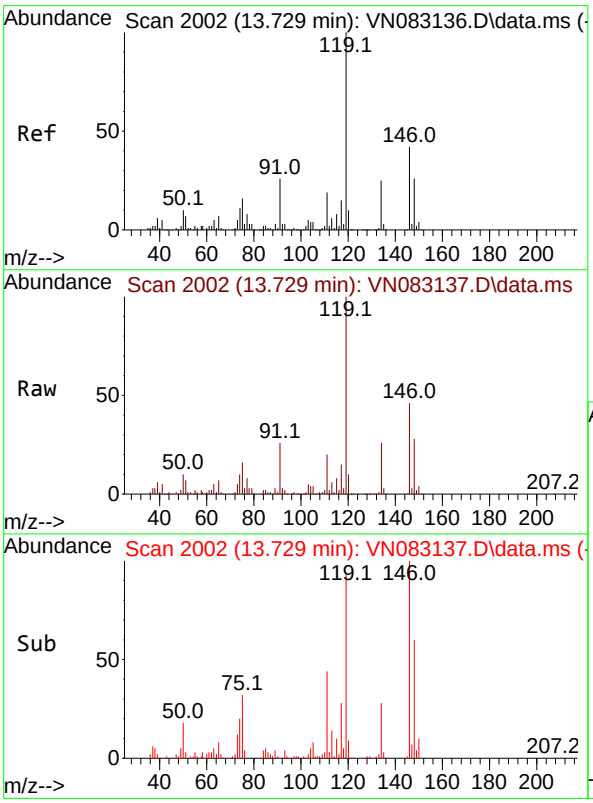
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 9.8 | 29.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

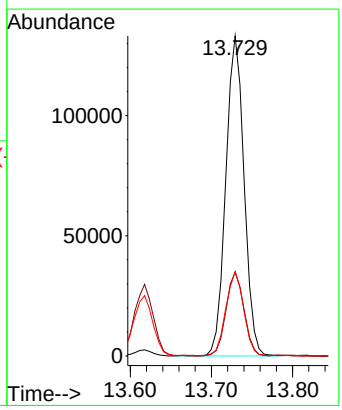


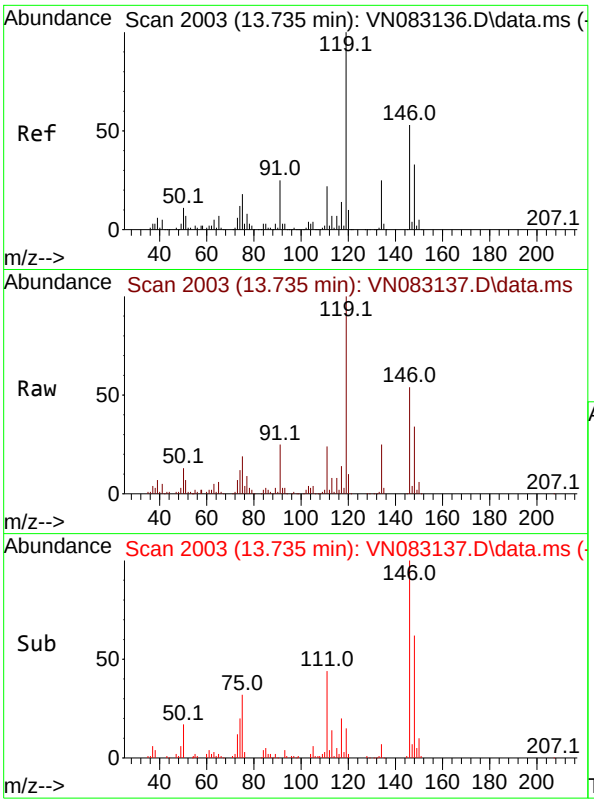




#86
p-Isopropyltoluene
Concen: 19.986 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:119 Resp: 208404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.7 | 13.0 | 39.0 |
| 91 | 25.8 | 12.3 | 36.9 |

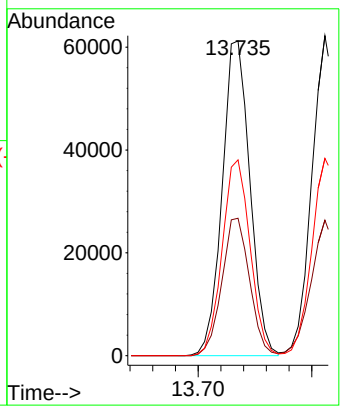





#87
1,3-Dichlorobenzene
Concen: 19.897 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:146 Resp: 10381

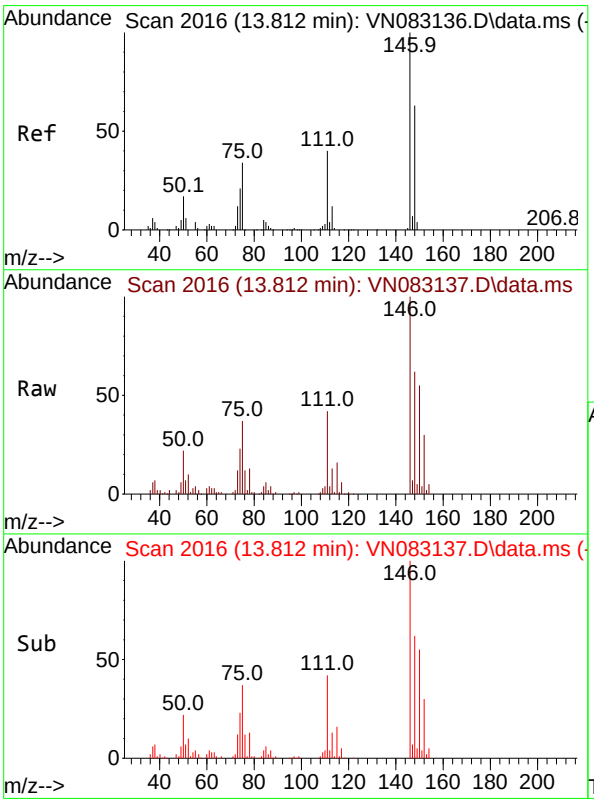
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.7 | 20.6 | 61.9 |
| 148 | 62.7 | 31.8 | 95.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

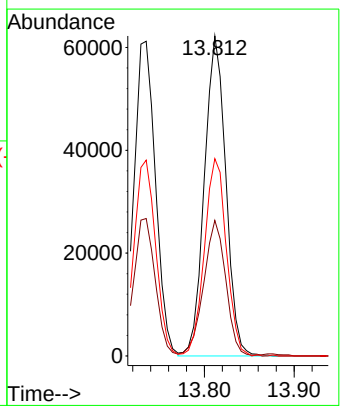
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

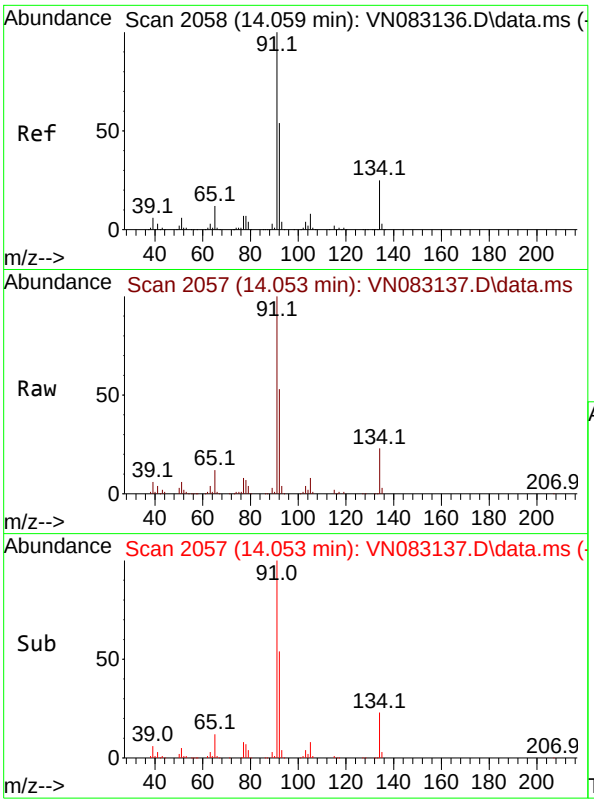



#88
1,4-Dichlorobenzene
Concen: 19.605 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:146 Resp: 103132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.2 | 20.1 | 60.3 |
| 148 | 63.5 | 32.2 | 96.6 |

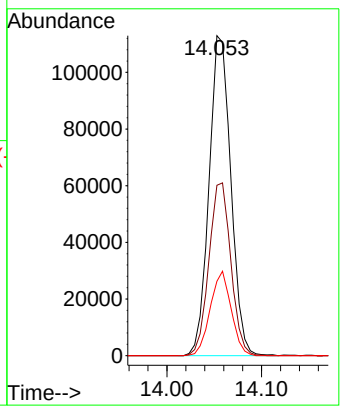





#89
n-Butylbenzene
Concen: 19.975 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 91 Resp: 18048

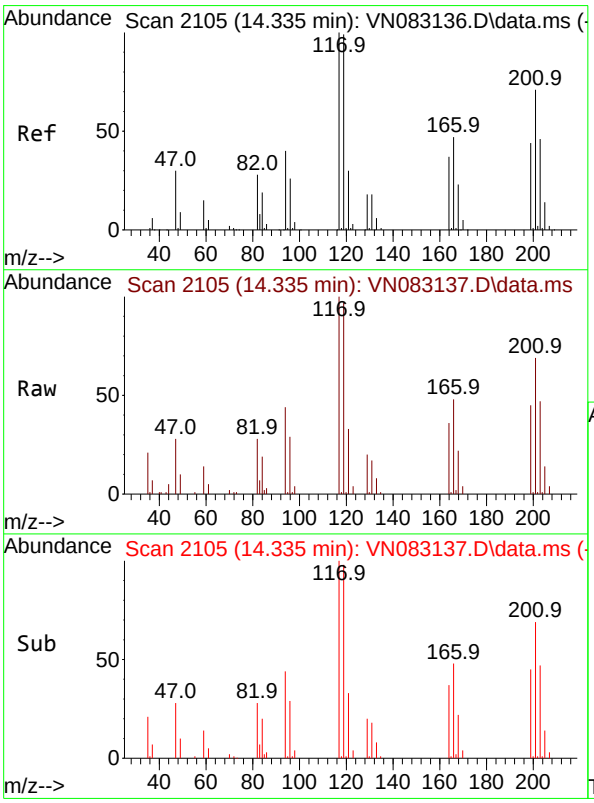
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.3 | 26.1 | 78.3 |
| 134 | 25.4 | 12.1 | 36.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

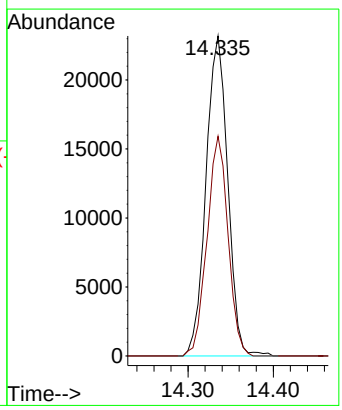
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

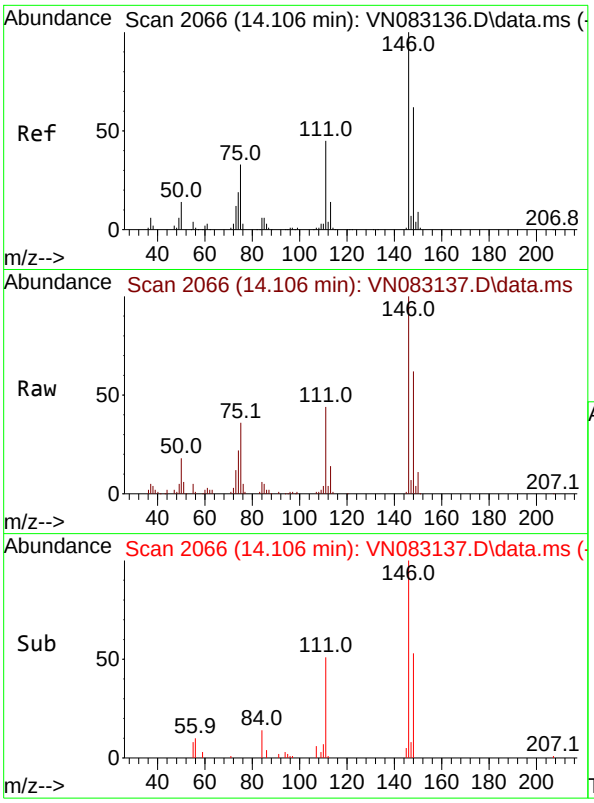



#90
Hexachloroethane
Concen: 20.343 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:117 Resp: 40982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 66.5 | 35.8 | 107.3 |

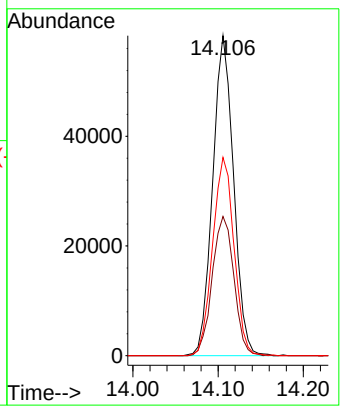





#91
1,2-Dichlorobenzene
Concen: 19.673 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:146 Resp: 9933

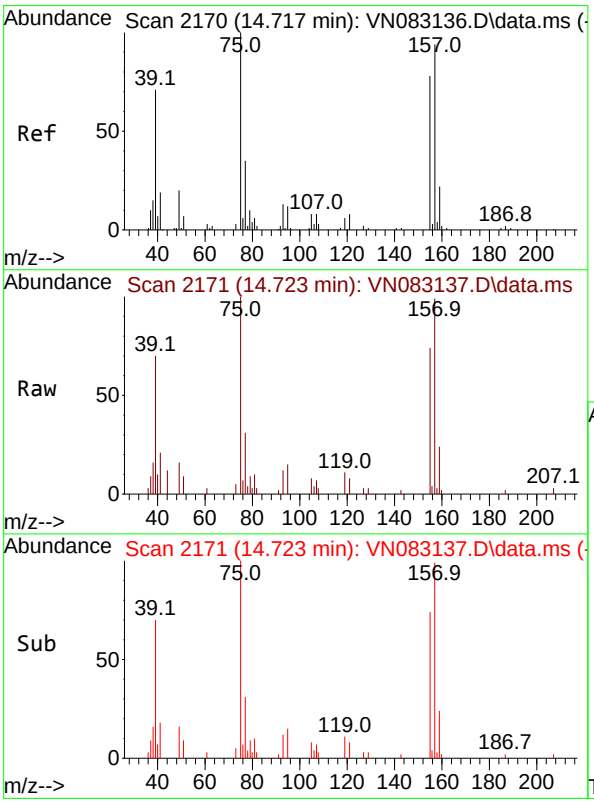
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.3 | 21.4 | 64.2 |
| 148 | 63.5 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

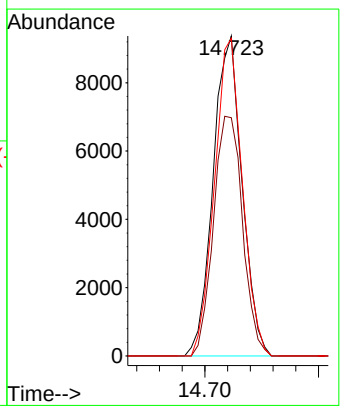
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

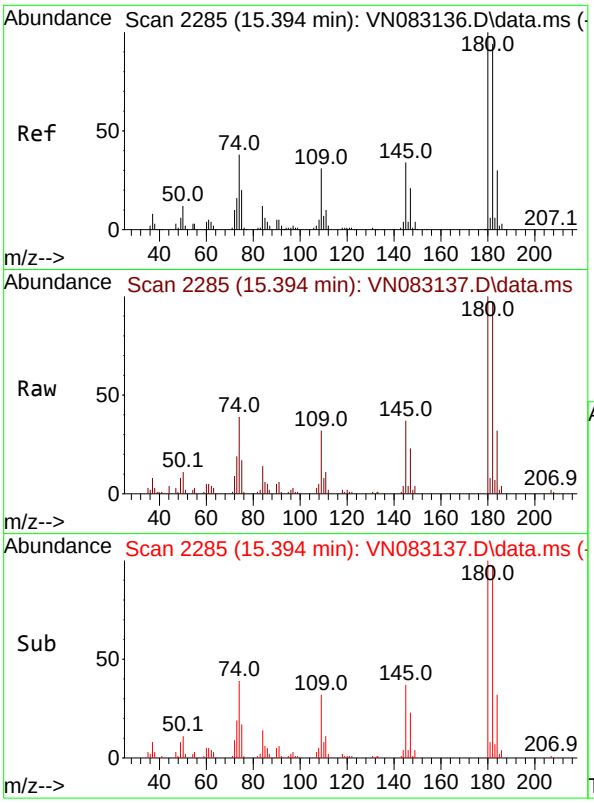



#92
1,2-Dibromo-3-Chloropropane
Concen: 19.320 ug/l
RT: 14.723 min Scan# 2171
Delta R.T. 0.006 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion: 75 Resp: 16552

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 75.5 | 36.6 | 109.8 |
| 157 | 95.6 | 46.9 | 140.6 |






#93
1,2,4-Trichlorobenzene
Concen: 19.902 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

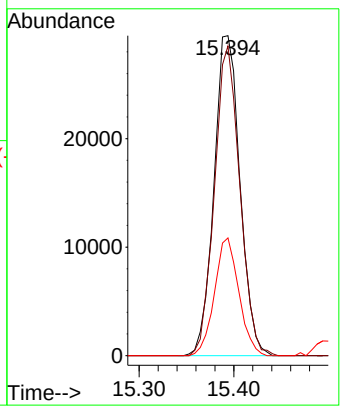
Tgt Ion:180 Resp: 5629

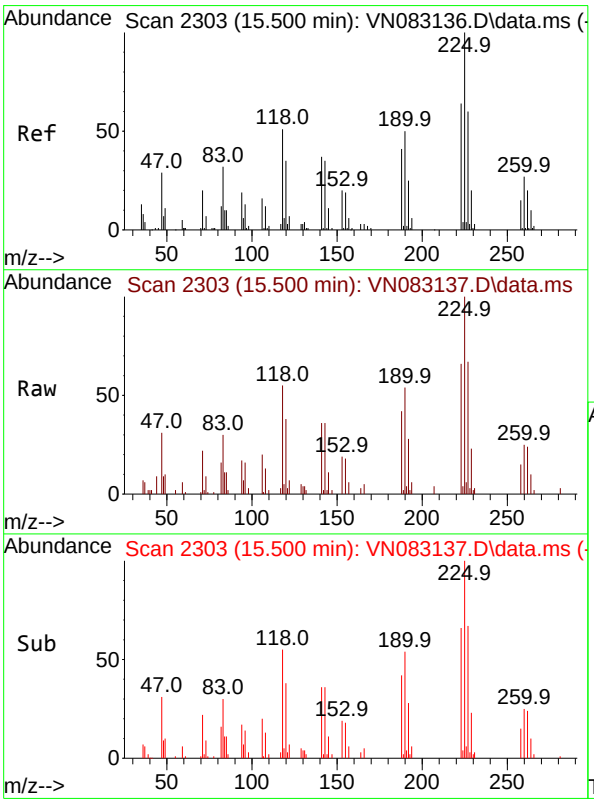
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.3 | 47.3 | 141.8 |
| 145 | 34.5 | 15.7 | 47.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

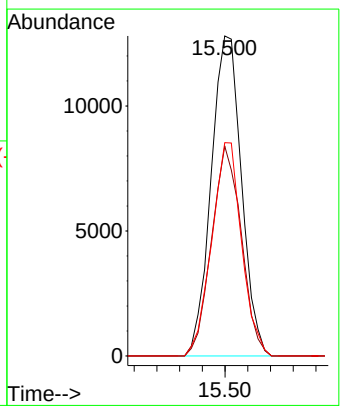


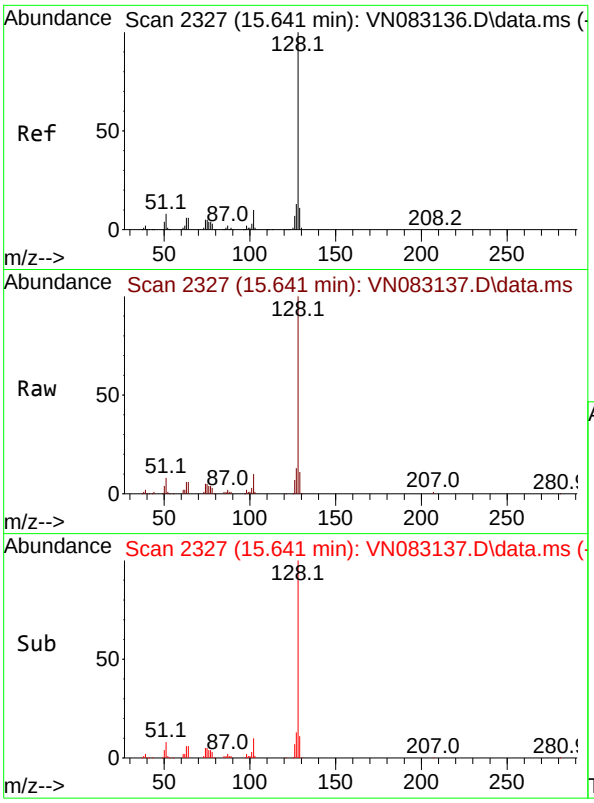




#94
Hexachlorobutadiene
Concen: 18.859 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:225 Resp: 23725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.3 | 31.9 | 95.7 |
| 227 | 65.7 | 32.5 | 97.5 |

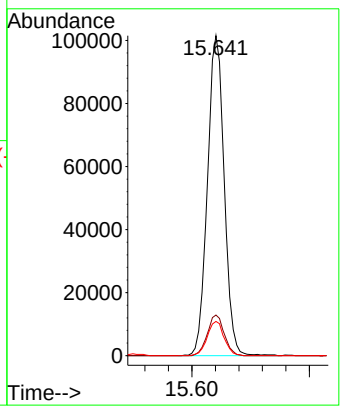





#95
Naphthalene
Concen: 20.047 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:128 Resp: 20087

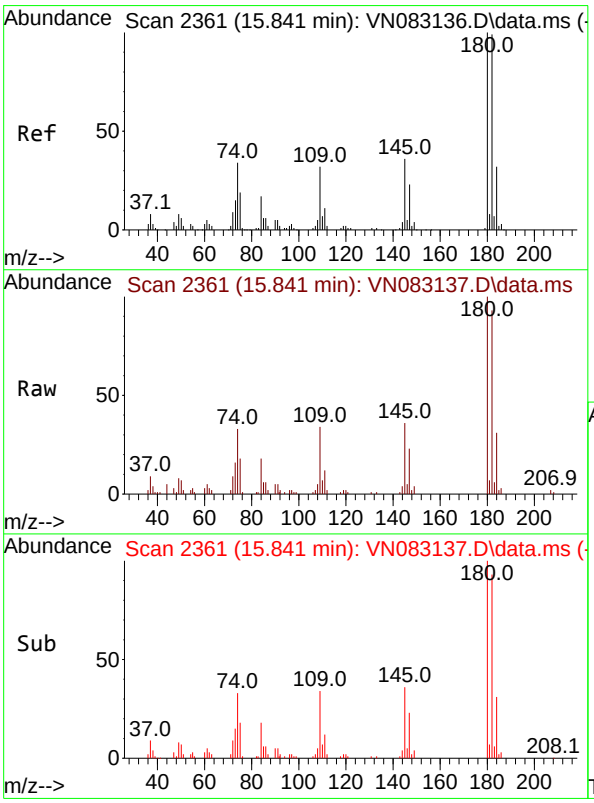
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.8 | 10.6 | 16.0 |
| 129 | 10.8 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC020

**Manual Integrations**
**APPROVED**

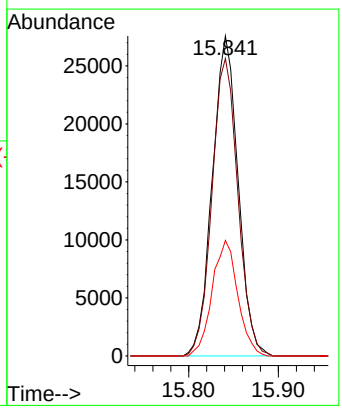
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024




#96
1,2,3-Trichlorobenzene
Concen: 19.630 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.000 min
Lab File: VN083137.D
Acq: 07 Aug 2024 11:22

Tgt Ion:180 Resp: 54944

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.5 | 48.9 | 146.8 |
| 145 | 35.9 | 16.8 | 50.4 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083138.D
Acq On : 07 Aug 2024 11:46
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:17:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 191754 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 332105 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 279409 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 125725 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.582 | 65 | 27223 | 9.974 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = | 19.940%# | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 20382 | 9.832 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 19.660%# | | |
| 50) Toluene-d8 | 10.565 | 98 | 75261 | 9.733 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = | 19.460%# | | |
| 62) 4-Bromofluorobenzene | 12.853 | 95 | 28691 | 9.517 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = | 19.040%# | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 22206 | 10.212 | ug/l | 99 |
| 3) Chloromethane | 2.359 | 50 | 22596 | 10.150 | ug/l | 92 |
| 4) Vinyl Chloride | 2.512 | 62 | 23461 | 10.328 | ug/l | 99 |
| 5) Bromomethane | 2.959 | 94 | 14783 | 10.488 | ug/l | 95 |
| 6) Chloroethane | 3.118 | 64 | 13616 | 9.581 | ug/l | 95 |
| 7) Trichlorofluoromethane | 3.500 | 101 | 38868 | 10.357 | ug/l | 97 |
| 8) Diethyl Ether | 3.965 | 74 | 14761 | 10.571 | ug/l | 86 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 21081 | 10.189 | ug/l | 100 |
| 10) Methyl Iodide | 4.589 | 142 | 27229 | 10.005 | ug/l | 96 |
| 11) Tert butyl alcohol | 5.530 | 59 | 29665 | 52.299 | ug/l | 97 |
| 12) 1,1-Dichloroethene | 4.336 | 96 | 21633 | 10.177 | ug/l | 83 |
| 13) Acrolein | 4.177 | 56 | 19397 | 52.469 | ug/l | 92 |
| 14) Allyl chloride | 5.024 | 41 | 41546 | 10.343 | ug/l | 89 |
| 15) Acrylonitrile | 5.724 | 53 | 58618 | 50.248 | ug/l | 99 |
| 16) Acetone | 4.430 | 43 | 54397 | 50.933 | ug/l | 92 |
| 17) Carbon Disulfide | 4.712 | 76 | 61323 | 9.860 | ug/l | 97 |
| 18) Methyl Acetate | 5.036 | 43 | 32282 | 10.145 | ug/l | 95 |
| 19) Methyl tert-butyl Ether | 5.794 | 73 | 77278 | 10.072 | ug/l | 94 |
| 20) Methylene Chloride | 5.277 | 84 | 23553 | 9.582 | ug/l # | 83 |
| 21) trans-1,2-Dichloroethene | 5.788 | 96 | 22473 | 10.229 | ug/l | 93 |
| 22) Diisopropyl ether | 6.671 | 45 | 77046 | 10.204 | ug/l | 91 |
| 23) Vinyl Acetate | 6.606 | 43 | 391151 | 50.550 | ug/l # | 94 |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 42035 | 10.213 | ug/l | 100 |
| 25) 2-Butanone | 7.488 | 43 | 82451 | 50.278 | ug/l # | 90 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 39561 | 10.351 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 26902 | 10.148 | ug/l | 93 |
| 28) Bromochloromethane | 7.818 | 49 | 14997 | 8.916 | ug/l | 85 |
| 29) Tetrahydrofuran | 7.841 | 42 | 54815 | 51.708 | ug/l | 88 |
| 30) Chloroform | 7.971 | 83 | 43421 | 10.155 | ug/l | 98 |
| 31) Cyclohexane | 8.259 | 56 | 42564 | 10.523 | ug/l | 92 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 41247 | 10.191 | ug/l | 92 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 31681 | 10.103 | ug/l | 99 |
| 37) Ethyl Acetate | 7.565 | 43 | 34005 | 9.685 | ug/l # | 96 |
| 38) Carbon Tetrachloride | 8.365 | 117 | 35950 | 10.179 | ug/l | 93 |
| 39) Methylcyclohexane | 9.600 | 83 | 38738 | 10.058 | ug/l | 93 |
| 40) Benzene | 8.606 | 78 | 94885 | 10.157 | ug/l | 97 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083138.D
Acq On : 07 Aug 2024 11:46
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 08 06:17:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 18392 | 9.213 | ug/l | | 93 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 34826 | 10.234 | ug/l | | 97 |
| 43) Isopropyl Acetate | 8.694 | 43 | 71420 | 10.170 | ug/l | | 98 |
| 44) Trichloroethene | 9.353 | 130 | 22669 | 10.195 | ug/l | | 100 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 22642 | 10.211 | ug/l | | 98 |
| 46) Dibromomethane | 9.706 | 93 | 15937 | 10.041 | ug/l | | 97 |
| 47) Bromodichloromethane | 9.888 | 83 | 35389 | 9.930 | ug/l | | 97 |
| 48) Methyl methacrylate | 9.682 | 41 | 28711 | 9.891 | ug/l | | 93 |
| 49) 1,4-Dioxane | 9.694 | 88 | 10545 | 201.364 | ug/l | | 95 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 171277 | 51.587 | ug/l | | 94 |
| 52) Toluene | 10.629 | 92 | 59784 | 10.129 | ug/l | | 97 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 36670 | 10.017 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 39503 | 10.145 | ug/l | | 91 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 21732 | 10.274 | ug/l | | 94 |
| 56) Ethyl methacrylate | 10.871 | 69 | 40676 | 10.201 | ug/l | # | 86 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 38200 | 10.132 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 87140 | 51.698 | ug/l | | 96 |
| 59) 2-Hexanone | 11.194 | 43 | 129231 | 50.312 | ug/l | | 93 |
| 60) Dibromochloromethane | 11.359 | 129 | 25798 | 10.088 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 22707 | 10.219 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.106 | 164 | 19174 | 10.362 | ug/l | | 92 |
| 65) Chlorobenzene | 11.894 | 112 | 64445 | 10.437 | ug/l | | 96 |
| 66) 1,1,1,2-Tetrachloroethane | 11.965 | 131 | 22498 | 10.331 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 115664 | 10.211 | ug/l | | 99 |
| 68) m/p-Xylenes | 12.070 | 106 | 87775 | 20.687 | ug/l | | 100 |
| 69) o-Xylene | 12.400 | 106 | 43216 | 10.327 | ug/l | | 97 |
| 70) Styrene | 12.412 | 104 | 72641 | 10.335 | ug/l | | 97 |
| 71) Bromoform | 12.582 | 173 | 16320 | 9.893 | ug/l | # | 95 |
| 73) Isopropylbenzene | 12.694 | 105 | 110277 | 10.487 | ug/l | | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 52998 | 10.303 | ug/l | | 96 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 30438 | 10.234 | ug/l | | 98 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 28359m | 10.261 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 23781 | 10.180 | ug/l | | 93 |
| 78) n-propylbenzene | 13.035 | 91 | 125678 | 10.379 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 80065 | 10.429 | ug/l | | 96 |
| 80) 1,3,5-Trimethylbenzene | 13.176 | 105 | 91559 | 10.400 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 11760 | 9.271 | ug/l | | 95 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 78348 | 10.174 | ug/l | | 97 |
| 83) tert-Butylbenzene | 13.441 | 119 | 80263 | 10.294 | ug/l | | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 92502 | 10.426 | ug/l | | 97 |
| 85) sec-Butylbenzene | 13.617 | 105 | 108740 | 10.221 | ug/l | | 98 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 88256 | 10.047 | ug/l | | 97 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 44168 | 10.048 | ug/l | | 97 |
| 88) 1,4-Dichlorobenzene | 13.811 | 146 | 44036 | 9.937 | ug/l | | 96 |
| 89) n-Butylbenzene | 14.059 | 91 | 76567 | 10.060 | ug/l | | 99 |
| 90) Hexachloroethane | 14.335 | 117 | 17798 | 10.487 | ug/l | | 93 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 43734 | 10.282 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.723 | 75 | 7258 | 10.056 | ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 23580 | 9.895 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 10788 | 10.179 | ug/l | | 99 |
| 95) Naphthalene | 15.641 | 128 | 86373 | 10.232 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 24492 | 10.387 | ug/l | | 97 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083138.D
Acq On : 07 Aug 2024 11:46
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:17:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083138.D
Acq On : 07 Aug 2024 11:46
Operator : JC\MD
Sample : VSTDICC010
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 08 06:17:39 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
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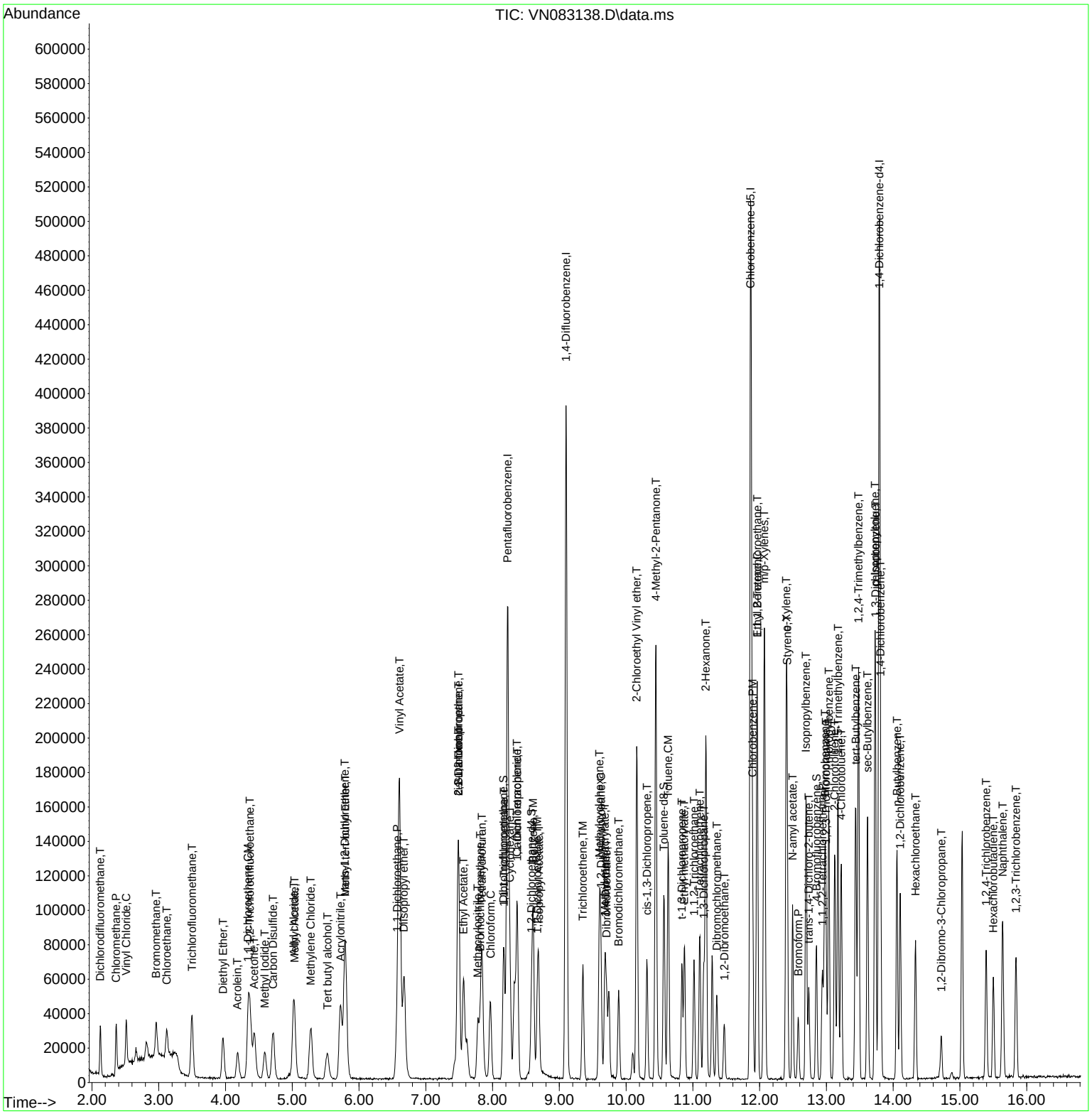
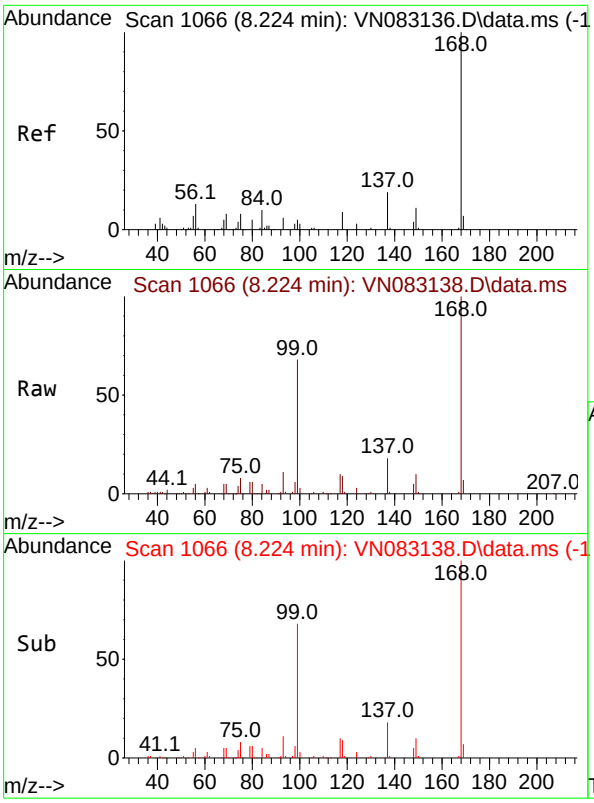
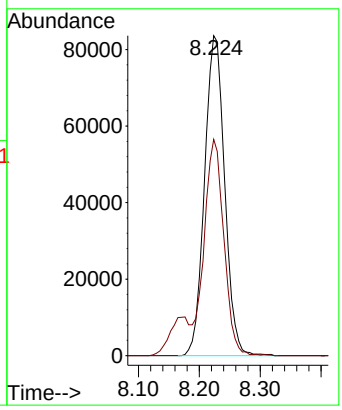





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:168 Resp: 19175

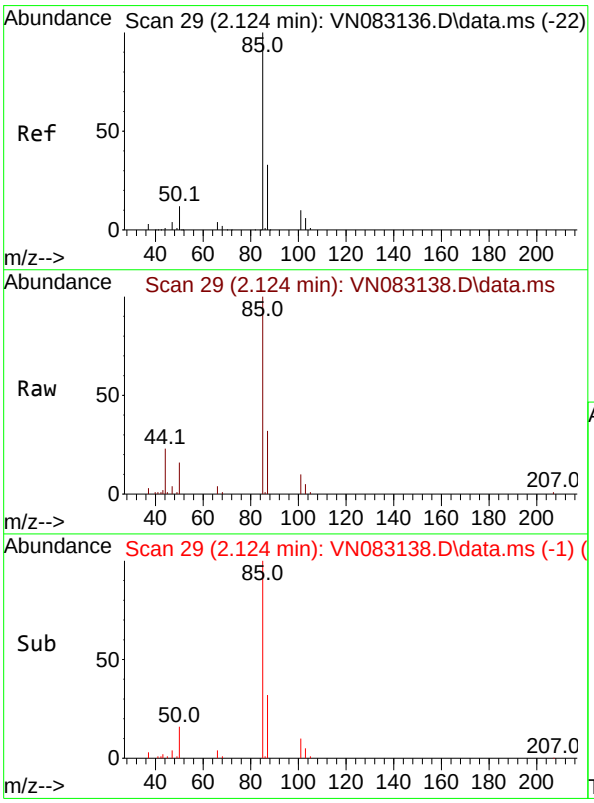
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 67.6 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
**APPROVED**

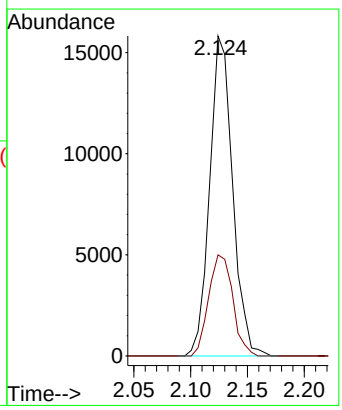
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

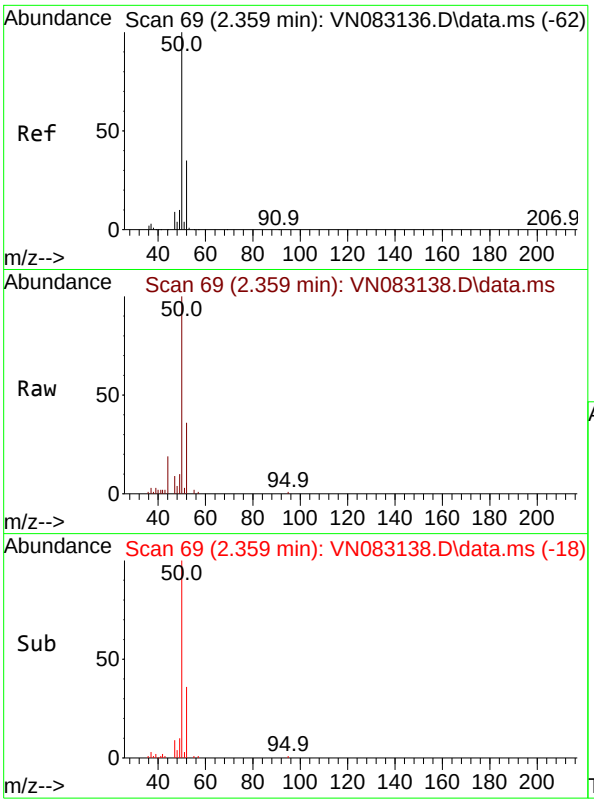



#2
Dichlorodifluoromethane
Concen: 10.212 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 85 Resp: 22206

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.6 | 15.7 | 47.0 |

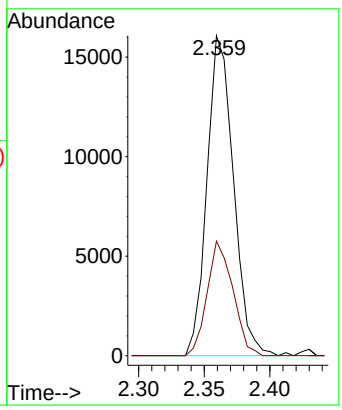





#3
Chloromethane
Concen: 10.150 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 50 Resp: 2259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 35.8 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
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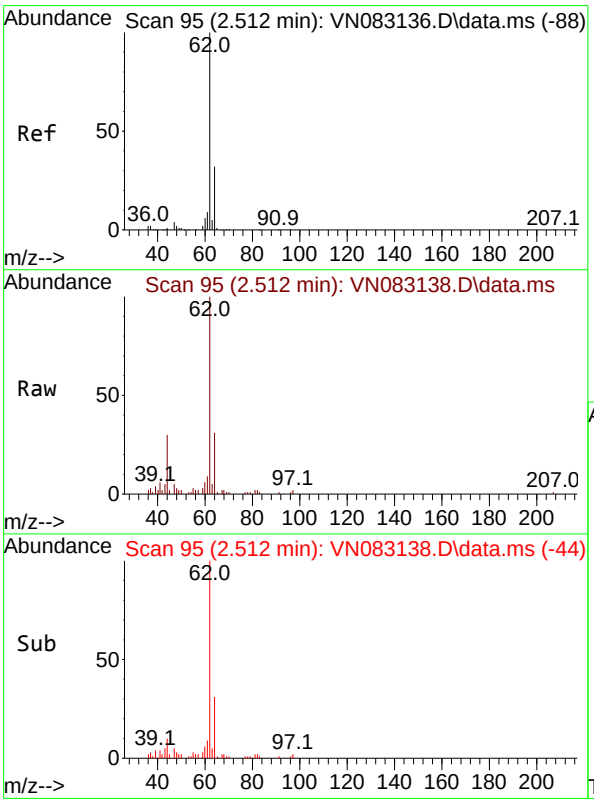
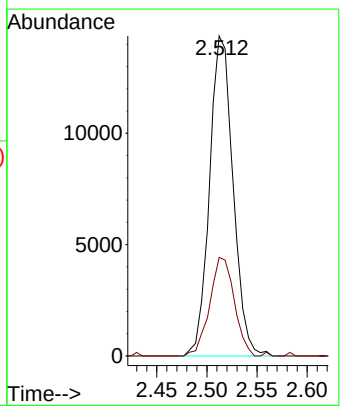
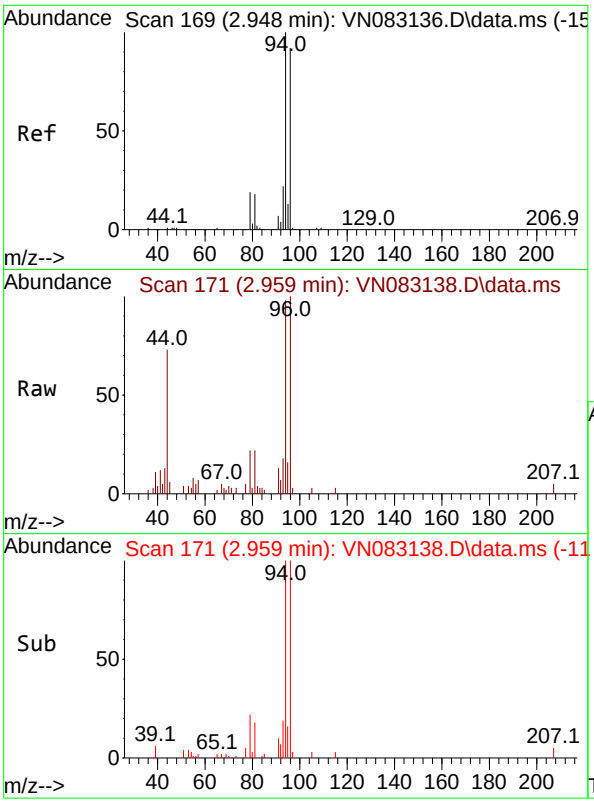



#4
Vinyl Chloride
Concen: 10.328 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 62 Resp: 23461

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 30.8 | 25.0 | 37.6 |

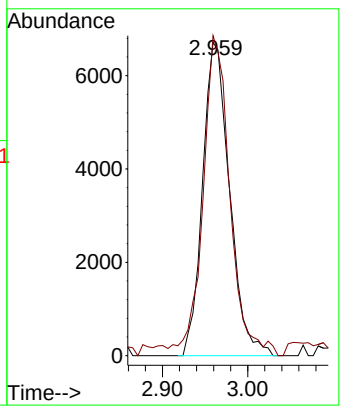





#5
Bromomethane
Concen: 10.488 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 94 Resp: 1478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 102.2 | 78.0 | 117.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
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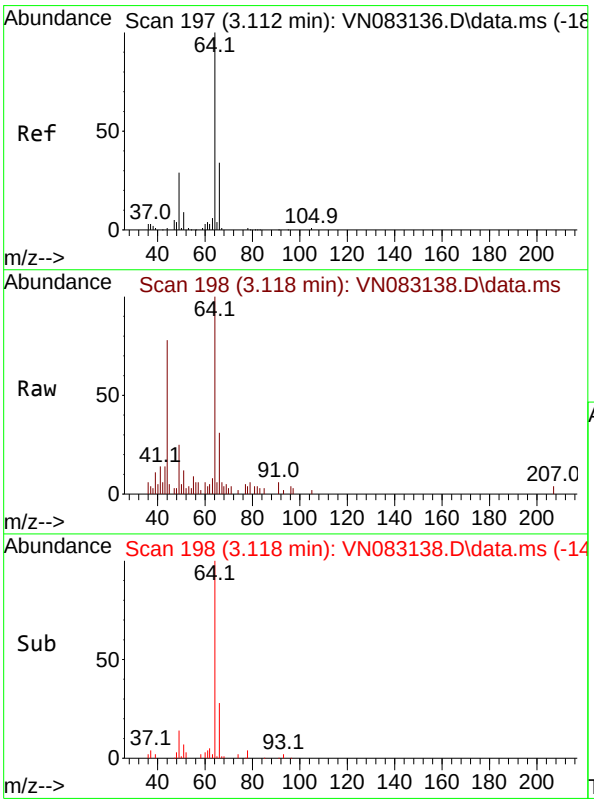
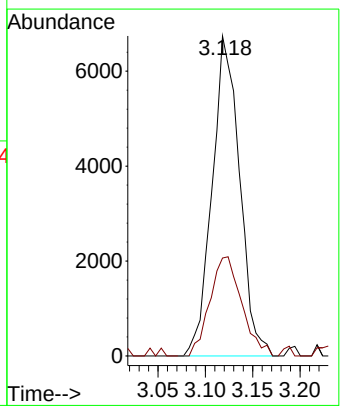
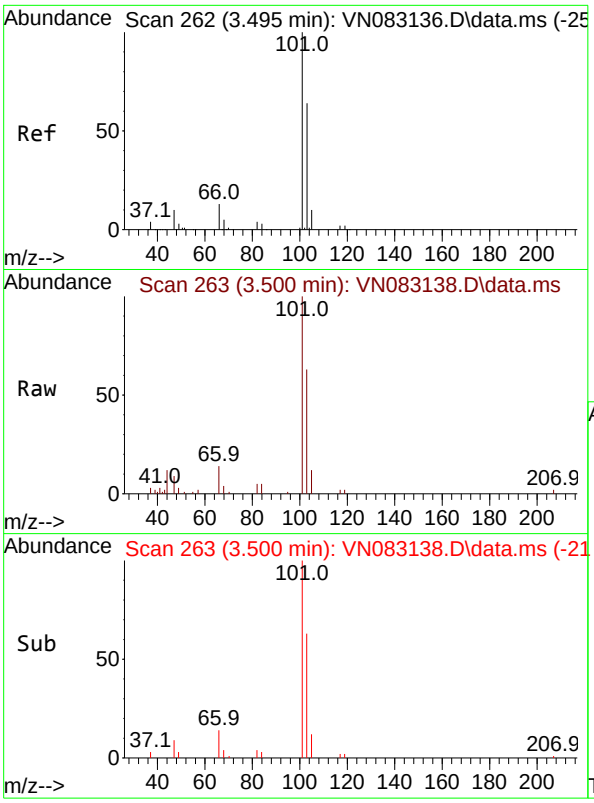



#6
Chloroethane
Concen: 9.581 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 64 Resp: 13616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.6 | 26.6 | 40.0 |






#7
Trichlorofluoromethane
Concen: 10.357 ug/l
RT: 3.500 min Scan# 2
Delta R.T. 0.005 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:101 Resp: 3886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 63.5 | 52.7 | 79.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
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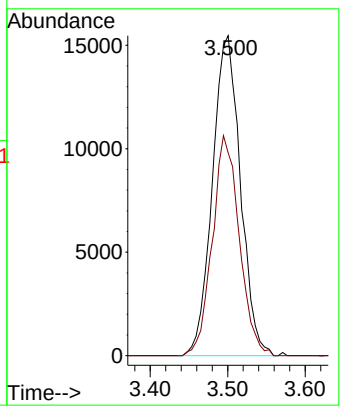
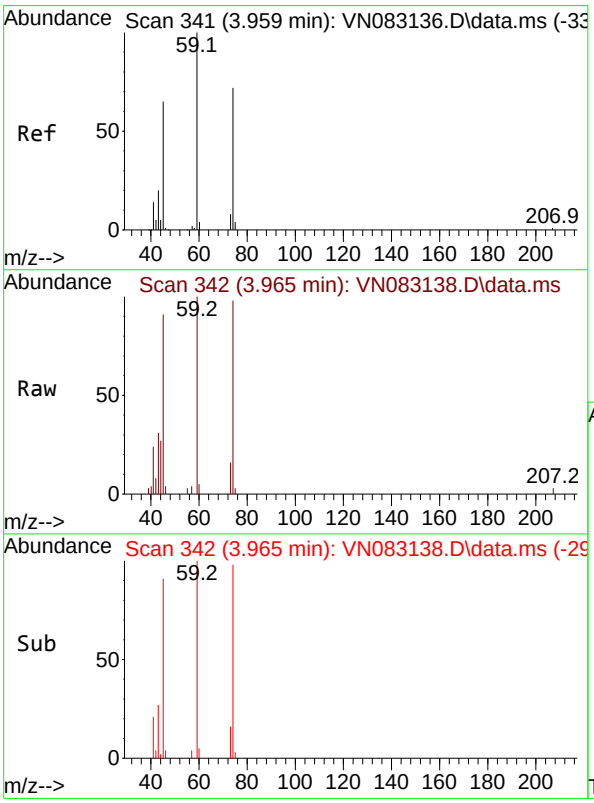
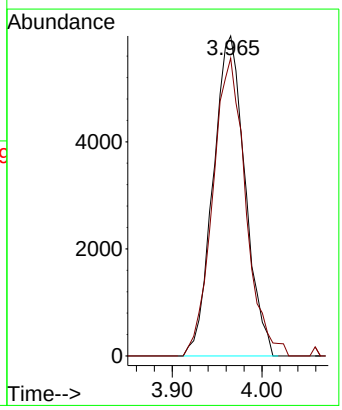


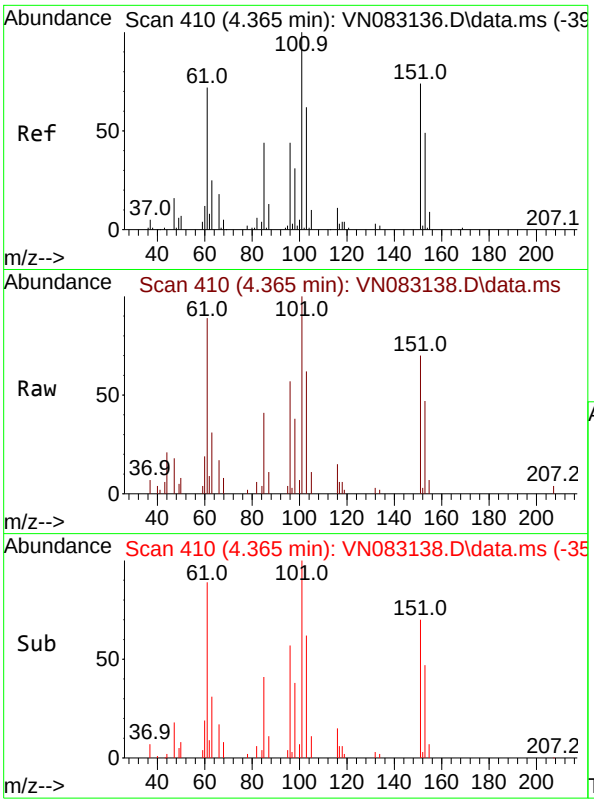




#8
Diethyl Ether
Concen: 10.571 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 74 Resp: 14761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 95.9 | 55.5 | 166.3 |

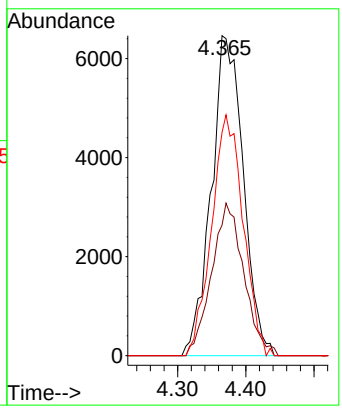





#9
1,1,2-Trichlorotrifluoroethane
Concen: 10.189 ug/l
RT: 4.365 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:101 Resp: 2108

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 48.0 | 38.3 | 57.5 |
| 151 | 74.1 | 59.3 | 88.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
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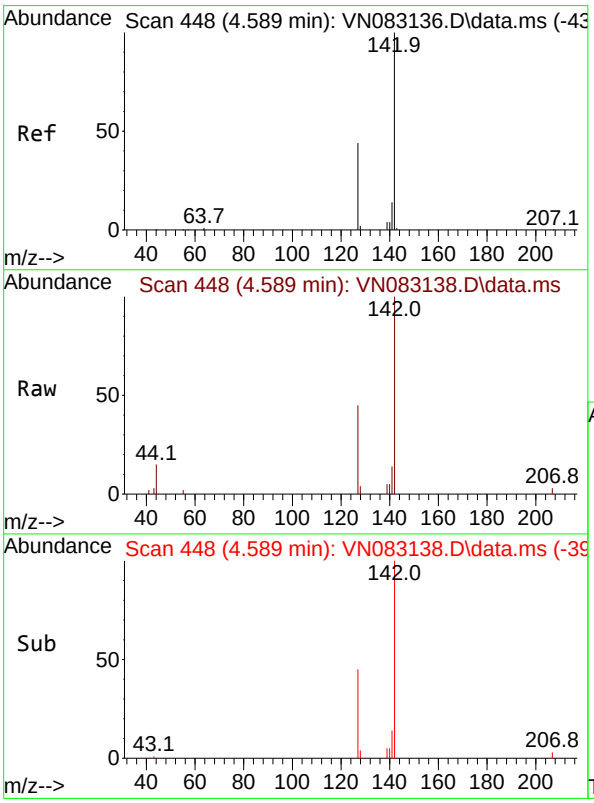
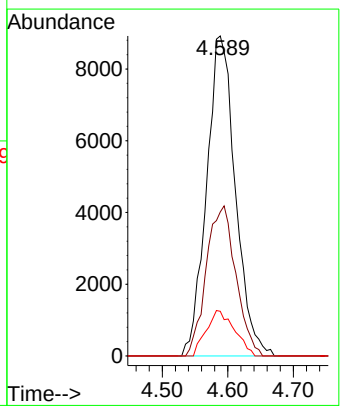
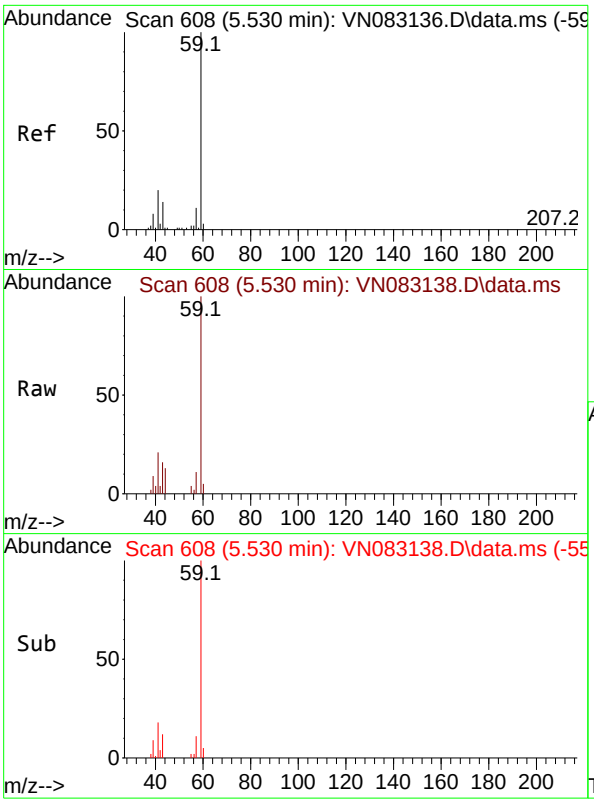



#10
Methyl Iodide
Concen: 10.005 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:142 Resp: 27229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 45.0 | 37.5 | 56.3 |
| 141 | 13.9 | 13.1 | 19.7 |

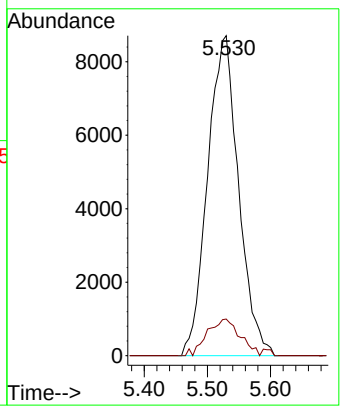





#11
Tert butyl alcohol
Concen: 52.299 ug/l
RT: 5.530 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 59 Resp: 2966

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 12.1 | 8.9 | 13.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

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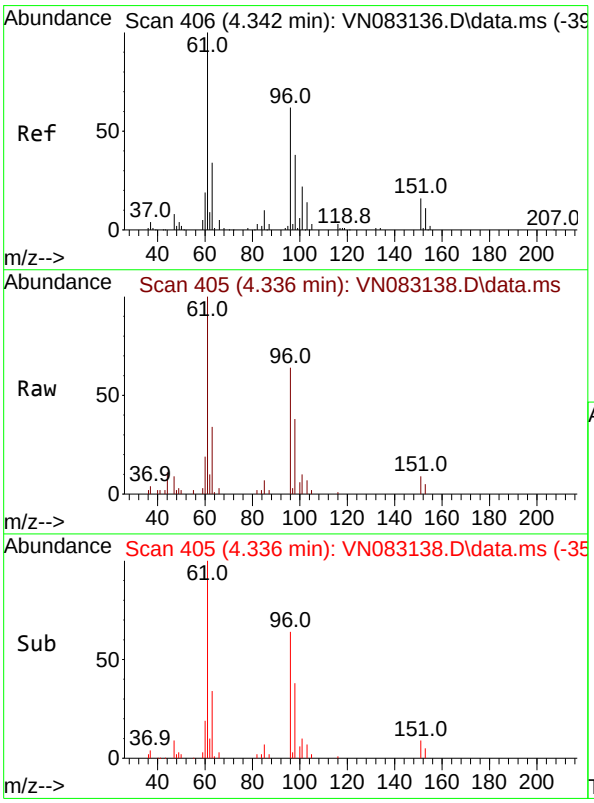
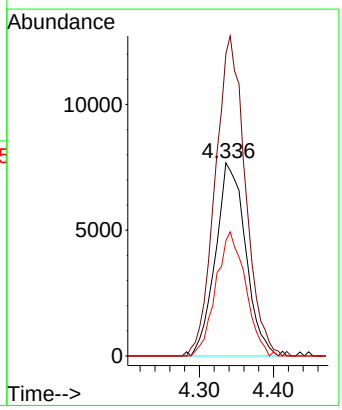
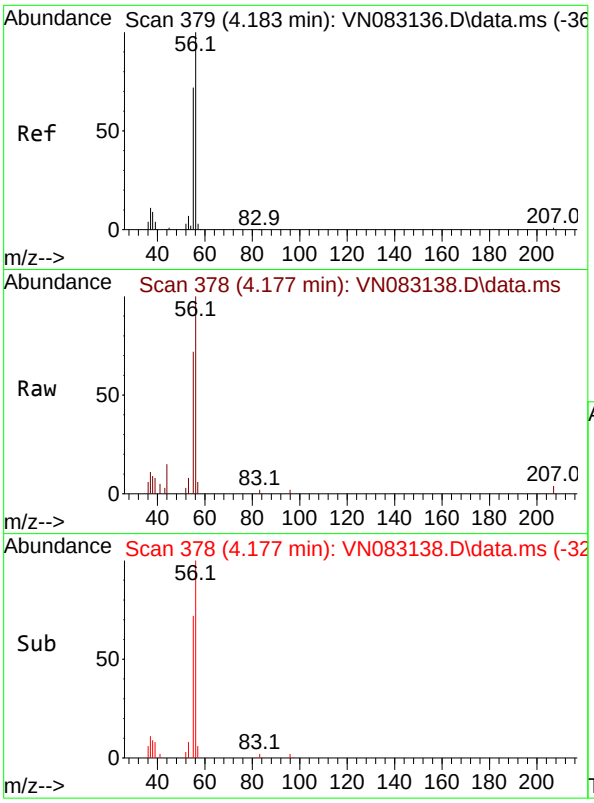



#12
1,1-Dichloroethene
Concen: 10.177 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 96 Resp: 21633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 156.5 | 149.7 | 224.5 |
| 98 | 59.7 | 50.1 | 75.1 |

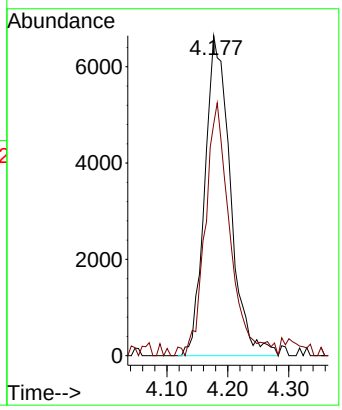





#13
Acrolein
Concen: 52.469 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 56 Resp: 1939

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 77.0 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
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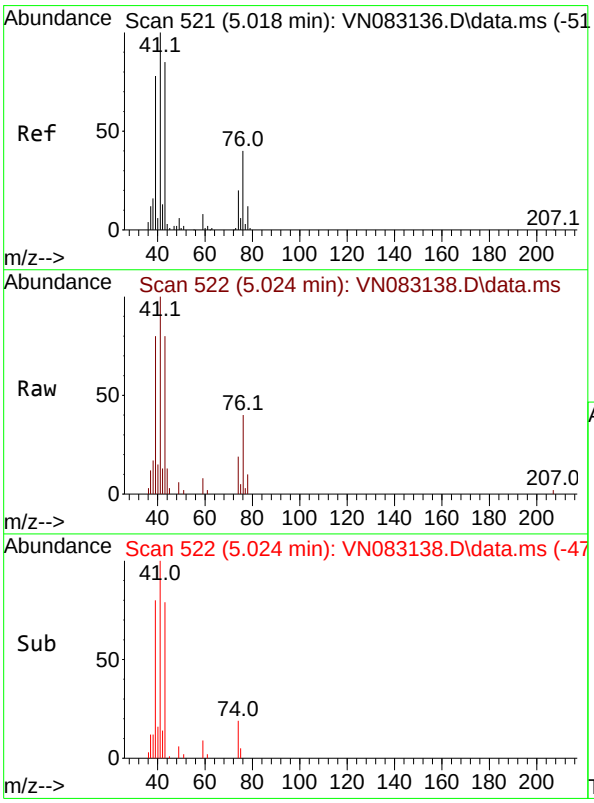
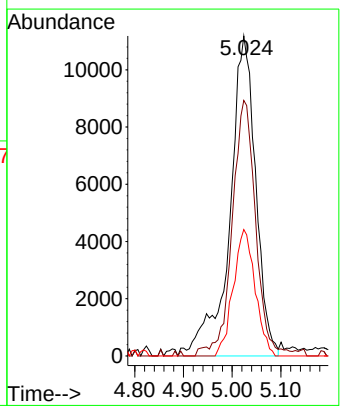
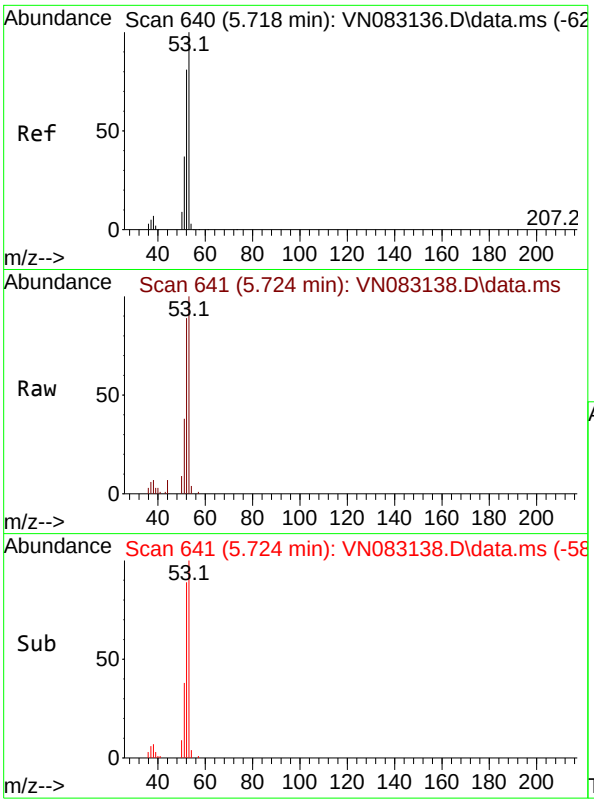



#14
Allyl chloride
Concen: 10.343 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 41 Resp: 41546

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 72.0 | 67.8 | 101.6 |
| 76 | 33.2 | 25.8 | 38.8 |

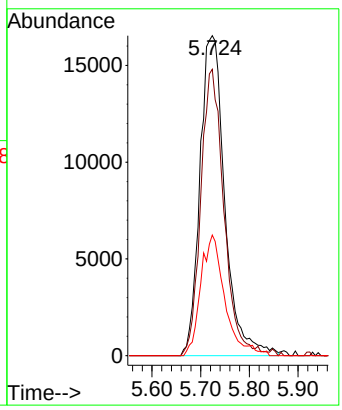





#15
Acrylonitrile
Concen: 50.248 ug/l
RT: 5.724 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 53 Resp: 5861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.1 | 66.6 | 100.0 |
| 51 | 36.6 | 30.1 | 45.1 |




**Instrument :**
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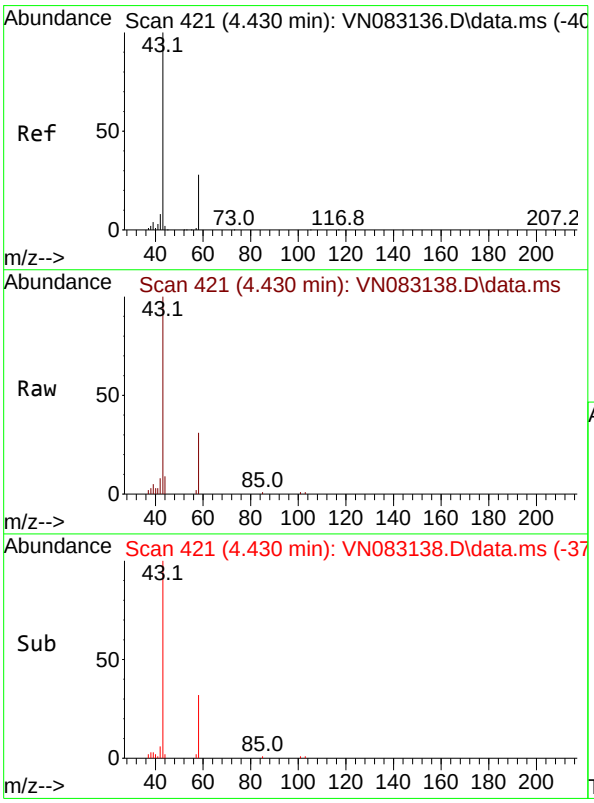
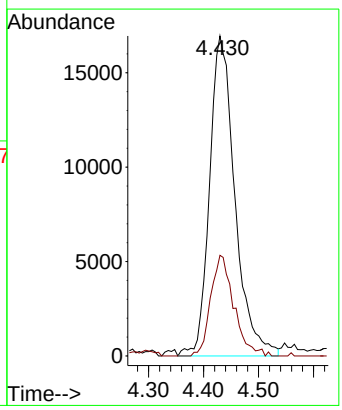
Supervised By :Mahesh Dadoda 08/09/2024

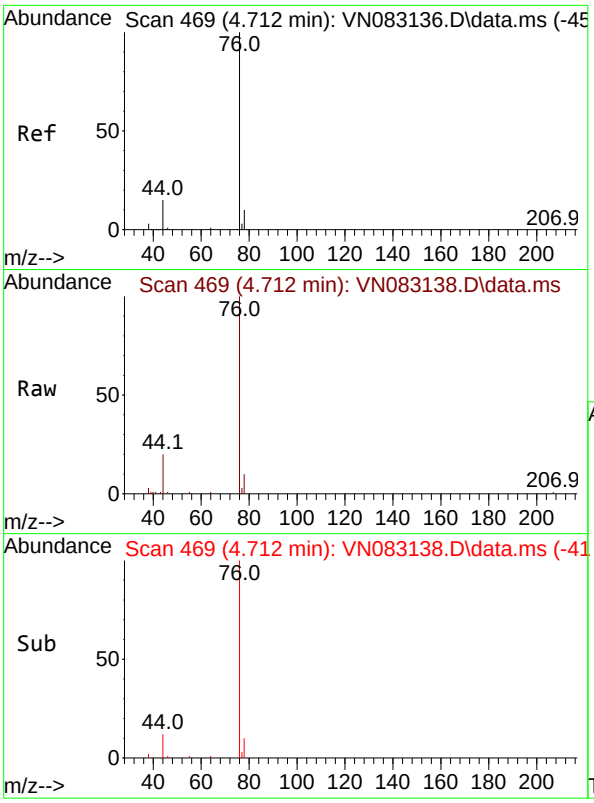



#16
Acetone
Concen: 50.933 ug/l
RT: 4.430 min Scan# 421
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 54397

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 31.4 | 21.8 | 32.6 |

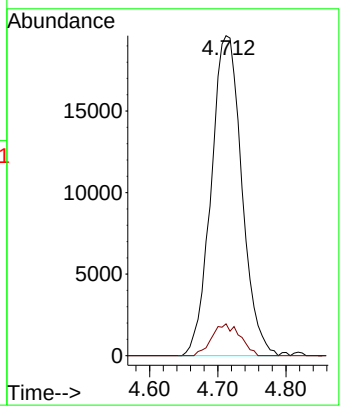





#17
Carbon Disulfide
Concen: 9.860 ug/l
RT: 4.712 min Scan# 4(
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 76 Resp: 6132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.9 | 7.2 | 10.8 |

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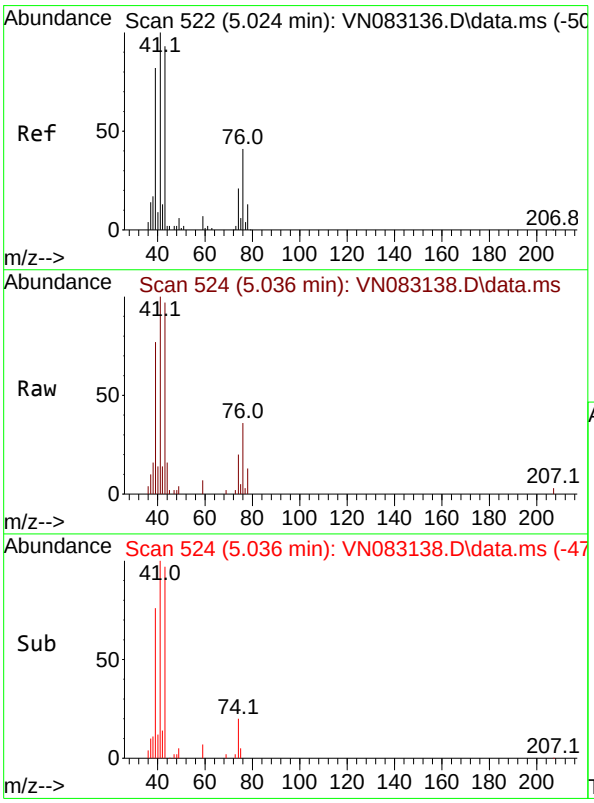
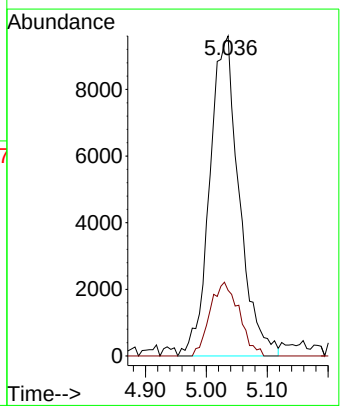
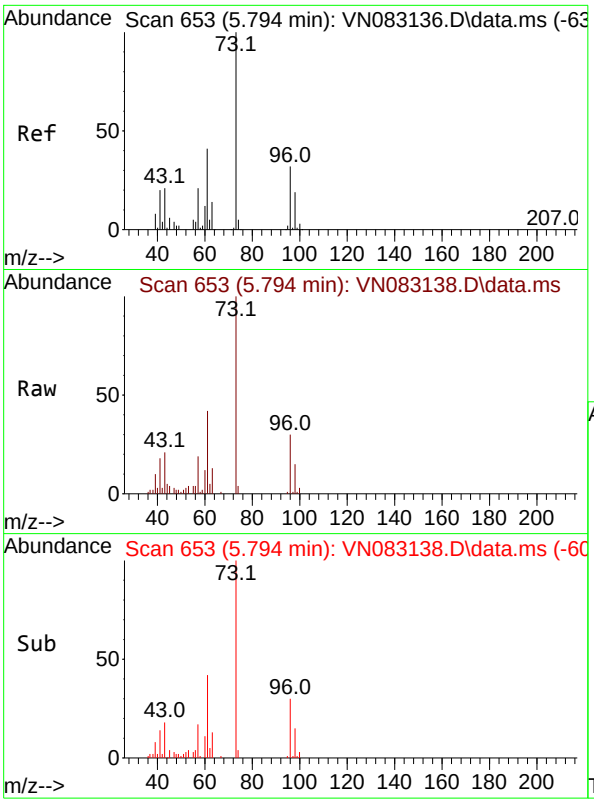



#18
Methyl Acetate
Concen: 10.145 ug/l
RT: 5.036 min Scan# 524
Delta R.T. 0.012 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 32282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.8 | 16.3 | 24.5 |

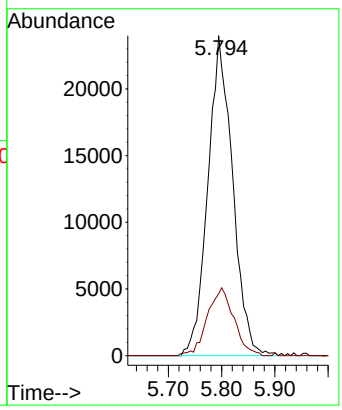





#19
Methyl tert-butyl Ether
Concen: 10.072 ug/l
RT: 5.794 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 73 Resp: 7727

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 19.3 | 17.9 | 26.9 |




**Instrument :**
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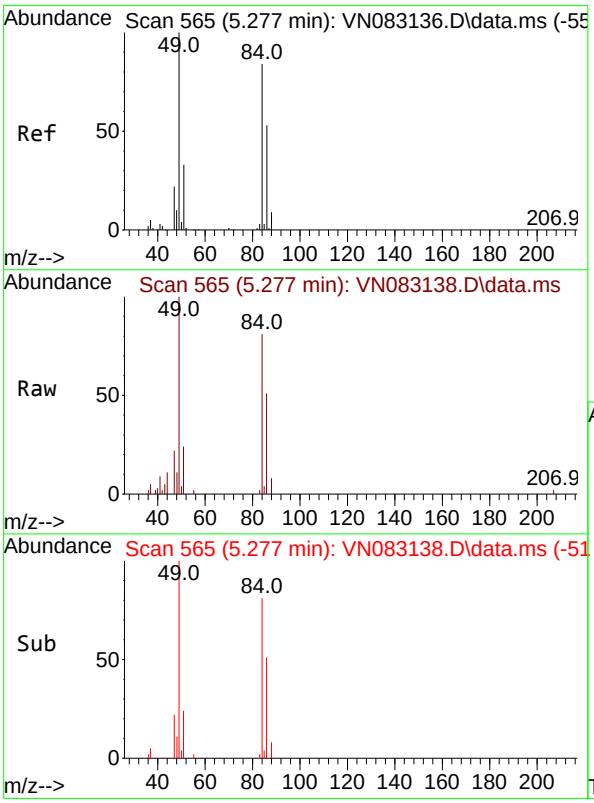
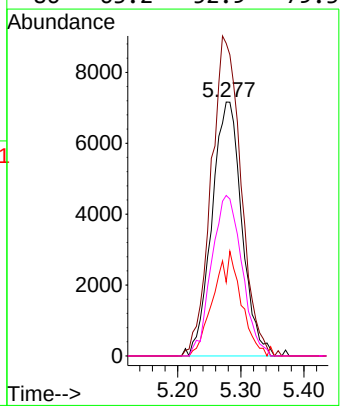
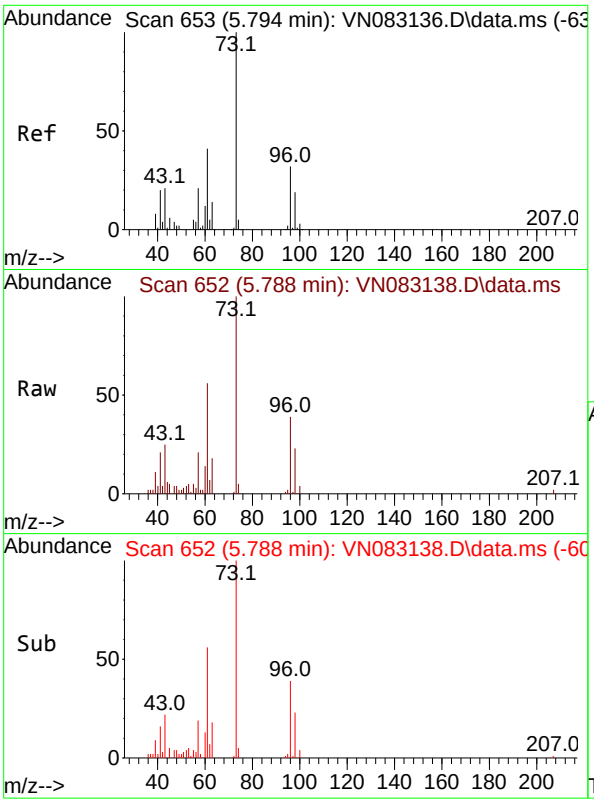



#20
Methylene Chloride
Concen: 9.582 ug/l
RT: 5.277 min Scan# 565
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 84 Resp: 23553

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 123.1 | 119.6 | 179.4 |
| 51 | 29.0 | 34.8 | 52.2# |
| 86 | 63.2 | 52.9 | 79.3 |

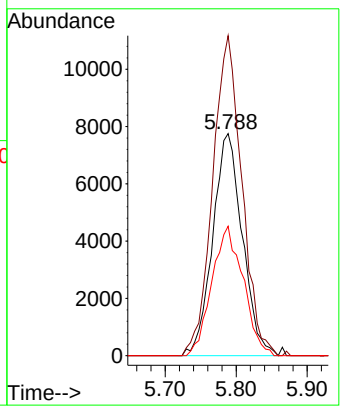





#21
trans-1,2-Dichloroethene
Concen: 10.229 ug/l
RT: 5.788 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 96 Resp: 2247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 144.0 | 123.4 | 185.2 |
| 98 | 58.3 | 49.3 | 73.9 |

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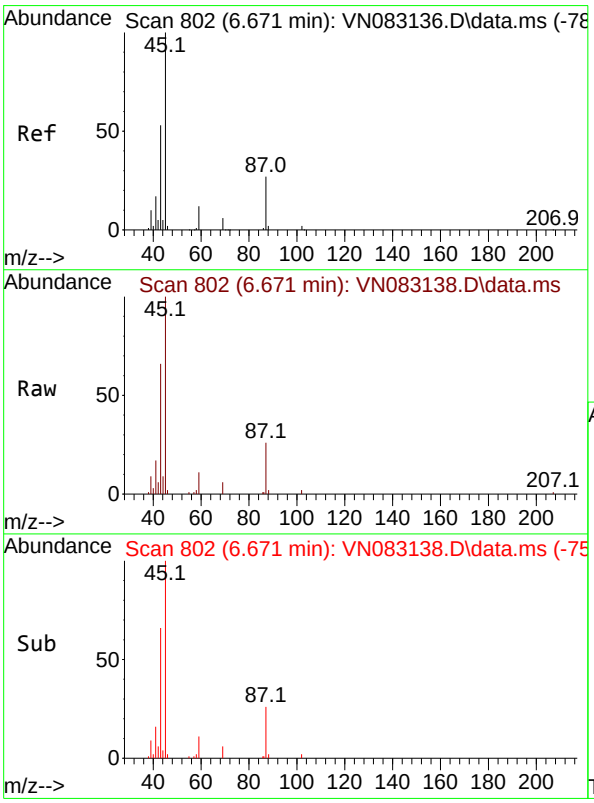
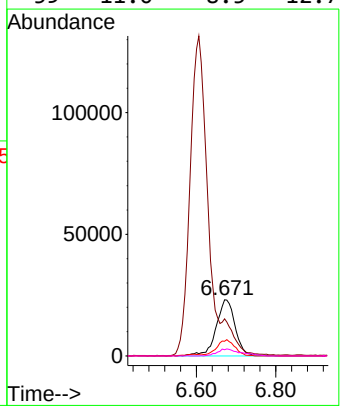
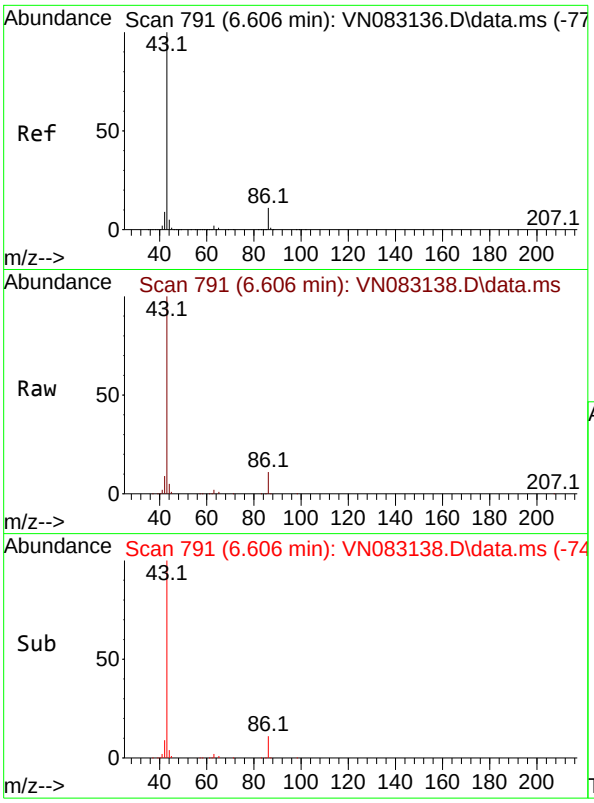



#22
Diisopropyl ether
Concen: 10.204 ug/l
RT: 6.671 min Scan# 802
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 45 Resp: 77046

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 64.3 | 44.0 | 66.0 |
| 87 | 26.1 | 19.7 | 29.5 |
| 59 | 11.0 | 8.5 | 12.7 |

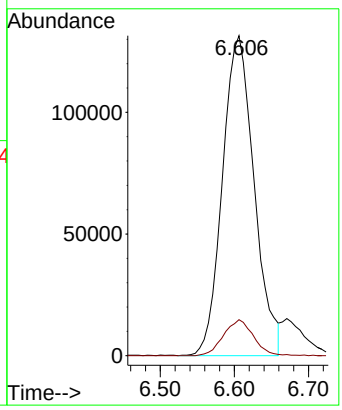





#23
Vinyl Acetate
Concen: 50.550 ug/l
RT: 6.606 min Scan# 7
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 39115

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 11.2 | 7.3 | 10.9 |

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VSTDICC010

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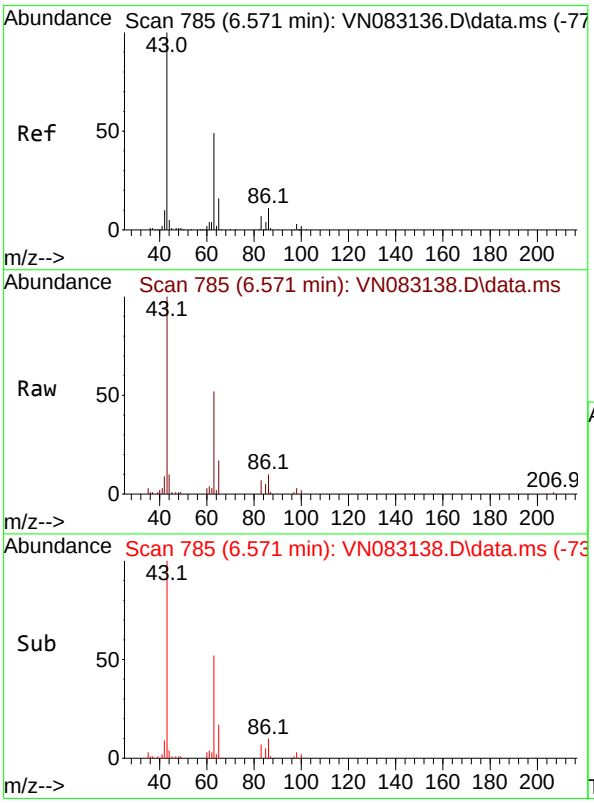
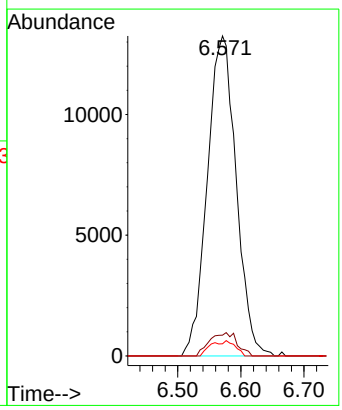
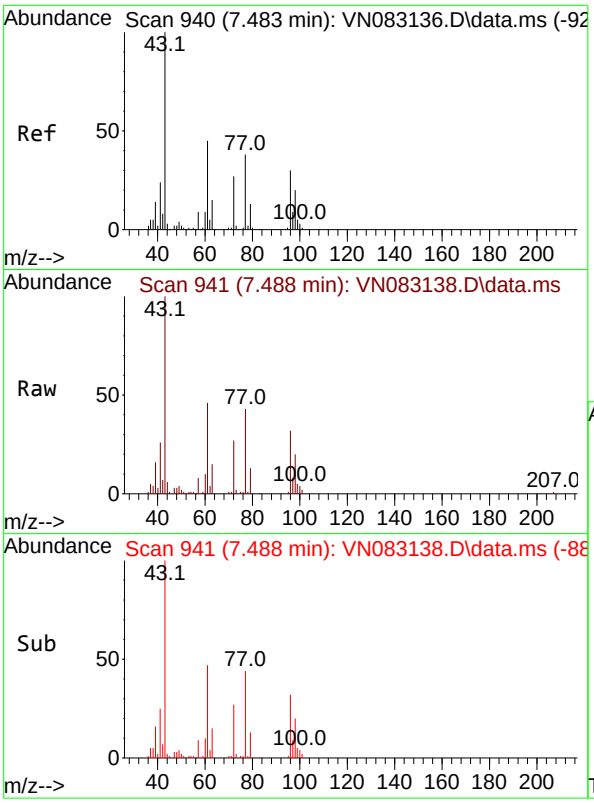



#24
1,1-Dichloroethane
Concen: 10.213 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 63 Resp: 42035

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.5 | 3.3 | 9.9 |
| 100 | 3.8 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 50.278 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 8245

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 27.4 | 18.2 | 27.2 |

**Instrument :**
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VSTDICC010

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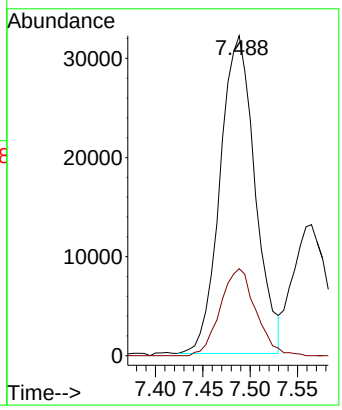
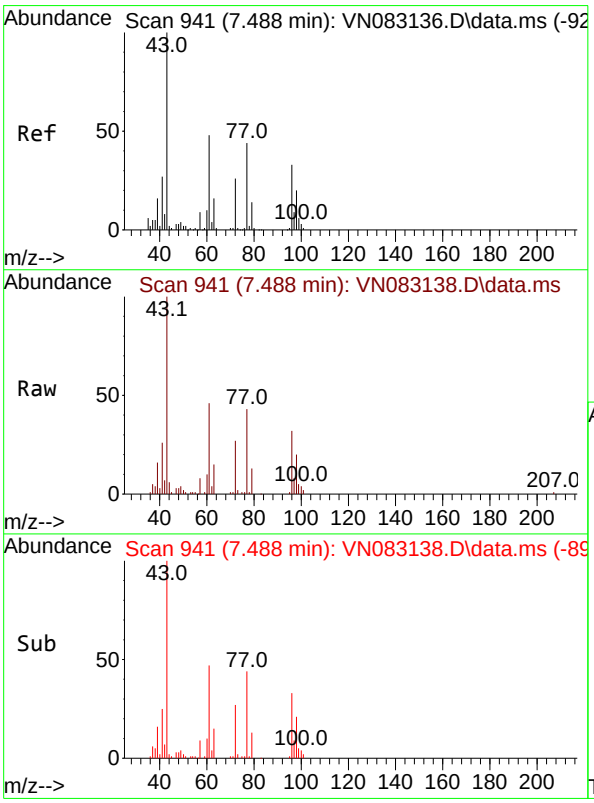
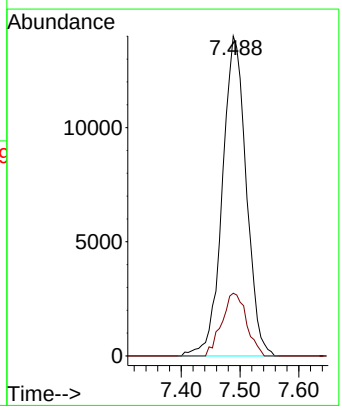


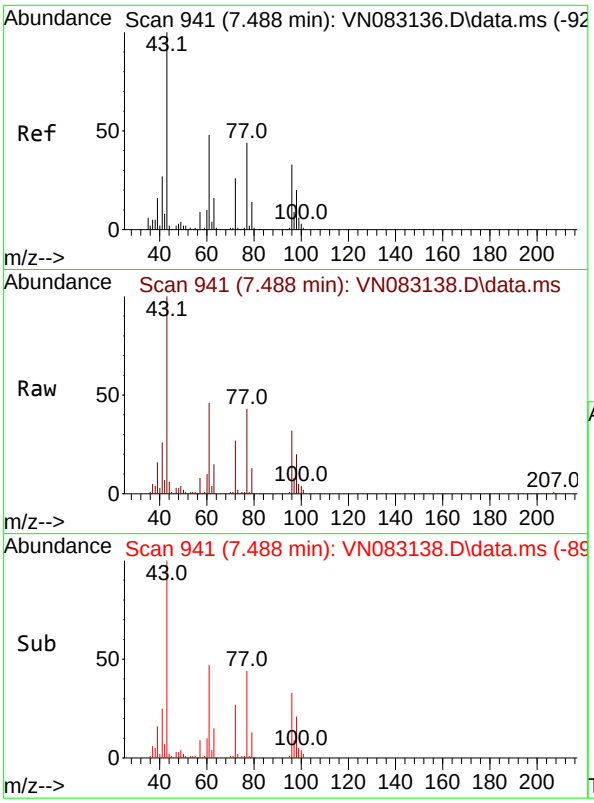




#26
2,2-Dichloropropane
Concen: 10.351 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 77 Resp: 39561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 20.2 | 10.3 | 30.9 |

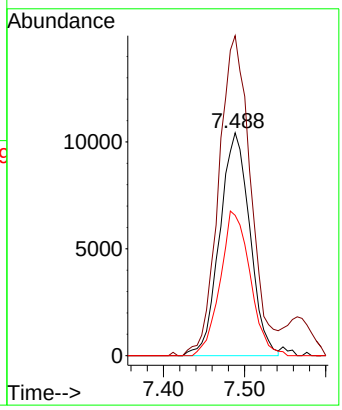





#27
cis-1,2-Dichloroethene
Concen: 10.148 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 96 Resp: 2690

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 152.1 | 0.0 | 329.6 |
| 98 | 64.4 | 0.0 | 128.6 |

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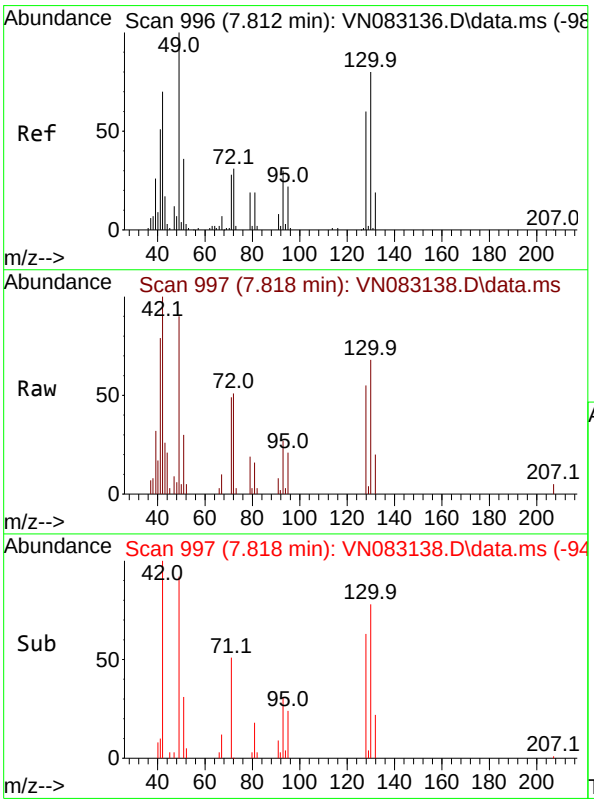
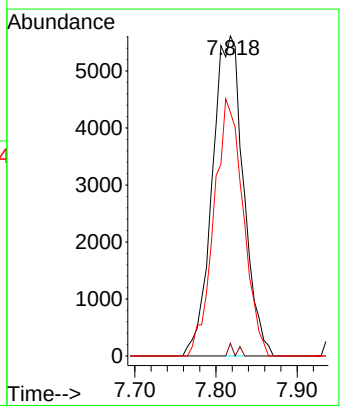
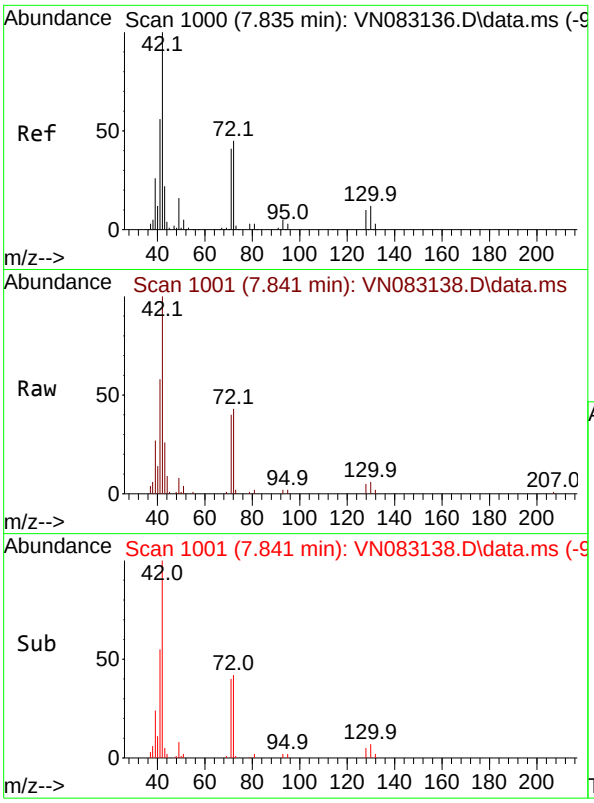



#28
Bromochloromethane
Concen: 8.916 ug/l
RT: 7.818 min Scan# 997
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 49 Resp: 14997

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.9 | 0.0 | 3.8 |
| 130 | 75.4 | 50.5 | 75.7 |

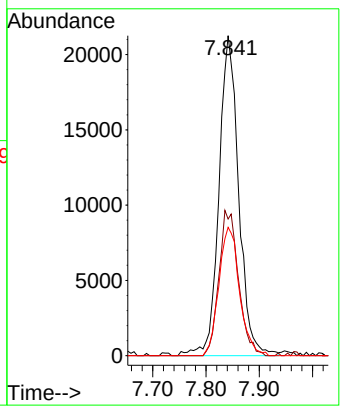





#29
Tetrahydrofuran
Concen: 51.708 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 42 Resp: 5481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 44.9 | 30.0 | 45.0 |
| 71 | 41.8 | 28.3 | 42.5 |

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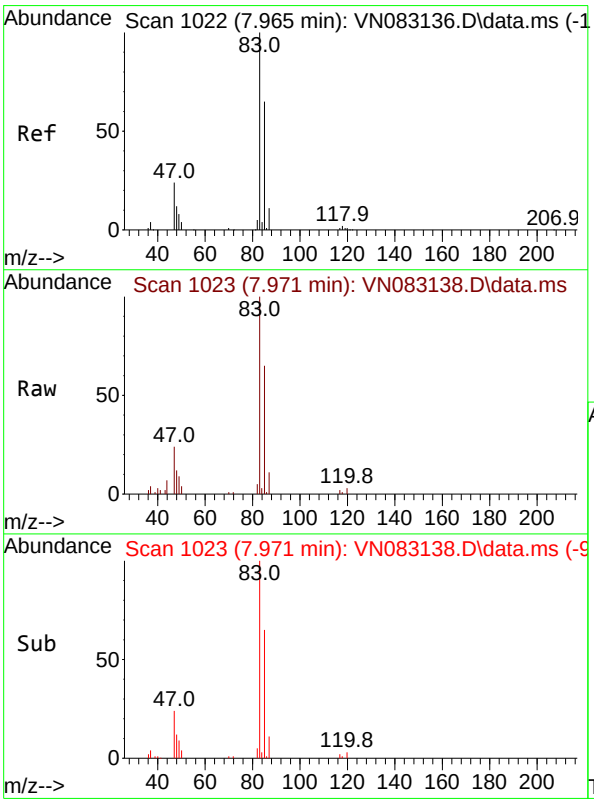
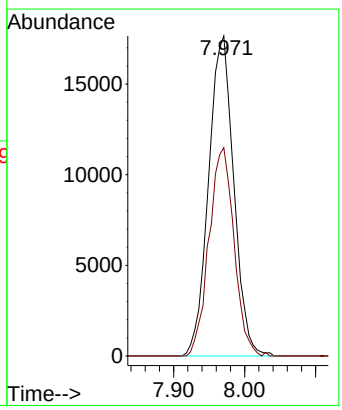
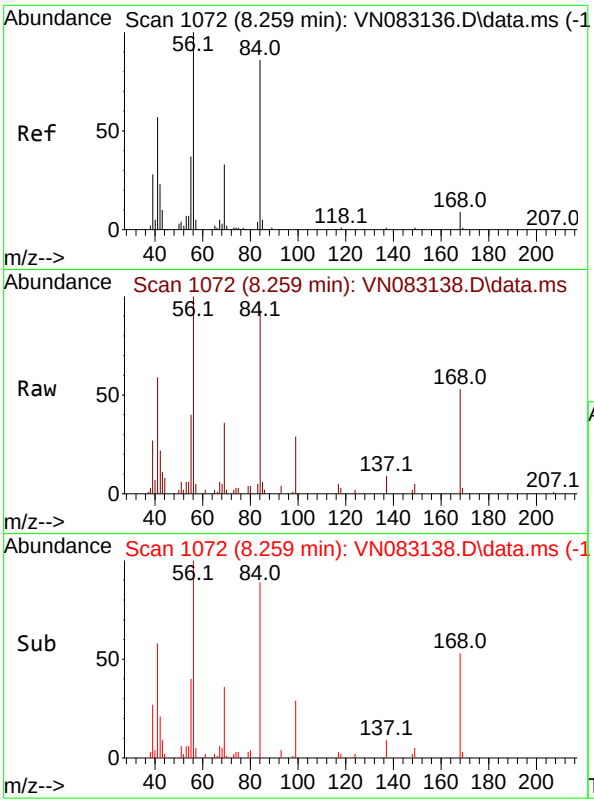



#30
Chloroform
Concen: 10.155 ug/l
RT: 7.971 min Scan# 1023
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 83 Resp: 43421

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.1 | 50.9 | 76.3 |

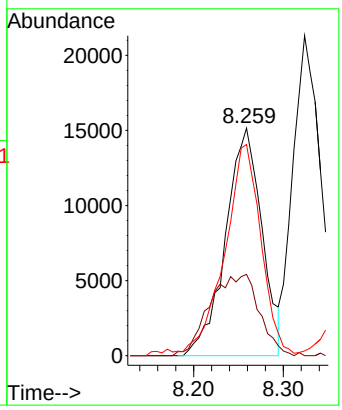





#31
Cyclohexane
Concen: 10.523 ug/l
RT: 8.259 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 56 Resp: 4256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 34.0 | 24.5 | 36.7 |
| 84 | 90.8 | 66.0 | 99.0 |

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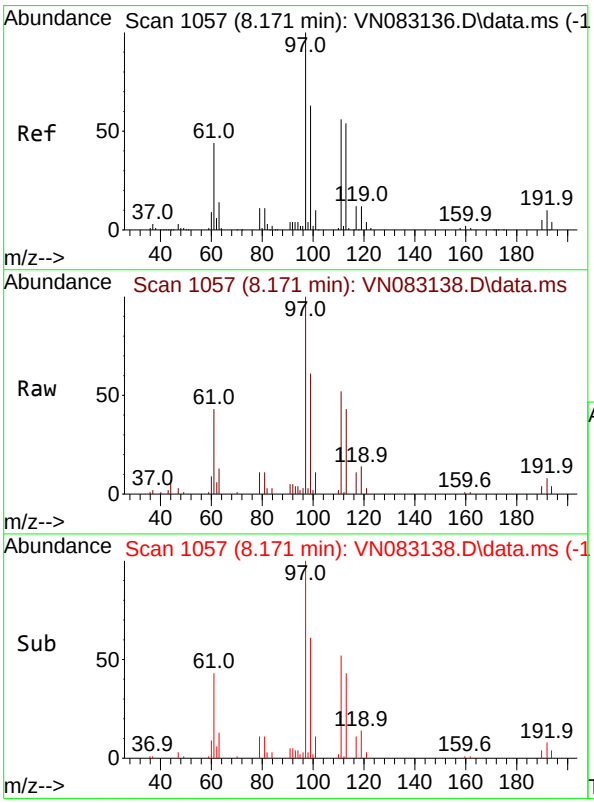
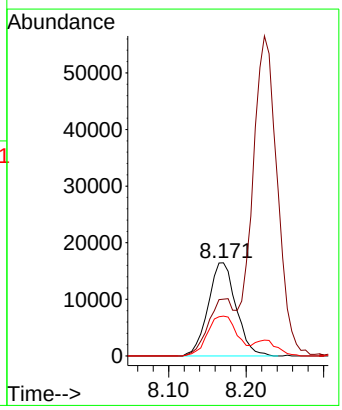
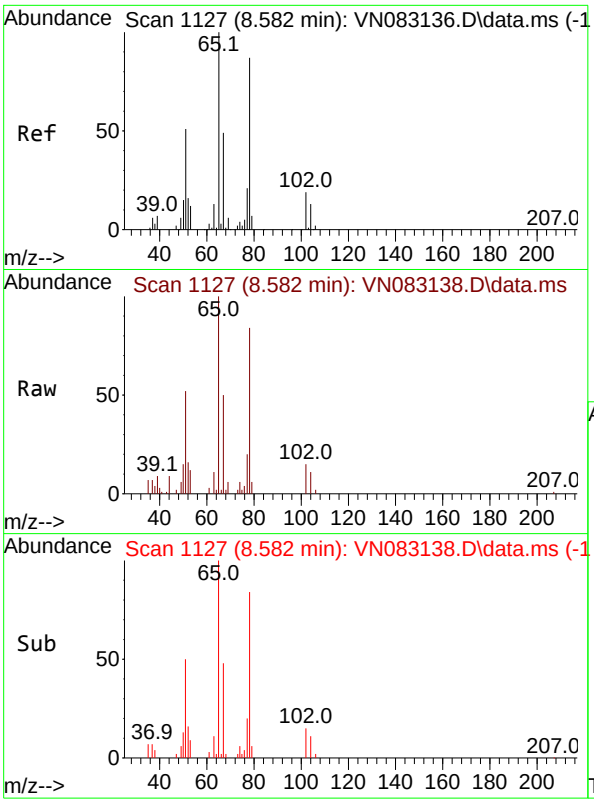



#32
1,1,1-Trichloroethane
Concen: 10.191 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 97 Resp: 41247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 59.5 | 52.0 | 78.0 |
| 61 | 46.2 | 42.1 | 63.1 |






#33
1,2-Dichloroethane-d4
Concen: 9.974 ug/l
RT: 8.582 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 65 Resp: 2722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.3 | 0.0 | 104.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
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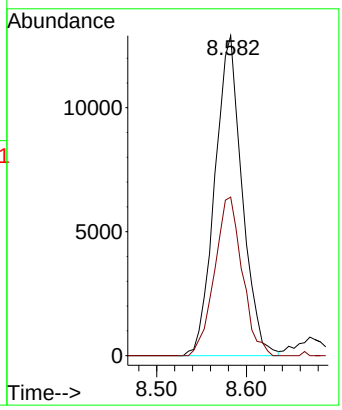
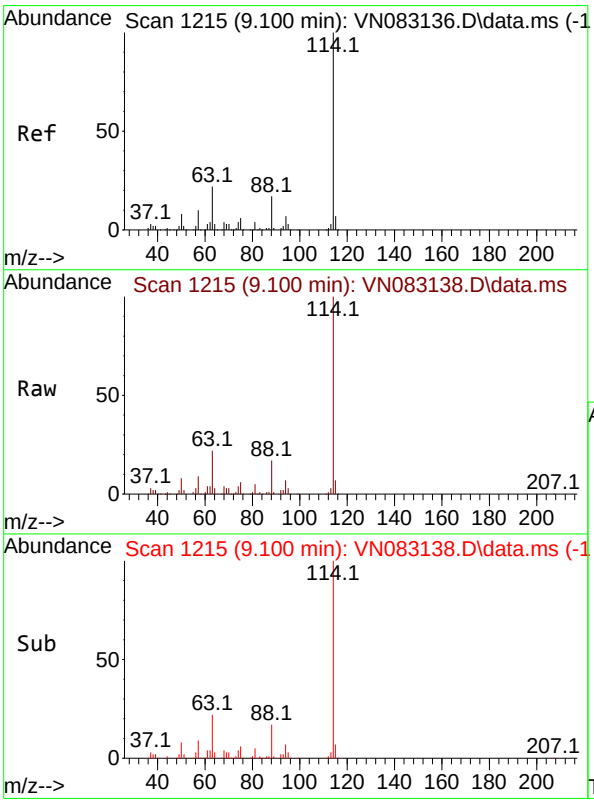
Supervised By :Mahesh Dadoda 08/09/2024

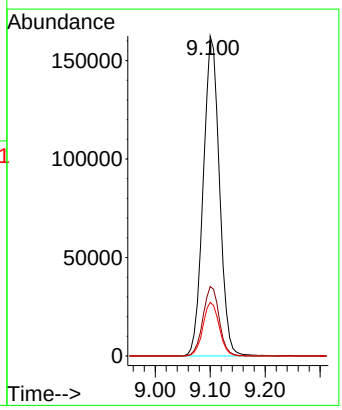


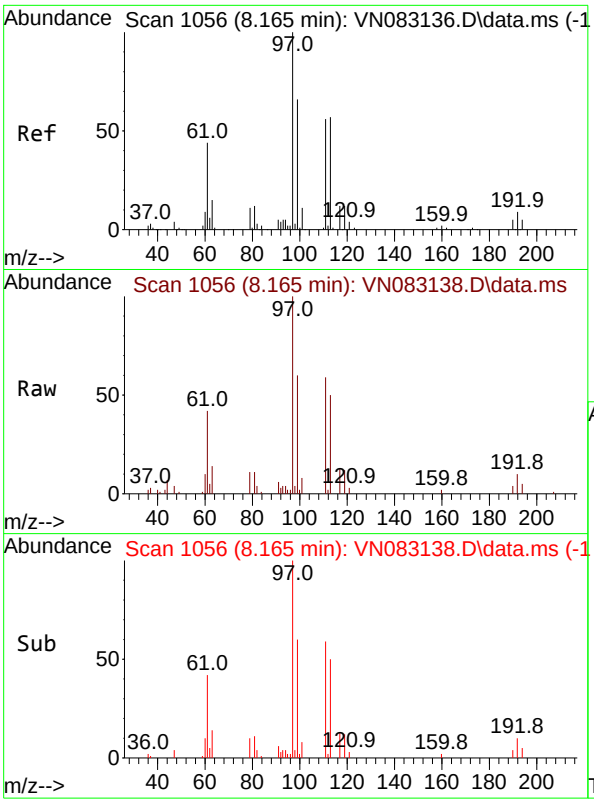




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:114 Resp: 332105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.7 | 0.0 | 44.6 |
| 88 | 16.8 | 0.0 | 31.4 |

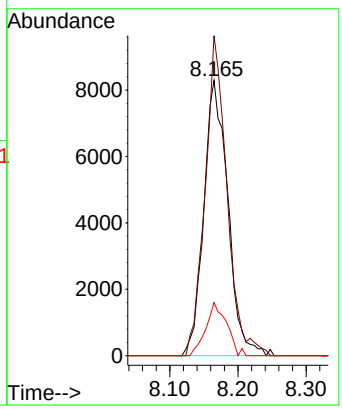





#35
Dibromofluoromethane
Concen: 9.832 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:113 Resp: 2038

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 105.9 | 82.4 | 123.6 |
| 192 | 16.7 | 14.9 | 22.3 |




**Instrument :**
MSVOA_N
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VSTDICC010

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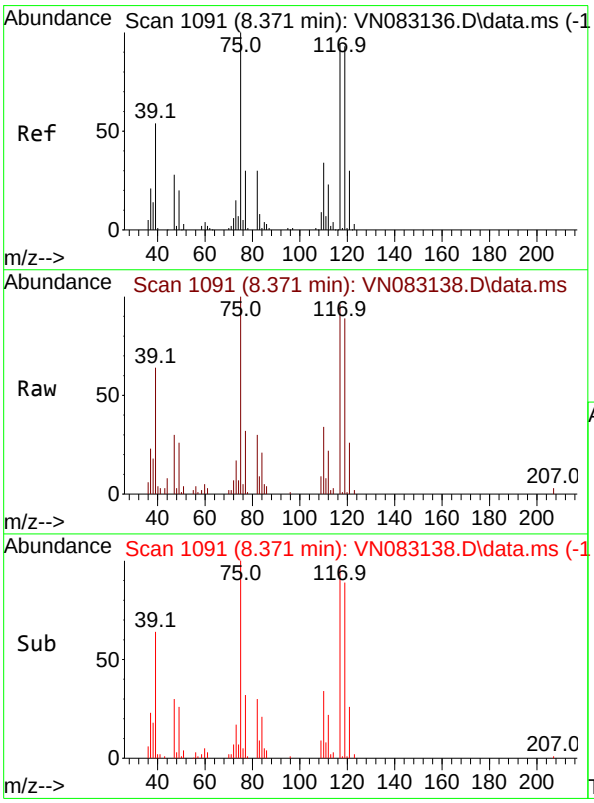
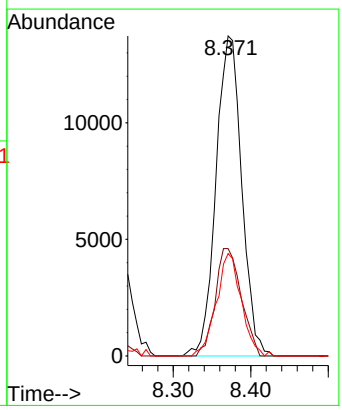
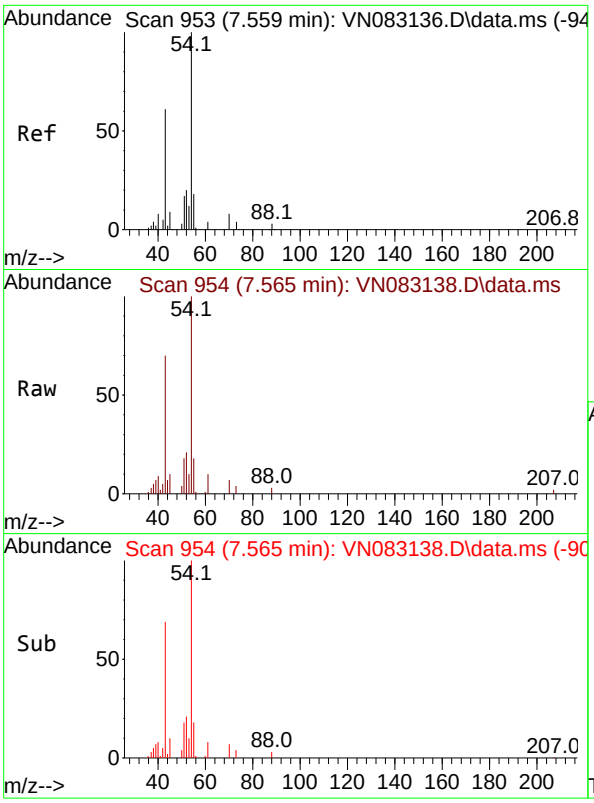



#36
1,1-Dichloropropene
Concen: 10.103 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 31681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.9 | 16.3 | 48.9 |
| 77 | 31.1 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 9.685 ug/l
RT: 7.565 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 3400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 12.0 | 9.3 | 13.9 |
| 70 | 11.4 | 7.0 | 10.6 |

**Instrument :**
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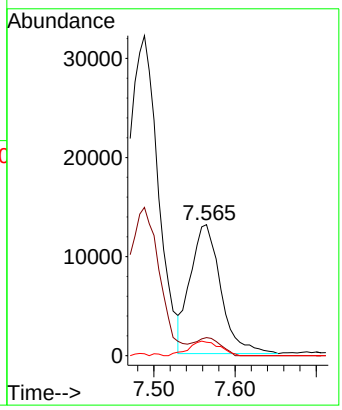
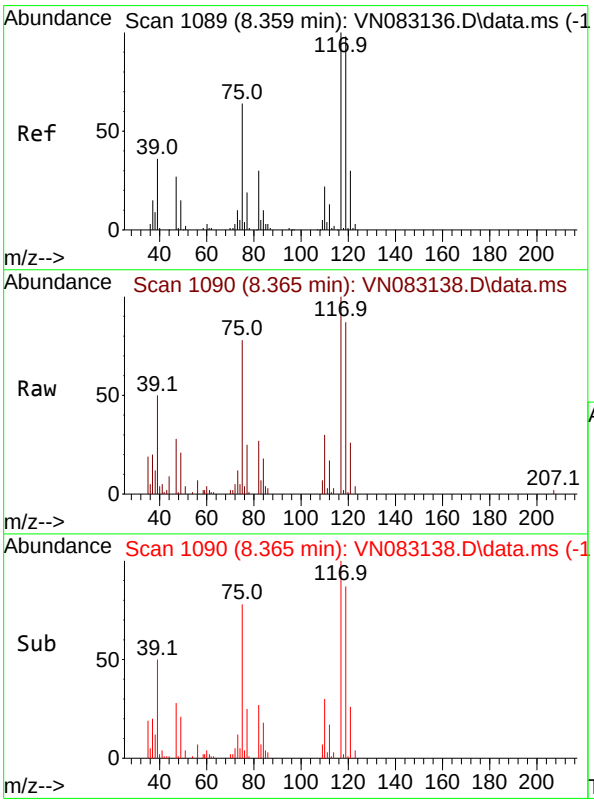
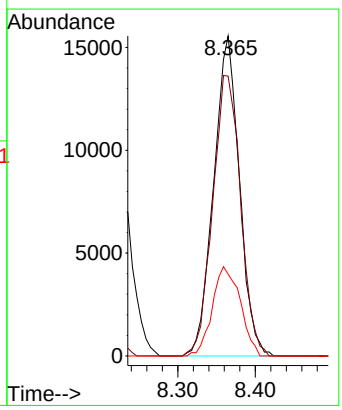


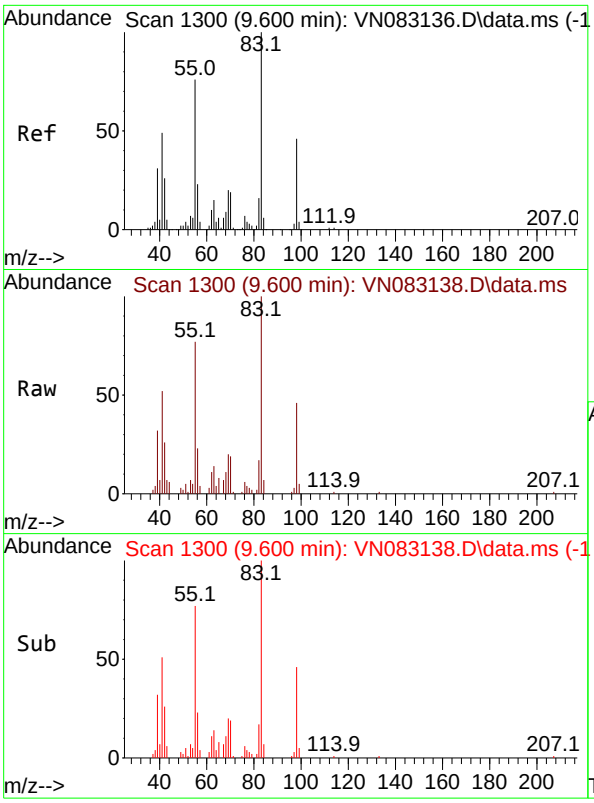




#38
Carbon Tetrachloride
Concen: 10.179 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:117 Resp: 35950

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 87.5 | 74.9 | 112.3 |
| 121 | 25.6 | 24.3 | 36.5 |






#39
Methylcyclohexane
Concen: 10.058 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 83 Resp: 3873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 77.1 | 66.4 | 99.6 |
| 98 | 45.9 | 40.7 | 61.1 |

**Instrument :**
MSVOA_N
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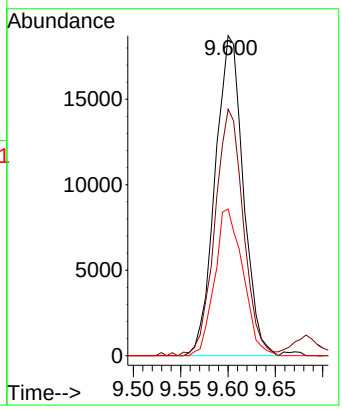
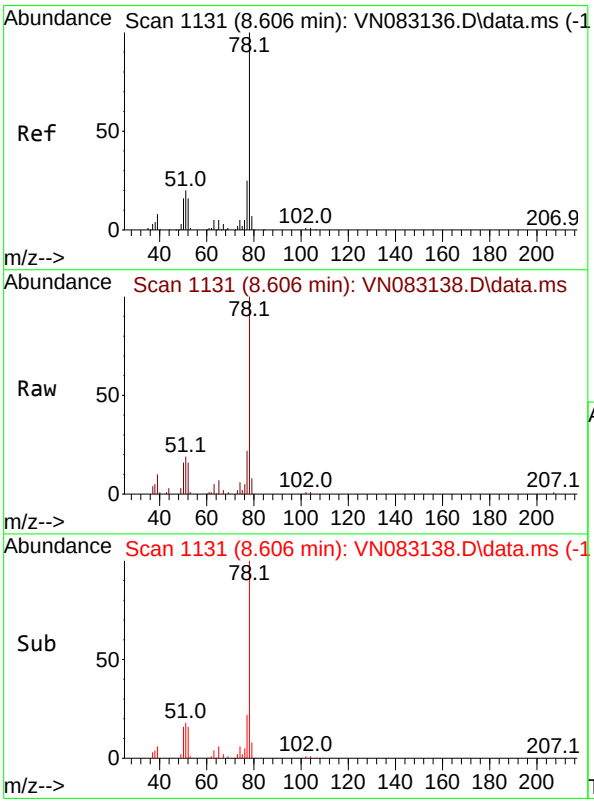
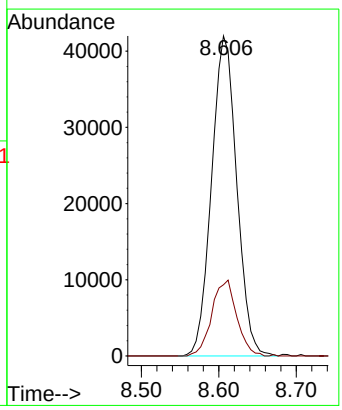


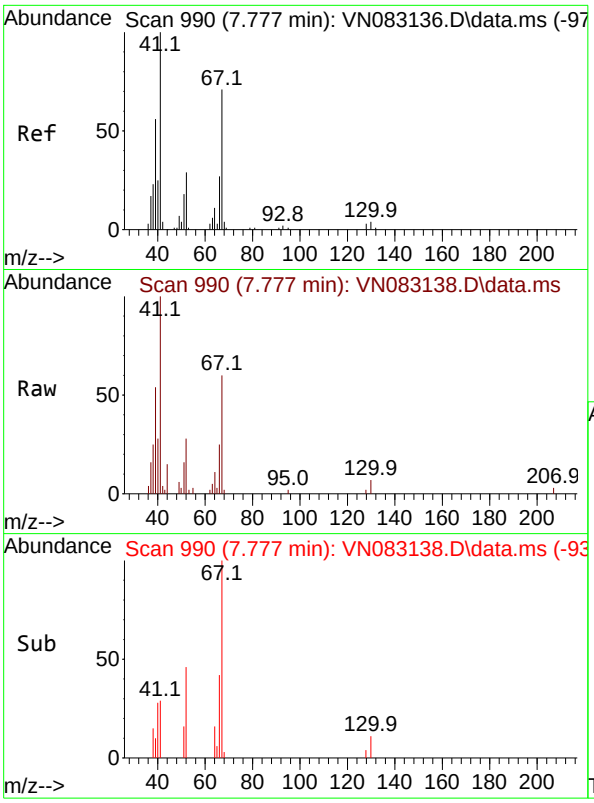




#40
Benzene
Concen: 10.157 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 78 Resp: 94885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.2 | 19.0 | 28.4 |

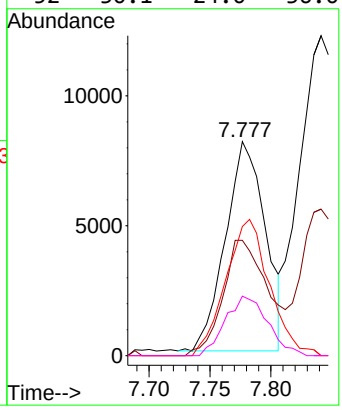





#41
Methacrylonitrile
Concen: 9.213 ug/l
RT: 7.777 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 41 Resp: 1839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 62.6 | 45.5 | 68.3 |
| 67 | 71.3 | 50.5 | 75.7 |
| 52 | 30.1 | 24.0 | 36.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
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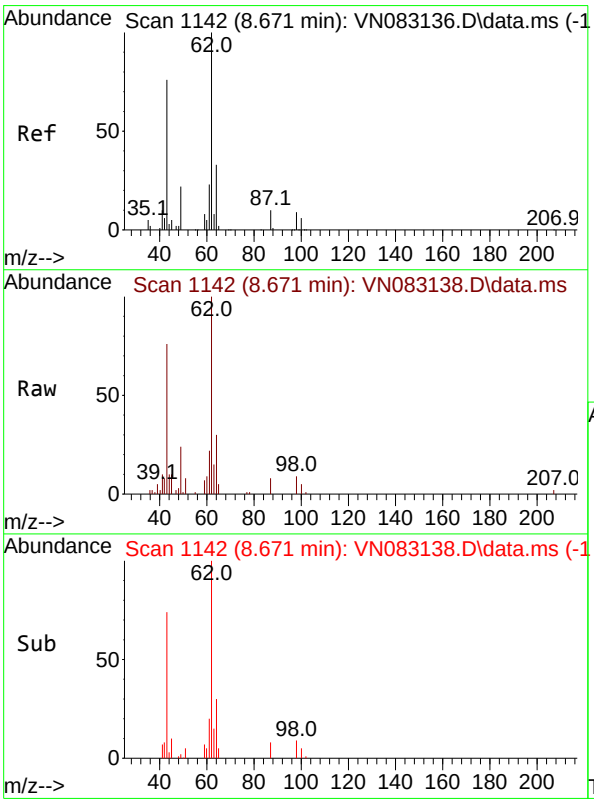
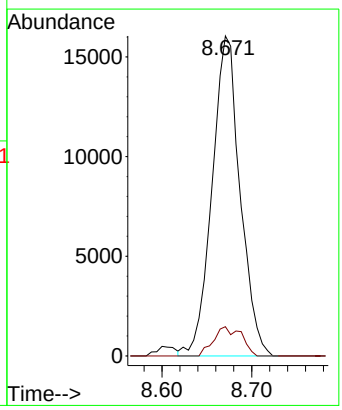
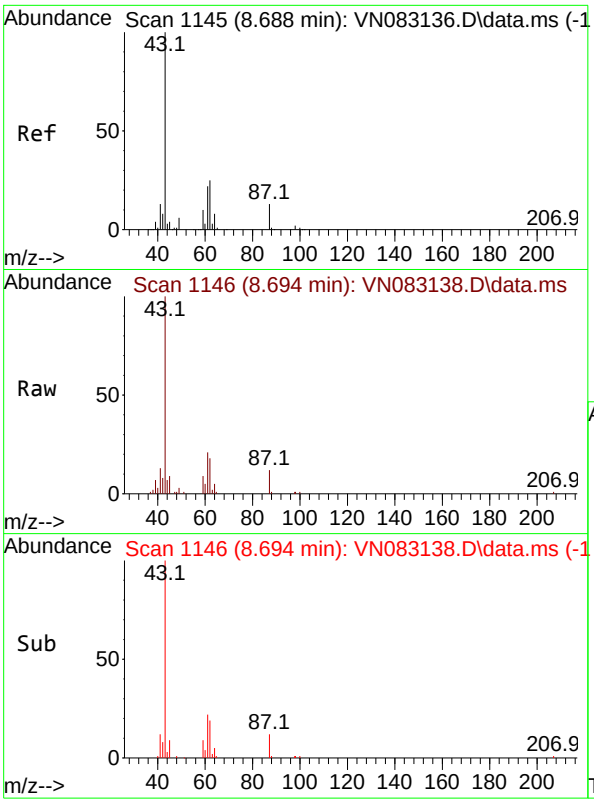



#42
1,2-Dichloroethane
Concen: 10.234 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 62 Resp: 34826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.1 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 10.170 ug/l
RT: 8.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 7142

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 20.7 | 17.8 | 26.6 |
| 87 | 10.4 | 8.2 | 12.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
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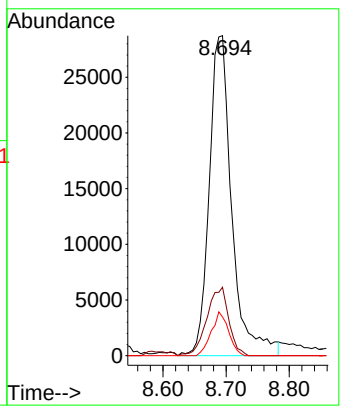
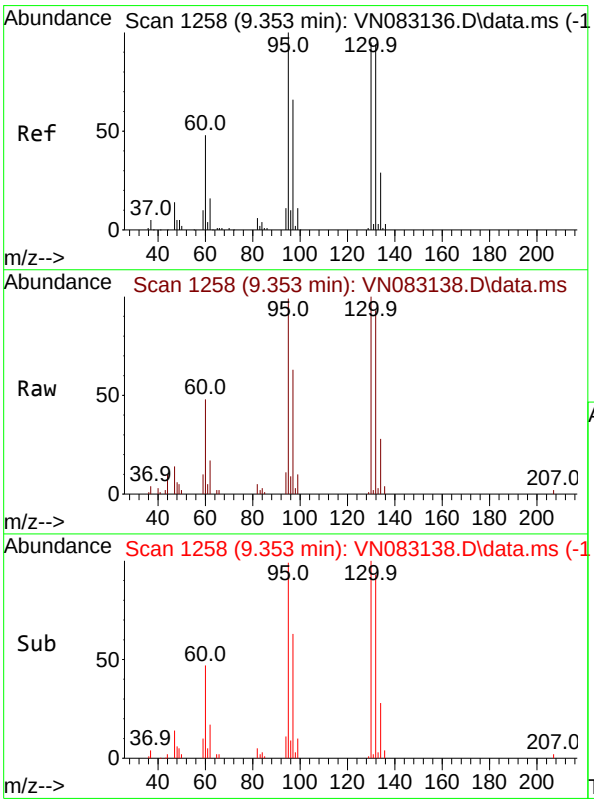
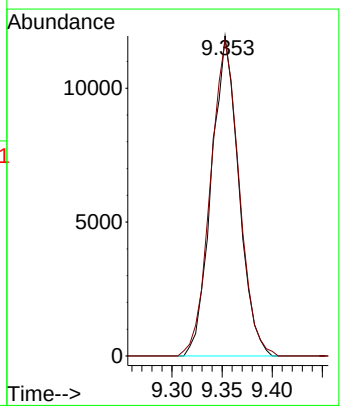


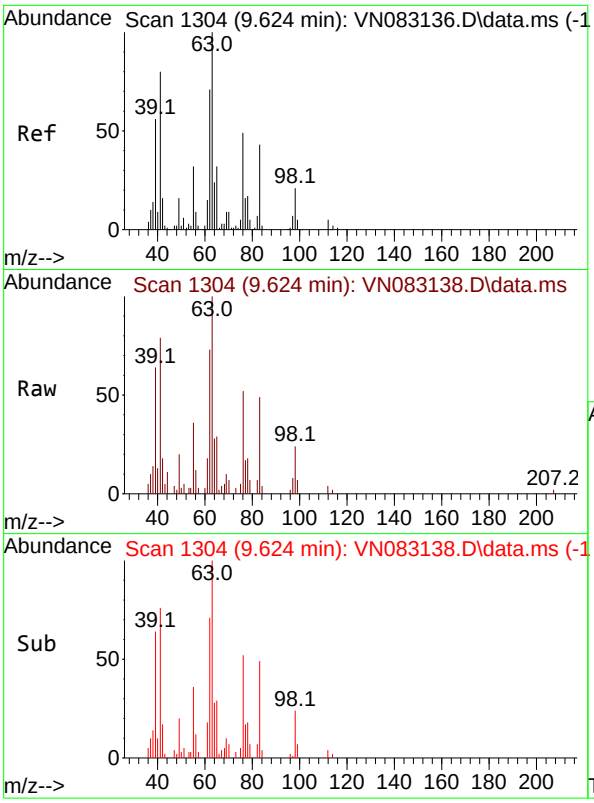




#44
Trichloroethene
Concen: 10.195 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:130 Resp: 22669

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 98.5 | 0.0 | 197.8 |

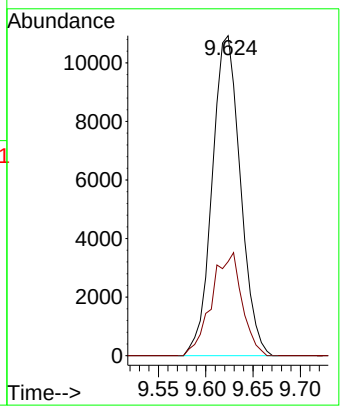





#45
1,2-Dichloropropane
Concen: 10.211 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 63 Resp: 2264

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 29.4 | 24.4 | 36.6 |




**Instrument :**
MSVOA_N
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VSTDICC010

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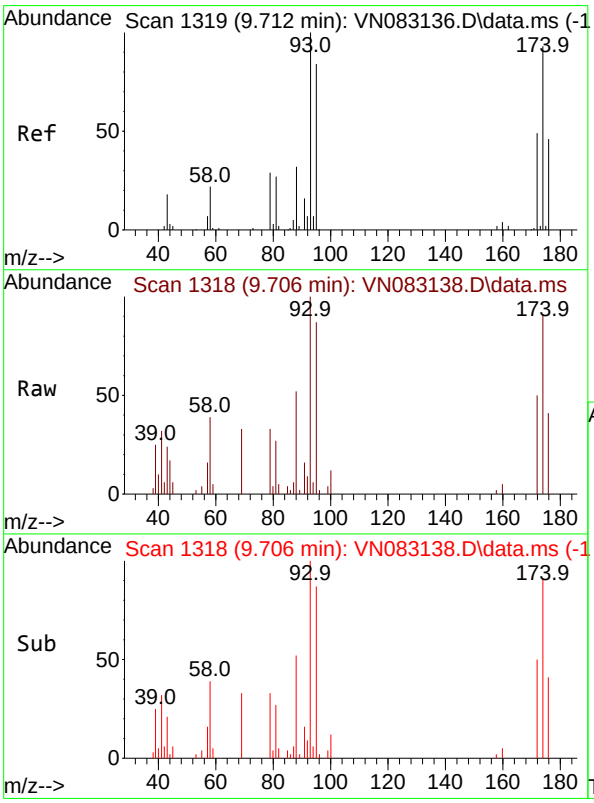
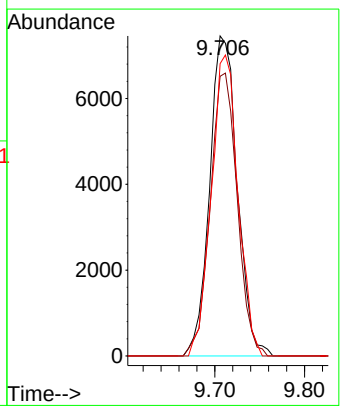
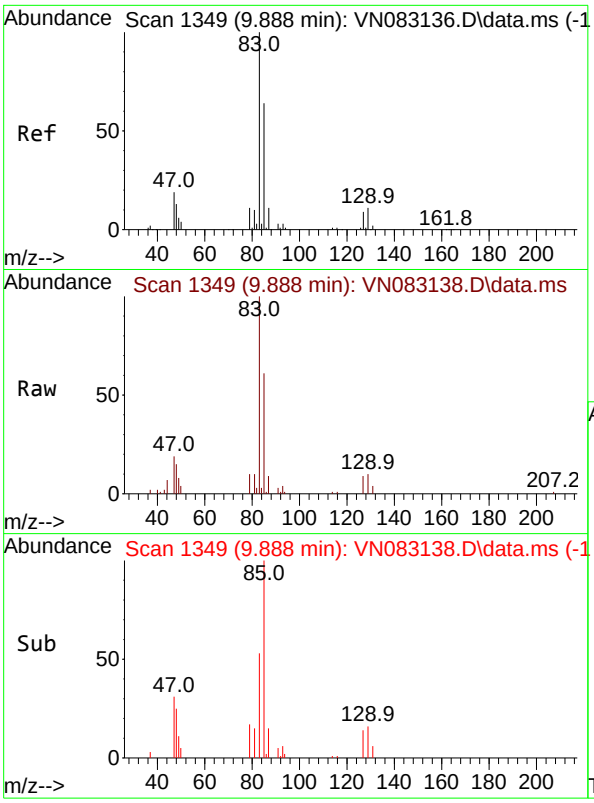



#46
Dibromomethane
Concen: 10.041 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 93 Resp: 15937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 86.3 | 65.8 | 98.6 |
| 174 | 91.4 | 71.7 | 107.5 |

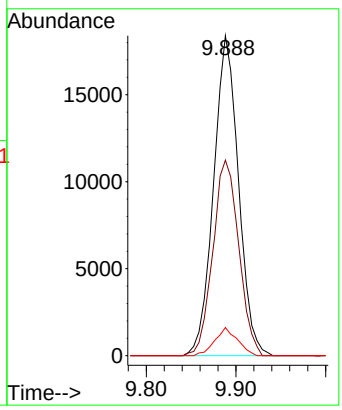





#47
Bromodichloromethane
Concen: 9.930 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 83 Resp: 3538

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 61.1 | 51.1 | 76.7 |
| 127 | 8.8 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

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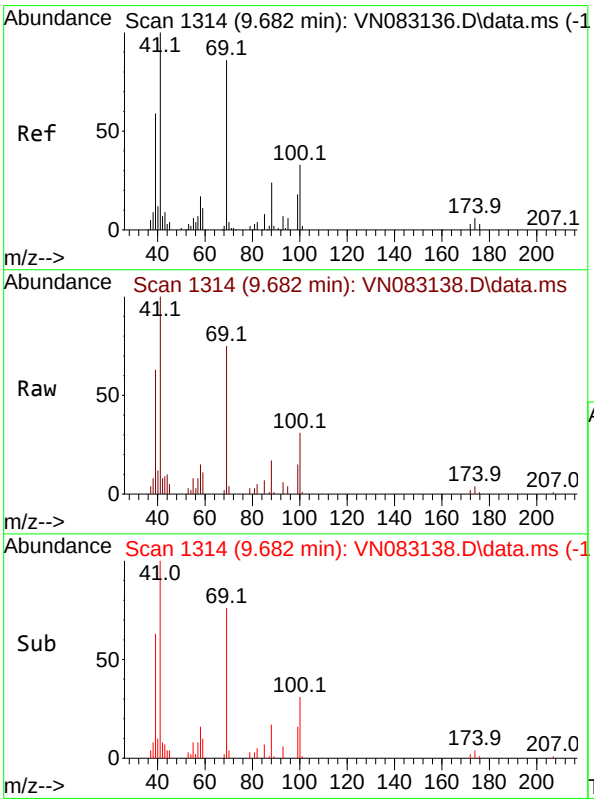
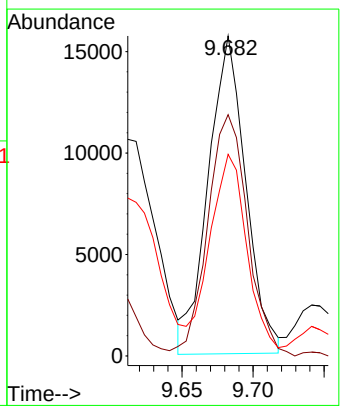
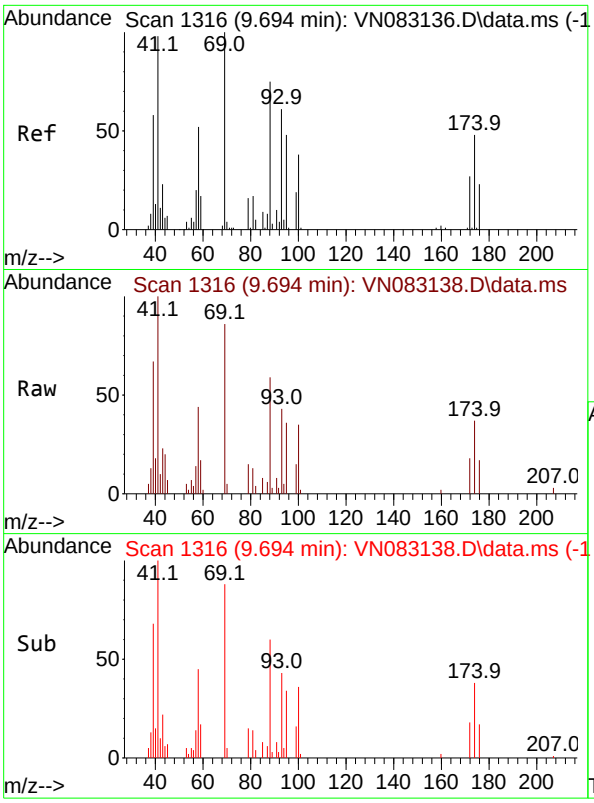



#48
Methyl methacrylate
Concen: 9.891 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 41 Resp: 28711

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 81.0 | 56.3 | 84.5 |
| 39 | 63.6 | 50.3 | 75.5 |






#49
1,4-Dioxane
Concen: 201.364 ug/l
RT: 9.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 88 Resp: 1054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 39.2 | 27.8 | 41.8 |
| 58 | 77.8 | 59.4 | 89.0 |

**Instrument :**
MSVOA_N
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VSTDICC010

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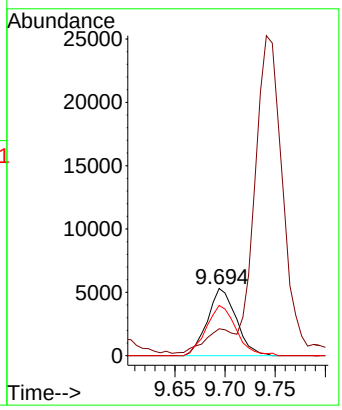
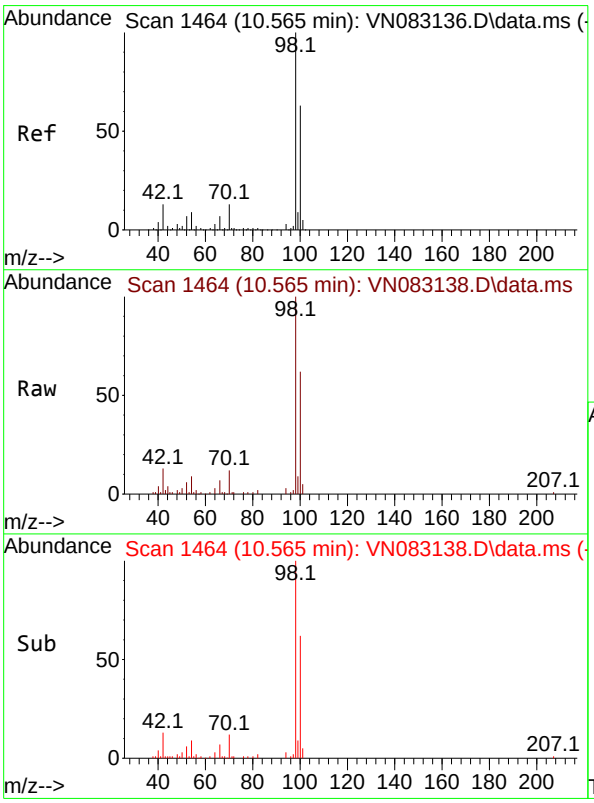
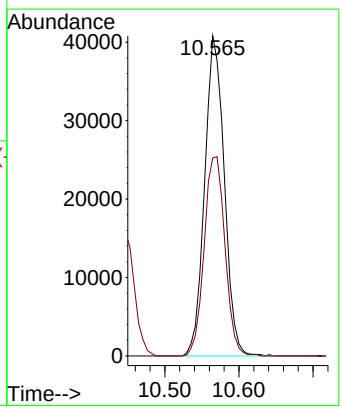


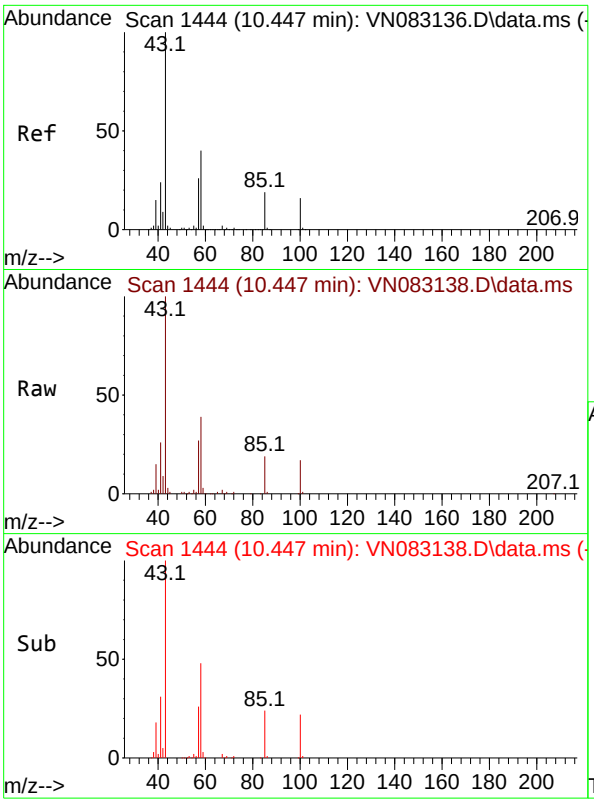




#50
Toluene-d8
Concen: 9.733 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 98 Resp: 75261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.0 | 51.5 | 77.3 |






#51
4-Methyl-2-Pentanone
Concen: 51.587 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 17127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 38.8 | 28.2 | 42.4 |

**Instrument :**
MSVOA_N
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**Manual Integrations**
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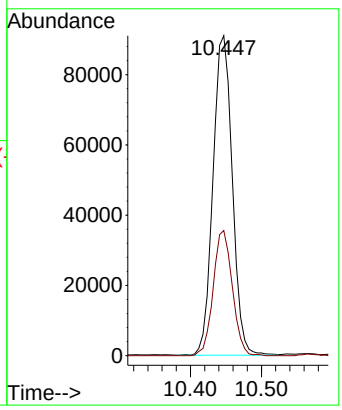
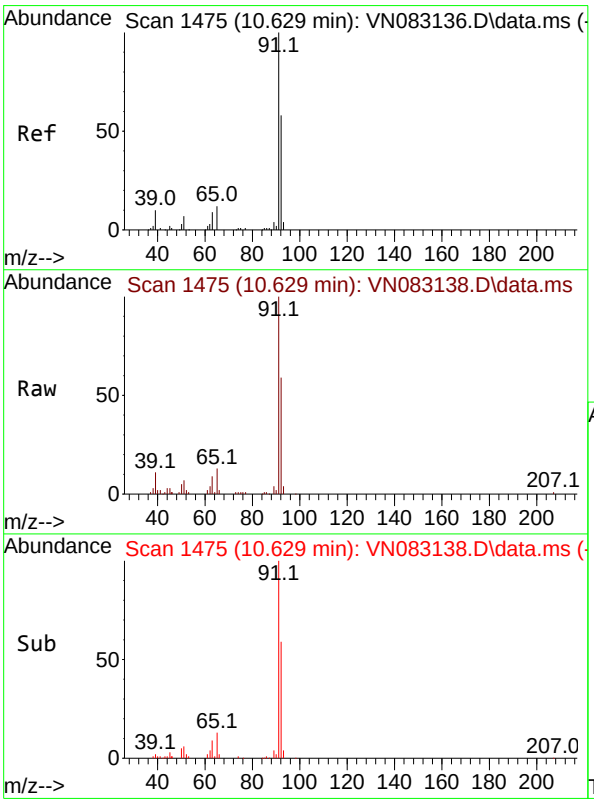
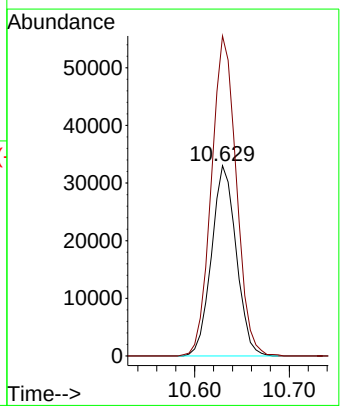


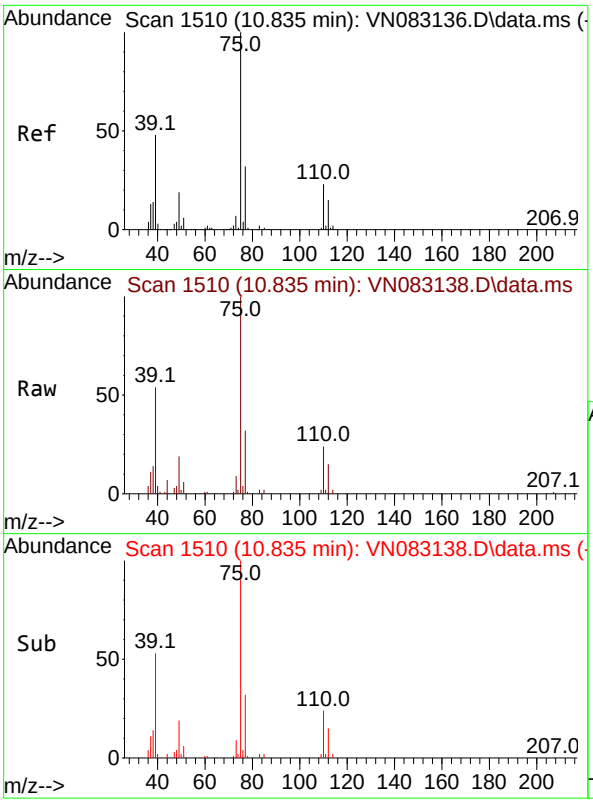




#52
Toluene
Concen: 10.129 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 92 Resp: 59784

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 170.0 | 139.4 | 209.0 |

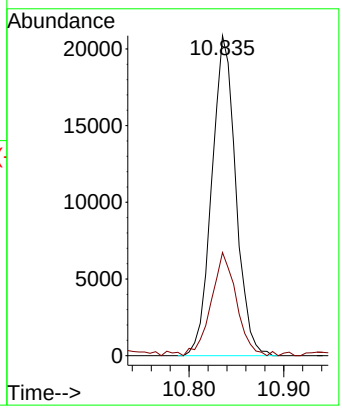





#53
t-1,3-Dichloropropene
Concen: 10.017 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 3667

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.2 | 25.7 | 38.5 |

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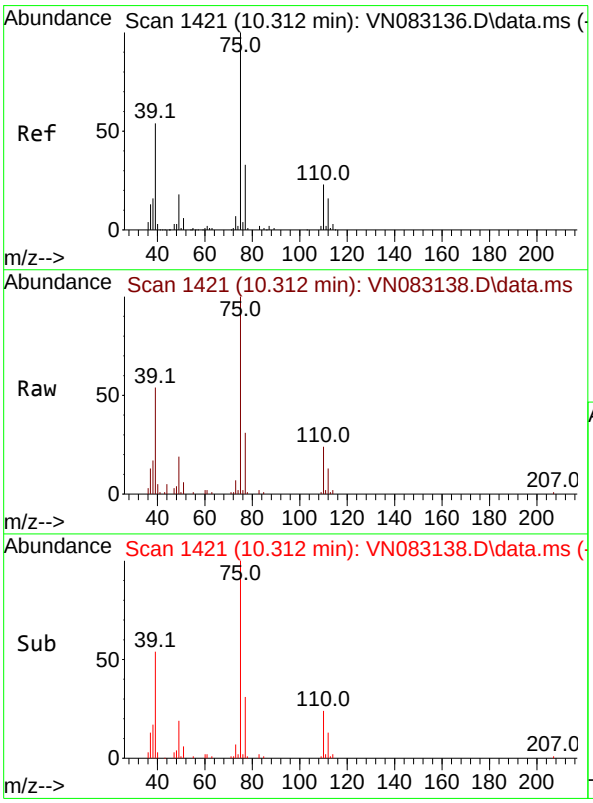
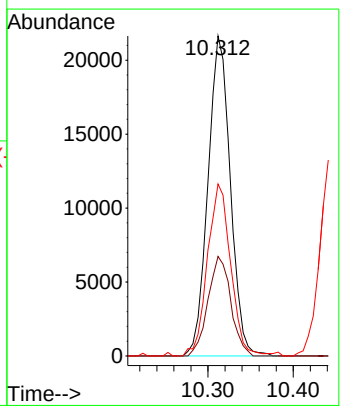
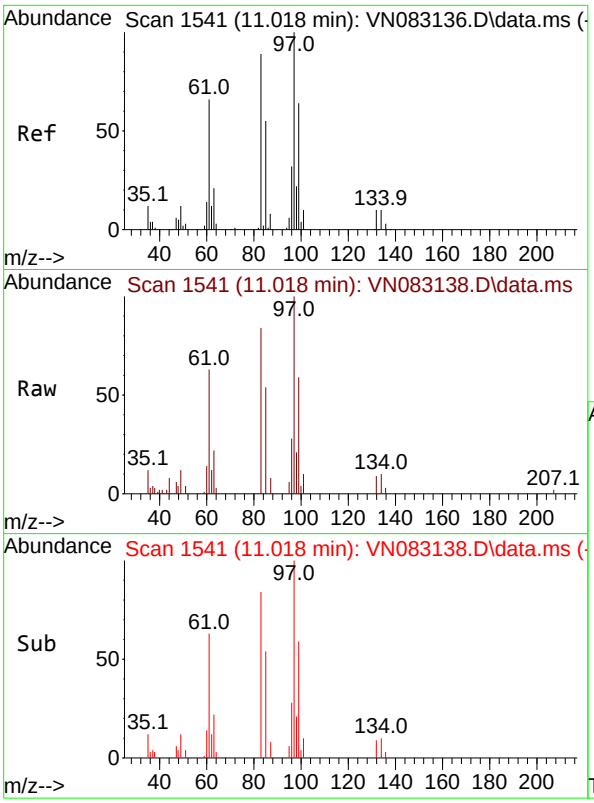



#54
cis-1,3-Dichloropropene
Concen: 10.145 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 39503

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.1 | 24.3 | 36.5 |
| 39 | 53.8 | 50.5 | 75.7 |

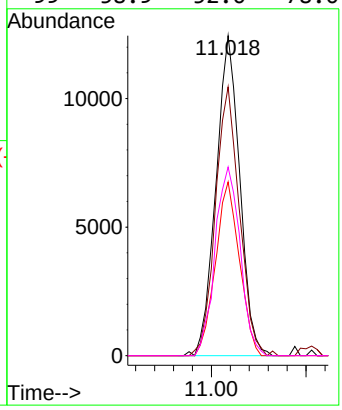





#55
1,1,2-Trichloroethane
Concen: 10.274 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 97 Resp: 2173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 84.0 | 71.4 | 107.0 |
| 85 | 54.3 | 45.8 | 68.6 |
| 99 | 58.9 | 52.0 | 78.0 |

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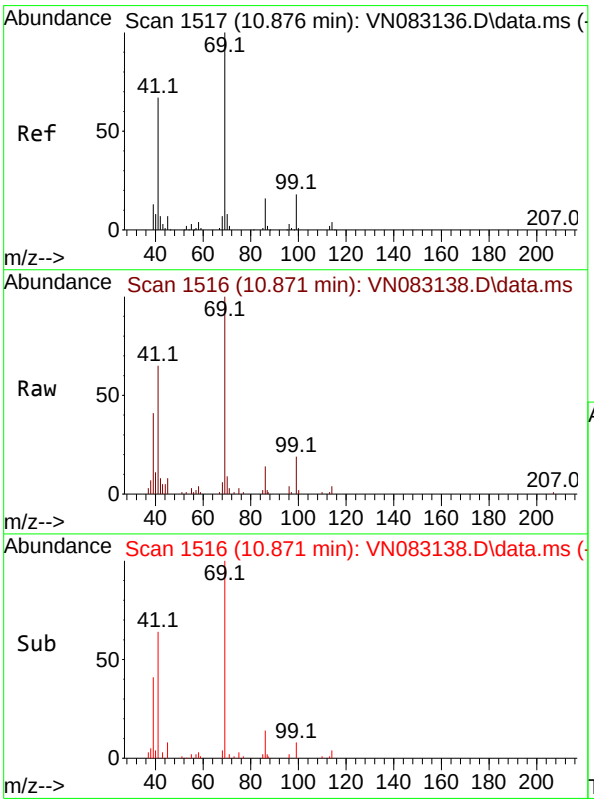
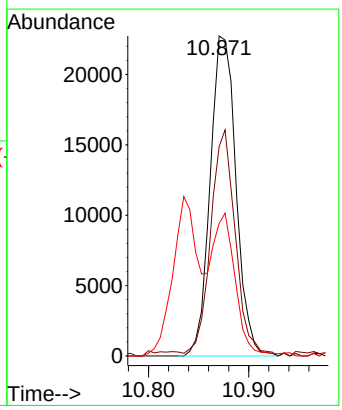
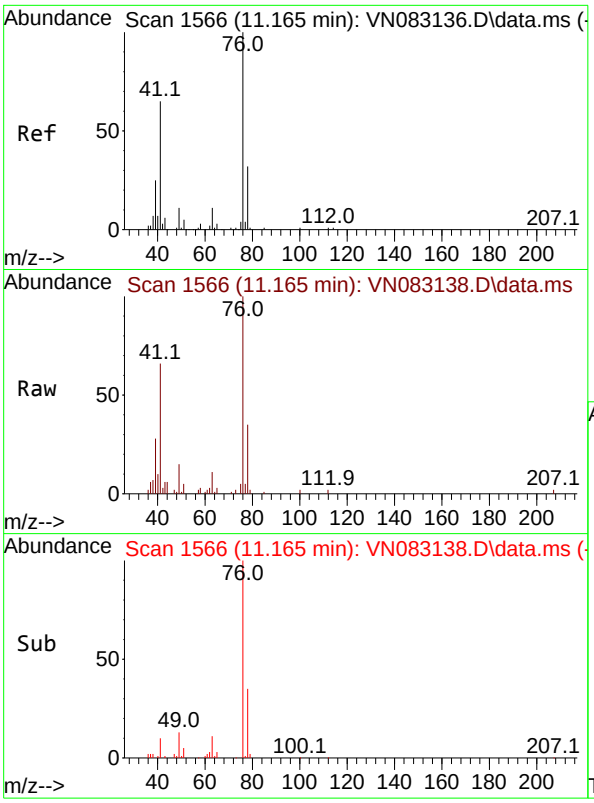



#56
Ethyl methacrylate
Concen: 10.201 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 69 Resp: 40676

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 67.9 | 63.4 | 95.2 |
| 39 | 36.8 | 37.4 | 56.0# |

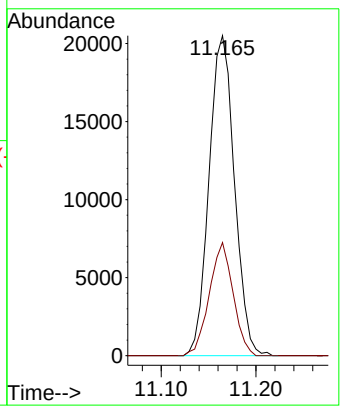





#57
1,3-Dichloropropane
Concen: 10.132 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 76 Resp: 3820

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 33.1 | 25.6 | 38.4 |




**Instrument :**
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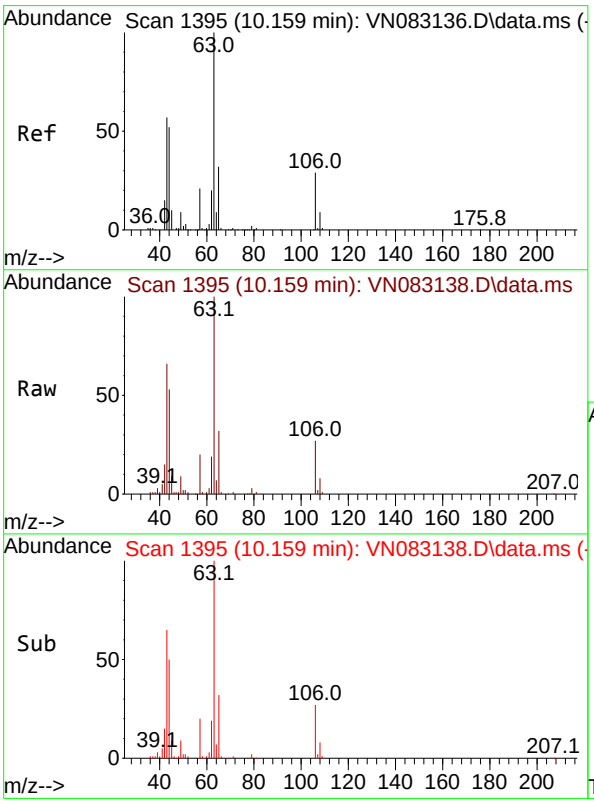
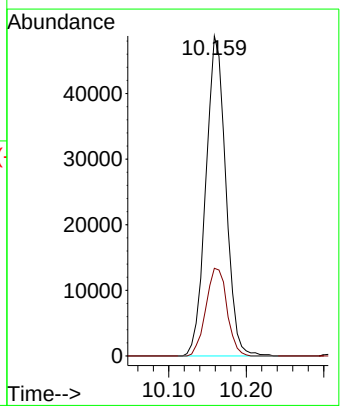
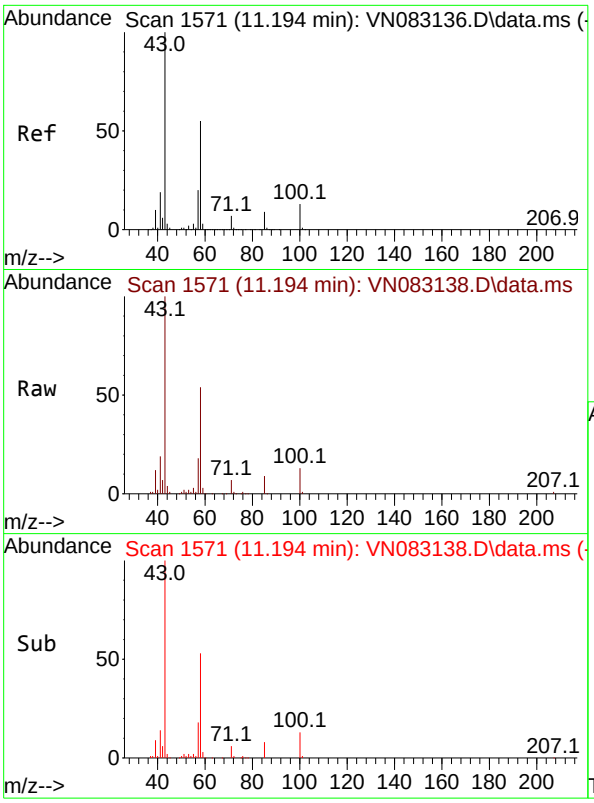



#58
2-Chloroethyl Vinyl ether
Concen: 51.698 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 63 Resp: 87140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.9 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 50.312 ug/l
RT: 11.194 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 12923

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 54.0 | 24.6 | 73.8 |

**Instrument :**
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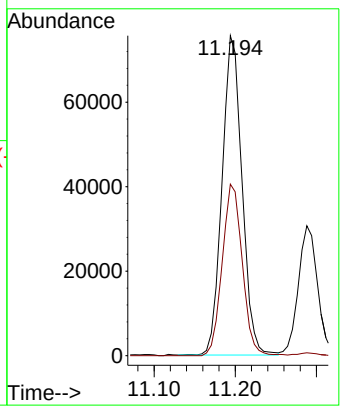
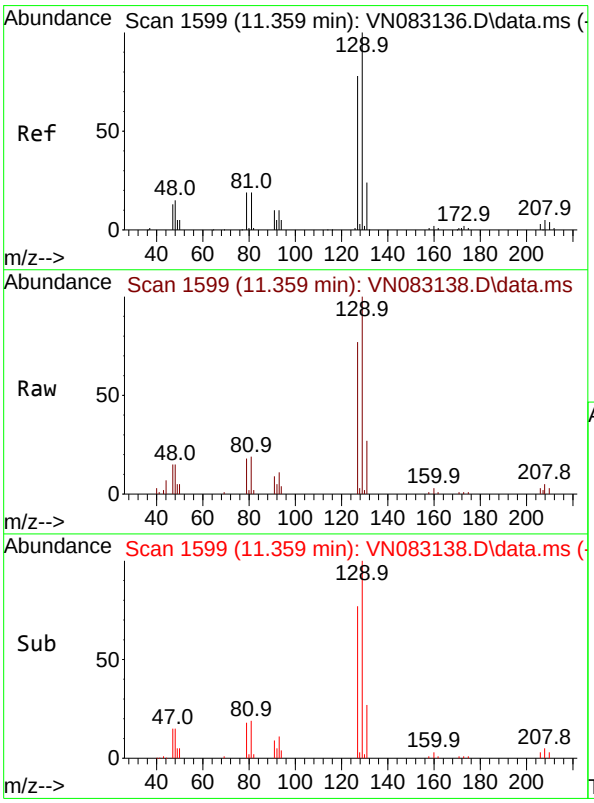
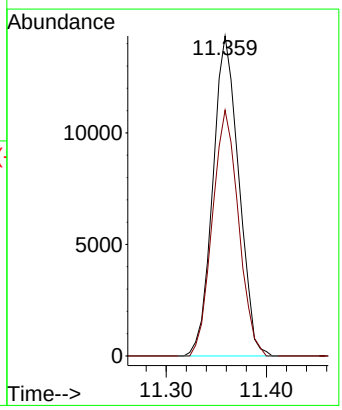


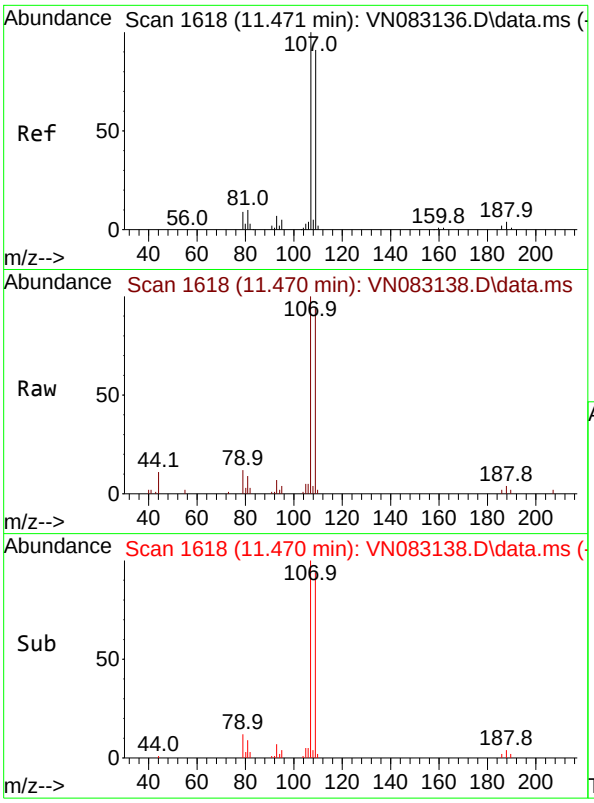




#60
Dibromochloromethane
Concen: 10.088 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:129 Resp: 25798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.5 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 10.219 ug/l
RT: 11.470 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:107 Resp: 2270

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 92.7 | 73.7 | 110.5 |

**Instrument :**
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VSTDICC010

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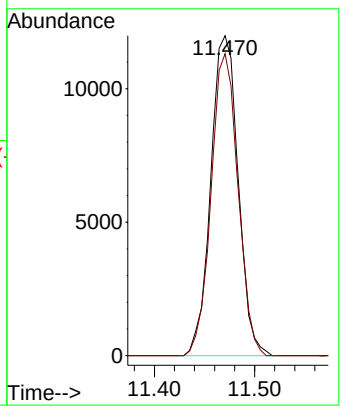
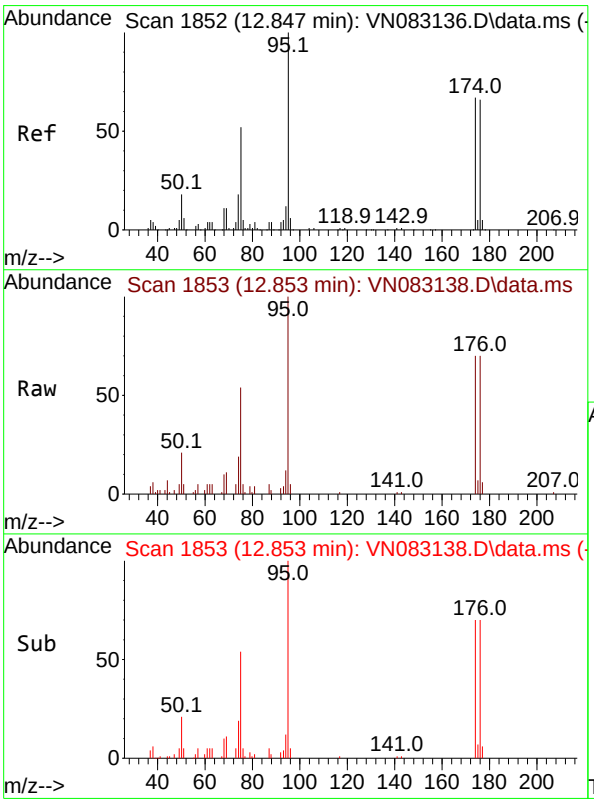
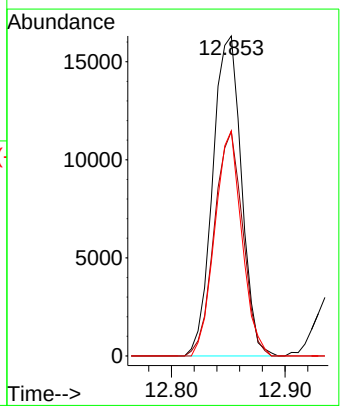


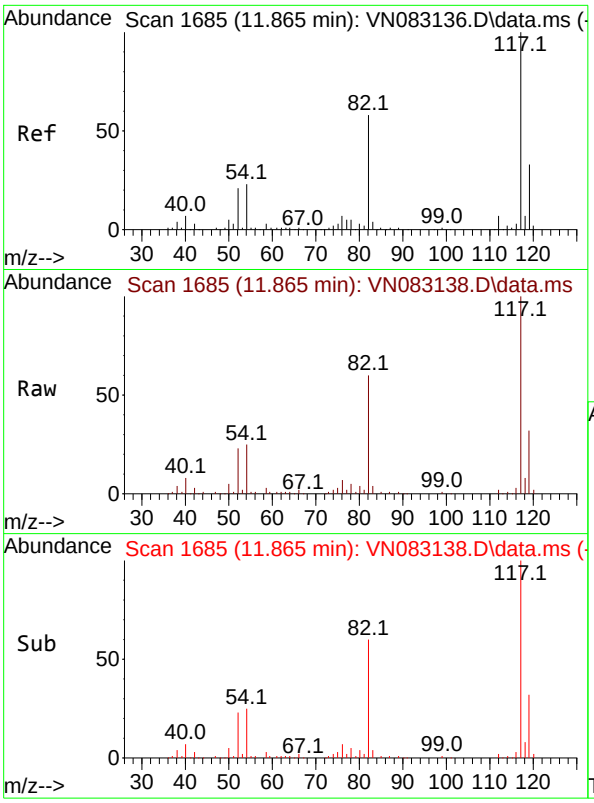




#62
4-Bromofluorobenzene
Concen: 9.517 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 95 Resp: 28691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.5 | 0.0 | 159.2 |
| 176 | 66.2 | 0.0 | 147.6 |

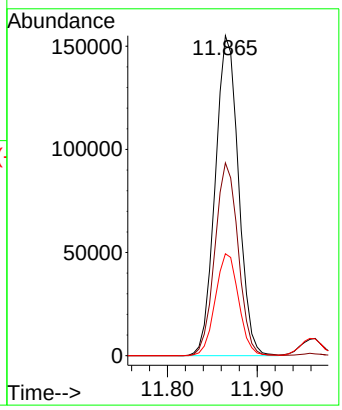





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:117 Resp: 27940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.2 | 47.5 | 71.3 |
| 119 | 31.9 | 25.6 | 38.4 |

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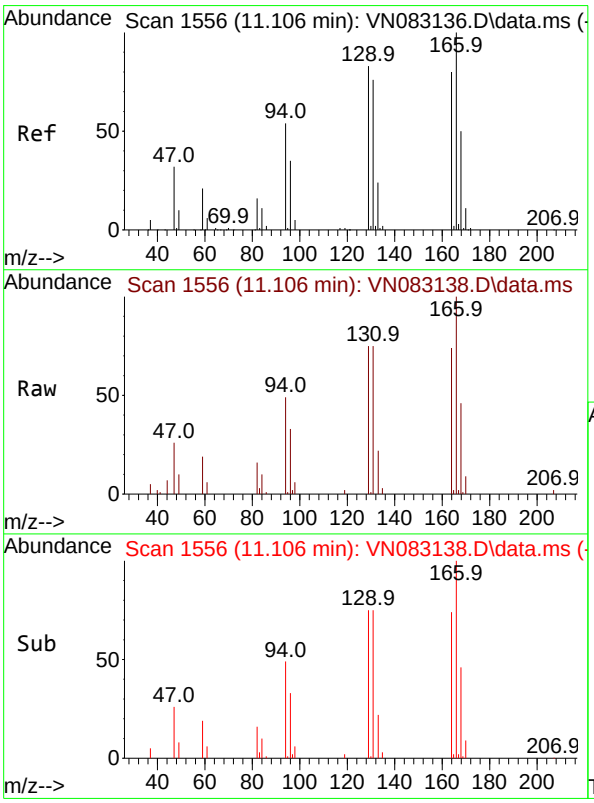
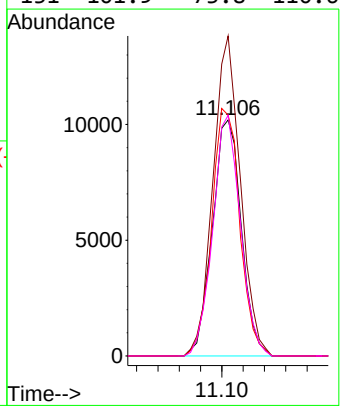
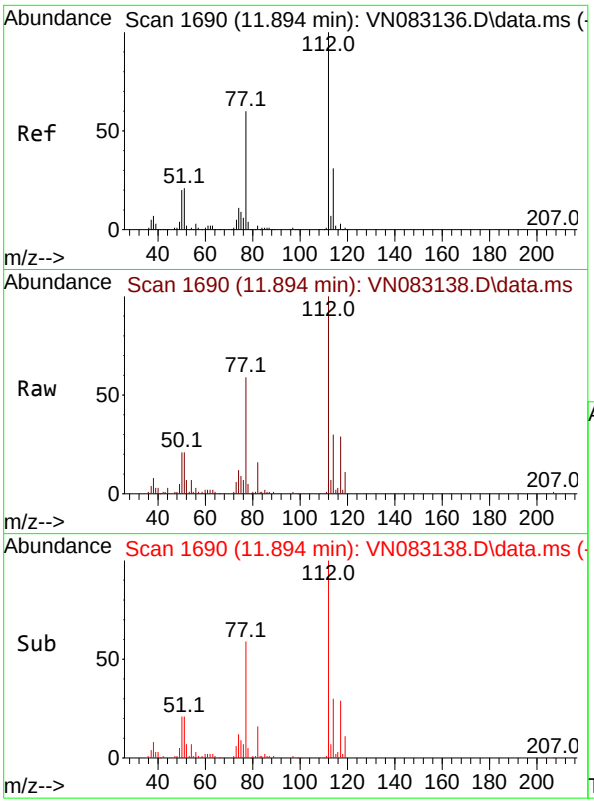



#64
Tetrachloroethene
Concen: 10.362 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:164 Resp: 19174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 135.5 | 101.4 | 152.0 |
| 129 | 102.0 | 75.7 | 113.5 |
| 131 | 101.9 | 73.8 | 110.6 |

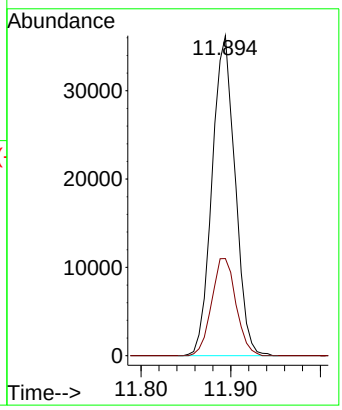





#65
Chlorobenzene
Concen: 10.437 ug/l
RT: 11.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:112 Resp: 6444

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 30.4 | 26.2 | 39.2 |

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VSTDICC010

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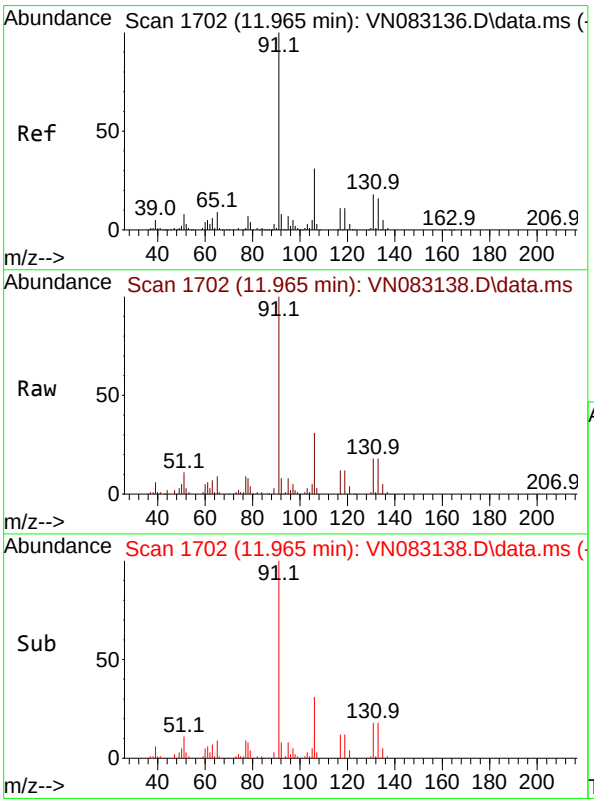
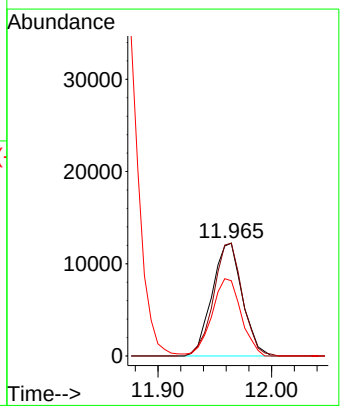
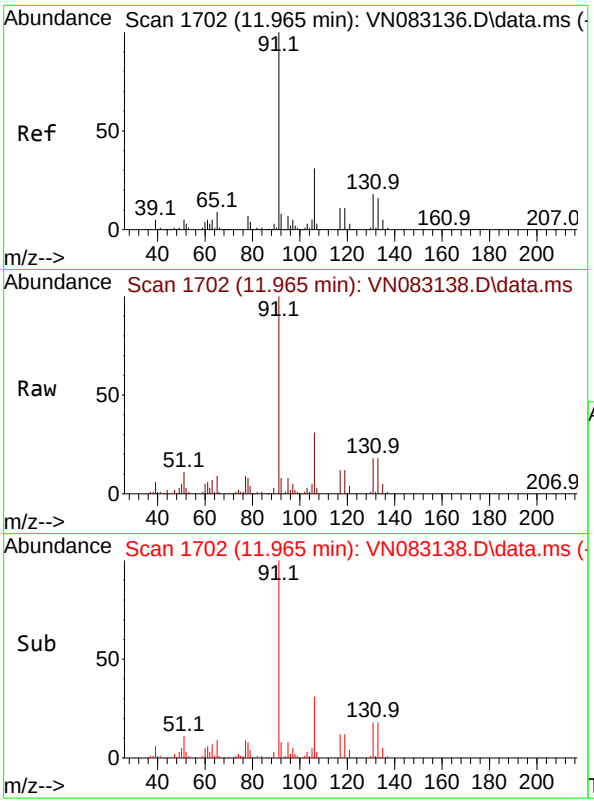



#66
1,1,1,2-Tetrachloroethane
Concen: 10.331 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:131 Resp: 22498

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.7 | 47.3 | 142.0 |
| 119 | 66.5 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 10.211 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 91 Resp: 11566

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.7 | 24.0 | 36.0 |

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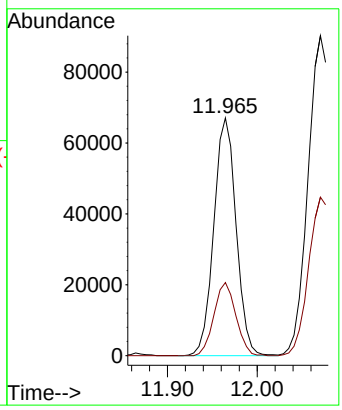
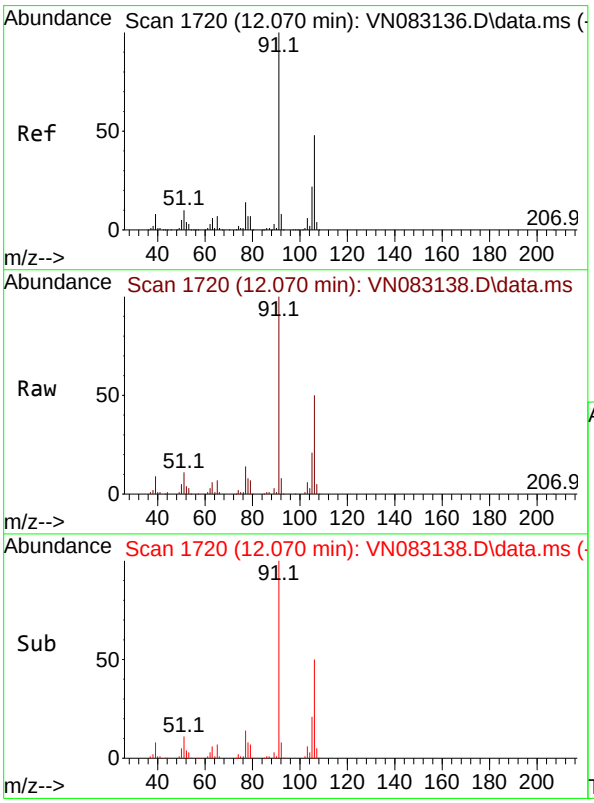
Supervised By :Mahesh Dadoda 08/09/2024

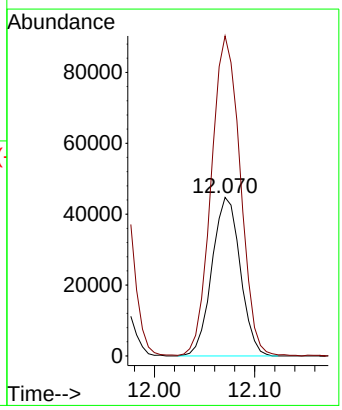


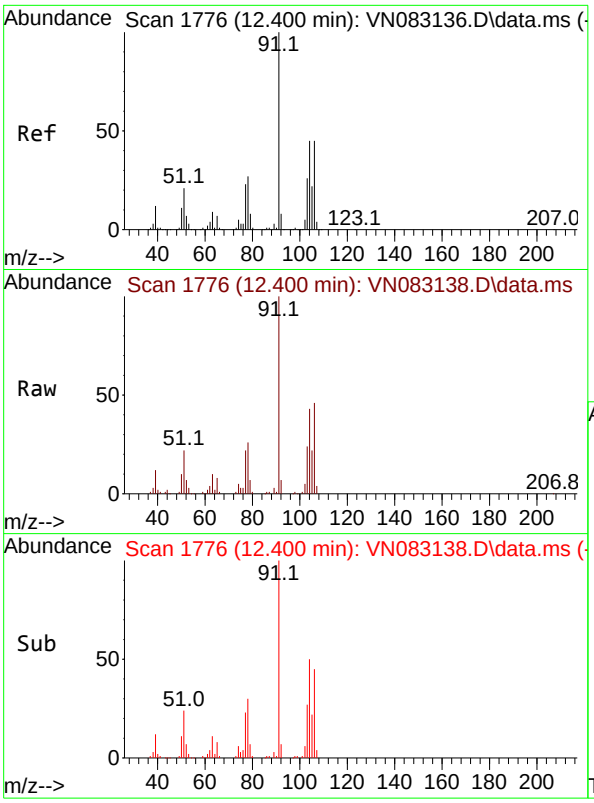




#68
m/p-Xylenes
Concen: 20.687 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:106 Resp: 87775

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 206.9 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 10.327 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:106 Resp: 4321

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 217.0 | 111.3 | 333.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
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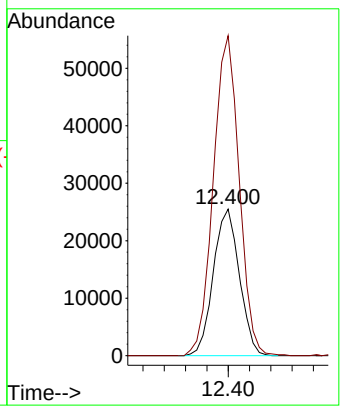
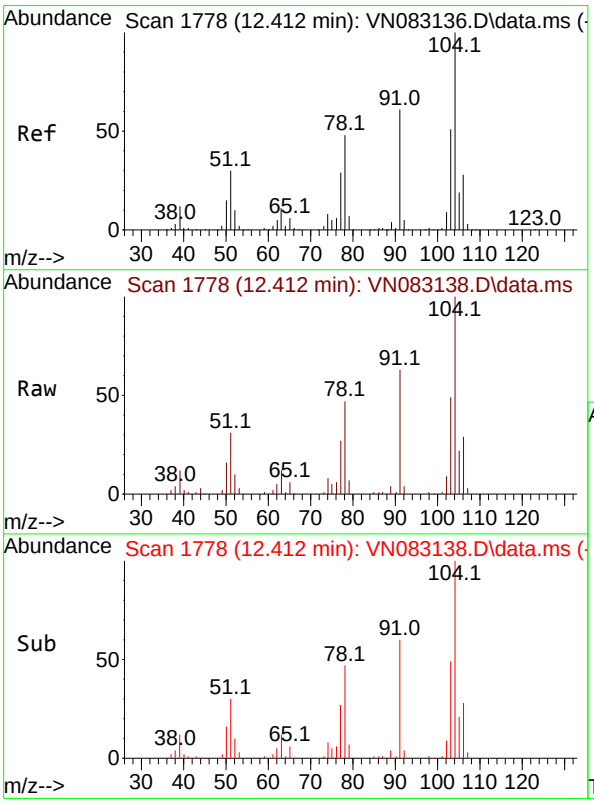
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

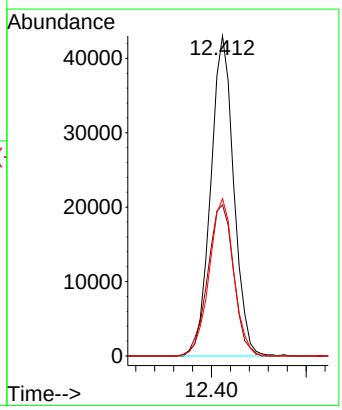


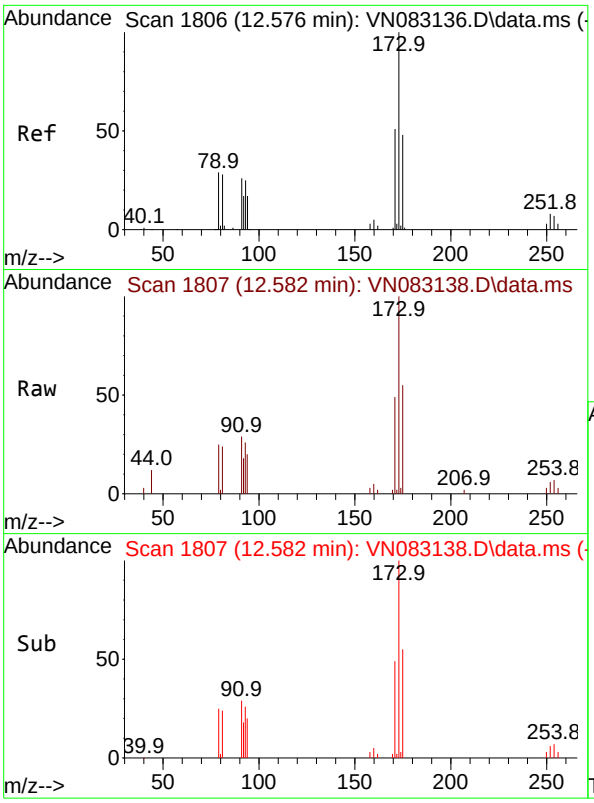




#70
Styrene
Concen: 10.335 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:104 Resp: 72641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.1 | 41.6 | 62.4 |
| 103 | 52.2 | 44.0 | 66.0 |

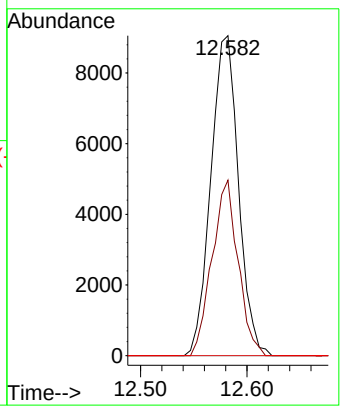





#71
Bromoform
Concen: 9.893 ug/l
RT: 12.582 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:173 Resp: 1632

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 51.7 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
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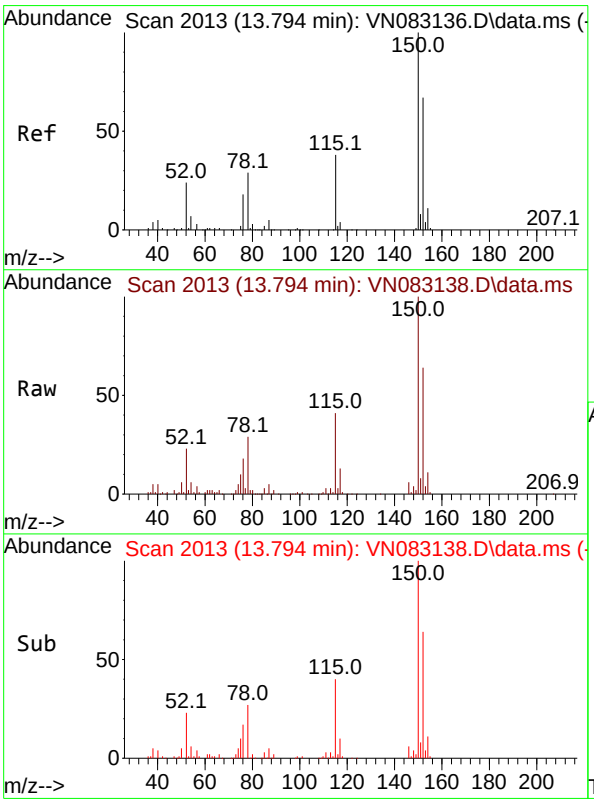
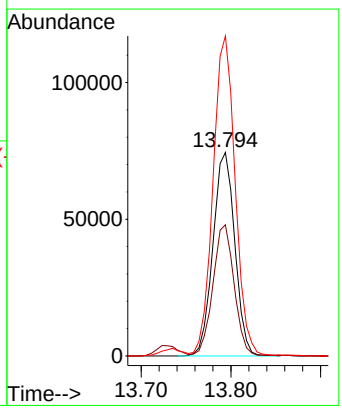
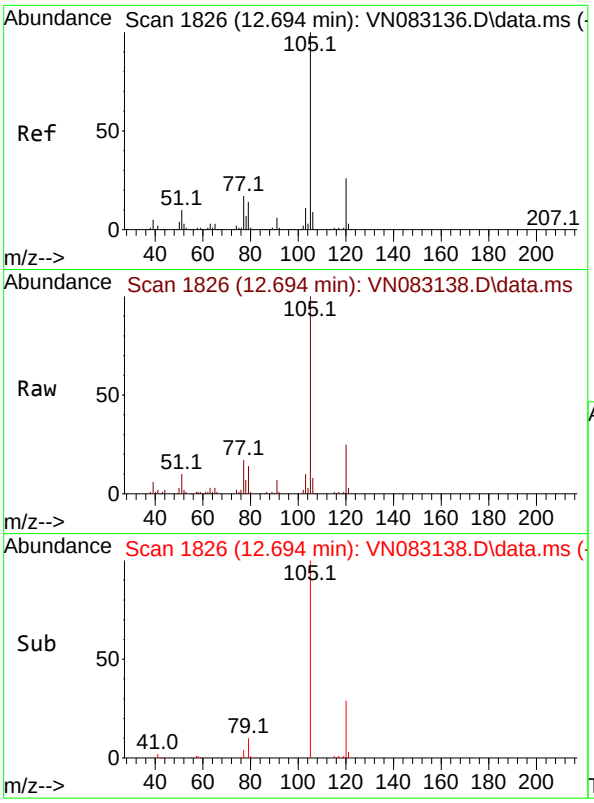



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:152 Resp: 125725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.4 | 30.6 | 91.6 |
| 150 | 158.1 | 0.0 | 348.6 |

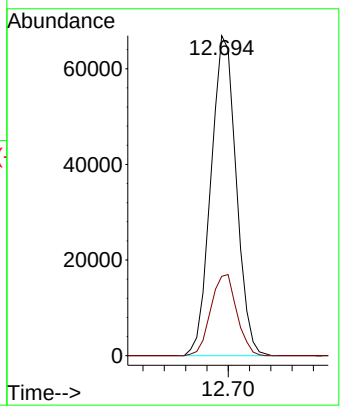





#73
Isopropylbenzene
Concen: 10.487 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:105 Resp: 11027

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.0 | 12.9 | 38.6 |




**Instrument :**
MSVOA_N
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VSTDICC010

**Manual Integrations**
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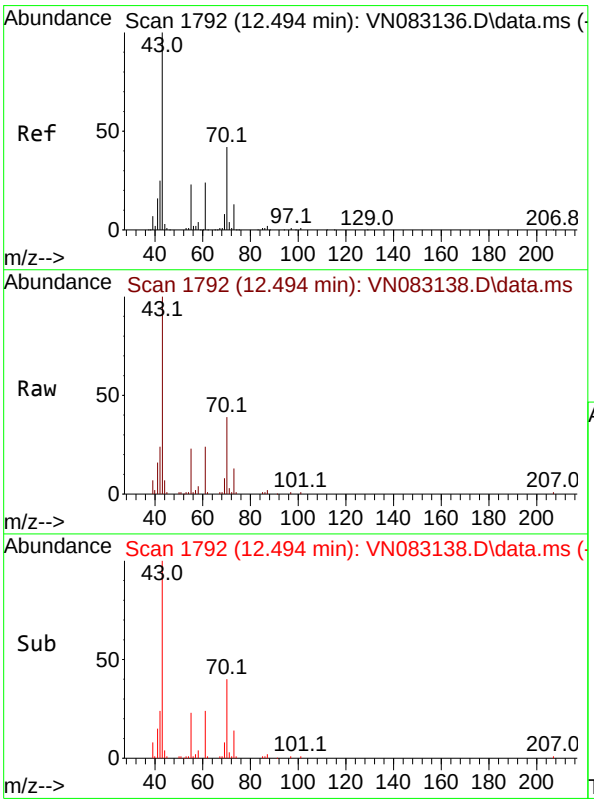
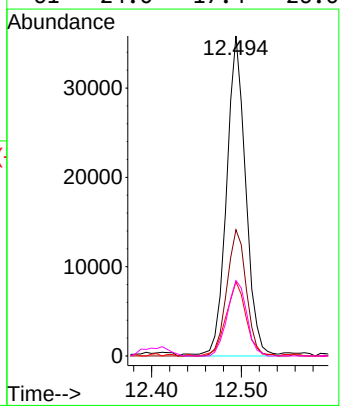
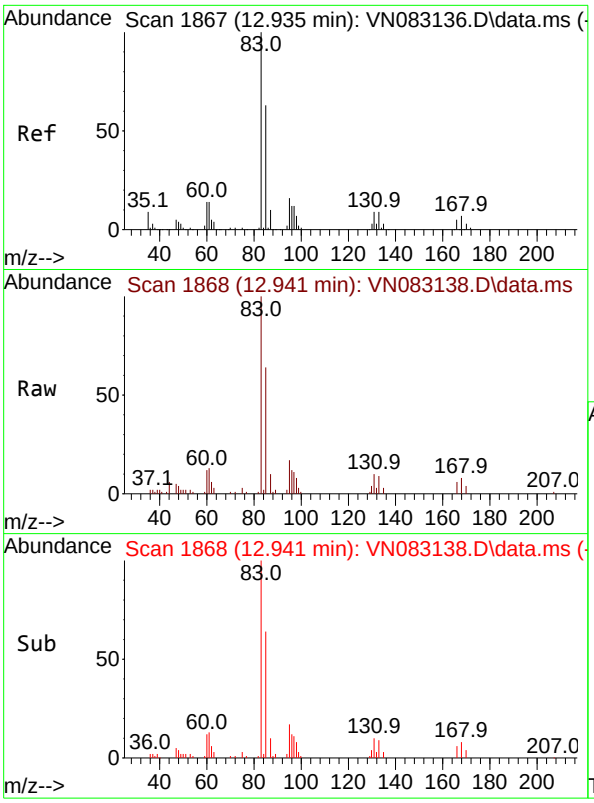



#74
N-amyl acetate
Concen: 10.303 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 43 Resp: 52998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 39.8 | 29.8 | 44.6 |
| 55 | 24.3 | 18.7 | 28.1 |
| 61 | 24.0 | 17.4 | 26.0 |






#75
1,1,2,2-Tetrachloroethane
Concen: 10.234 ug/l
RT: 12.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 83 Resp: 3043

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.8 | 5.0 | 14.9 |
| 85 | 65.6 | 31.9 | 95.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

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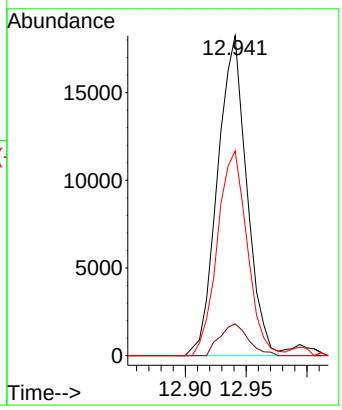
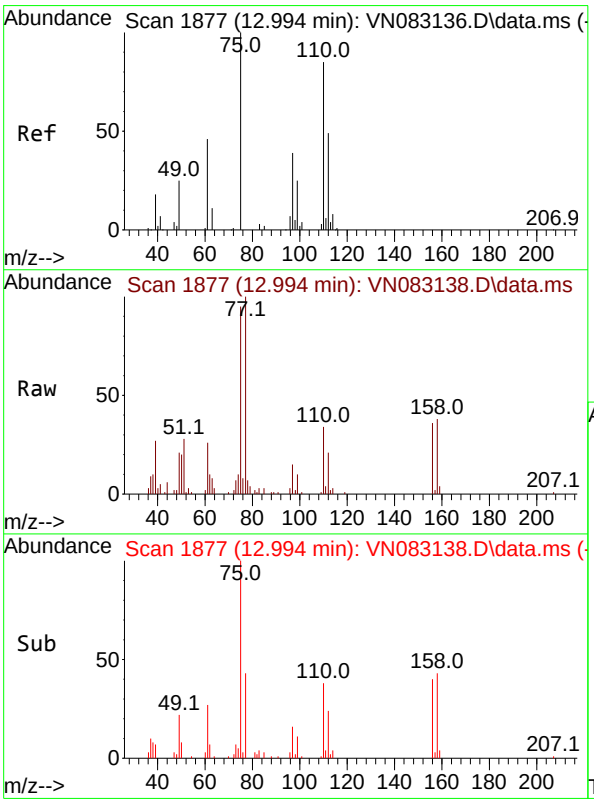
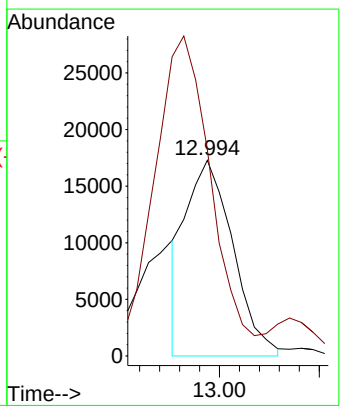


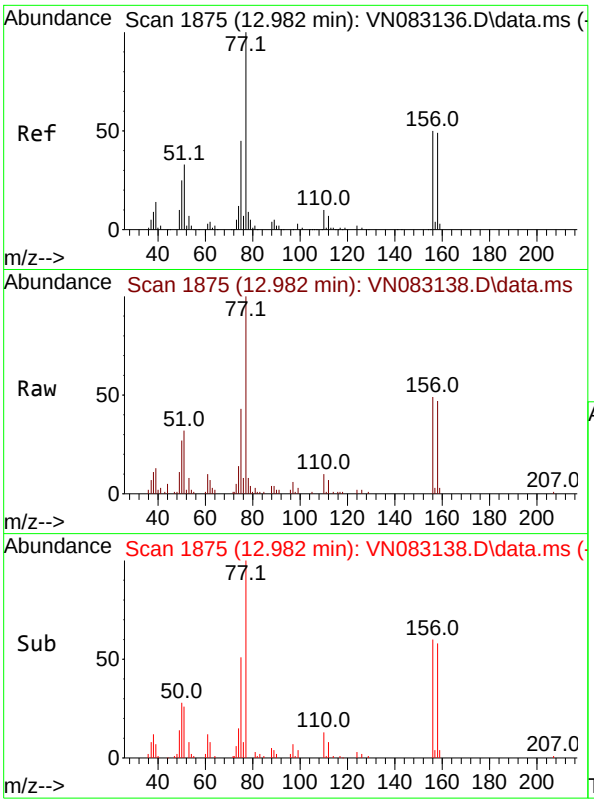




#76
1,2,3-Trichloropropane
Concen: 10.261 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 28359

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 197.9 | 110.9 | 332.6 |

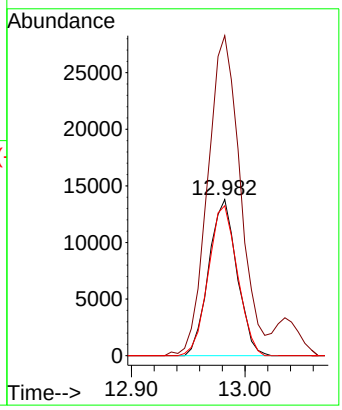





#77
Bromobenzene
Concen: 10.180 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:156 Resp: 2378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 236.0 | 111.3 | 333.8 |
| 158 | 98.9 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
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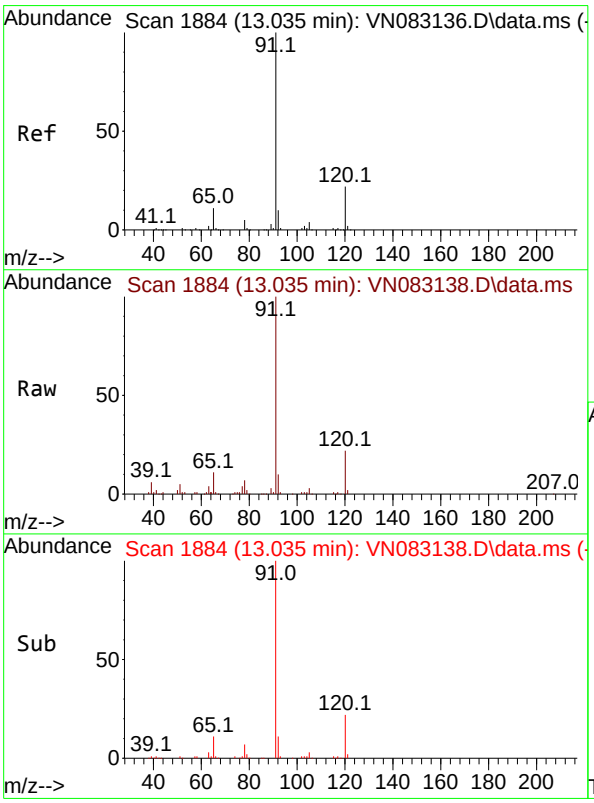
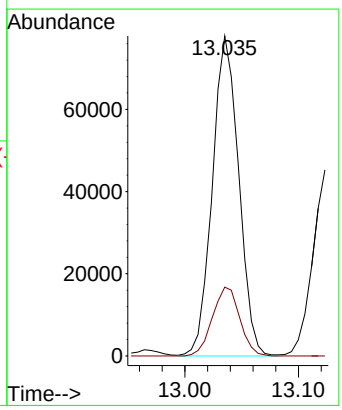
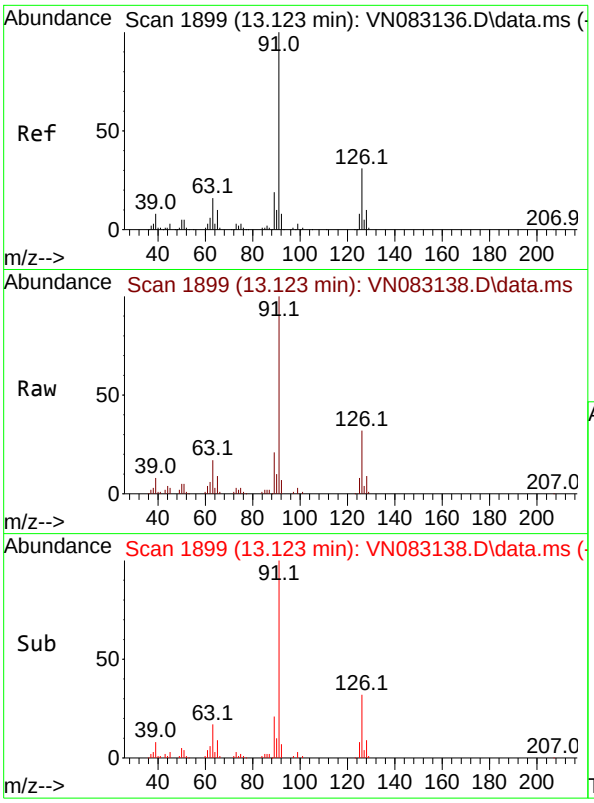



#78
n-propylbenzene
Concen: 10.379 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 91 Resp: 125678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.2 | 10.9 | 32.9 |

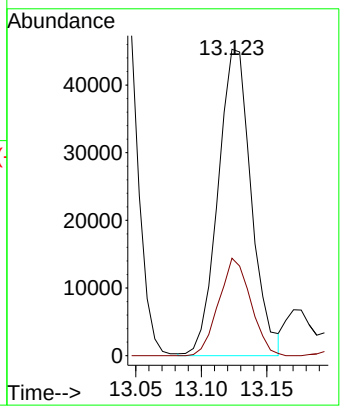





#79
2-Chlorotoluene
Concen: 10.429 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 91 Resp: 8006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.4 | 16.2 | 48.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

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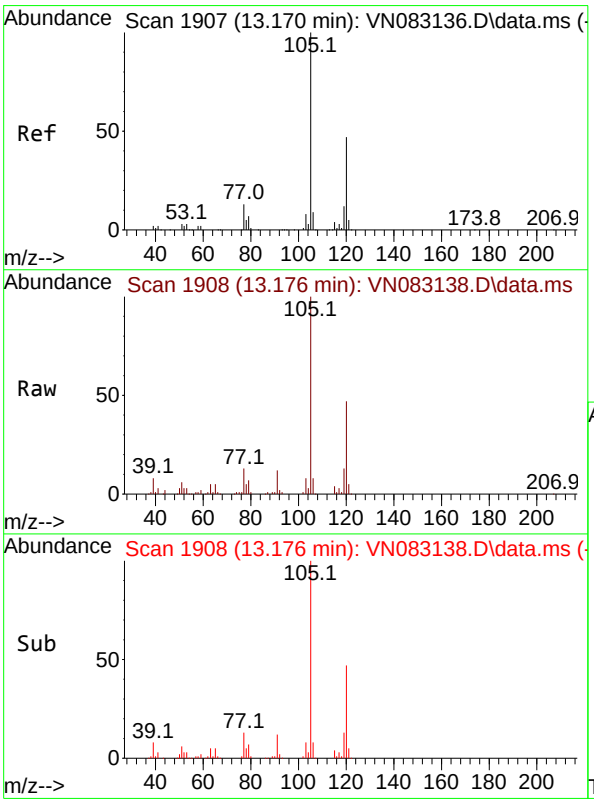
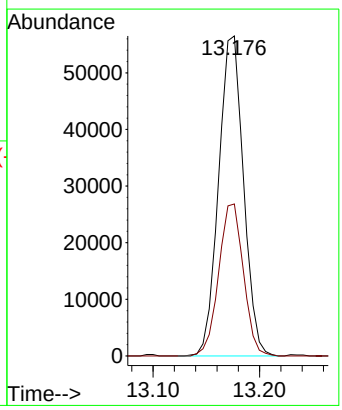
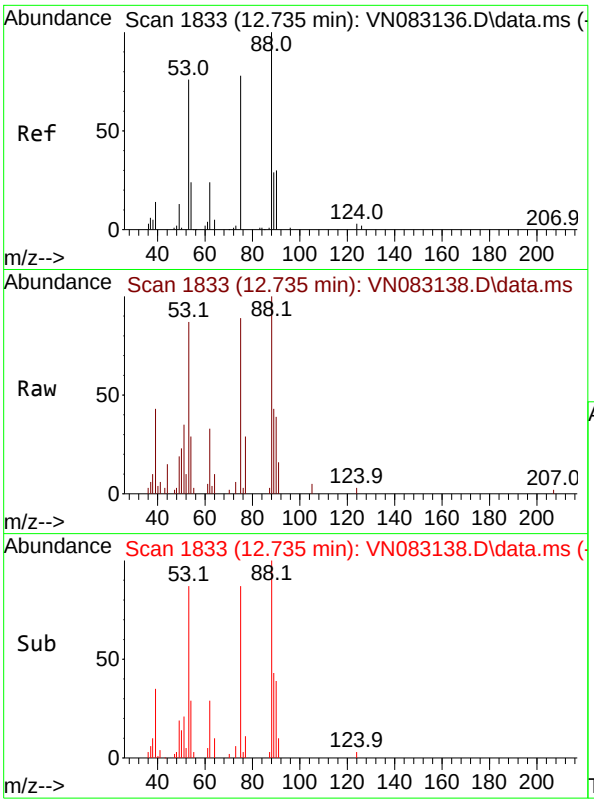



#80
1,3,5-Trimethylbenzene
Concen: 10.400 ug/l
RT: 13.176 min Scan# 1908
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:105 Resp: 91559

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.3 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 9.271 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 1176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 116.7 | 88.4 | 132.6 |
| 89 | 47.3 | 36.3 | 54.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

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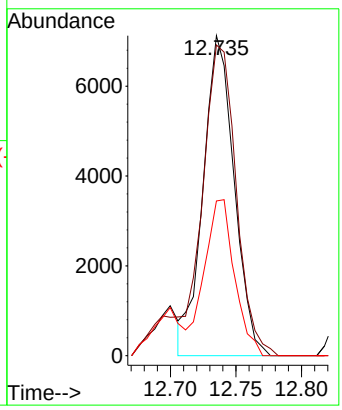
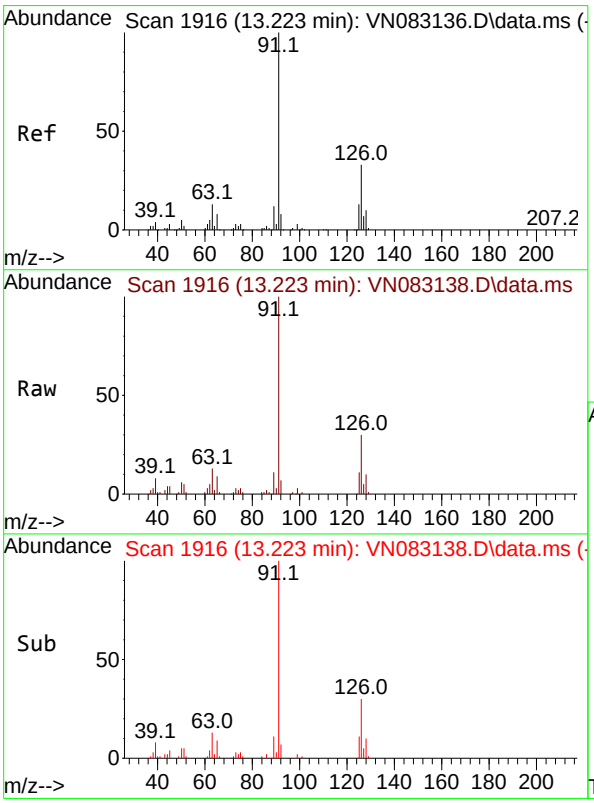
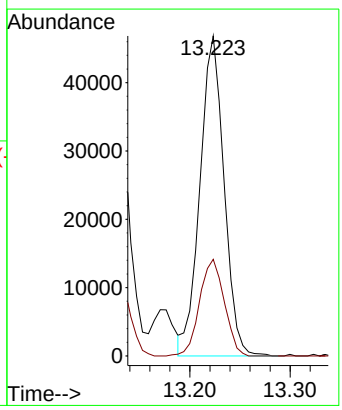


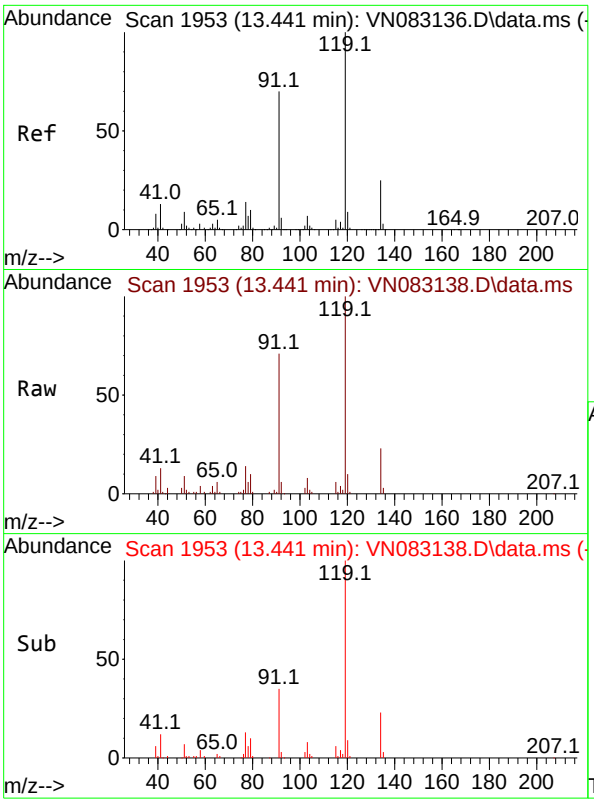




#82
4-Chlorotoluene
Concen: 10.174 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 91 Resp: 78348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.0 | 16.2 | 48.6 |






#83
tert-Butylbenzene
Concen: 10.294 ug/l
RT: 13.441 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:119 Resp: 8026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 71.7 | 35.0 | 105.1 |
| 134 | 25.3 | 13.3 | 39.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

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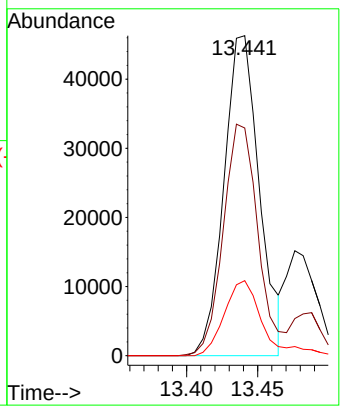
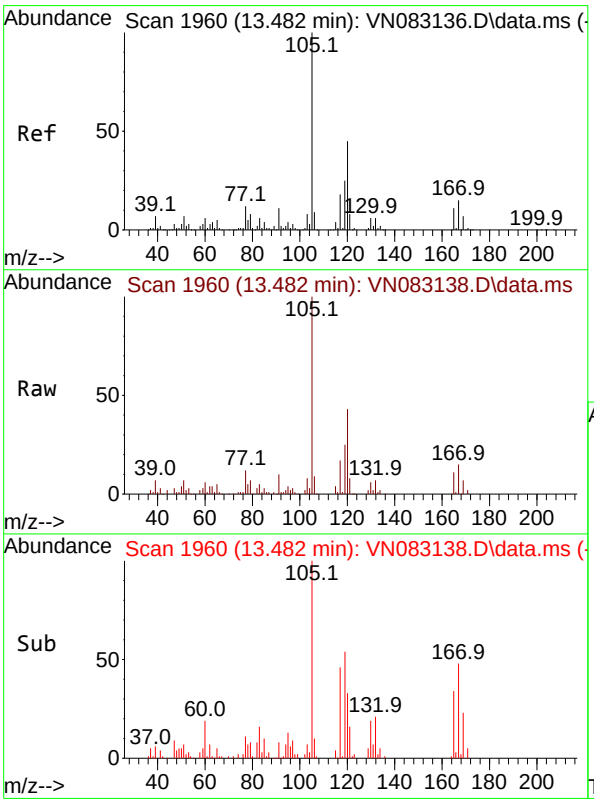
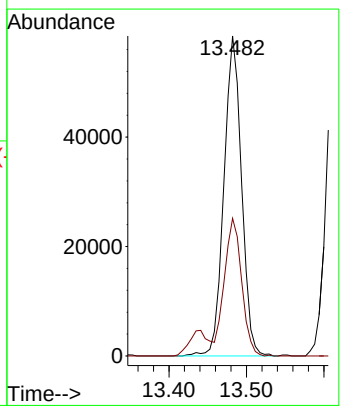


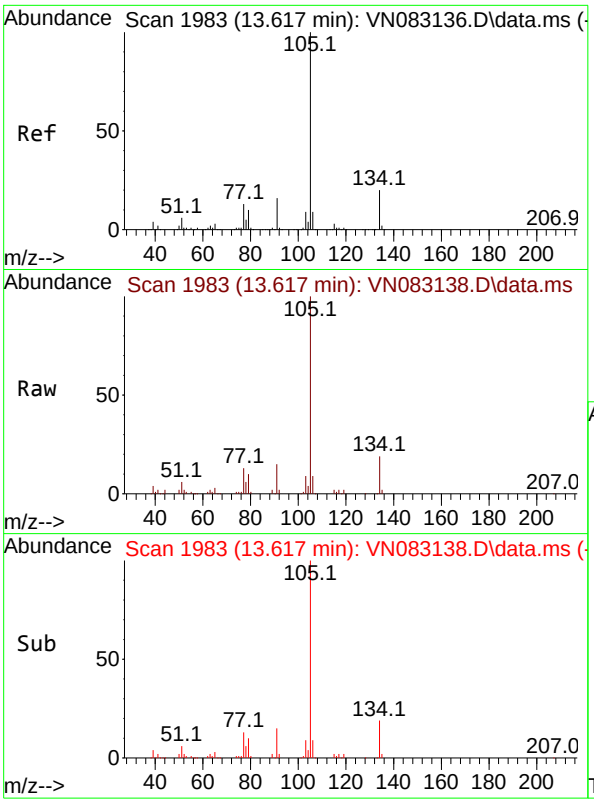




#84
1,2,4-Trimethylbenzene
Concen: 10.426 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:105 Resp: 92502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 42.1 | 21.9 | 65.8 |






#85
sec-Butylbenzene
Concen: 10.221 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

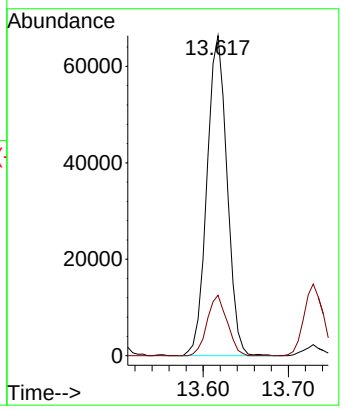
Tgt Ion:105 Resp: 10874

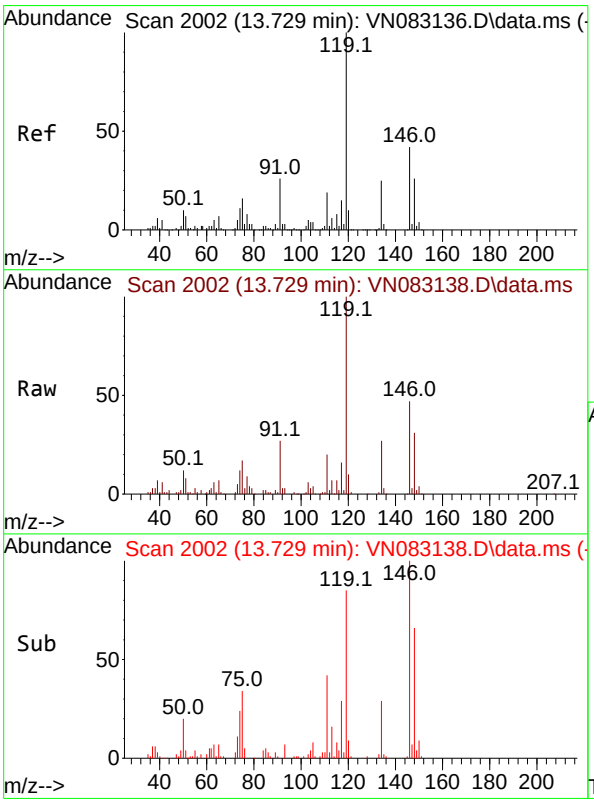
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 18.8 | 9.8 | 29.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

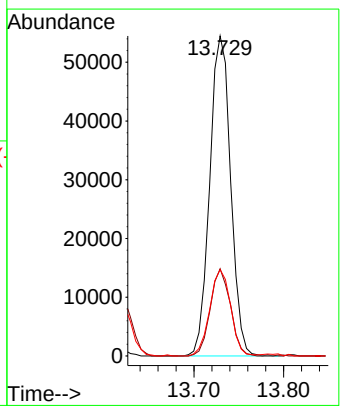


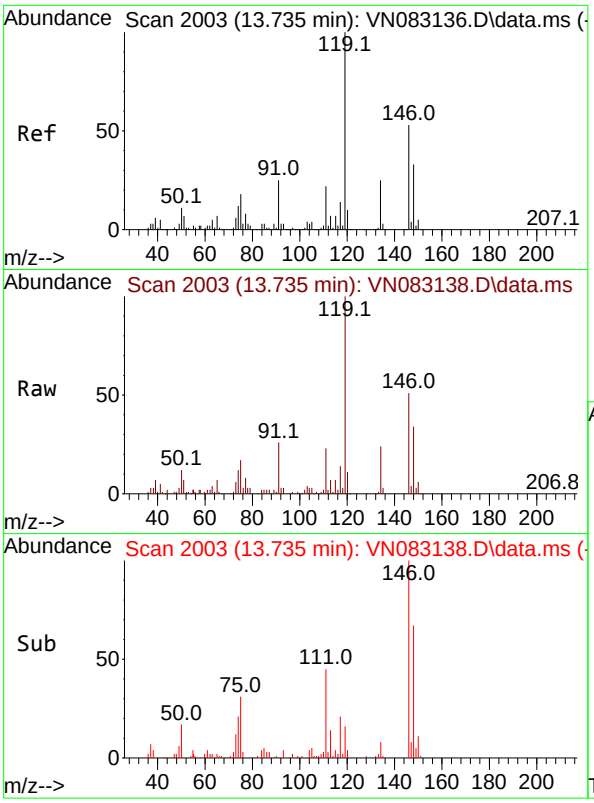




#86
p-Isopropyltoluene
Concen: 10.047 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:119 Resp: 88256

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.2 | 13.0 | 39.0 |
| 91 | 27.0 | 12.3 | 36.9 |






#87
1,3-Dichlorobenzene
Concen: 10.048 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

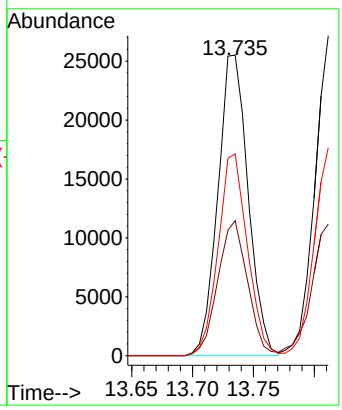
Tgt Ion:146 Resp: 4416

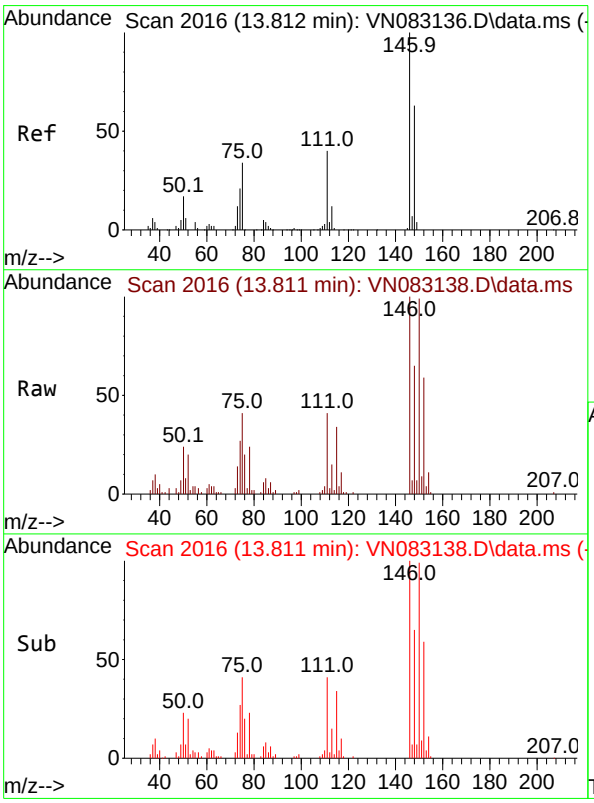
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.1 | 20.6 | 61.9 |
| 148 | 65.1 | 31.8 | 95.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

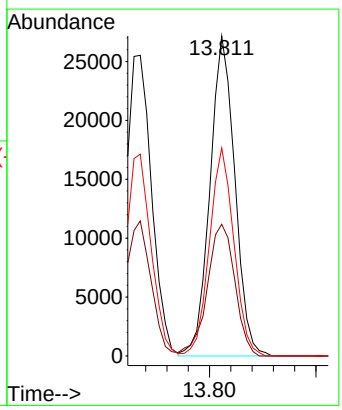


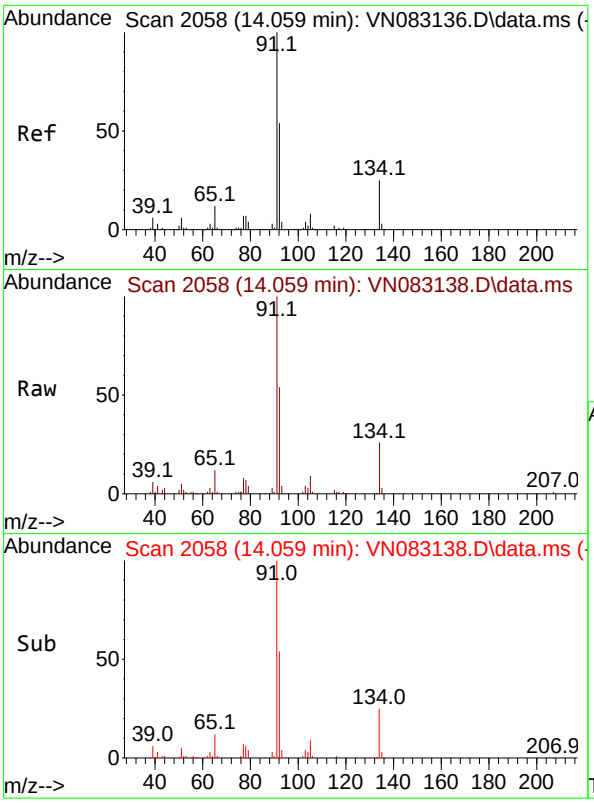




#88
1,4-Dichlorobenzene
Concen: 9.937 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:146 Resp: 44036

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.6 | 20.1 | 60.3 |
| 148 | 64.0 | 32.2 | 96.6 |






#89
n-Butylbenzene
Concen: 10.060 ug/l
RT: 14.059 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

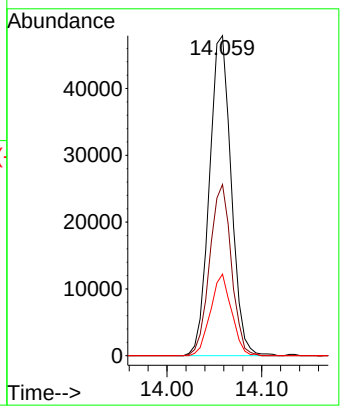
Tgt Ion: 91 Resp: 7656

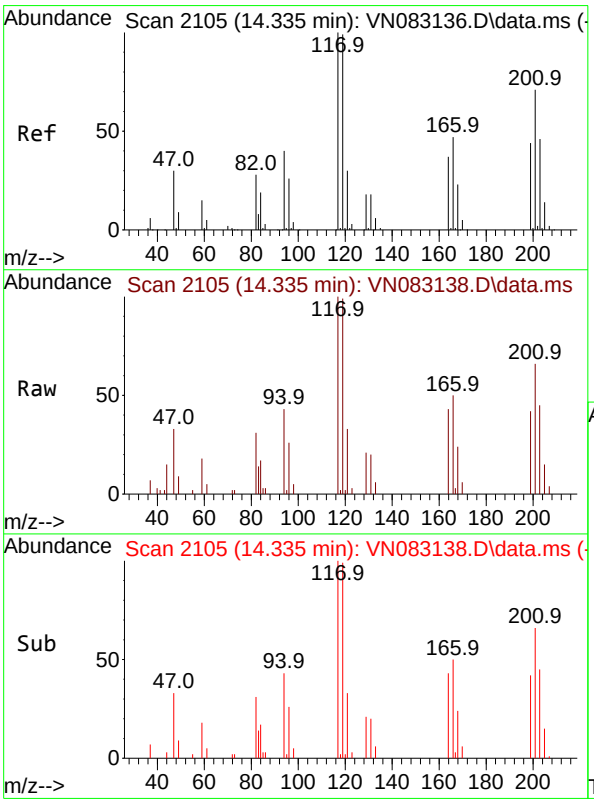
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.1 | 26.1 | 78.3 |
| 134 | 24.7 | 12.1 | 36.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

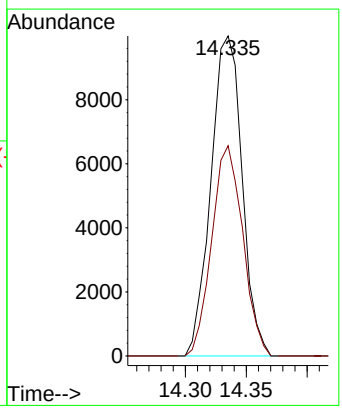


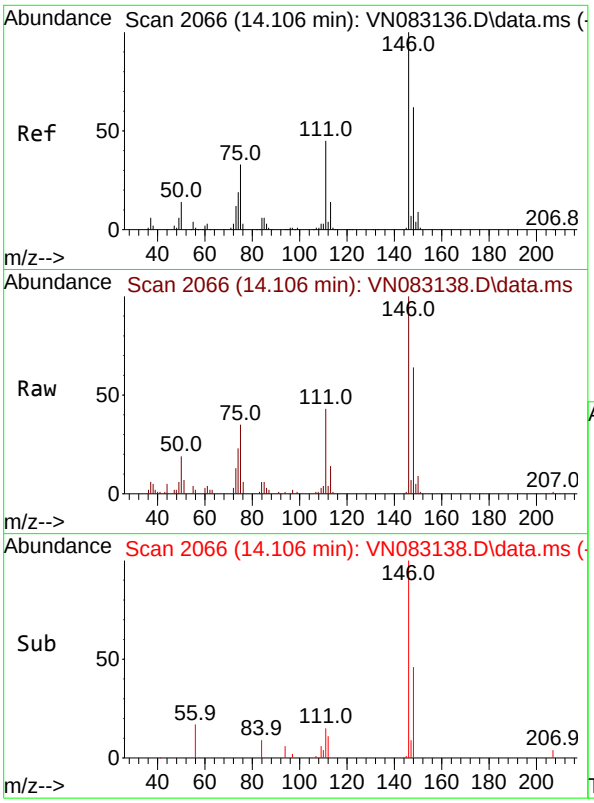




#90
Hexachloroethane
Concen: 10.487 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:117 Resp: 17798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.3 | 35.8 | 107.3 |

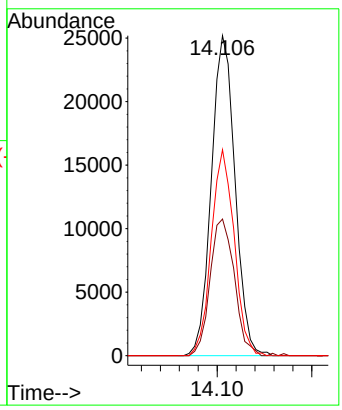





#91
1,2-Dichlorobenzene
Concen: 10.282 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:146 Resp: 4373

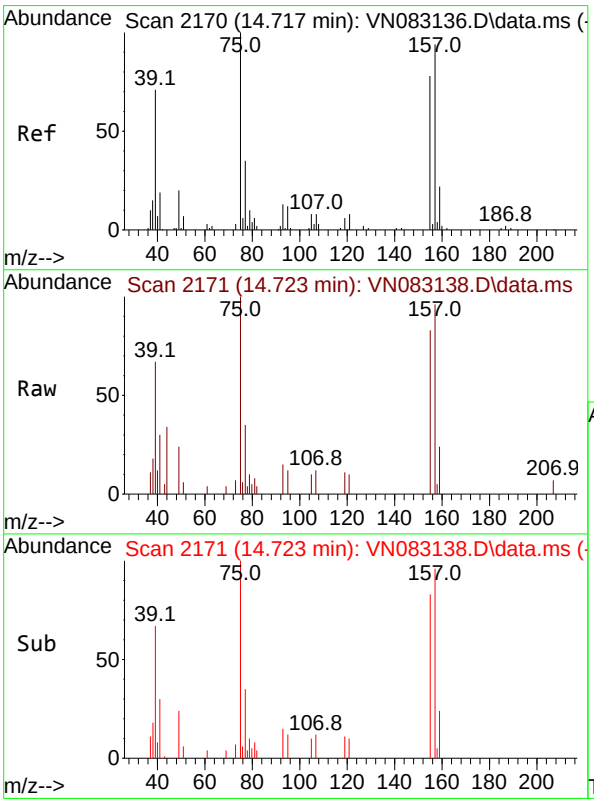
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.8 | 21.4 | 64.2 |
| 148 | 62.3 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
**APPROVED**

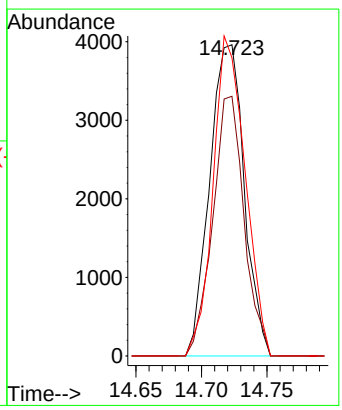
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

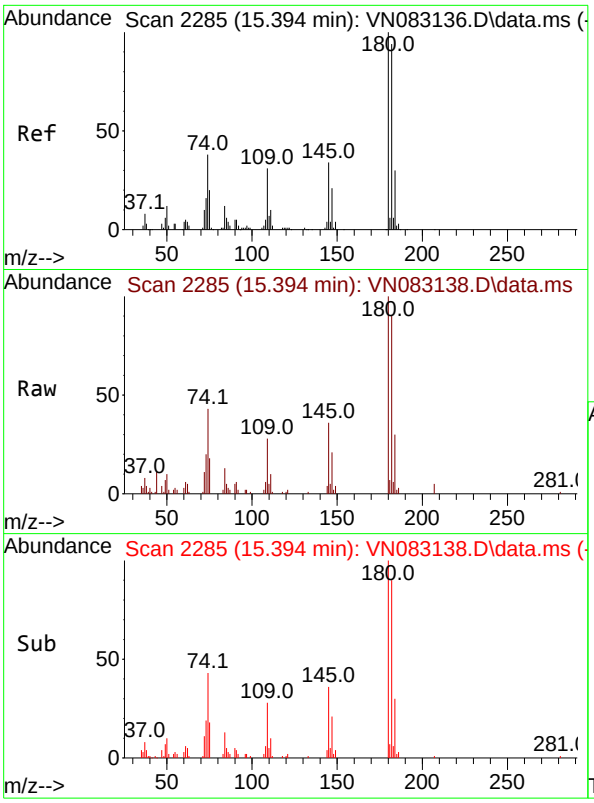



#92
1,2-Dibromo-3-Chloropropane
Concen: 10.056 ug/l
RT: 14.723 min Scan# 2171
Delta R.T. 0.006 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion: 75 Resp: 7258

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 75.6 | 36.6 | 109.8 |
| 157 | 95.2 | 46.9 | 140.6 |

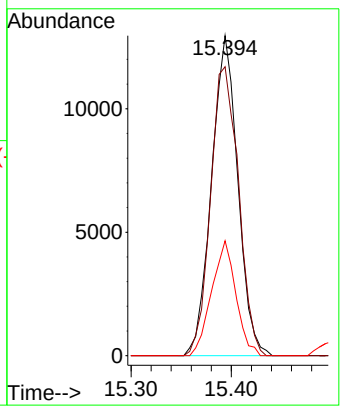





#93
1,2,4-Trichlorobenzene
Concen: 9.895 ug/l
RT: 15.394 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:180 Resp: 2358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.2 | 47.3 | 141.8 |
| 145 | 33.2 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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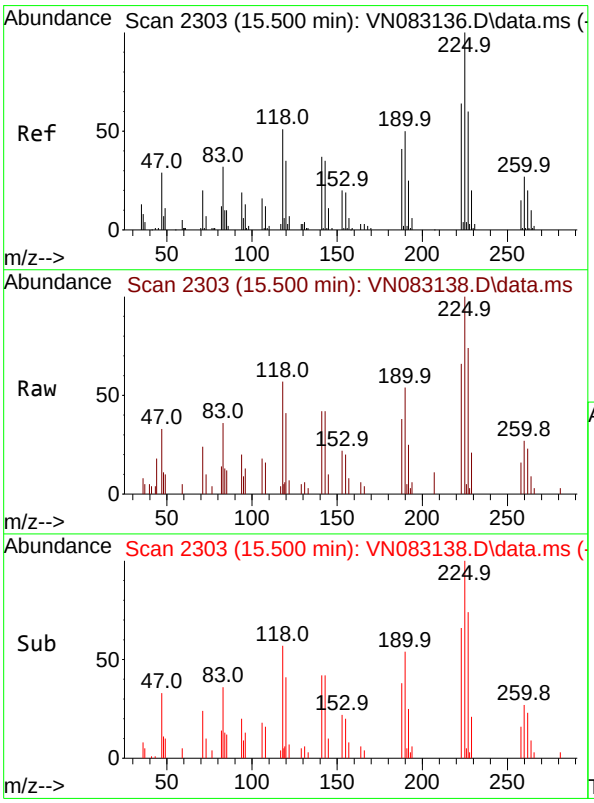
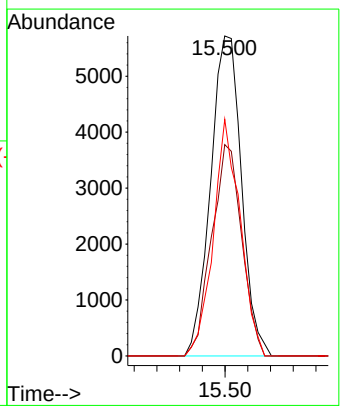
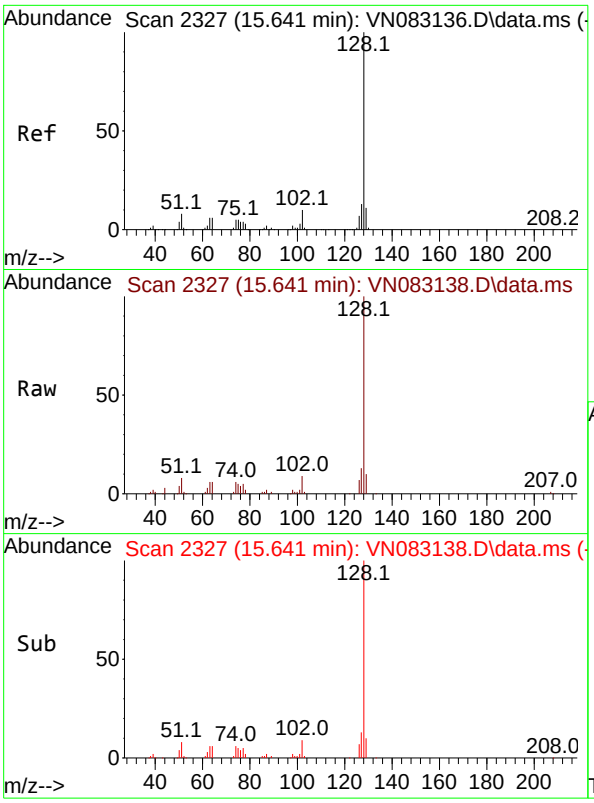



#94
Hexachlorobutadiene
Concen: 10.179 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:225 Resp: 10788

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.4 | 31.9 | 95.7 |
| 227 | 64.4 | 32.5 | 97.5 |

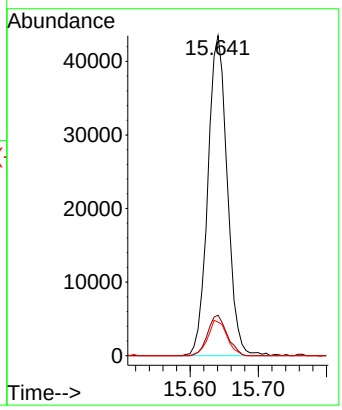





#95
Naphthalene
Concen: 10.232 ug/l
RT: 15.641 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:128 Resp: 8637

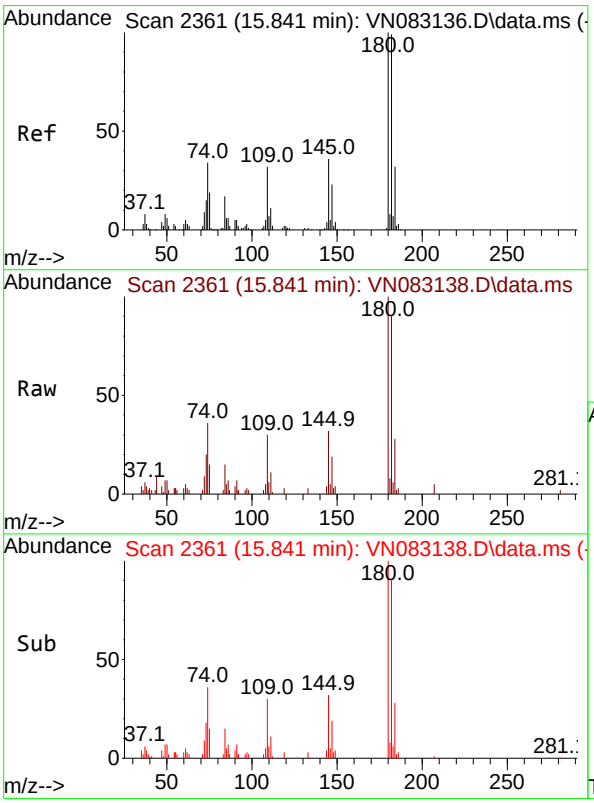
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.6 | 16.0 |
| 129 | 10.8 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC010

**Manual Integrations**
**APPROVED**

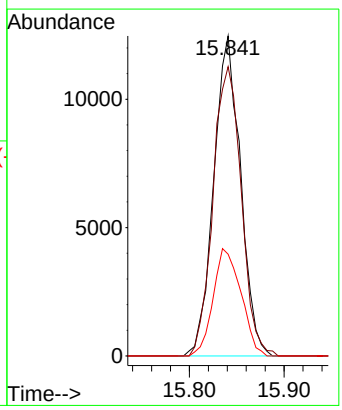
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024




#96
1,2,3-Trichlorobenzene
Concen: 10.387 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083138.D
Acq: 07 Aug 2024 11:46

Tgt Ion:180 Resp: 24492

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.3 | 48.9 | 146.8 |
| 145 | 34.8 | 16.8 | 50.4 |



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083139.D
Acq On : 07 Aug 2024 12:10
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 08 06:18:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 201859 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 347562 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 293513 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 133537 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.582 | 65 | 15867 | 5.522 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = | 11.040%# | | |
| 35) Dibromofluoromethane | 8.159 | 113 | 12039 | 5.549 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 11.100%# | | |
| 50) Toluene-d8 | 10.565 | 98 | 43104 | 5.326 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = | 10.660%# | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 16776 | 5.317 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = | 10.640%# | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 12045 | 5.262 | ug/l | 97 |
| 3) Chloromethane | 2.359 | 50 | 12017 | 5.128 | ug/l | 97 |
| 4) Vinyl Chloride | 2.512 | 62 | 11837 | 4.950 | ug/l | 96 |
| 5) Bromomethane | 2.942 | 94 | 8328 | 5.612 | ug/l | 88 |
| 6) Chloroethane | 3.106 | 64 | 7688 | 5.139 | ug/l | 90 |
| 7) Trichlorofluoromethane | 3.489 | 101 | 20242 | 5.124 | ug/l | 93 |
| 8) Diethyl Ether | 3.959 | 74 | 7674 | 5.220 | ug/l | 91 |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 11261 | 5.170 | ug/l | 99 |
| 10) Methyl Iodide | 4.595 | 142 | 13878 | 4.844 | ug/l # | 95 |
| 11) Tert butyl alcohol | 5.524 | 59 | 15685 | 26.268 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 11718 | 5.237 | ug/l | 90 |
| 13) Acrolein | 4.177 | 56 | 9615 | 24.707 | ug/l | 89 |
| 14) Allyl chloride | 5.018 | 41 | 22183 | 5.246 | ug/l | 87 |
| 15) Acrylonitrile | 5.724 | 53 | 31357 | 25.534 | ug/l | 96 |
| 16) Acetone | 4.436 | 43 | 27636 | 24.581 | ug/l | 97 |
| 17) Carbon Disulfide | 4.712 | 76 | 32908 | 5.026 | ug/l | 96 |
| 18) Methyl Acetate | 5.030 | 43 | 17029 | 5.084 | ug/l | 98 |
| 19) Methyl tert-butyl Ether | 5.789 | 73 | 41439 | 5.131 | ug/l | 93 |
| 20) Methylene Chloride | 5.271 | 84 | 12913 | 4.991 | ug/l # | 84 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 11465 | 4.957 | ug/l | 88 |
| 22) Diisopropyl ether | 6.677 | 45 | 39688 | 4.993 | ug/l # | 97 |
| 23) Vinyl Acetate | 6.600 | 43 | 202471m | 24.856 | ug/l | |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 22058 | 5.091 | ug/l | 98 |
| 25) 2-Butanone | 7.488 | 43 | 41750 | 24.185 | ug/l | 91 |
| 26) 2,2-Dichloropropane | 7.494 | 77 | 19864 | 4.937 | ug/l | 95 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 13862 | 4.967 | ug/l | 94 |
| 28) Bromochloromethane | 7.812 | 49 | 9874 | 5.577 | ug/l # | 85 |
| 29) Tetrahydrofuran | 7.841 | 42 | 28260 | 25.324 | ug/l | 89 |
| 30) Chloroform | 7.965 | 83 | 22650 | 5.032 | ug/l | 99 |
| 31) Cyclohexane | 8.265 | 56 | 24999 | 5.871 | ug/l | 96 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 21825 | 5.123 | ug/l # | 49 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 16102 | 4.907 | ug/l | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 17909 | 4.874 | ug/l # | 96 |
| 38) Carbon Tetrachloride | 8.365 | 117 | 18728 | 5.067 | ug/l | 98 |
| 39) Methylcyclohexane | 9.600 | 83 | 19981 | 4.957 | ug/l | 91 |
| 40) Benzene | 8.606 | 78 | 48765 | 4.988 | ug/l | 98 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083139.D
Acq On : 07 Aug 2024 12:10
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 08 06:18:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 10086 | 4.828 | ug/l | | 95 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 18219 | 5.116 | ug/l | | 97 |
| 43) Isopropyl Acetate | 8.694 | 43 | 44817 | 5.438 | ug/l | # | 92 |
| 44) Trichloroethene | 9.353 | 130 | 11830 | 5.084 | ug/l | | 94 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 11320 | 4.878 | ug/l | | 90 |
| 46) Dibromomethane | 9.712 | 93 | 8436 | 5.079 | ug/l | | 98 |
| 47) Bromodichloromethane | 9.888 | 83 | 18799 | 5.040 | ug/l | | 98 |
| 48) Methyl methacrylate | 9.682 | 41 | 14704 | 4.840 | ug/l | | 94 |
| 49) 1,4-Dioxane | 9.694 | 88 | 5239 | 95.593 | ug/l | # | 77 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 86679 | 24.946 | ug/l | | 93 |
| 52) Toluene | 10.629 | 92 | 30769 | 4.981 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 18964 | 4.950 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 20431 | 5.014 | ug/l | | 93 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 10913 | 4.930 | ug/l | | 98 |
| 56) Ethyl methacrylate | 10.876 | 69 | 20661 | 4.951 | ug/l | | 93 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 18934 | 4.799 | ug/l | | 94 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 43528 | 24.676 | ug/l | | 96 |
| 59) 2-Hexanone | 11.194 | 43 | 66854 | 24.870 | ug/l | | 95 |
| 60) Dibromochloromethane | 11.359 | 129 | 13307 | 4.972 | ug/l | | 97 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 11523 | 4.955 | ug/l | | 96 |
| 64) Tetrachloroethene | 11.106 | 164 | 9517 | 4.896 | ug/l | | 96 |
| 65) Chlorobenzene | 11.894 | 112 | 32114 | 4.951 | ug/l | | 96 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 11758 | 5.140 | ug/l | | 94 |
| 67) Ethyl Benzene | 11.965 | 91 | 59648 | 5.013 | ug/l | | 97 |
| 68) m/p-Xylenes | 12.070 | 106 | 44572 | 10.000 | ug/l | | 96 |
| 69) o-Xylene | 12.400 | 106 | 22003 | 5.005 | ug/l | | 99 |
| 70) Styrene | 12.412 | 104 | 37023 | 5.014 | ug/l | | 98 |
| 71) Bromoform | 12.582 | 173 | 8085 | 4.665 | ug/l | # | 89 |
| 73) Isopropylbenzene | 12.694 | 105 | 56741 | 5.080 | ug/l | | 100 |
| 74) N-amyl acetate | 12.494 | 43 | 27393 | 5.014 | ug/l | | 95 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 16514 | 5.227 | ug/l | | 97 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 14463m | 4.927 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 13024 | 5.249 | ug/l | | 94 |
| 78) n-propylbenzene | 13.035 | 91 | 64751 | 5.035 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 41176 | 5.050 | ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 47581 | 5.088 | ug/l | | 97 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 7079 | 5.254 | ug/l | | 92 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 41137 | 5.030 | ug/l | | 97 |
| 83) tert-Butylbenzene | 13.435 | 119 | 42723 | 5.159 | ug/l | | 100 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 47965 | 5.090 | ug/l | | 98 |
| 85) sec-Butylbenzene | 13.617 | 105 | 56947 | 5.040 | ug/l | | 98 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 47654 | 5.108 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 22814 | 4.887 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 23971 | 5.093 | ug/l | | 94 |
| 89) n-Butylbenzene | 14.053 | 91 | 40282 | 4.983 | ug/l | | 99 |
| 90) Hexachloroethane | 14.335 | 117 | 9298 | 5.158 | ug/l | | 93 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 23116 | 5.117 | ug/l | | 96 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 4097 | 5.345 | ug/l | | 94 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 11922 | 4.710 | ug/l | | 94 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 5946 | 5.282 | ug/l | | 93 |
| 95) Naphthalene | 15.641 | 128 | 43131 | 4.811 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 12285 | 4.905 | ug/l | | 94 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083139.D
Acq On : 07 Aug 2024 12:10
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:18:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083139.D
Acq On : 07 Aug 2024 12:10
Operator : JC\MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 08 06:18:41 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
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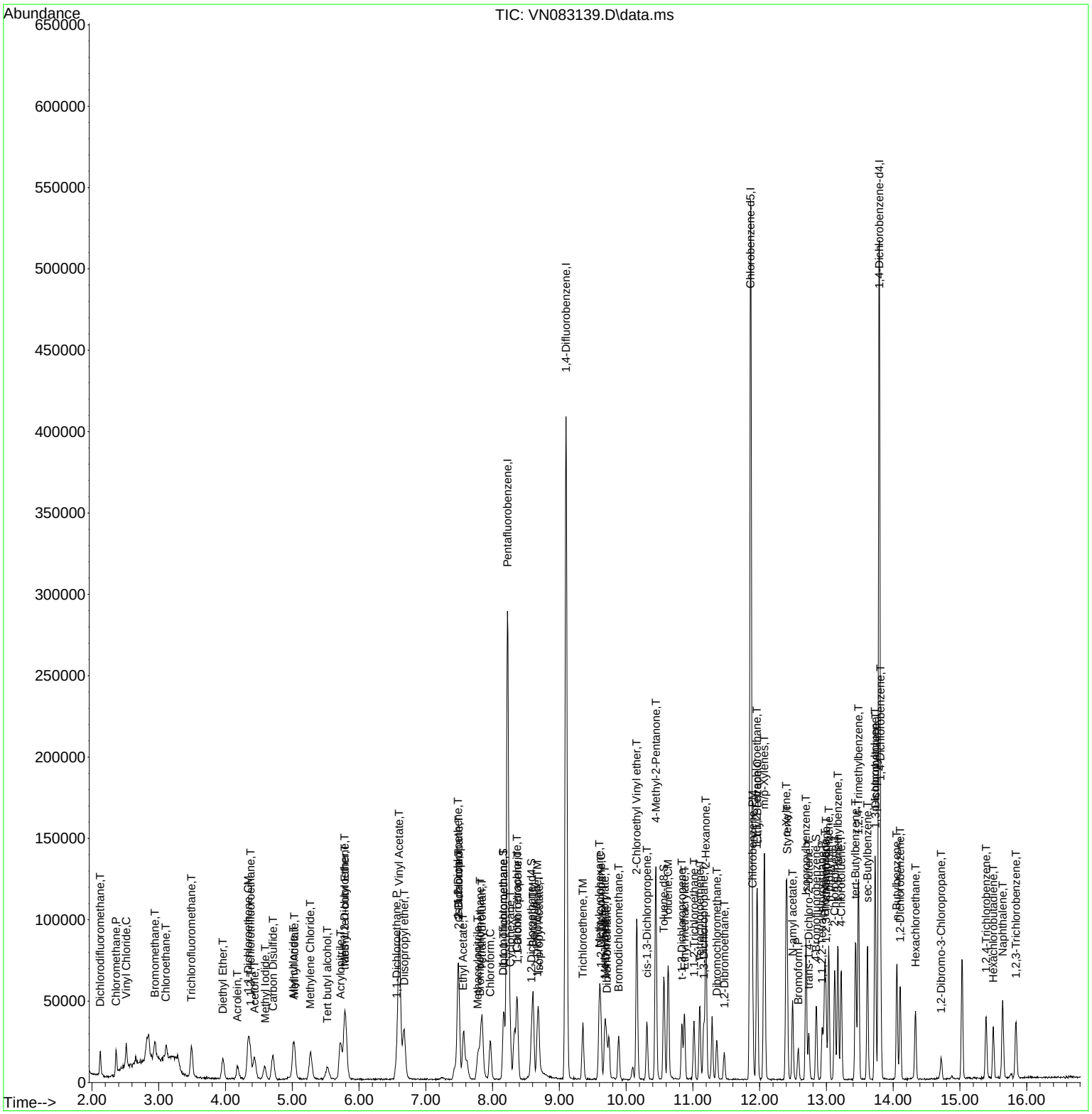
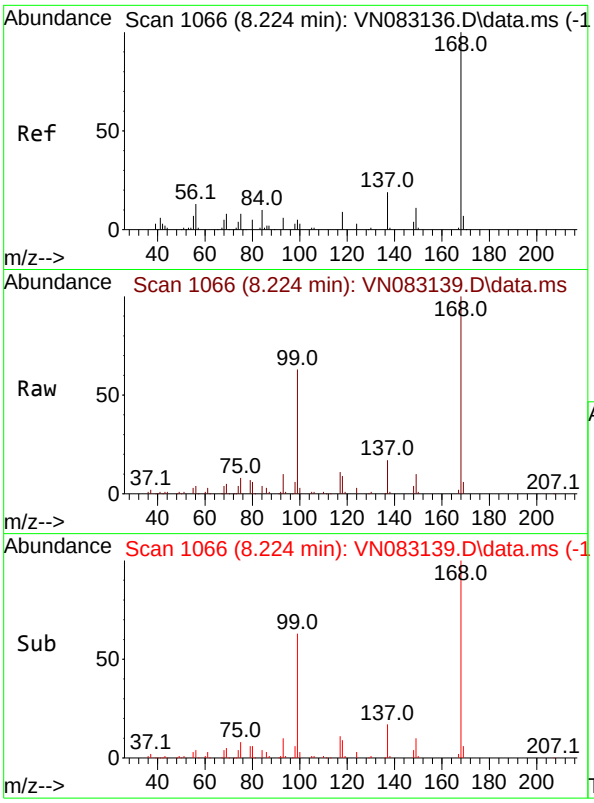
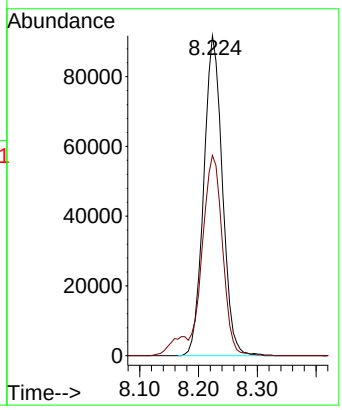





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:168 Resp: 20185

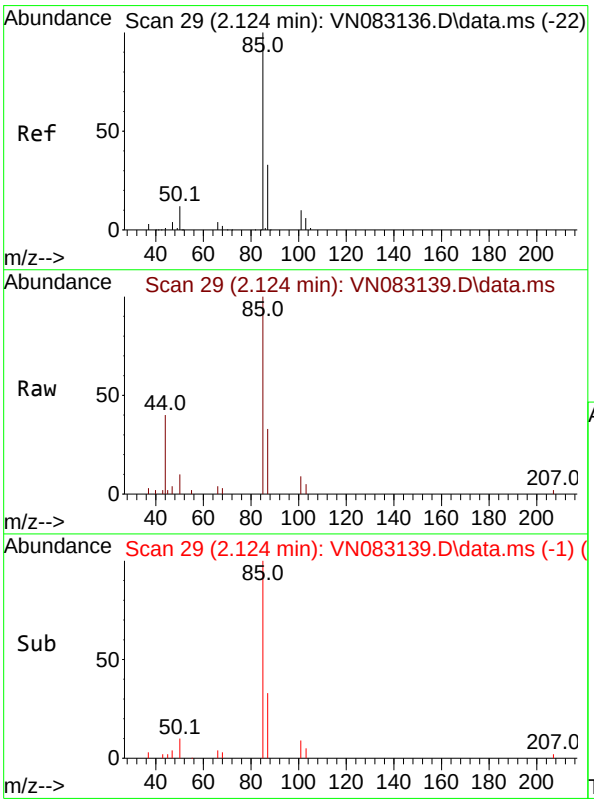
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 62.6 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

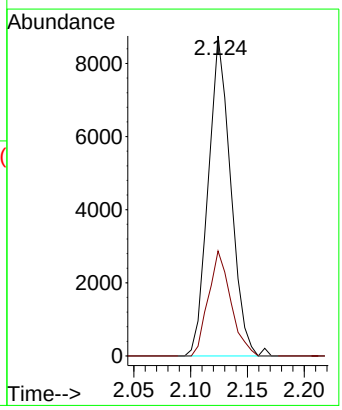
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

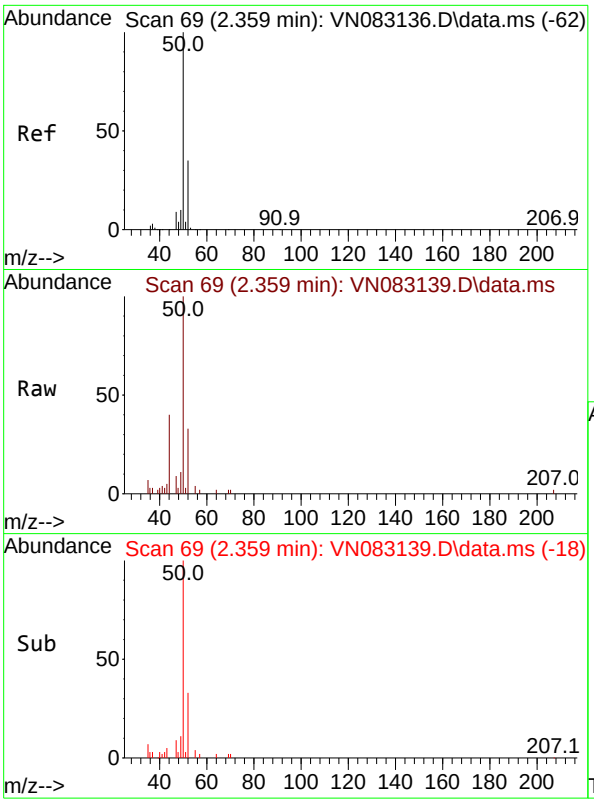



#2
Dichlorodifluoromethane
Concen: 5.262 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 85 Resp: 12045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.8 | 15.7 | 47.0 |

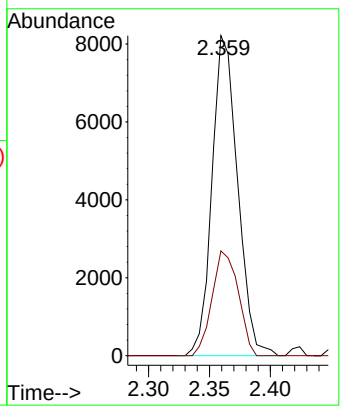





#3
Chloromethane
Concen: 5.128 ug/l
RT: 2.359 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 50 Resp: 1201

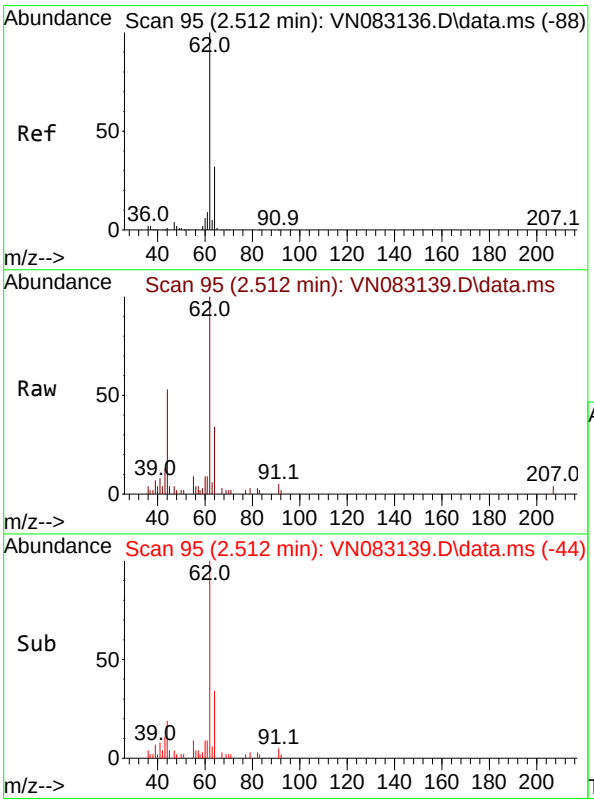
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.7 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

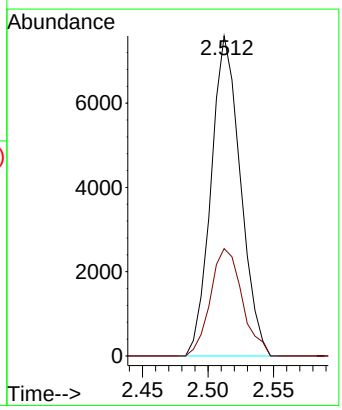
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

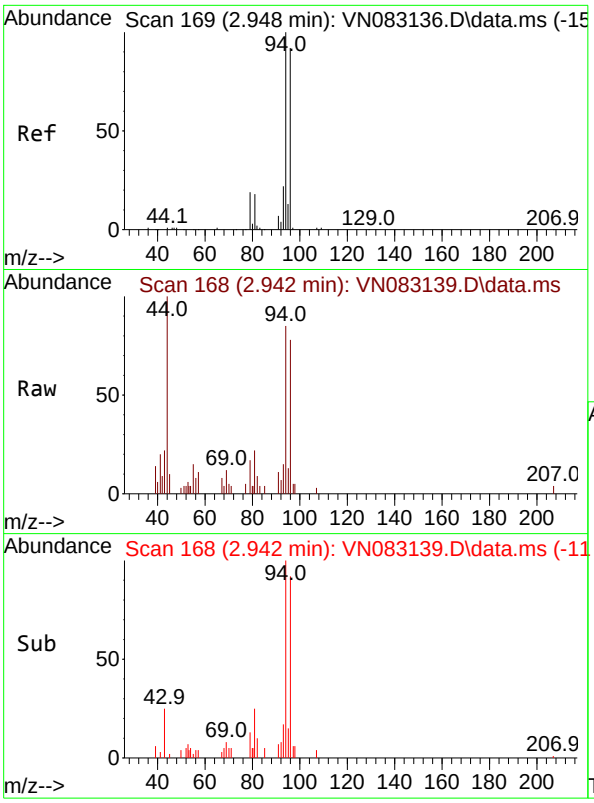



#4
Vinyl Chloride
Concen: 4.950 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 62 Resp: 11837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 33.6 | 25.0 | 37.6 |

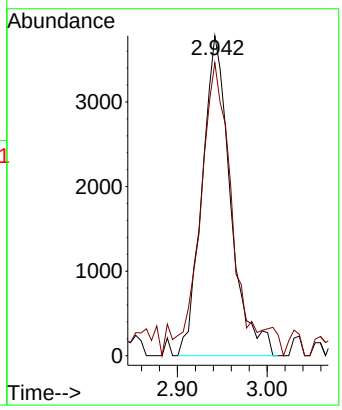





#5
Bromomethane
Concen: 5.612 ug/l
RT: 2.942 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 94 Resp: 832

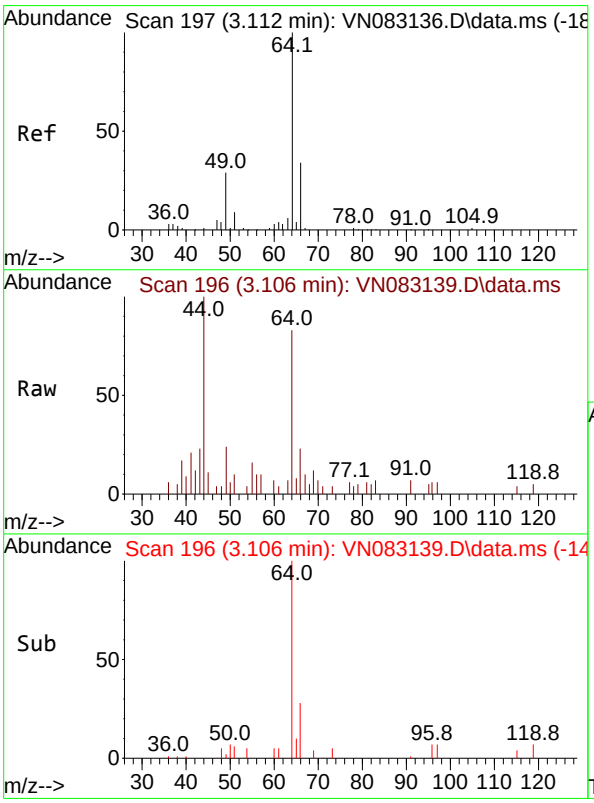
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 85.3 | 78.0 | 117.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

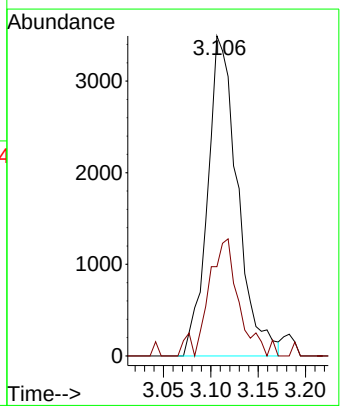
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

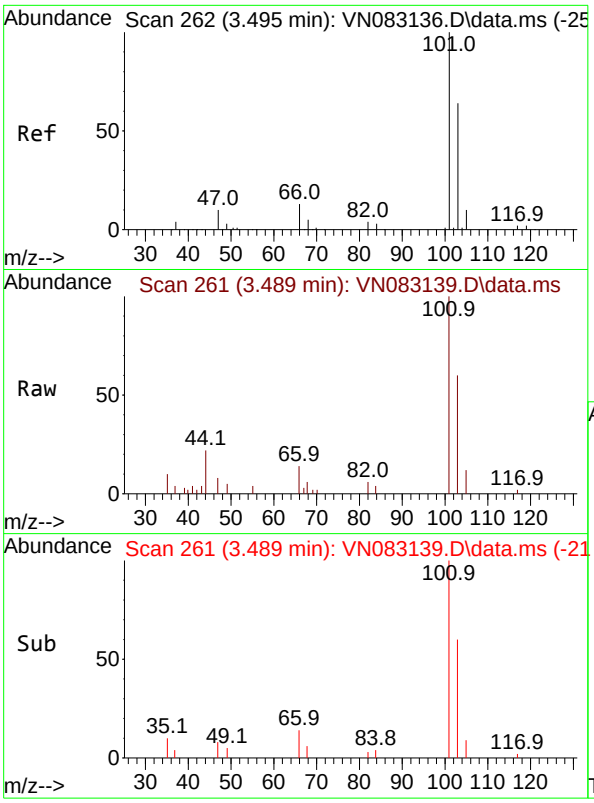



#6
Chloroethane
Concen: 5.139 ug/l
RT: 3.106 min Scan# 196
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 64 Resp: 7688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 27.9 | 26.6 | 40.0 |






#7
Trichlorofluoromethane
Concen: 5.124 ug/l
RT: 3.489 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

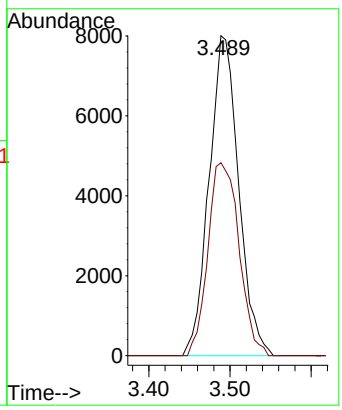
Tgt Ion:101 Resp: 2024

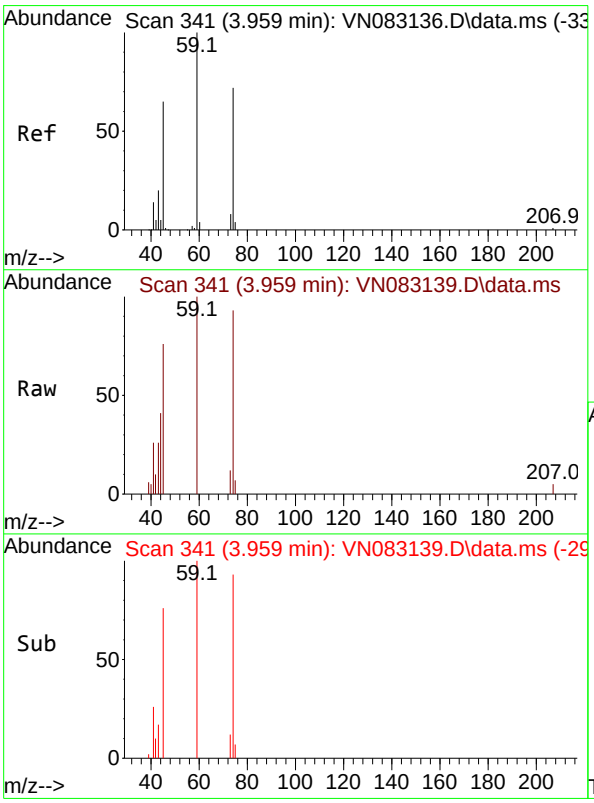
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 60.3 | 52.7 | 79.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

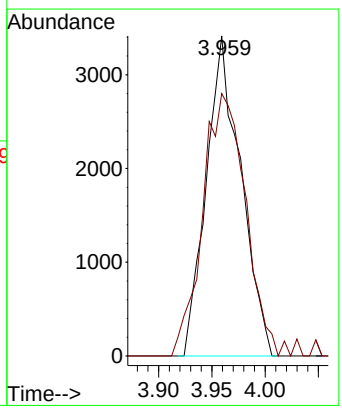


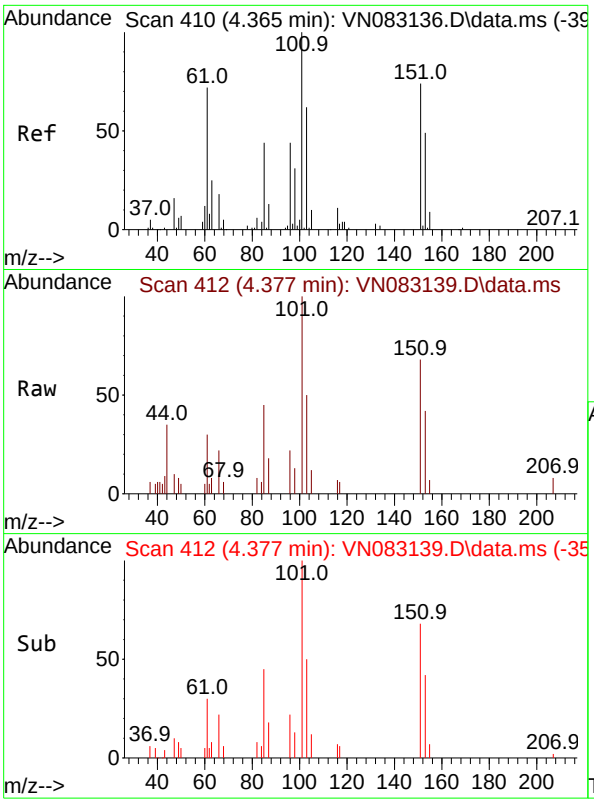




#8
Diethyl Ether
Concen: 5.220 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 74 Resp: 7674

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 101.8 | 55.5 | 166.3 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.170 ug/l
RT: 4.377 min Scan# 41
Delta R.T. 0.012 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

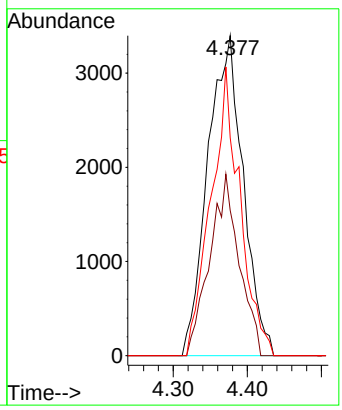
Tgt Ion:101 Resp: 1126

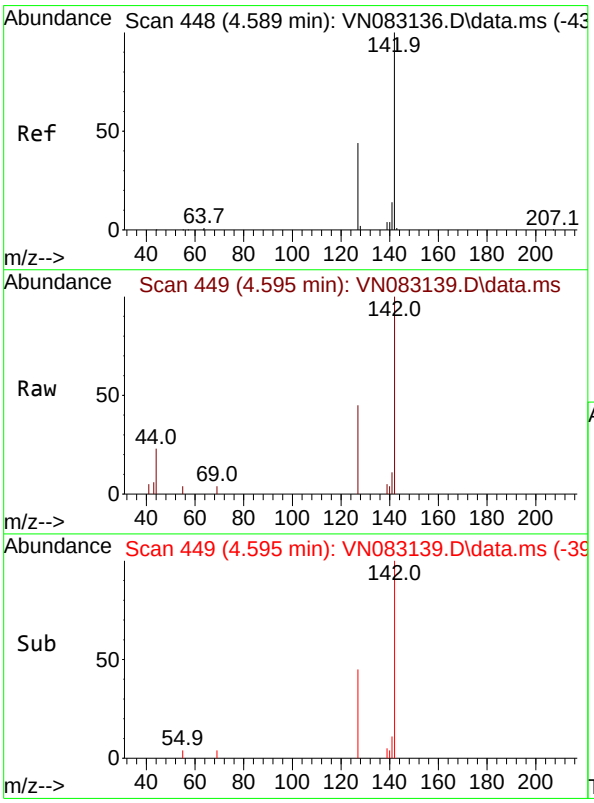
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 47.2 | 38.3 | 57.5 |
| 151 | 74.4 | 59.3 | 88.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

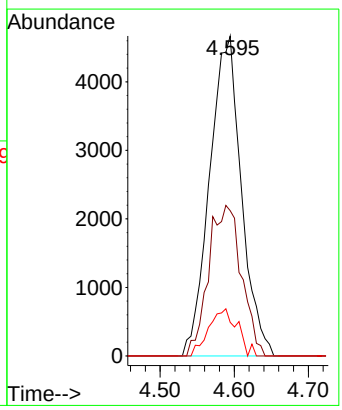


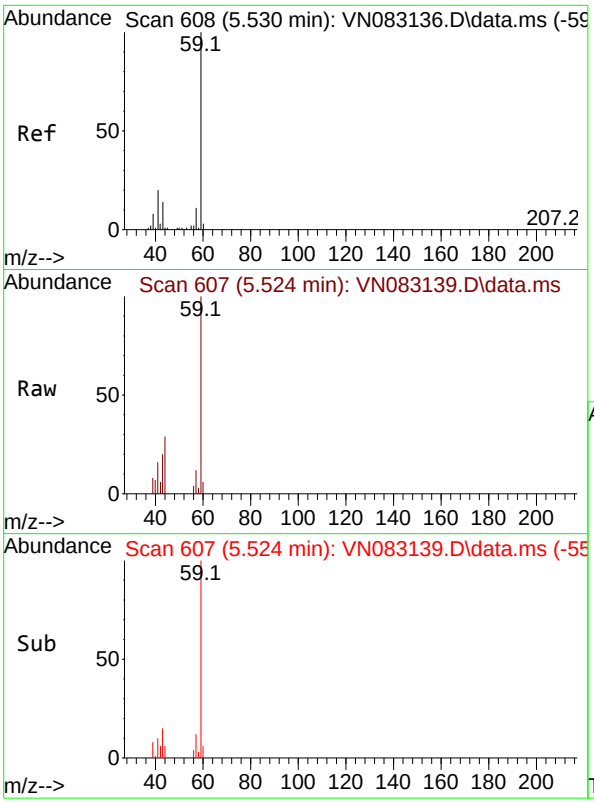




#10
Methyl Iodide
Concen: 4.844 ug/l
RT: 4.595 min Scan# 449
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:142 Resp: 13878

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 45.4 | 37.5 | 56.3 |
| 141 | 10.5 | 13.1 | 19.7# |

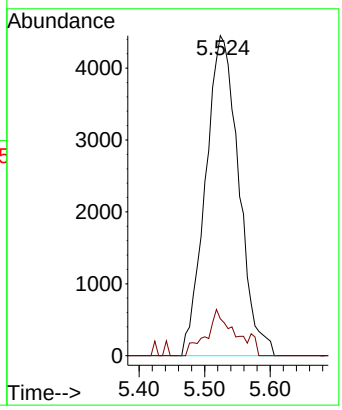





#11
Tert butyl alcohol
Concen: 26.268 ug/l
RT: 5.524 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 59 Resp: 1568

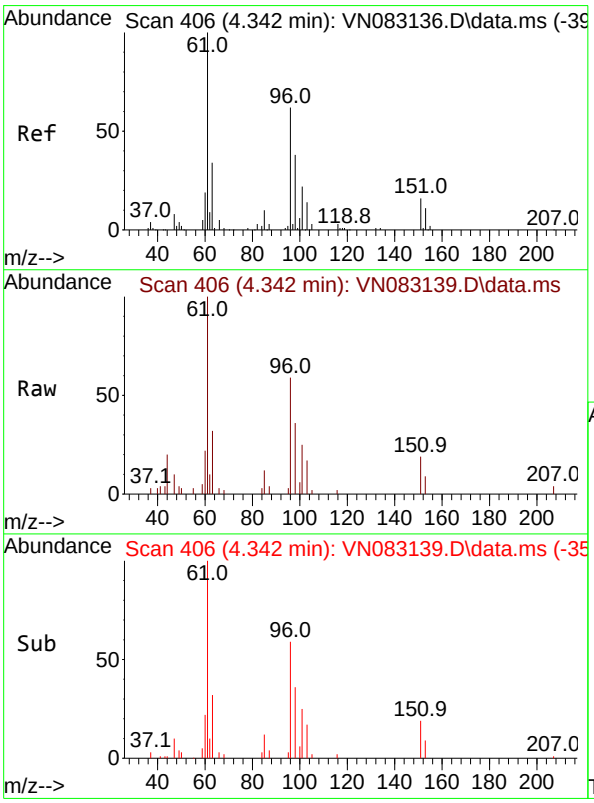
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.4 | 8.9 | 13.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

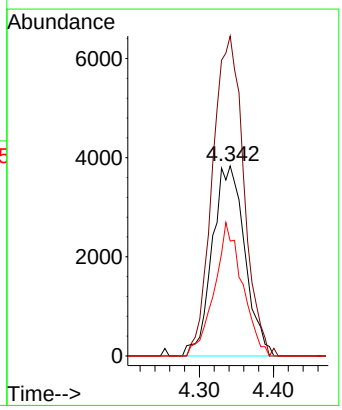
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

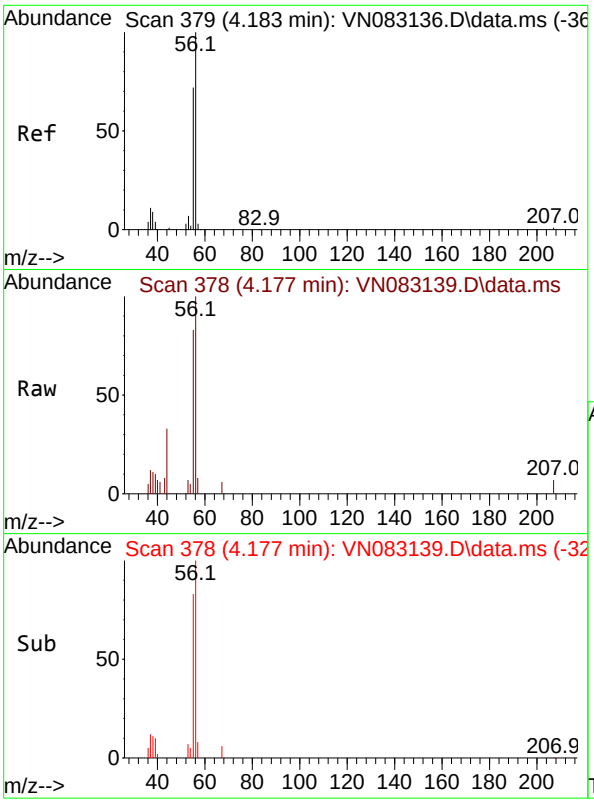



#12
1,1-Dichloroethene
Concen: 5.237 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 96 Resp: 11718

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 168.3 | 149.7 | 224.5 |
| 98 | 60.4 | 50.1 | 75.1 |

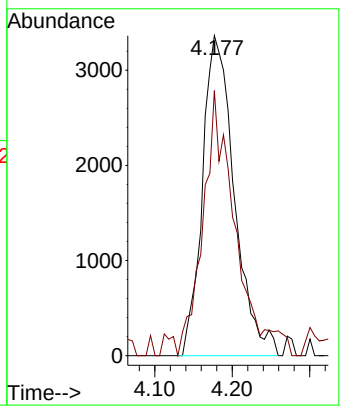





#13
Acrolein
Concen: 24.707 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 56 Resp: 961

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 80.0 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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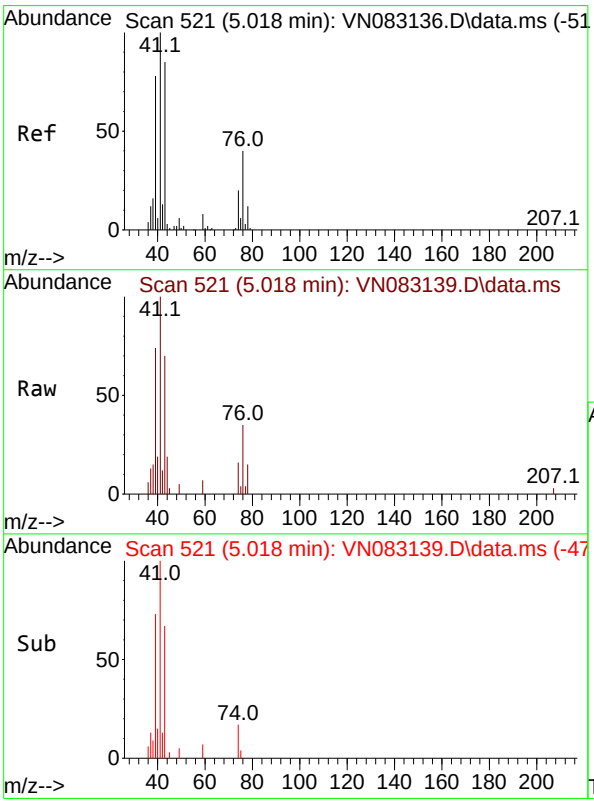
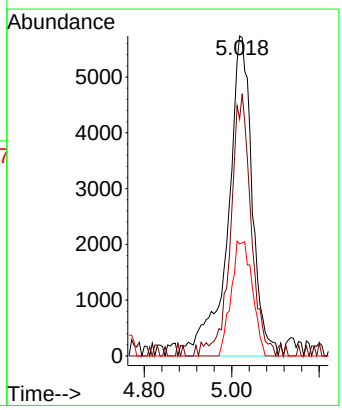
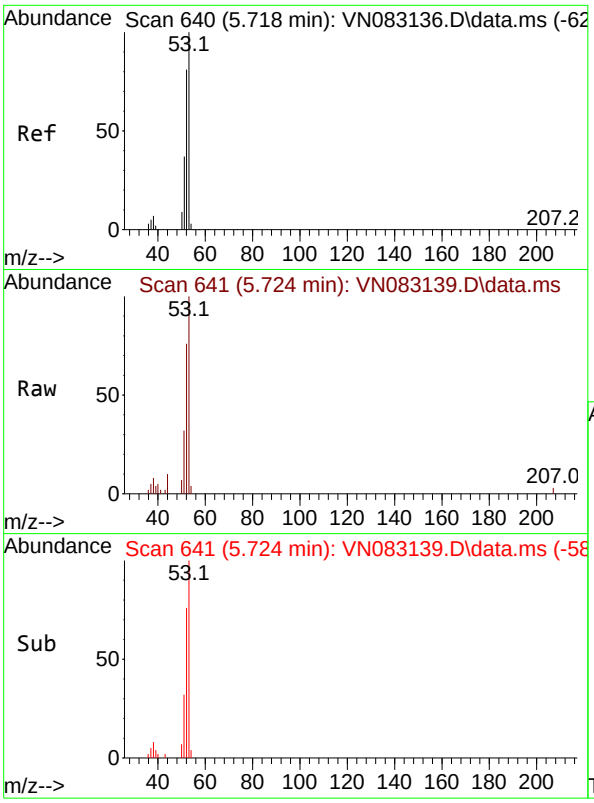



#14
Allyl chloride
Concen: 5.246 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 41 Resp: 22183

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 69.3 | 67.8 | 101.6 |
| 76 | 31.2 | 25.8 | 38.8 |

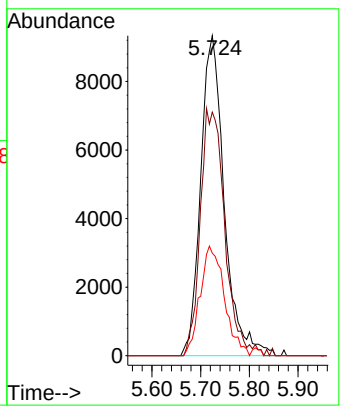





#15
Acrylonitrile
Concen: 25.534 ug/l
RT: 5.724 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 53 Resp: 3135

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 79.9 | 66.6 | 100.0 |
| 51 | 35.3 | 30.1 | 45.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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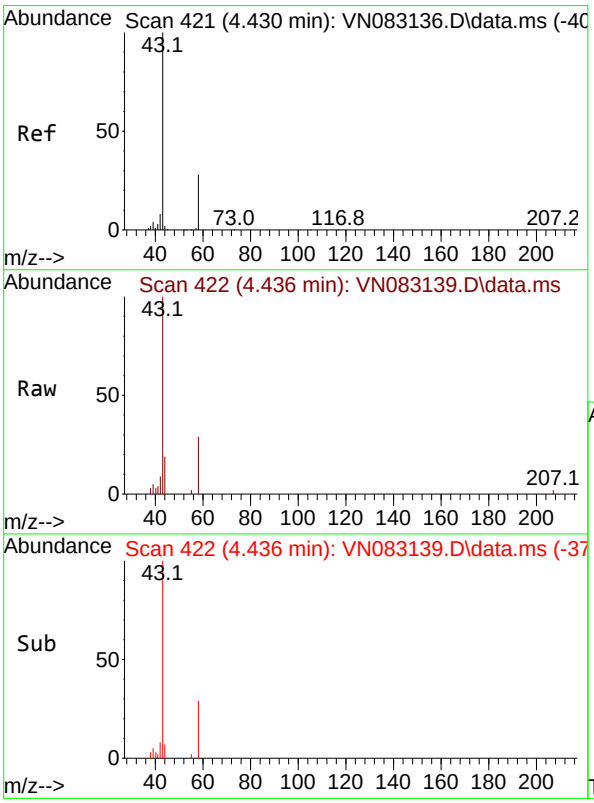
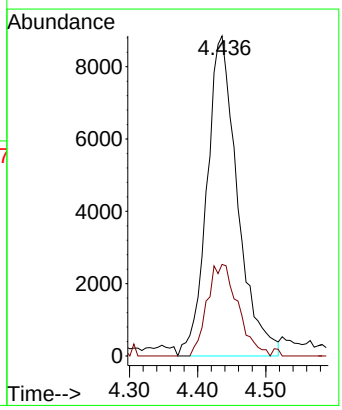
Supervised By :Mahesh Dadoda 08/09/2024

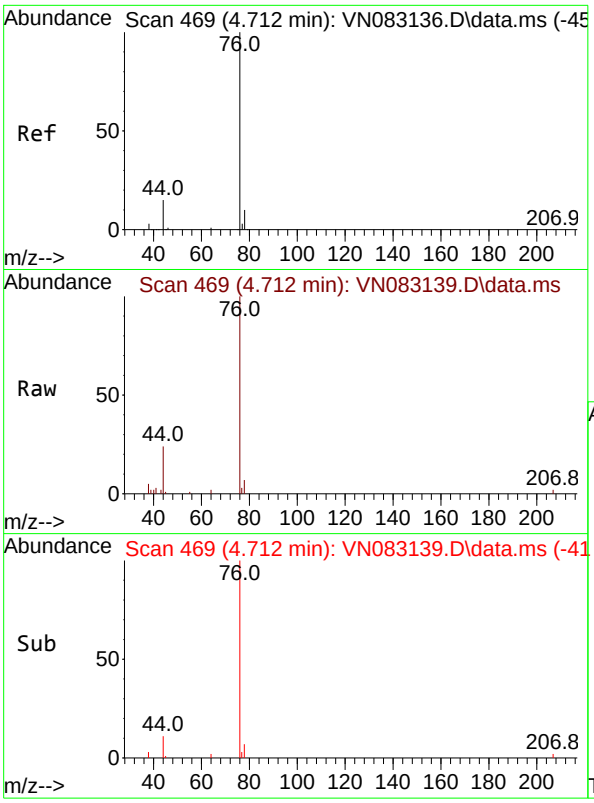



#16
Acetone
Concen: 24.581 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 27636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.6 | 21.8 | 32.6 |

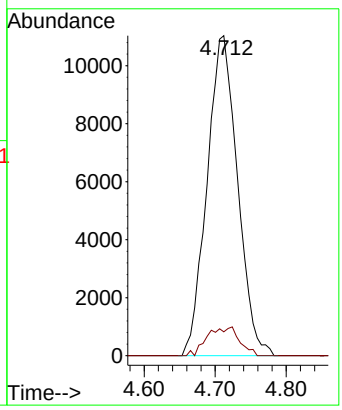





#17
Carbon Disulfide
Concen: 5.026 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 76 Resp: 3290

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 7.4 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
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VSTDICC005

**Manual Integrations**
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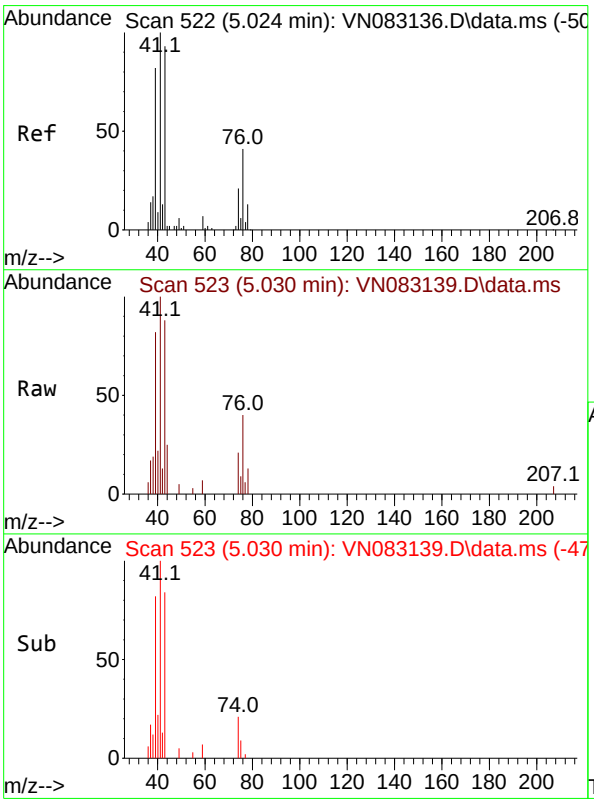
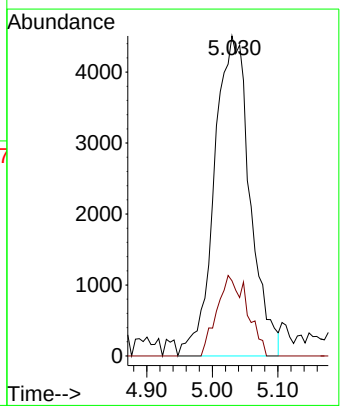
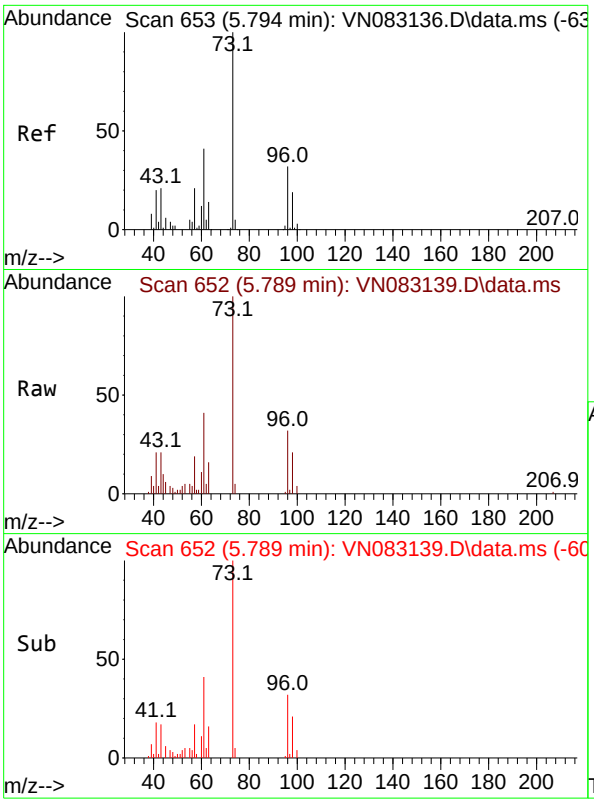



#18
Methyl Acetate
Concen: 5.084 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 17029

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 21.4 | 16.3 | 24.5 |

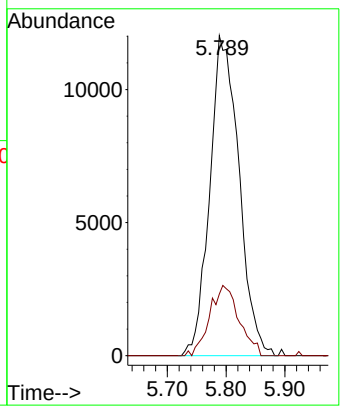





#19
Methyl tert-butyl Ether
Concen: 5.131 ug/l
RT: 5.789 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 73 Resp: 4143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 19.2 | 17.9 | 26.9 |




**Instrument :**
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**ClientSampleId :**
VSTDICC005

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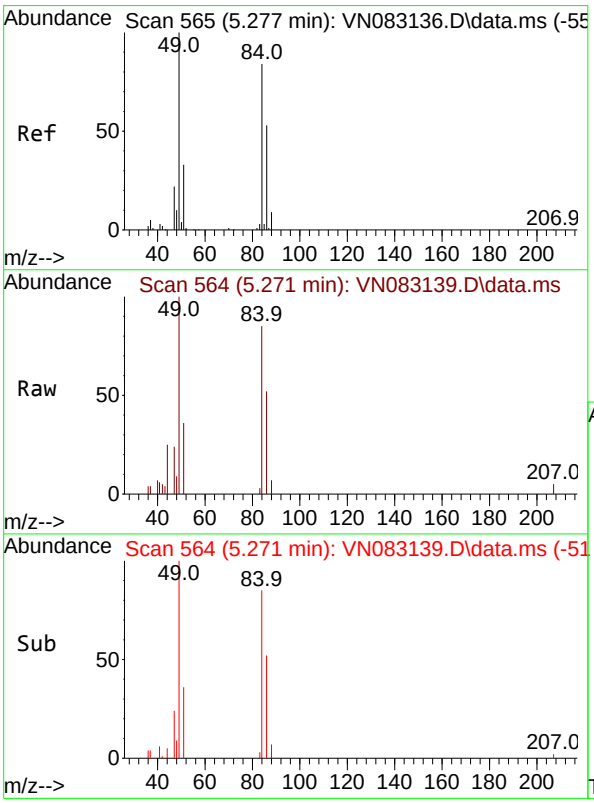
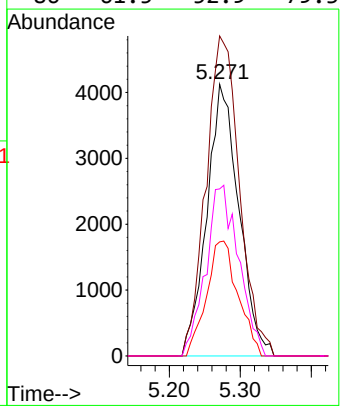
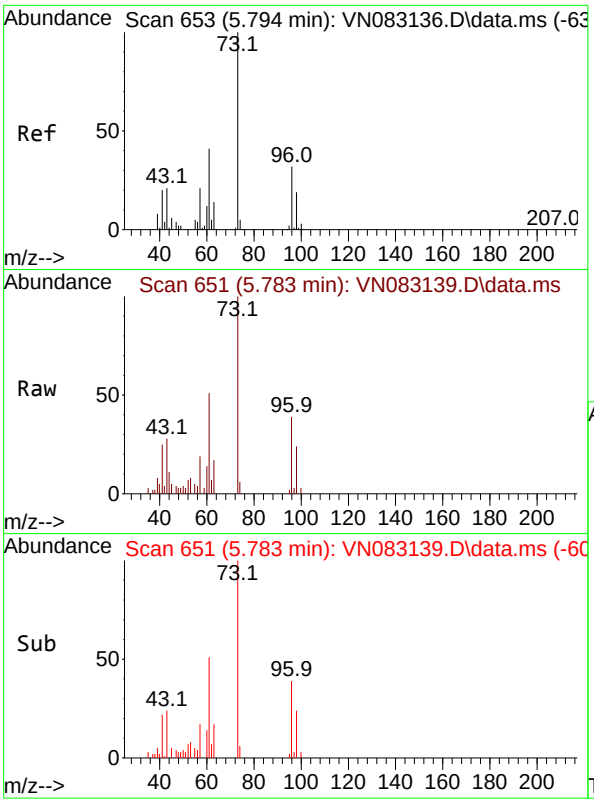



#20
Methylene Chloride
Concen: 4.991 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 84 Resp: 12913

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 117.8 | 119.6 | 179.4# |
| 51 | 42.0 | 34.8 | 52.2 |
| 86 | 61.5 | 52.9 | 79.3 |

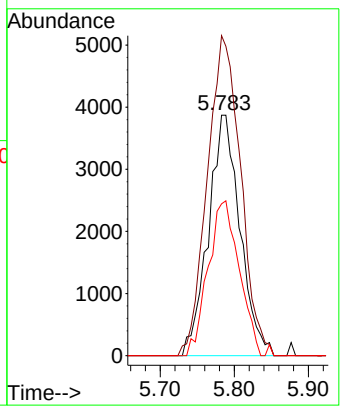





#21
trans-1,2-Dichloroethene
Concen: 4.957 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 96 Resp: 1146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 133.0 | 123.4 | 185.2 |
| 98 | 63.1 | 49.3 | 73.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

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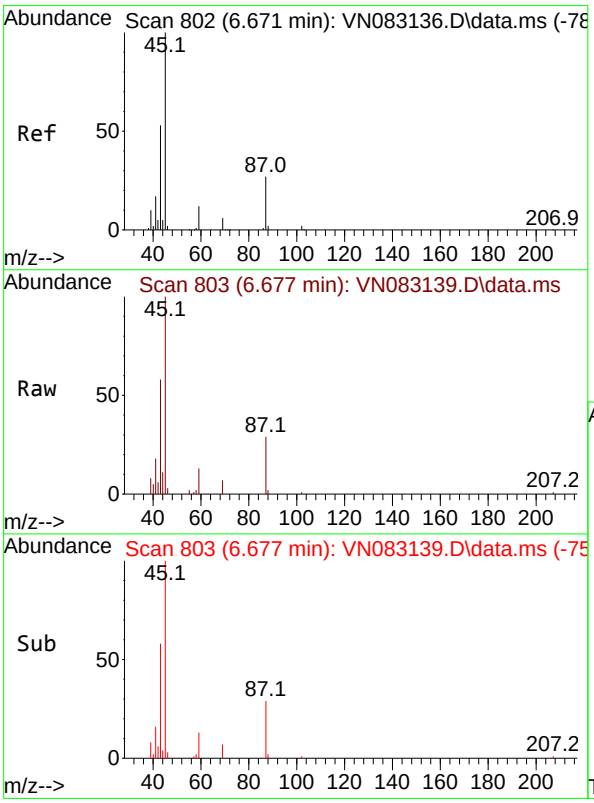
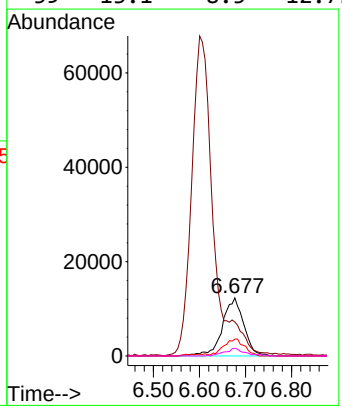
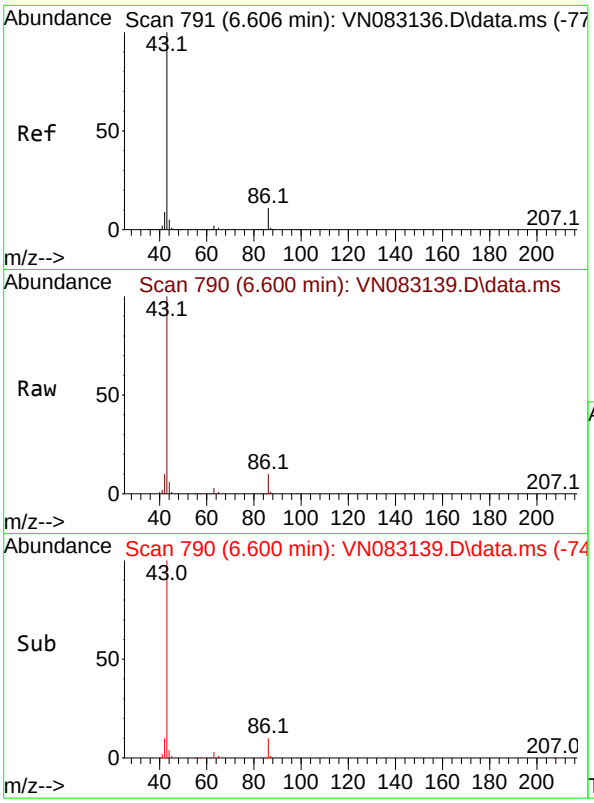



#22
Diisopropyl ether
Concen: 4.993 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 45 Resp: 39688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 54.9 | 44.0 | 66.0 |
| 87 | 29.0 | 19.7 | 29.5 |
| 59 | 13.1 | 8.5 | 12.7# |

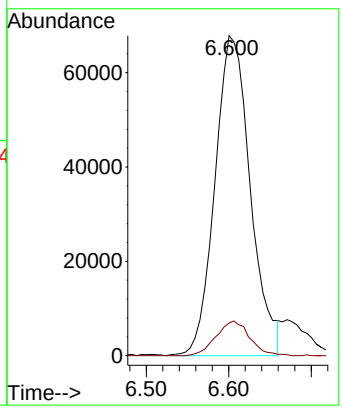





#23
Vinyl Acetate
Concen: 24.856 ug/l m
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 20247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.2 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
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VSTDICC005

**Manual Integrations**
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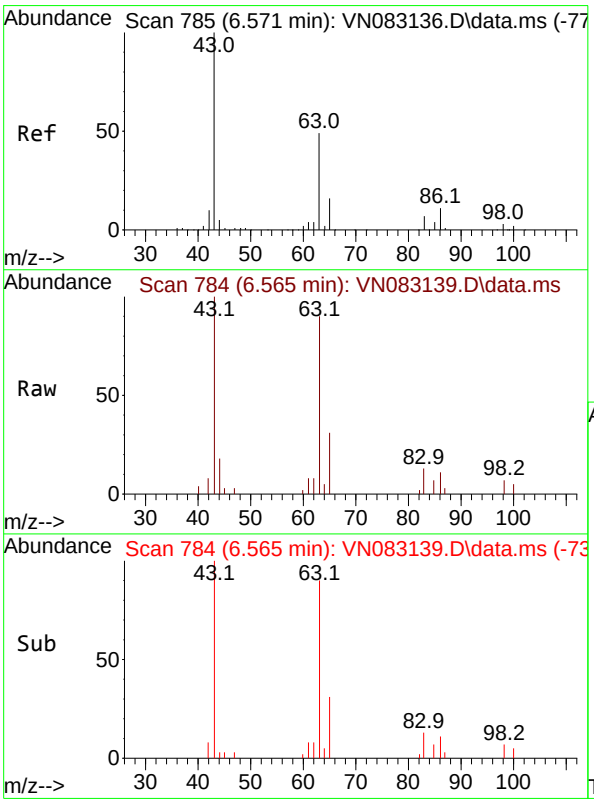
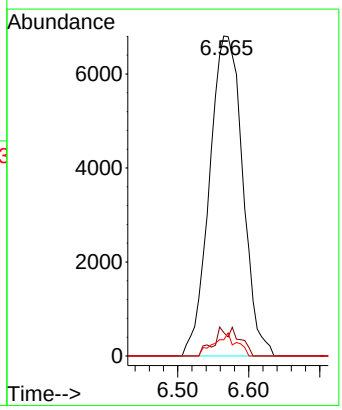
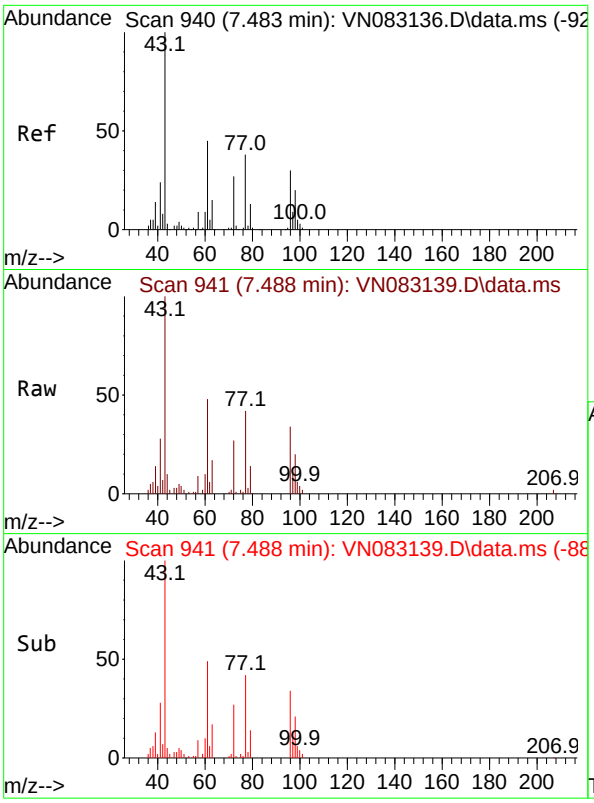



#24
1,1-Dichloroethane
Concen: 5.091 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 63 Resp: 22058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.3 | 3.3 | 9.9 |
| 100 | 5.0 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 24.185 ug/l
RT: 7.488 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 4175(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 27.1 | 18.2 | 27.2 |

**Instrument :**
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VSTDICC005

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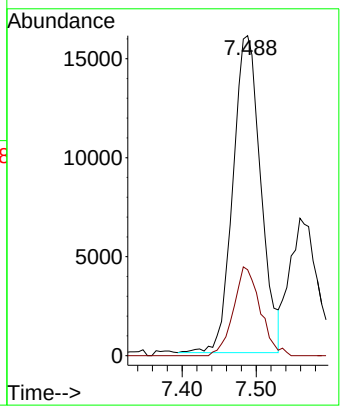
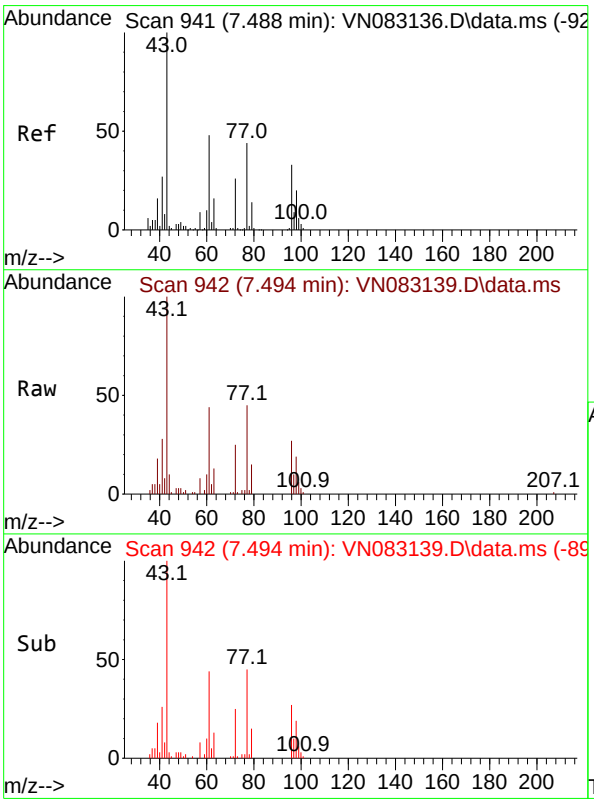
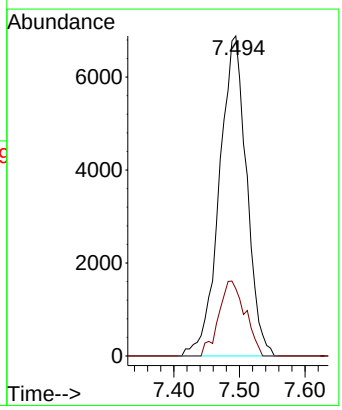


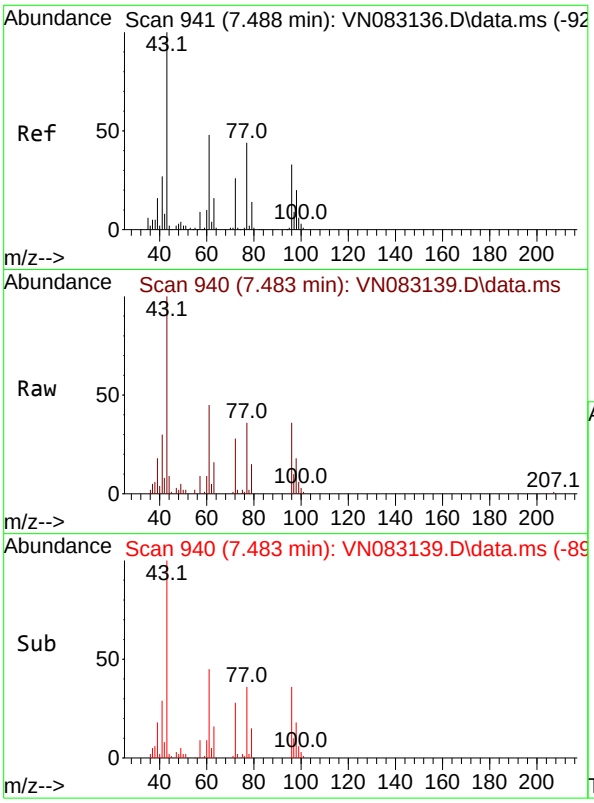




#26
2,2-Dichloropropane
Concen: 4.937 ug/l
RT: 7.494 min Scan# 942
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 77 Resp: 19864

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 22.7 | 10.3 | 30.9 |

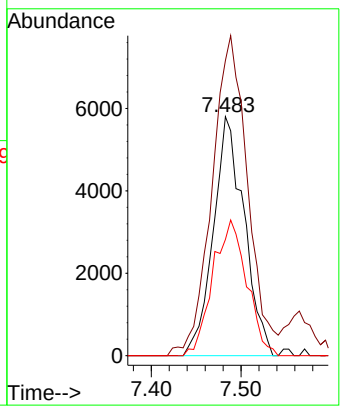





#27
cis-1,2-Dichloroethene
Concen: 4.967 ug/l
RT: 7.483 min Scan# 94
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 96 Resp: 1386

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 154.7 | 0.0 | 329.6 |
| 98 | 62.6 | 0.0 | 128.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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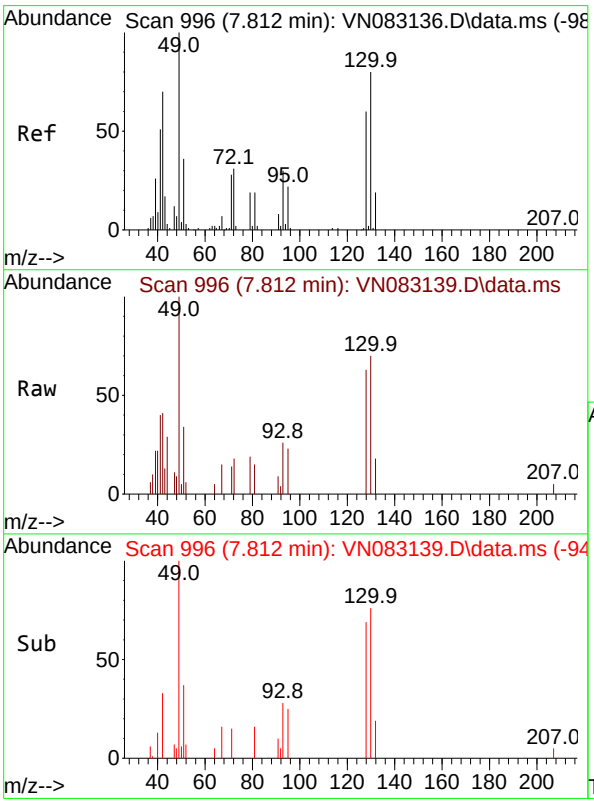
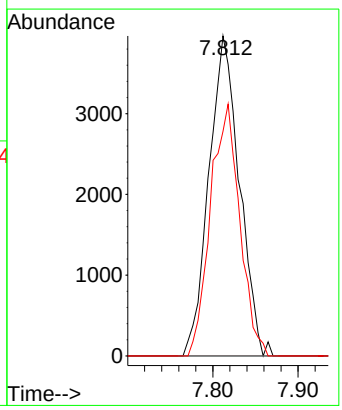
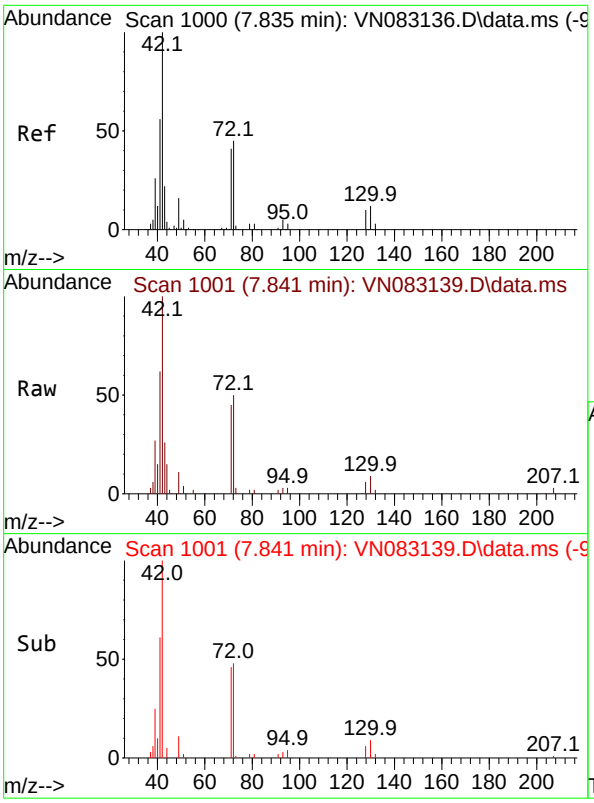



#28
Bromochloromethane
Concen: 5.577 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 49 Resp: 9874

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.0 | 0.0 | 3.8 |
| 130 | 75.2 | 50.5 | 75.7 |

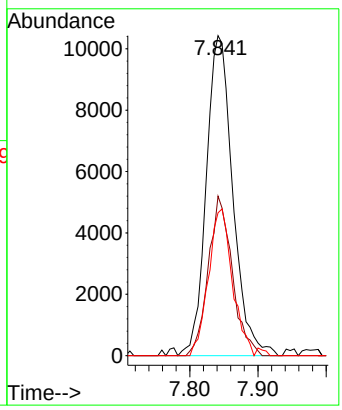





#29
Tetrahydrofuran
Concen: 25.324 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 42 Resp: 2826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 44.9 | 30.0 | 45.0 |
| 71 | 41.3 | 28.3 | 42.5 |




**Instrument :**
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**Manual Integrations**
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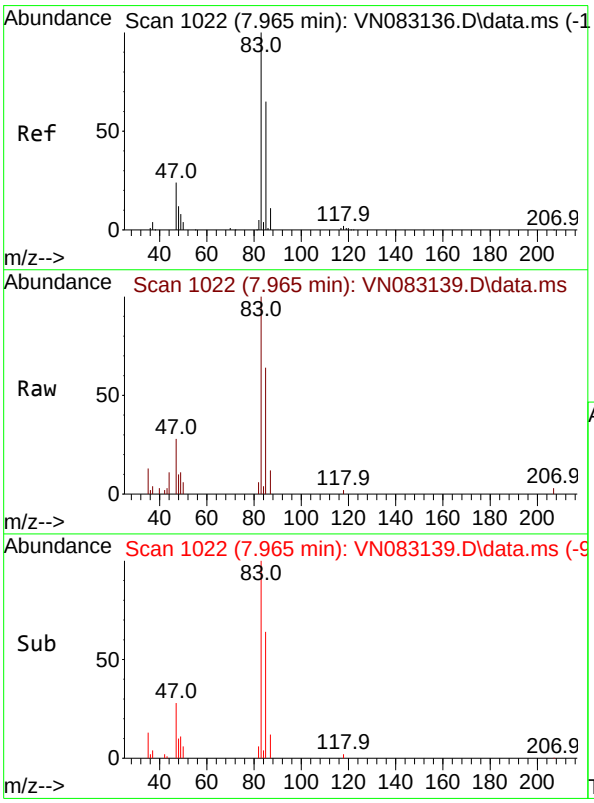
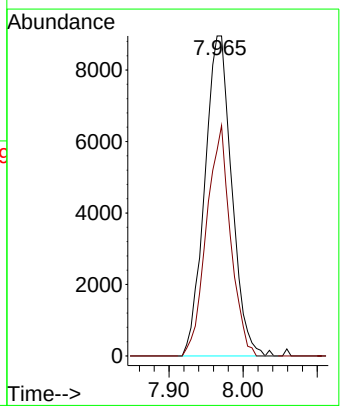
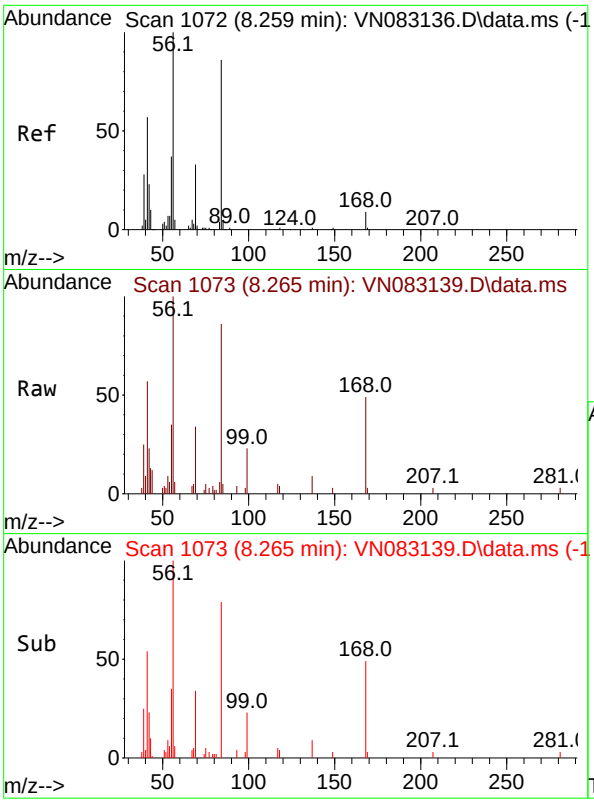



#30
Chloroform
Concen: 5.032 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 83 Resp: 22650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.3 | 50.9 | 76.3 |

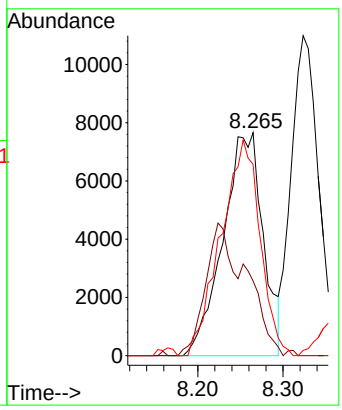





#31
Cyclohexane
Concen: 5.871 ug/l
RT: 8.265 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 56 Resp: 2499

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 33.5 | 24.5 | 36.7 |
| 84 | 85.8 | 66.0 | 99.0 |




**Instrument :**
MSVOA_N
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VSTDICC005

**Manual Integrations**
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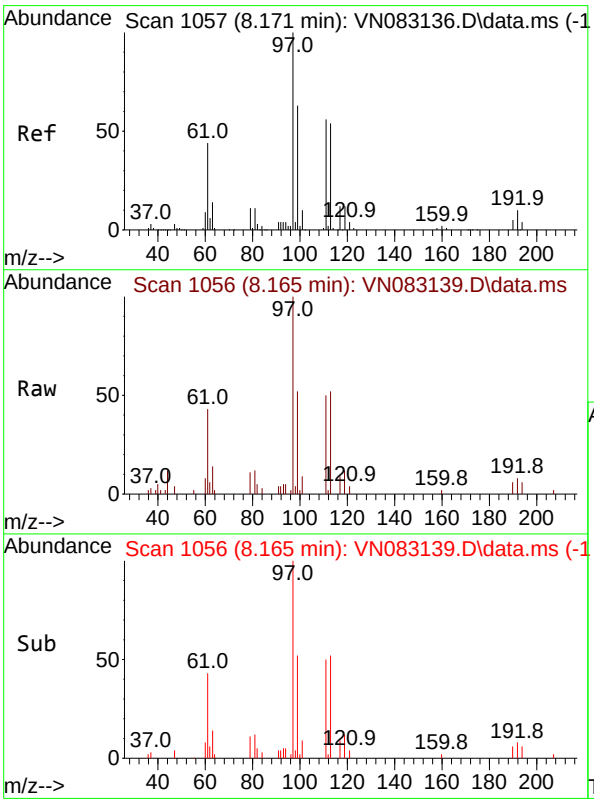
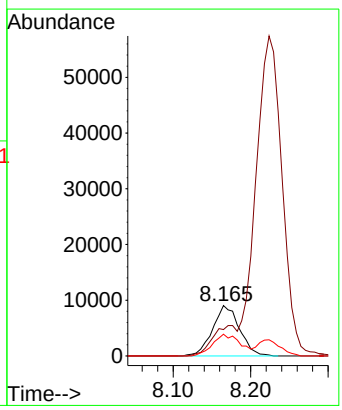
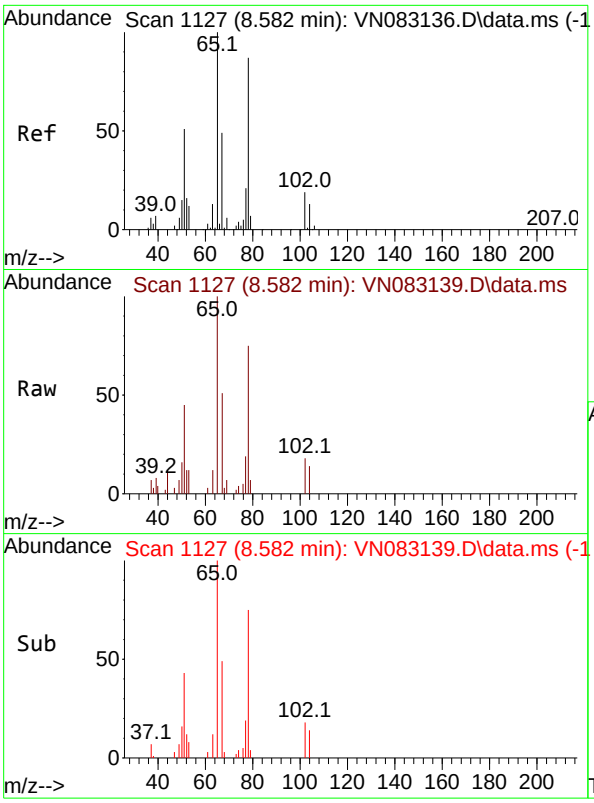



#32
1,1,1-Trichloroethane
Concen: 5.123 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 97 Resp: 21825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 0.0 | 52.0 | 78.0# |
| 61 | 44.1 | 42.1 | 63.1 |






#33
1,2-Dichloroethane-d4
Concen: 5.522 ug/l
RT: 8.582 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

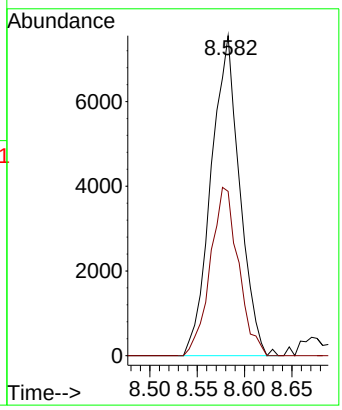
Tgt Ion: 65 Resp: 1586

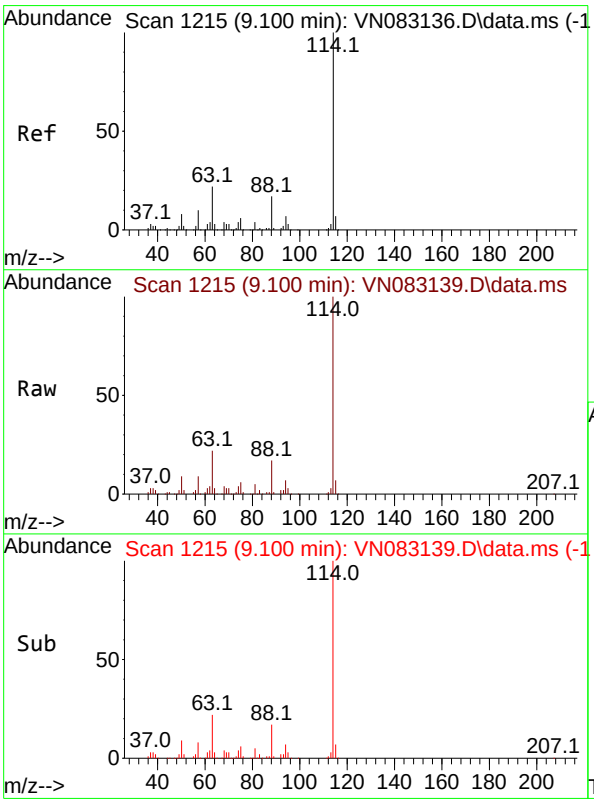
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.8 | 0.0 | 104.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

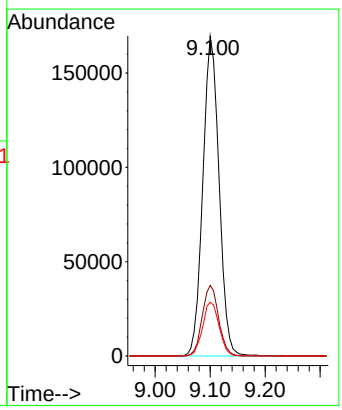


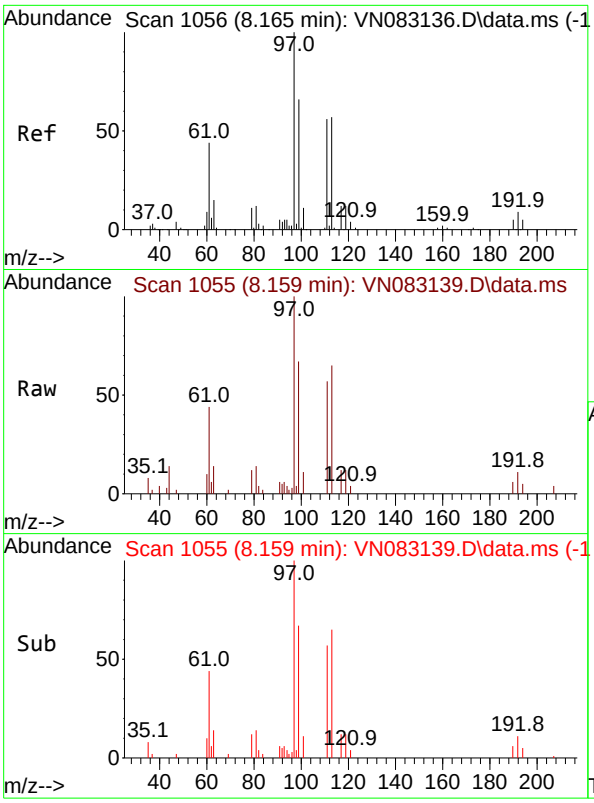




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:114 Resp: 347562

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.1 | 0.0 | 44.6 |
| 88 | 16.8 | 0.0 | 31.4 |

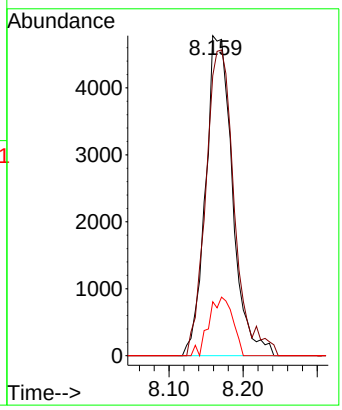





#35
Dibromofluoromethane
Concen: 5.549 ug/l
RT: 8.159 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:113 Resp: 1203

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.4 | 82.4 | 123.6 |
| 192 | 16.2 | 14.9 | 22.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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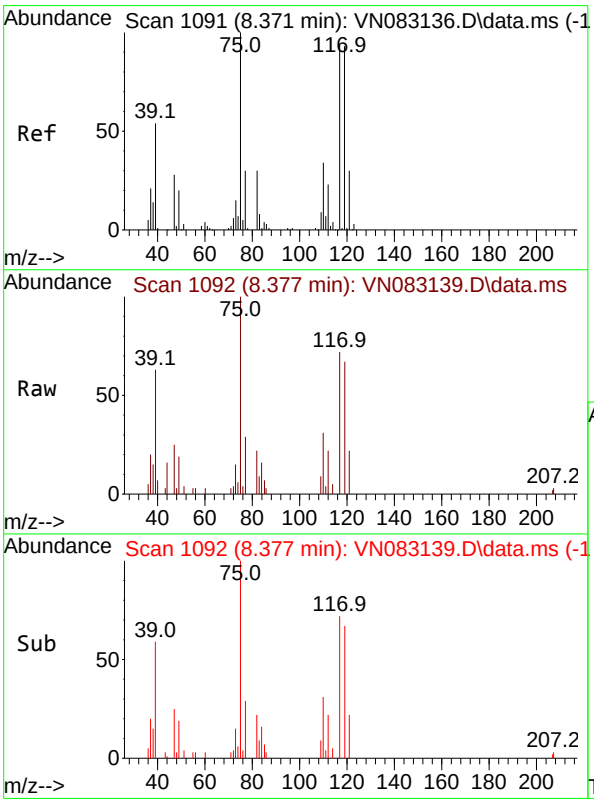
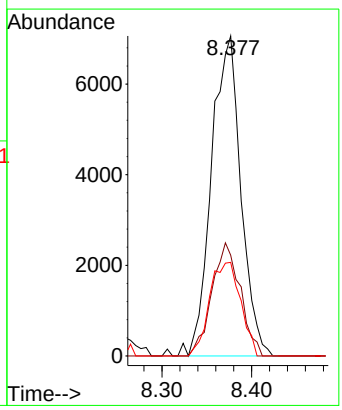
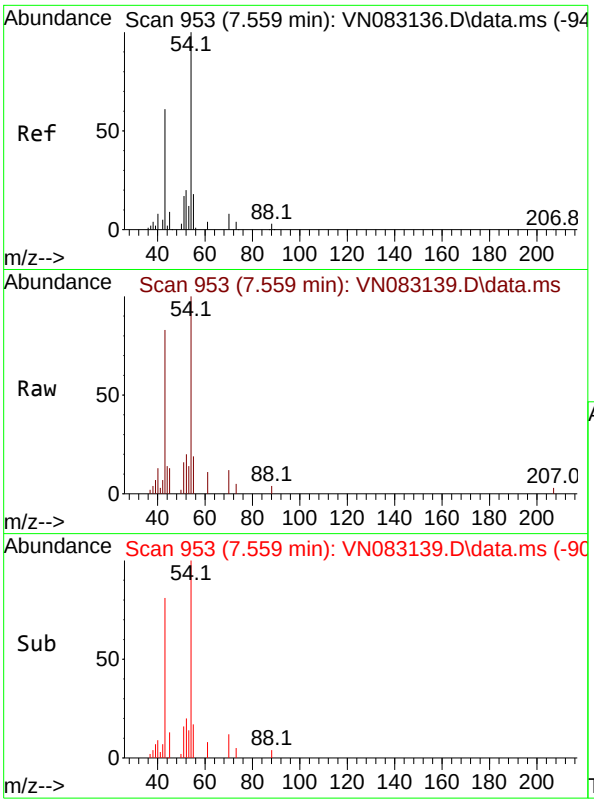



#36
1,1-Dichloropropene
Concen: 4.907 ug/l
RT: 8.377 min Scan# 1092
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 16102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 34.1 | 16.3 | 48.9 |
| 77 | 30.8 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 4.874 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 1790

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 12.1 | 9.3 | 13.9 |
| 70 | 11.6 | 7.0 | 10.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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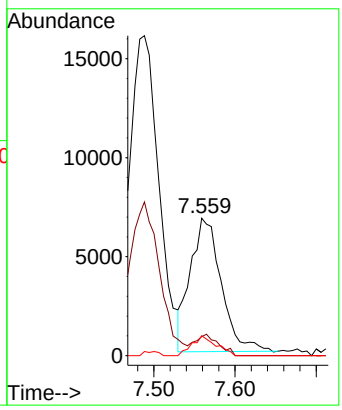
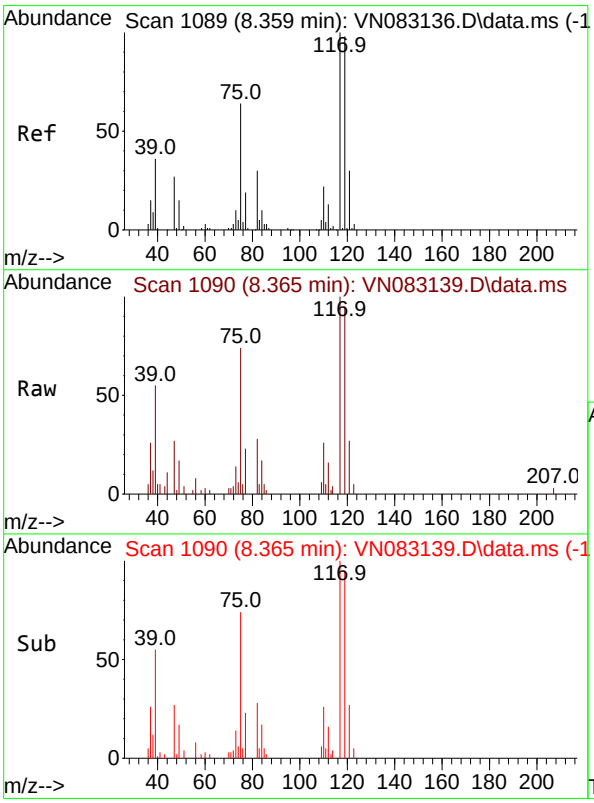
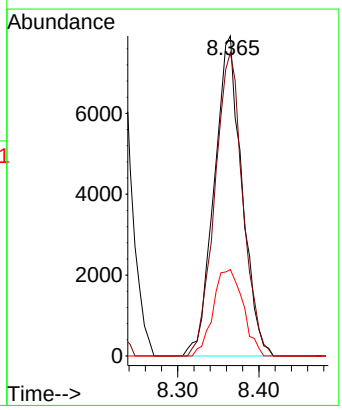


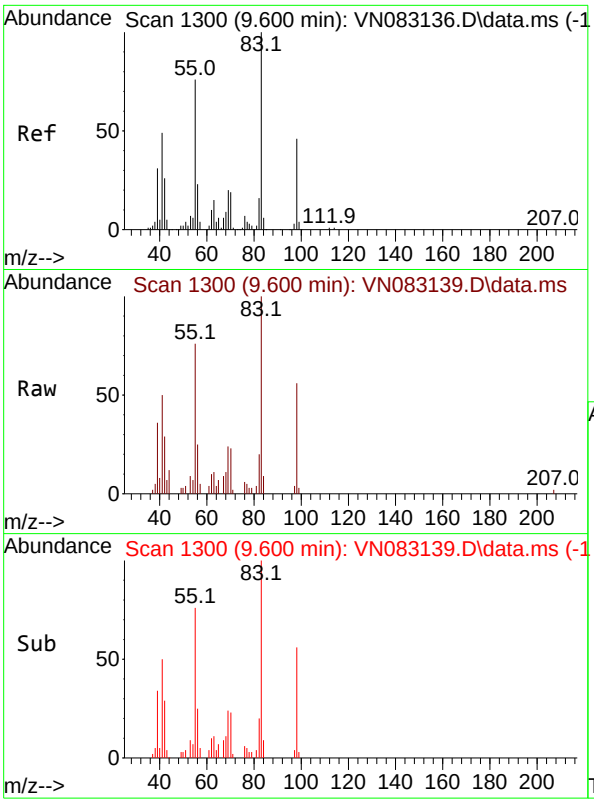




#38
Carbon Tetrachloride
Concen: 5.067 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:117 Resp: 18728

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.8 | 74.9 | 112.3 |
| 121 | 27.0 | 24.3 | 36.5 |

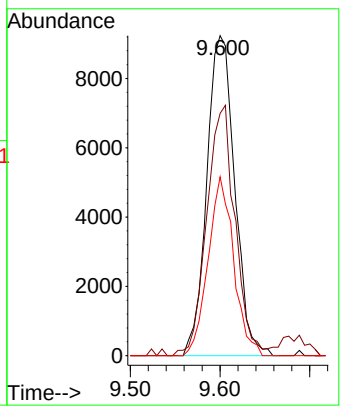





#39
Methylcyclohexane
Concen: 4.957 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 83 Resp: 1998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 74.1 | 66.4 | 99.6 |
| 98 | 55.9 | 40.7 | 61.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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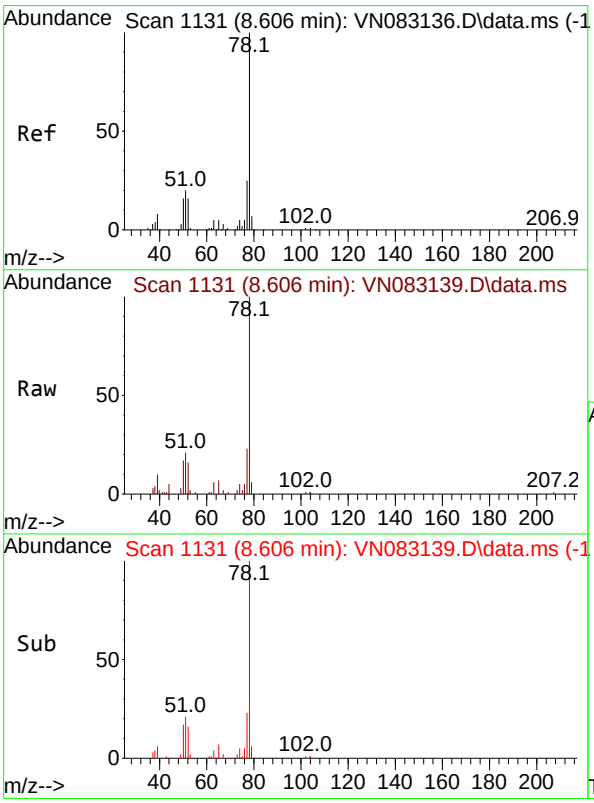
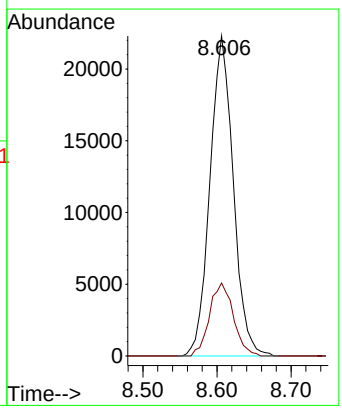
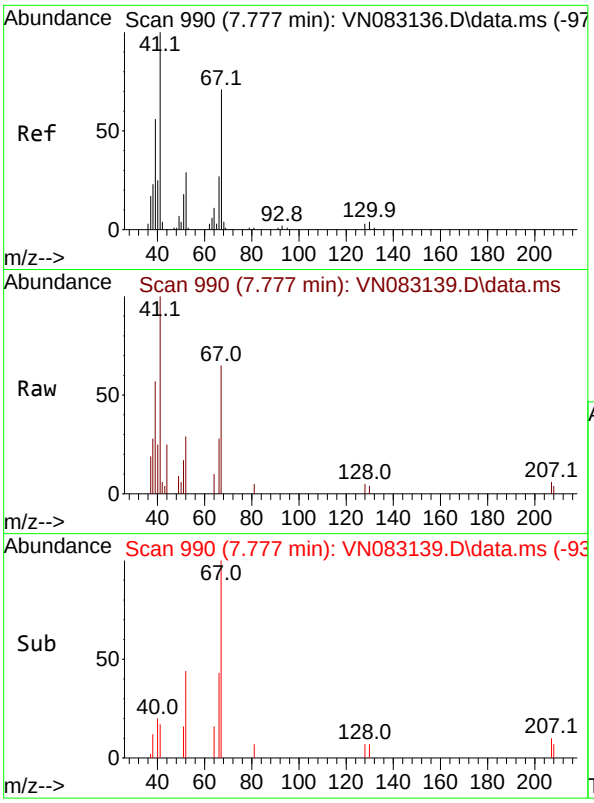



#40
Benzene
Concen: 4.988 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 78 Resp: 48765

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.8 | 19.0 | 28.4 |

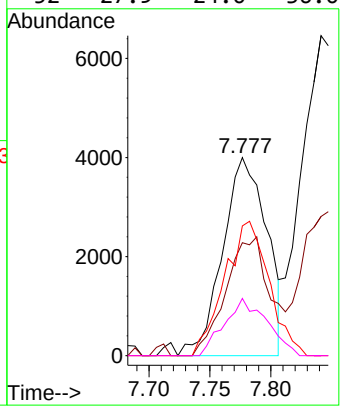





#41
Methacrylonitrile
Concen: 4.828 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 41 Resp: 1008

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 60.2 | 45.5 | 68.3 |
| 67 | 68.2 | 50.5 | 75.7 |
| 52 | 27.9 | 24.0 | 36.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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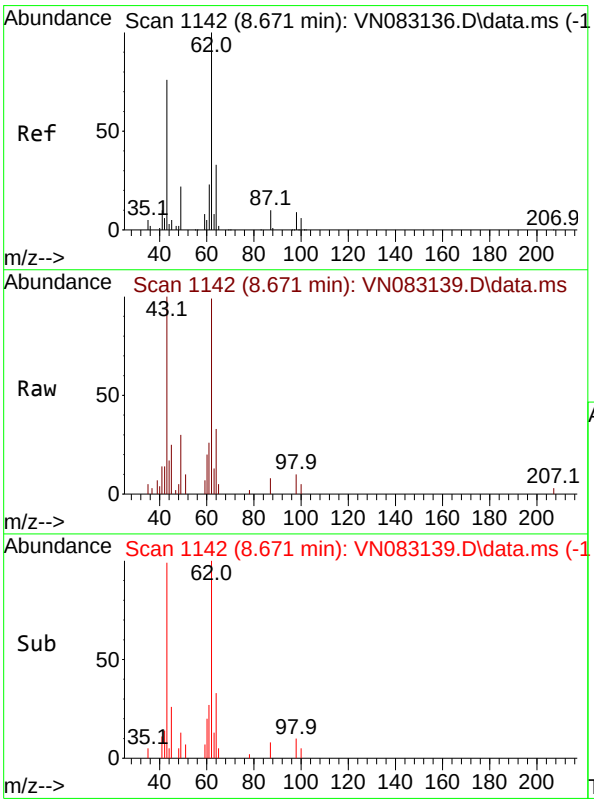
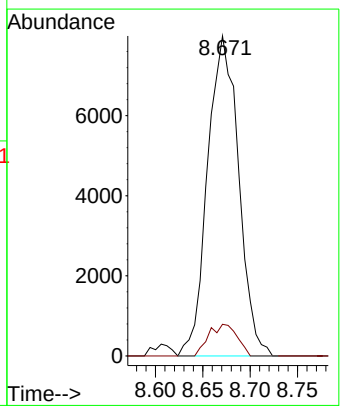
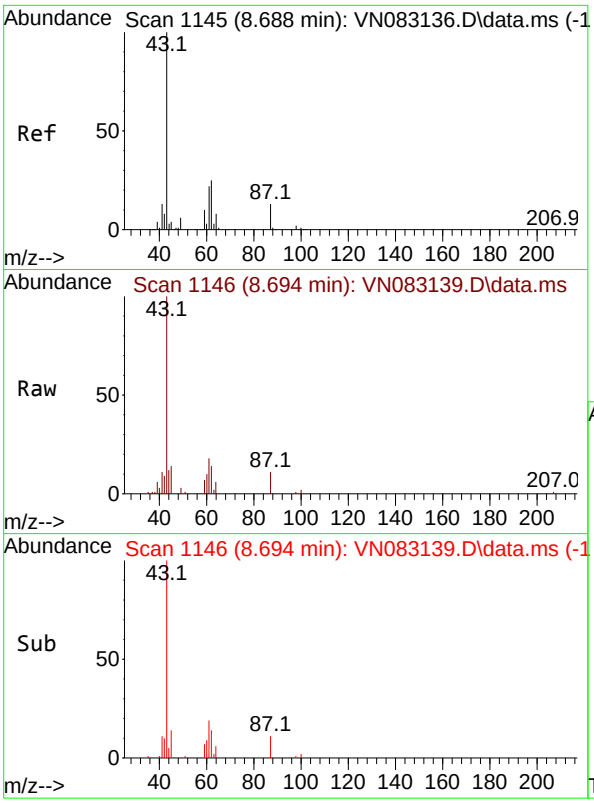



#42
1,2-Dichloroethane
Concen: 5.116 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 62 Resp: 18219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 9.0 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 5.438 ug/l
RT: 8.694 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 4481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 17.5 | 17.8 | 26.6 |
| 87 | 9.2 | 8.2 | 12.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

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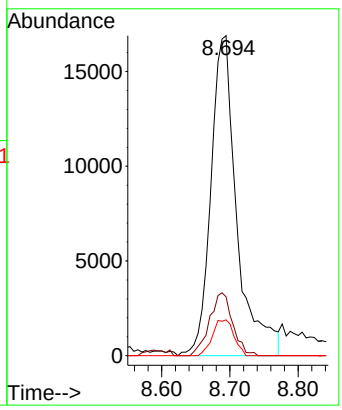
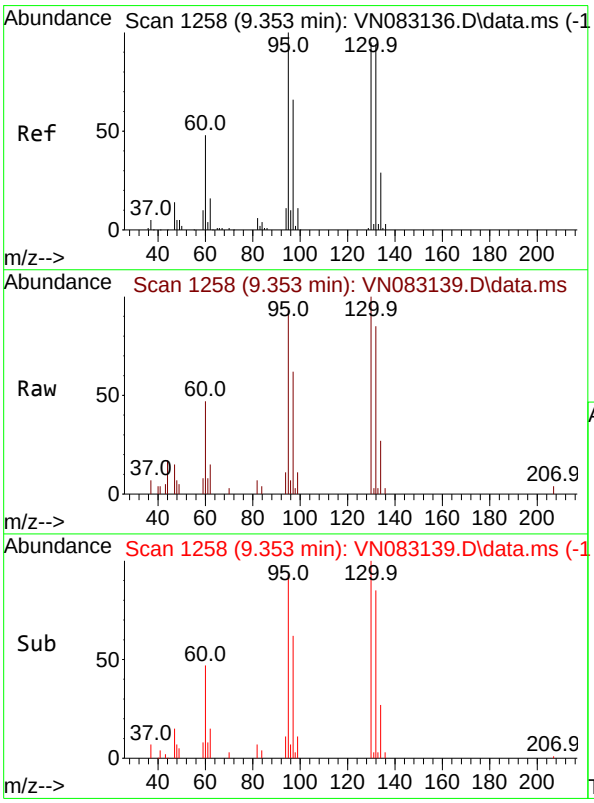
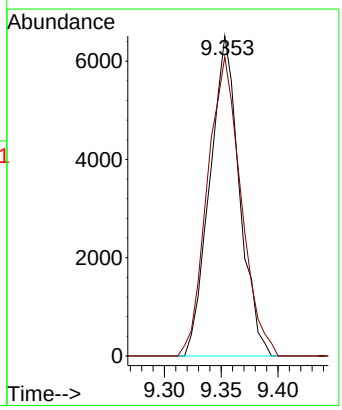


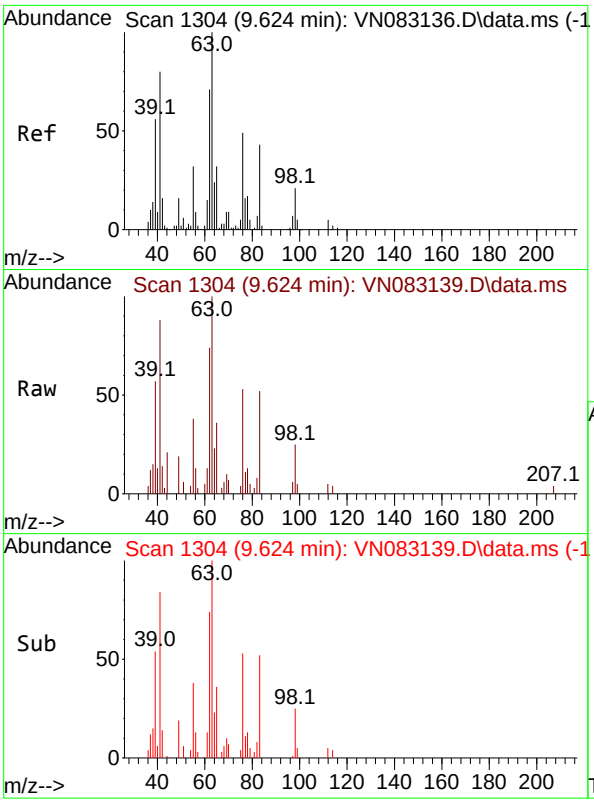




#44
Trichloroethene
Concen: 5.084 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:130 Resp: 11830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 93.4 | 0.0 | 197.8 |

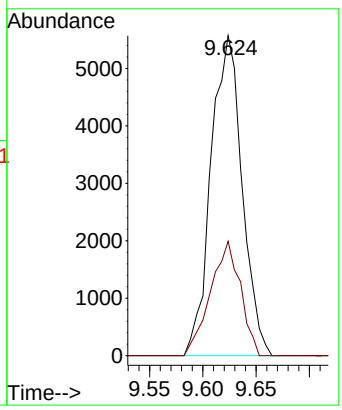





#45
1,2-Dichloropropane
Concen: 4.878 ug/l
RT: 9.624 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 63 Resp: 1132

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 35.7 | 24.4 | 36.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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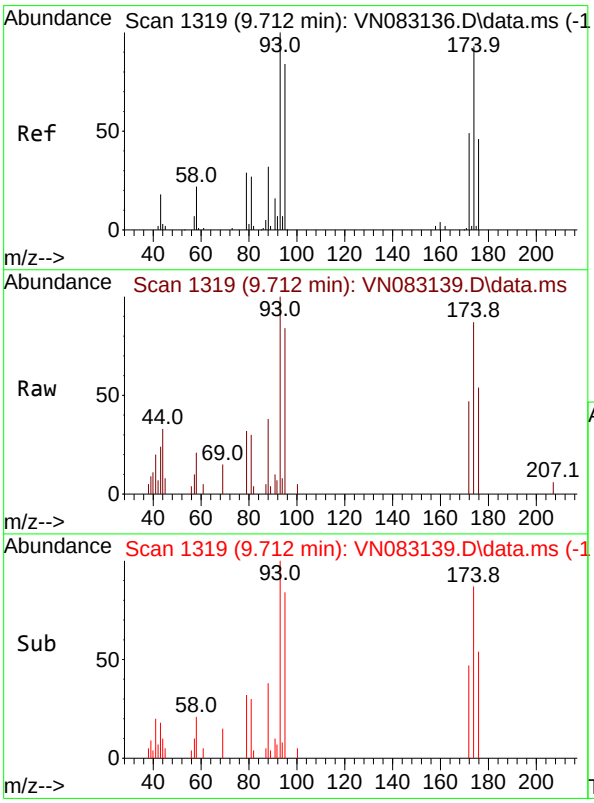
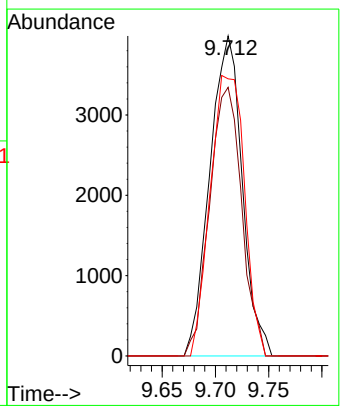
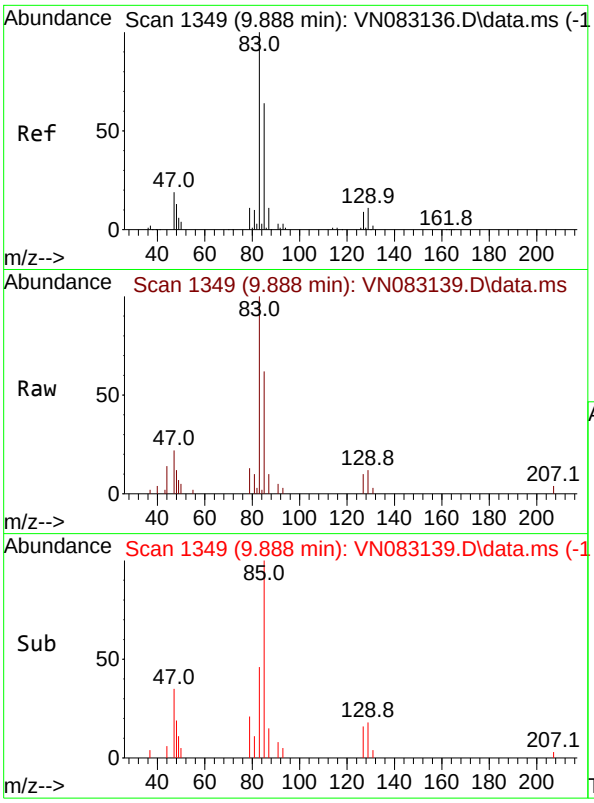



#46
Dibromomethane
Concen: 5.079 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 93 Resp: 8436

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.9 | 65.8 | 98.6 |
| 174 | 92.2 | 71.7 | 107.5 |

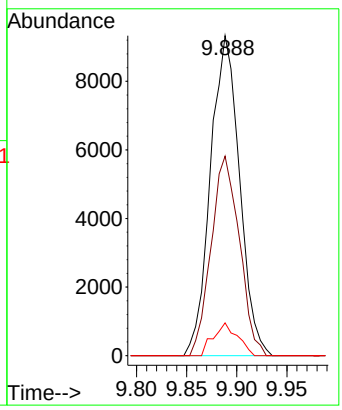





#47
Bromodichloromethane
Concen: 5.040 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 83 Resp: 1879

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.3 | 51.1 | 76.7 |
| 127 | 10.3 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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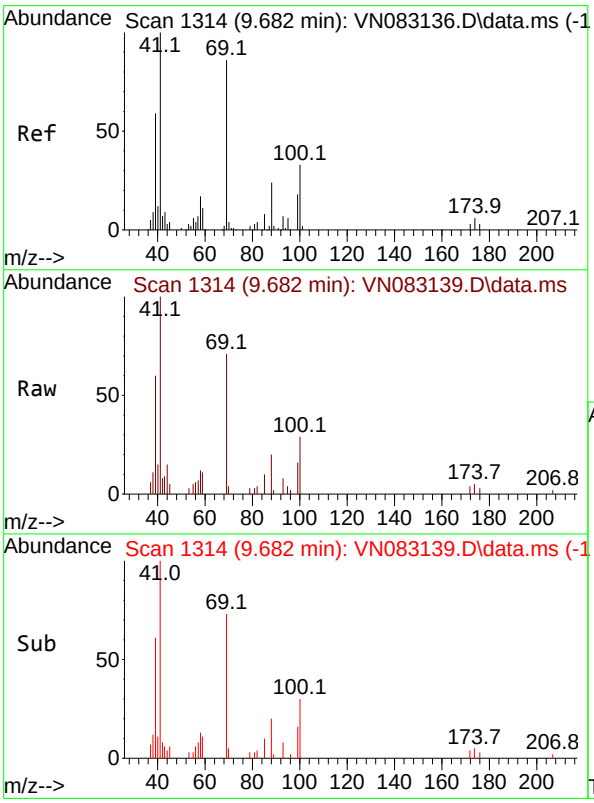
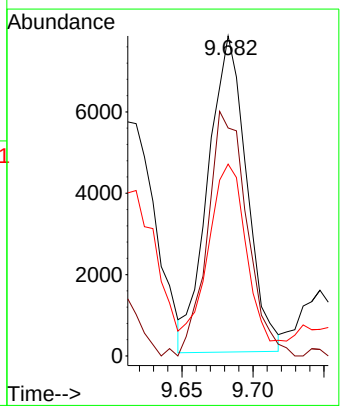
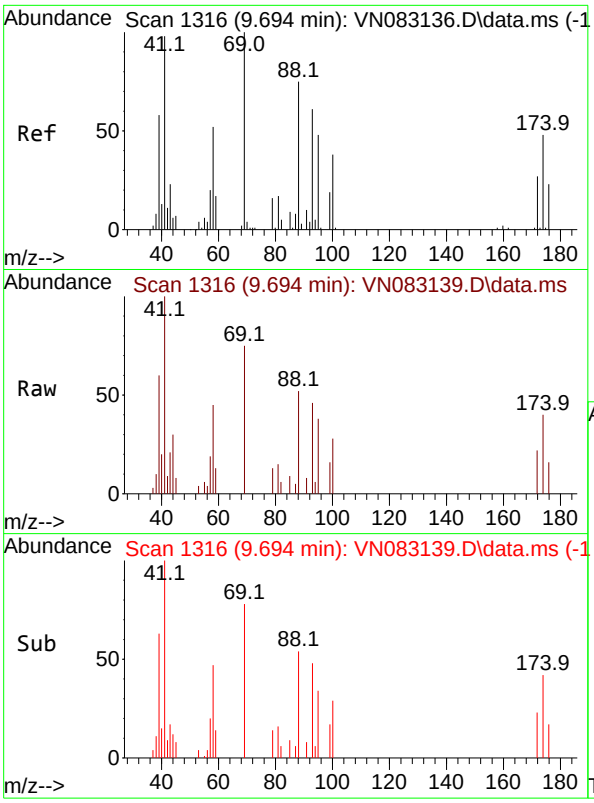



#48
Methyl methacrylate
Concen: 4.840 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 41 Resp: 14704

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 79.2 | 56.3 | 84.5 |
| 39 | 63.9 | 50.3 | 75.5 |






#49
1,4-Dioxane
Concen: 95.593 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 88 Resp: 523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 27.8 | 41.8 |
| 58 | 79.3 | 59.4 | 89.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

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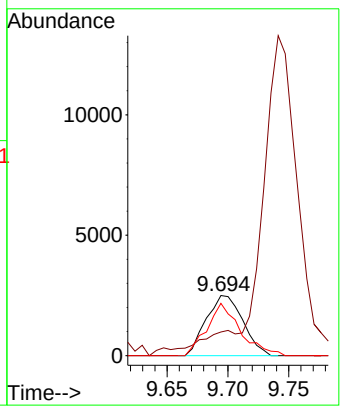
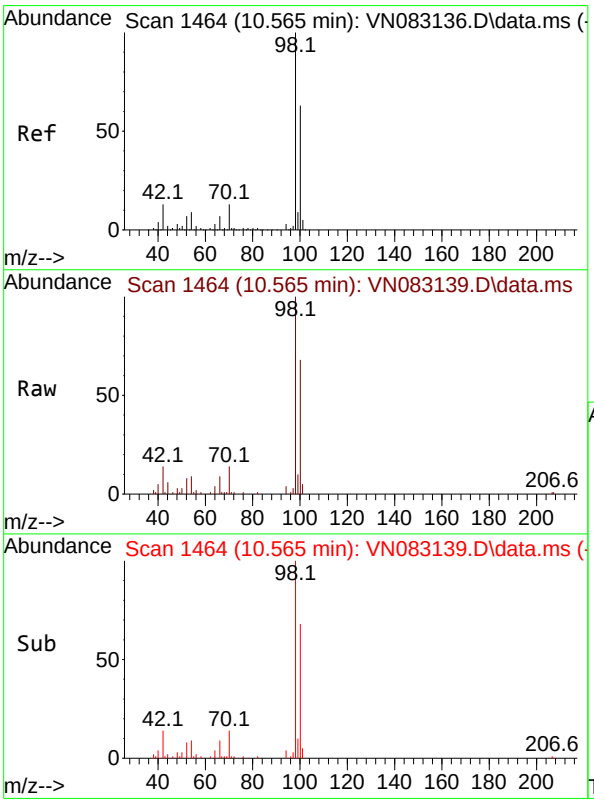
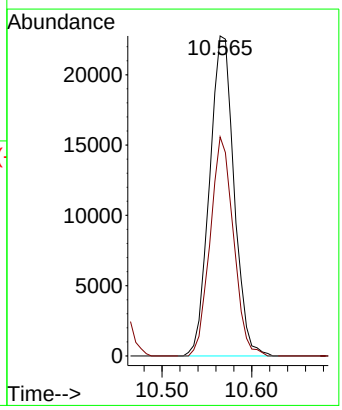


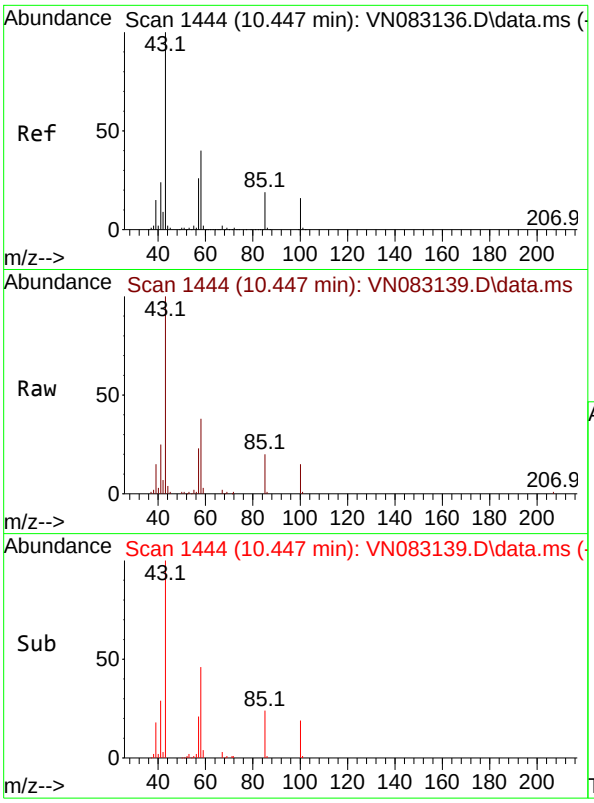




#50
Toluene-d8
Concen: 5.326 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 98 Resp: 43104

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.2 | 51.5 | 77.3 |

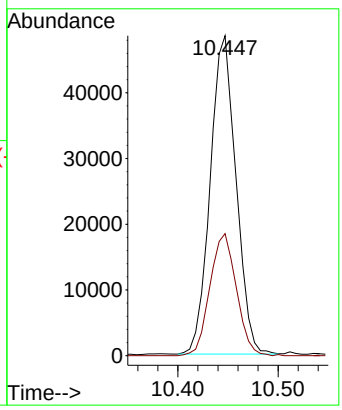





#51
4-Methyl-2-Pentanone
Concen: 24.946 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 8667

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 39.3 | 28.2 | 42.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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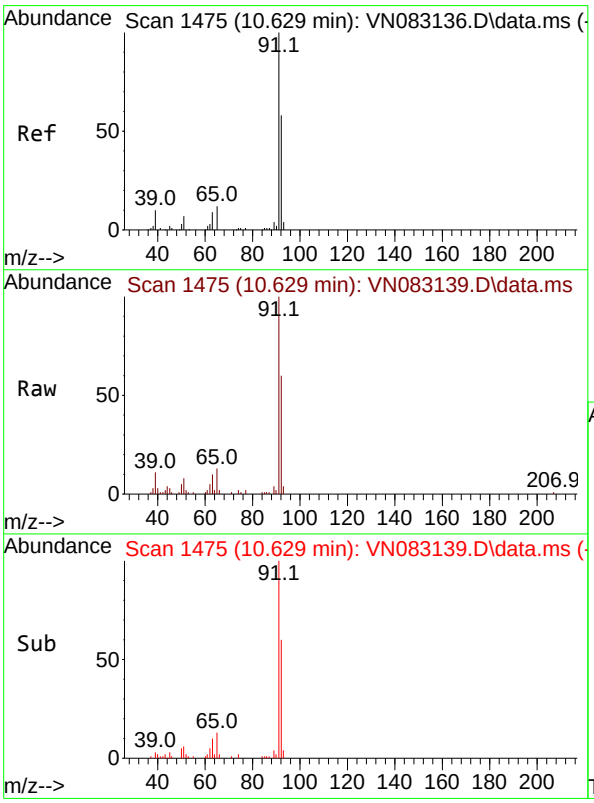
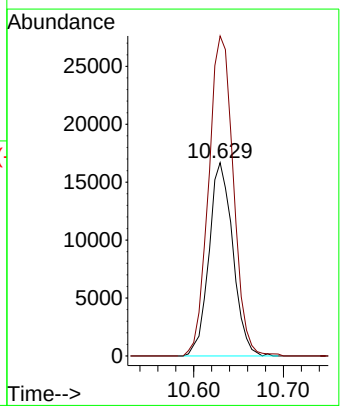
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

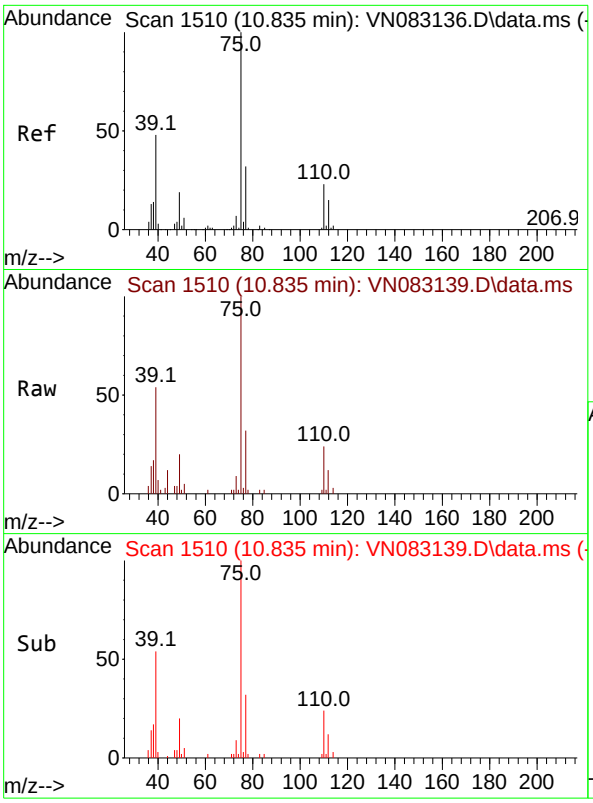



#52
Toluene
Concen: 4.981 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 92 Resp: 30769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.3 | 139.4 | 209.0 |

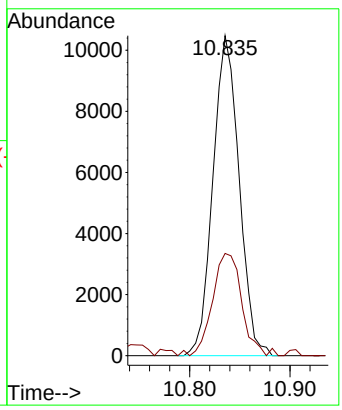





#53
t-1,3-Dichloropropene
Concen: 4.950 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 1896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.0 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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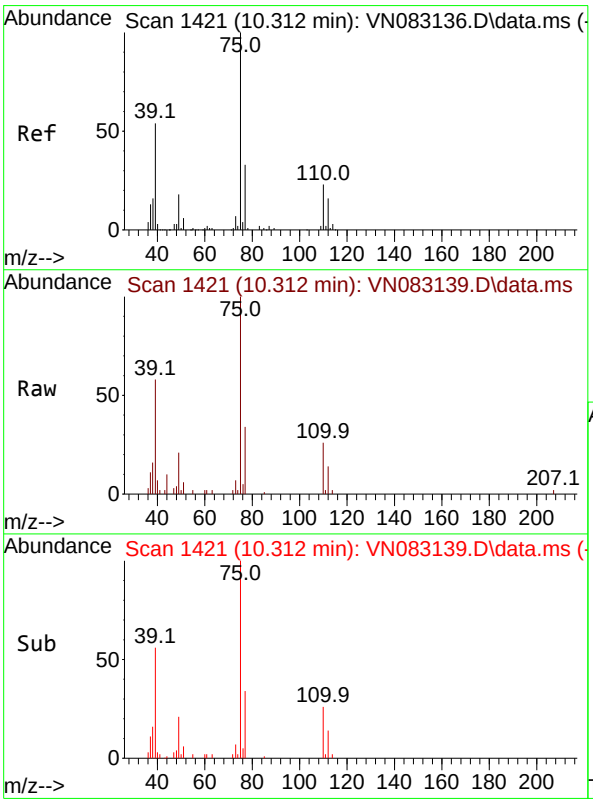
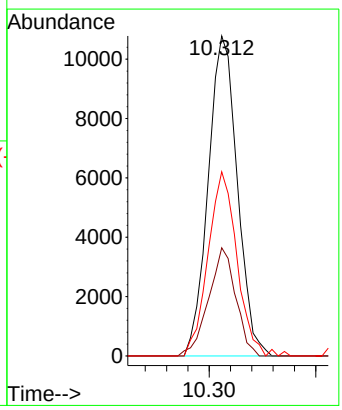
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

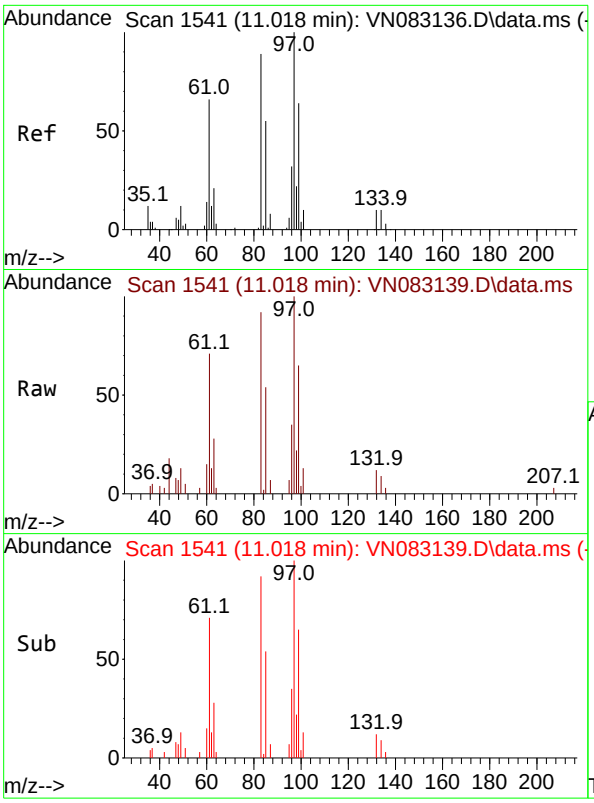



#54
cis-1,3-Dichloropropene
Concen: 5.014 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 20431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.8 | 24.3 | 36.5 |
| 39 | 57.5 | 50.5 | 75.7 |

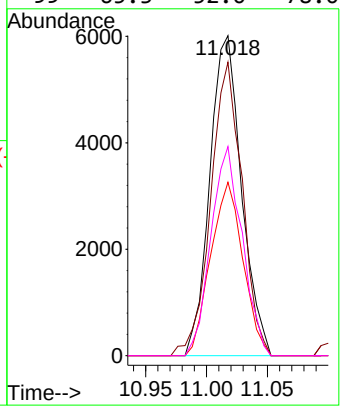





#55
1,1,2-Trichloroethane
Concen: 4.930 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 97 Resp: 1091

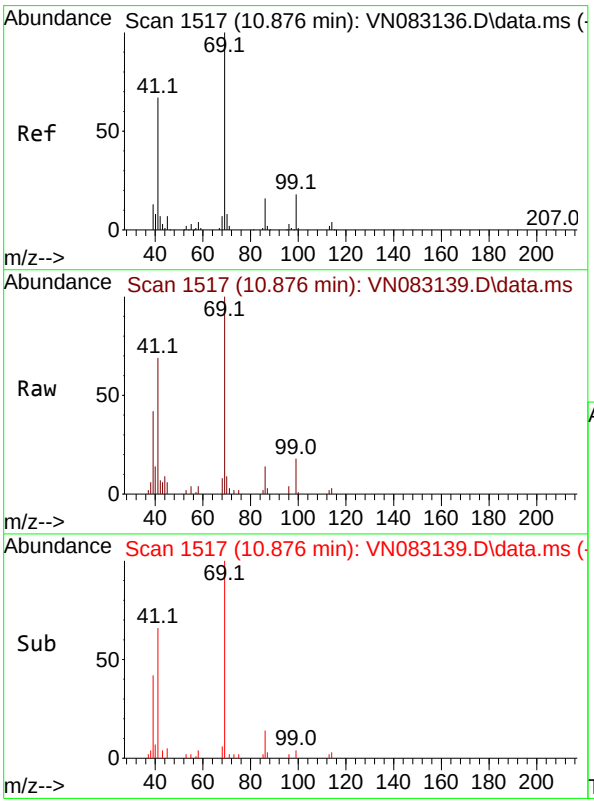
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 91.7 | 71.4 | 107.0 |
| 85 | 54.2 | 45.8 | 68.6 |
| 99 | 65.3 | 52.0 | 78.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

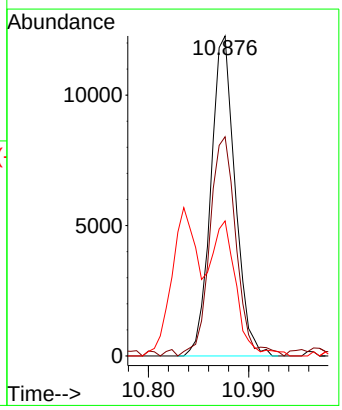
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

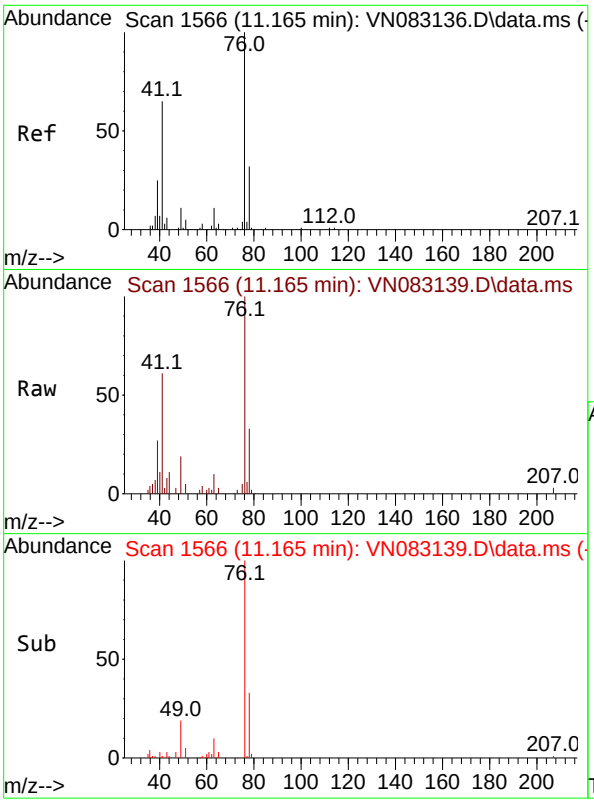



#56
Ethyl methacrylate
Concen: 4.951 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 69 Resp: 20661

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 74.3 | 63.4 | 95.2 |
| 39 | 39.8 | 37.4 | 56.0 |

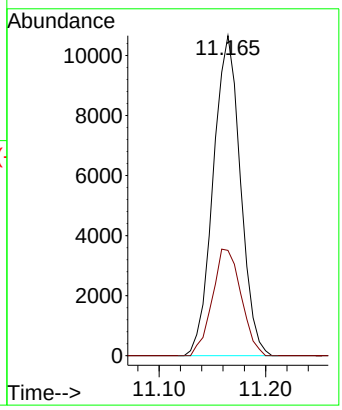





#57
1,3-Dichloropropane
Concen: 4.799 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 76 Resp: 1893

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 35.3 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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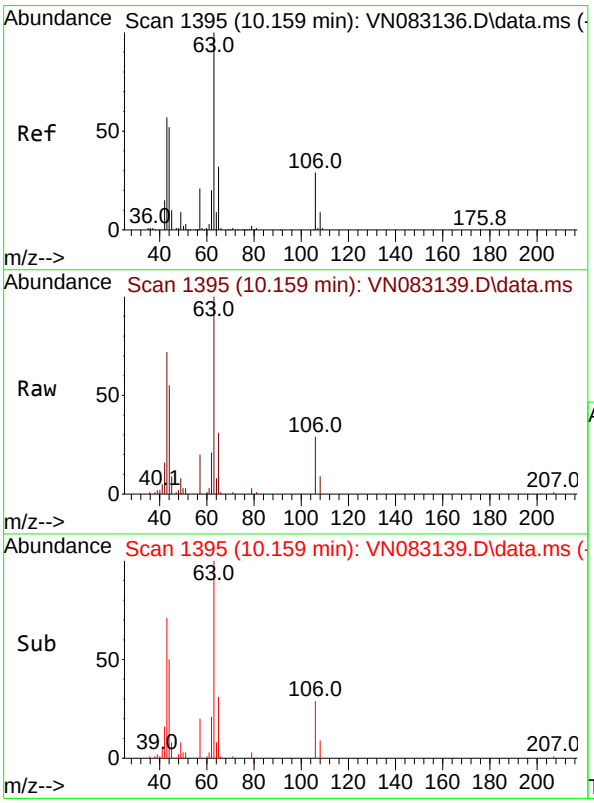
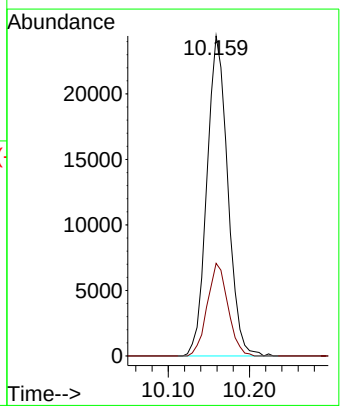
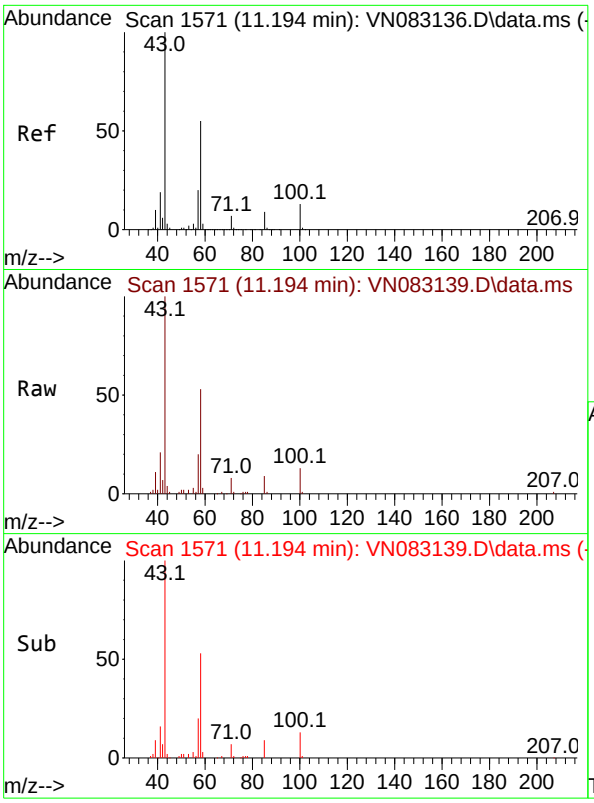



#58
2-Chloroethyl Vinyl ether
Concen: 24.676 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 63 Resp: 43528

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.8 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 24.870 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 6685

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 52.9 | 24.6 | 73.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

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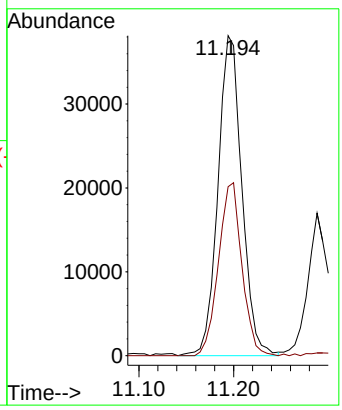
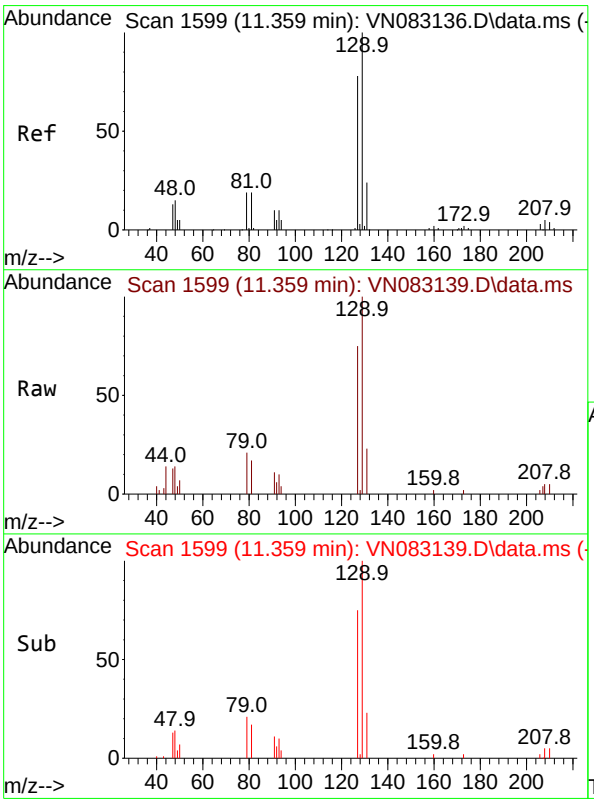
Supervised By :Mahesh Dadoda 08/09/2024

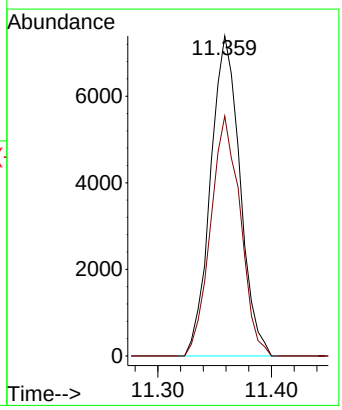


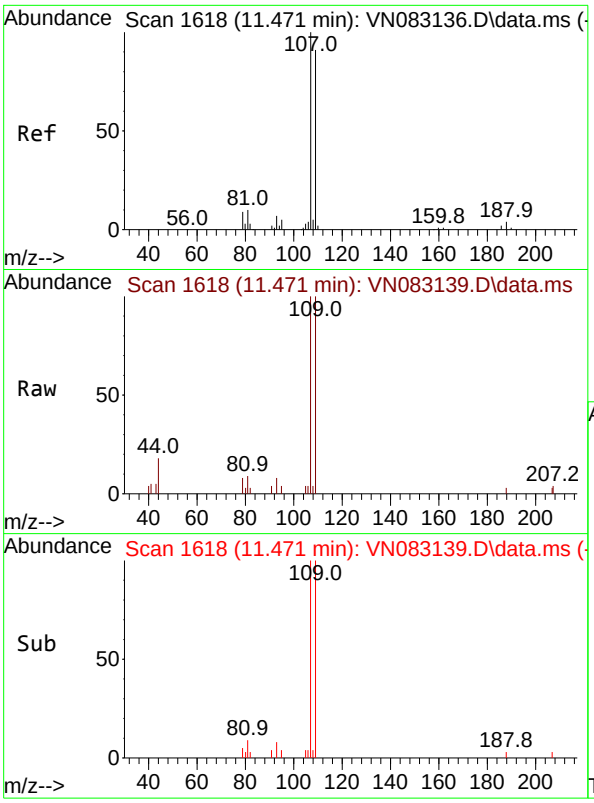




#60
Dibromochloromethane
Concen: 4.972 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:129 Resp: 13307

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 75.6 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 4.955 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

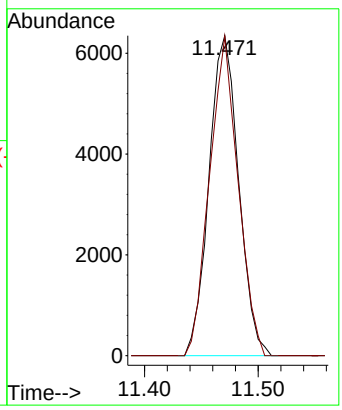
Tgt Ion:107 Resp: 1152

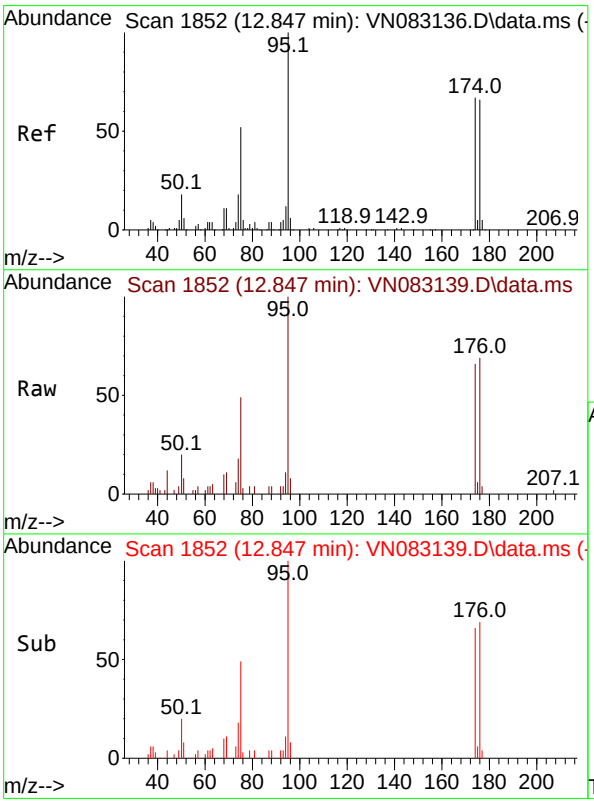
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 95.9 | 73.7 | 110.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

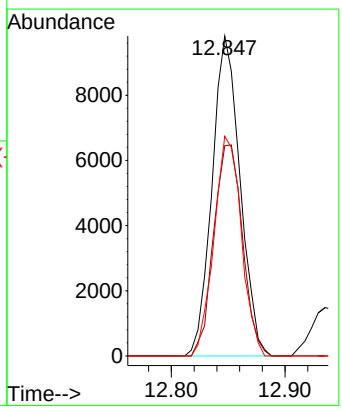


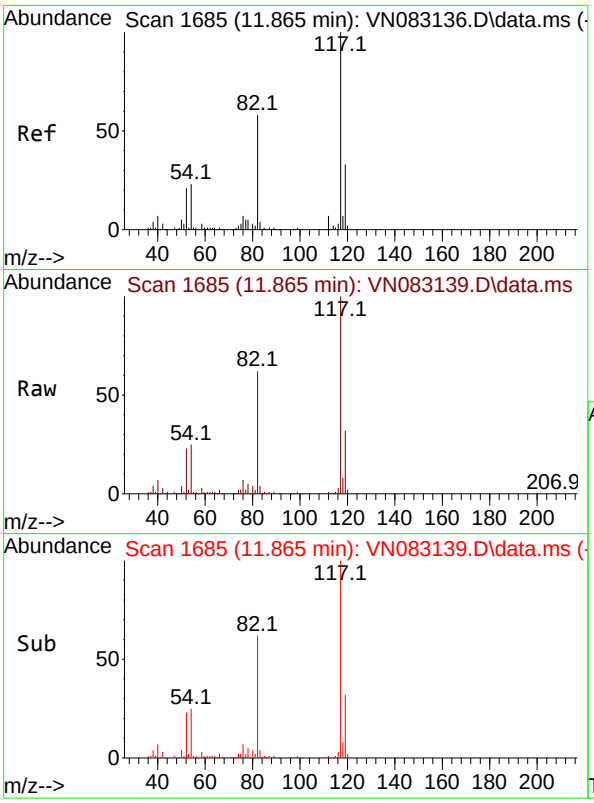




#62
4-Bromofluorobenzene
Concen: 5.317 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 95 Resp: 16776

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 68.1 | 0.0 | 159.2 |
| 176 | 67.0 | 0.0 | 147.6 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:117 Resp: 29351

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 62.1 | 47.5 | 71.3 |
| 119 | 32.0 | 25.6 | 38.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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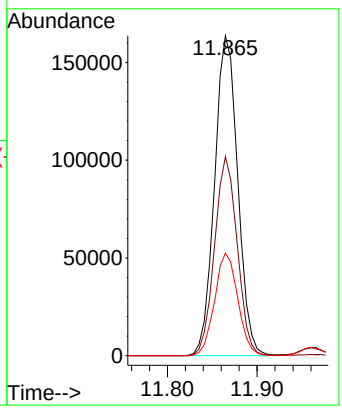
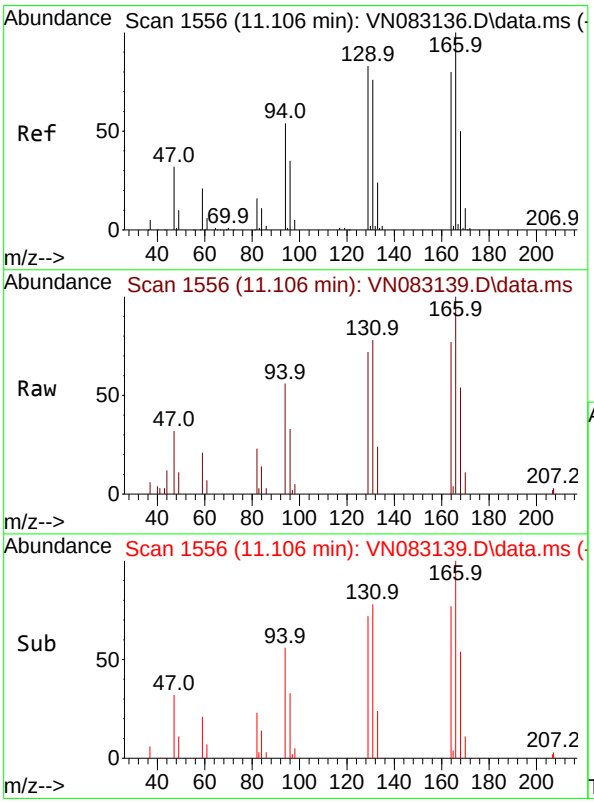
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

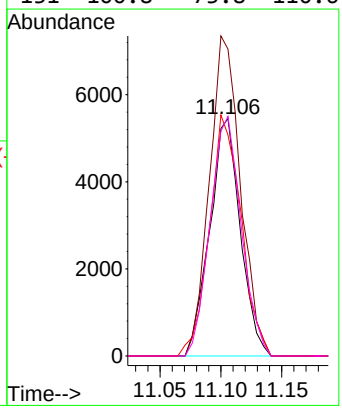


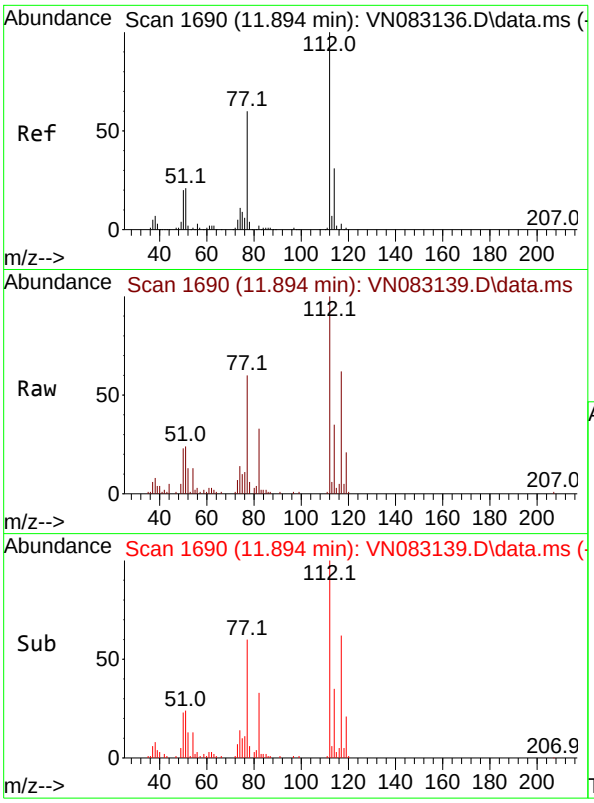




#64
Tetrachloroethene
Concen: 4.896 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:164 Resp: 9517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 129.2 | 101.4 | 152.0 |
| 129 | 93.1 | 75.7 | 113.5 |
| 131 | 100.8 | 73.8 | 110.6 |

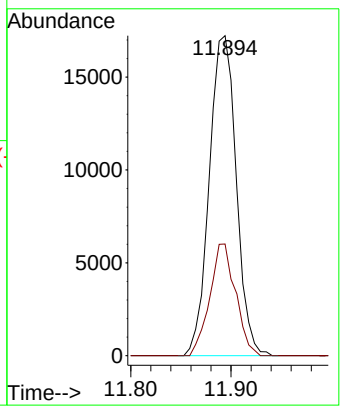





#65
Chlorobenzene
Concen: 4.951 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:112 Resp: 3211

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 34.9 | 26.2 | 39.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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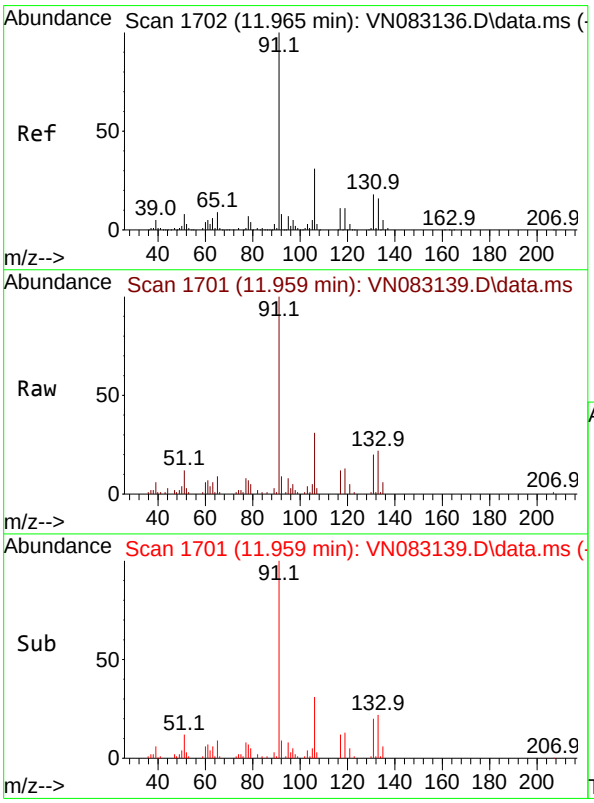
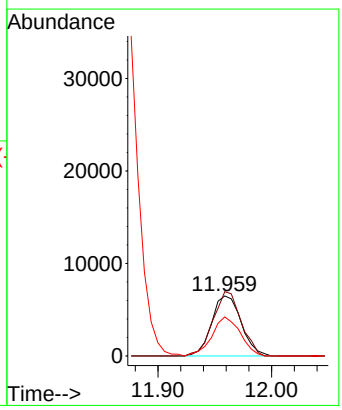
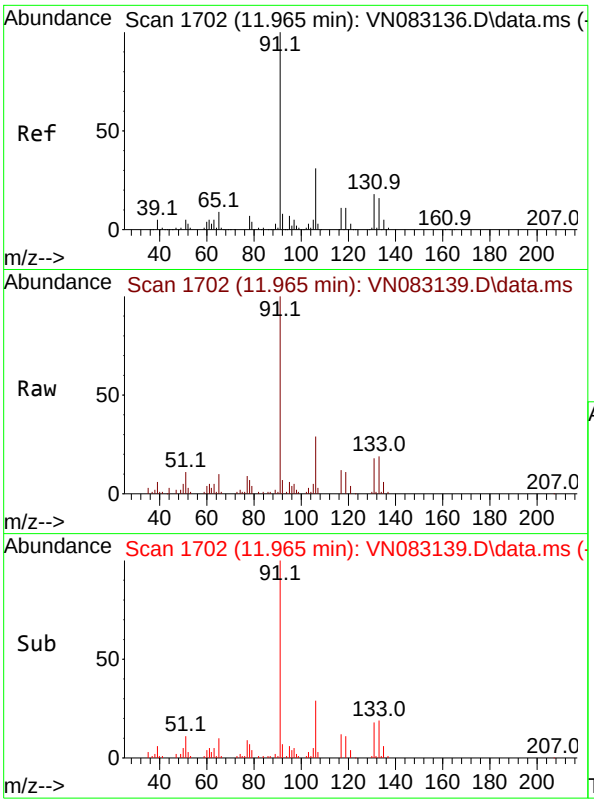



#66
1,1,1,2-Tetrachloroethane
Concen: 5.140 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:131 Resp: 11758

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 101.6 | 47.3 | 142.0 |
| 119 | 62.2 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 5.013 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 91 Resp: 5964

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 28.6 | 24.0 | 36.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

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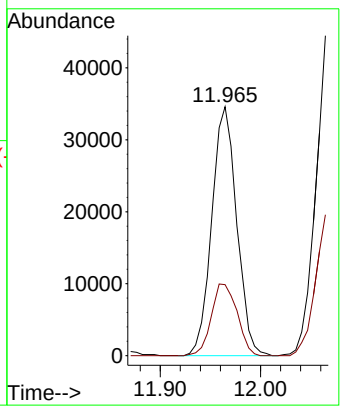
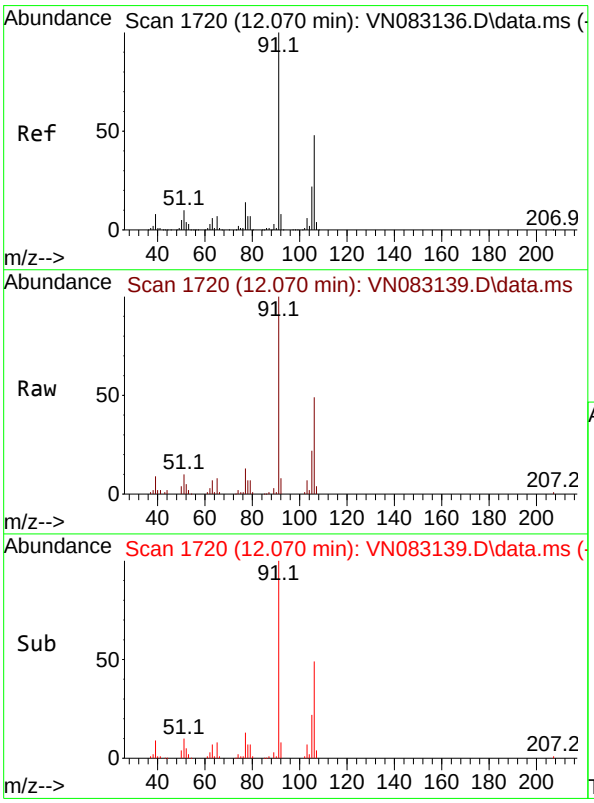
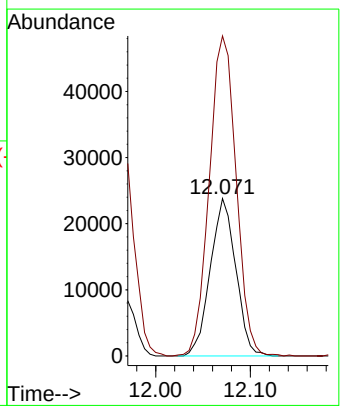


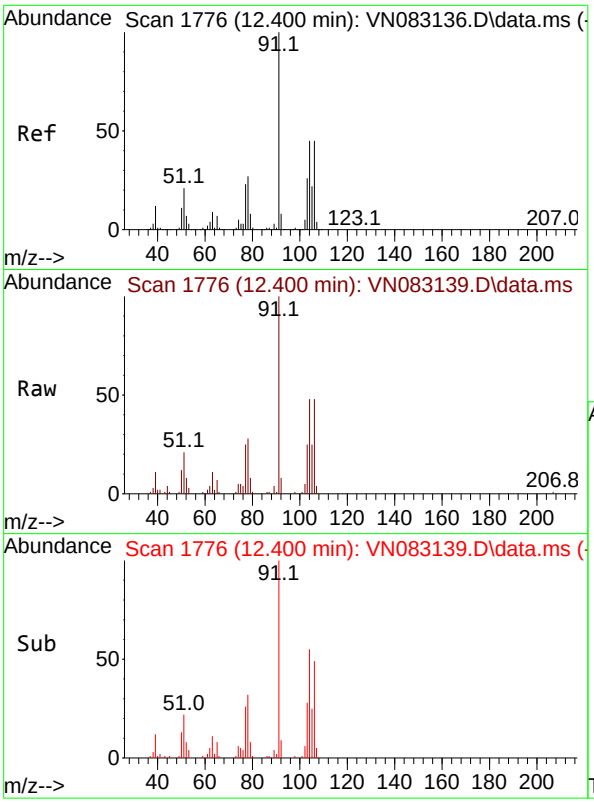




#68
m/p-Xylenes
Concen: 10.000 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:106 Resp: 44572

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 214.3 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 5.005 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

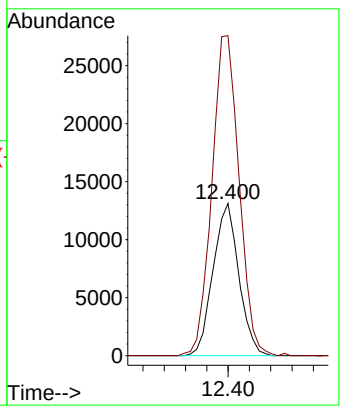
Tgt Ion:106 Resp: 2200

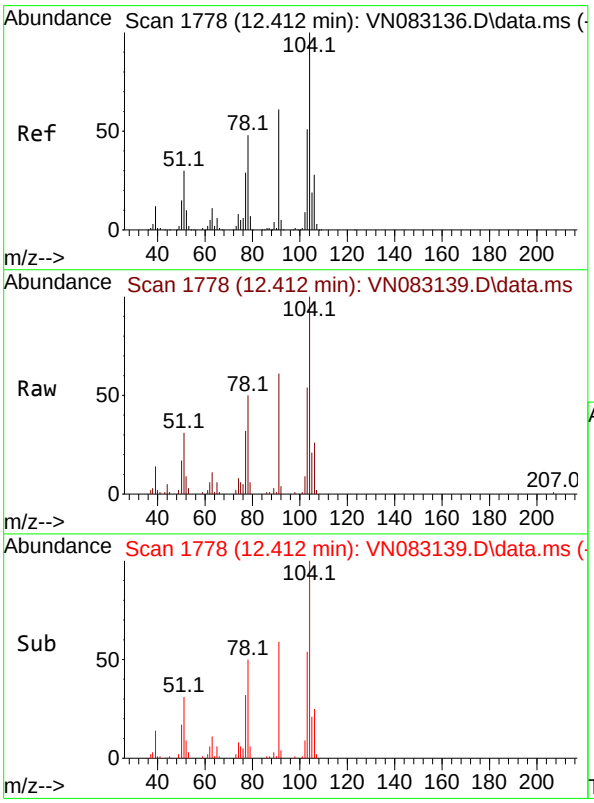
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.7 | 111.3 | 333.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

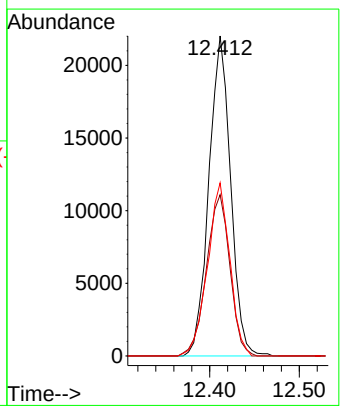


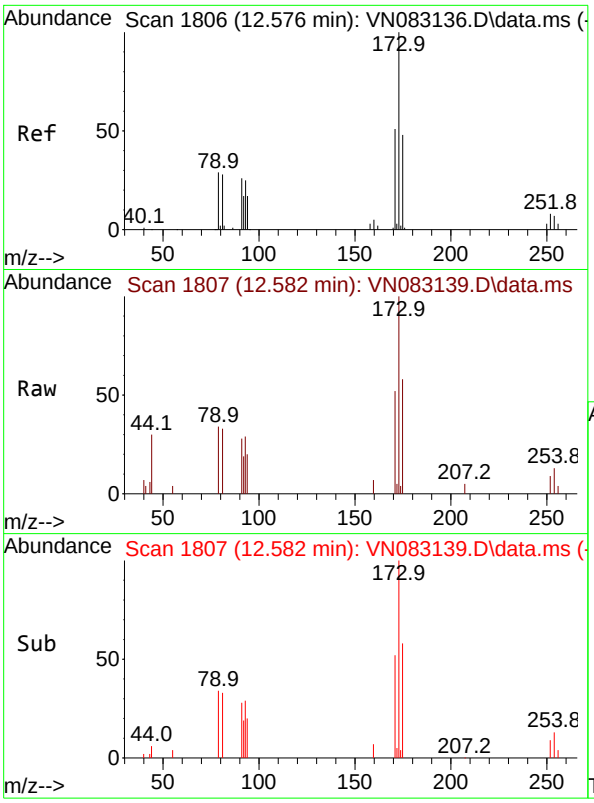




#70
Styrene
Concen: 5.014 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:104 Resp: 37023

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 54.3 | 41.6 | 62.4 |
| 103 | 55.4 | 44.0 | 66.0 |






#71
Bromoform
Concen: 4.665 ug/l
RT: 12.582 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

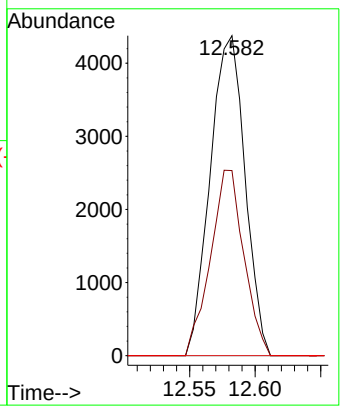
**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

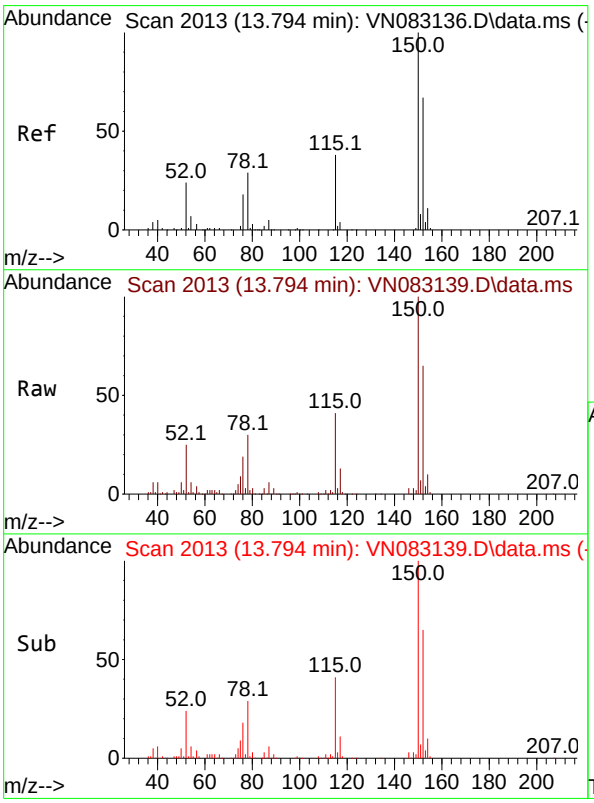
Tgt Ion:173 Resp: 808

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 55.6 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

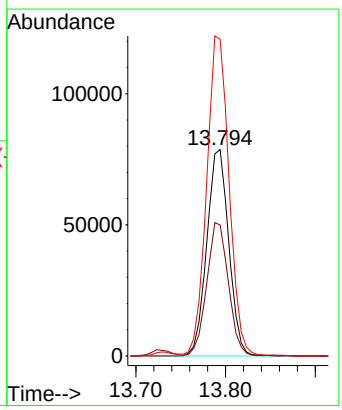


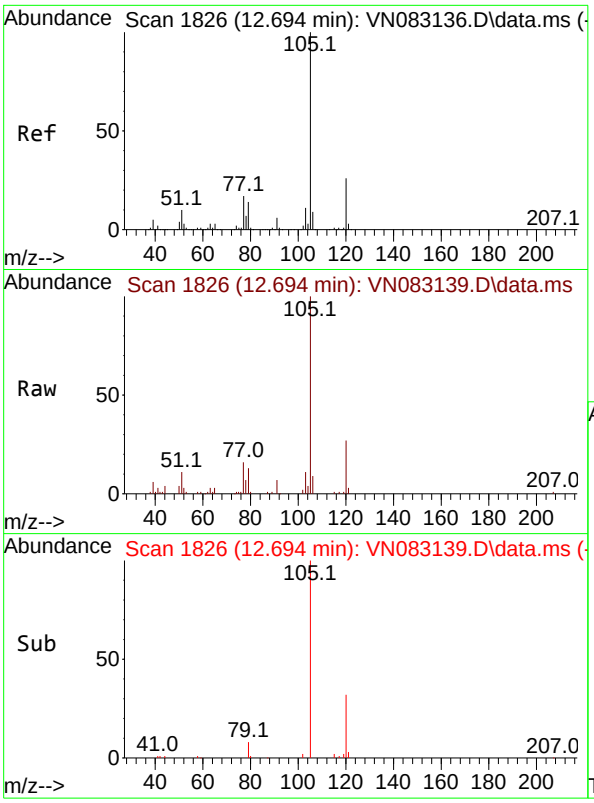




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:152 Resp: 133537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.0 | 30.6 | 91.6 |
| 150 | 158.4 | 0.0 | 348.6 |

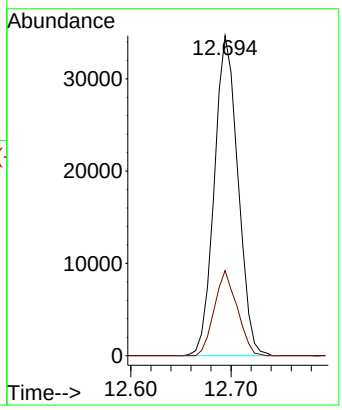





#73
Isopropylbenzene
Concen: 5.080 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:105 Resp: 5674

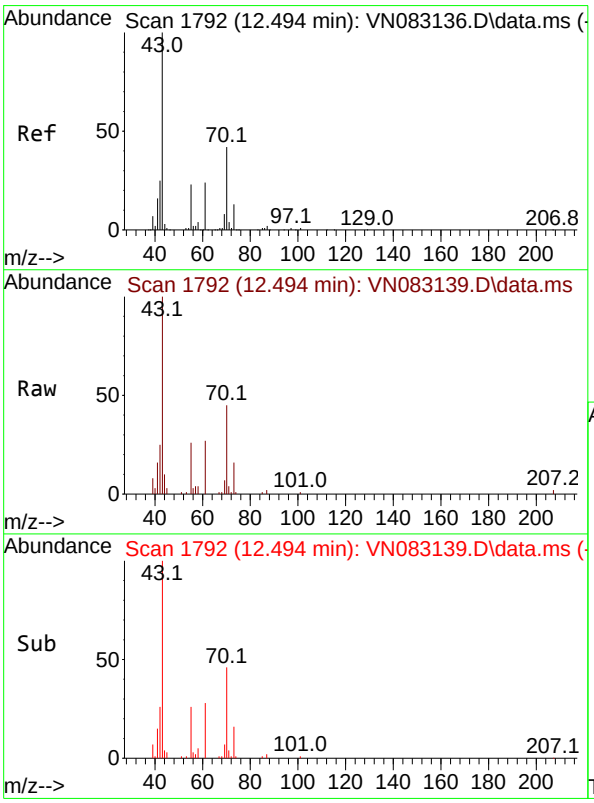
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.7 | 12.9 | 38.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

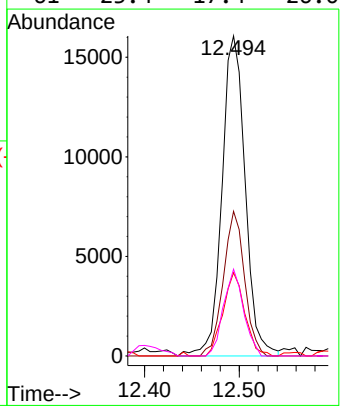
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

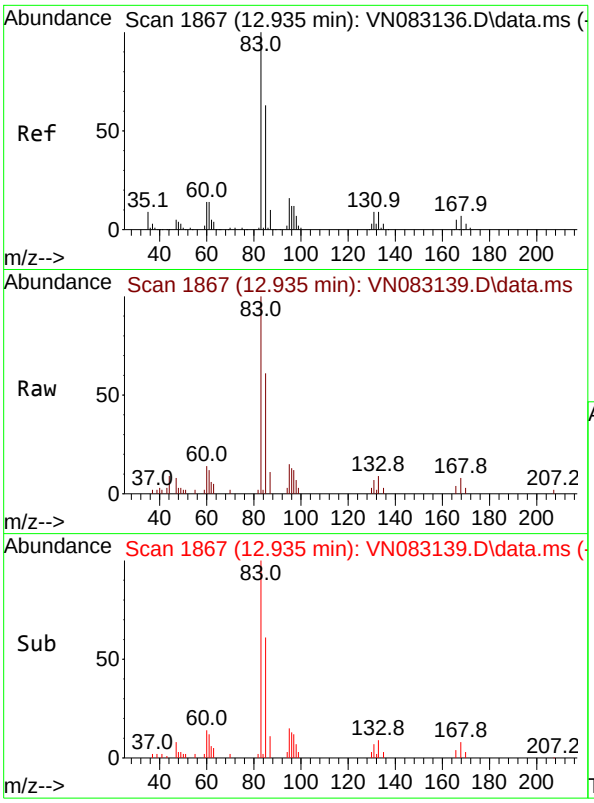



#74
N-amyl acetate
Concen: 5.014 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 43 Resp: 27393

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 41.4 | 29.8 | 44.6 |
| 55 | 24.3 | 18.7 | 28.1 |
| 61 | 23.4 | 17.4 | 26.0 |

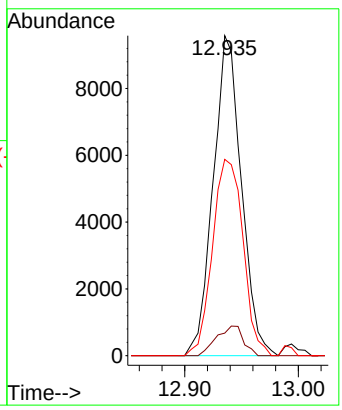





#75
1,1,2,2-Tetrachloroethane
Concen: 5.227 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 83 Resp: 1651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 8.8 | 5.0 | 14.9 |
| 85 | 66.4 | 31.9 | 95.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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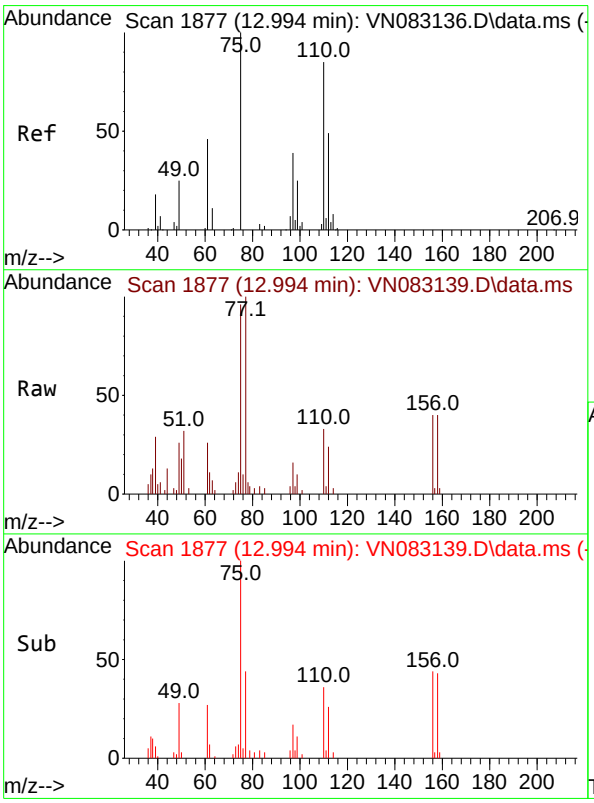
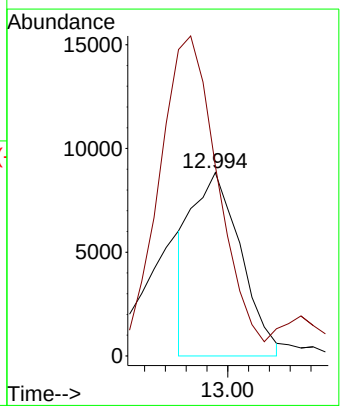
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

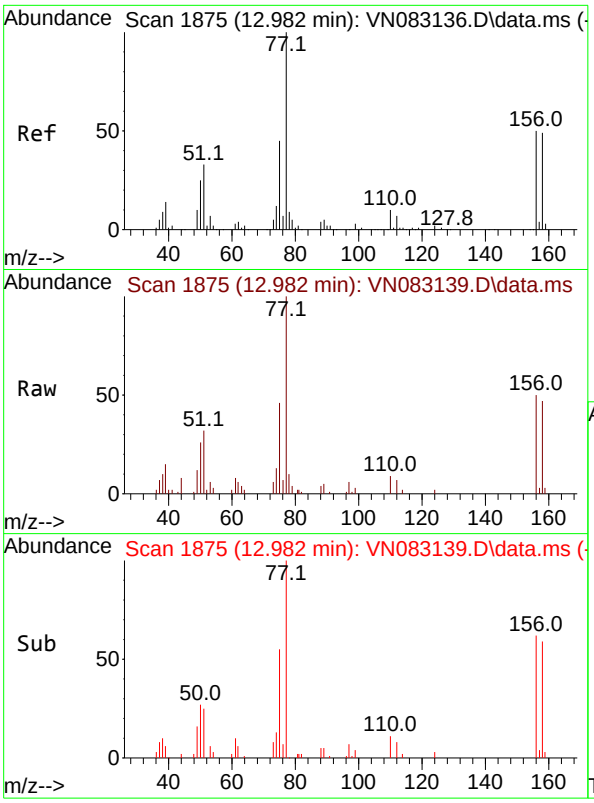



#76
1,2,3-Trichloropropane
Concen: 4.927 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 14463

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 212.4 | 110.9 | 332.6 |

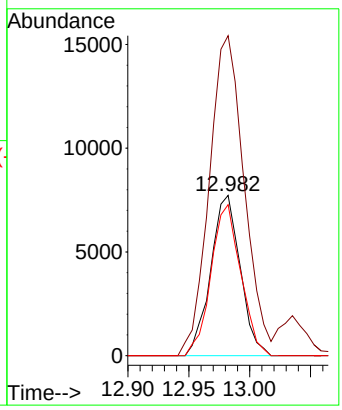





#77
Bromobenzene
Concen: 5.249 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:156 Resp: 1302

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 235.8 | 111.3 | 333.8 |
| 158 | 95.0 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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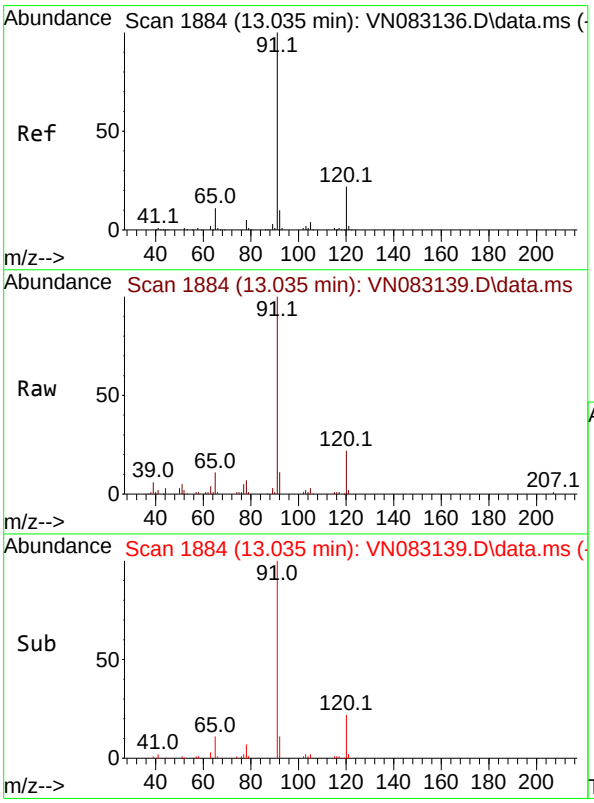
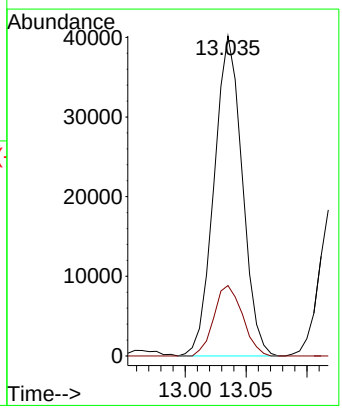
Supervised By :Mahesh Dadoda 08/09/2024

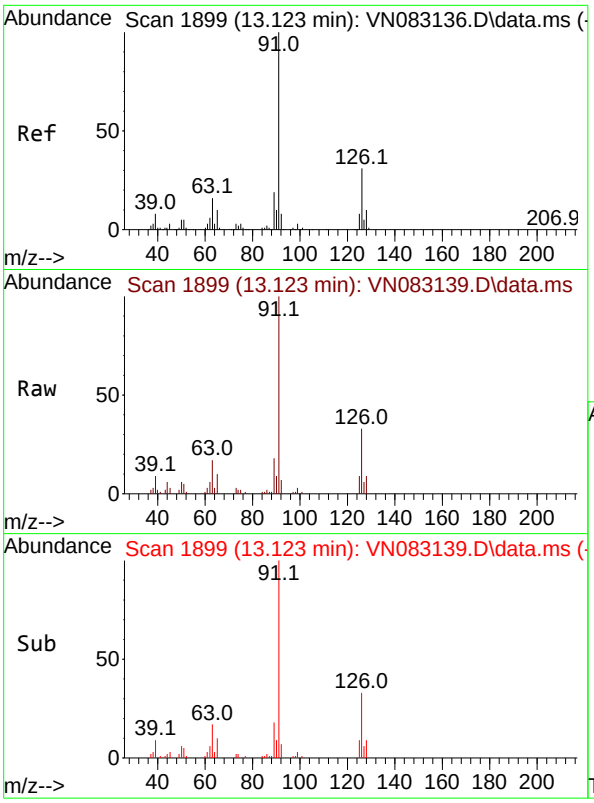



#78
n-propylbenzene
Concen: 5.035 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 91 Resp: 64751

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.4 | 10.9 | 32.9 |






#79
2-Chlorotoluene
Concen: 5.050 ug/l
RT: 13.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 91 Resp: 4117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.6 | 16.2 | 48.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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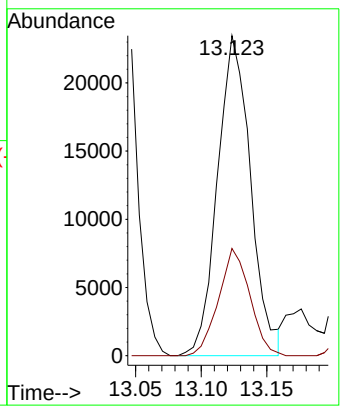
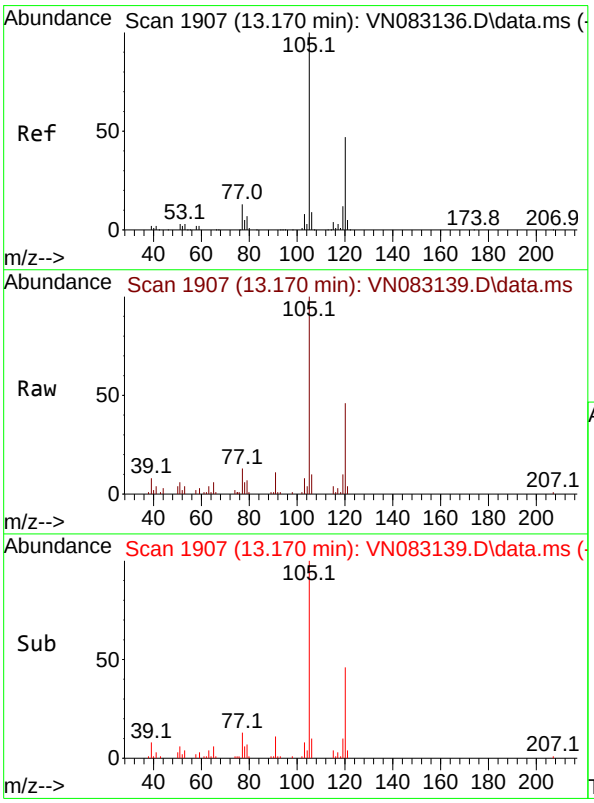
Supervised By :Mahesh Dadoda 08/09/2024

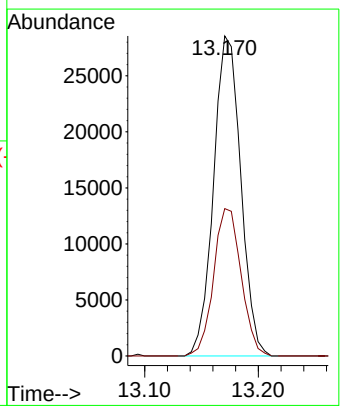


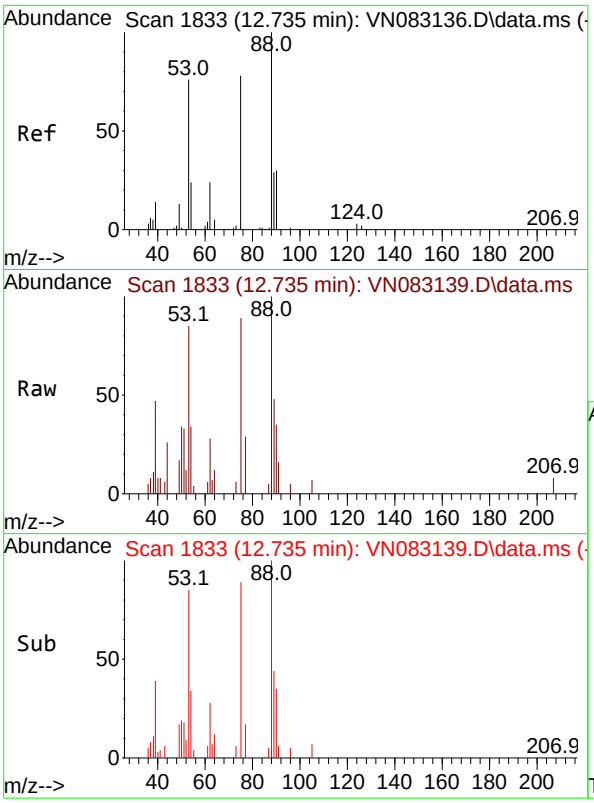




#80
1,3,5-Trimethylbenzene
Concen: 5.088 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:105 Resp: 47581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.5 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 5.254 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 707

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 100.6 | 88.4 | 132.6 |
| 89 | 41.6 | 36.3 | 54.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

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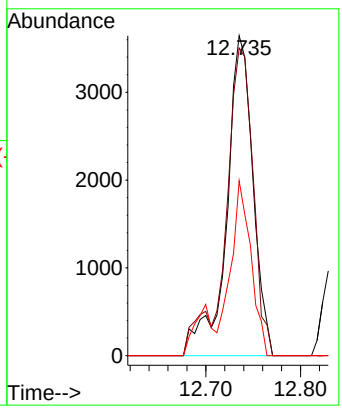
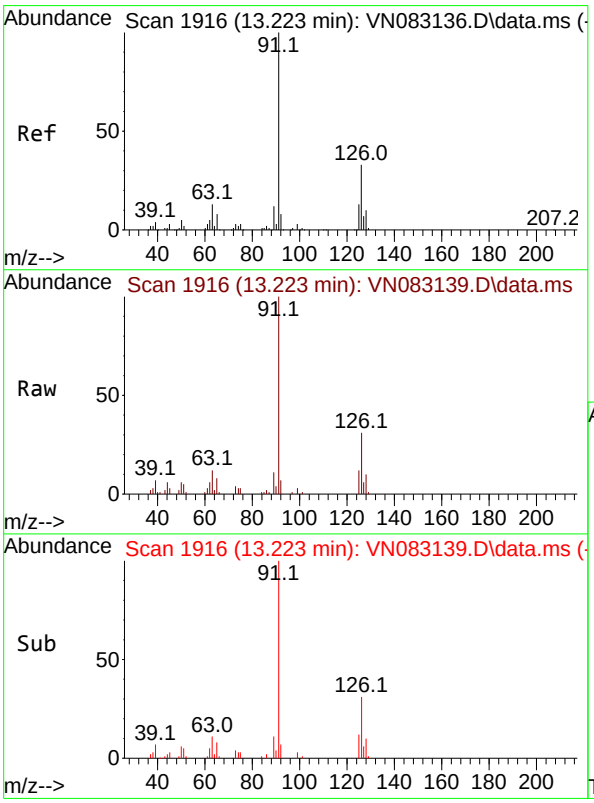
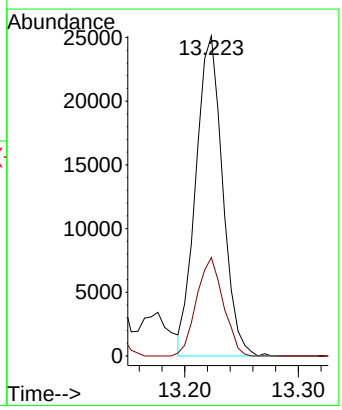


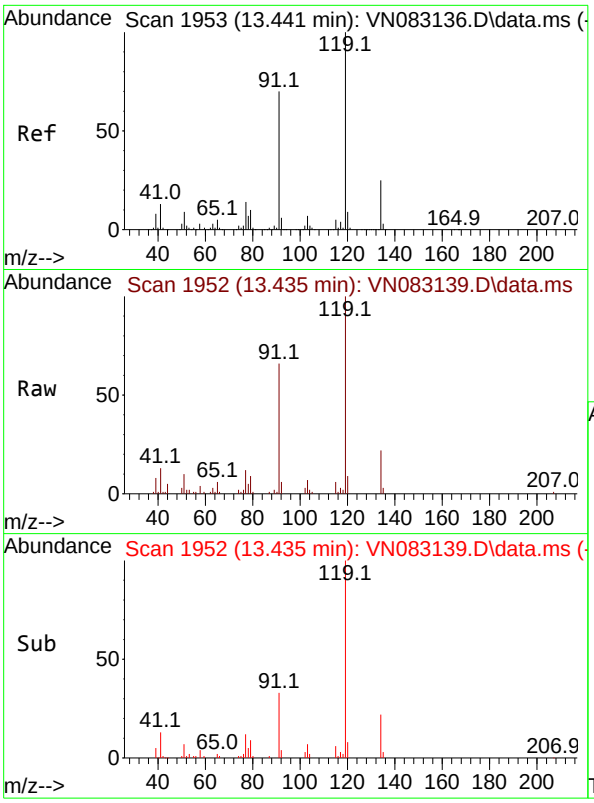




#82
4-Chlorotoluene
Concen: 5.030 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 91 Resp: 41137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.6 | 16.2 | 48.6 |

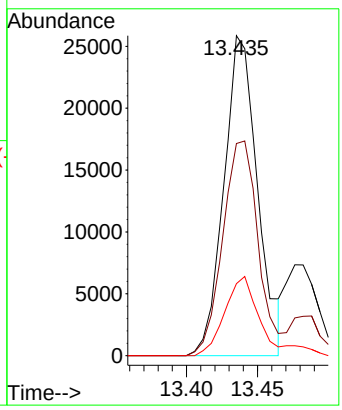





#83
tert-Butylbenzene
Concen: 5.159 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:119 Resp: 4272

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.0 | 35.0 | 105.1 |
| 134 | 26.6 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
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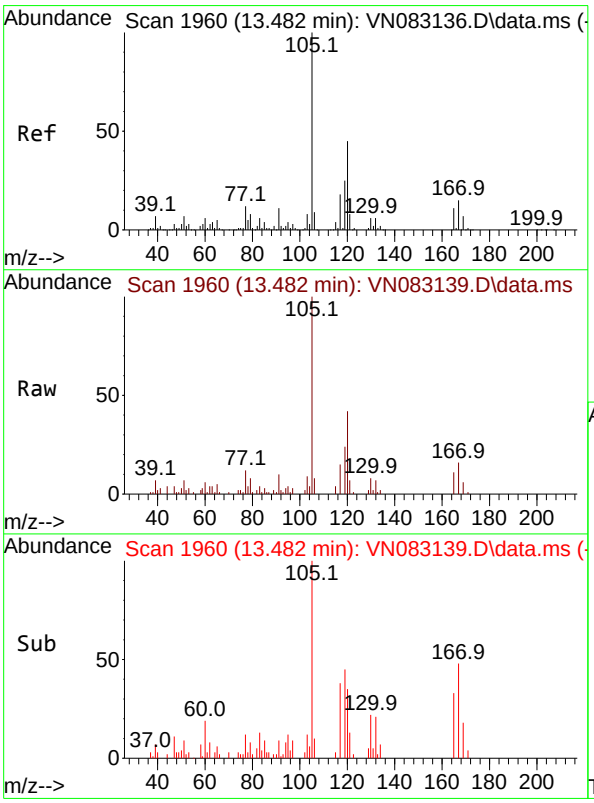
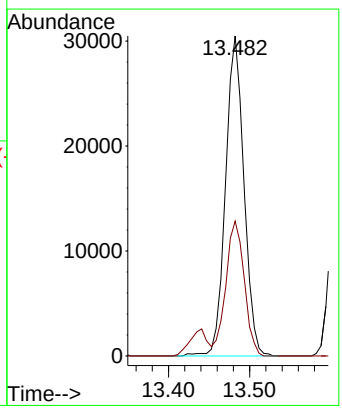
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

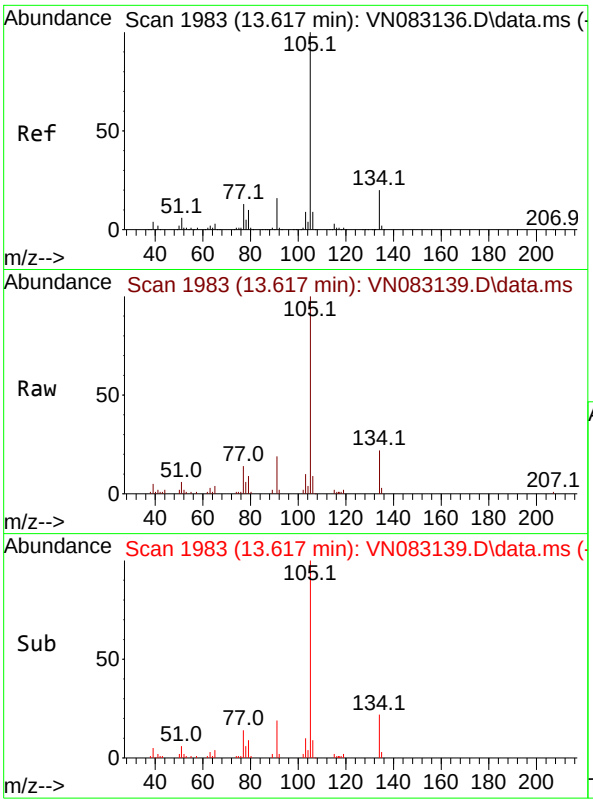



#84
1,2,4-Trimethylbenzene
Concen: 5.090 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:105 Resp: 47965

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 42.3 | 21.9 | 65.8 |






#85
sec-Butylbenzene
Concen: 5.040 ug/l
RT: 13.617 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

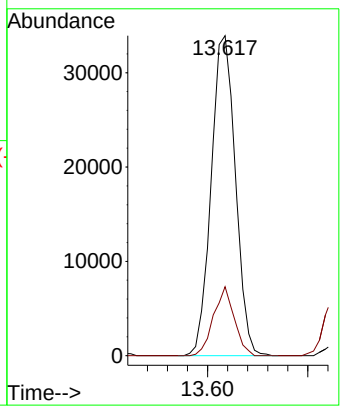
Tgt Ion:105 Resp: 5694

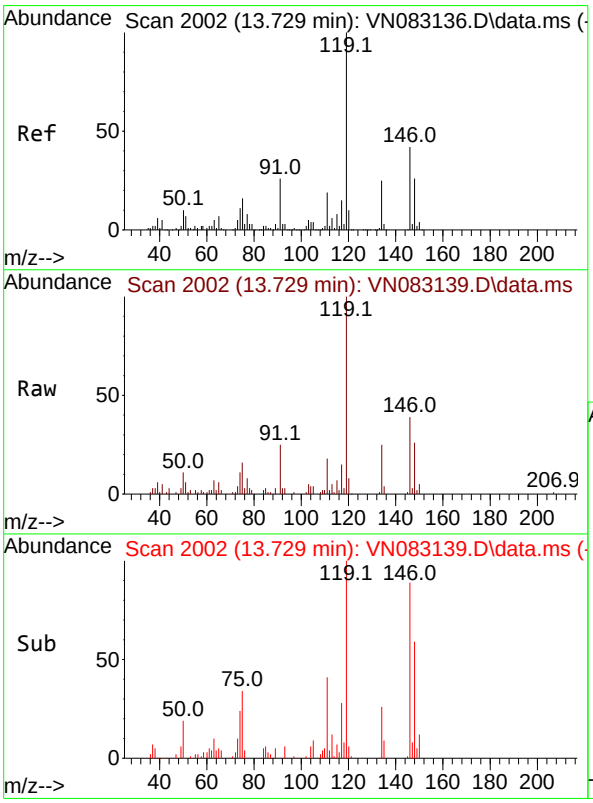
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 18.5 | 9.8 | 29.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

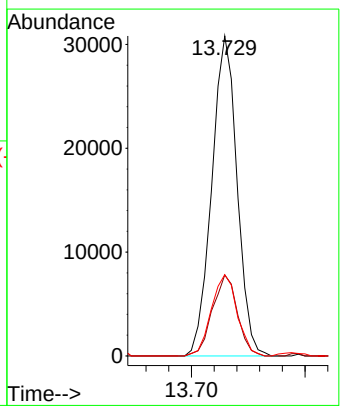


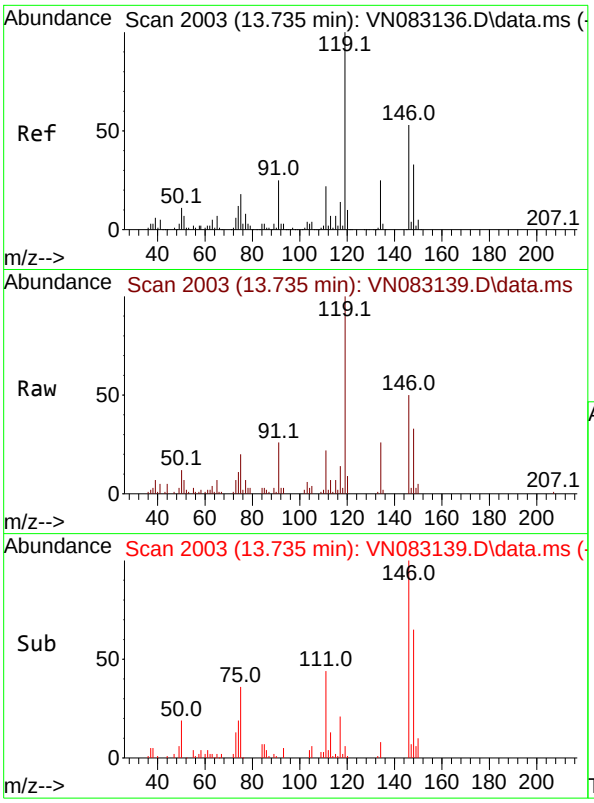




#86
p-Isopropyltoluene
Concen: 5.108 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:119 Resp: 47654

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 24.9 | 13.0 | 39.0 |
| 91 | 26.0 | 12.3 | 36.9 |

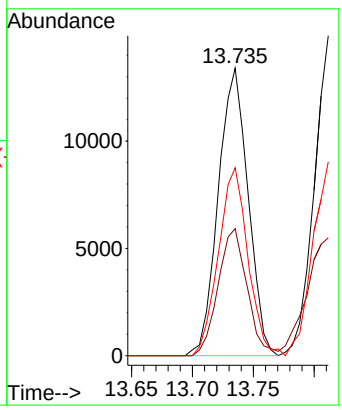





#87
1,3-Dichlorobenzene
Concen: 4.887 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:146 Resp: 2281

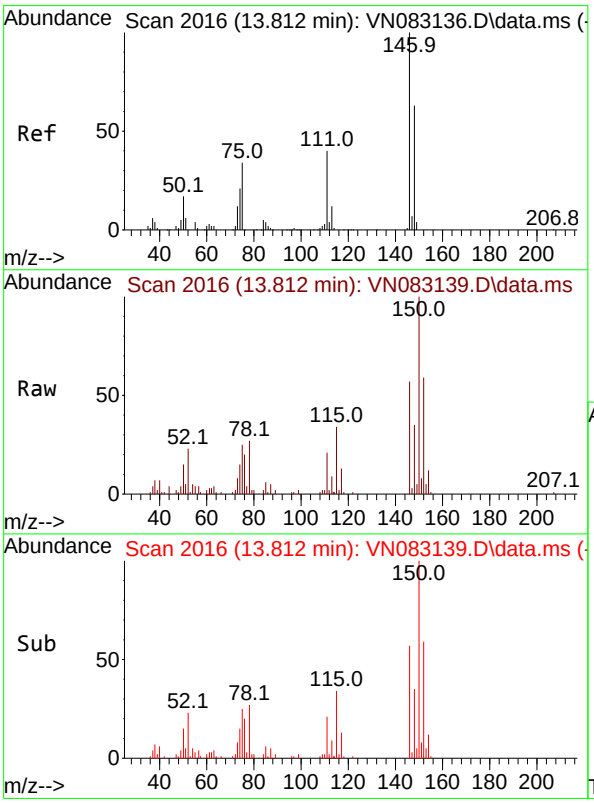
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.0 | 20.6 | 61.9 |
| 148 | 64.7 | 31.8 | 95.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

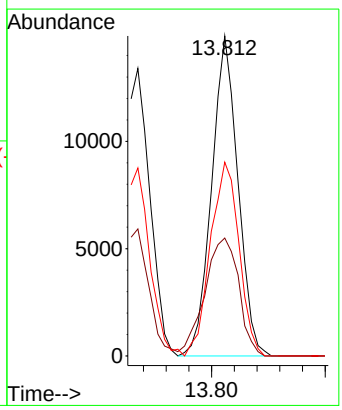
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

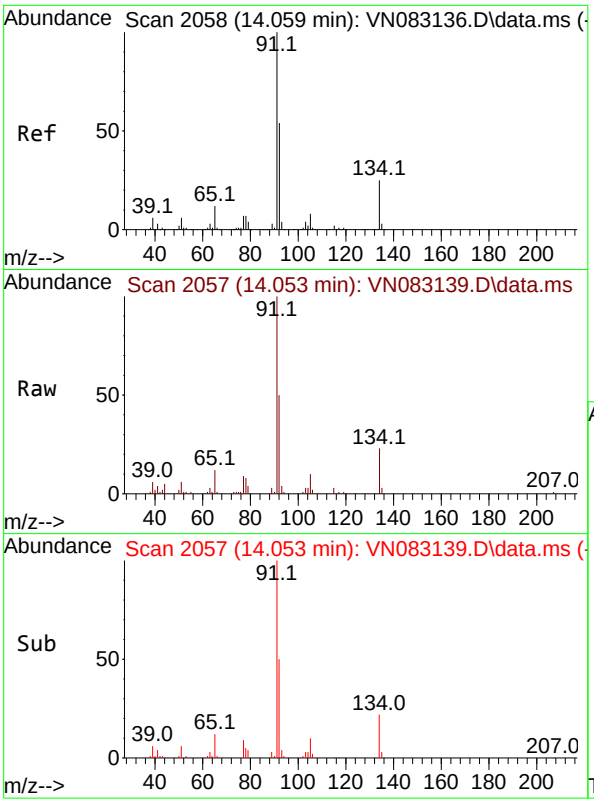



#88
1,4-Dichlorobenzene
Concen: 5.093 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:146 Resp: 23971

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 47.6 | 20.1 | 60.3 |
| 148 | 65.9 | 32.2 | 96.6 |

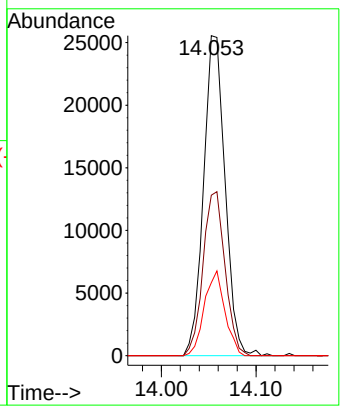





#89
n-Butylbenzene
Concen: 4.983 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 91 Resp: 4028

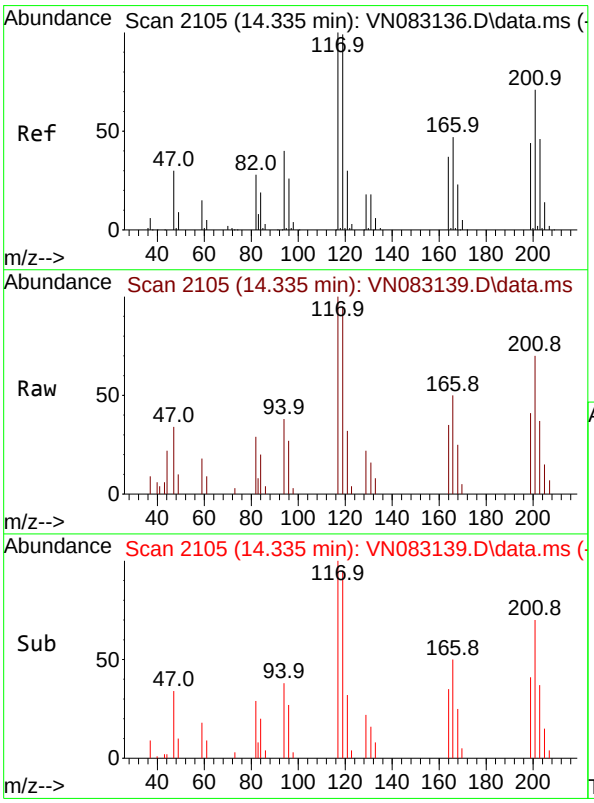
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 52.3 | 26.1 | 78.3 |
| 134 | 25.3 | 12.1 | 36.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

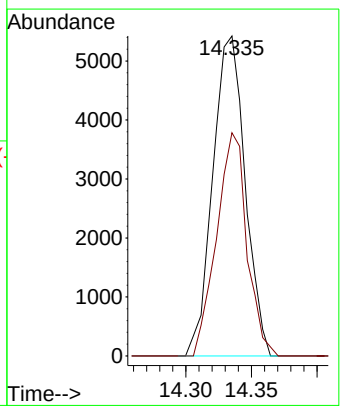
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

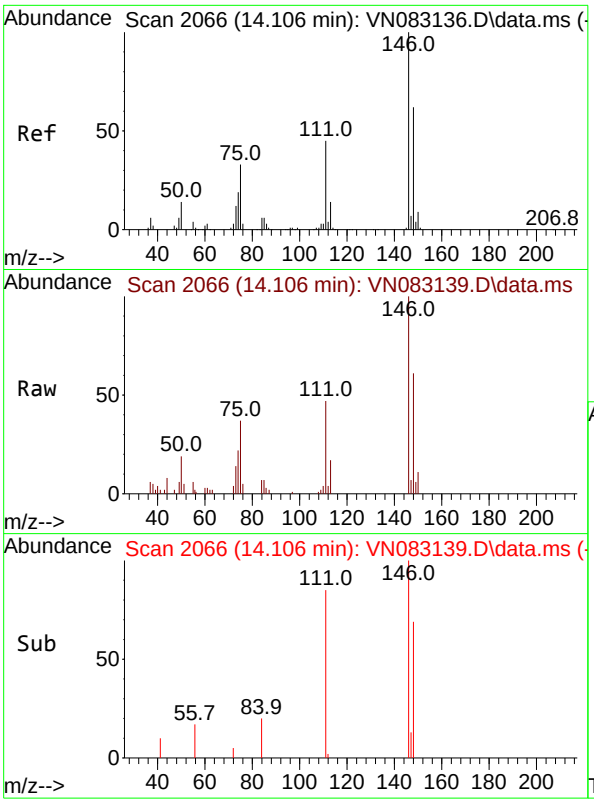



#90
Hexachloroethane
Concen: 5.158 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:117 Resp: 9298

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.4 | 35.8 | 107.3 |

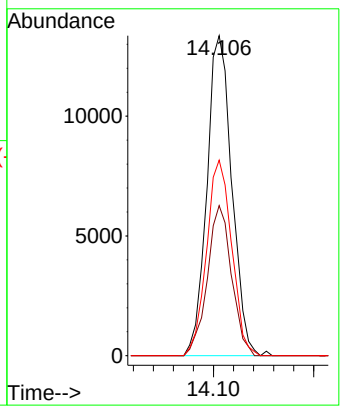





#91
1,2-Dichlorobenzene
Concen: 5.117 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:146 Resp: 2311

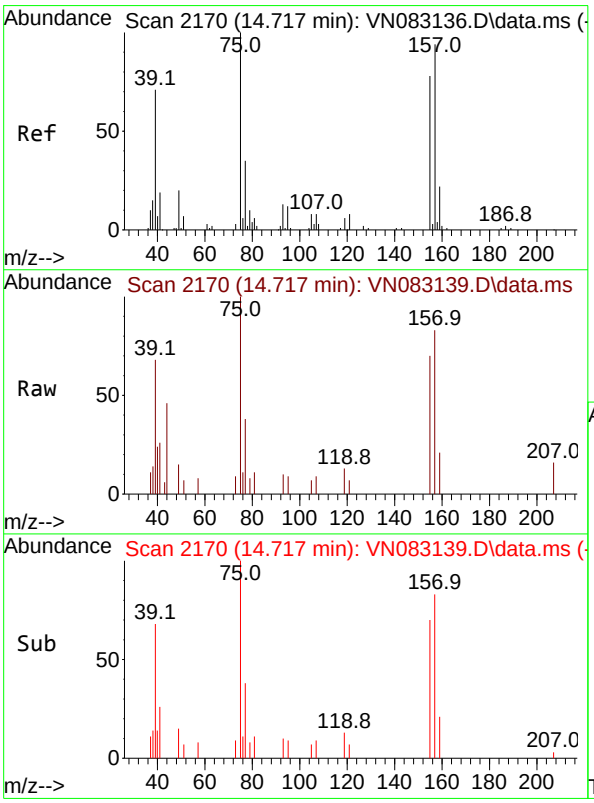
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.5 | 21.4 | 64.2 |
| 148 | 61.5 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

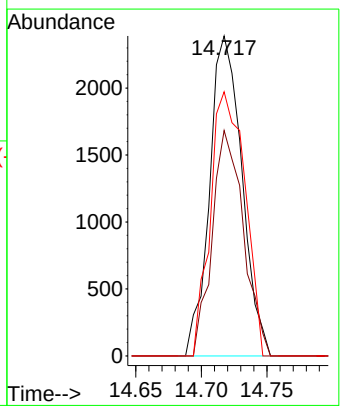
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

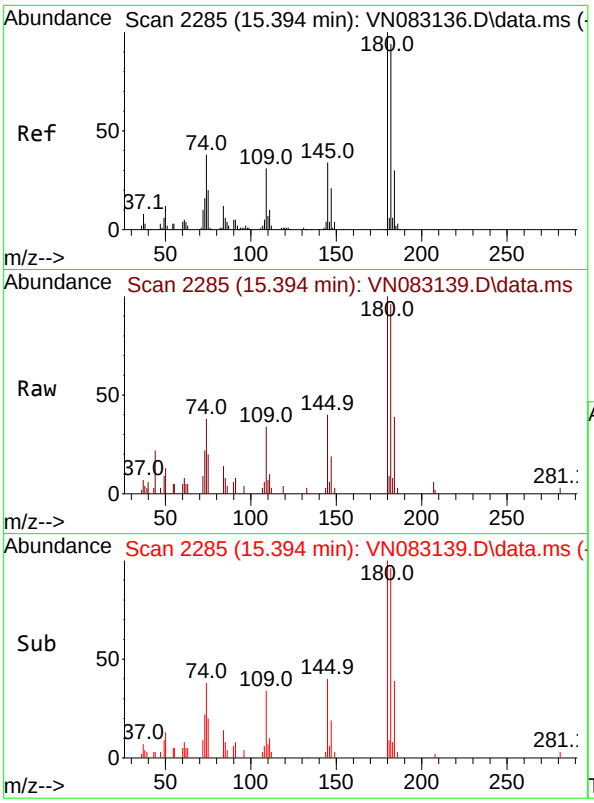



#92
1,2-Dibromo-3-Chloropropane
Concen: 5.345 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion: 75 Resp: 4097

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 68.1 | 36.6 | 109.8 |
| 157 | 88.3 | 46.9 | 140.6 |

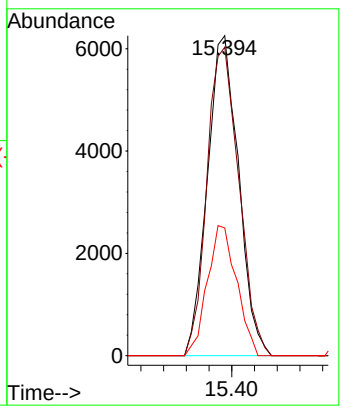





#93
1,2,4-Trichlorobenzene
Concen: 4.710 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:180 Resp: 1192

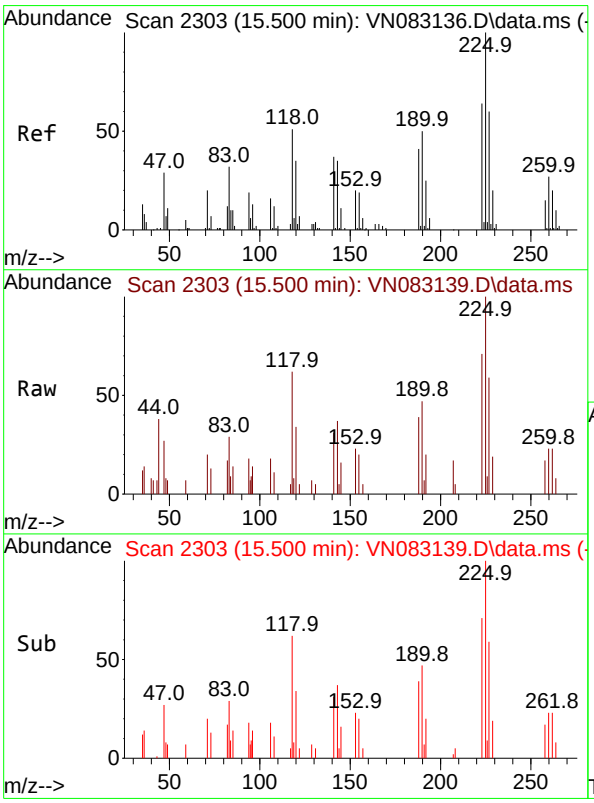
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 98.9 | 47.3 | 141.8 |
| 145 | 38.1 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

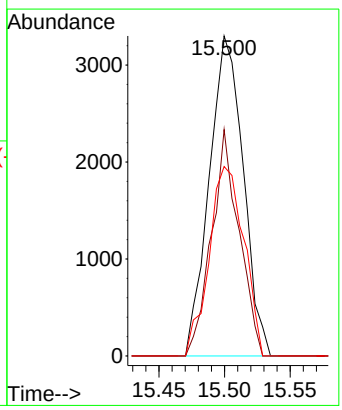
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

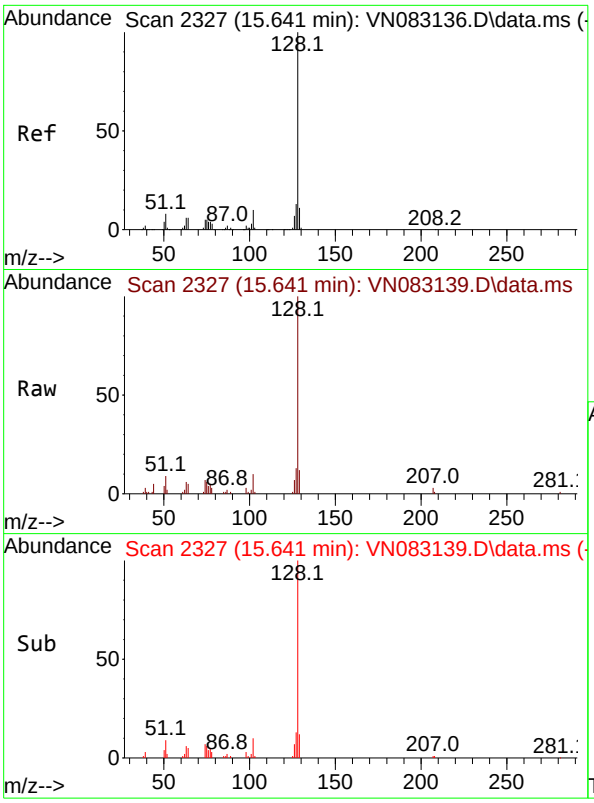



#94
Hexachlorobutadiene
Concen: 5.282 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:225 Resp: 5946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 57.3 | 31.9 | 95.7 |
| 227 | 60.5 | 32.5 | 97.5 |

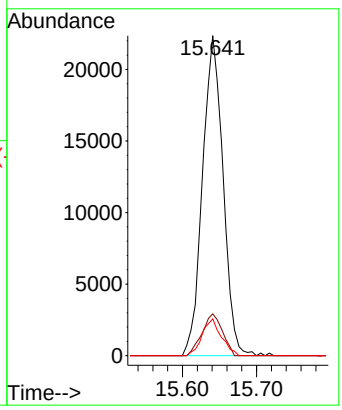





#95
Naphthalene
Concen: 4.811 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:128 Resp: 4313

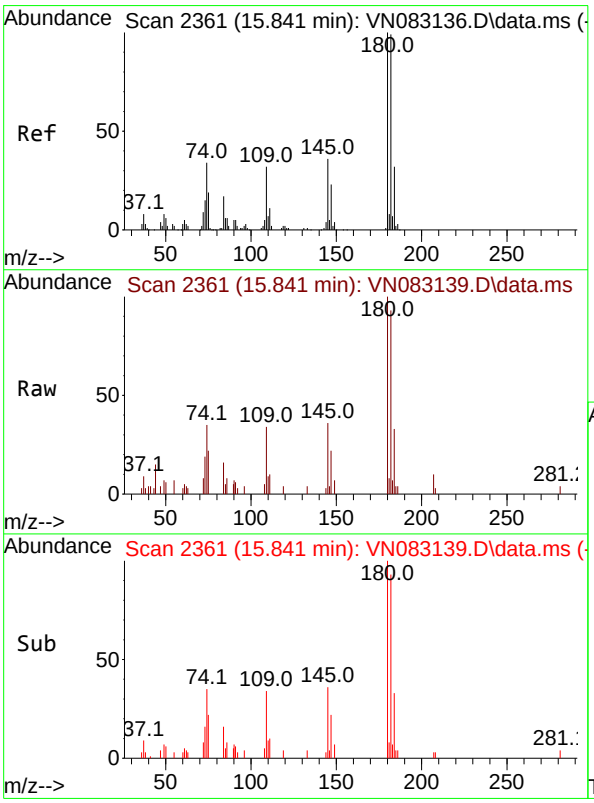
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.0 | 10.6 | 16.0 |
| 129 | 10.8 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC005

**Manual Integrations**
**APPROVED**

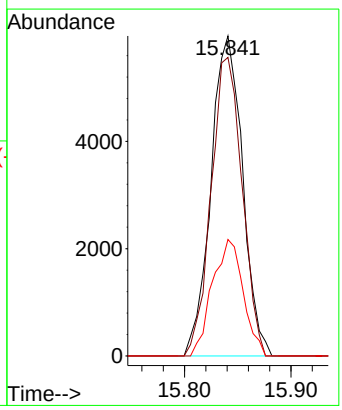
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024




#96
1,2,3-Trichlorobenzene
Concen: 4.905 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.000 min
Lab File: VN083139.D
Acq: 07 Aug 2024 12:10

Tgt Ion:180 Resp: 12285

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 91.5 | 48.9 | 146.8 |
| 145 | 35.5 | 16.8 | 50.4 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083140.D
Acq On : 07 Aug 2024 12:34
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:19:42 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 202290 | 50.000 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 347394 | 50.000 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 292647 | 50.000 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 122922 | 50.000 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 0.000 | 65 | 0d | 0.000 | ug/l | | |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = | 0.000%# | | | |
| 35) Dibromofluoromethane | 0.000 | 113 | 0d | 0.000 | ug/l | | |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 0.000%# | | | |
| 50) Toluene-d8 | 0.000 | 98 | 0d | 0.000 | ug/l | | |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = | 0.000%# | | | |
| 62) 4-Bromofluorobenzene | 0.000 | 95 | 0d | 0.000 | ug/l | | |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = | 0.000%# | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 2193 | 0.956 | ug/l | | 84 |
| 3) Chloromethane | 2.365 | 50 | 2331 | 0.993 | ug/l | | 96 |
| 4) Vinyl Chloride | 2.512 | 62 | 2457 | 1.025 | ug/l | | 94 |
| 6) Chloroethane | 3.124 | 64 | 1763 | 1.176 | ug/l | # | 54 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 3645 | 0.921 | ug/l | | 88 |
| 8) Diethyl Ether | 3.965 | 74 | 1368 | 0.929 | ug/l | | 95 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 2064 | 0.946 | ug/l | # | 88 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 2328 | 1.038 | ug/l | # | 72 |
| 14) Allyl chloride | 5.018 | 41 | 4894 | 1.155 | ug/l | # | 75 |
| 15) Acrylonitrile | 5.724 | 53 | 6198 | 5.036 | ug/l | | 94 |
| 16) Acetone | 4.442 | 43 | 5369 | 4.765 | ug/l | | 95 |
| 17) Carbon Disulfide | 4.718 | 76 | 7603 | 1.159 | ug/l | | 99 |
| 18) Methyl Acetate | 5.036 | 43 | 3987 | 1.188 | ug/l | # | 89 |
| 19) Methyl tert-butyl Ether | 5.795 | 73 | 7900 | 0.976 | ug/l | | 96 |
| 20) Methylene Chloride | 5.283 | 84 | 3255 | 1.255 | ug/l | # | 63 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 2425 | 1.046 | ug/l | # | 75 |
| 22) Diisopropyl ether | 6.677 | 45 | 7871 | 0.988 | ug/l | | 94 |
| 23) Vinyl Acetate | 6.606 | 43 | 39044 | 4.783 | ug/l | # | 94 |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 4189 | 0.965 | ug/l | # | 83 |
| 25) 2-Butanone | 7.495 | 43 | 9164 | 5.297 | ug/l | | 93 |
| 26) 2,2-Dichloropropane | 7.489 | 77 | 3741 | 0.928 | ug/l | | 95 |
| 27) cis-1,2-Dichloroethene | 7.495 | 96 | 2919 | 1.044 | ug/l | | 90 |
| 28) Bromochloromethane | 7.812 | 49 | 1883 | 1.061 | ug/l | # | 92 |
| 29) Tetrahydrofuran | 7.842 | 42 | 5490 | 4.909 | ug/l | # | 87 |
| 30) Chloroform | 7.971 | 83 | 4457 | 0.988 | ug/l | | 95 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 4076 | 0.955 | ug/l | # | 49 |
| 36) 1,1-Dichloropropene | 8.377 | 75 | 3393 | 1.034 | ug/l | | 97 |
| 37) Ethyl Acetate | 7.565 | 43 | 4617 | 1.257 | ug/l | # | 90 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 3422 | 0.926 | ug/l | # | 84 |
| 39) Methylcyclohexane | 9.600 | 83 | 3974 | 0.986 | ug/l | | 87 |
| 40) Benzene | 8.606 | 78 | 9334 | 0.955 | ug/l | | 99 |
| 41) Methacrylonitrile | 7.783 | 41 | 2618 | 1.254 | ug/l | # | 85 |
| 42) 1,2-Dichloroethane | 8.677 | 62 | 3457 | 0.971 | ug/l | | 82 |
| 43) Isopropyl Acetate | 8.689 | 43 | 14981 | 0.753 | ug/l | # | 80 |
| 44) Trichloroethene | 9.359 | 130 | 2151 | 0.925 | ug/l | | 98 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 2194 | 0.946 | ug/l | | 93 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083140.D
Acq On : 07 Aug 2024 12:34
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:19:42 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 46) Dibromomethane | 9.700 | 93 | 1513 | 0.911 ug/l | 95 |
| 47) Bromodichloromethane | 9.894 | 83 | 3783 | 1.015 ug/l # | 83 |
| 48) Methyl methacrylate | 9.683 | 41 | 3518 | 1.159 ug/l | 96 |
| 49) 1,4-Dioxane | 9.700 | 88 | 1089 | 19.880 ug/l # | 77 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 15872 | 4.570 ug/l | 90 |
| 52) Toluene | 10.630 | 92 | 5723 | 0.927 ug/l | 97 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 3260 | 0.851 ug/l | 100 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 3797 | 0.932 ug/l # | 87 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 1963 | 0.887 ug/l | 96 |
| 56) Ethyl methacrylate | 10.871 | 69 | 3843 | 0.921 ug/l # | 90 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 3837 | 0.973 ug/l | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 8453 | 4.794 ug/l | 93 |
| 59) 2-Hexanone | 11.200 | 43 | 12761 | 4.749 ug/l | 100 |
| 60) Dibromochloromethane | 11.353 | 129 | 2283 | 0.853 ug/l | 99 |
| 61) 1,2-Dibromoethane | 11.465 | 107 | 2200 | 0.947 ug/l | 98 |
| 64) Tetrachloroethene | 11.106 | 164 | 1872 | 0.966 ug/l | 93 |
| 65) Chlorobenzene | 11.888 | 112 | 6259 | 0.968 ug/l | 93 |
| 66) 1,1,1,2-Tetrachloroethane | 11.965 | 131 | 2168 | 0.951 ug/l # | 63 |
| 67) Ethyl Benzene | 11.965 | 91 | 11455 | 0.966 ug/l | 98 |
| 68) m/p-Xylenes | 12.065 | 106 | 8266 | 1.860 ug/l | 94 |
| 69) o-Xylene | 12.400 | 106 | 4113 | 0.938 ug/l | 98 |
| 70) Styrene | 12.412 | 104 | 6441 | 0.875 ug/l | 90 |
| 71) Bromoform | 12.577 | 173 | 1561 | 0.903 ug/l # | 88 |
| 73) Isopropylbenzene | 12.694 | 105 | 10459 | 1.017 ug/l | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 5755 | 1.144 ug/l # | 92 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 3034 | 1.043 ug/l | 99 |
| 76) 1,2,3-Trichloropropane | 12.988 | 75 | 3031m | 1.122 ug/l | |
| 77) Bromobenzene | 12.977 | 156 | 2212 | 0.969 ug/l | 86 |
| 78) n-propylbenzene | 13.029 | 91 | 11800 | 0.997 ug/l | 99 |
| 79) 2-Chlorotoluene | 13.124 | 91 | 7735 | 1.031 ug/l | 90 |
| 80) 1,3,5-Trimethylbenzene | 13.176 | 105 | 8552 | 0.994 ug/l | 95 |
| 82) 4-Chlorotoluene | 13.224 | 91 | 8018 | 1.065 ug/l | 93 |
| 83) tert-Butylbenzene | 13.435 | 119 | 7628 | 1.001 ug/l | 98 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 8397 | 0.968 ug/l | 100 |
| 85) sec-Butylbenzene | 13.618 | 105 | 10411 | 1.001 ug/l | 96 |
| 86) p-Isopropyltoluene | 13.735 | 119 | 8247 | 0.960 ug/l | 99 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 4598 | 1.070 ug/l | 97 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 4578m | 1.057 ug/l | |
| 89) n-Butylbenzene | 14.053 | 91 | 7008 | 0.942 ug/l | 100 |
| 90) Hexachloroethane | 14.335 | 117 | 1524 | 0.918 ug/l | 93 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 4279 | 1.029 ug/l | 95 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.718 | 75 | 763 | 1.081 ug/l | 78 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 2493 | 1.070 ug/l | 97 |
| 94) Hexachlorobutadiene | 15.512 | 225 | 1181 | 1.140 ug/l | 92 |
| 95) Naphthalene | 15.641 | 128 | 8430 | 1.021 ug/l # | 96 |
| 96) 1,2,3-Trichlorobenzene | 15.835 | 180 | 2389 | 1.036 ug/l | 96 |

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

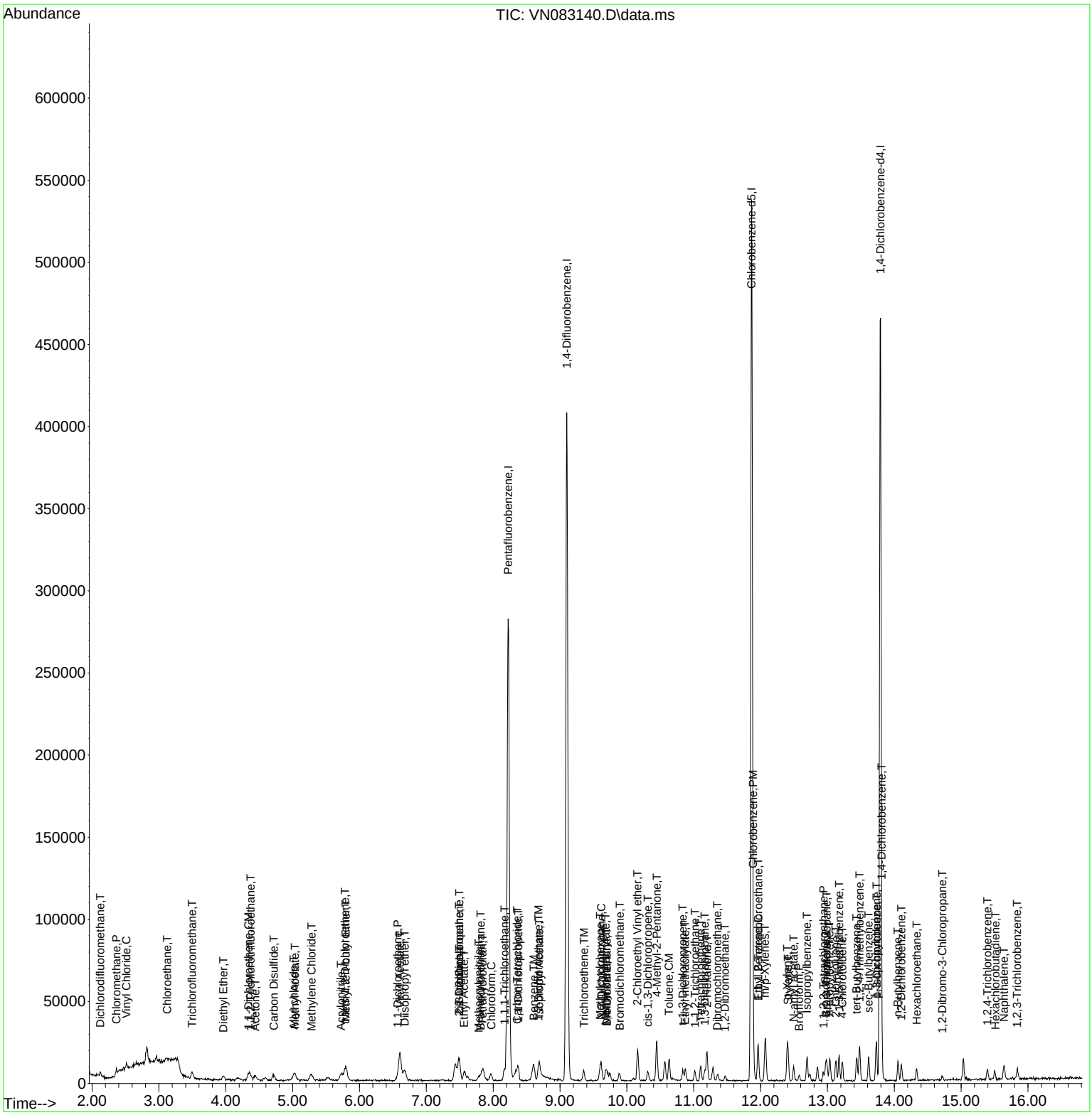
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083140.D
Acq On : 07 Aug 2024 12:34
Operator : JC\MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 8 Sample Multiplier: 1

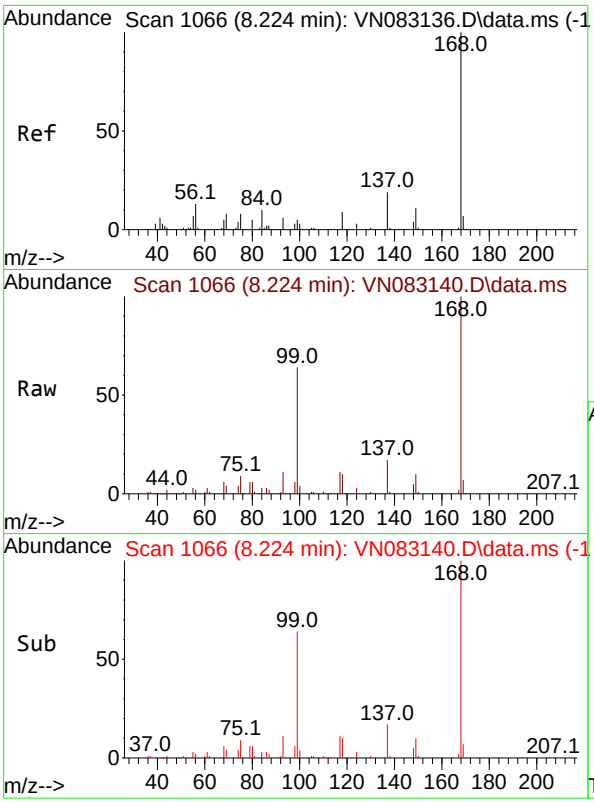
Quant Time: Aug 08 06:19:42 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 05:50:26 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

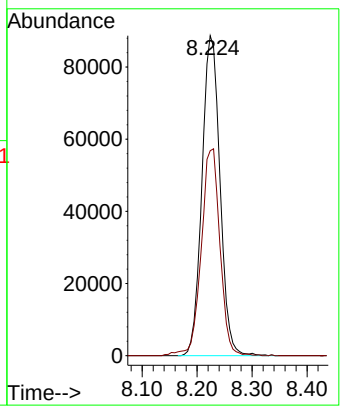





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:168 Resp: 20229

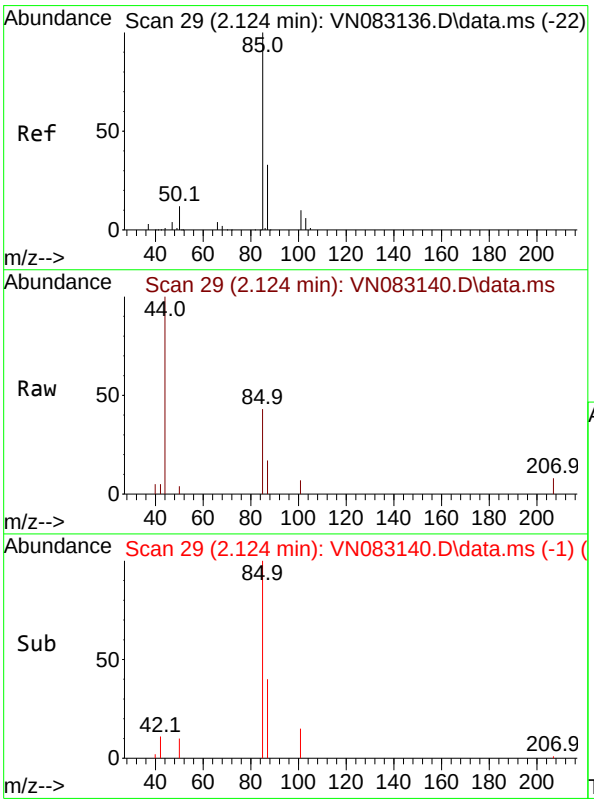
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 64.1 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

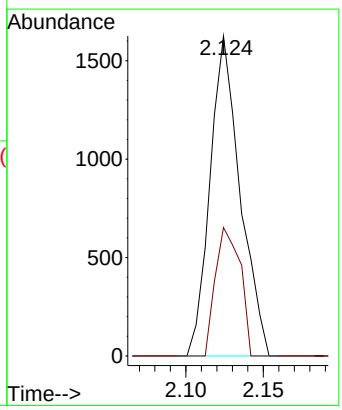
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

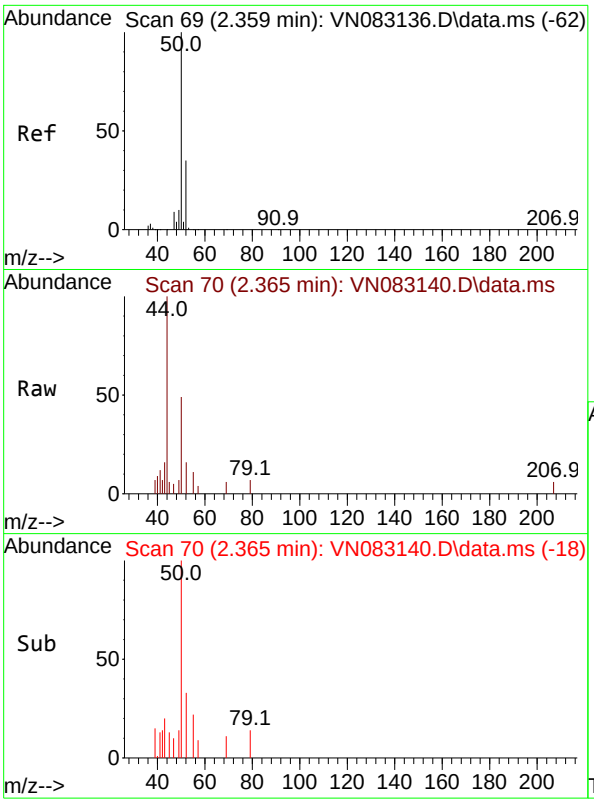



#2
Dichlorodifluoromethane
Concen: 0.956 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 85 Resp: 2193

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 40.2 | 15.7 | 47.0 |






#3
Chloromethane
Concen: 0.993 ug/l
RT: 2.365 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 50 Resp: 233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.3 | 25.0 | 37.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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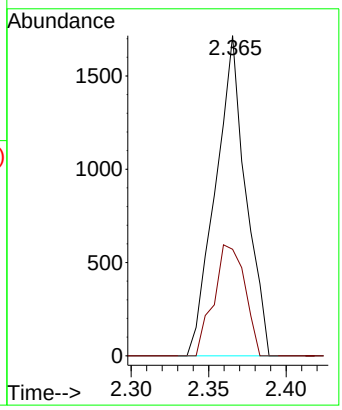
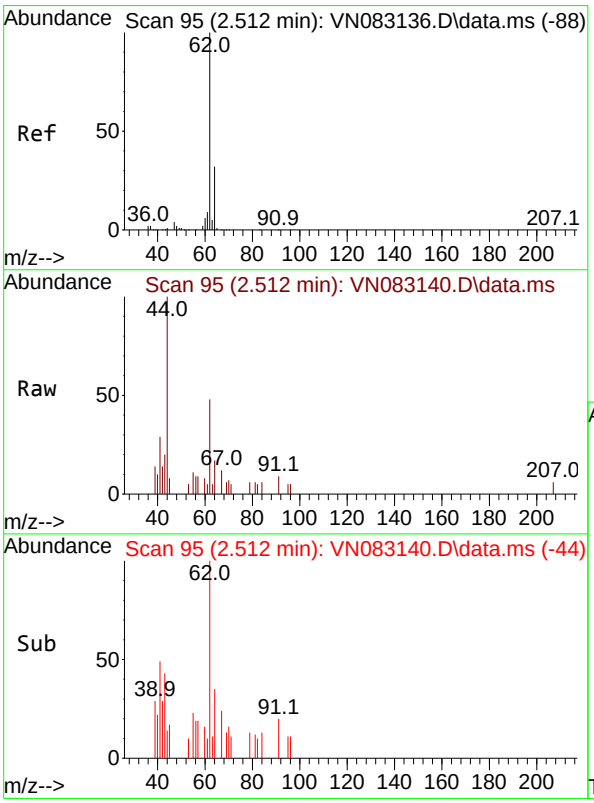
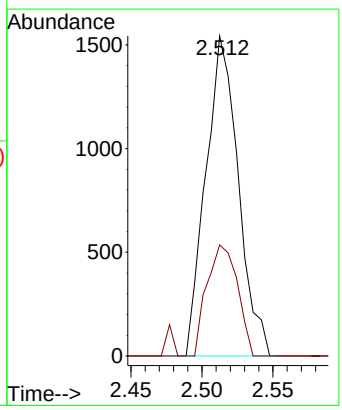


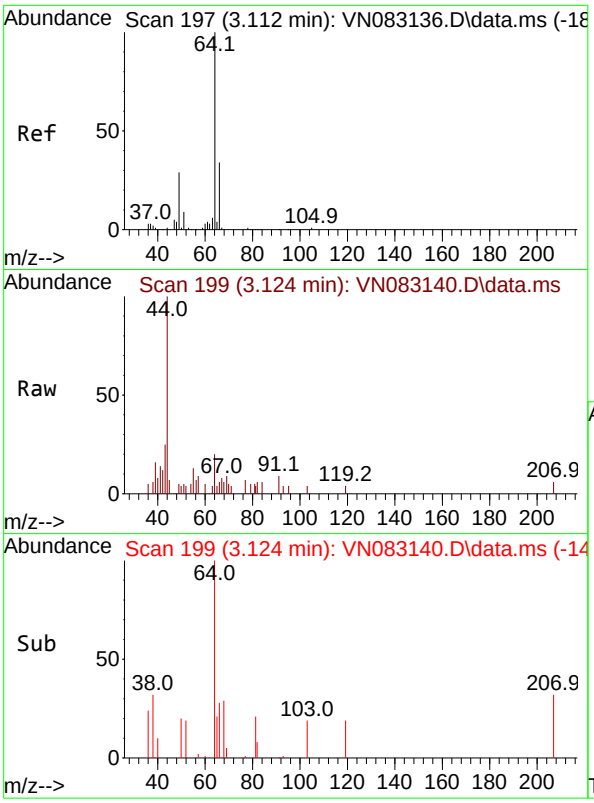




#4
Vinyl Chloride
Concen: 1.025 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 62 Resp: 2457

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 34.7 | 25.0 | 37.6 |

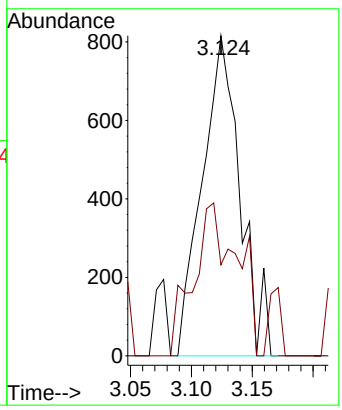





#6
Chloroethane
Concen: 1.176 ug/l
RT: 3.124 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 64 Resp: 176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 7.1 | 26.6 | 40.0# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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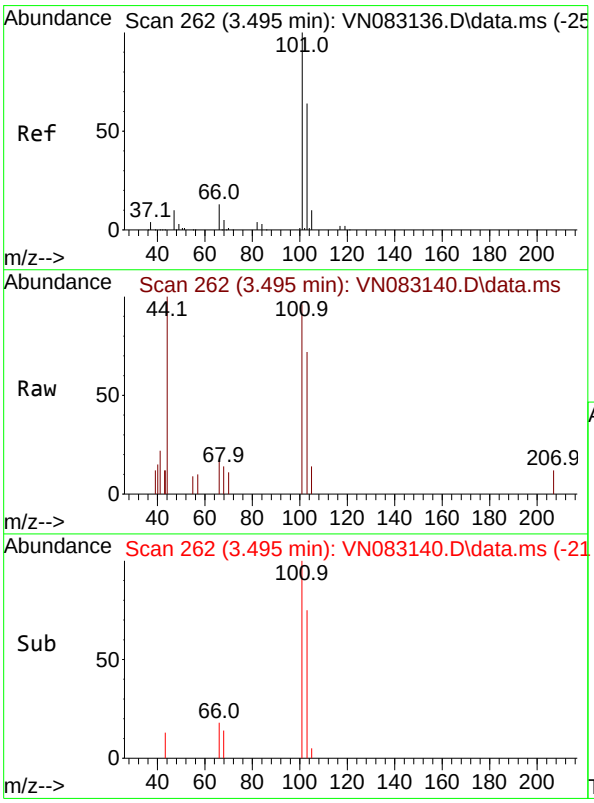
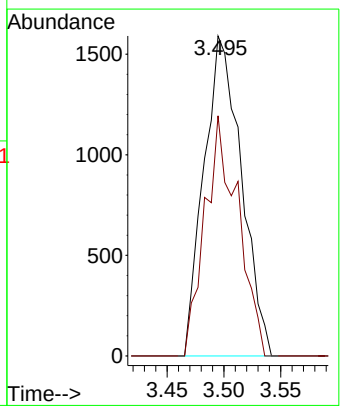
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

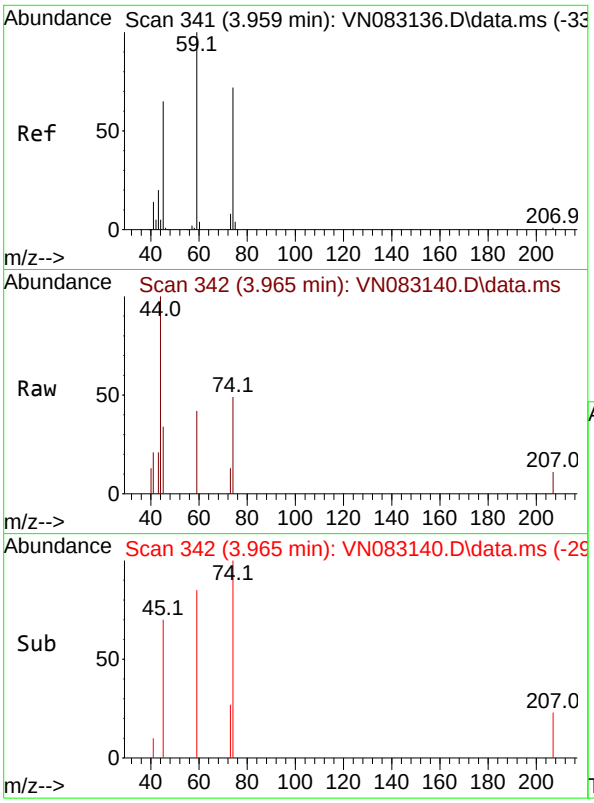



#7
Trichlorofluoromethane
Concen: 0.921 ug/l
RT: 3.495 min Scan# 262
Delta R.T. -0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:101 Resp: 3645

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 75.0 | 52.7 | 79.1 |






#8
Diethyl Ether
Concen: 0.929 ug/l
RT: 3.965 min Scan# 34
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

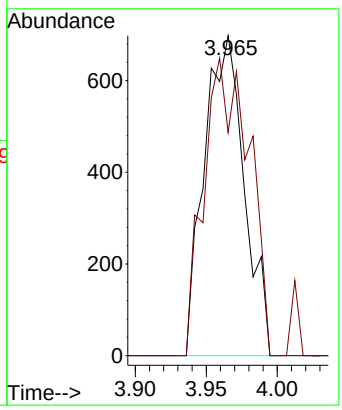
Tgt Ion: 74 Resp: 136

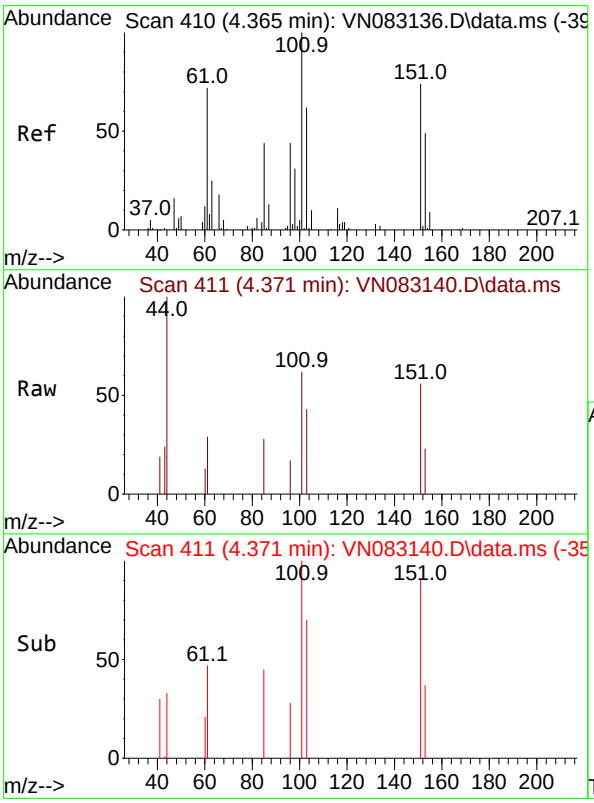
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 105.1 | 55.5 | 166.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

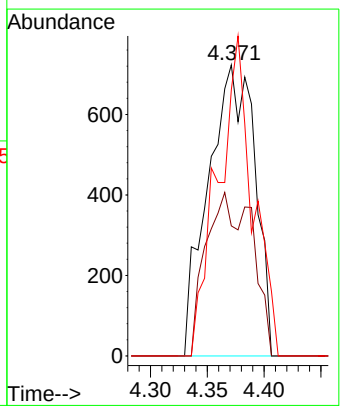


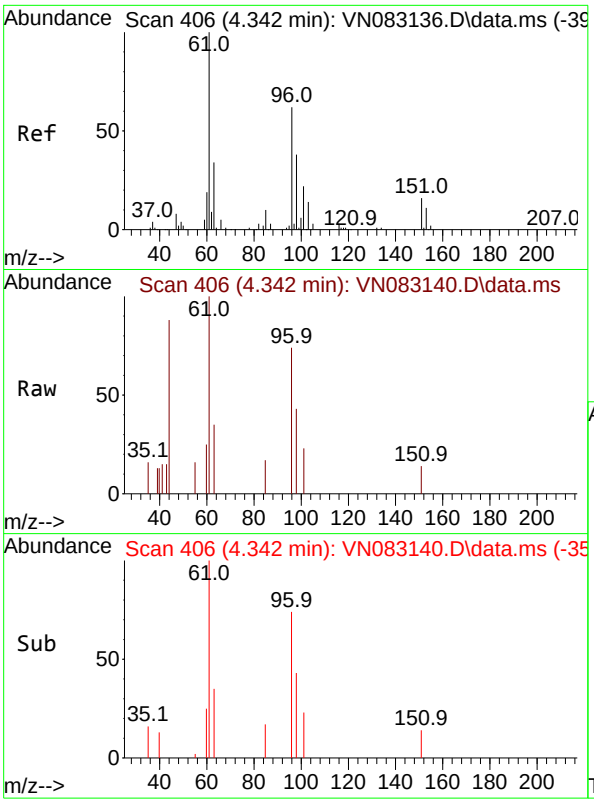




#9
1,1,2-Trichlorotrifluoroethane
Concen: 0.946 ug/l
RT: 4.371 min Scan# 411
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:101 Resp: 2064

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 37.3 | 38.3 | 57.5# |
| 151 | 82.8 | 59.3 | 88.9 |

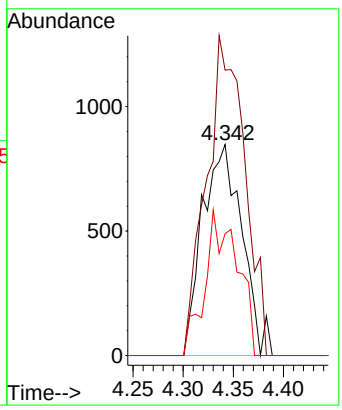





#12
1,1-Dichloroethene
Concen: 1.038 ug/l
RT: 4.342 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 96 Resp: 232

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 135.3 | 149.7 | 224.5# |
| 98 | 57.8 | 50.1 | 75.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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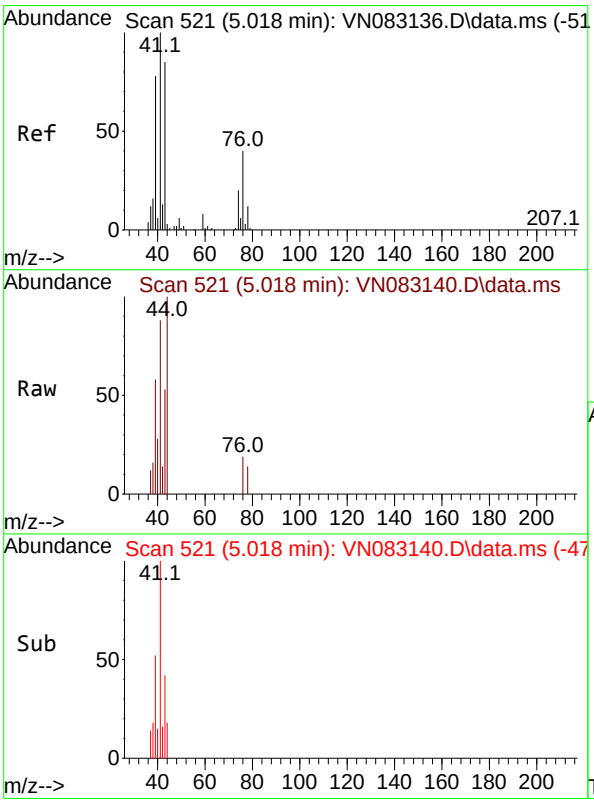
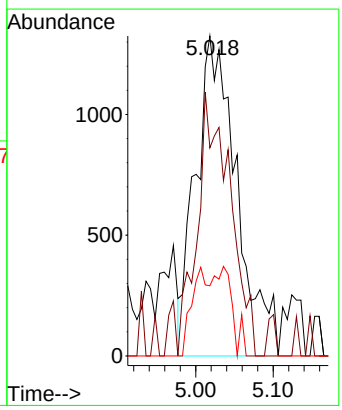
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

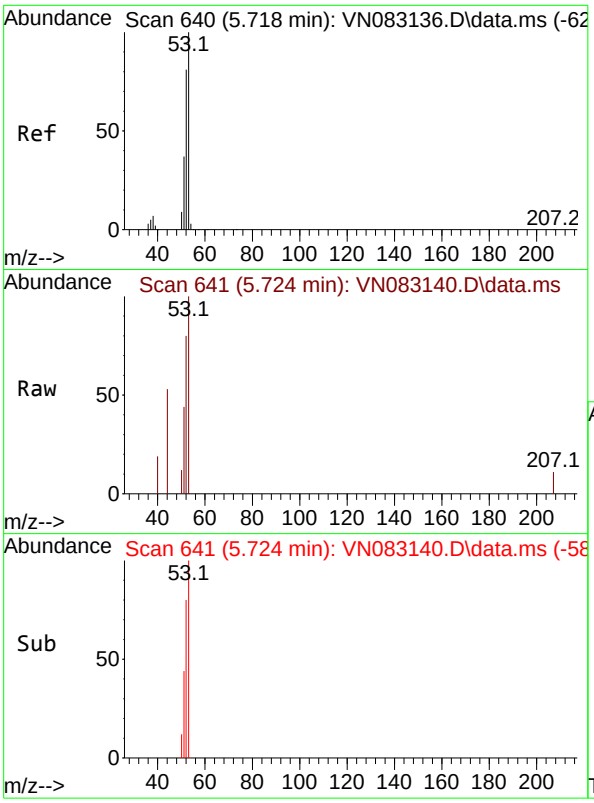



#14
Allyl chloride
Concen: 1.155 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 41 Resp: 4894

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 65.9 | 67.8 | 101.6# |
| 76 | 11.9 | 25.8 | 38.8# |

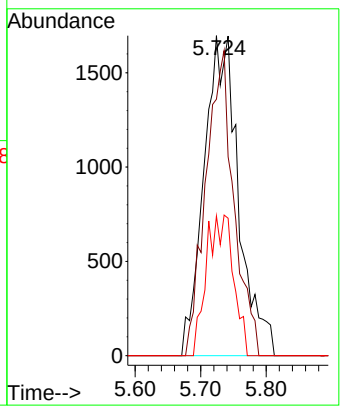





#15
Acrylonitrile
Concen: 5.036 ug/l
RT: 5.724 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 53 Resp: 619

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 77.5 | 66.6 | 100.0 |
| 51 | 34.3 | 30.1 | 45.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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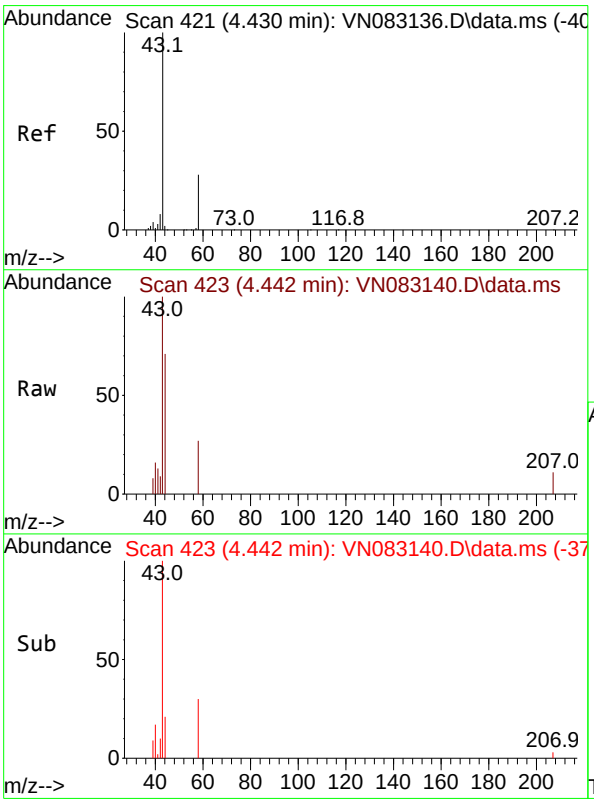
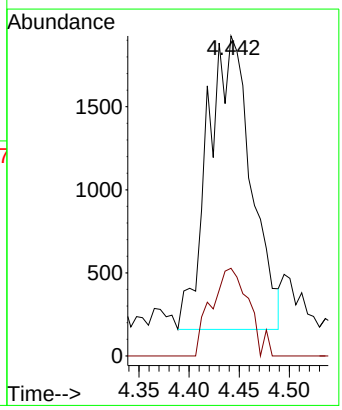
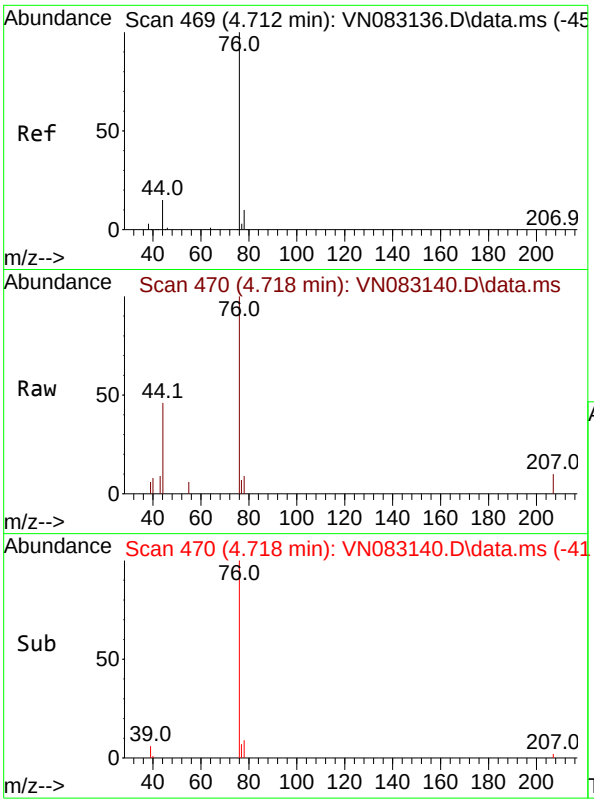



#16
Acetone
Concen: 4.765 ug/l
RT: 4.442 min Scan# 423
Delta R.T. 0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 5369

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 29.9 | 21.8 | 32.6 |

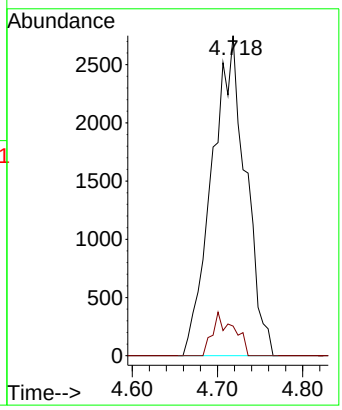





#17
Carbon Disulfide
Concen: 1.159 ug/l
RT: 4.718 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 76 Resp: 760

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.3 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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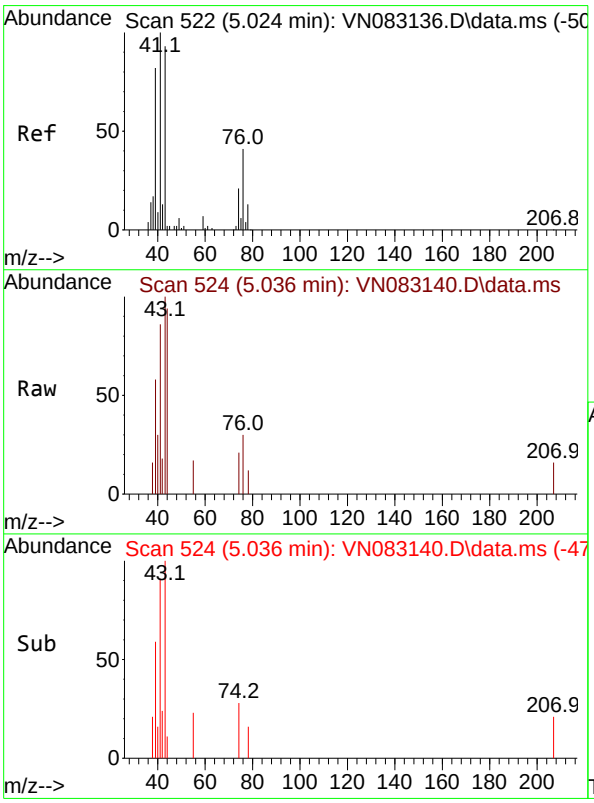
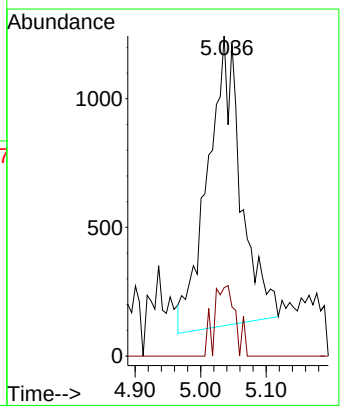
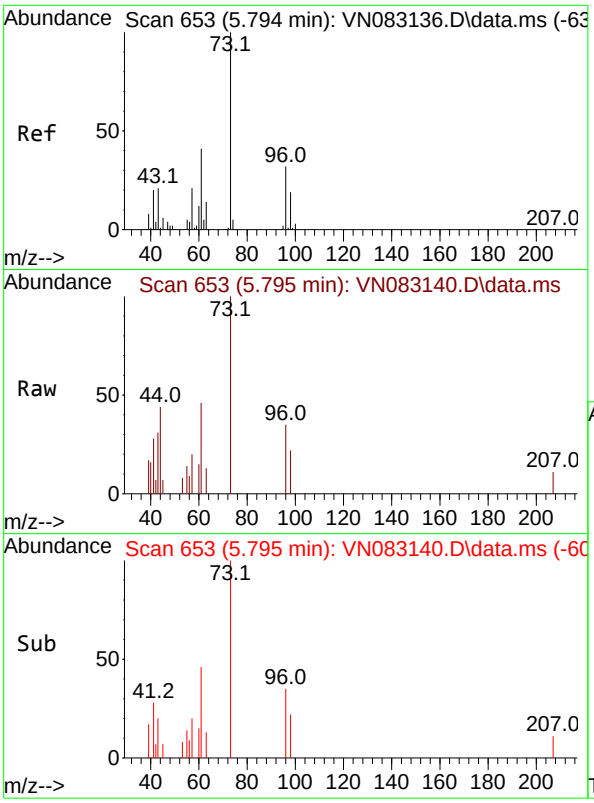



#18
Methyl Acetate
Concen: 1.188 ug/l
RT: 5.036 min Scan# 524
Delta R.T. 0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 3987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 15.5 | 16.3 | 24.5# |






#19
Methyl tert-butyl Ether
Concen: 0.976 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

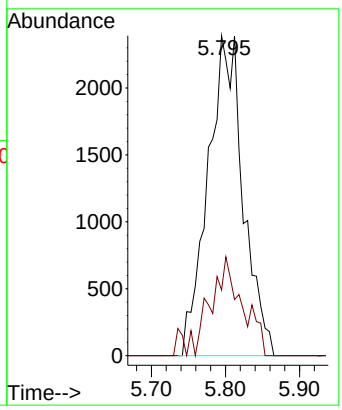
Tgt Ion: 73 Resp: 790

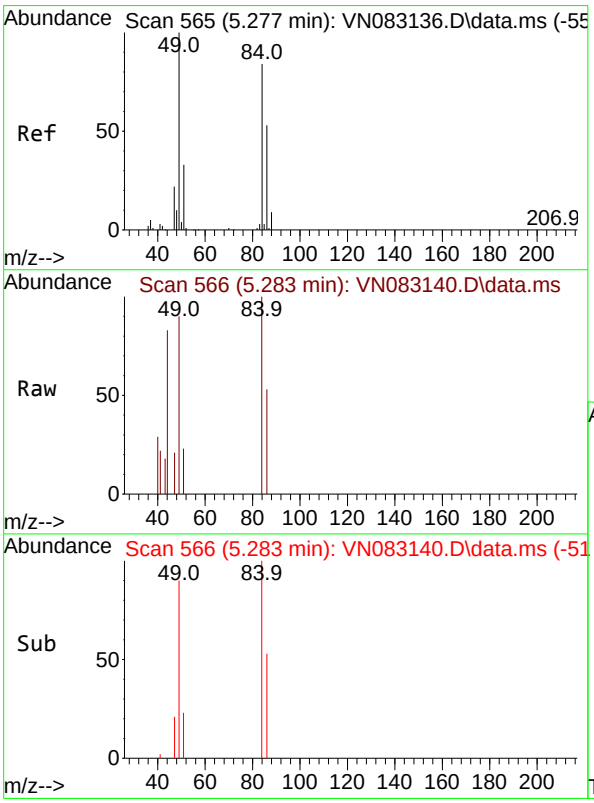
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 20.5 | 17.9 | 26.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

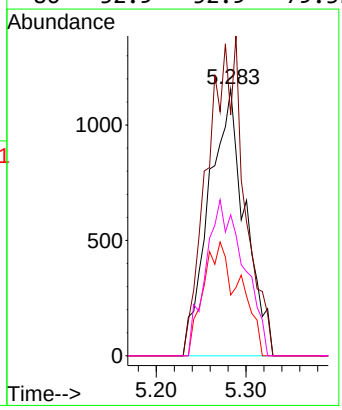


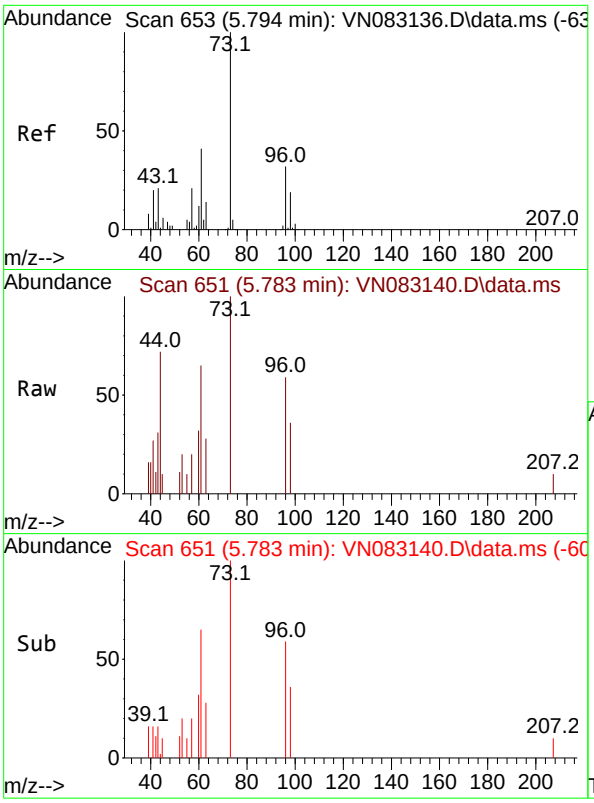




#20
Methylene Chloride
Concen: 1.255 ug/l
RT: 5.283 min Scan# 566
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 84 Resp: 3255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 90.3 | 119.6 | 179.4# |
| 51 | 22.8 | 34.8 | 52.2# |
| 86 | 52.9 | 52.9 | 79.3# |

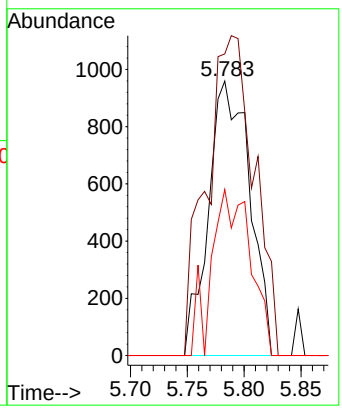





#21
trans-1,2-Dichloroethene
Concen: 1.046 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 96 Resp: 242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 109.9 | 123.4 | 185.2 |
| 98 | 60.5 | 49.3 | 73.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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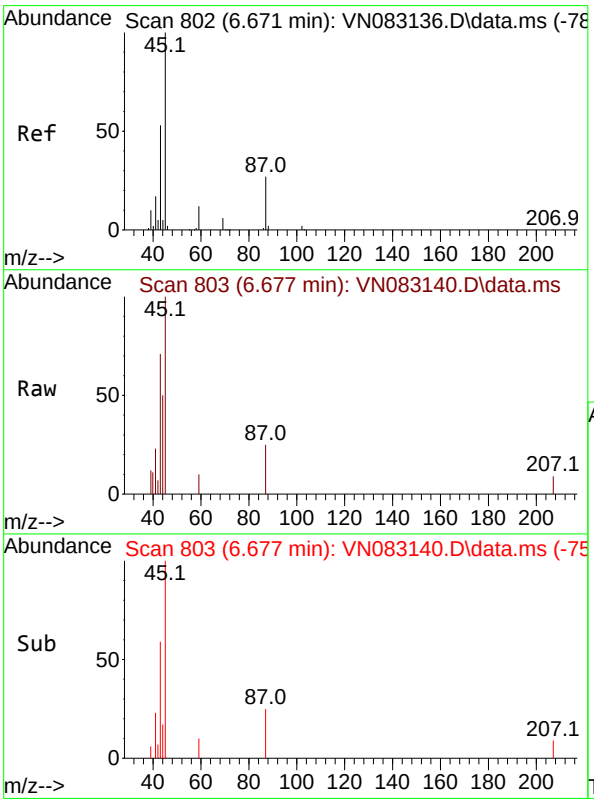
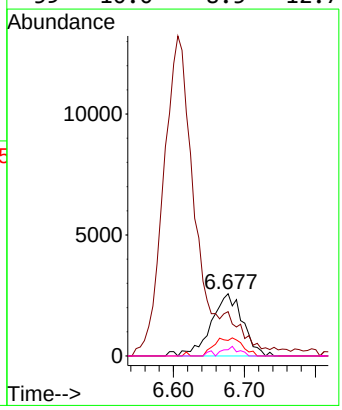
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

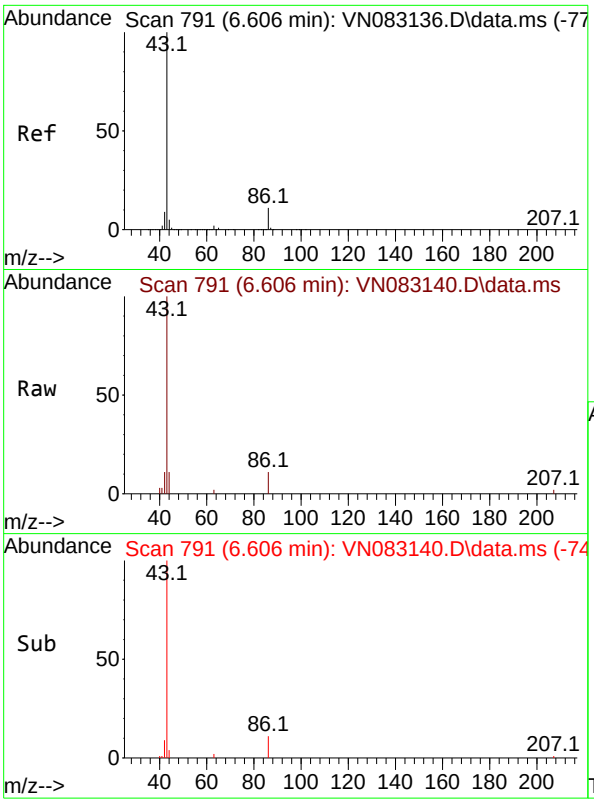



#22
Diisopropyl ether
Concen: 0.988 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 45 Resp: 7871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 61.5 | 44.0 | 66.0 |
| 87 | 24.9 | 19.7 | 29.5 |
| 59 | 10.0 | 8.5 | 12.7 |






#23
Vinyl Acetate
Concen: 4.783 ug/l
RT: 6.606 min Scan# 7
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 3904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 11.4 | 7.3 | 10.9# |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

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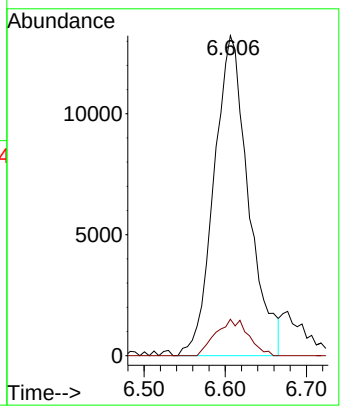
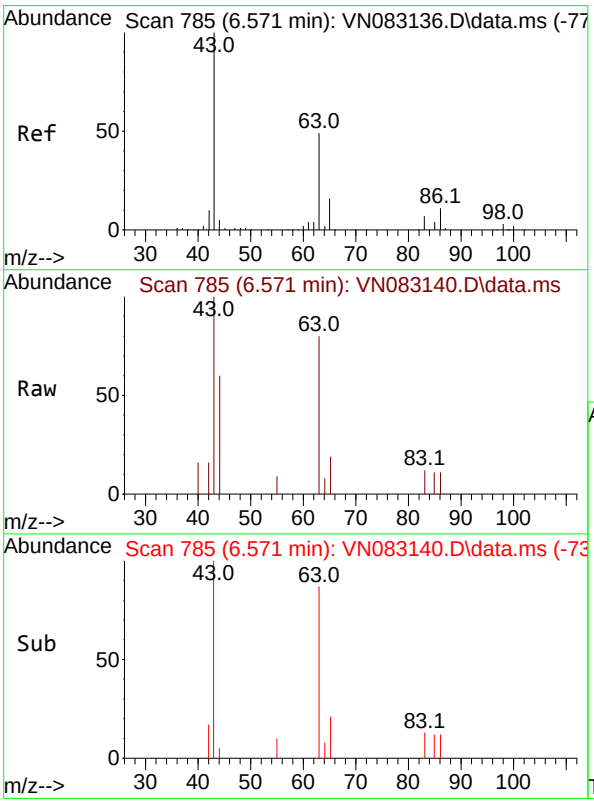
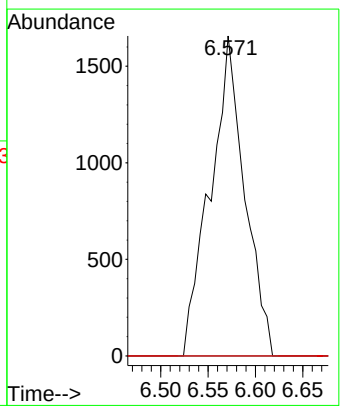


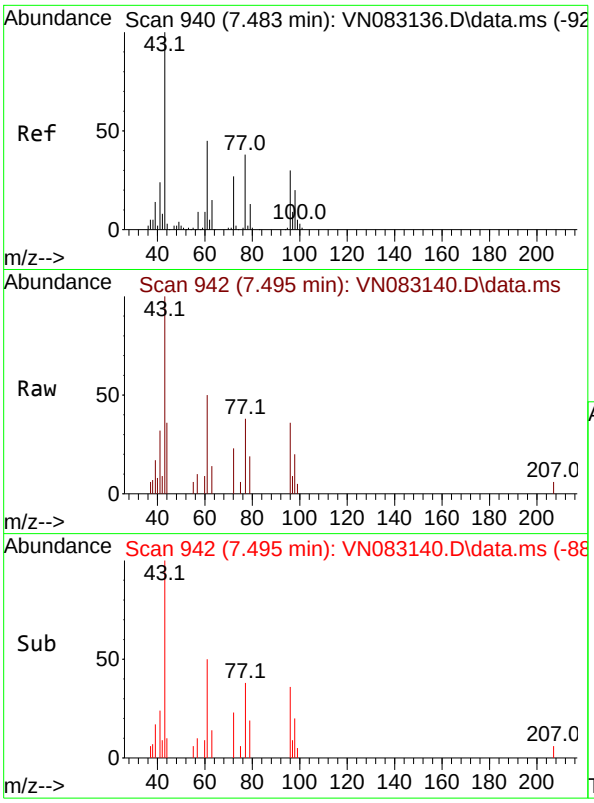




#24
1,1-Dichloroethane
Concen: 0.965 ug/l
RT: 6.571 min Scan# 785
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 63 Resp: 4189

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 0.0 | 3.3 | 9.9# |
| 100 | 0.0 | 2.0 | 6.0# |






#25
2-Butanone
Concen: 5.297 ug/l
RT: 7.495 min Scan# 94
Delta R.T. 0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 916

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 25.9 | 18.2 | 27.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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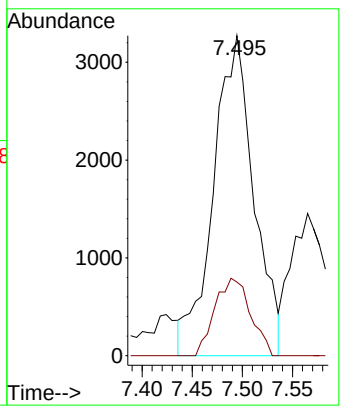
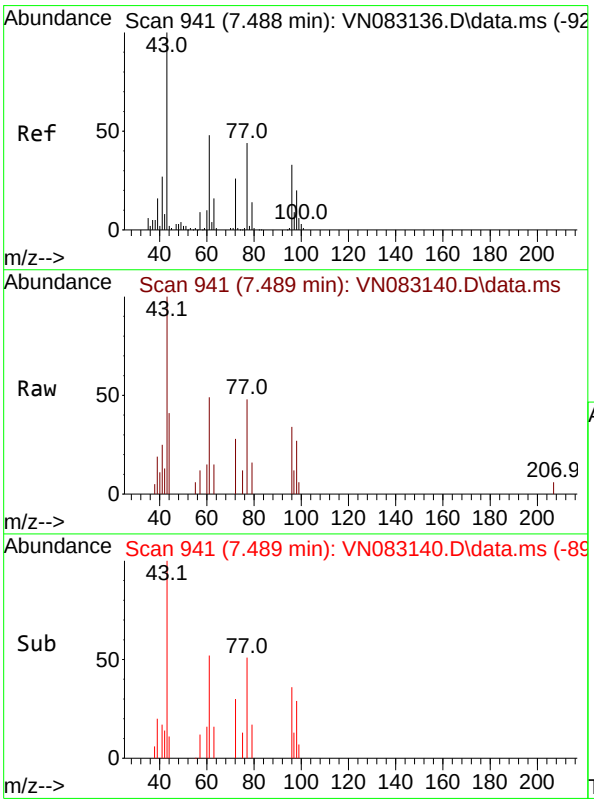
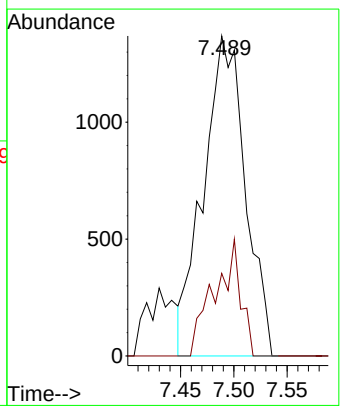


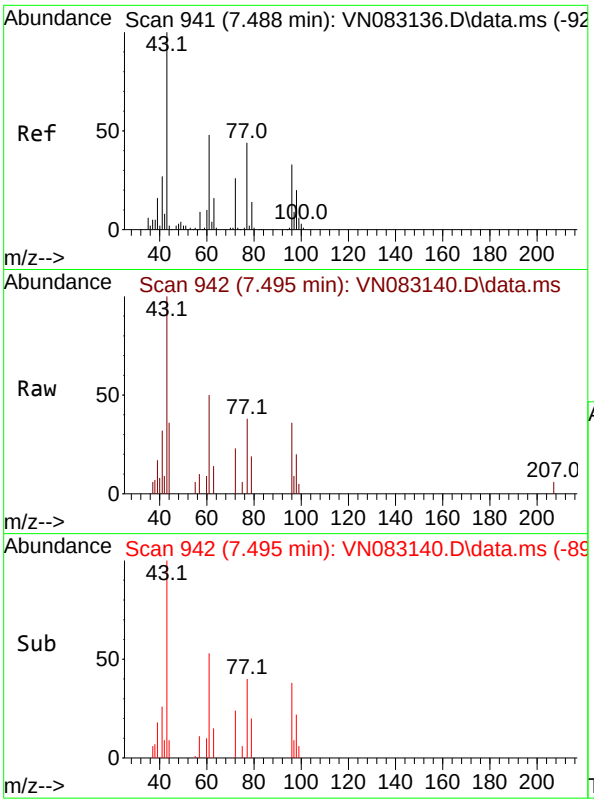




#26
2,2-Dichloropropane
Concen: 0.928 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 77 Resp: 3741

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 22.9 | 10.3 | 30.9 |

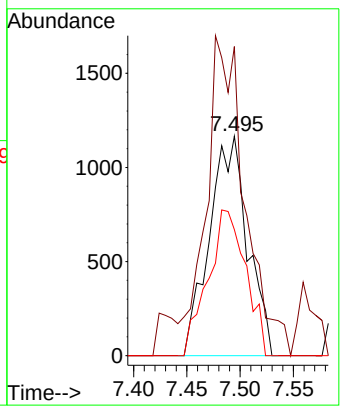





#27
cis-1,2-Dichloroethene
Concen: 1.044 ug/l
RT: 7.495 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 96 Resp: 291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 146.7 | 0.0 | 329.6 |
| 98 | 65.4 | 0.0 | 128.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

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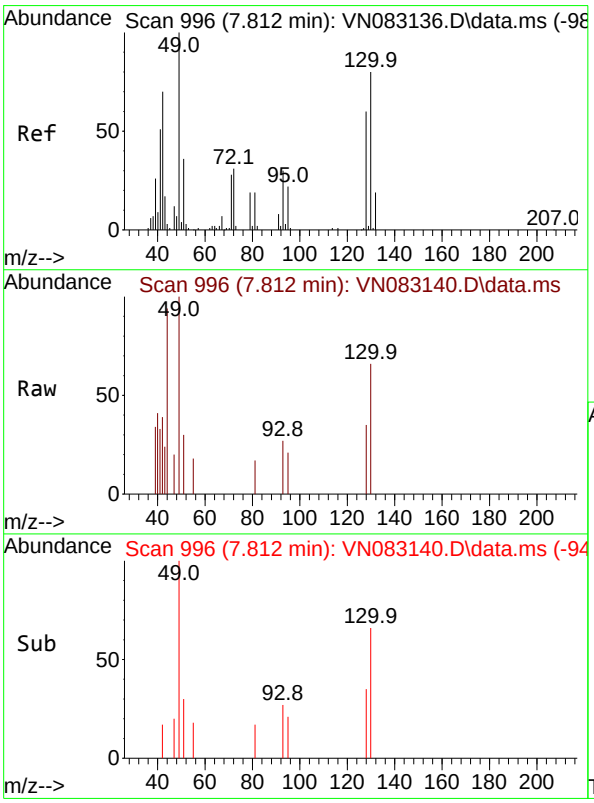
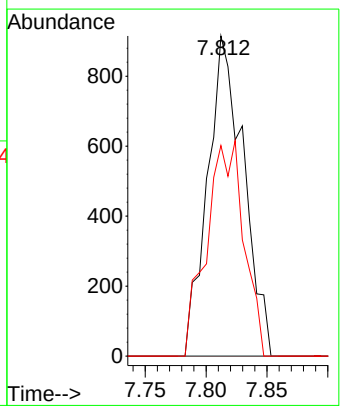
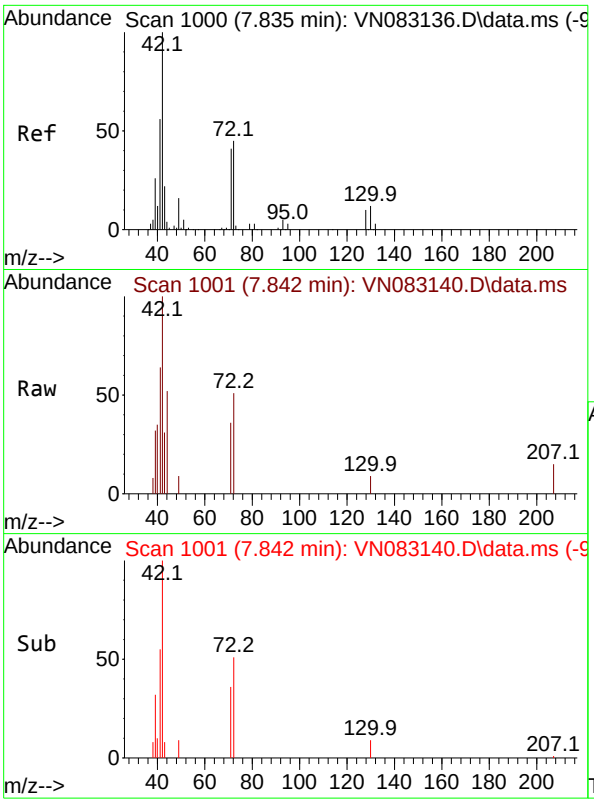



#28
Bromochloromethane
Concen: 1.061 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 49 Resp: 1883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.0 | 0.0 | 3.8 |
| 130 | 69.5 | 50.5 | 75.7 |

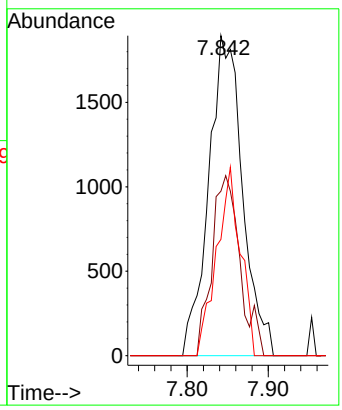





#29
Tetrahydrofuran
Concen: 4.909 ug/l
RT: 7.842 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 42 Resp: 549

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 46.5 | 30.0 | 45.0 |
| 71 | 41.2 | 28.3 | 42.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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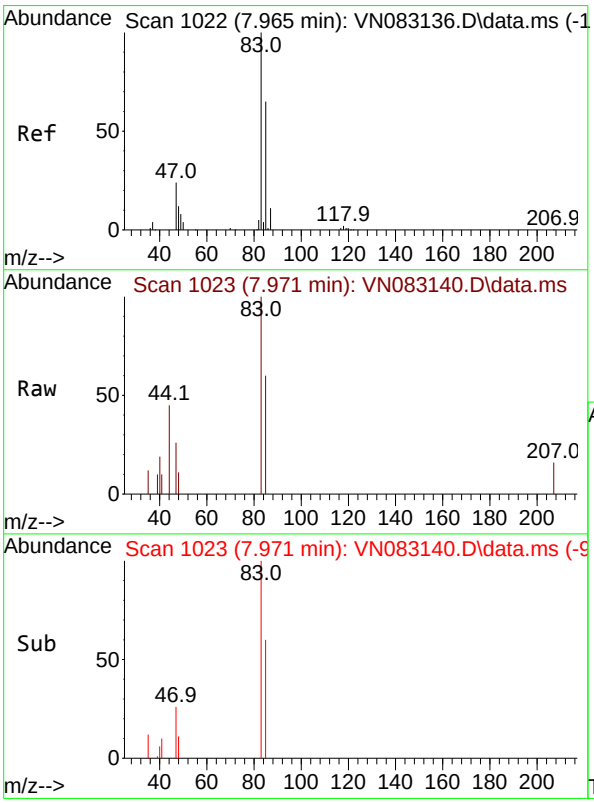
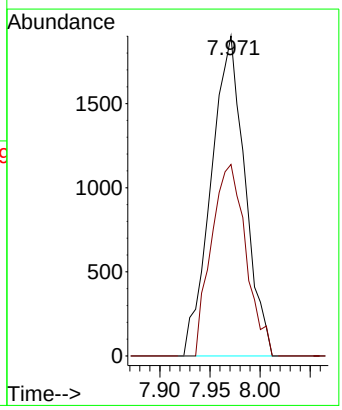
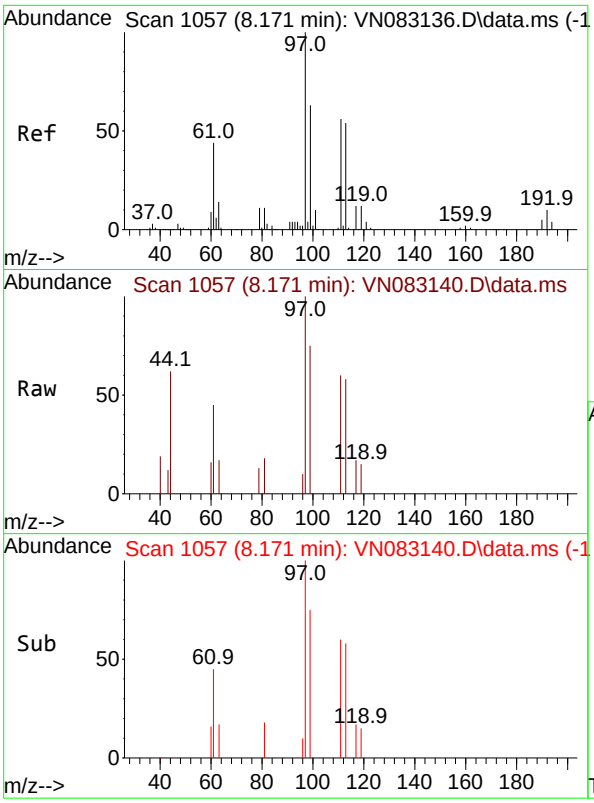



#30
Chloroform
Concen: 0.988 ug/l
RT: 7.971 min Scan# 1023
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 83 Resp: 4457

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 59.8 | 50.9 | 76.3 |






#32
1,1,1-Trichloroethane
Concen: 0.955 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 97 Resp: 407

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 0.0 | 52.0 | 78.0# |
| 61 | 44.6 | 42.1 | 63.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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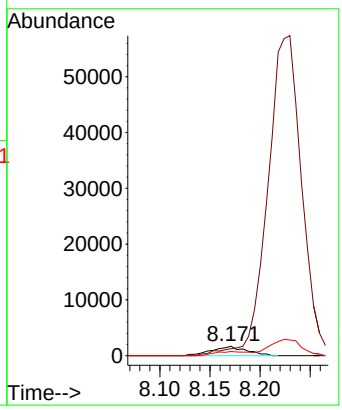
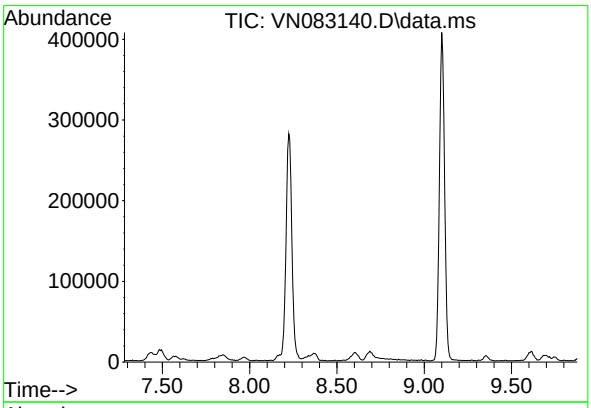


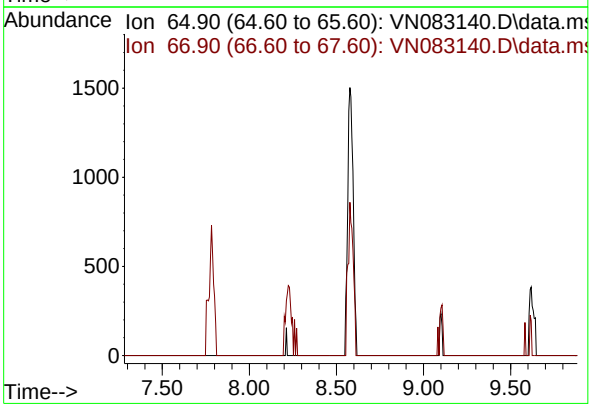



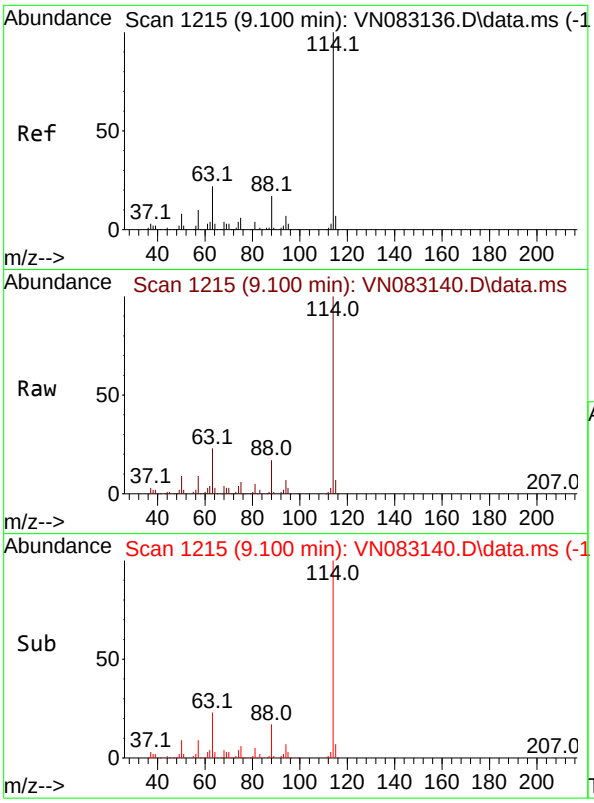

#33
1,2-Dichloroethane-d4
Concen: 0.000 ug/l
Expected RT: 8.58 min

Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 65

| Sig | Exp Ratio |
|---|---|
| 65 | 100 |
| 67 | 52.2 |






#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:114 Resp: 34739

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.6 | 0.0 | 44.6 |
| 88 | 16.9 | 0.0 | 31.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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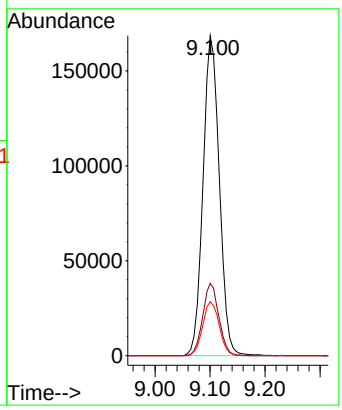
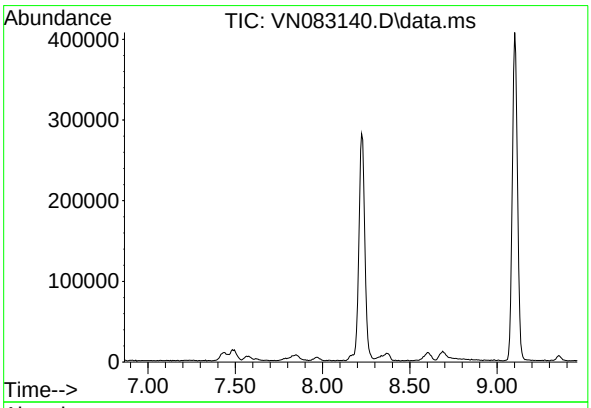


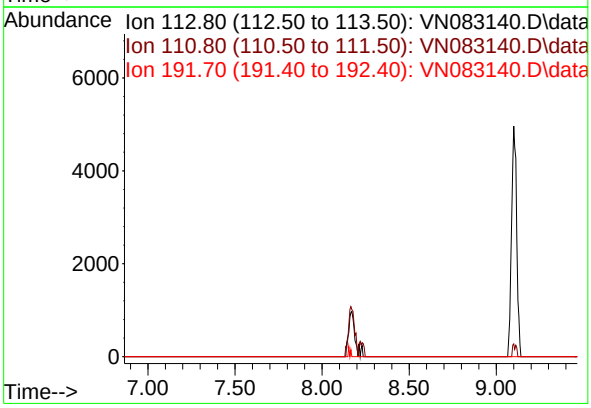



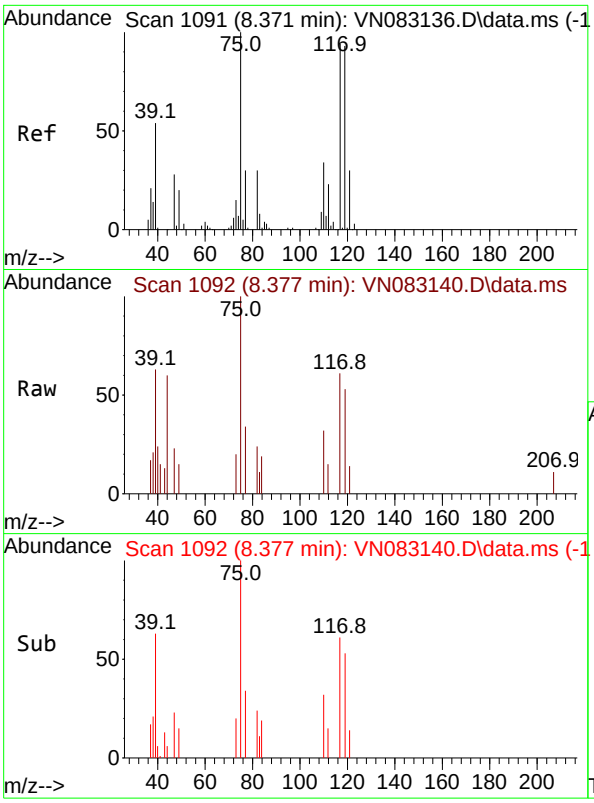

#35
Dibromofluoromethane
Concen: 0.000 ug/l
Expected RT: 8.16 min

Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 113

| Sig | Exp Ratio |
|---|---|
| 113 | 100 |
| 111 | 103.0 |
| 192 | 18.6 |






#36
1,1-Dichloropropene
Concen: 1.034 ug/l
RT: 8.377 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 75 Resp: 339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 32.0 | 16.3 | 48.9 |
| 77 | 33.3 | 24.6 | 37.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

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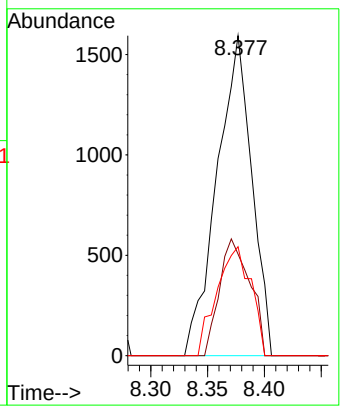
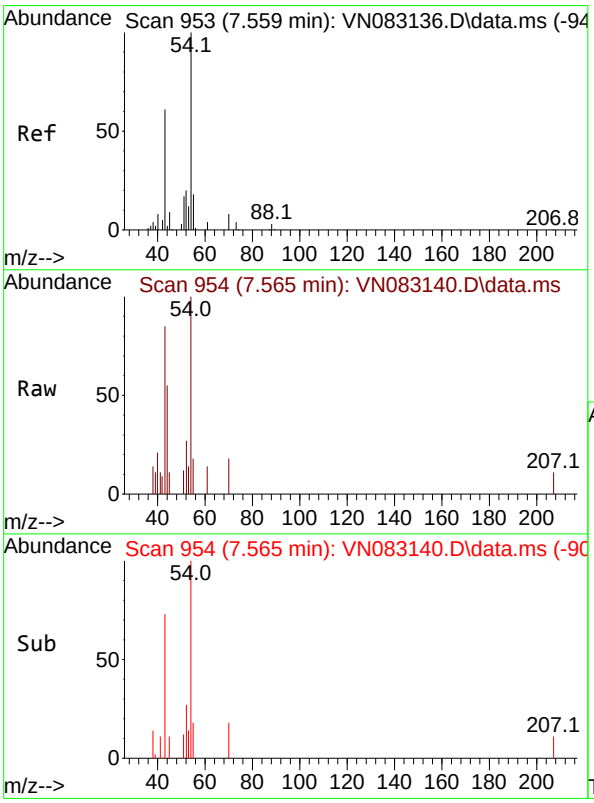
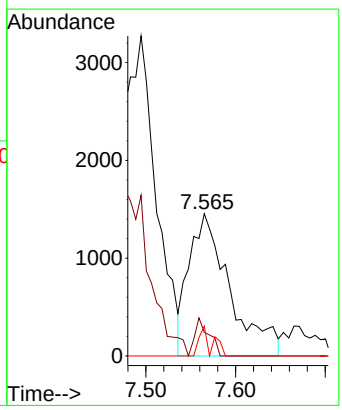


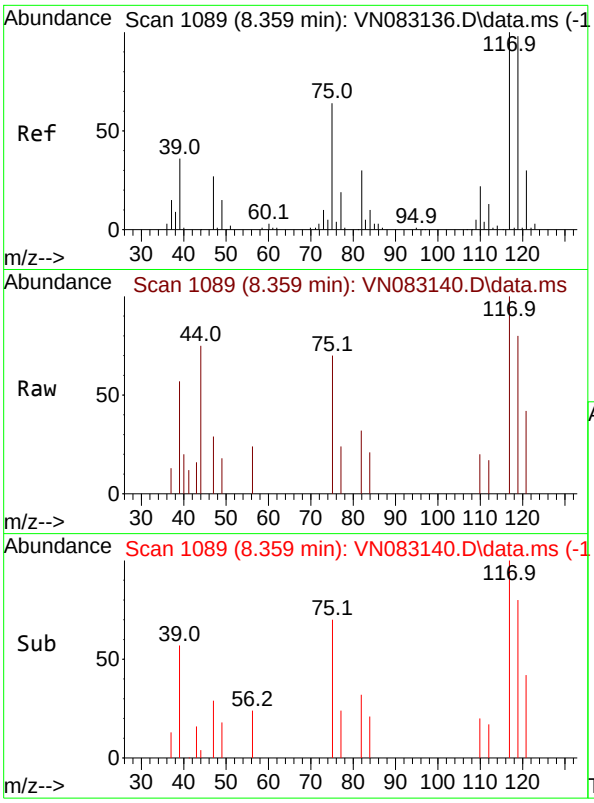




#37
Ethyl Acetate
Concen: 1.257 ug/l
RT: 7.565 min Scan# 954
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 4617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 9.2 | 9.3 | 13.9# |
| 70 | 3.8 | 7.0 | 10.6# |






#38
Carbon Tetrachloride
Concen: 0.926 ug/l
RT: 8.359 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:117 Resp: 342

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 79.9 | 74.9 | 112.3 |
| 121 | 42.0 | 24.3 | 36.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

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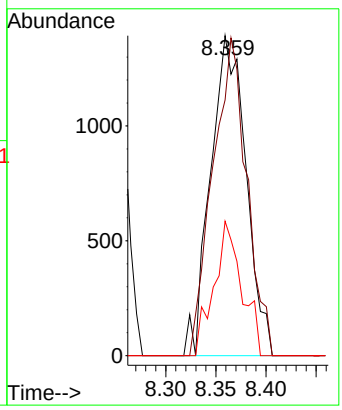
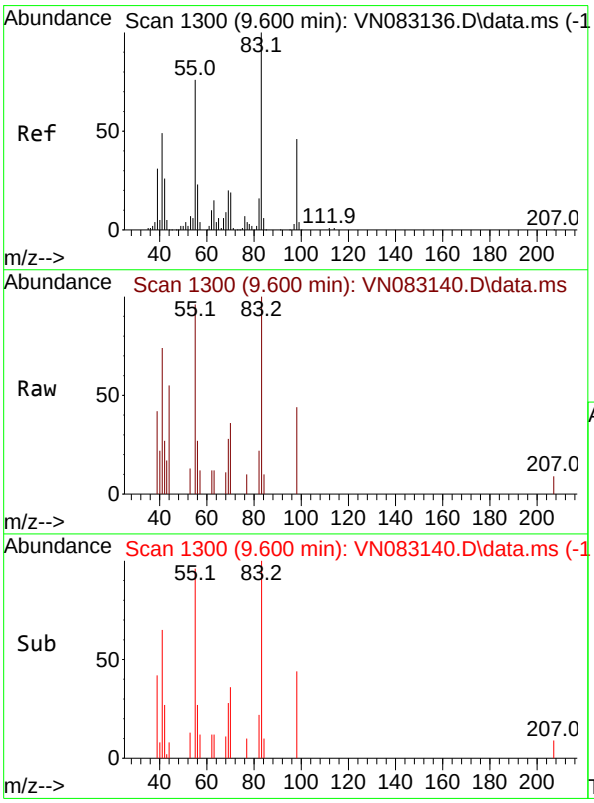
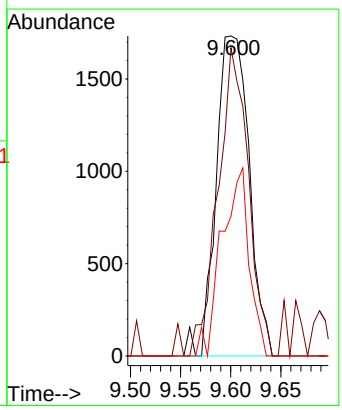


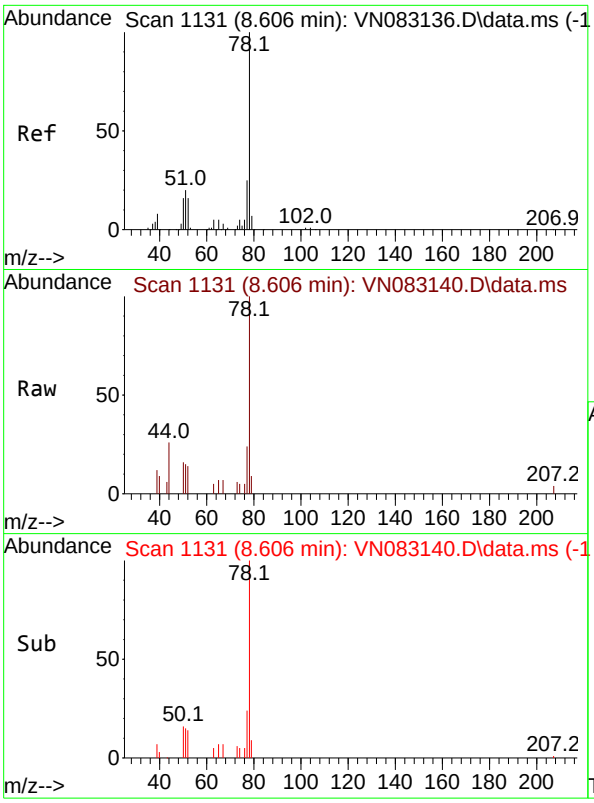




#39
Methylcyclohexane
Concen: 0.986 ug/l
RT: 9.600 min Scan# 1300
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 83 Resp: 3974

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 96.3 | 66.4 | 99.6 |
| 98 | 43.7 | 40.7 | 61.1 |






#40
Benzene
Concen: 0.955 ug/l
RT: 8.606 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

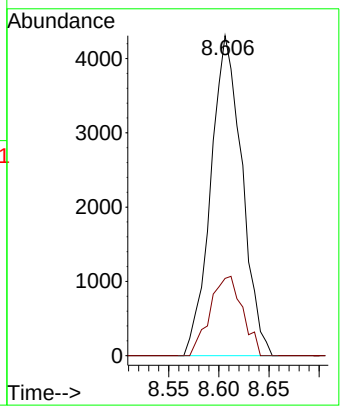
Tgt Ion: 78 Resp: 933

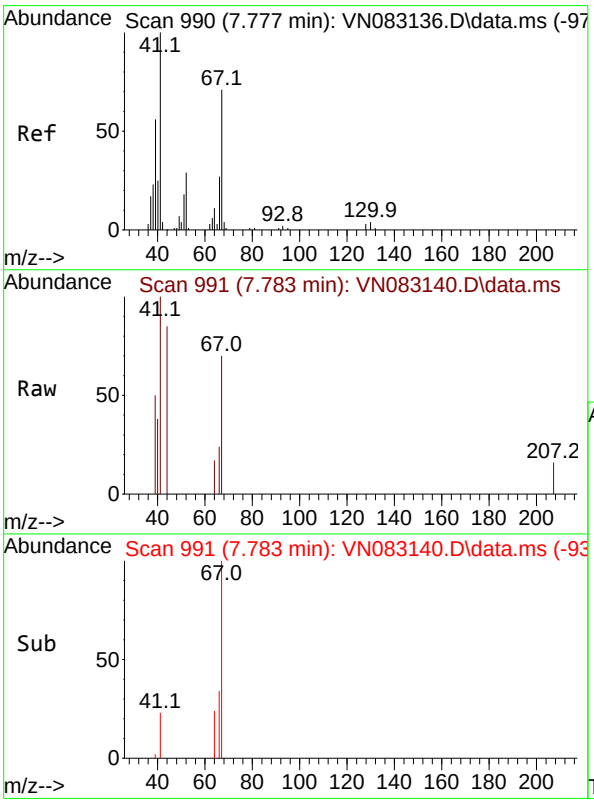
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.2 | 19.0 | 28.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

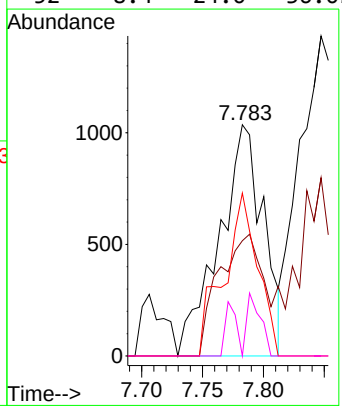


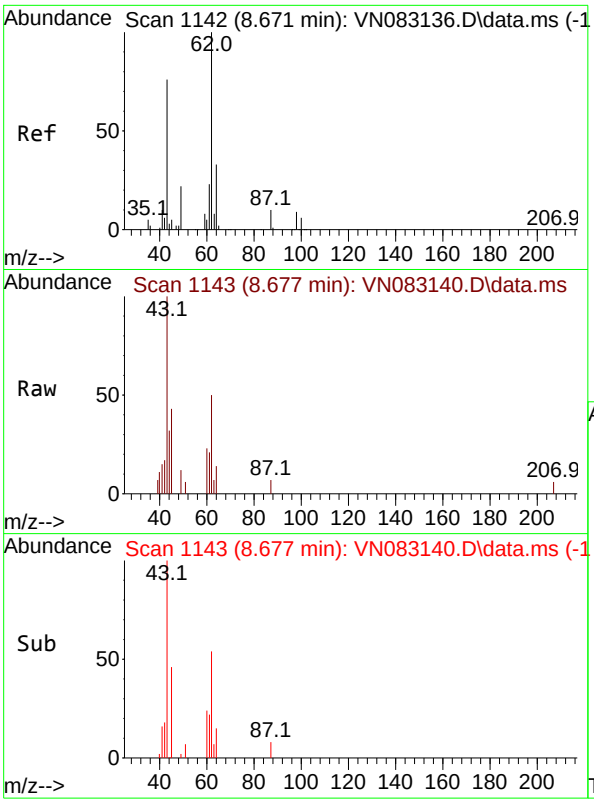




#41
Methacrylonitrile
Concen: 1.254 ug/l
RT: 7.783 min Scan# 991
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 41 Resp: 2618

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 52.4 | 45.5 | 68.3 |
| 67 | 54.2 | 50.5 | 75.7 |
| 52 | 8.4 | 24.0 | 36.0# |






#42
1,2-Dichloroethane
Concen: 0.971 ug/l
RT: 8.677 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 62 Resp: 345

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 1.6 | 0.0 | 15.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

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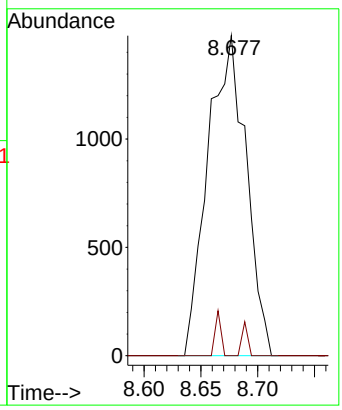
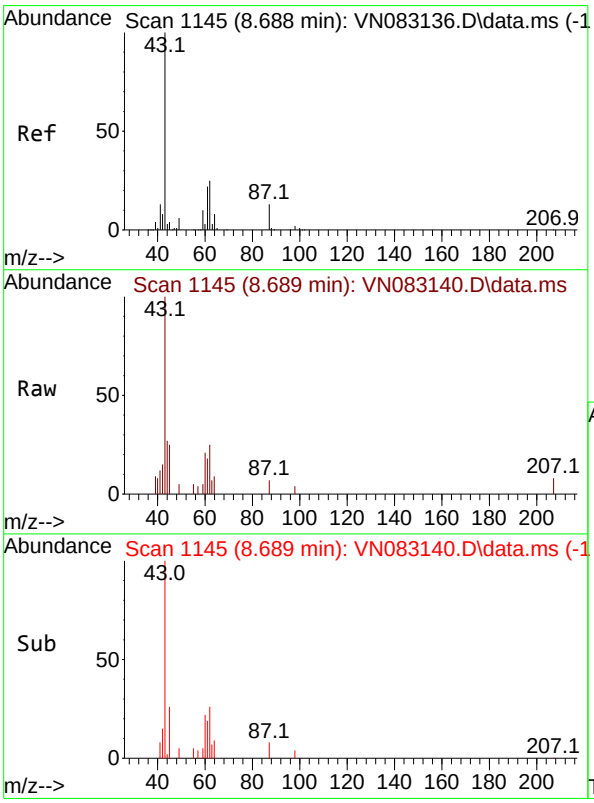
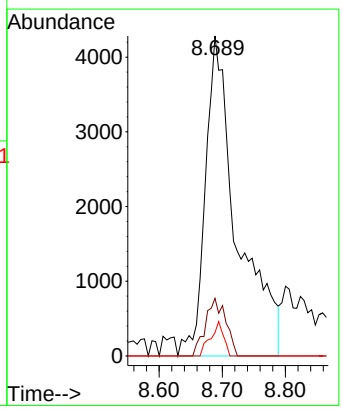


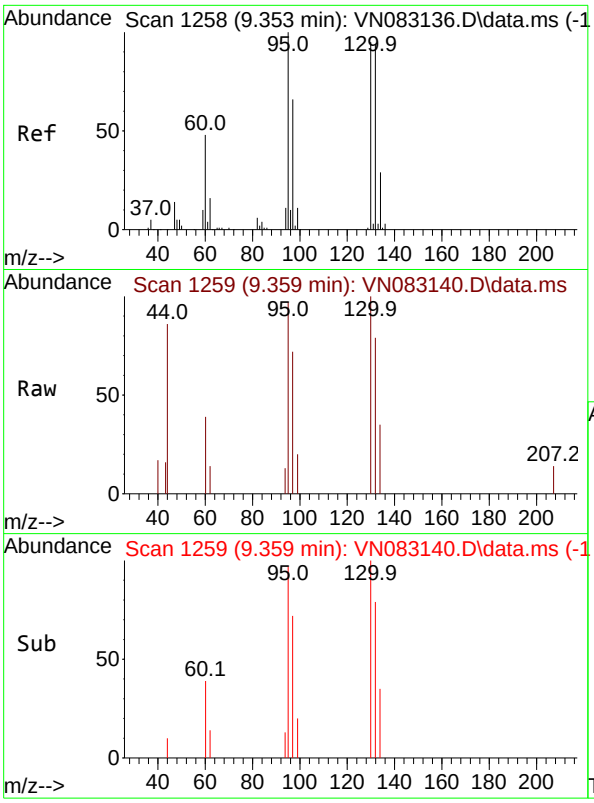




#43
Isopropyl Acetate
Concen: 0.753 ug/l
RT: 8.689 min Scan# 1145
Delta R.T. 0.001 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 14981

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 11.5 | 17.8 | 26.6# |
| 87 | 4.4 | 8.2 | 12.2# |






#44
Trichloroethene
Concen: 0.925 ug/l
RT: 9.359 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:130 Resp: 215

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 96.7 | 0.0 | 197.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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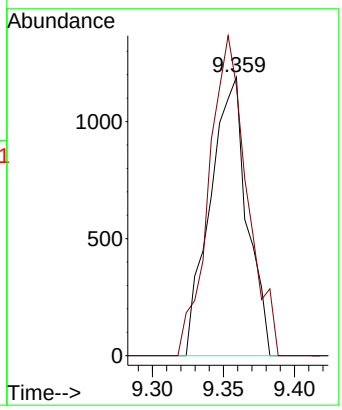
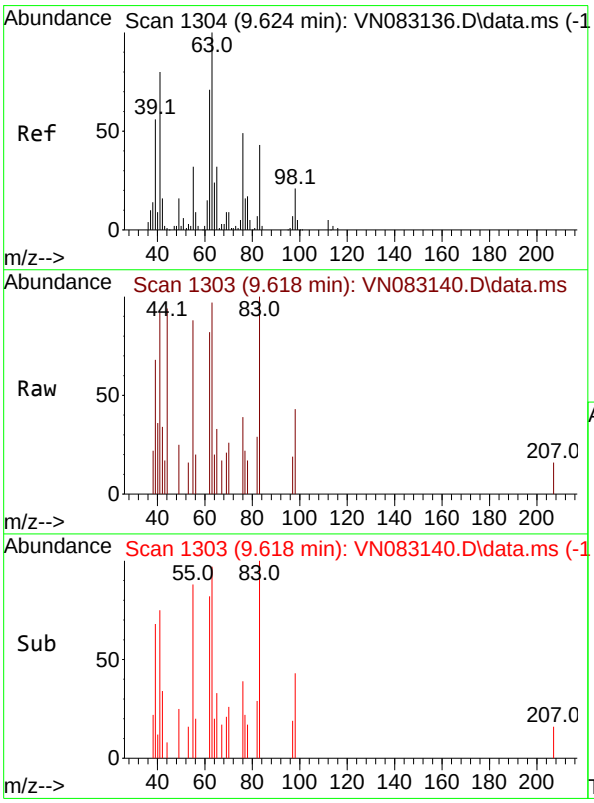
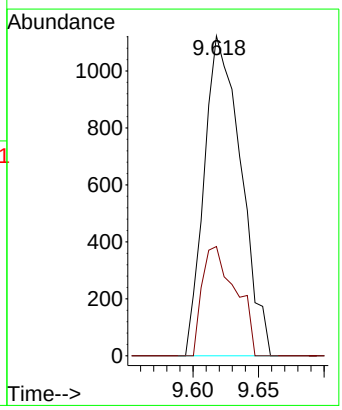


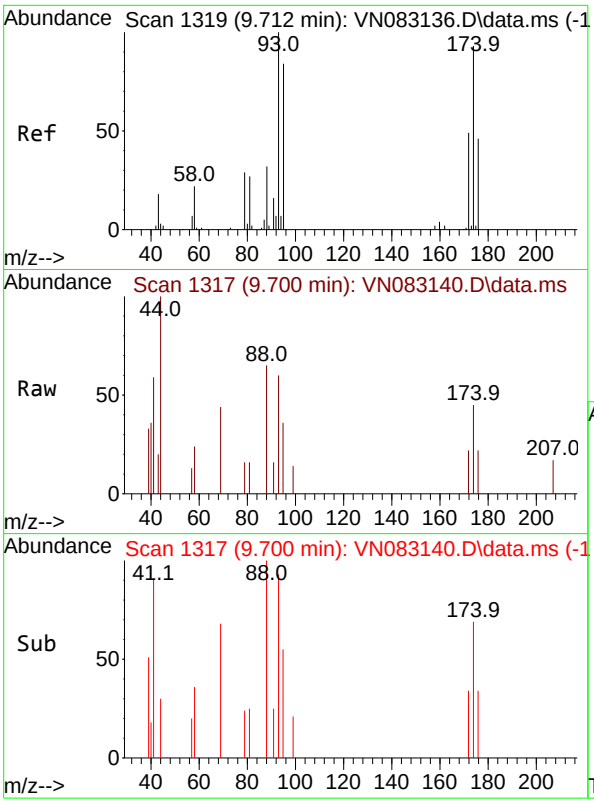




#45
1,2-Dichloropropane
Concen: 0.946 ug/l
RT: 9.618 min Scan# 1303
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 63 Resp: 2194

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 34.2 | 24.4 | 36.6 |

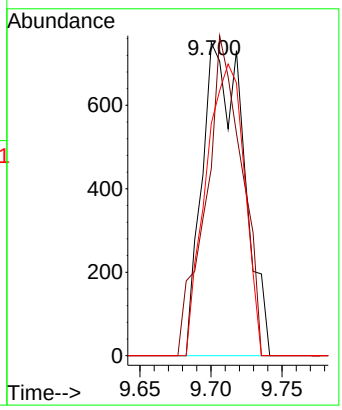





#46
Dibromomethane
Concen: 0.911 ug/l
RT: 9.700 min Scan# 1
Delta R.T. -0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 93 Resp: 151

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 89.4 | 65.8 | 98.6 |
| 174 | 87.3 | 71.7 | 107.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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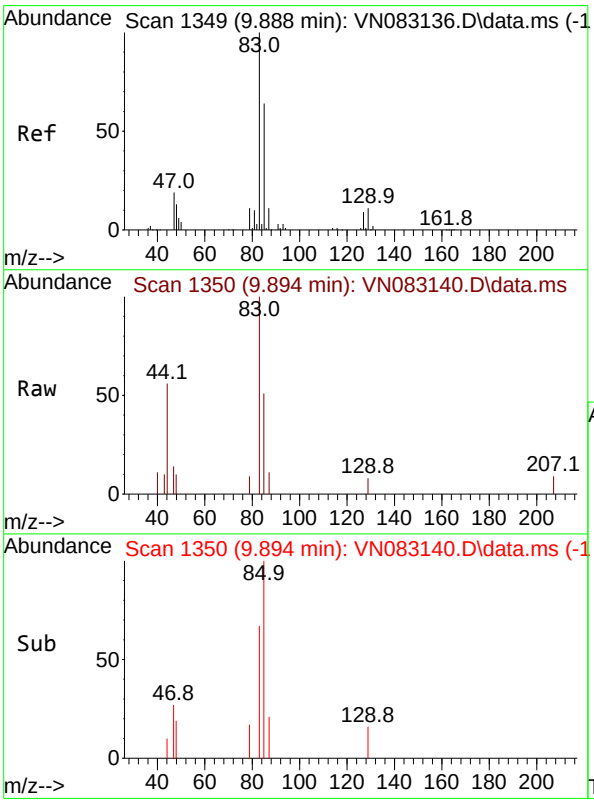
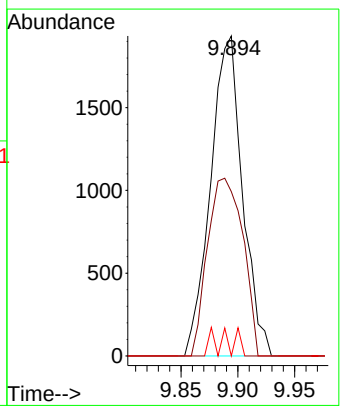
Supervised By :Mahesh Dadoda 08/09/2024

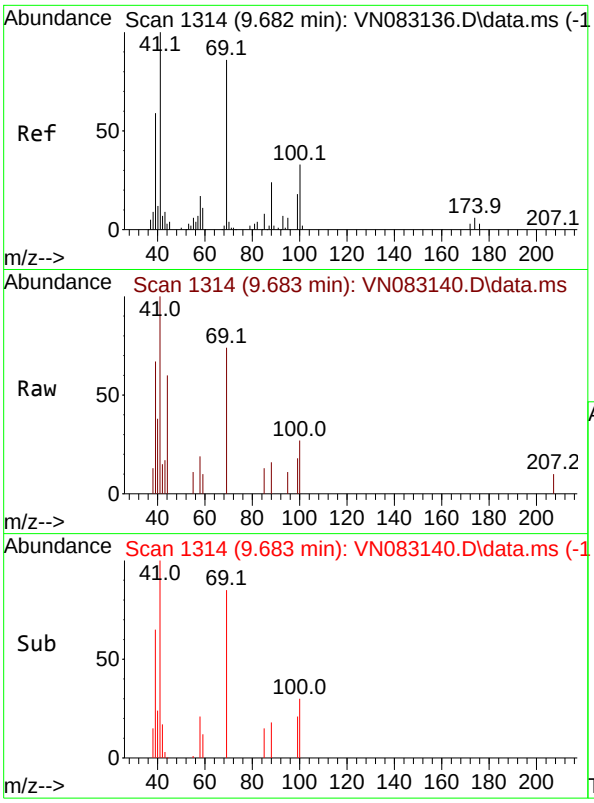



#47
Bromodichloromethane
Concen: 1.015 ug/l
RT: 9.894 min Scan# 1350
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 83 Resp: 3783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 51.4 | 51.1 | 76.7 |
| 127 | 0.0 | 7.2 | 10.8# |

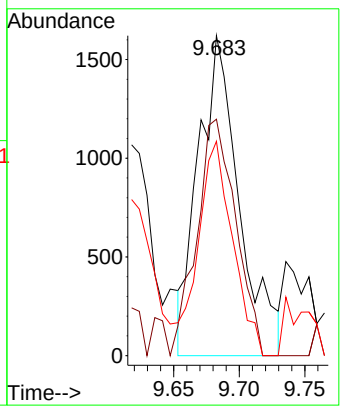





#48
Methyl methacrylate
Concen: 1.159 ug/l
RT: 9.683 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 41 Resp: 351

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 70.6 | 56.3 | 84.5 |
| 39 | 57.3 | 50.3 | 75.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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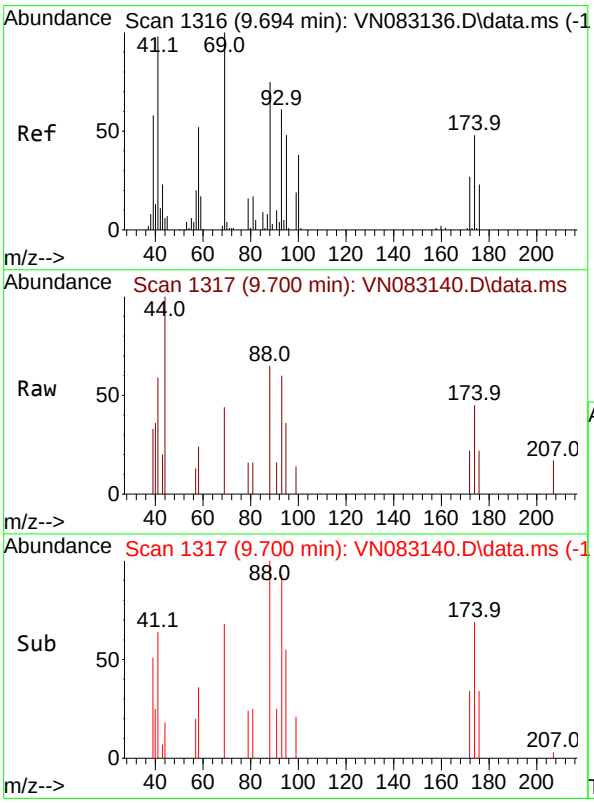
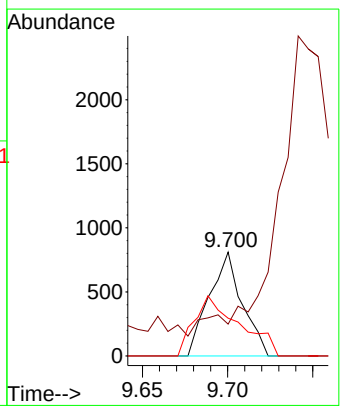
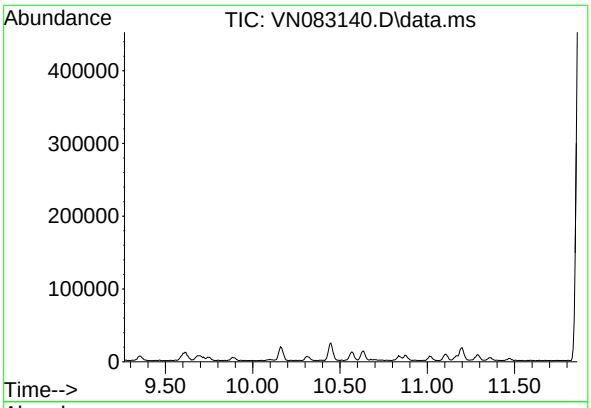



#49
1,4-Dioxane
Concen: 19.880 ug/l
RT: 9.700 min Scan# 1317
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 88 Resp: 1089

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 27.8 | 41.8# |
| 58 | 79.4 | 59.4 | 89.0 |






#50
Toluene-d8
Concen: 0.000 ug/l
Expected RT: 10.56 min

Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 98

| Sig | Exp Ratio |
|---|---|
| 98 | 100 |
| 100 | 64.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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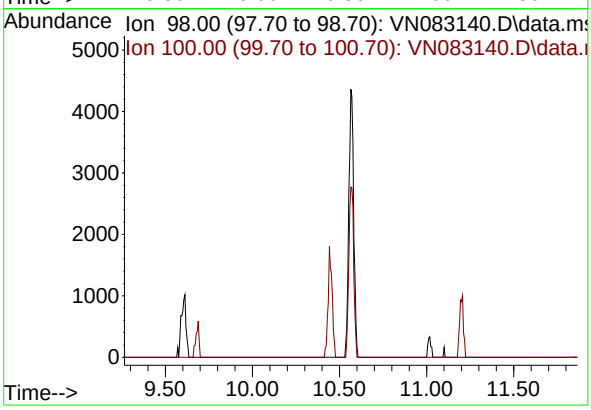
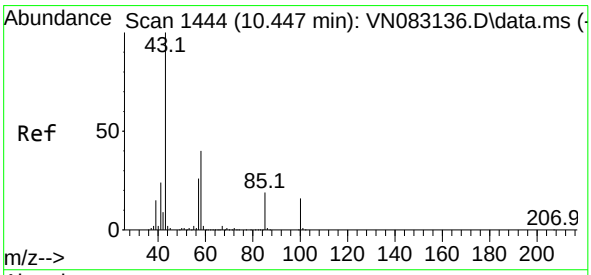
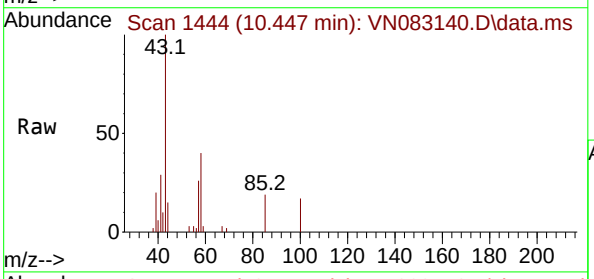
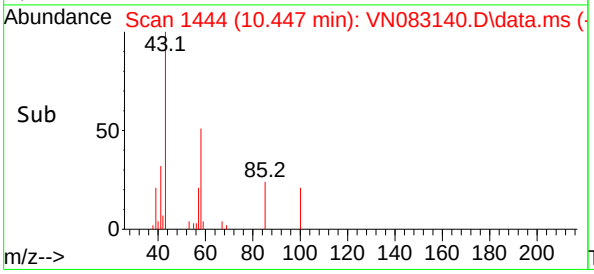


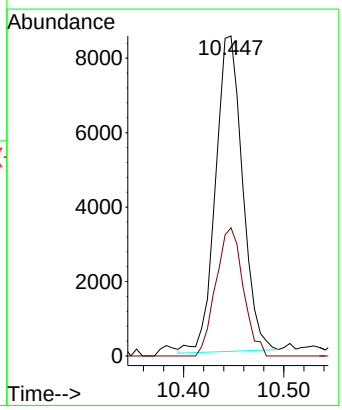



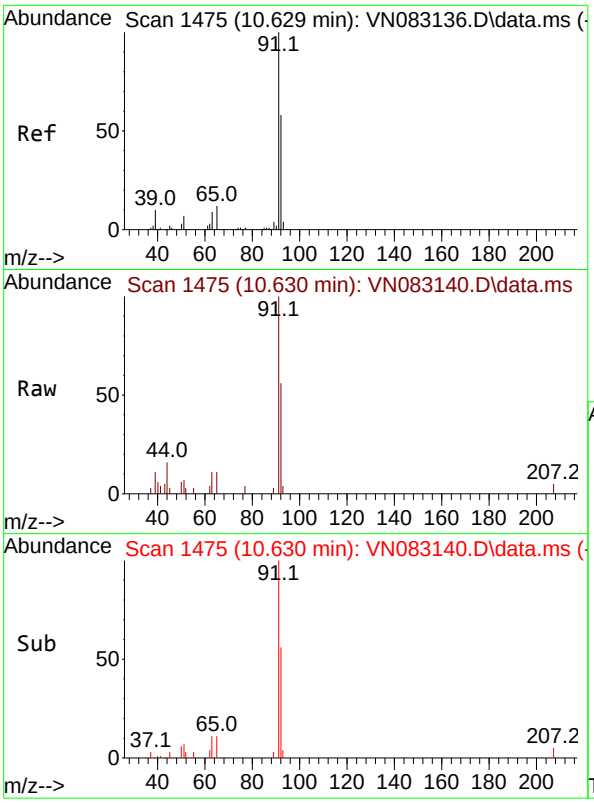




#51
4-Methyl-2-Pentanone
Concen: 4.570 ug/l
RT: 10.447 min Scan# 1444
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 15872

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 41.1 | 28.2 | 42.4 |

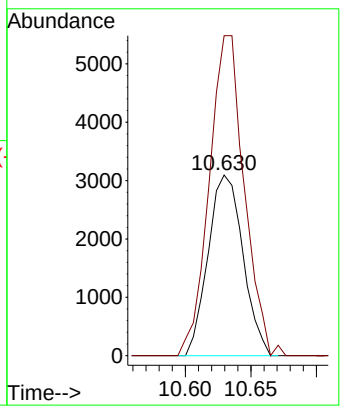





#52
Toluene
Concen: 0.927 ug/l
RT: 10.630 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 92 Resp: 572

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 178.1 | 139.4 | 209.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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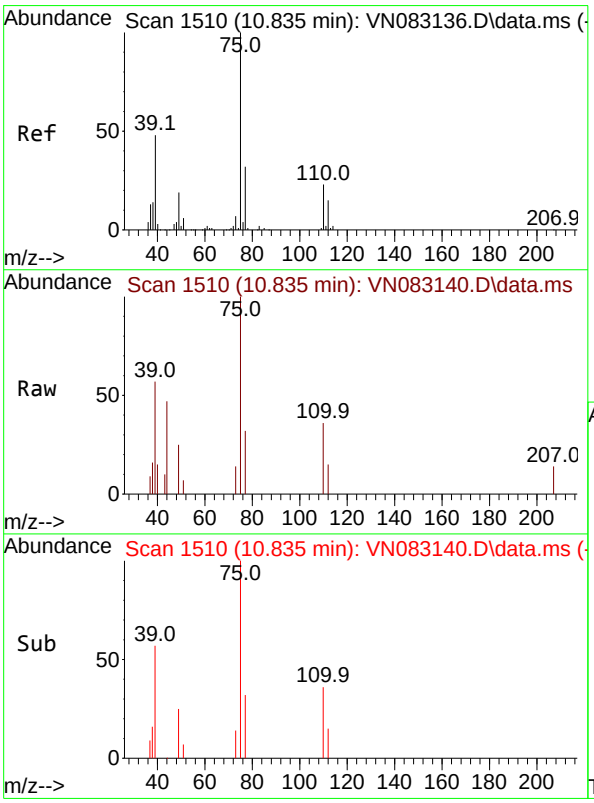
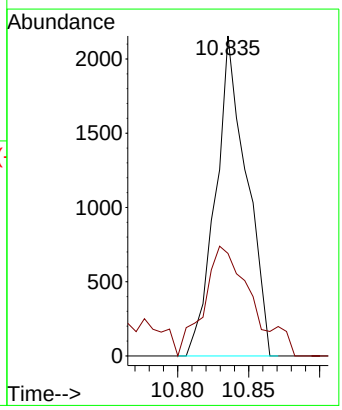
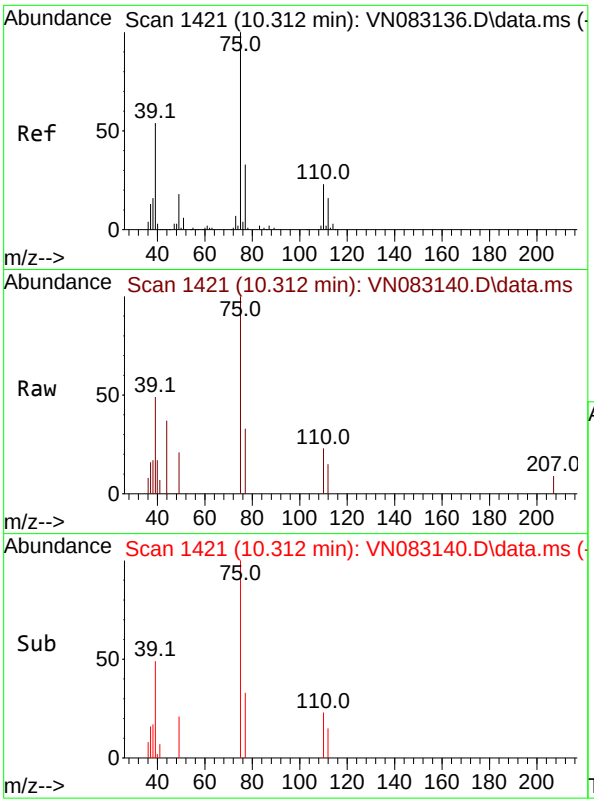



#53
t-1,3-Dichloropropene
Concen: 0.851 ug/l
RT: 10.835 min Scan# 1510
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 75 Resp: 3260

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.0 | 25.7 | 38.5 |

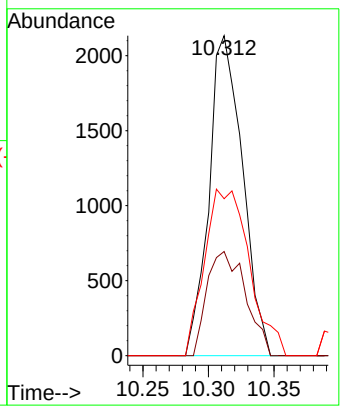





#54
cis-1,3-Dichloropropene
Concen: 0.932 ug/l
RT: 10.312 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 75 Resp: 379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.5 | 24.3 | 36.5 |
| 39 | 49.0 | 50.5 | 75.7# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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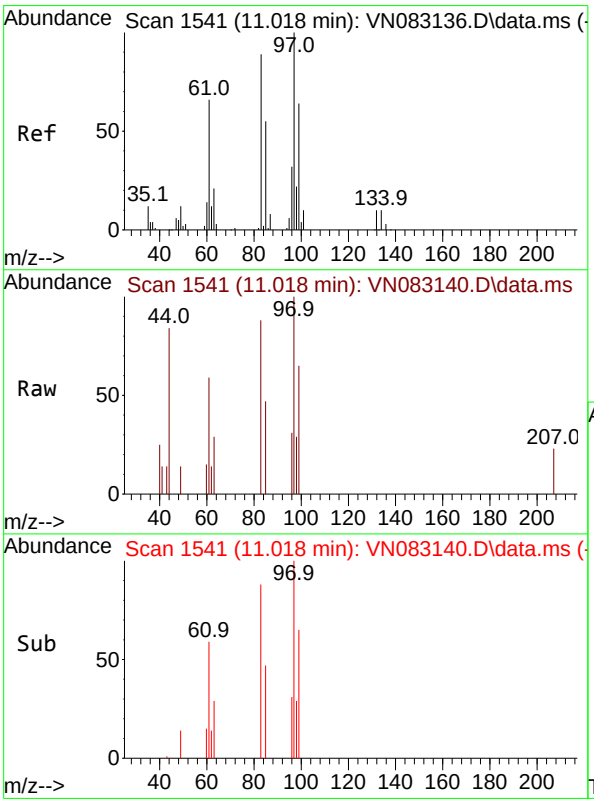
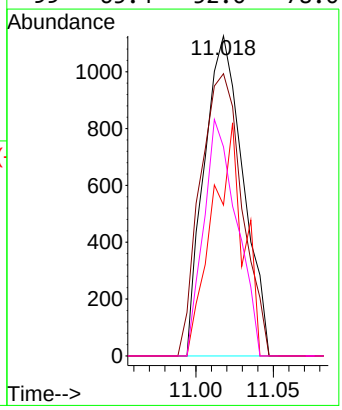
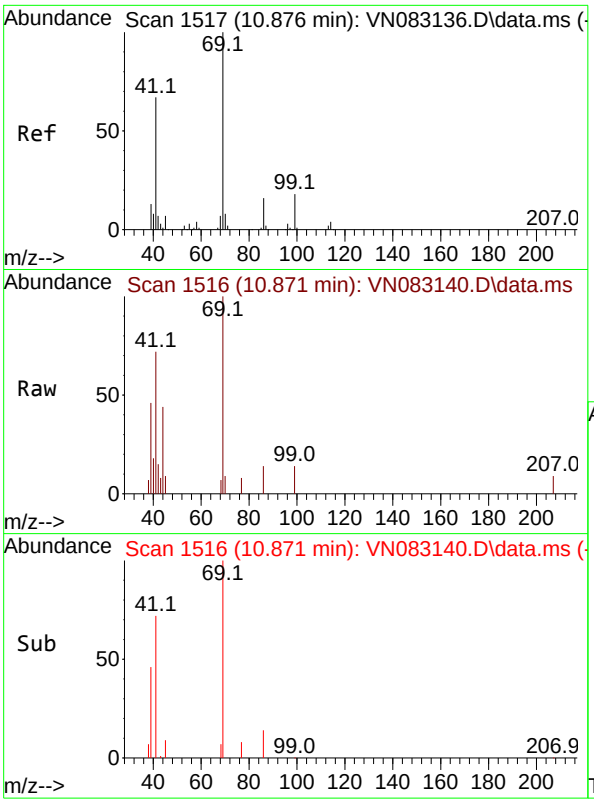



#55
1,1,2-Trichloroethane
Concen: 0.887 ug/l
RT: 11.018 min Scan# 1541
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 97 Resp: 1963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 88.2 | 71.4 | 107.0 |
| 85 | 47.2 | 45.8 | 68.6 |
| 99 | 65.4 | 52.0 | 78.0 |






#56
Ethyl methacrylate
Concen: 0.921 ug/l
RT: 10.871 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 69 Resp: 384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 83.6 | 63.4 | 95.2 |
| 39 | 33.7 | 37.4 | 56.0# |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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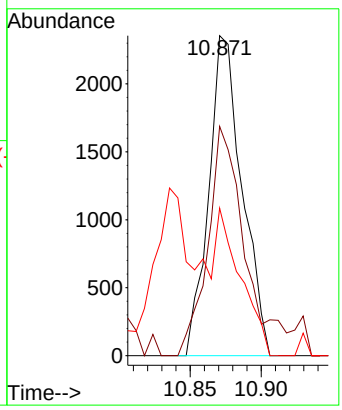
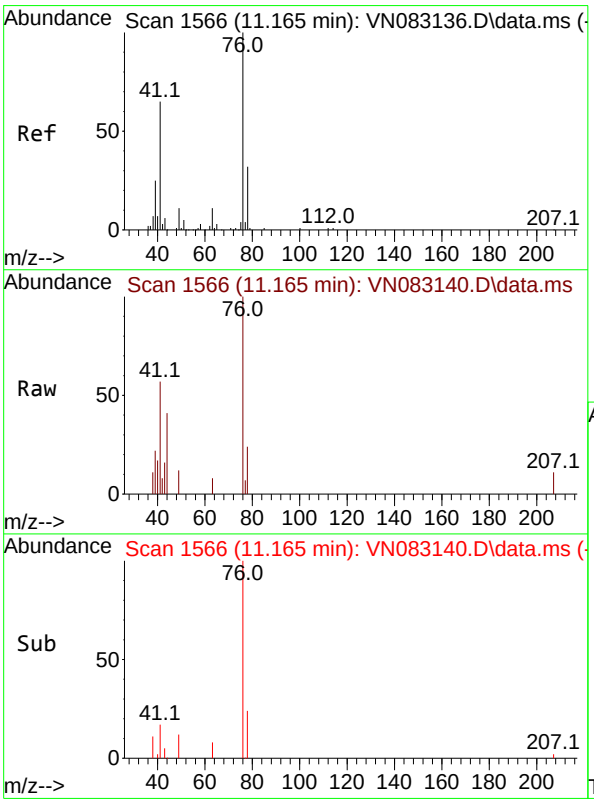
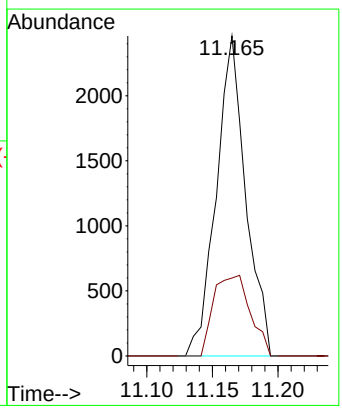


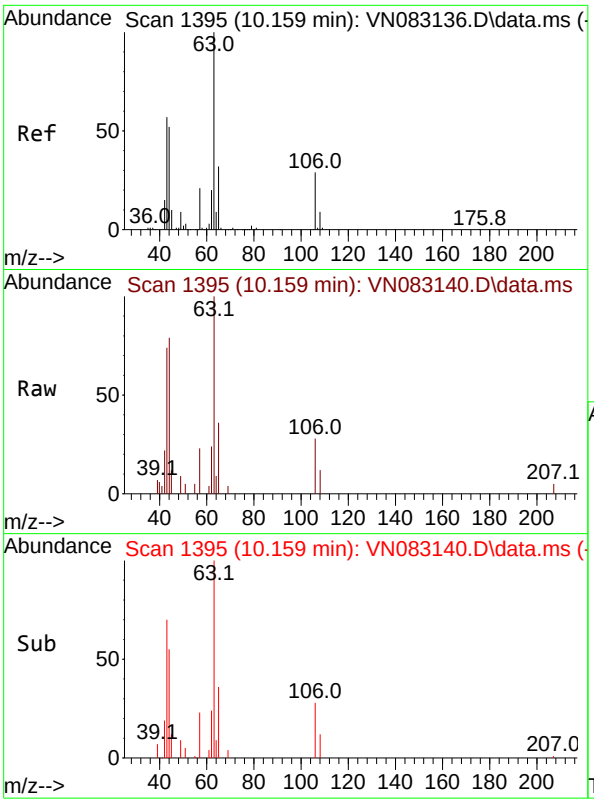




#57
1,3-Dichloropropane
Concen: 0.973 ug/l
RT: 11.165 min Scan# 1566
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 76 Resp: 3837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.3 | 25.6 | 38.4 |






#58
2-Chloroethyl Vinyl ether
Concen: 4.794 ug/l
RT: 10.159 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

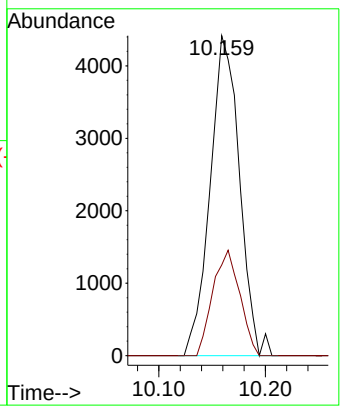
Tgt Ion: 63 Resp: 845

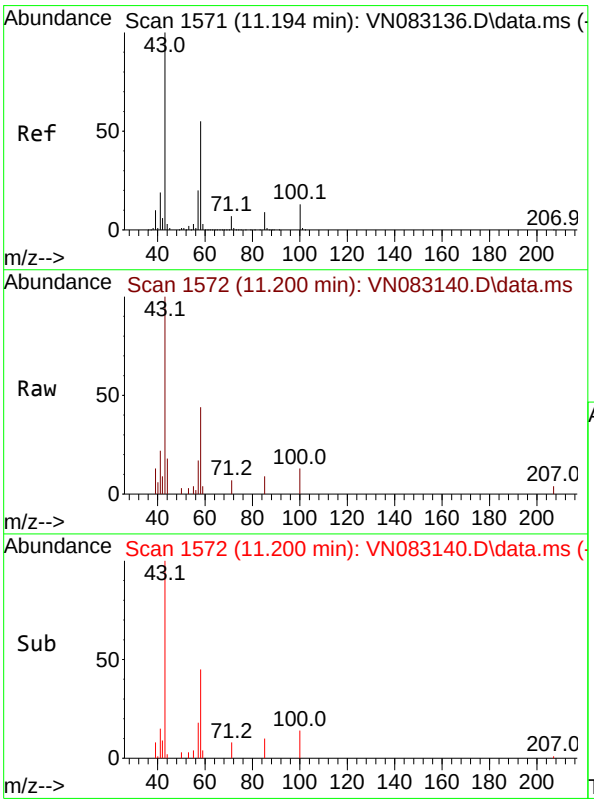
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 30.3 | 21.4 | 32.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

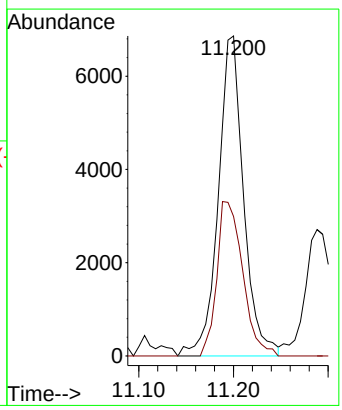


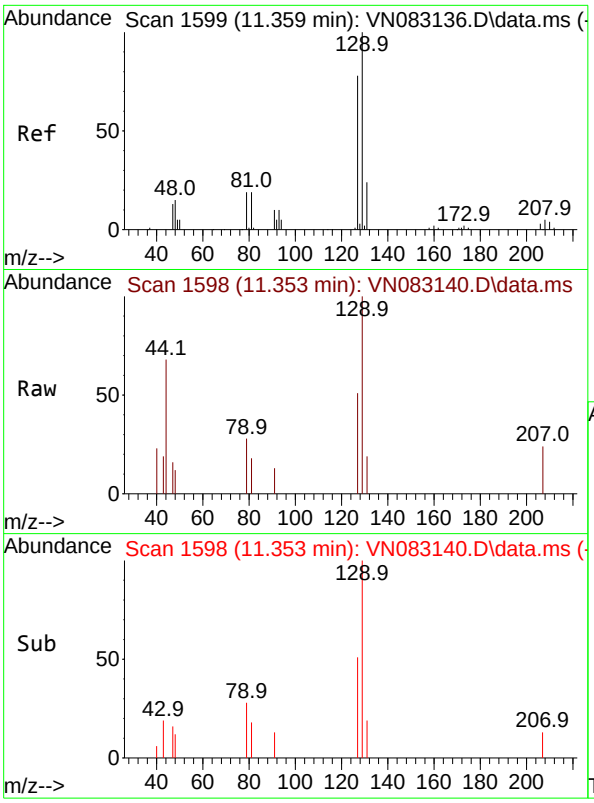




#59
2-Hexanone
Concen: 4.749 ug/l
RT: 11.200 min Scan# 1572
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 12761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 49.3 | 24.6 | 73.8 |

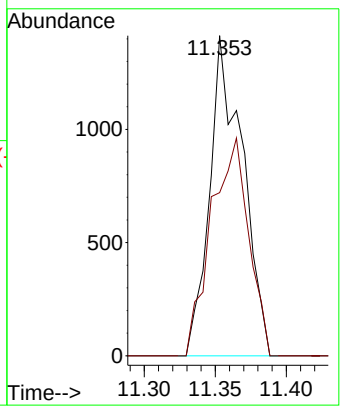





#60
Dibromochloromethane
Concen: 0.853 ug/l
RT: 11.353 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:129 Resp: 228

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.5 | 39.2 | 117.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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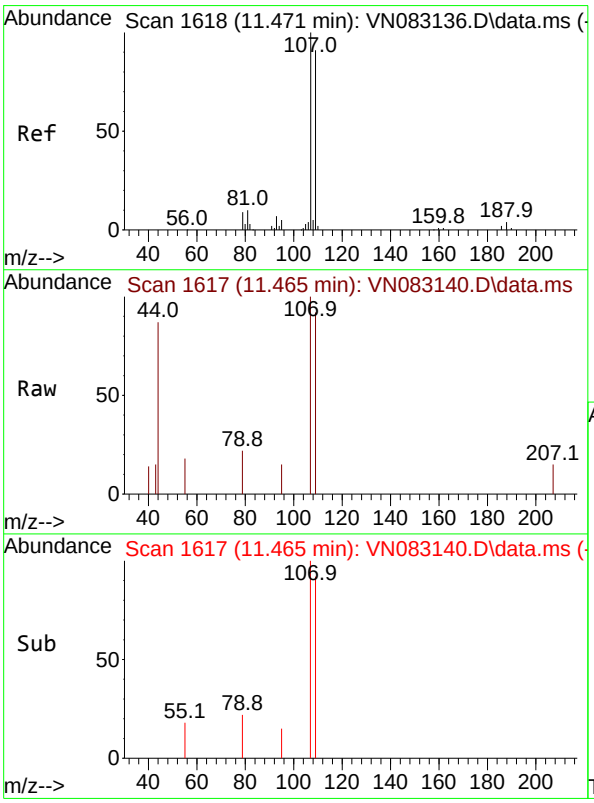
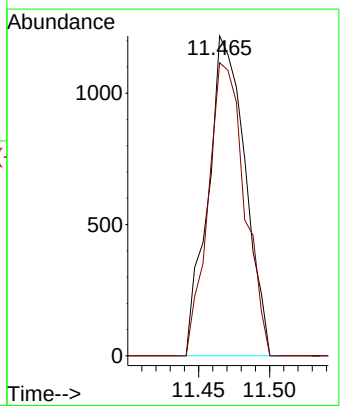
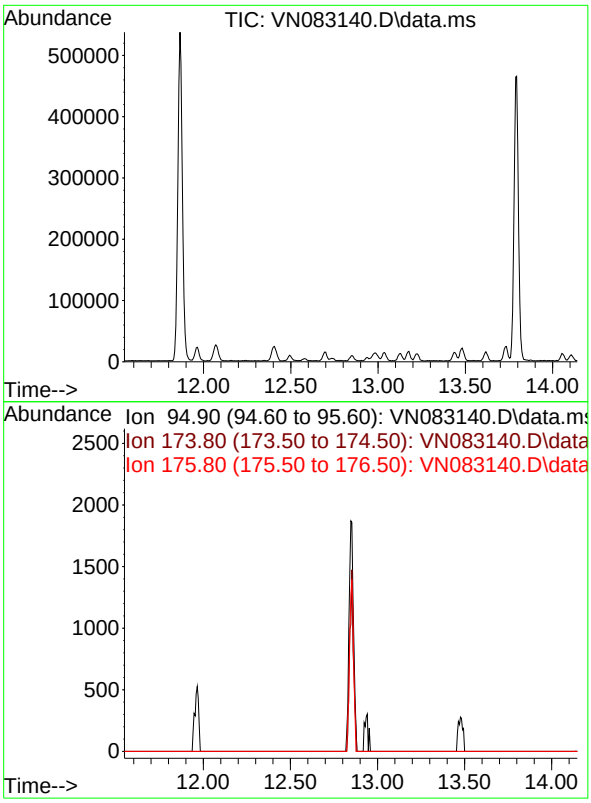



#61
1,2-Dibromoethane
Concen: 0.947 ug/l
RT: 11.465 min Scan# 1617
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:107 Resp: 2200

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 90.4 | 73.7 | 110.5 |






#62
4-Bromofluorobenzene
Concen: 0.000 ug/l
Expected RT: 12.85 min

Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 95

| Sig | Exp Ratio |
|---|---|
| 95 | 100 |
| 174 | 79.6 |
| 176 | 73.8 |

**Instrument :**
MSVOA_N
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VSTDICC001

**Manual Integrations**
**APPROVED**

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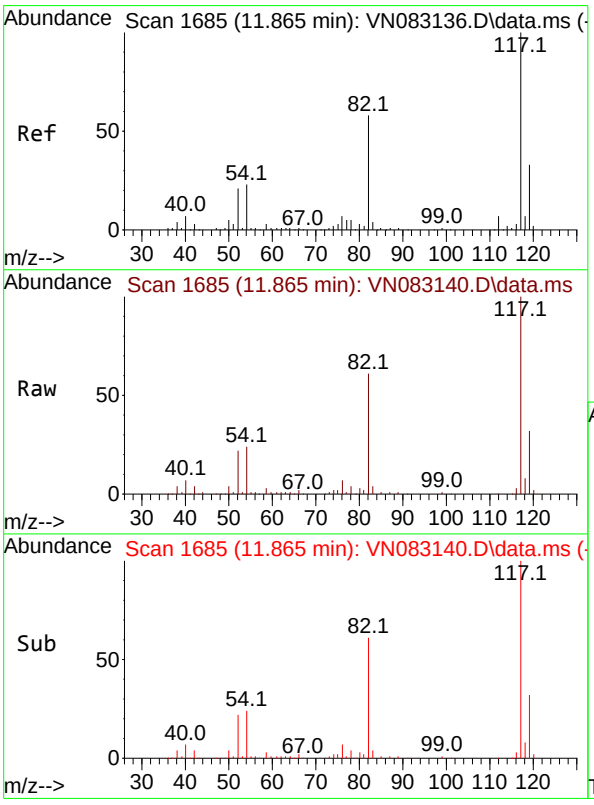
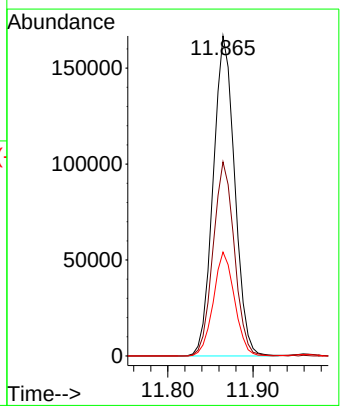
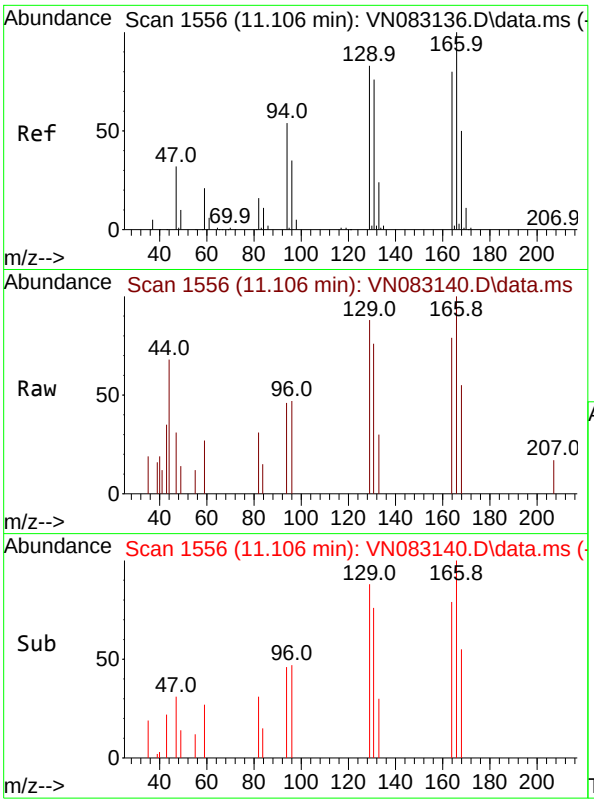



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:117 Resp: 292647

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.6 | 47.5 | 71.3 |
| 119 | 32.4 | 25.6 | 38.4 |

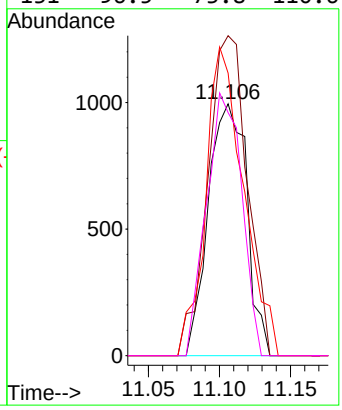





#64
Tetrachloroethene
Concen: 0.966 ug/l
RT: 11.106 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:164 Resp: 187

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 127.0 | 101.4 | 152.0 |
| 129 | 112.2 | 75.7 | 113.5 |
| 131 | 96.5 | 73.8 | 110.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

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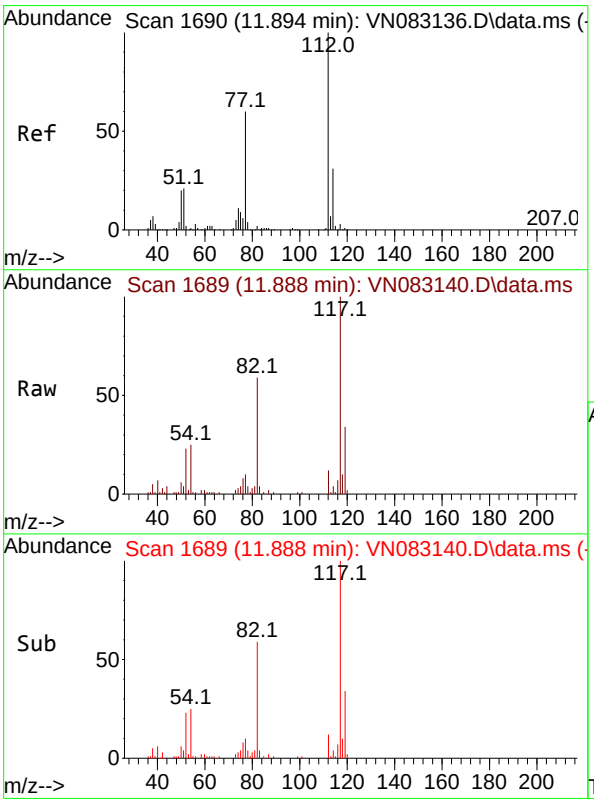
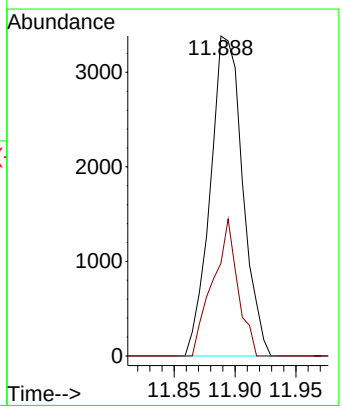
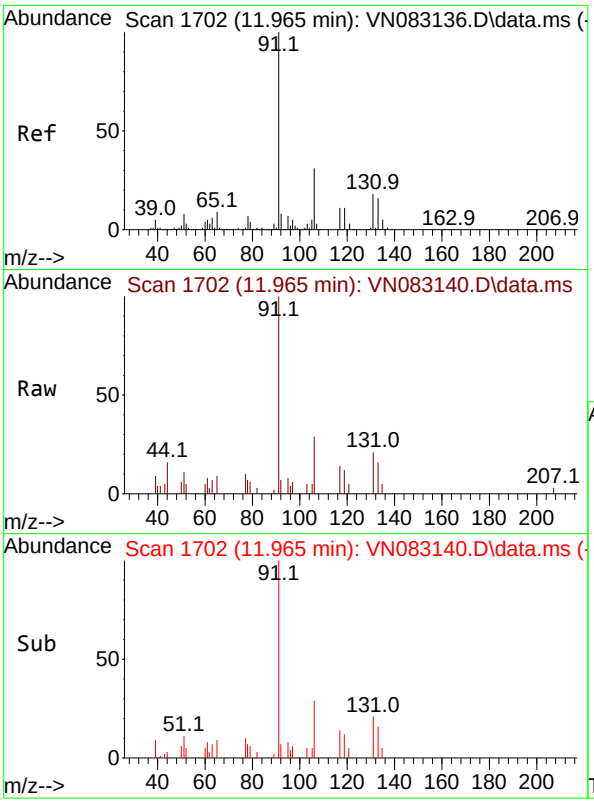



#65
Chlorobenzene
Concen: 0.968 ug/l
RT: 11.888 min Scan# 1689
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:112 Resp: 6259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 29.0 | 26.2 | 39.2 |






#66
1,1,1,2-Tetrachloroethane
Concen: 0.951 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:131 Resp: 216

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 100.6 | 47.3 | 142.0 |
| 119 | 0.0 | 32.5 | 97.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

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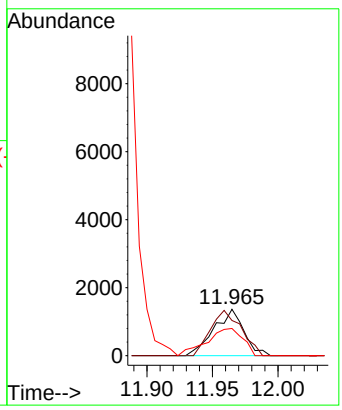
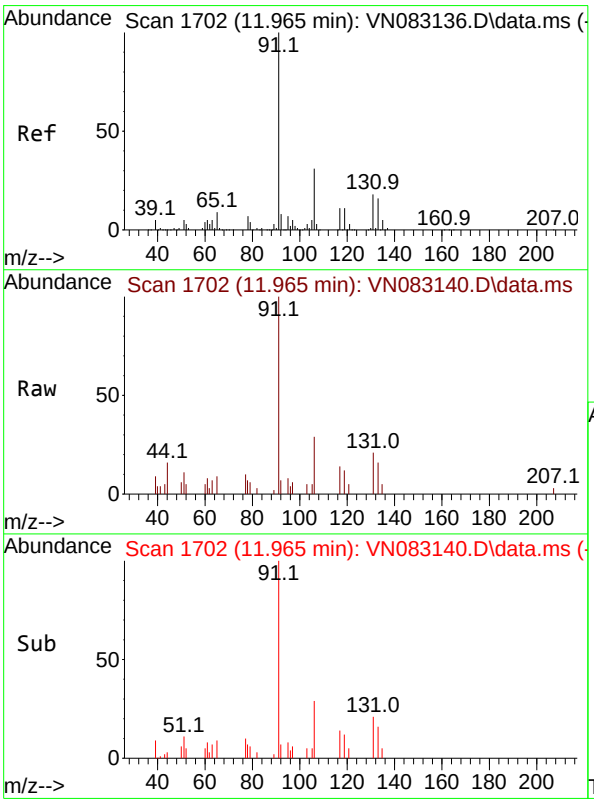
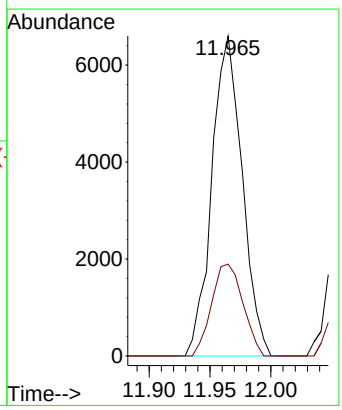


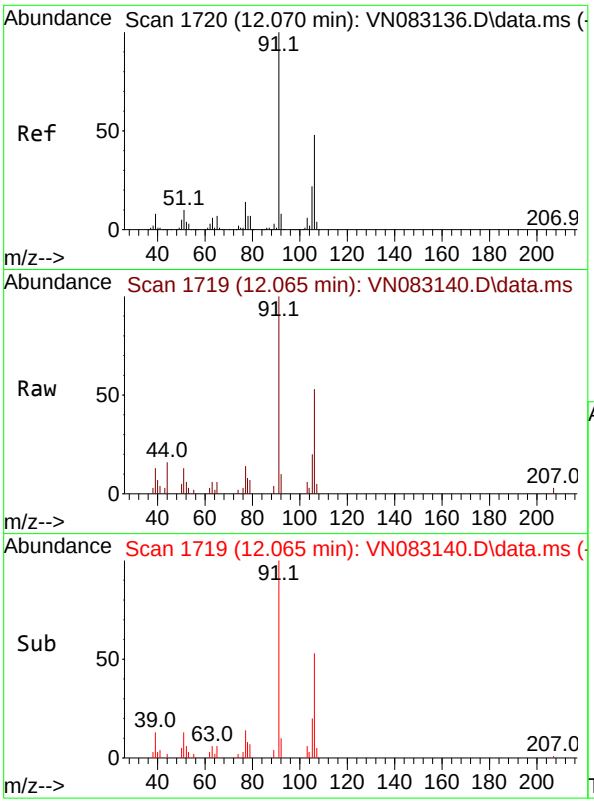




#67
Ethyl Benzene
Concen: 0.966 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 91 Resp: 11455

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 28.7 | 24.0 | 36.0 |






#68
m/p-Xylenes
Concen: 1.860 ug/l
RT: 12.065 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:106 Resp: 826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 217.0 | 166.1 | 249.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

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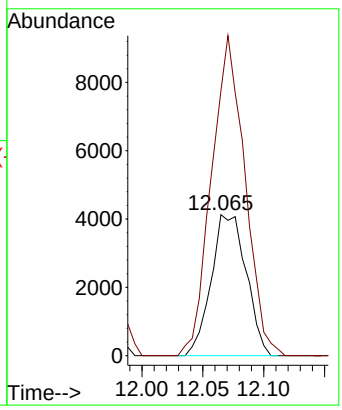
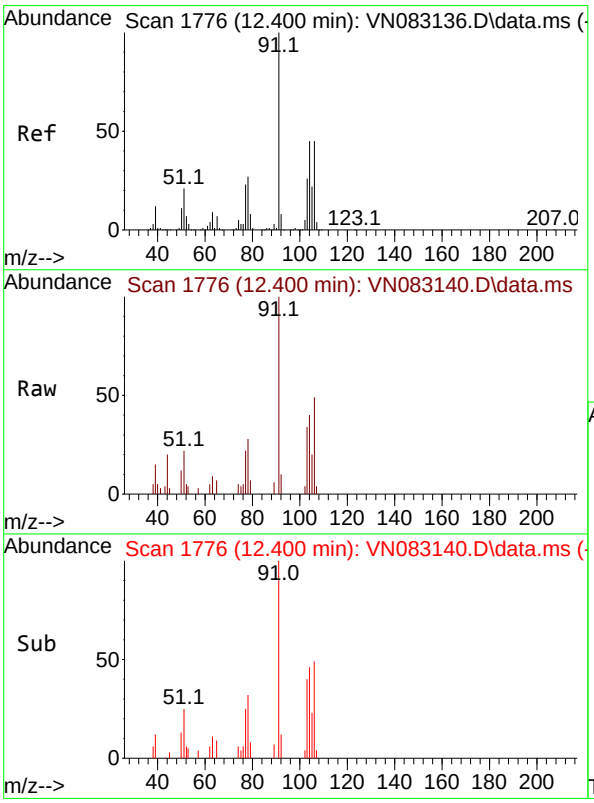
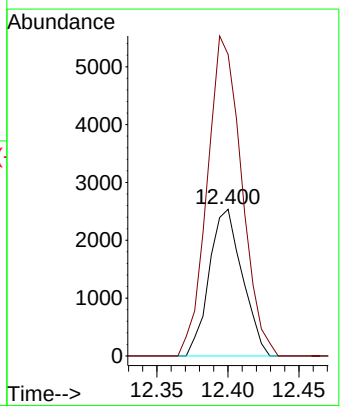


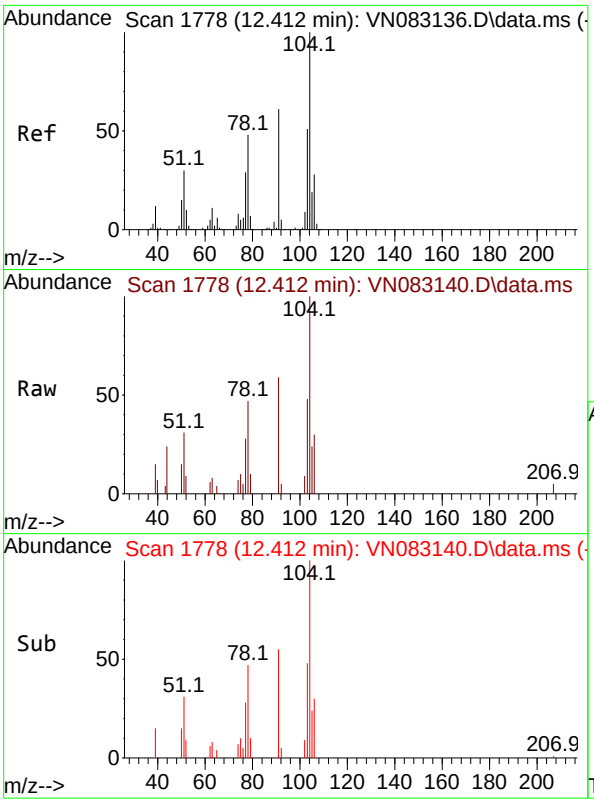




#69
o-Xylene
Concen: 0.938 ug/l
RT: 12.400 min Scan# 1776
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:106 Resp: 4113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 226.2 | 111.3 | 333.9 |






#70
Styrene
Concen: 0.875 ug/l
RT: 12.412 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:104 Resp: 641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 60.2 | 41.6 | 62.4 |
| 103 | 60.7 | 44.0 | 66.0 |

**Instrument :**
MSVOA_N
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VSTDICC001

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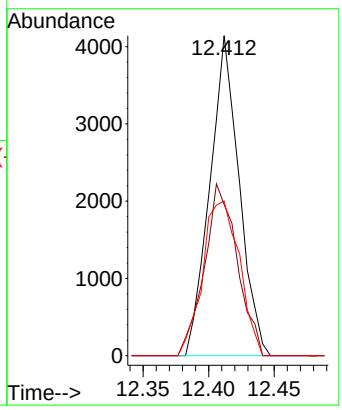
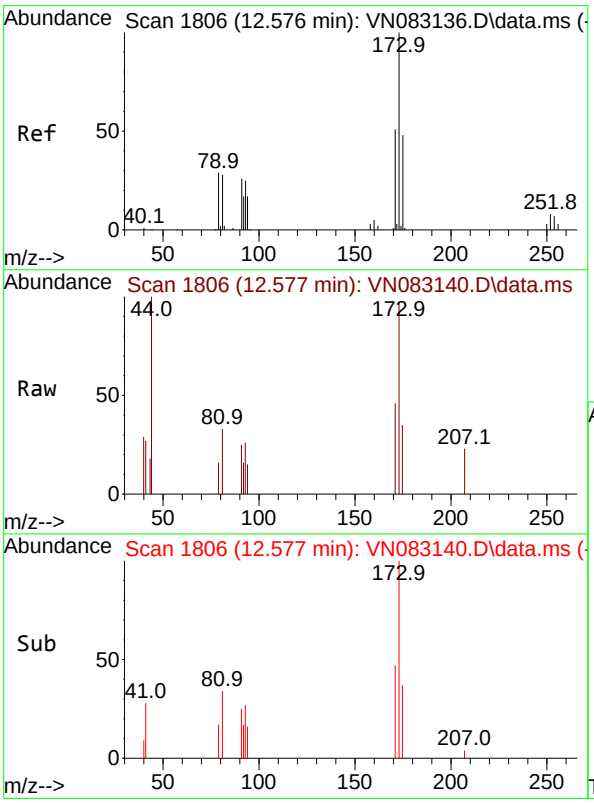
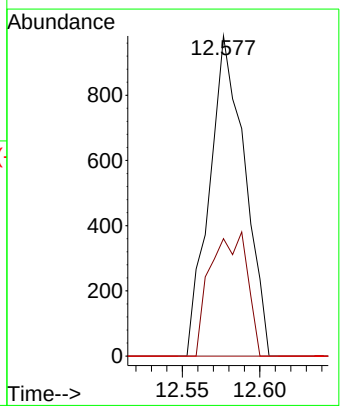


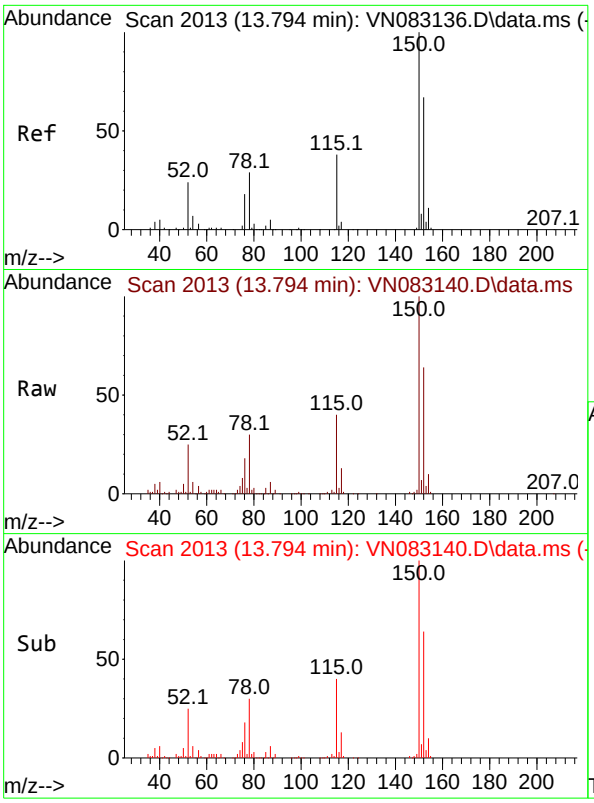




#71
Bromoform
Concen: 0.903 ug/l
RT: 12.577 min Scan# 1806
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:173 Resp: 1561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 40.2 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |

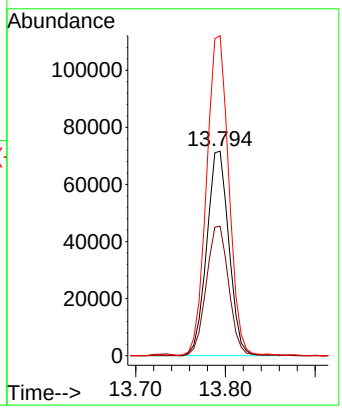





#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:152 Resp: 12292

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.2 | 30.6 | 91.6 |
| 150 | 157.5 | 0.0 | 348.6 |




**Instrument :**
MSVOA_N
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VSTDICC001

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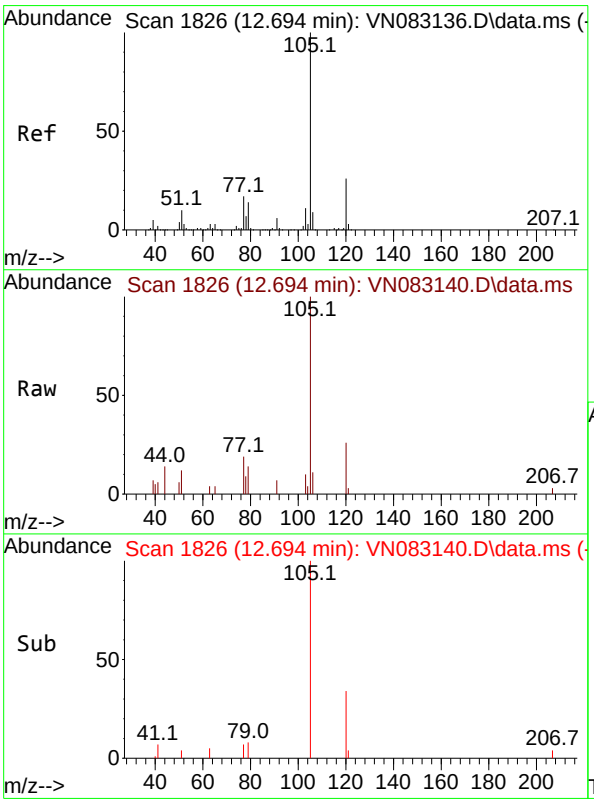
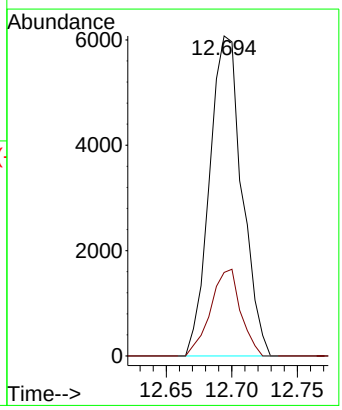
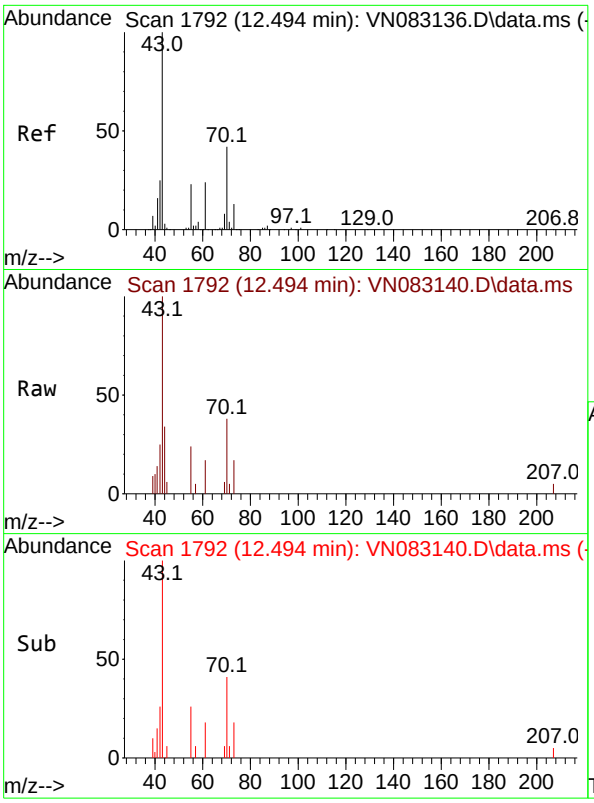



#73
Isopropylbenzene
Concen: 1.017 ug/l
RT: 12.694 min Scan# 1826
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:105 Resp: 10459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.1 | 12.9 | 38.6 |

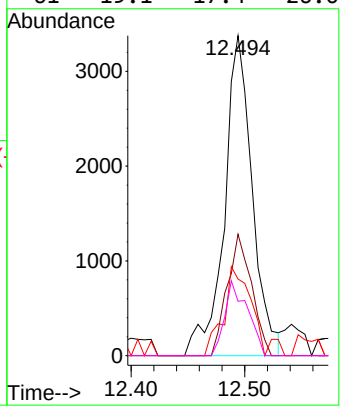





#74
N-amyl acetate
Concen: 1.144 ug/l
RT: 12.494 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 43 Resp: 575

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 33.3 | 29.8 | 44.6 |
| 55 | 28.9 | 18.7 | 28.1 |
| 61 | 19.1 | 17.4 | 26.0 |




**Instrument :**
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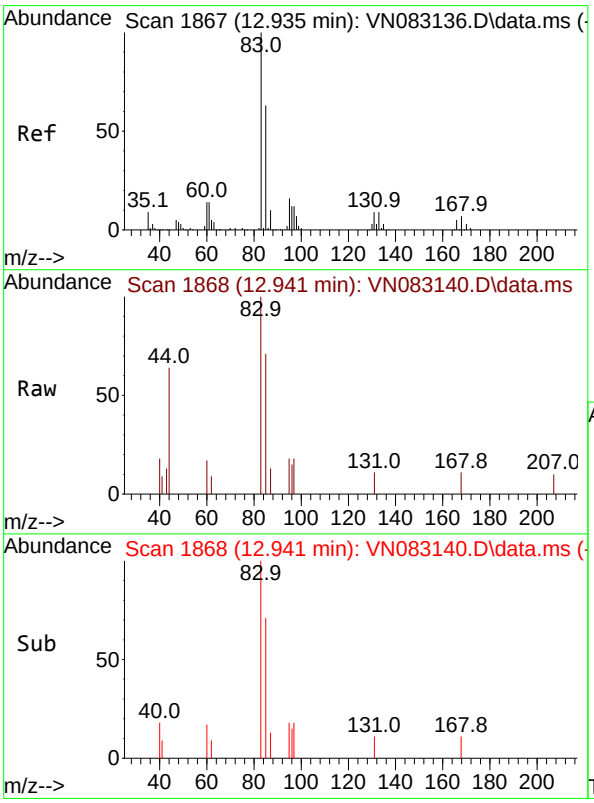
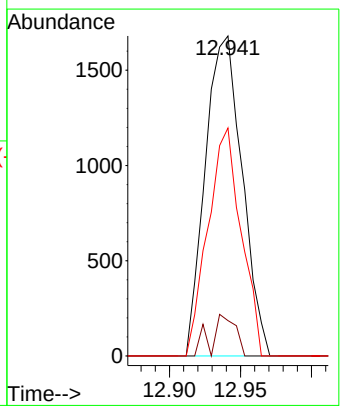
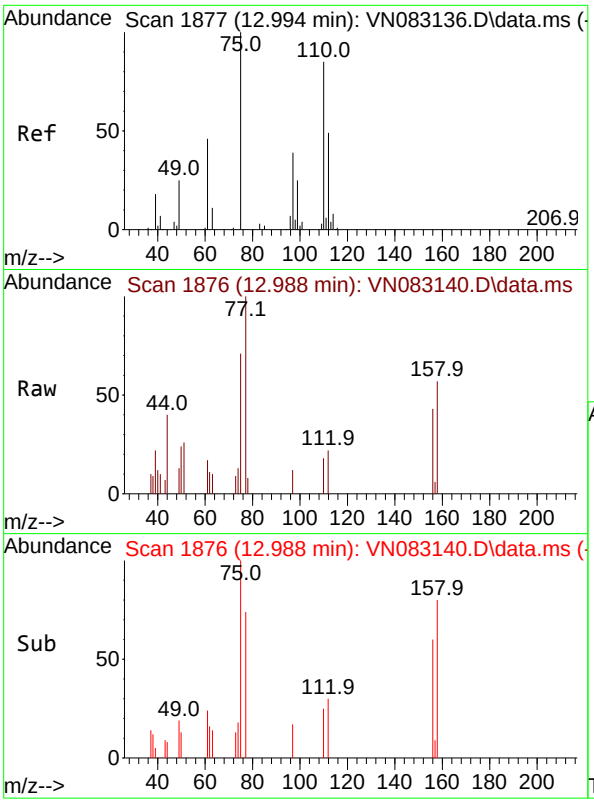



#75
1,1,2,2-Tetrachloroethane
Concen: 1.043 ug/l
RT: 12.941 min Scan# 1868
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 83 Resp: 3034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 8.5 | 5.0 | 14.9 |
| 85 | 64.0 | 31.9 | 95.7 |






#76
1,2,3-Trichloropropane
Concen: 1.122 ug/l m
RT: 12.988 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

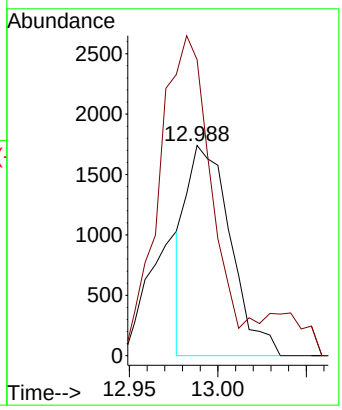
Tgt Ion: 75 Resp: 303

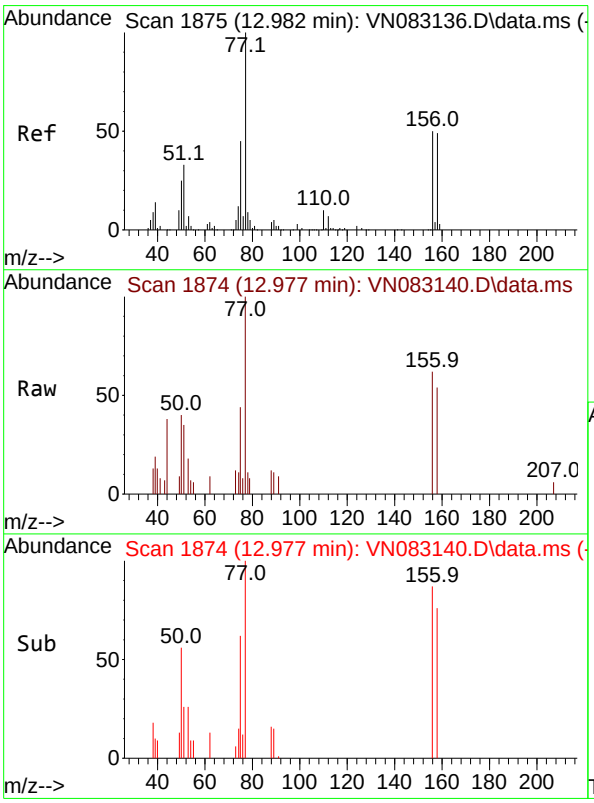
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 184.1 | 110.9 | 332.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

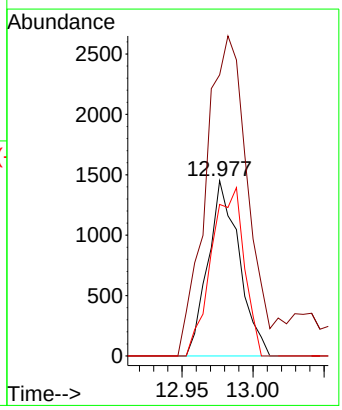


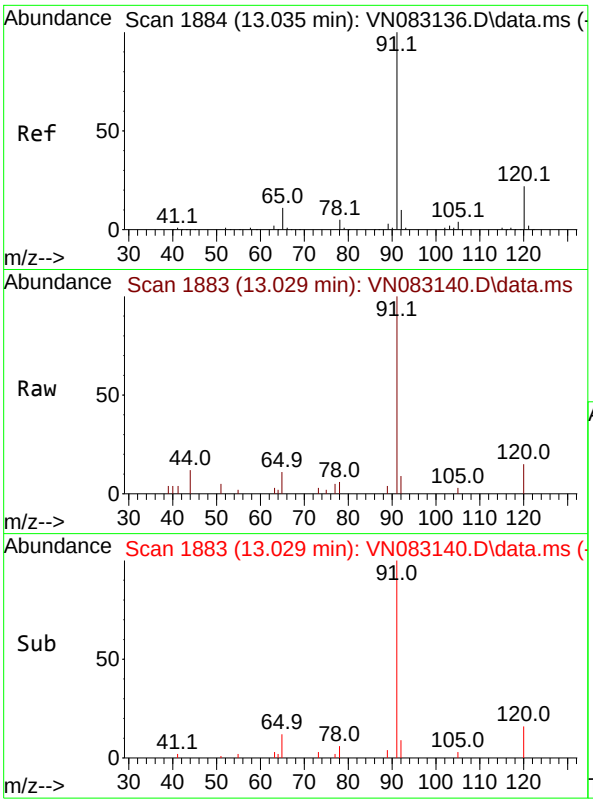




#77
Bromobenzene
Concen: 0.969 ug/l
RT: 12.977 min Scan# 1874
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:156 Resp: 2212

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 252.2 | 111.3 | 333.8 |
| 158 | 101.5 | 48.3 | 144.9 |






#78
n-propylbenzene
Concen: 0.997 ug/l
RT: 13.029 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 91 Resp: 1180

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.7 | 10.9 | 32.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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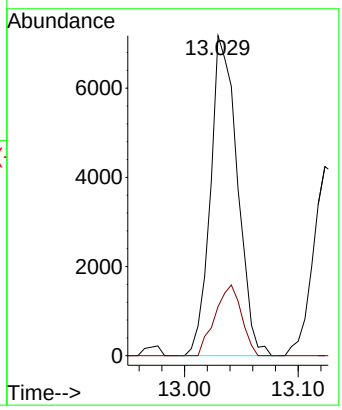
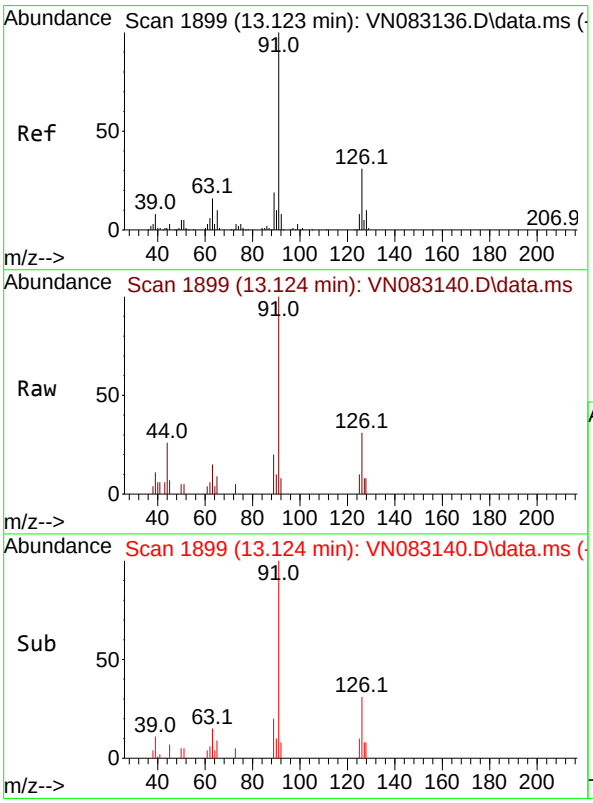
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

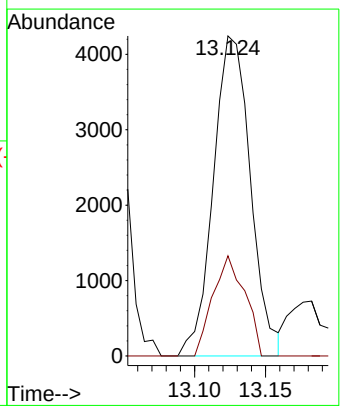


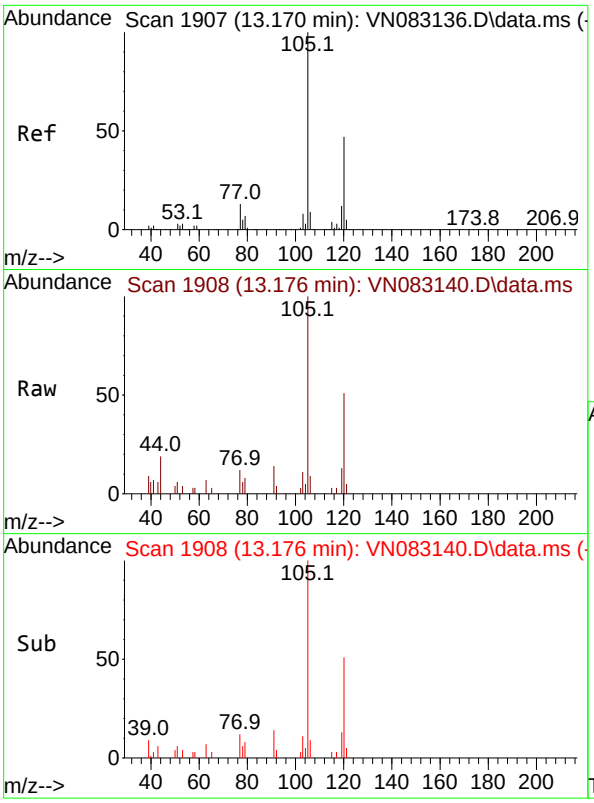




#79
2-Chlorotoluene
Concen: 1.031 ug/l
RT: 13.124 min Scan# 1899
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 91 Resp: 7735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 26.9 | 16.2 | 48.6 |






#80
1,3,5-Trimethylbenzene
Concen: 0.994 ug/l
RT: 13.176 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:105 Resp: 855

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 51.7 | 24.3 | 72.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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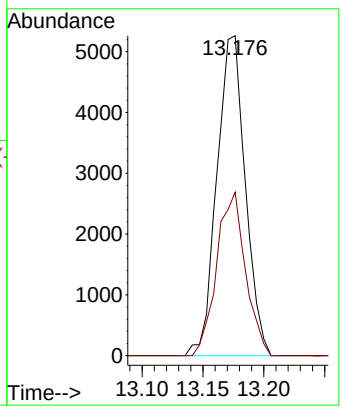
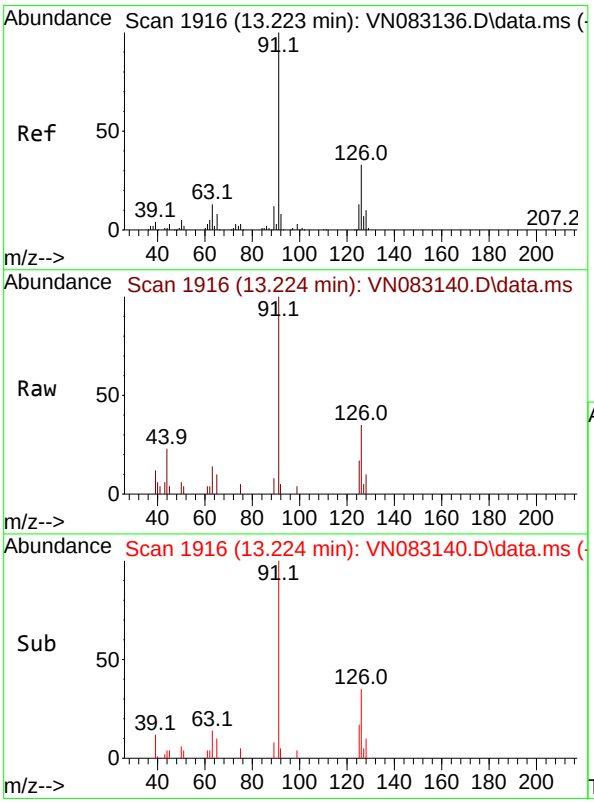
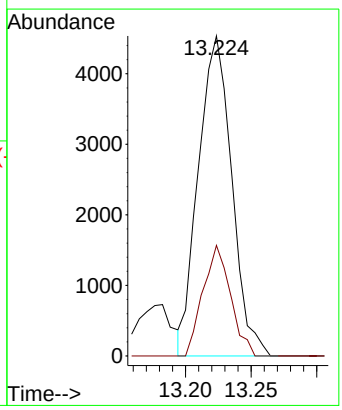


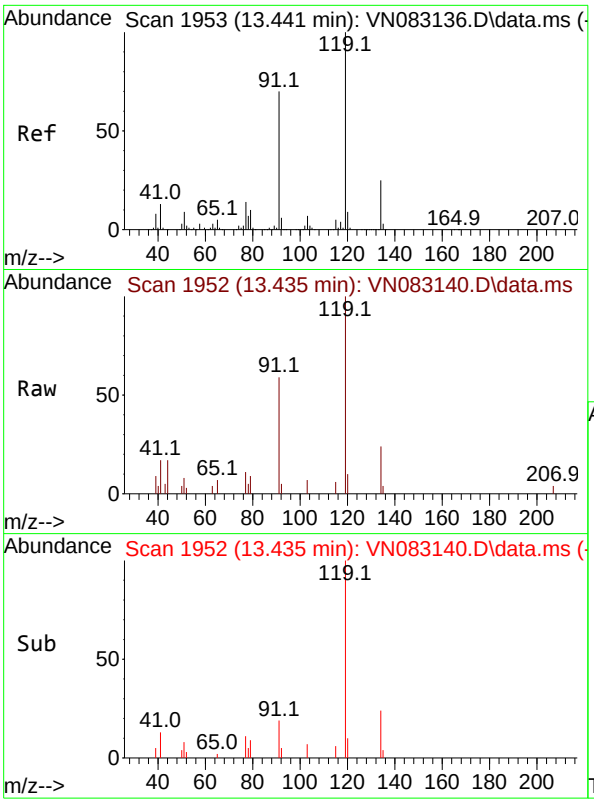




#82
4-Chlorotoluene
Concen: 1.065 ug/l
RT: 13.224 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 91 Resp: 8018

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.6 | 16.2 | 48.6 |

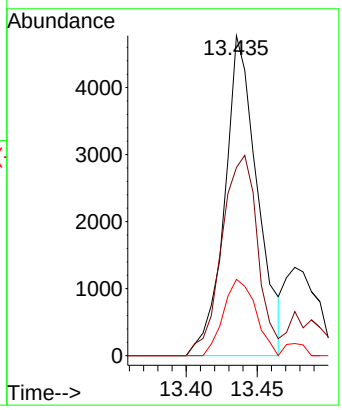





#83
tert-Butylbenzene
Concen: 1.001 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:119 Resp: 762

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 69.2 | 35.0 | 105.1 |
| 134 | 23.5 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
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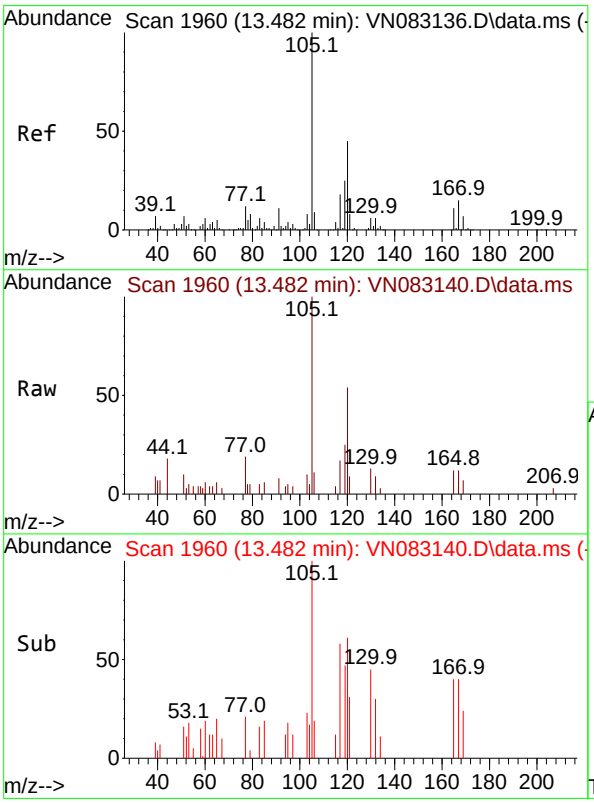
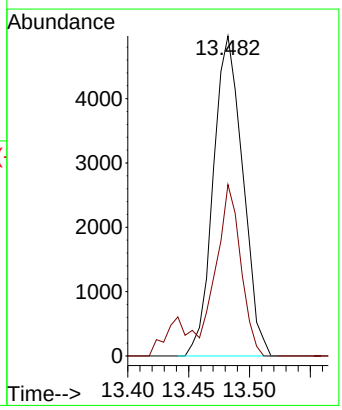
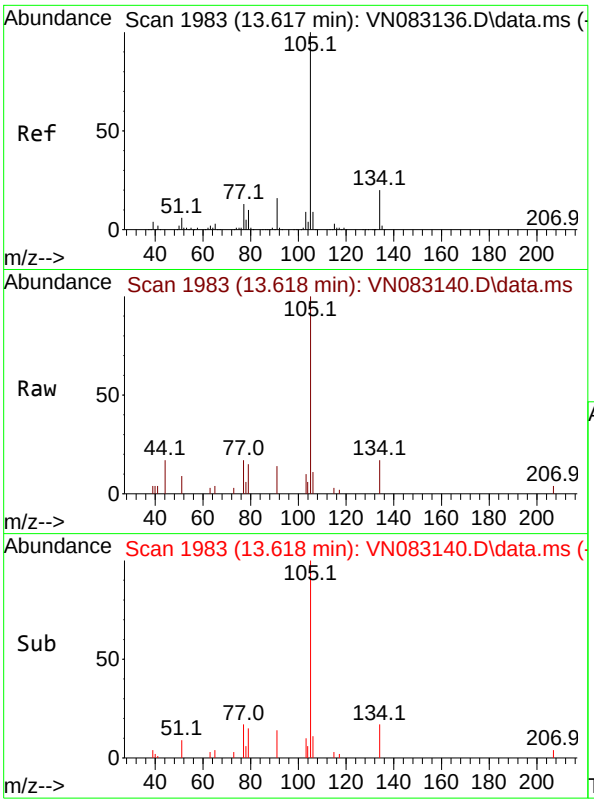



#84
1,2,4-Trimethylbenzene
Concen: 0.968 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:105 Resp: 8397

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.1 | 21.9 | 65.8 |






#85
sec-Butylbenzene
Concen: 1.001 ug/l
RT: 13.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:105 Resp: 1041

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 17.7 | 9.8 | 29.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

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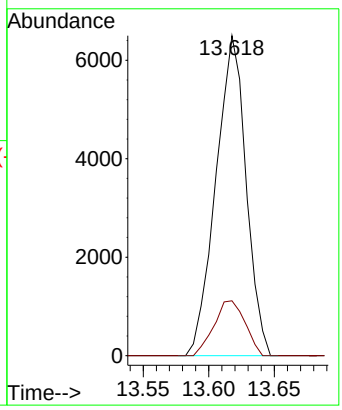
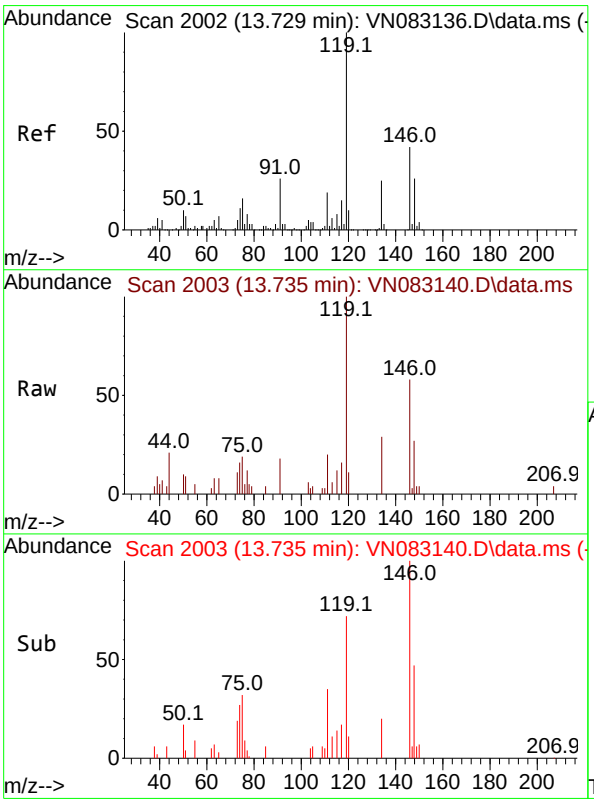
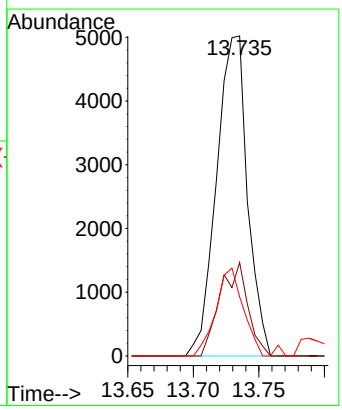


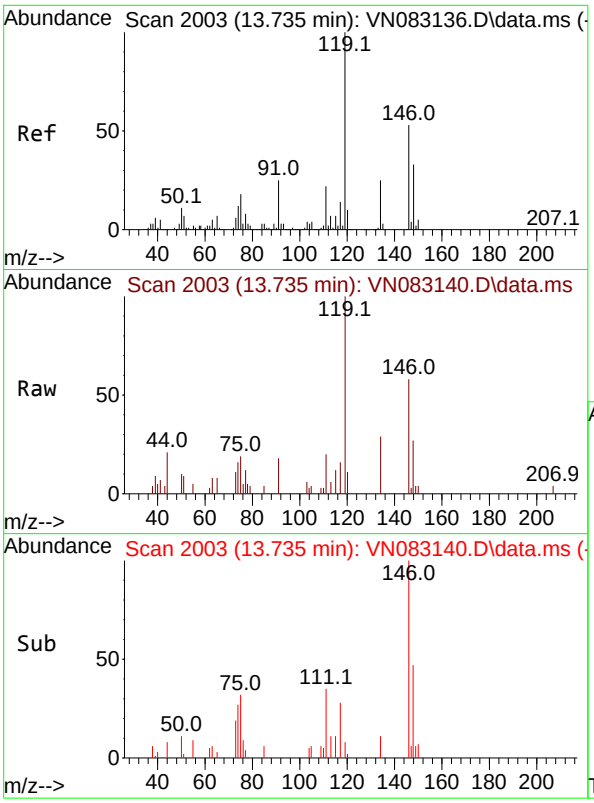




#86
p-Isopropyltoluene
Concen: 0.960 ug/l
RT: 13.735 min Scan# 2003
Delta R.T. 0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:119 Resp: 8247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.4 | 13.0 | 39.0 |
| 91 | 24.2 | 12.3 | 36.9 |

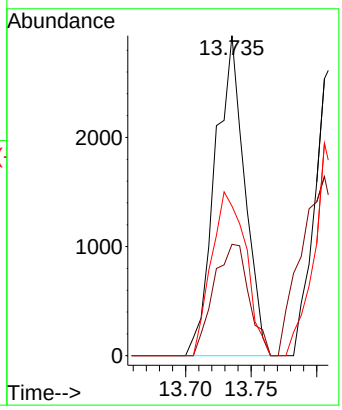





#87
1,3-Dichlorobenzene
Concen: 1.070 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:146 Resp: 459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.5 | 20.6 | 61.9 |
| 148 | 59.5 | 31.8 | 95.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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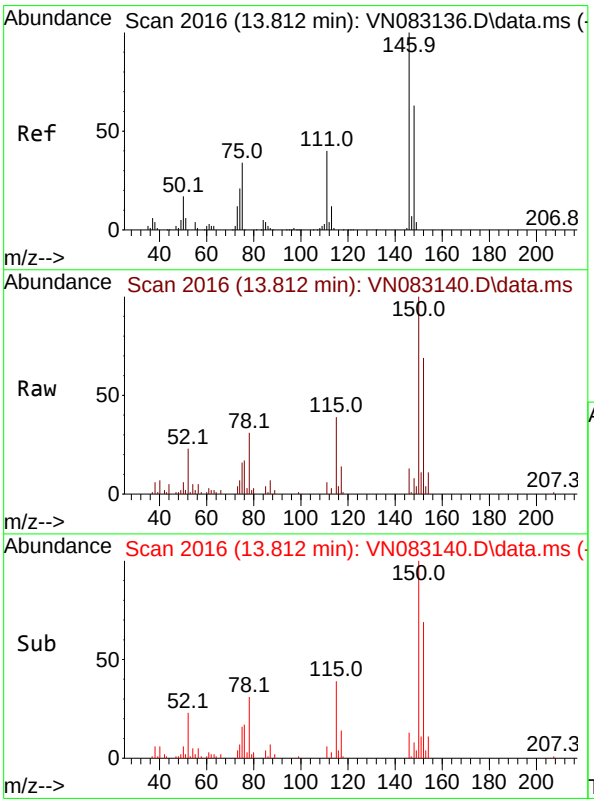
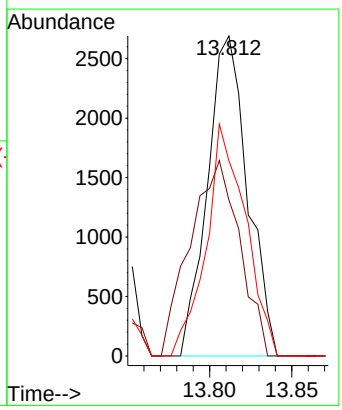
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

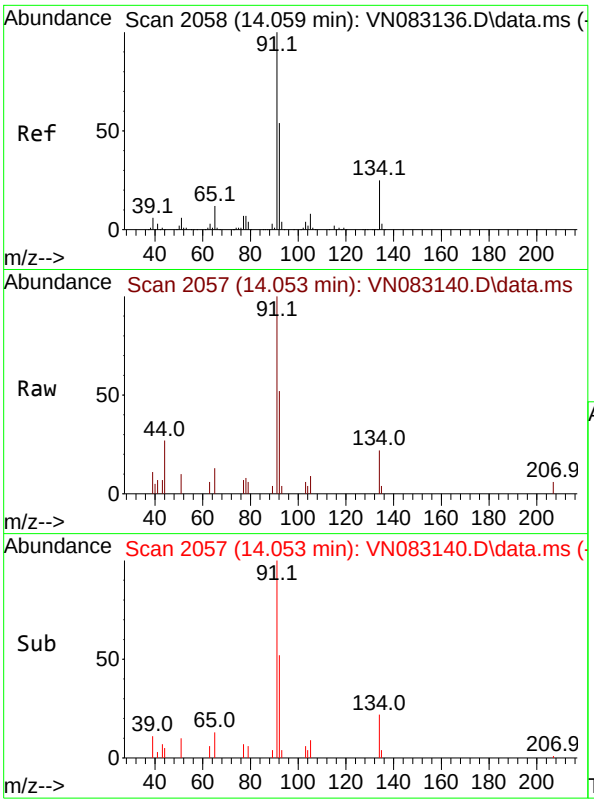



#88
1,4-Dichlorobenzene
Concen: 1.057 ug/l m
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:146 Resp: 4578

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.7 | 20.1 | 60.3 |
| 148 | 59.7 | 32.2 | 96.6 |






#89
n-Butylbenzene
Concen: 0.942 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 91 Resp: 700

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 52.0 | 26.1 | 78.3 |
| 134 | 24.1 | 12.1 | 36.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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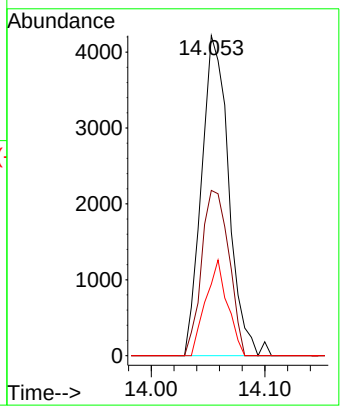
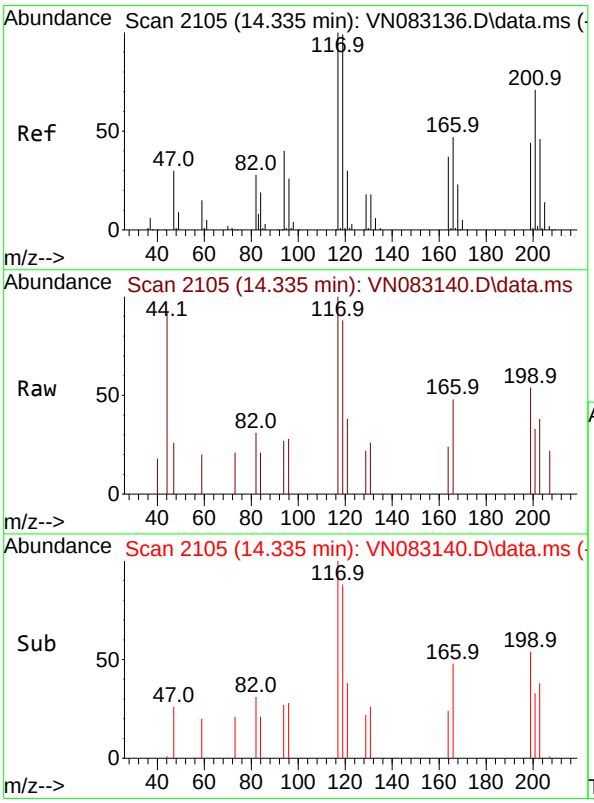
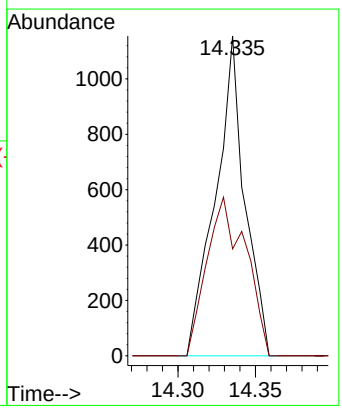


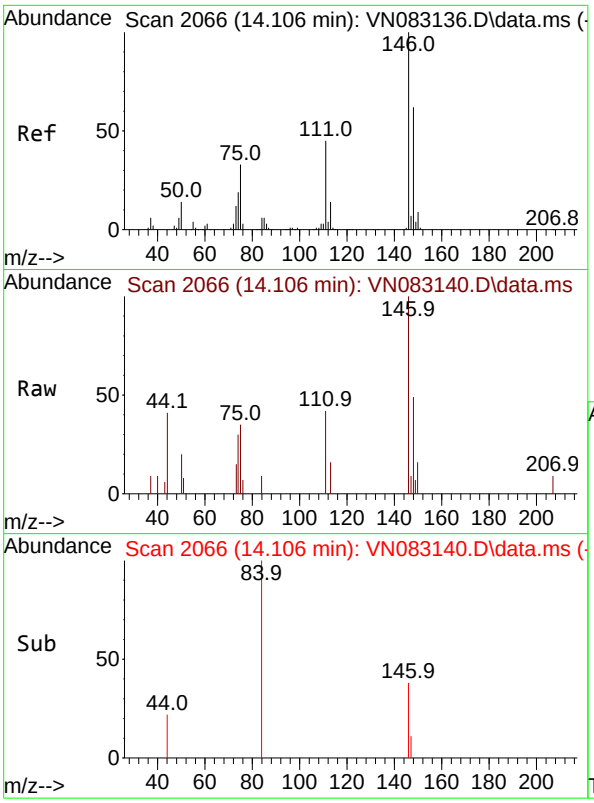




#90
Hexachloroethane
Concen: 0.918 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:117 Resp: 1524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.7 | 35.8 | 107.3 |

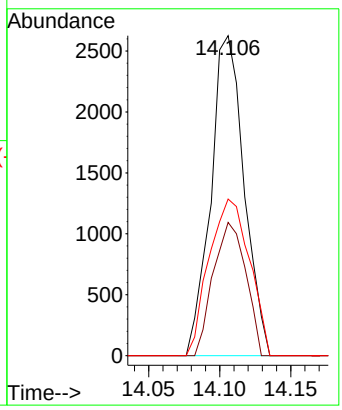





#91
1,2-Dichlorobenzene
Concen: 1.029 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:146 Resp: 427

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.7 | 21.4 | 64.2 |
| 148 | 59.6 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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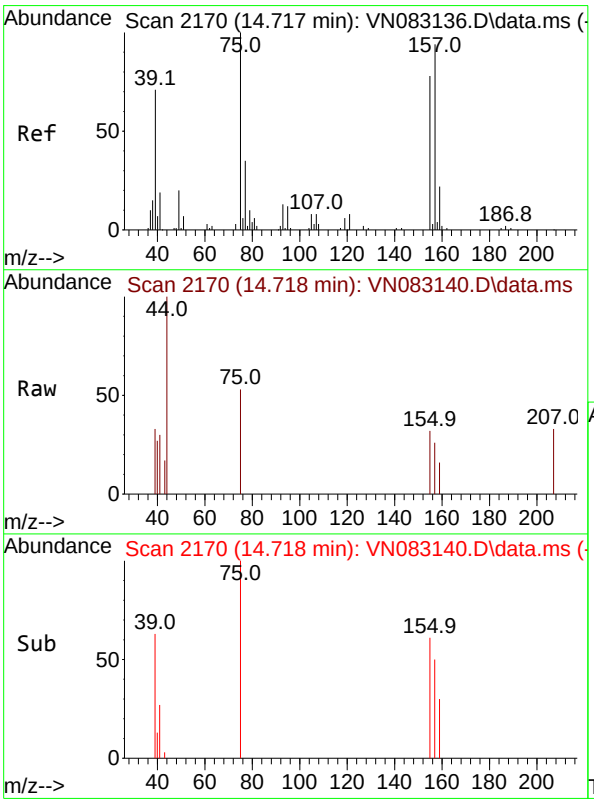
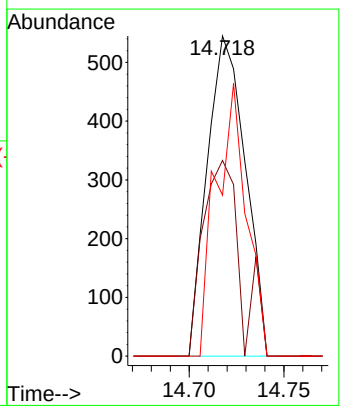
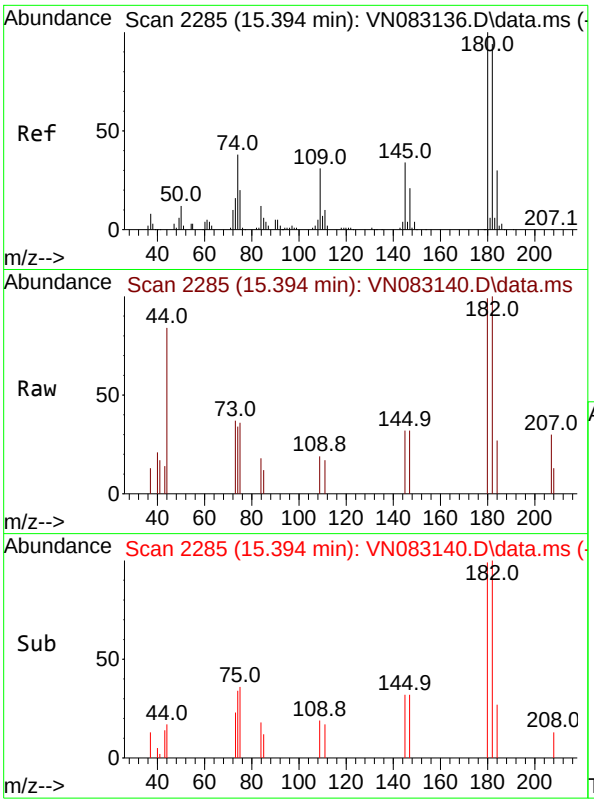



#92
1,2-Dibromo-3-Chloropropane
Concen: 1.081 ug/l
RT: 14.718 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion: 75 Resp: 763

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 59.5 | 36.6 | 109.8 |
| 157 | 67.9 | 46.9 | 140.6 |

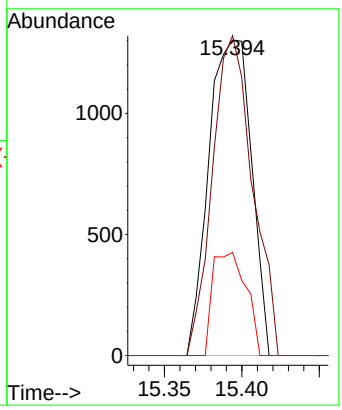





#93
1,2,4-Trichlorobenzene
Concen: 1.070 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:180 Resp: 249

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.5 | 47.3 | 141.8 |
| 145 | 25.6 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
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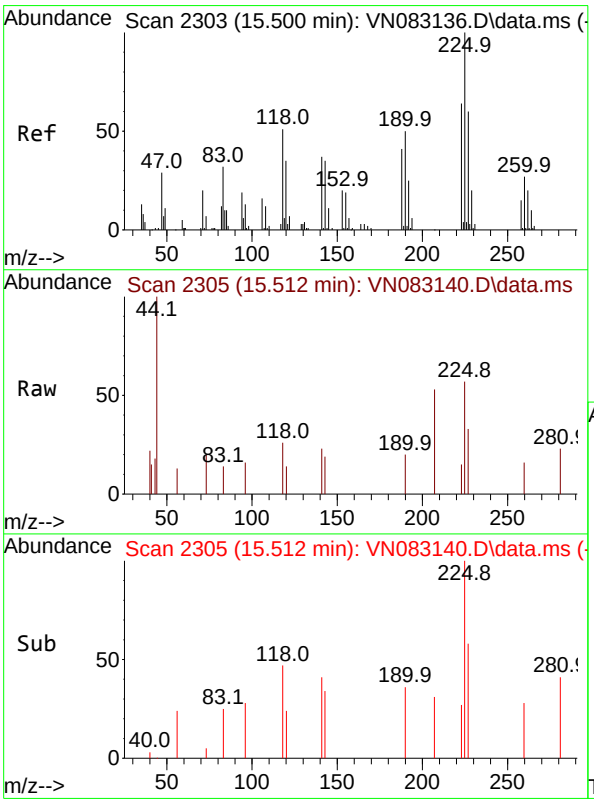
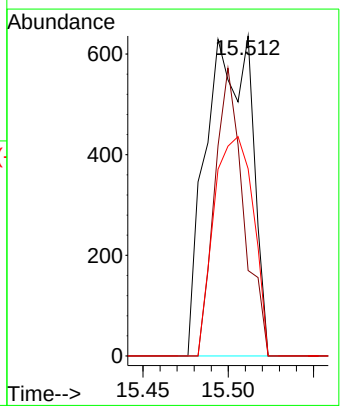
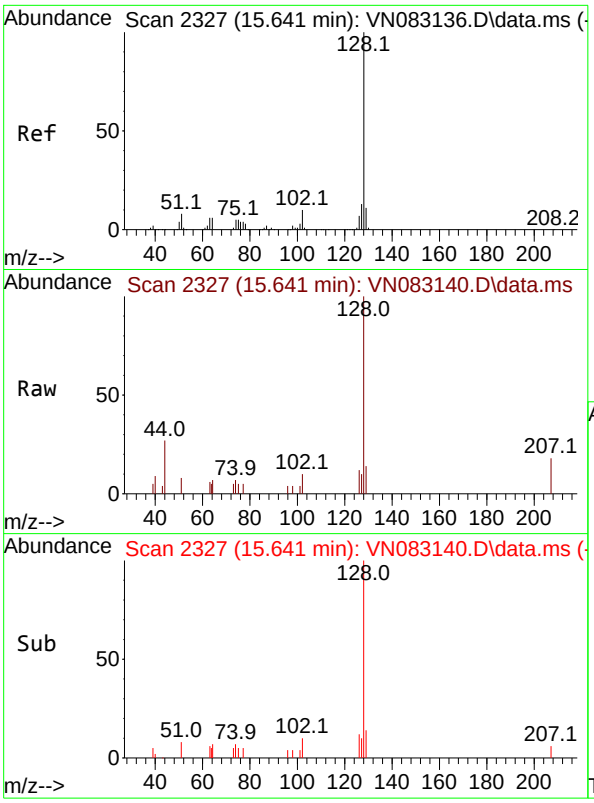



#94
Hexachlorobutadiene
Concen: 1.140 ug/l
RT: 15.512 min Scan# 2305
Delta R.T. 0.012 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:225 Resp: 1181

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 57.0 | 31.9 | 95.7 |
| 227 | 59.4 | 32.5 | 97.5 |

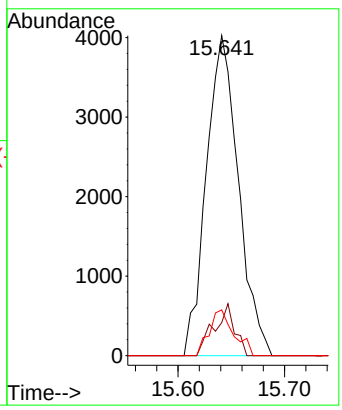





#95
Naphthalene
Concen: 1.021 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:128 Resp: 843

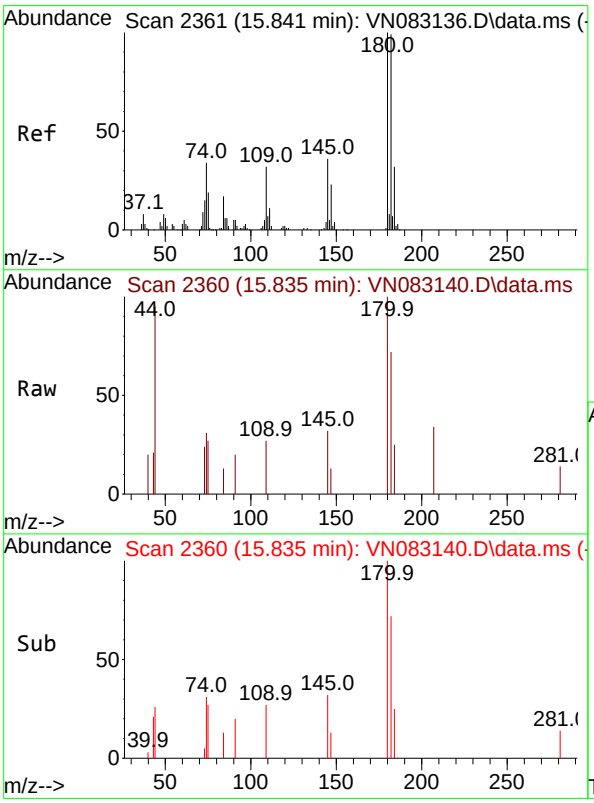
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 10.4 | 10.6 | 16.0 |
| 129 | 10.9 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDICC001

**Manual Integrations**
**APPROVED**

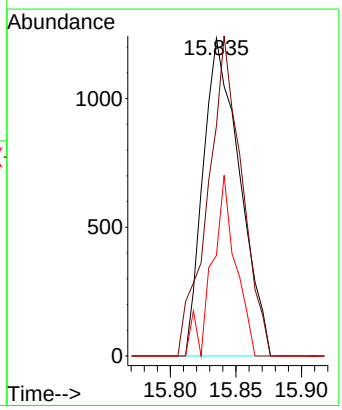
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024




#96
1,2,3-Trichlorobenzene
Concen: 1.036 ug/l
RT: 15.835 min Scan# 2360
Delta R.T. -0.006 min
Lab File: VN083140.D
Acq: 07 Aug 2024 12:34

Tgt Ion:180 Resp: 2389

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.8 | 48.9 | 146.8 |
| 145 | 36.6 | 16.8 | 50.4 |



ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 223686 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 380000 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 330951 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 157193 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 161051 | 50.583 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 101.160% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 122268 | 51.549 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 103.100% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 461627 | 52.175 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 104.340% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 181344 | 52.574 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 105.140% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 119481 | 47.102 | ug/l | 99 |
| 3) Chloromethane | 2.360 | 50 | 120081 | 46.238 | ug/l | 97 |
| 4) Vinyl Chloride | 2.512 | 62 | 121730 | 45.937 | ug/l | 99 |
| 5) Bromomethane | 2.948 | 94 | 70678 | 42.984 | ug/l | 99 |
| 6) Chloroethane | 3.112 | 64 | 72491 | 43.725 | ug/l | 96 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 206291 | 47.124 | ug/l | 98 |
| 8) Diethyl Ether | 3.959 | 74 | 75355 | 46.259 | ug/l | 85 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 113860 | 47.176 | ug/l | 99 |
| 10) Methyl Iodide | 4.589 | 142 | 150327 | 47.349 | ug/l | 97 |
| 11) Tert butyl alcohol | 5.524 | 59 | 137718 | 208.135 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.336 | 96 | 112976 | 45.562 | ug/l | 93 |
| 13) Acrolein | 4.177 | 56 | 93826 | 217.571 | ug/l | 97 |
| 14) Allyl chloride | 5.018 | 41 | 192929 | 41.173 | ug/l | 94 |
| 15) Acrylonitrile | 5.712 | 53 | 296594 | 217.950 | ug/l | 99 |
| 16) Acetone | 4.424 | 43 | 262677 | 210.840 | ug/l | 97 |
| 17) Carbon Disulfide | 4.712 | 76 | 316980 | 43.689 | ug/l | 100 |
| 18) Methyl Acetate | 5.024 | 43 | 157374 | 42.397 | ug/l # | 91 |
| 19) Methyl tert-butyl Ether | 5.795 | 73 | 418691 | 46.781 | ug/l | 97 |
| 20) Methylene Chloride | 5.277 | 84 | 125142 | 43.645 | ug/l # | 82 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 117045 | 45.671 | ug/l | 92 |
| 22) Diisopropyl ether | 6.671 | 45 | 412931 | 46.881 | ug/l | 97 |
| 23) Vinyl Acetate | 6.600 | 43 | 2125343 | 235.414 | ug/l | 95 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 224136 | 46.685 | ug/l | 99 |
| 25) 2-Butanone | 7.483 | 43 | 405134 | 211.782 | ug/l | 91 |
| 26) 2,2-Dichloropropane | 7.489 | 77 | 213355 | 47.853 | ug/l | 97 |
| 27) cis-1,2-Dichloroethene | 7.483 | 96 | 142606 | 46.113 | ug/l | 93 |
| 28) Bromochloromethane | 7.812 | 49 | 90226 | 45.986 | ug/l | 86 |
| 29) Tetrahydrofuran | 7.836 | 42 | 274710 | 222.147 | ug/l | 89 |
| 30) Chloroform | 7.965 | 83 | 236359 | 47.387 | ug/l | 97 |
| 31) Cyclohexane | 8.253 | 56 | 205124 | 43.474 | ug/l | 96 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 222538 | 47.135 | ug/l | 96 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 171262 | 47.732 | ug/l | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 173246 | 43.124 | ug/l # | 96 |
| 38) Carbon Tetrachloride | 8.365 | 117 | 193592 | 47.904 | ug/l | 100 |
| 39) Methylcyclohexane | 9.600 | 83 | 210745 | 47.821 | ug/l | 98 |
| 40) Benzene | 8.606 | 78 | 509159 | 47.635 | ug/l | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 98251 | 43.013 | ug/l | | 95 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 184210 | 47.310 | ug/l | | 98 |
| 43) Isopropyl Acetate | 8.689 | 43 | 319540 | 45.577 | ug/l | # | 95 |
| 44) Trichloroethene | 9.353 | 130 | 122105 | 47.994 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 122313 | 48.208 | ug/l | | 99 |
| 46) Dibromomethane | 9.712 | 93 | 85581 | 47.124 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 191842 | 47.047 | ug/l | | 98 |
| 48) Methyl methacrylate | 9.683 | 41 | 148161 | 44.609 | ug/l | | 92 |
| 49) 1,4-Dioxane | 9.694 | 88 | 53042 | 885.211 | ug/l | | 96 |
| 51) 4-Methyl-2-Pentanone | 10.441 | 43 | 877246 | 230.917 | ug/l | | 94 |
| 52) Toluene | 10.630 | 92 | 327682 | 48.520 | ug/l | | 98 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 208495 | 49.776 | ug/l | | 99 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 216020 | 48.487 | ug/l | | 93 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 117023 | 48.351 | ug/l | | 99 |
| 56) Ethyl methacrylate | 10.871 | 69 | 216248 | 47.395 | ug/l | | 88 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 204441 | 47.391 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 472357 | 244.918 | ug/l | | 96 |
| 59) 2-Hexanone | 11.194 | 43 | 661033 | 224.916 | ug/l | | 92 |
| 60) Dibromochloromethane | 11.359 | 129 | 144886 | 49.513 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 119834 | 47.133 | ug/l | | 98 |
| 64) Tetrachloroethene | 11.106 | 164 | 105591 | 48.175 | ug/l | | 97 |
| 65) Chlorobenzene | 11.888 | 112 | 347560 | 47.522 | ug/l | | 95 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 120826 | 46.843 | ug/l | | 98 |
| 67) Ethyl Benzene | 11.965 | 91 | 640827 | 47.764 | ug/l | | 99 |
| 68) m/p-Xylenes | 12.071 | 106 | 484653 | 96.434 | ug/l | | 98 |
| 69) o-Xylene | 12.400 | 106 | 231292 | 46.662 | ug/l | | 97 |
| 70) Styrene | 12.412 | 104 | 403657 | 48.487 | ug/l | | 98 |
| 71) Bromoform | 12.577 | 173 | 93397 | 47.797 | ug/l | # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 616544 | 46.893 | ug/l | | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 281352 | 43.748 | ug/l | | 94 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 159962 | 43.016 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 145309m | 42.119 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 136249 | 46.649 | ug/l | | 97 |
| 78) n-propylbenzene | 13.035 | 91 | 721825 | 47.678 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.124 | 91 | 445353 | 46.398 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 524769 | 47.673 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 74654 | 47.070 | ug/l | | 84 |
| 82) 4-Chlorotoluene | 13.224 | 91 | 447810 | 46.512 | ug/l | | 98 |
| 83) tert-Butylbenzene | 13.435 | 119 | 450104 | 46.173 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 515759 | 46.493 | ug/l | | 99 |
| 85) sec-Butylbenzene | 13.618 | 105 | 625404 | 47.018 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 522411 | 47.566 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 252579 | 45.959 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 252088 | 45.499 | ug/l | | 98 |
| 89) n-Butylbenzene | 14.059 | 91 | 461440 | 48.489 | ug/l | | 98 |
| 90) Hexachloroethane | 14.335 | 117 | 99176 | 46.741 | ug/l | | 95 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 240673 | 45.255 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.723 | 75 | 37677 | 41.753 | ug/l | | 99 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 137214 | 46.054 | ug/l | | 96 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 57394 | 43.315 | ug/l | | 98 |
| 95) Naphthalene | 15.641 | 128 | 471674 | 44.692 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 133315 | 45.221 | ug/l | | 95 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

ICAL Form

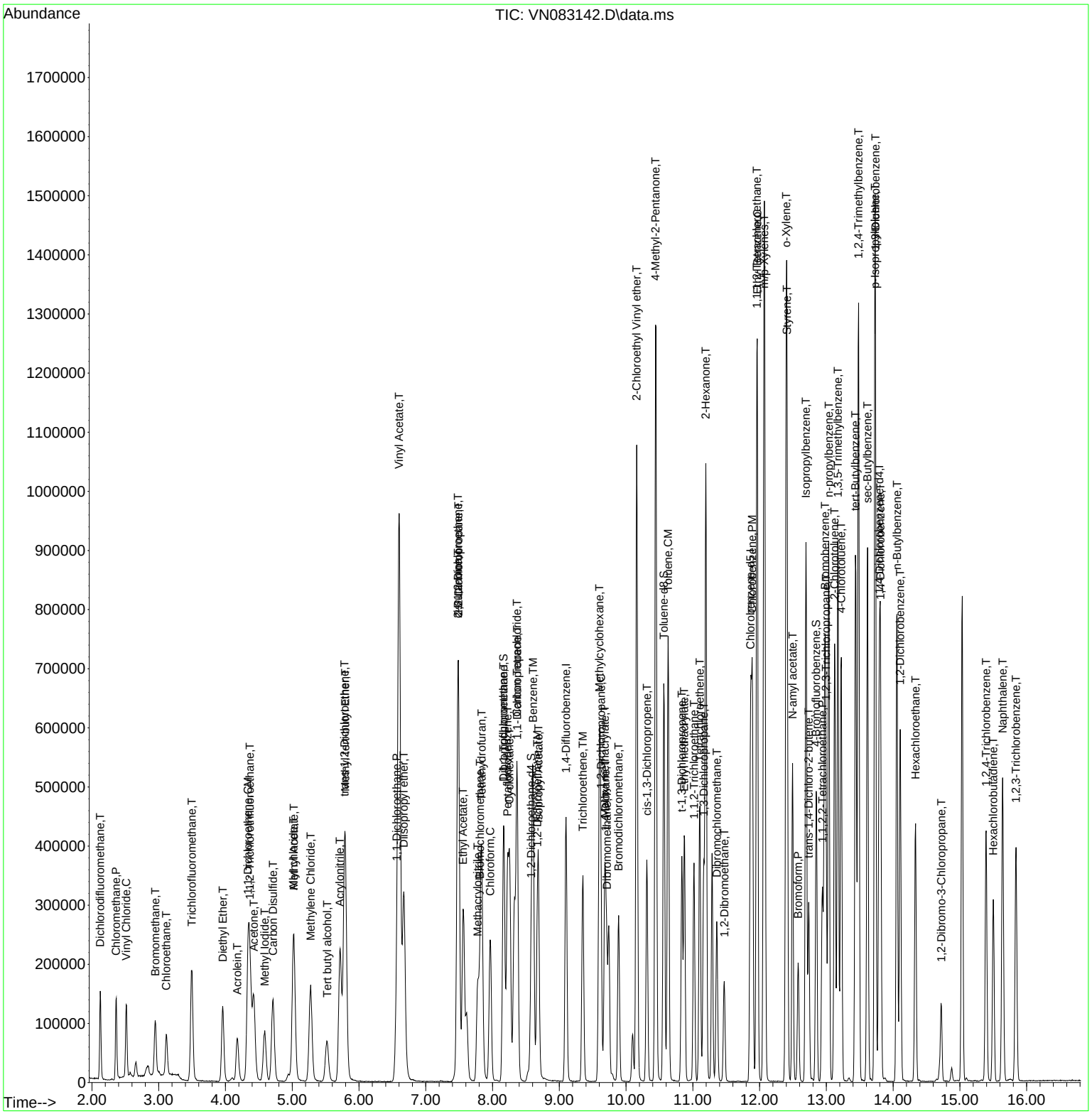
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

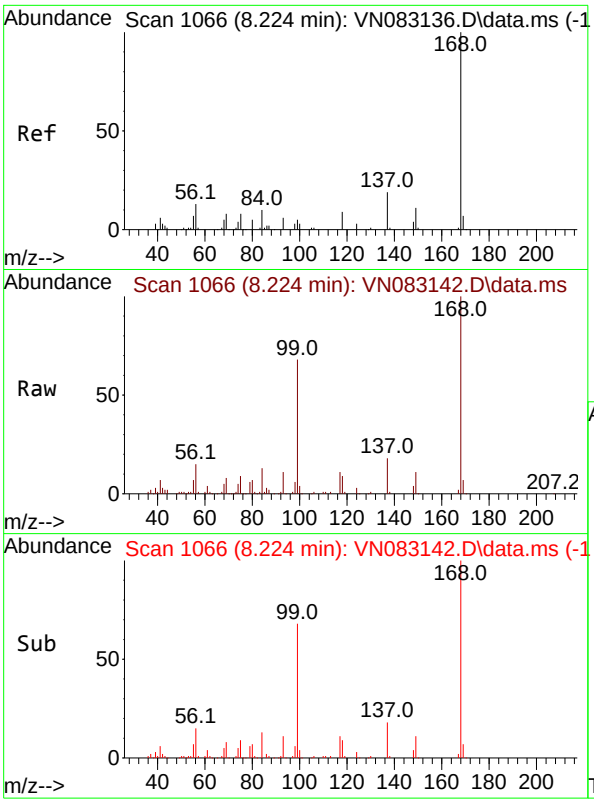
Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

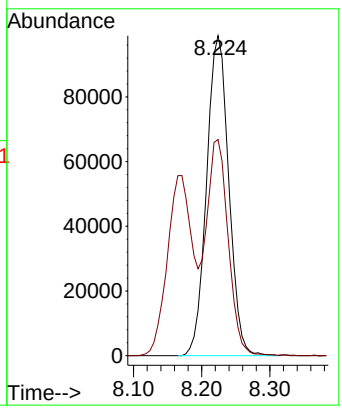





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:168 Resp: 22368

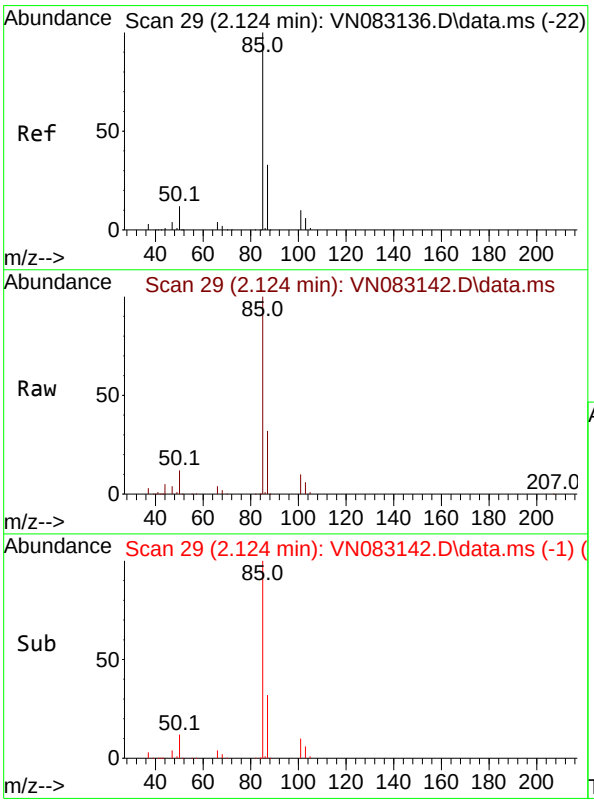
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 67.4 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
**APPROVED**

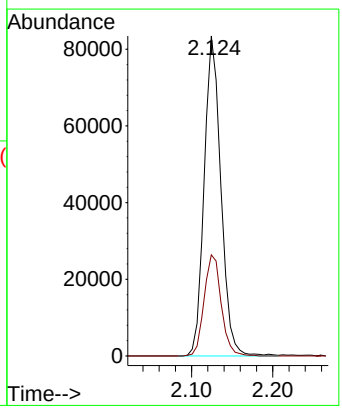
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

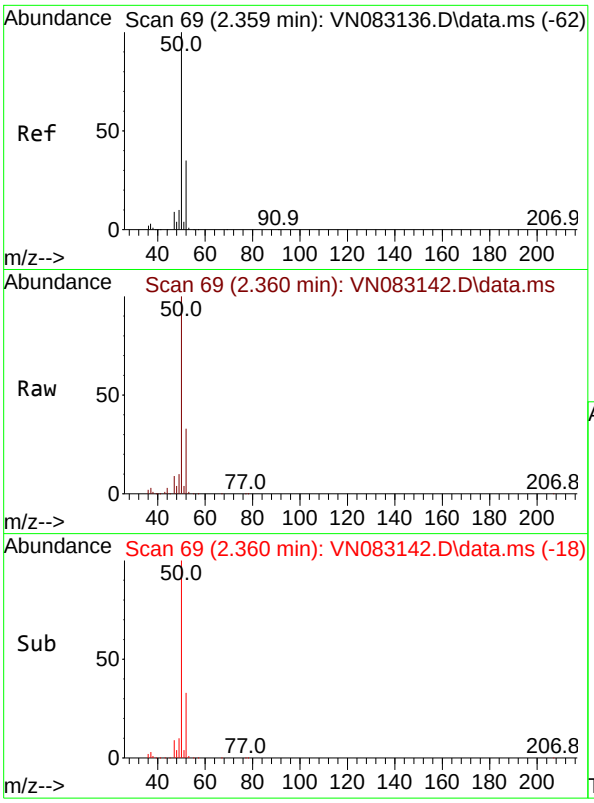



#2
Dichlorodifluoromethane
Concen: 47.102 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 85 Resp: 119481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.6 | 15.7 | 47.0 |

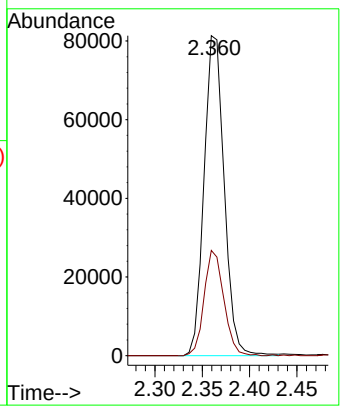





#3
Chloromethane
Concen: 46.238 ug/l
RT: 2.360 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 50 Resp: 12008

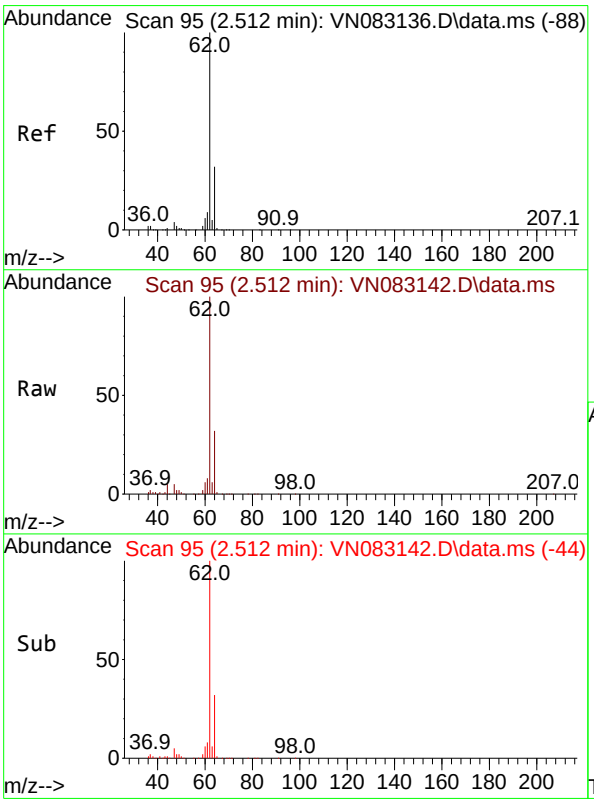
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.9 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
**APPROVED**

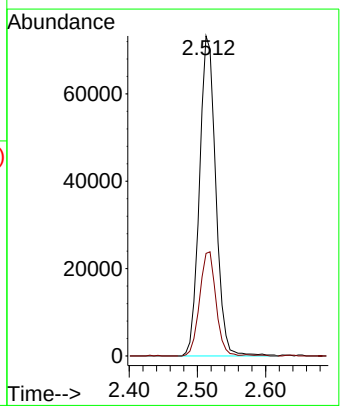
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

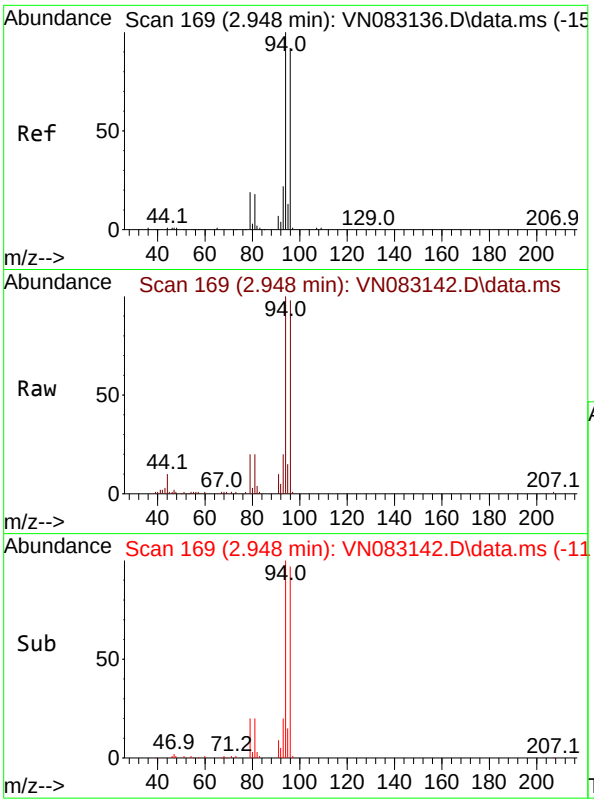



#4
Vinyl Chloride
Concen: 45.937 ug/l
RT: 2.512 min Scan# 95
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 62 Resp: 121730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.0 | 25.0 | 37.6 |






#5
Bromomethane
Concen: 42.984 ug/l
RT: 2.948 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

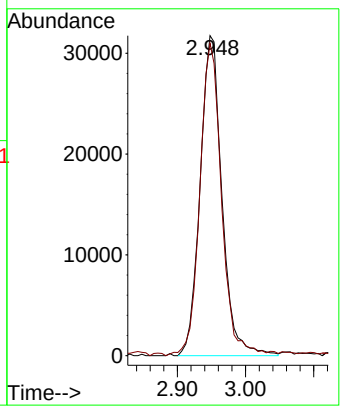
Tgt Ion: 94 Resp: 7067

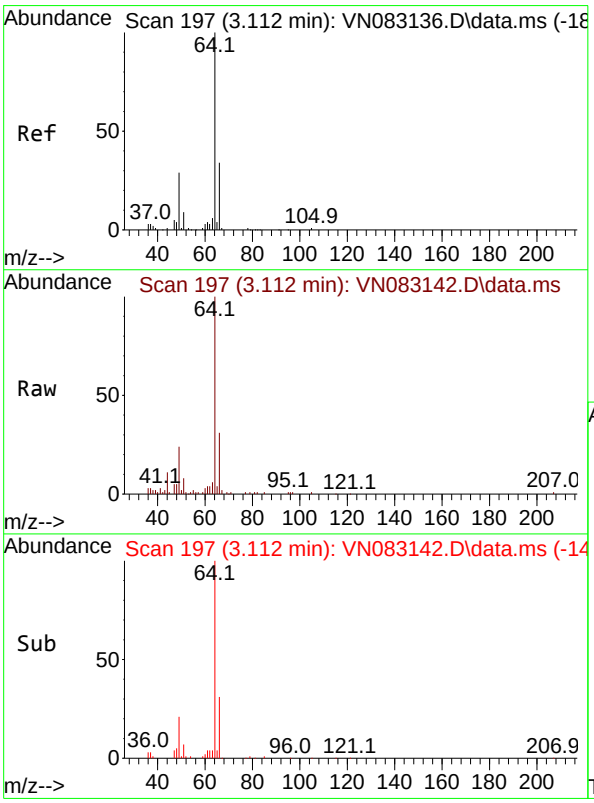
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 96.9 | 78.0 | 117.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

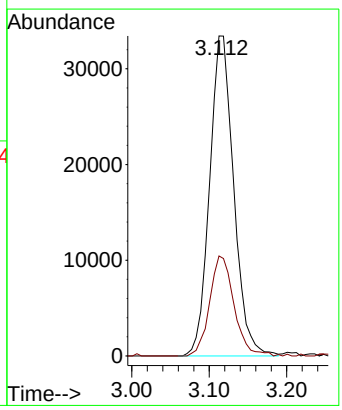


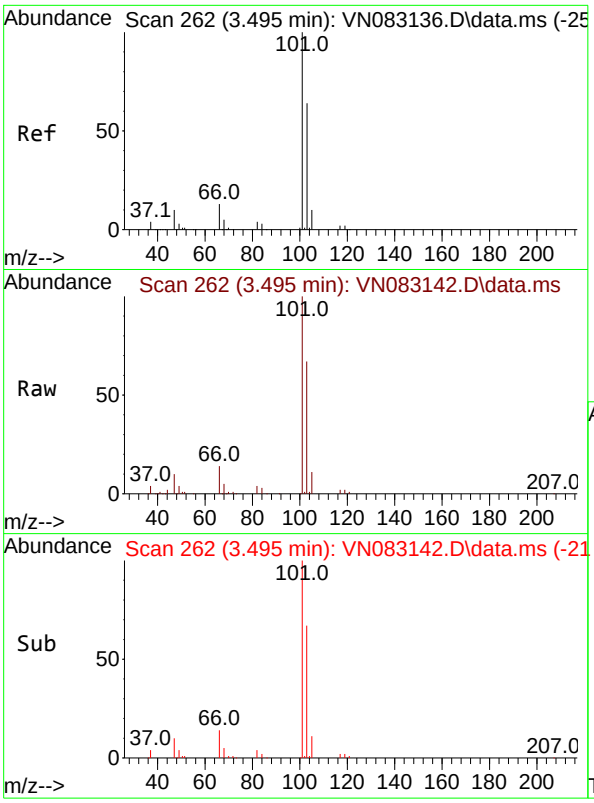




#6
Chloroethane
Concen: 43.725 ug/l
RT: 3.112 min Scan# 197
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 64 Resp: 72491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.3 | 26.6 | 40.0 |






#7
Trichlorofluoromethane
Concen: 47.124 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:101 Resp: 20629

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 67.1 | 52.7 | 79.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
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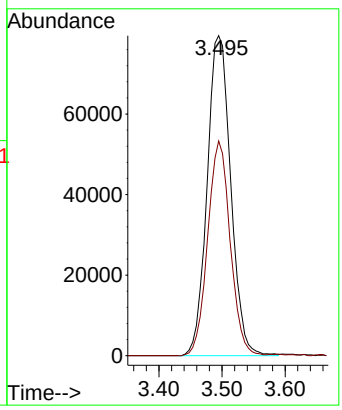
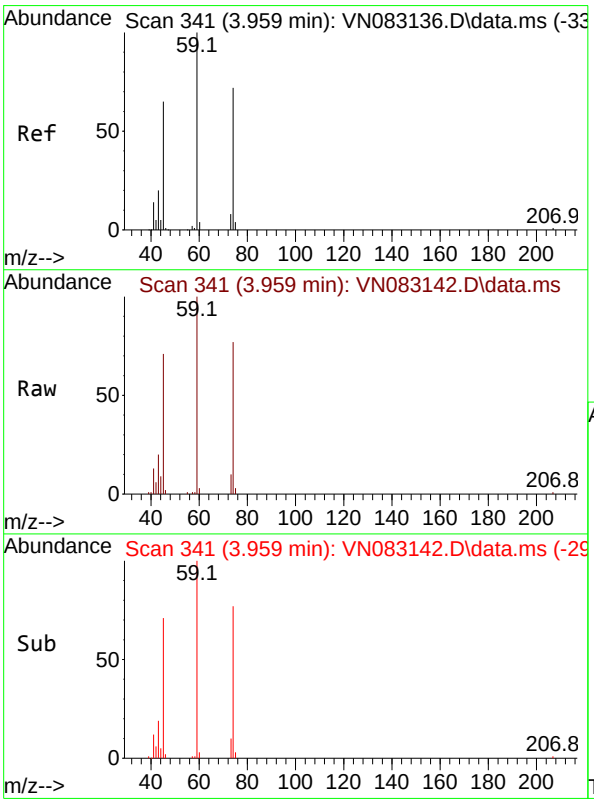
Supervised By :Mahesh Dadoda 08/09/2024

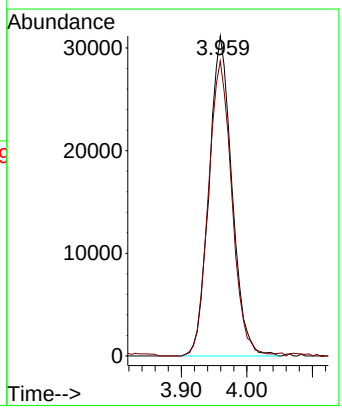


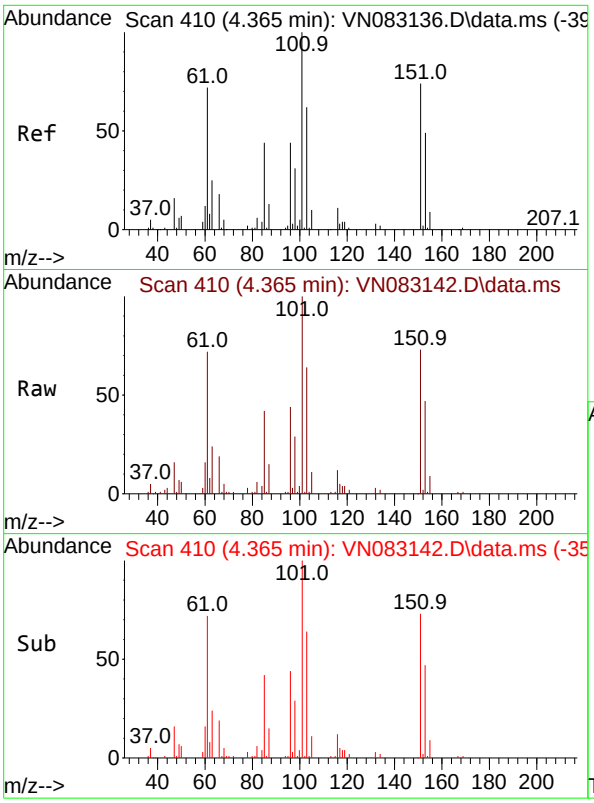




#8
Diethyl Ether
Concen: 46.259 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 74 Resp: 75355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 94.7 | 55.5 | 166.3 |

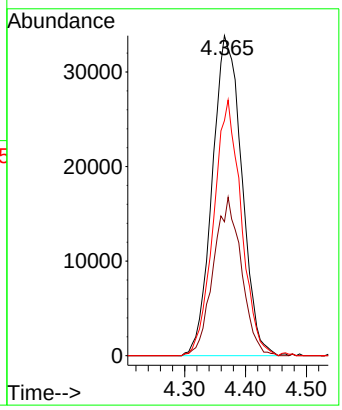





#9
1,1,2-Trichlorotrifluoroethane
Concen: 47.176 ug/l
RT: 4.365 min Scan# 41
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:101 Resp: 11386

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 47.0 | 38.3 | 57.5 |
| 151 | 75.1 | 59.3 | 88.9 |

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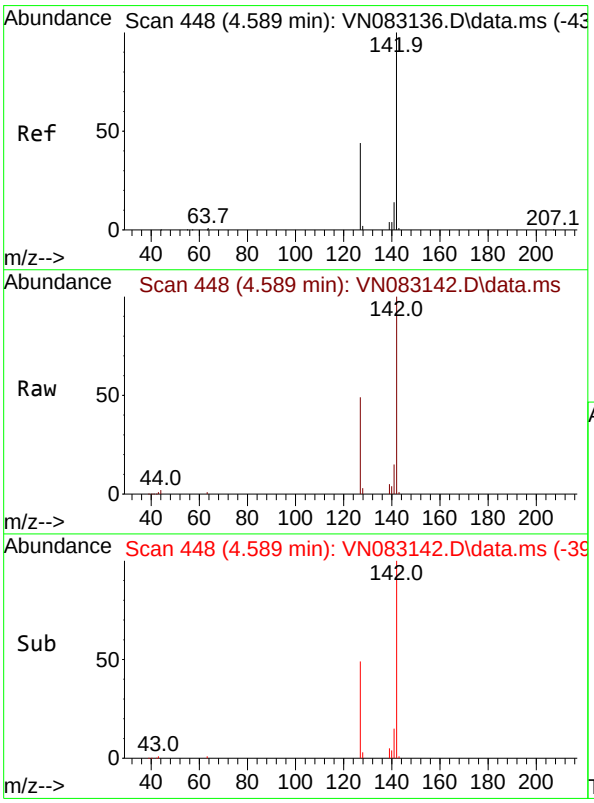
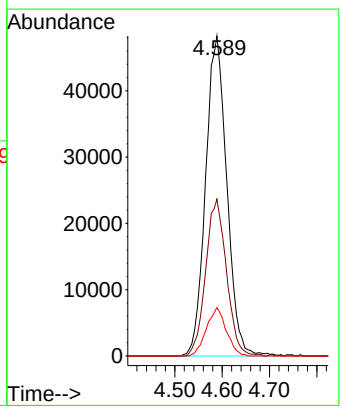
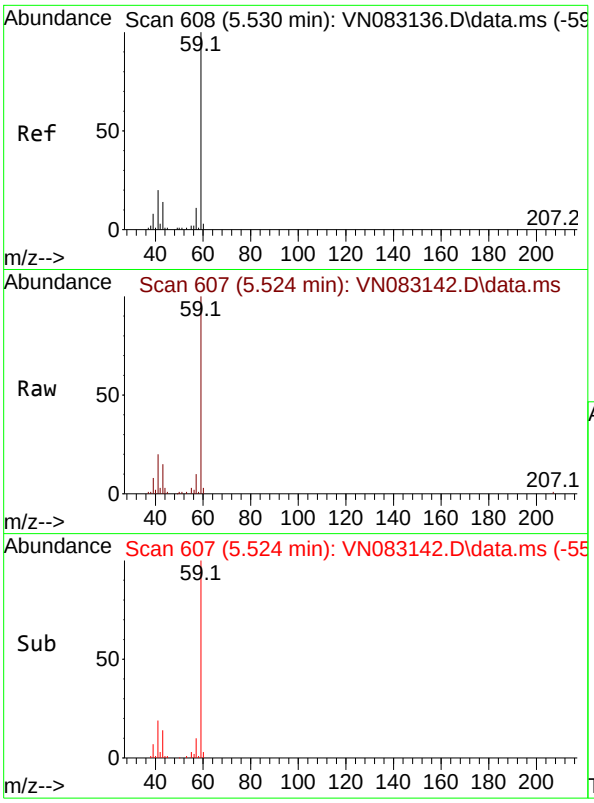



#10
Methyl Iodide
Concen: 47.349 ug/l
RT: 4.589 min Scan# 448
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:142 Resp: 150327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 49.1 | 37.5 | 56.3 |
| 141 | 15.1 | 13.1 | 19.7 |






#11
Tert butyl alcohol
Concen: 208.135 ug/l
RT: 5.524 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 59 Resp: 13771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.9 | 8.9 | 13.3 |

**Instrument :**
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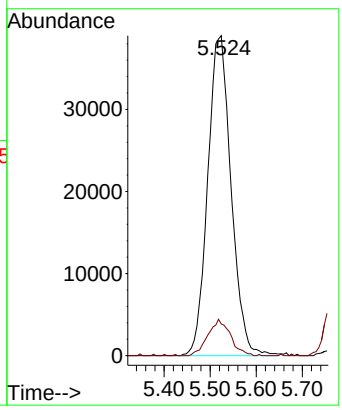
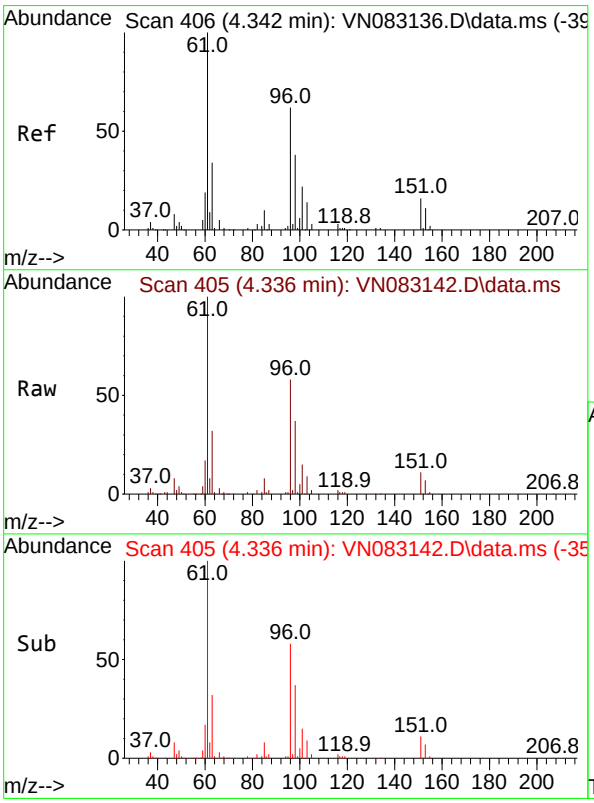
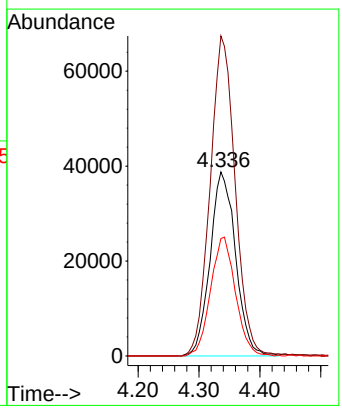


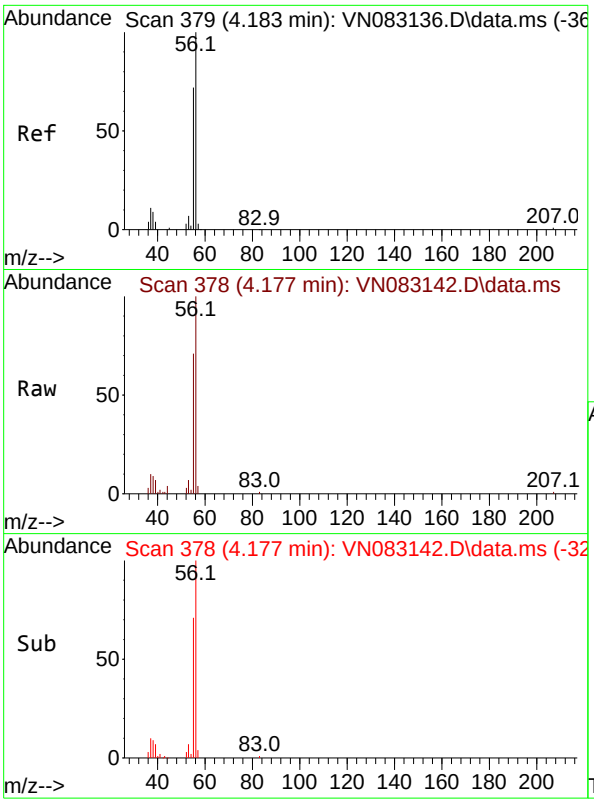




#12
1,1-Dichloroethene
Concen: 45.562 ug/l
RT: 4.336 min Scan# 405
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 96 Resp: 112976

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 173.9 | 149.7 | 224.5 |
| 98 | 63.8 | 50.1 | 75.1 |

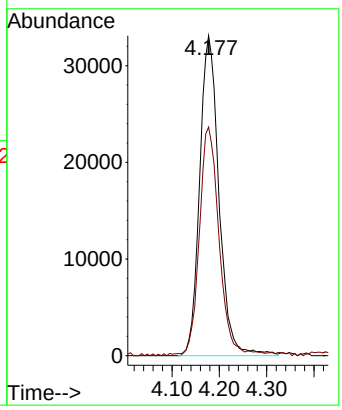





#13
Acrolein
Concen: 217.571 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 56 Resp: 9382

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 73.1 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
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ICVVN080724

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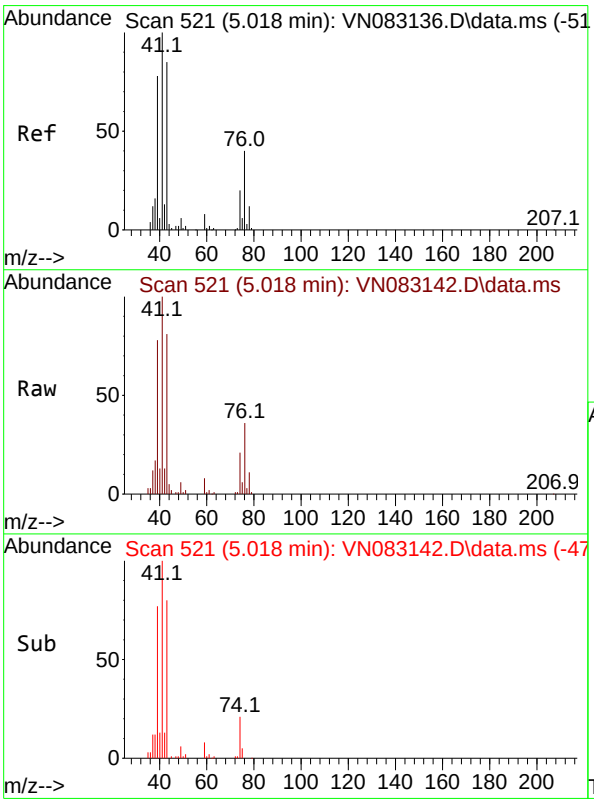
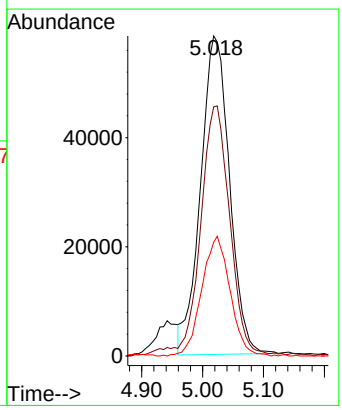
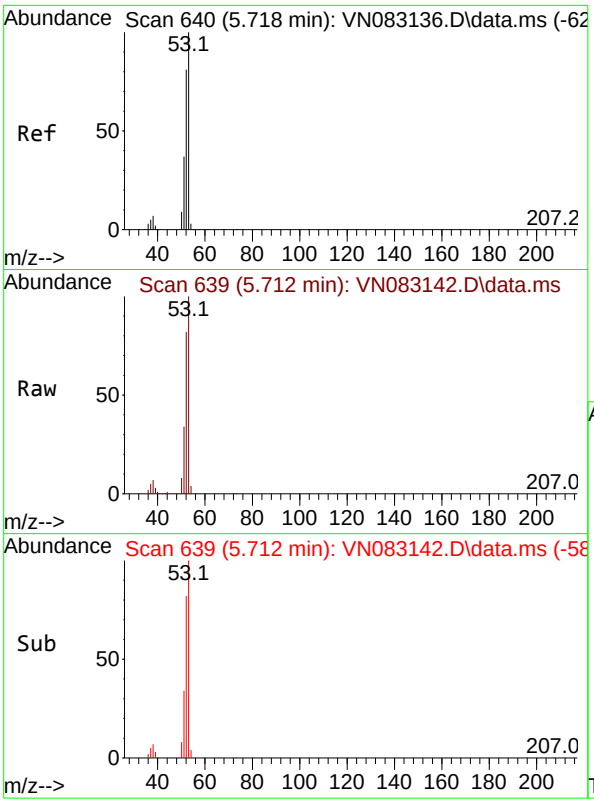



#14
Allyl chloride
Concen: 41.173 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 41 Resp: 192929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 79.9 | 67.8 | 101.6 |
| 76 | 36.7 | 25.8 | 38.8 |

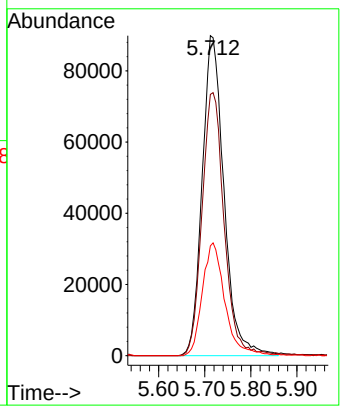





#15
Acrylonitrile
Concen: 217.950 ug/l
RT: 5.712 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 53 Resp: 29659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.9 | 66.6 | 100.0 |
| 51 | 36.5 | 30.1 | 45.1 |




**Instrument :**
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ICVVN080724

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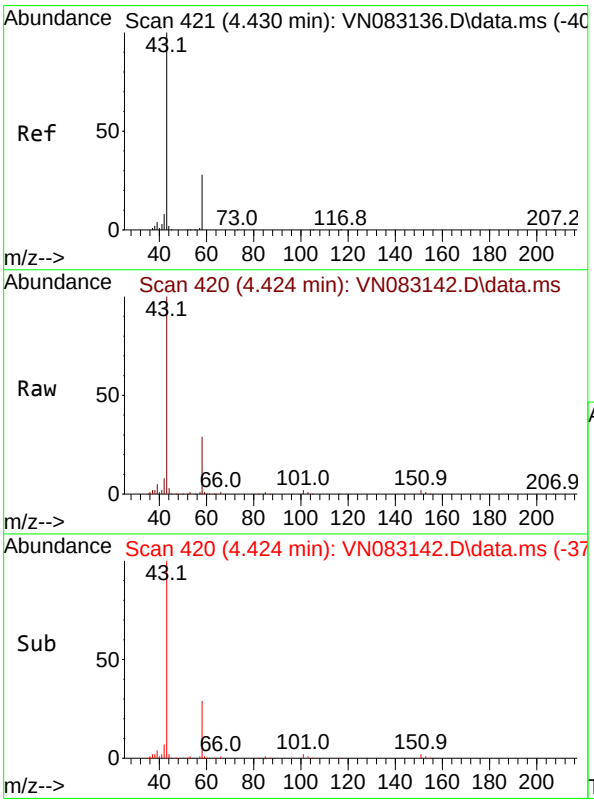
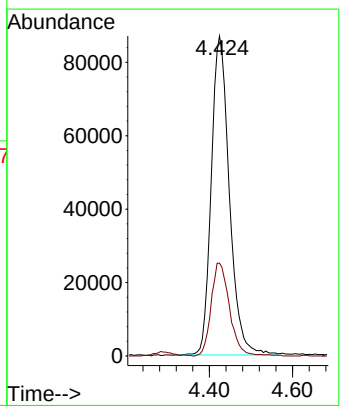
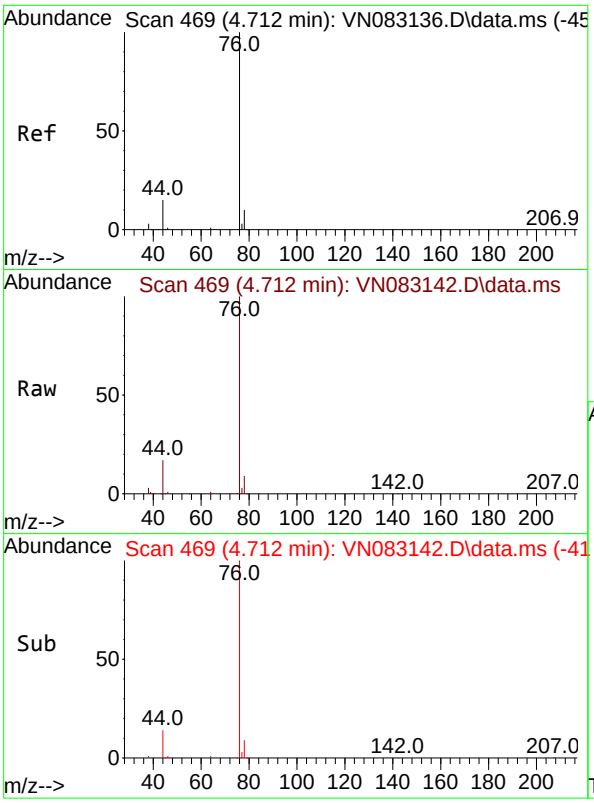



#16
Acetone
Concen: 210.840 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 262677

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.9 | 21.8 | 32.6 |

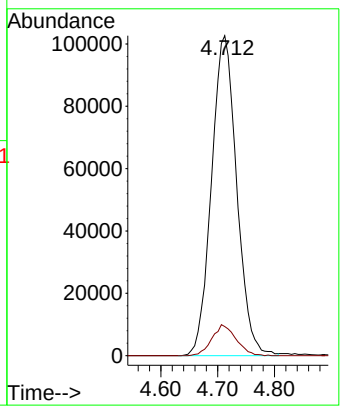





#17
Carbon Disulfide
Concen: 43.689 ug/l
RT: 4.712 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 76 Resp: 31698(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.1 | 7.2 | 10.8 |




**Instrument :**
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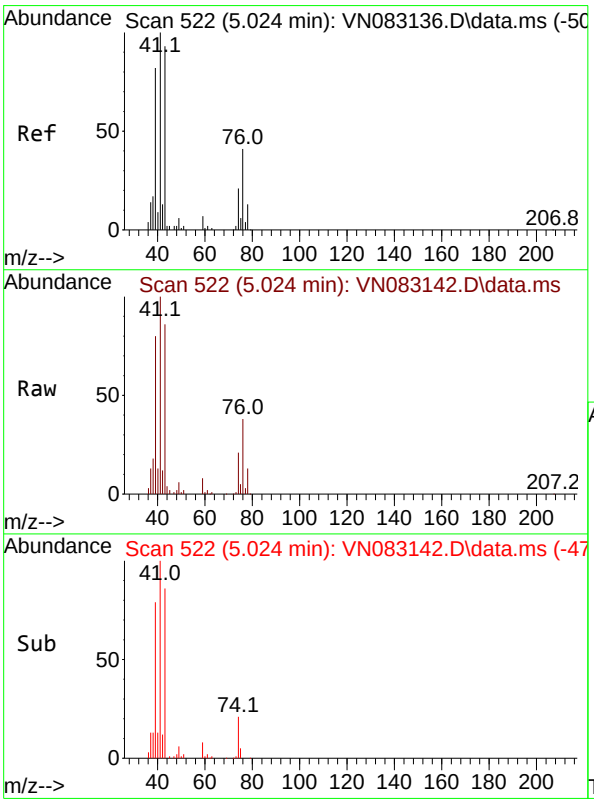
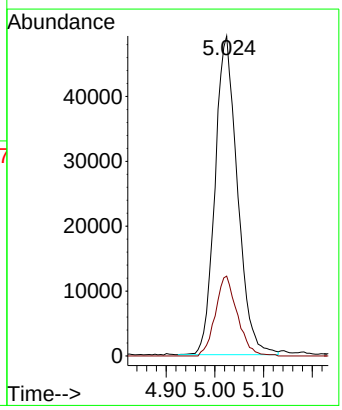
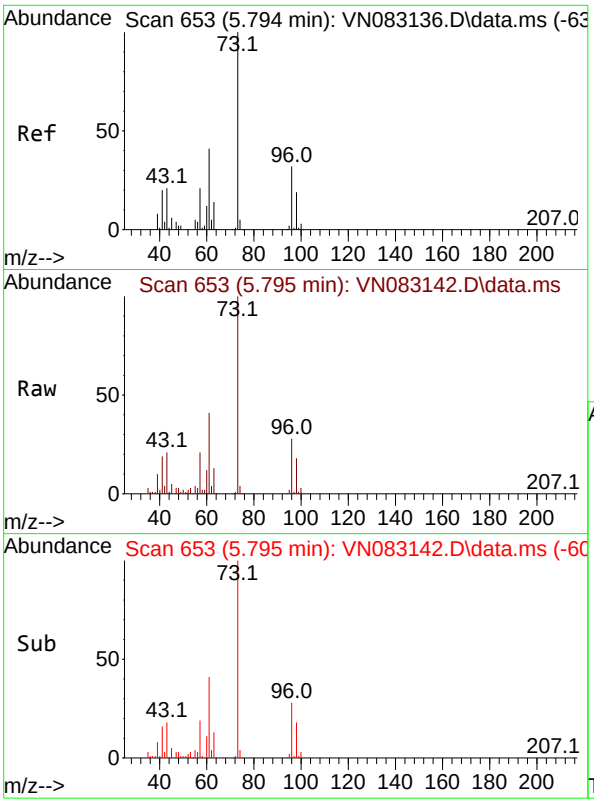



#18
Methyl Acetate
Concen: 42.397 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 157374

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 24.6 | 16.3 | 24.5# |

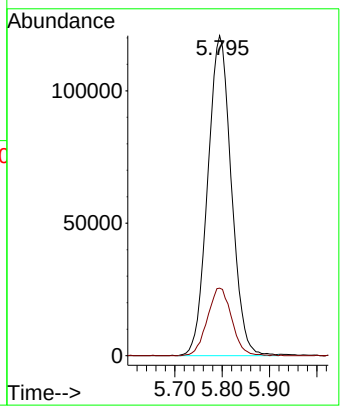





#19
Methyl tert-butyl Ether
Concen: 46.781 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 73 Resp: 41869

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.1 | 17.9 | 26.9 |

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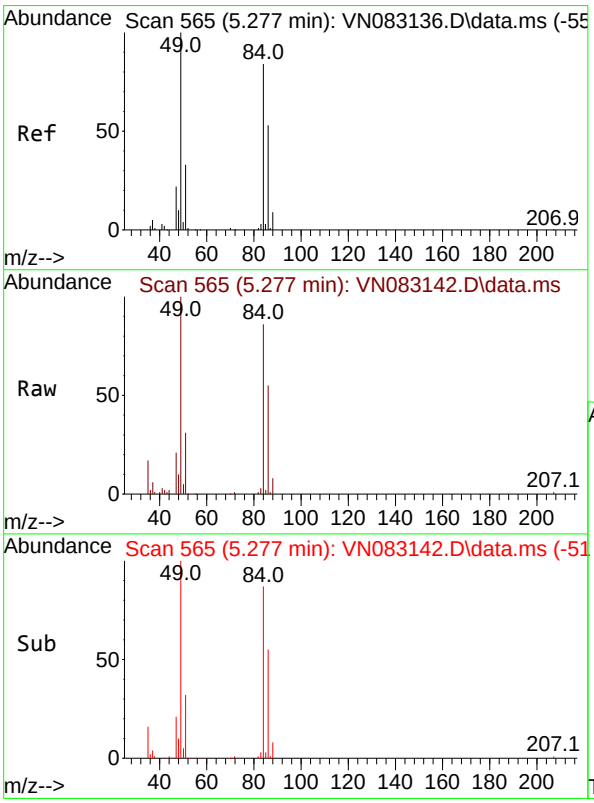
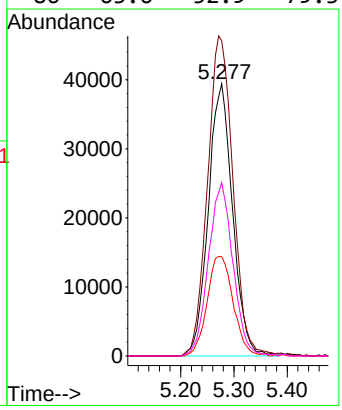
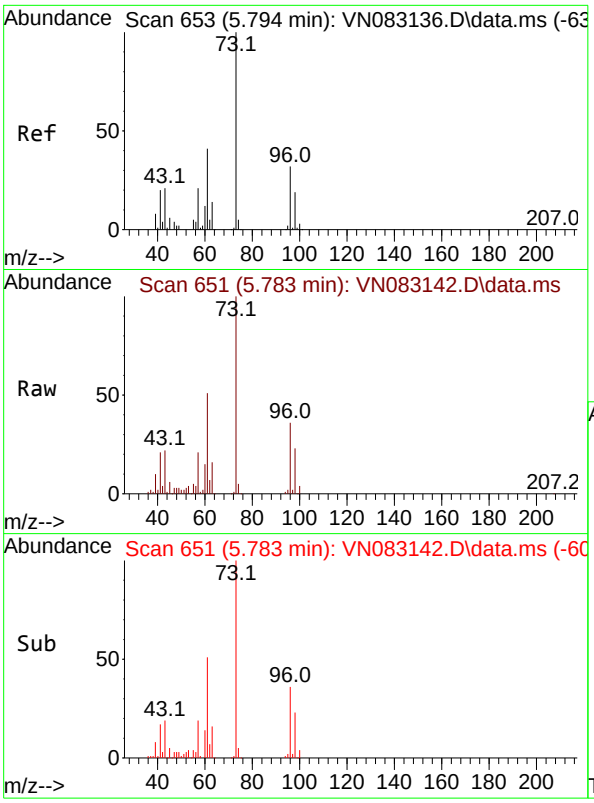



#20
Methylene Chloride
Concen: 43.645 ug/l
RT: 5.277 min Scan# 565
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 84 Resp: 125142

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 115.8 | 119.6 | 179.4# |
| 51 | 36.5 | 34.8 | 52.2 |
| 86 | 63.6 | 52.9 | 79.3 |

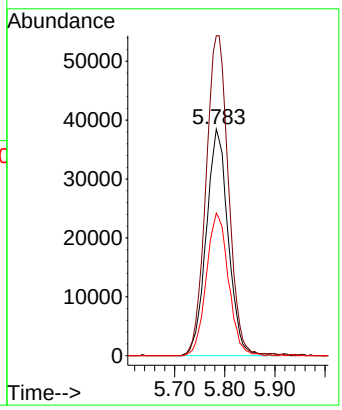





#21
trans-1,2-Dichloroethene
Concen: 45.671 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 96 Resp: 11704

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 141.1 | 123.4 | 185.2 |
| 98 | 62.9 | 49.3 | 73.9 |

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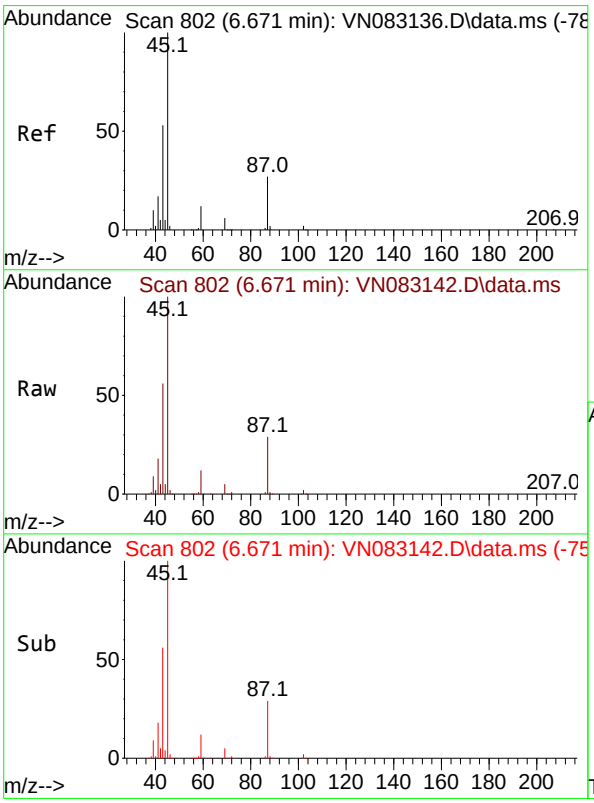
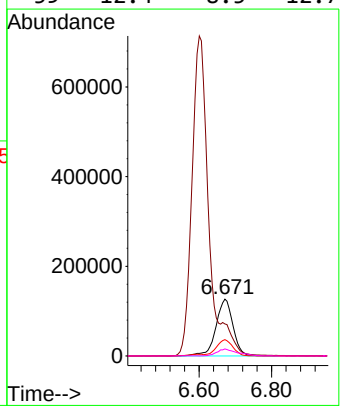
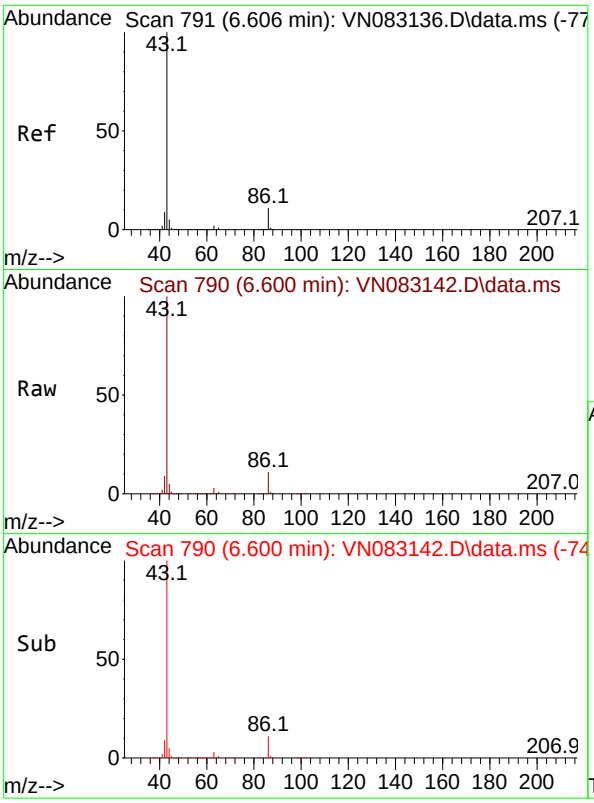



#22
Diisopropyl ether
Concen: 46.881 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 45 Resp: 412931

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 55.6 | 44.0 | 66.0 |
| 87 | 28.6 | 19.7 | 29.5 |
| 59 | 12.4 | 8.5 | 12.7 |

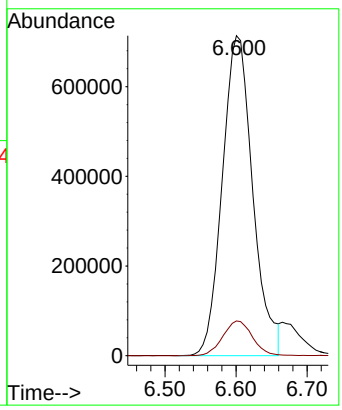





#23
Vinyl Acetate
Concen: 235.414 ug/l
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 212534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.9 | 7.3 | 10.9 |

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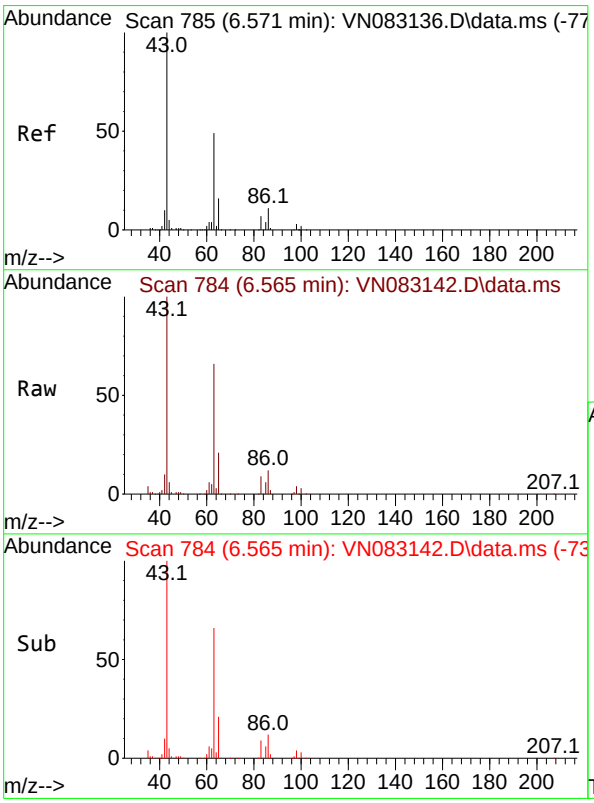
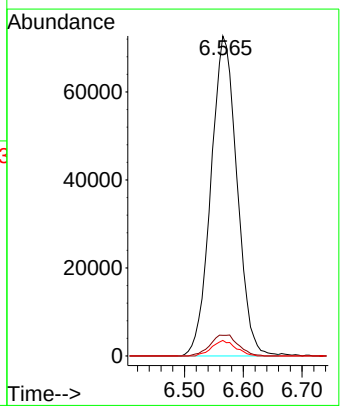
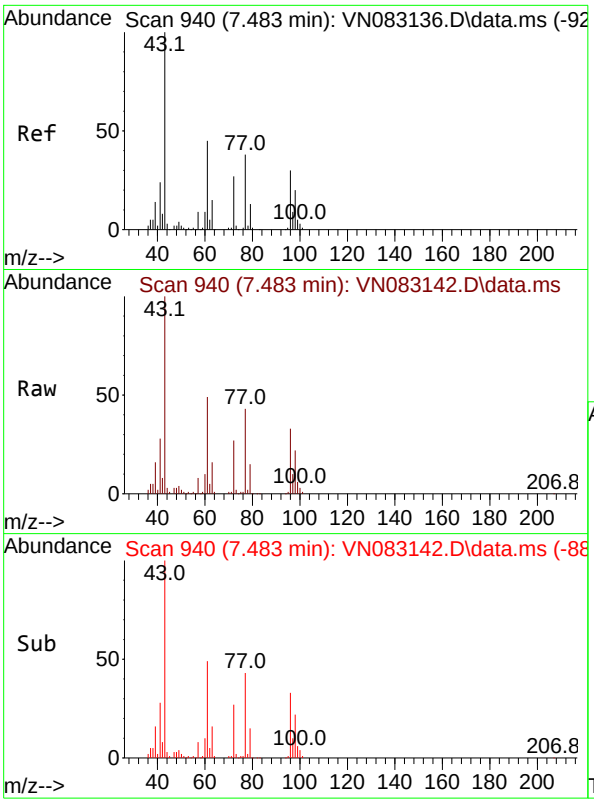



#24
1,1-Dichloroethane
Concen: 46.685 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 63 Resp: 224136

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.5 | 3.3 | 9.9 |
| 100 | 4.9 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 211.782 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 40513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 26.9 | 18.2 | 27.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
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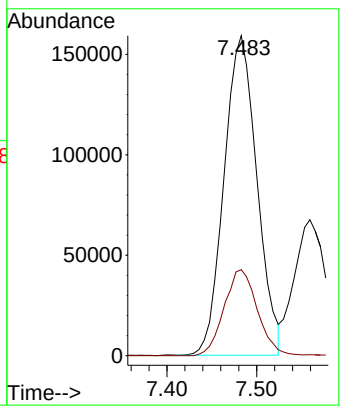
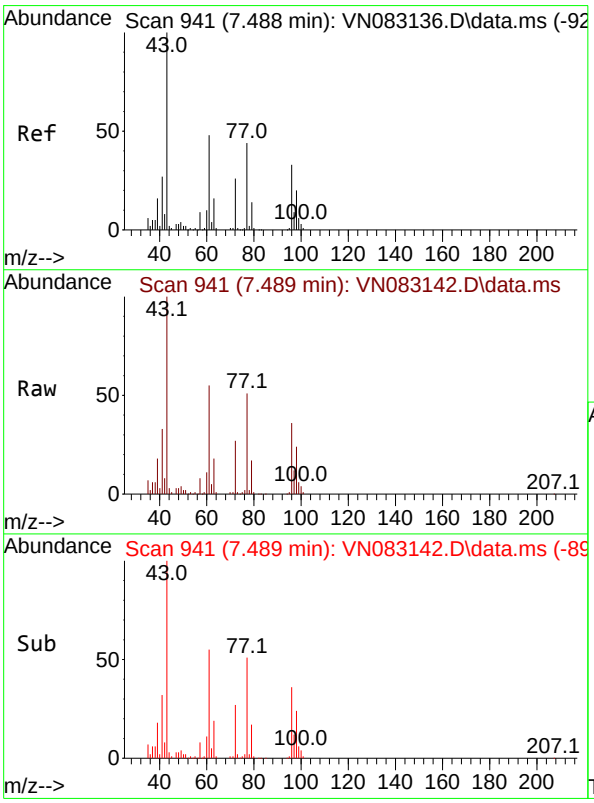
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

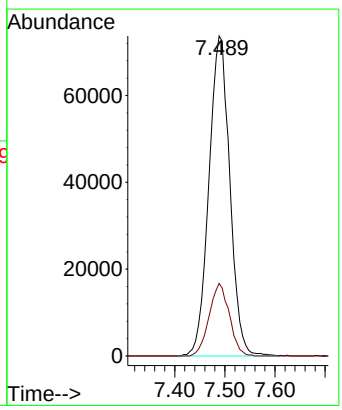


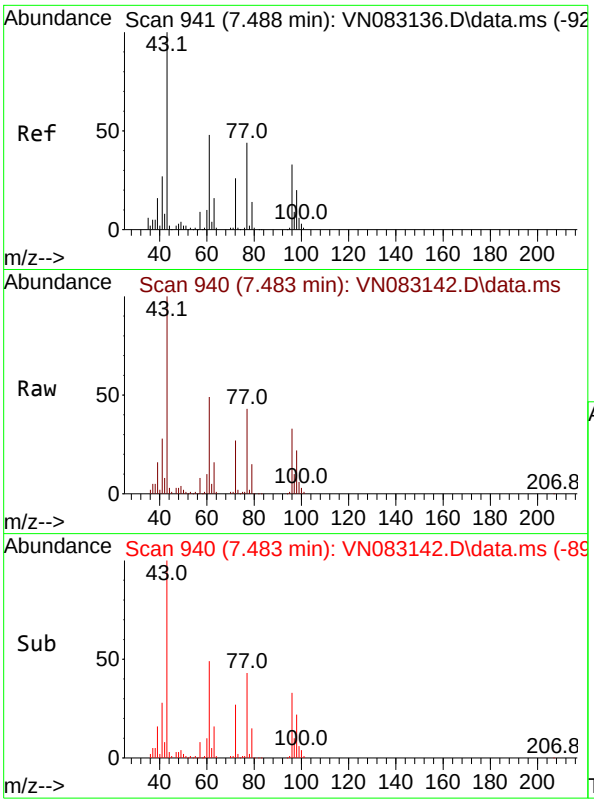




#26
2,2-Dichloropropane
Concen: 47.853 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 77 Resp: 213355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.9 | 10.3 | 30.9 |

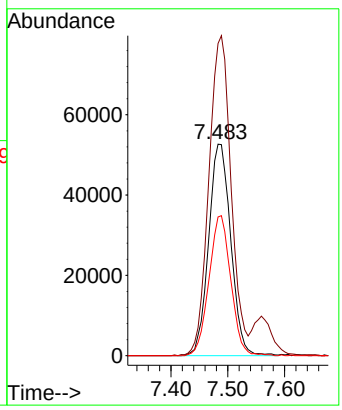





#27
cis-1,2-Dichloroethene
Concen: 46.113 ug/l
RT: 7.483 min Scan# 94
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 96 Resp: 14260

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 151.9 | 0.0 | 329.6 |
| 98 | 65.2 | 0.0 | 128.6 |




**Instrument :**
MSVOA_N
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ICVVN080724

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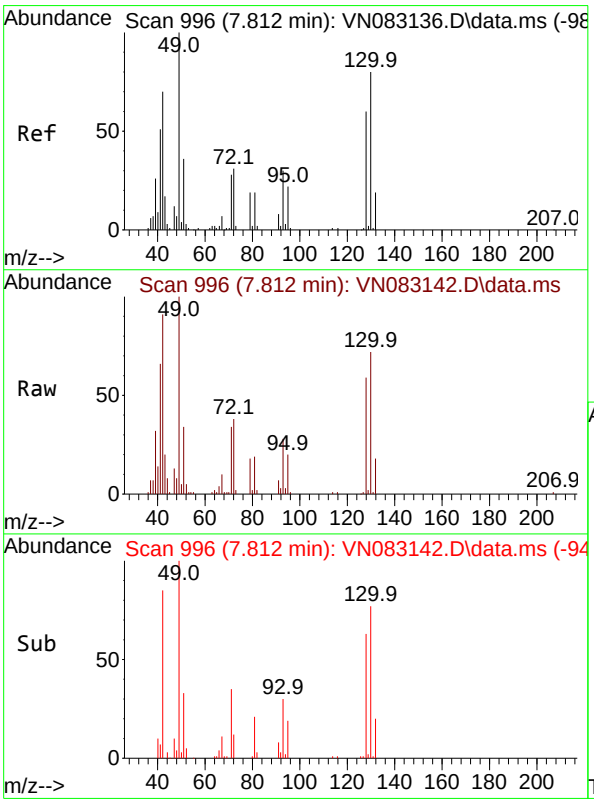
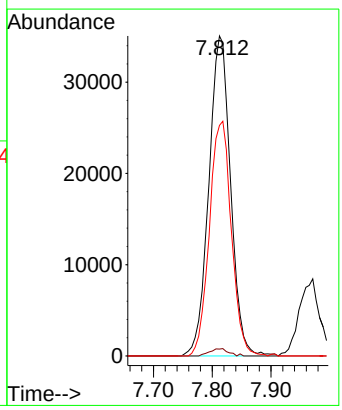
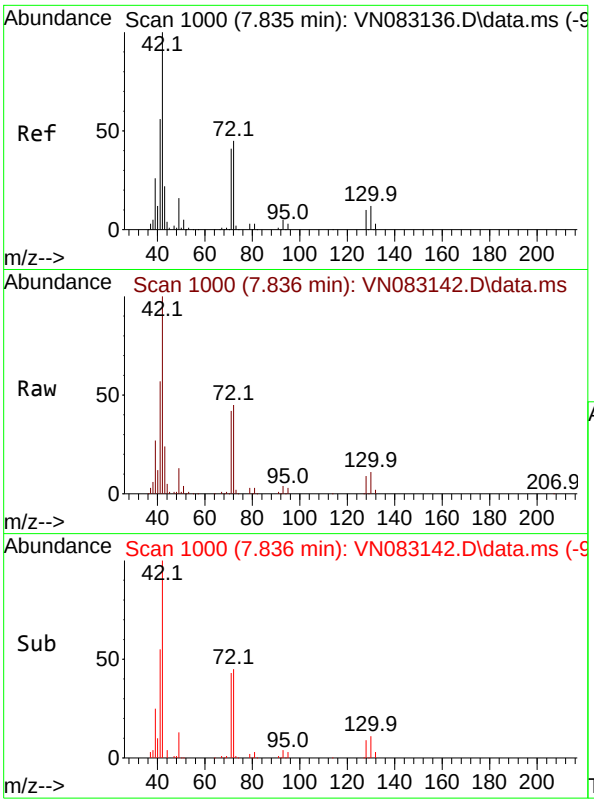



#28
Bromochloromethane
Concen: 45.986 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 49 Resp: 90226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.0 | 0.0 | 3.8 |
| 130 | 73.9 | 50.5 | 75.7 |

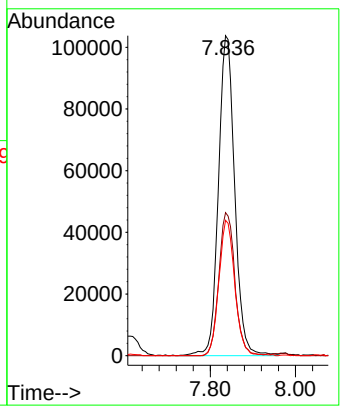





#29
Tetrahydrofuran
Concen: 222.147 ug/l
RT: 7.836 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 42 Resp: 27471

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 44.2 | 30.0 | 45.0 |
| 71 | 41.5 | 28.3 | 42.5 |




**Instrument :**
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ICVVN080724

**Manual Integrations**
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Reviewed By :John Carlone 08/08/2024
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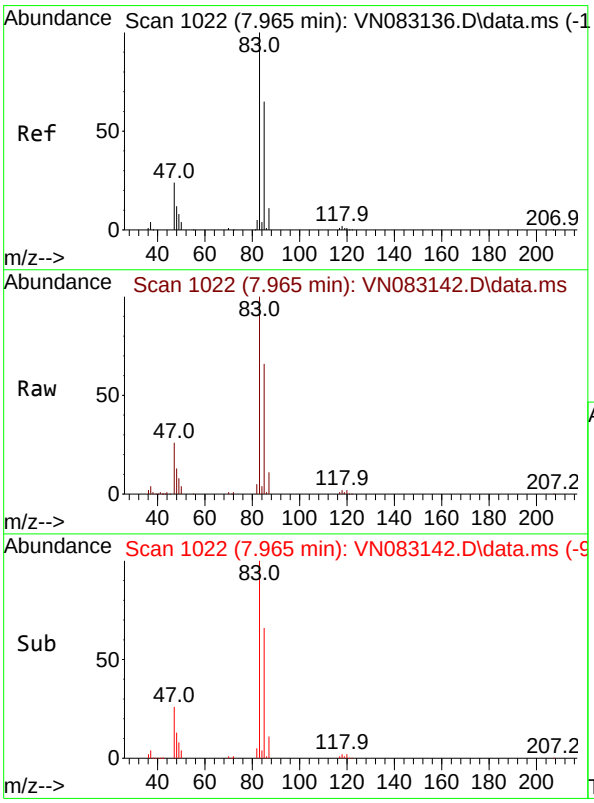
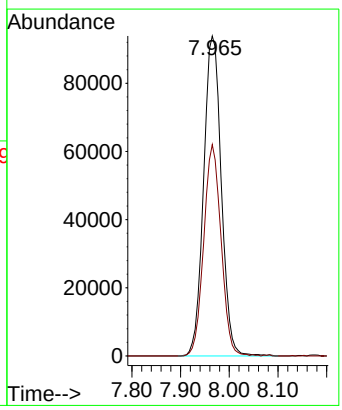
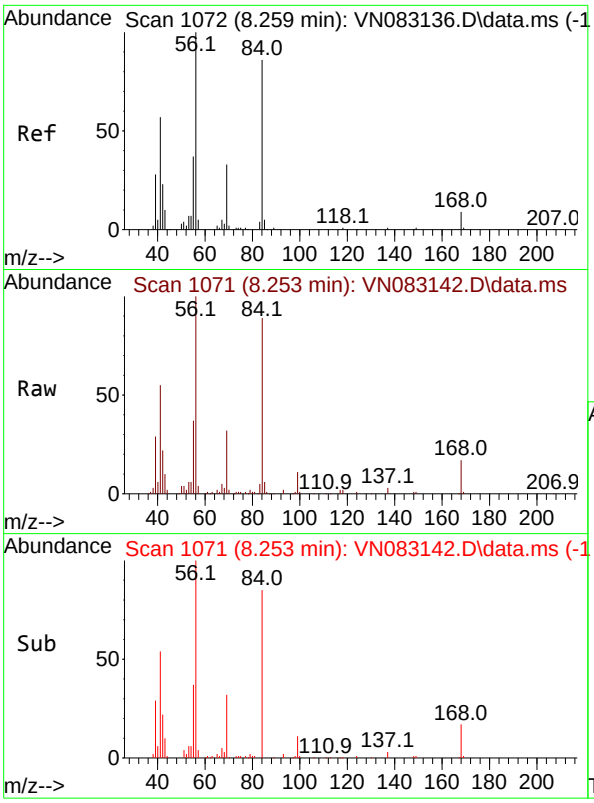



#30
Chloroform
Concen: 47.387 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 83 Resp: 236359

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.1 | 50.9 | 76.3 |

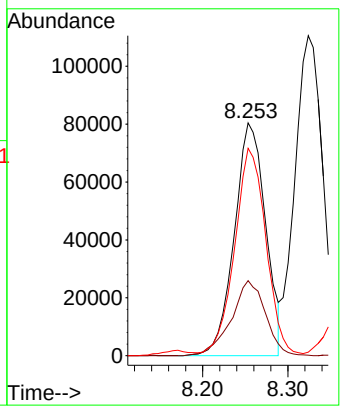





#31
Cyclohexane
Concen: 43.474 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 56 Resp: 20512

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 32.3 | 24.5 | 36.7 |
| 84 | 86.7 | 66.0 | 99.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
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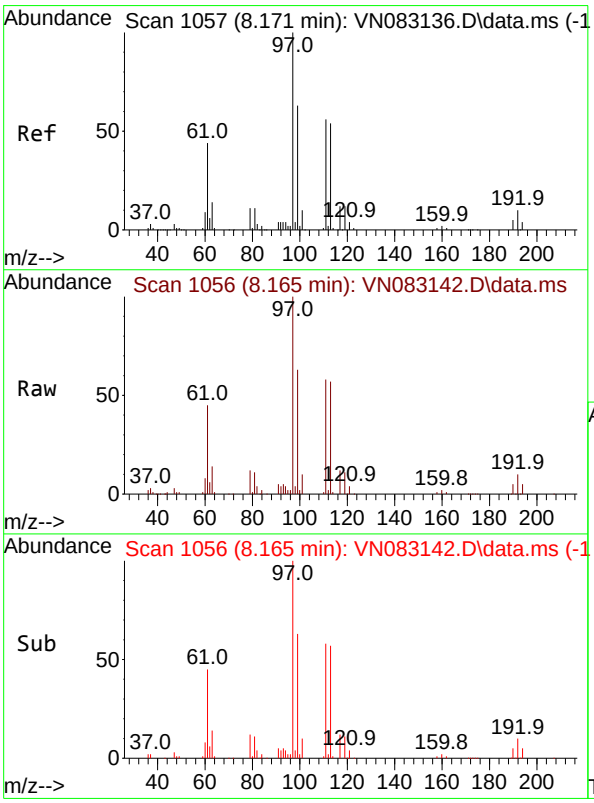
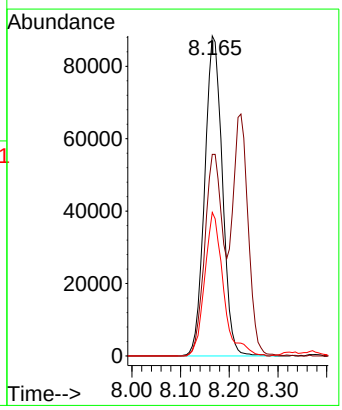
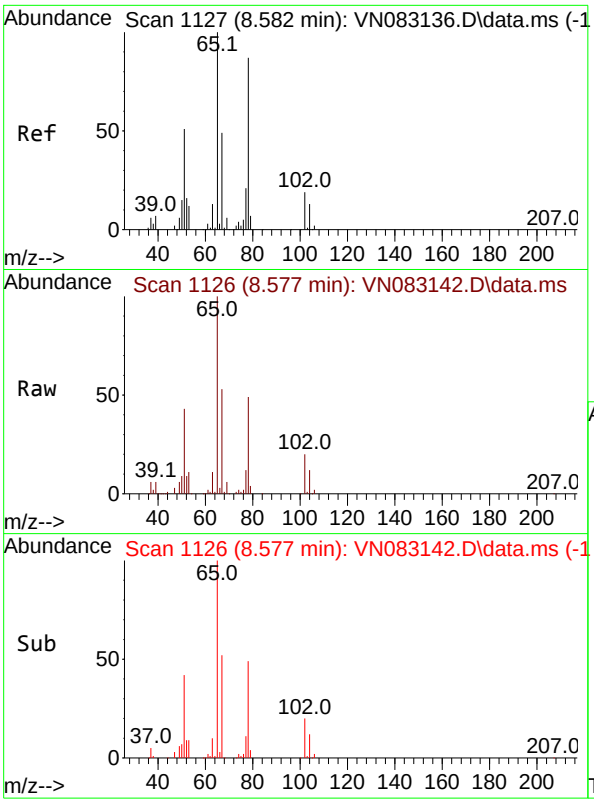



#32
1,1,1-Trichloroethane
Concen: 47.135 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 97 Resp: 222538

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.0 | 52.0 | 78.0 |
| 61 | 47.5 | 42.1 | 63.1 |






#33
1,2-Dichloroethane-d4
Concen: 50.583 ug/l
RT: 8.577 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 65 Resp: 16105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.3 | 0.0 | 104.4 |

**Instrument :**
MSVOA_N
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ICVVN080724

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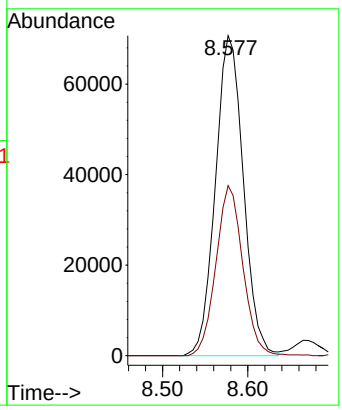
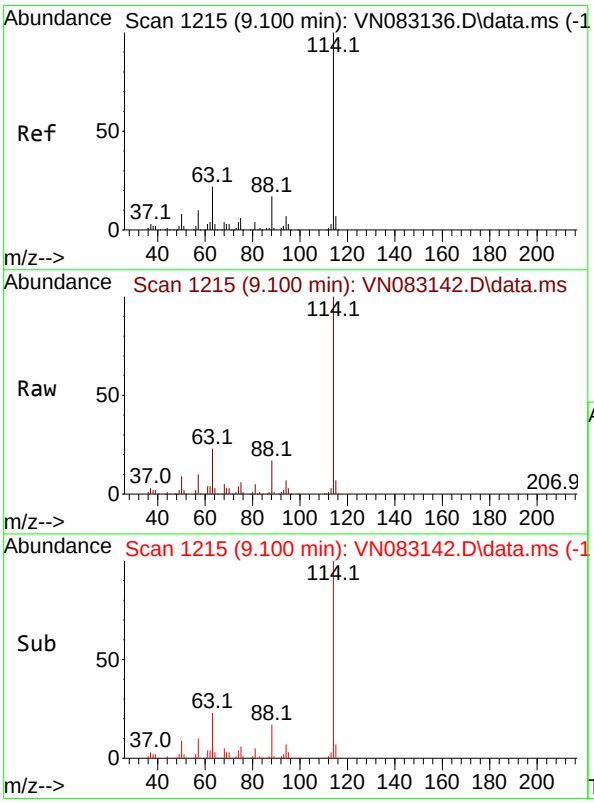
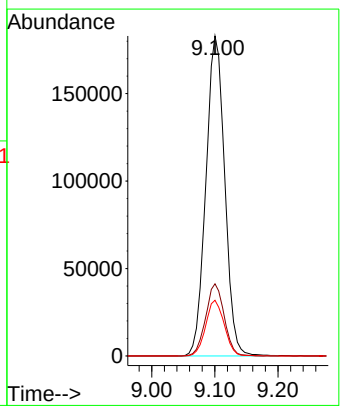


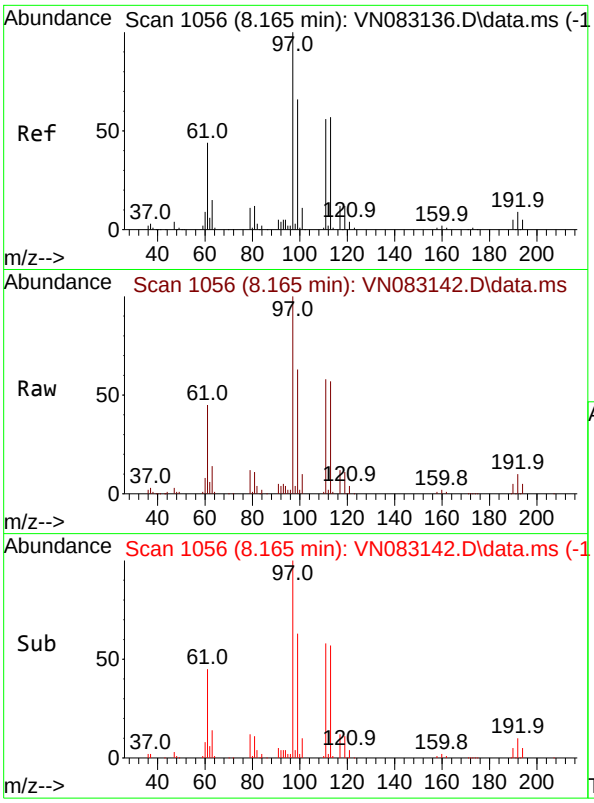




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:114 Resp: 380000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.6 | 0.0 | 44.6 |
| 88 | 17.4 | 0.0 | 31.4 |

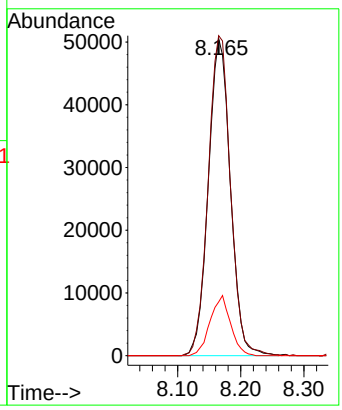





#35
Dibromofluoromethane
Concen: 51.549 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:113 Resp: 12226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.3 | 82.4 | 123.6 |
| 192 | 17.6 | 14.9 | 22.3 |




**Instrument :**
MSVOA_N
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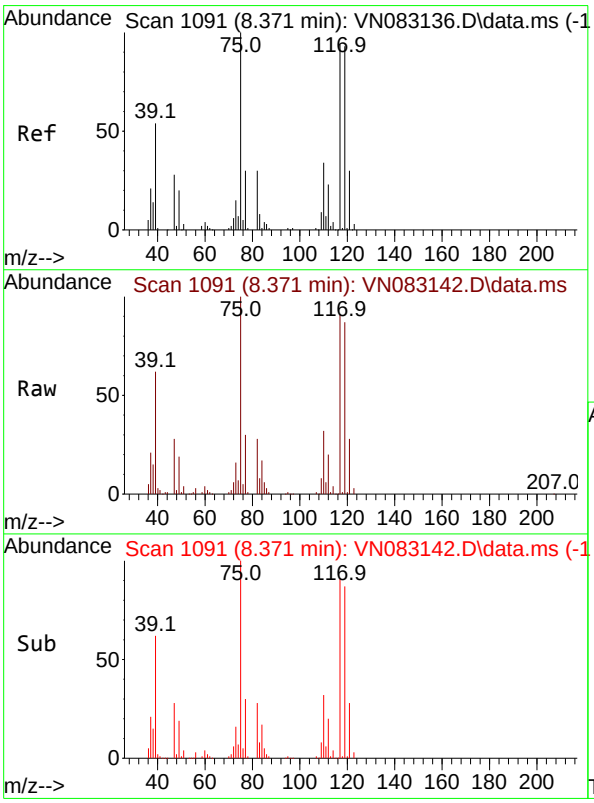
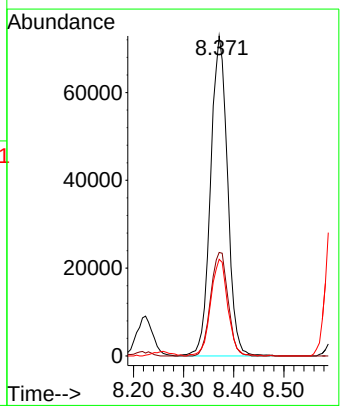
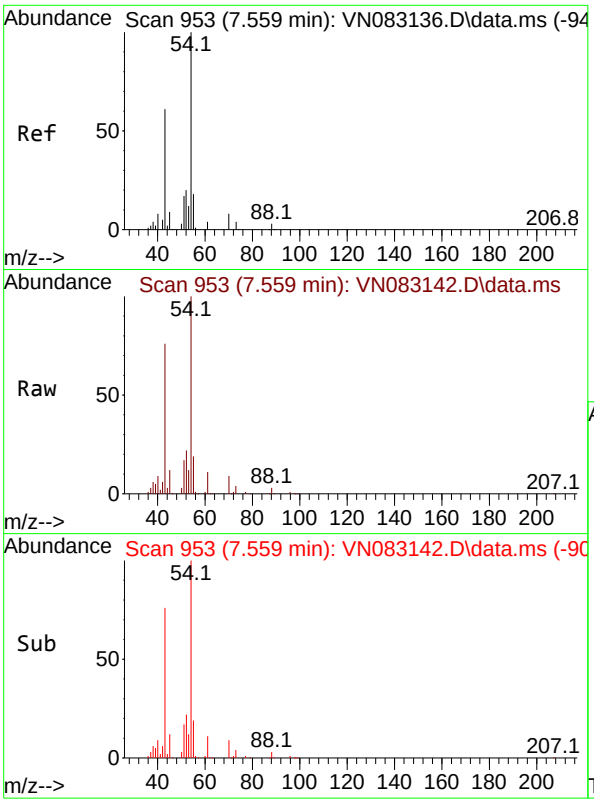



#36
1,1-Dichloropropene
Concen: 47.732 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 171262

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.2 | 16.3 | 48.9 |
| 77 | 30.5 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 43.124 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 17324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 12.9 | 9.3 | 13.9 |
| 70 | 11.0 | 7.0 | 10.6 |

**Instrument :**
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ICVVN080724

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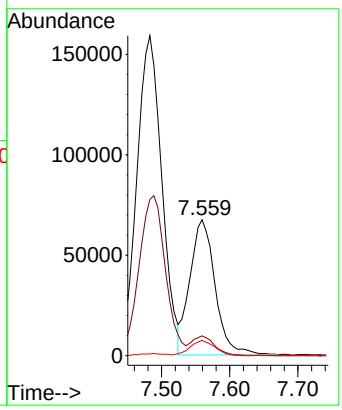
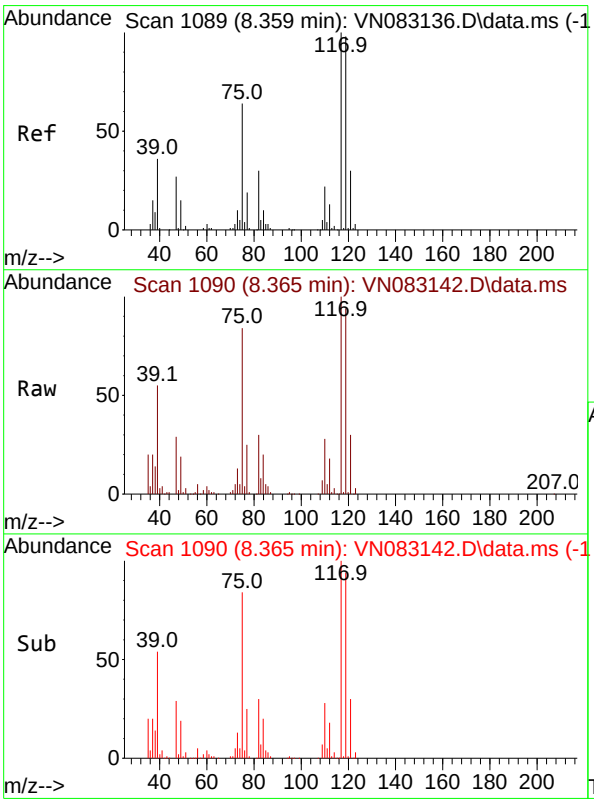
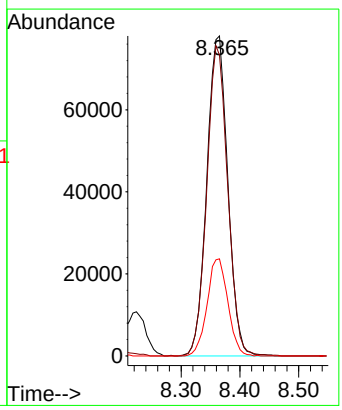


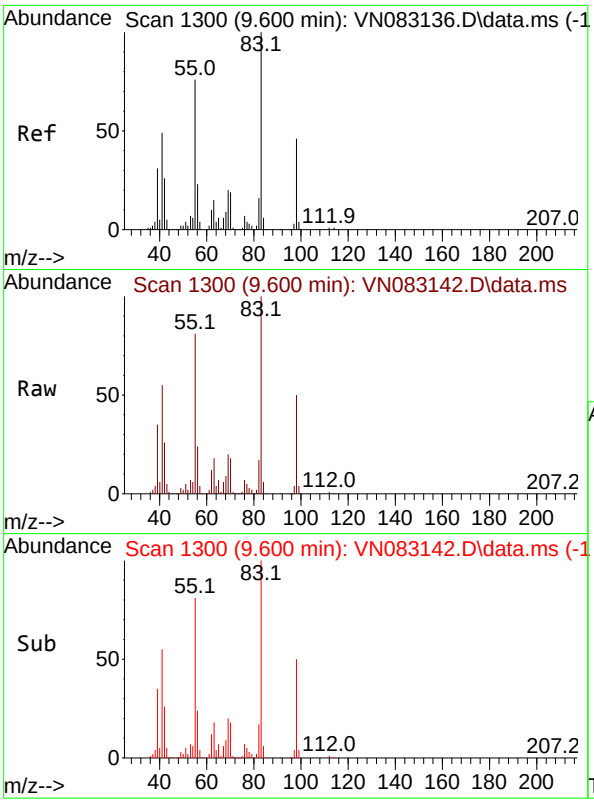




#38
Carbon Tetrachloride
Concen: 47.904 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:117 Resp: 193592

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.0 | 74.9 | 112.3 |
| 121 | 30.3 | 24.3 | 36.5 |






#39
Methylcyclohexane
Concen: 47.821 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 83 Resp: 21074

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 81.3 | 66.4 | 99.6 |
| 98 | 49.5 | 40.7 | 61.1 |

**Instrument :**
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ICVVN080724

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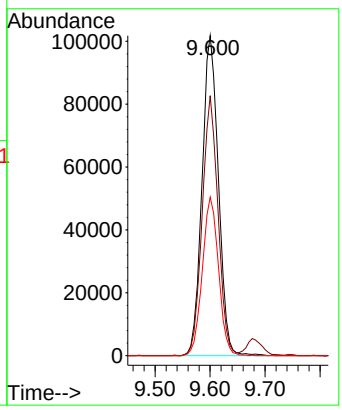
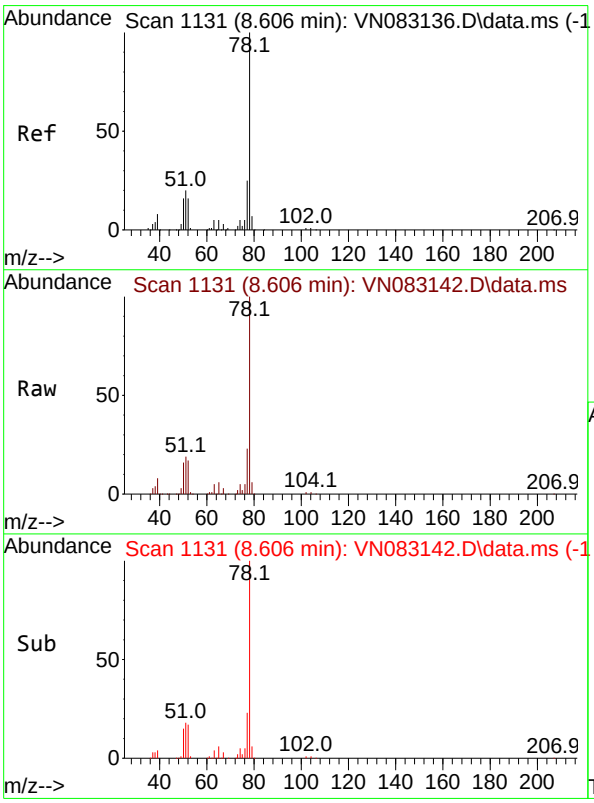
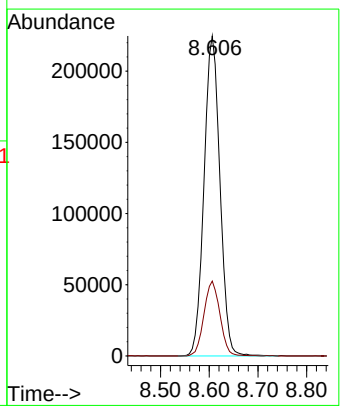


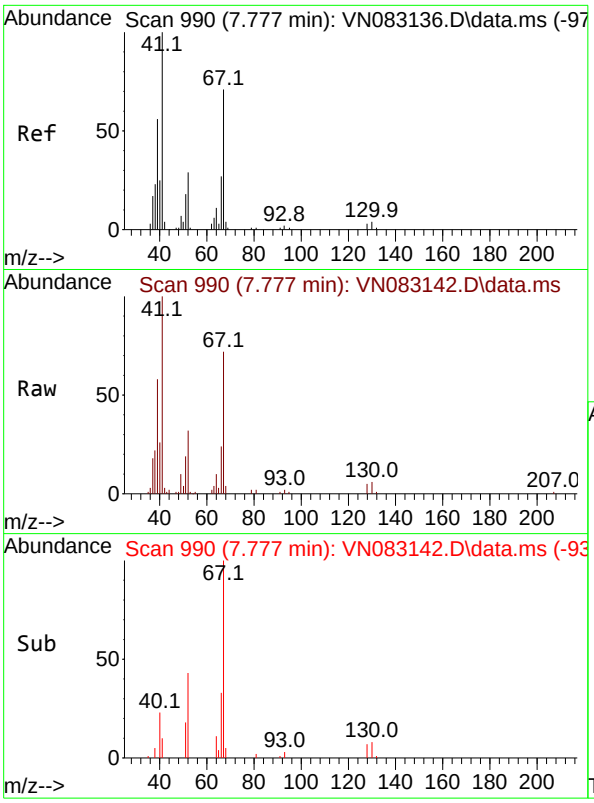




#40
Benzene
Concen: 47.635 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 78 Resp: 509159

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.4 | 19.0 | 28.4 |

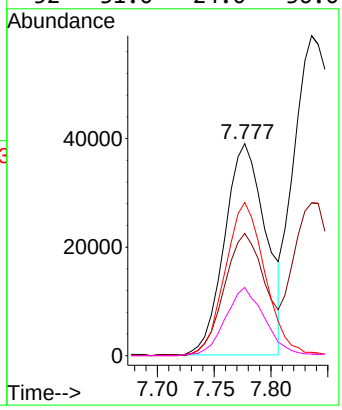





#41
Methacrylonitrile
Concen: 43.013 ug/l
RT: 7.777 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 41 Resp: 9825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 57.7 | 45.5 | 68.3 |
| 67 | 70.8 | 50.5 | 75.7 |
| 52 | 31.0 | 24.0 | 36.0 |




**Instrument :**
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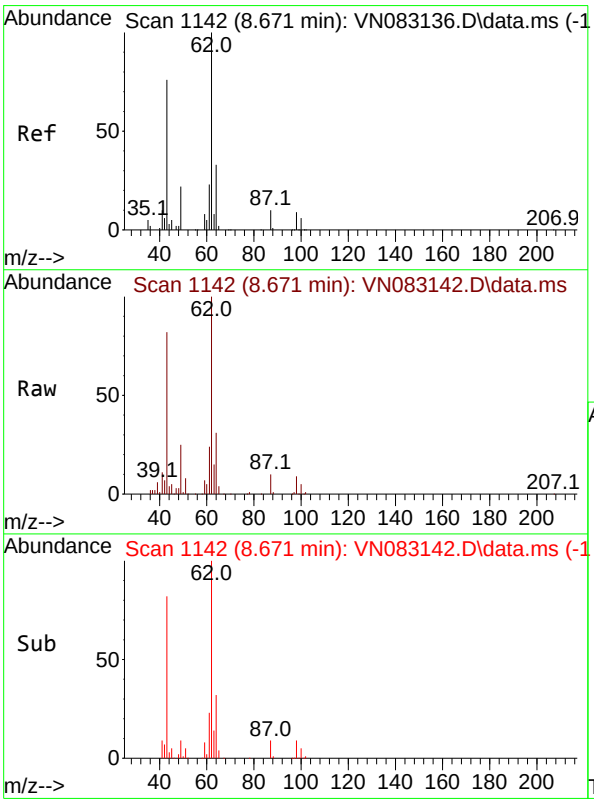
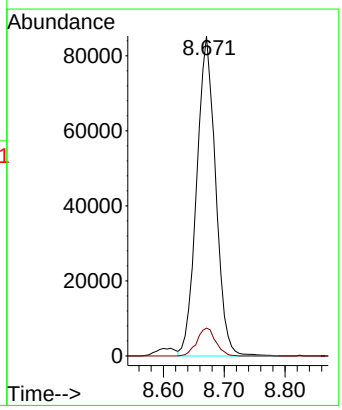
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

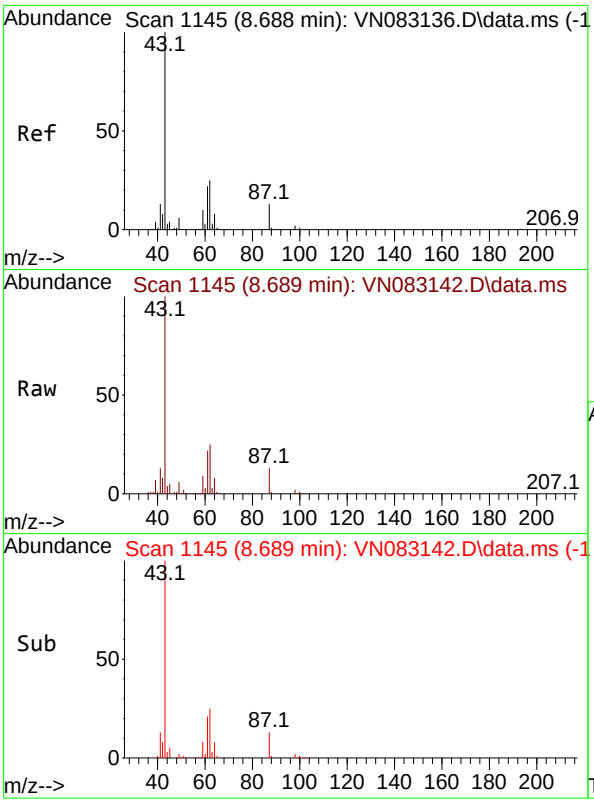



#42
1,2-Dichloroethane
Concen: 47.310 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 62 Resp: 184210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.6 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 45.577 ug/l
RT: 8.689 min Scan# 1
Delta R.T. 0.001 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 31954

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 24.3 | 17.8 | 26.6 |
| 87 | 13.0 | 8.2 | 12.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
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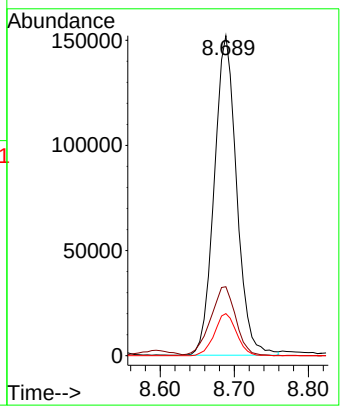
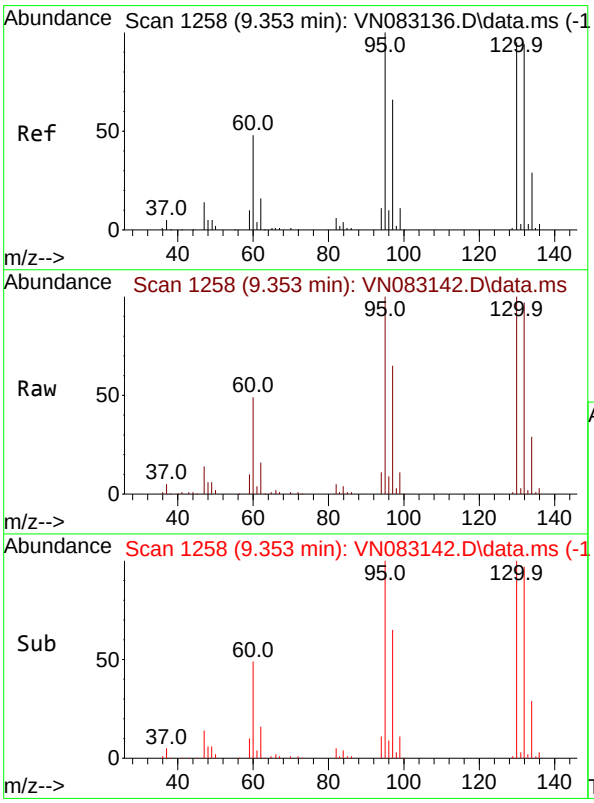
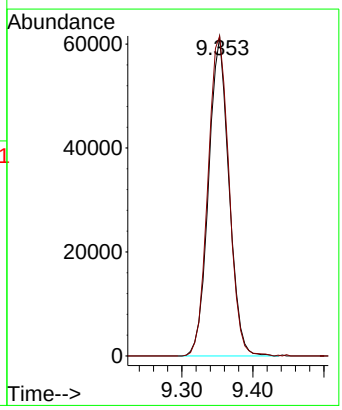


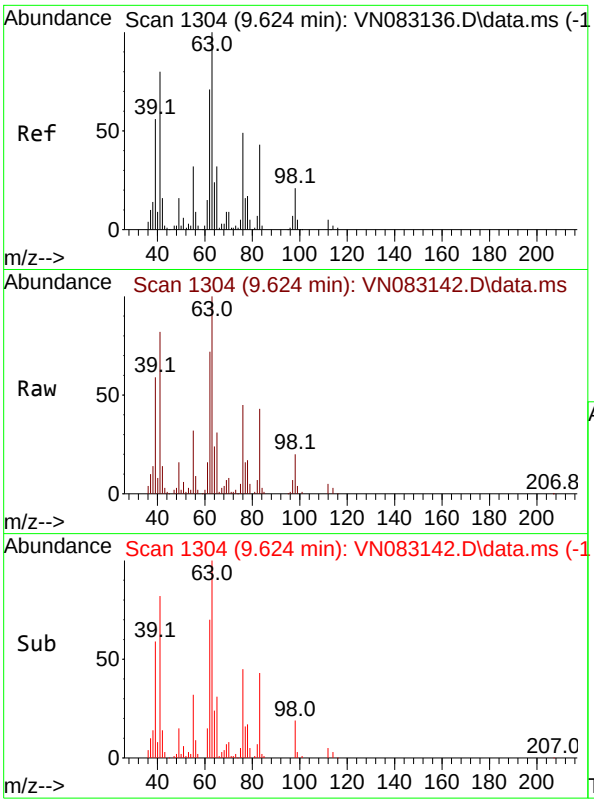




#44
Trichloroethene
Concen: 47.994 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:130 Resp: 122105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 100.4 | 0.0 | 197.8 |






#45
1,2-Dichloropropane
Concen: 48.208 ug/l
RT: 9.624 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 63 Resp: 12231

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.2 | 24.4 | 36.6 |

**Instrument :**
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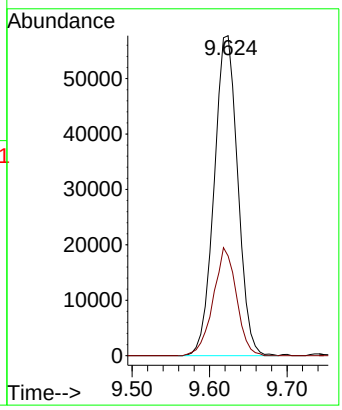
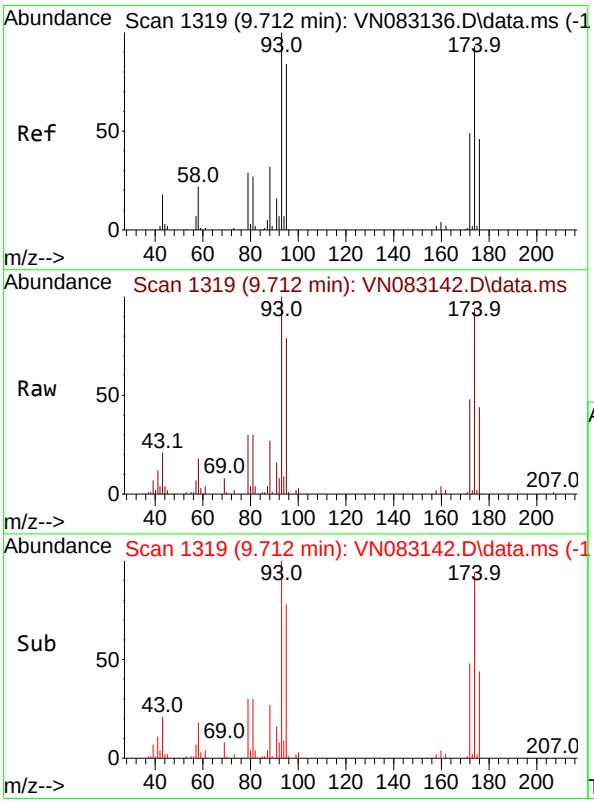
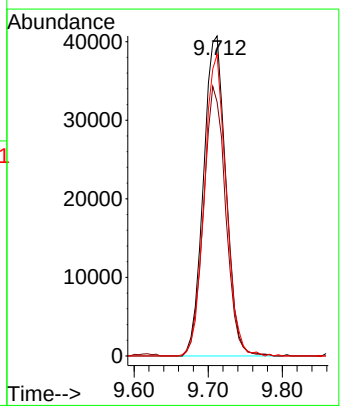


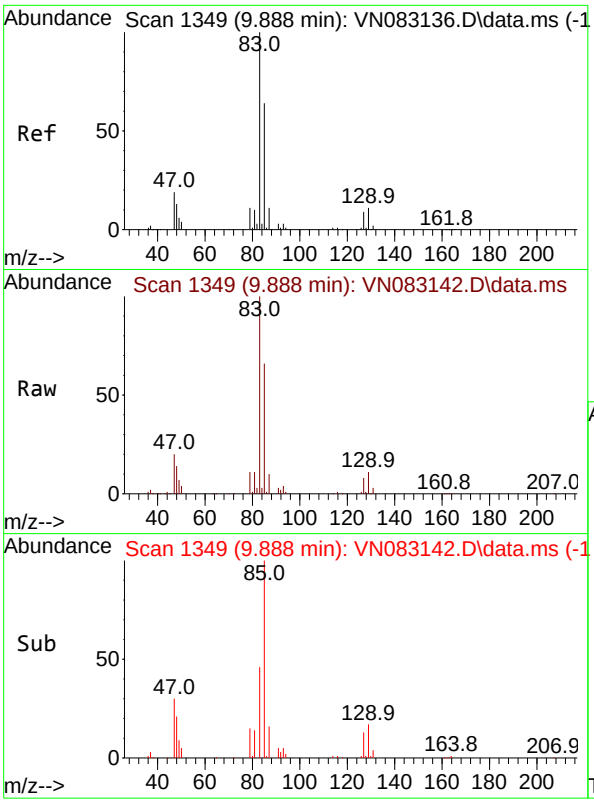




#46
Dibromomethane
Concen: 47.124 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 93 Resp: 85581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.0 | 65.8 | 98.6 |
| 174 | 91.4 | 71.7 | 107.5 |

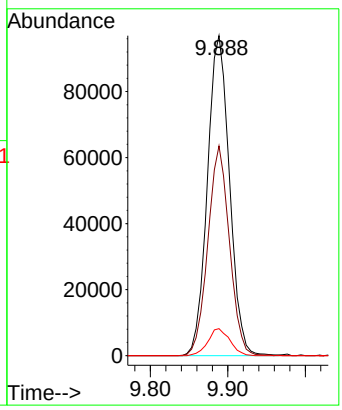





#47
Bromodichloromethane
Concen: 47.047 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 83 Resp: 19184

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.5 | 51.1 | 76.7 |
| 127 | 8.5 | 7.2 | 10.8 |




**Instrument :**
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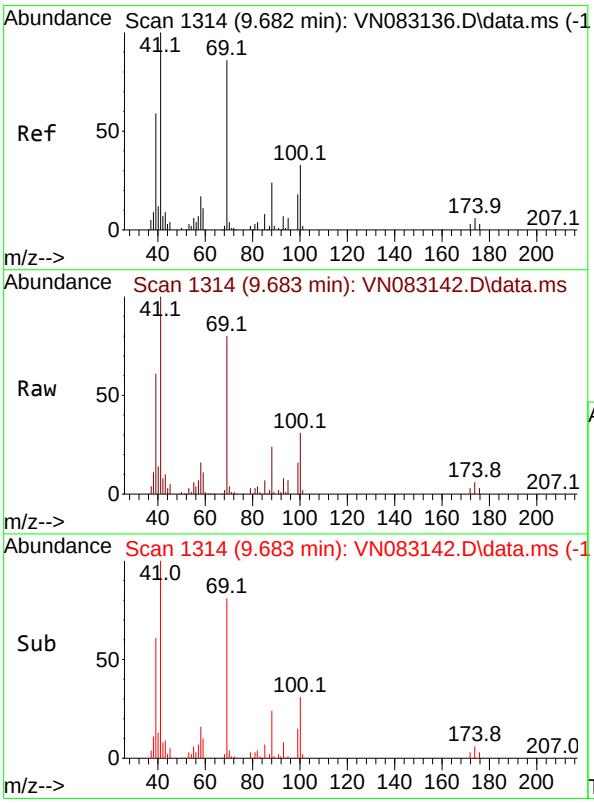
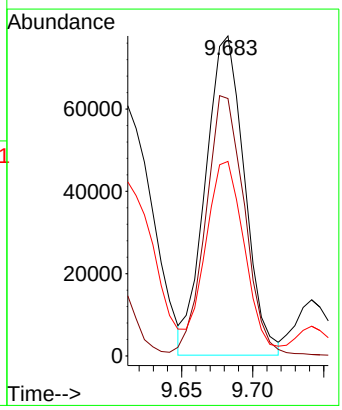
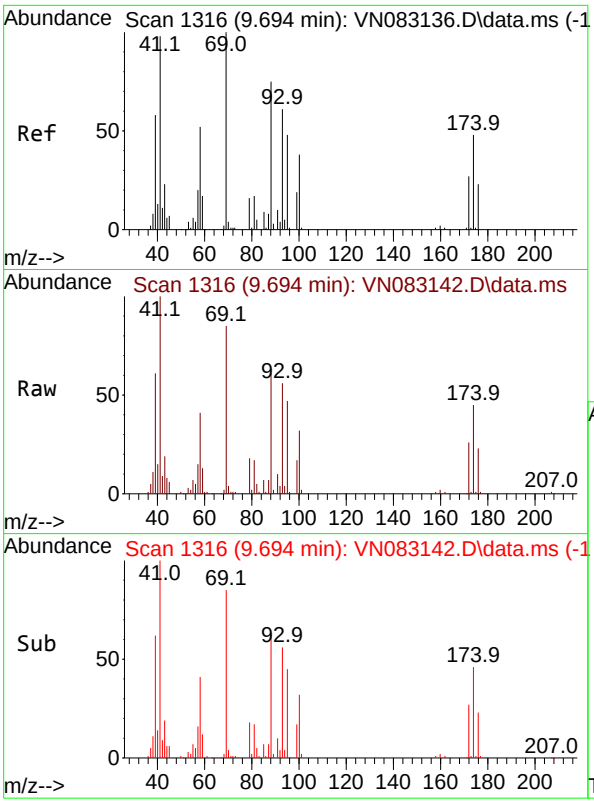



#48
Methyl methacrylate
Concen: 44.609 ug/l
RT: 9.683 min Scan# 1314
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 41 Resp: 148161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 81.0 | 56.3 | 84.5 |
| 39 | 60.7 | 50.3 | 75.5 |






#49
1,4-Dioxane
Concen: 885.211 ug/l
RT: 9.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 88 Resp: 5304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 32.0 | 27.8 | 41.8 |
| 58 | 71.4 | 59.4 | 89.0 |

**Instrument :**
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ICVVN080724

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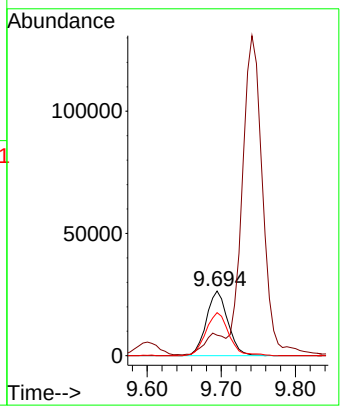
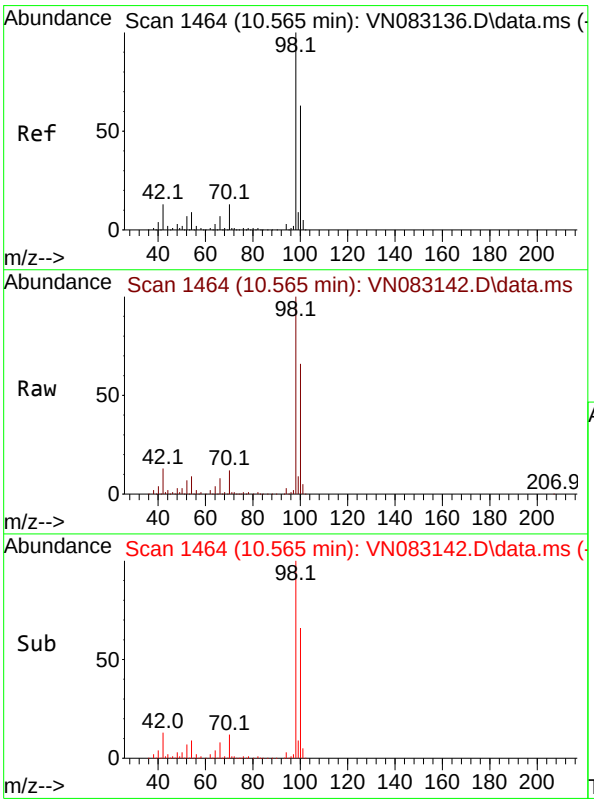
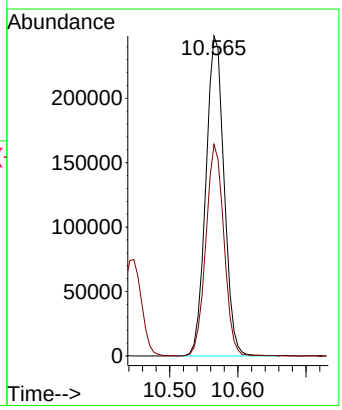


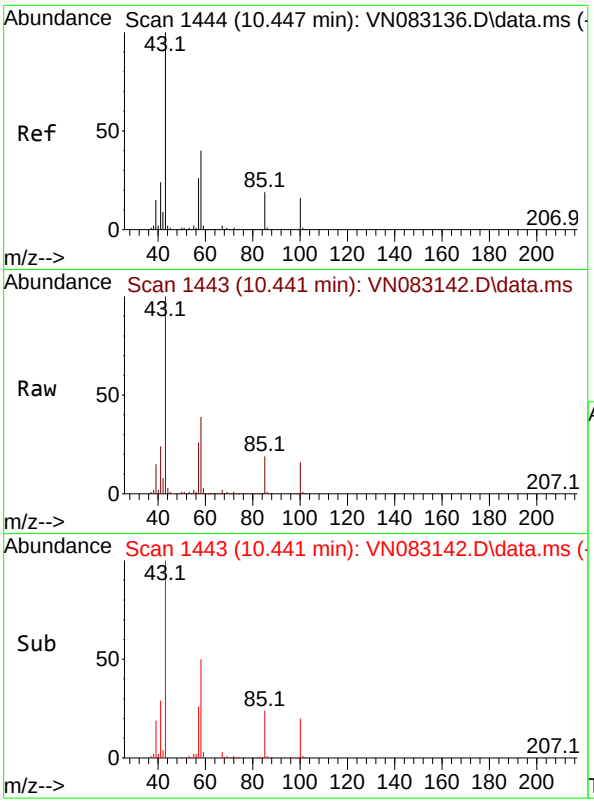




#50
Toluene-d8
Concen: 52.175 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 98 Resp: 461627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 51.5 | 77.3 |

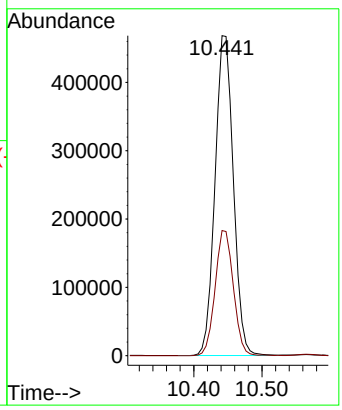





#51
4-Methyl-2-Pentanone
Concen: 230.917 ug/l
RT: 10.441 min Scan# 14
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 87724

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 39.0 | 28.2 | 42.4 |

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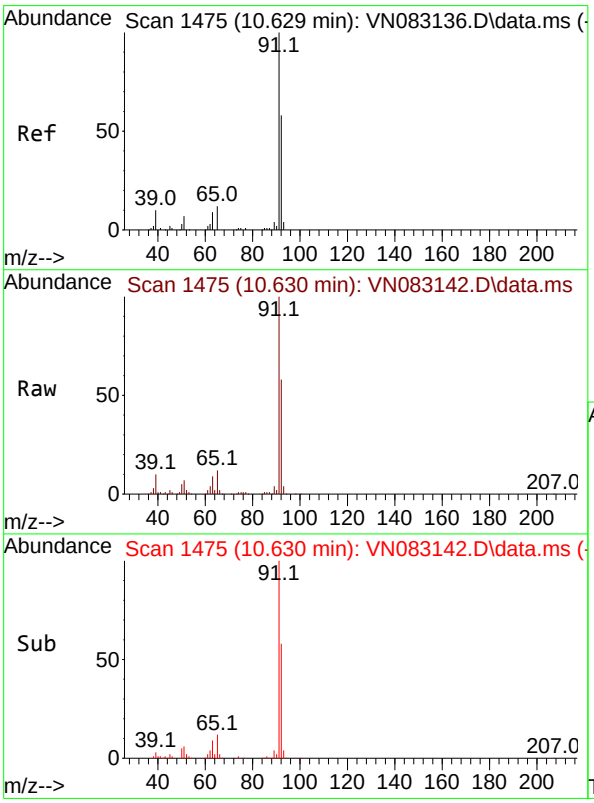
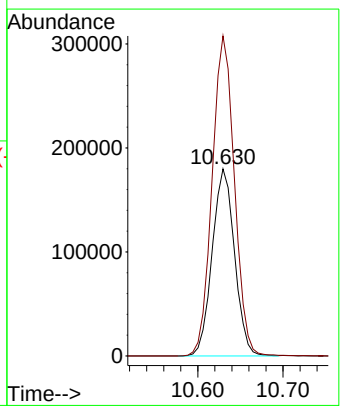
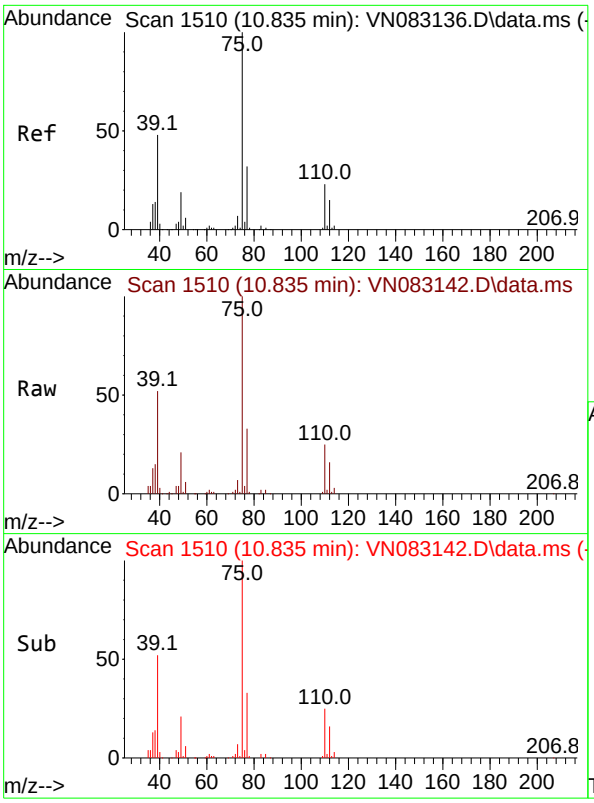



#52
Toluene
Concen: 48.520 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 92 Resp: 327682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 170.9 | 139.4 | 209.0 |

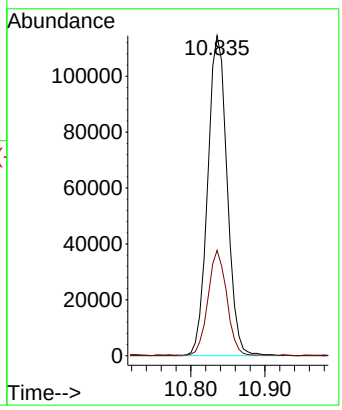





#53
t-1,3-Dichloropropene
Concen: 49.776 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 20849

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.8 | 25.7 | 38.5 |

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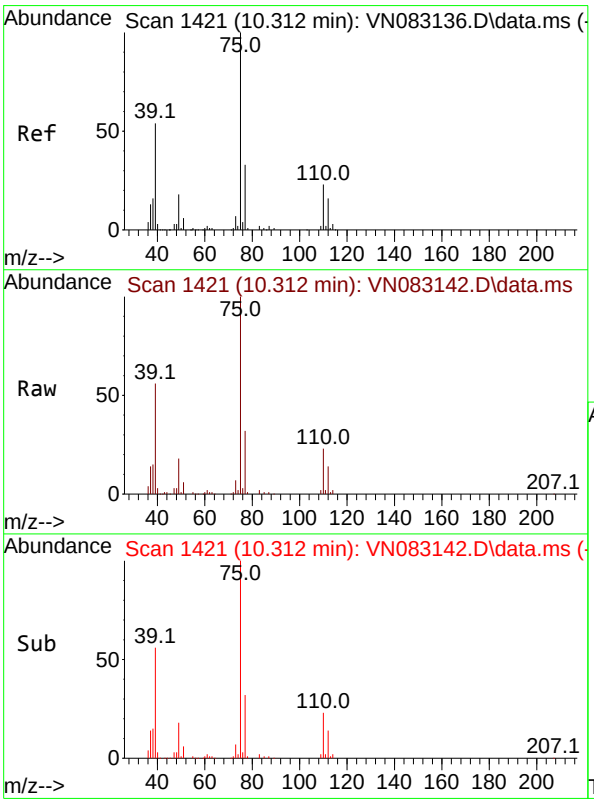
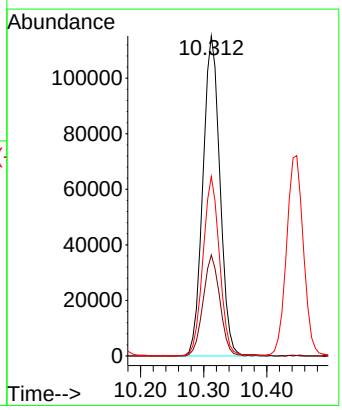
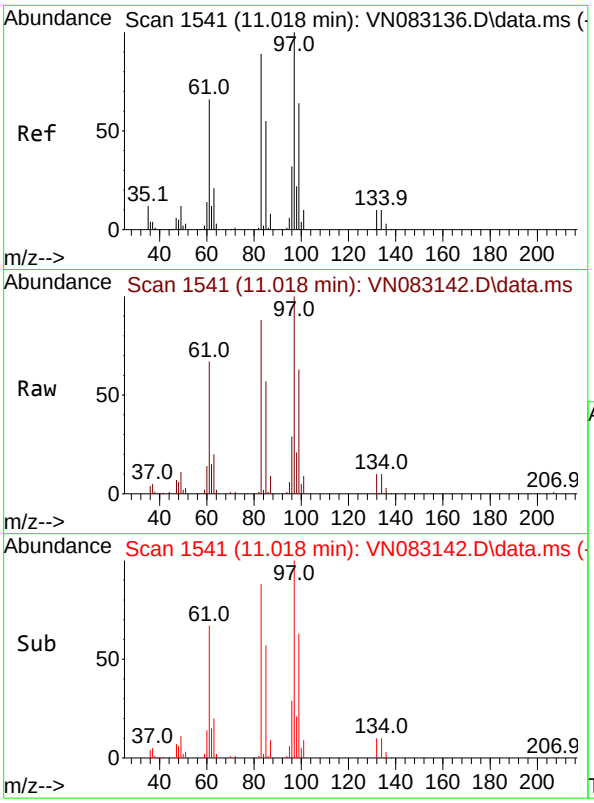



#54
cis-1,3-Dichloropropene
Concen: 48.487 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 216020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.6 | 24.3 | 36.5 |
| 39 | 56.0 | 50.5 | 75.7 |

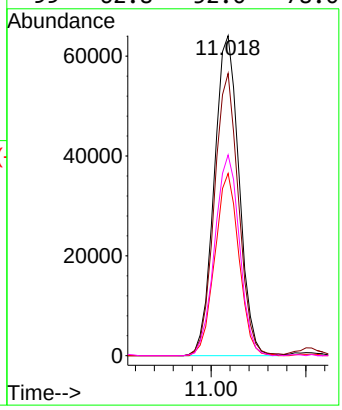





#55
1,1,2-Trichloroethane
Concen: 48.351 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 97 Resp: 11702

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 88.2 | 71.4 | 107.0 |
| 85 | 57.0 | 45.8 | 68.6 |
| 99 | 62.8 | 52.0 | 78.0 |

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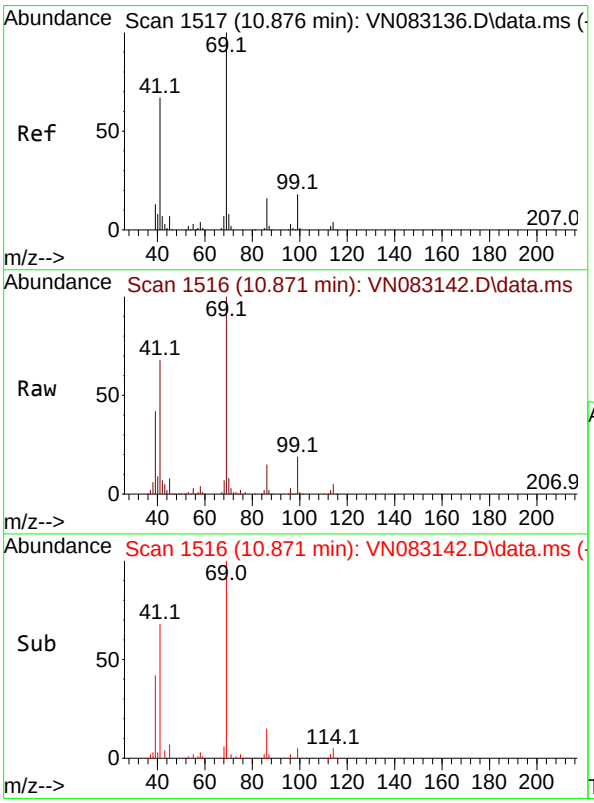
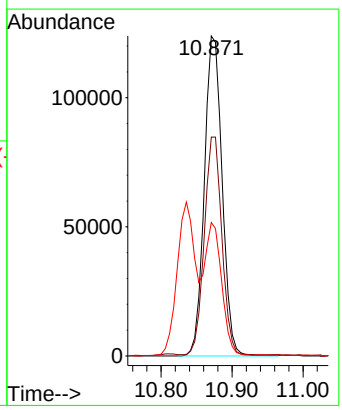
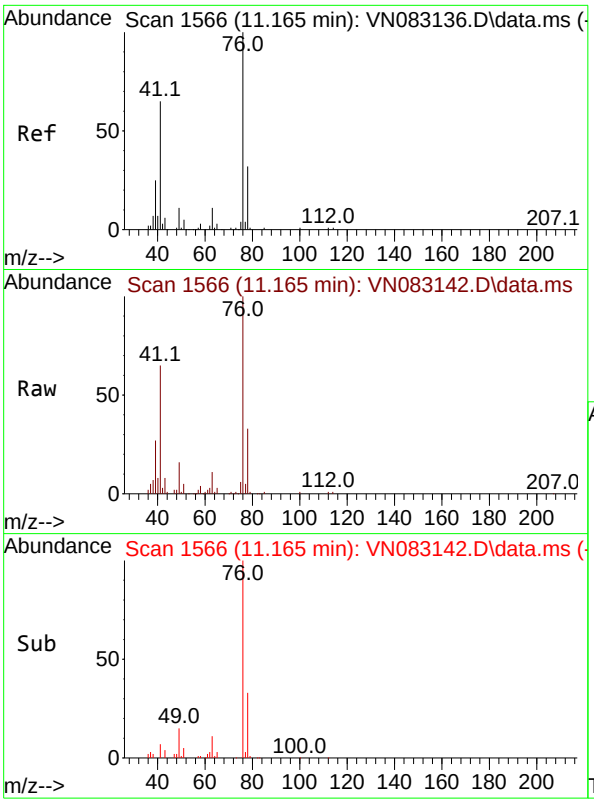



#56
Ethyl methacrylate
Concen: 47.395 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 69 Resp: 216248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 67.3 | 63.4 | 95.2 |
| 39 | 40.2 | 37.4 | 56.0 |

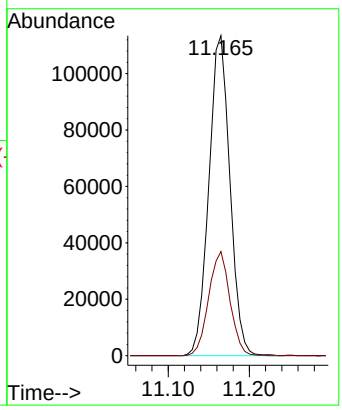





#57
1,3-Dichloropropane
Concen: 47.391 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 76 Resp: 20444

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.9 | 25.6 | 38.4 |

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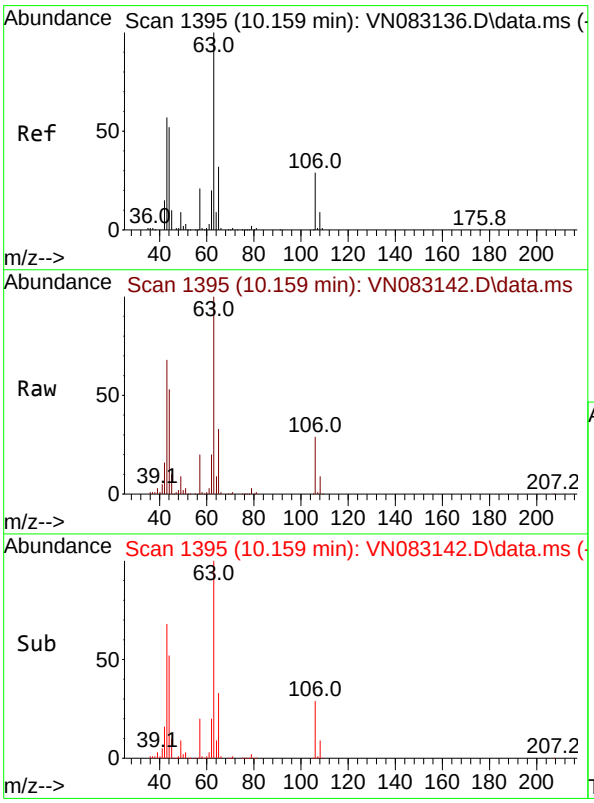
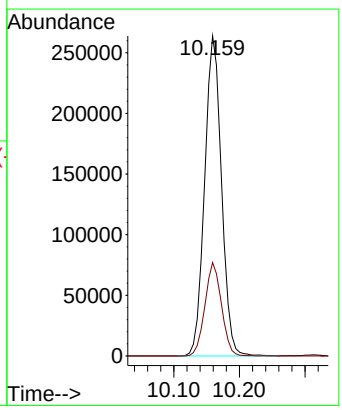
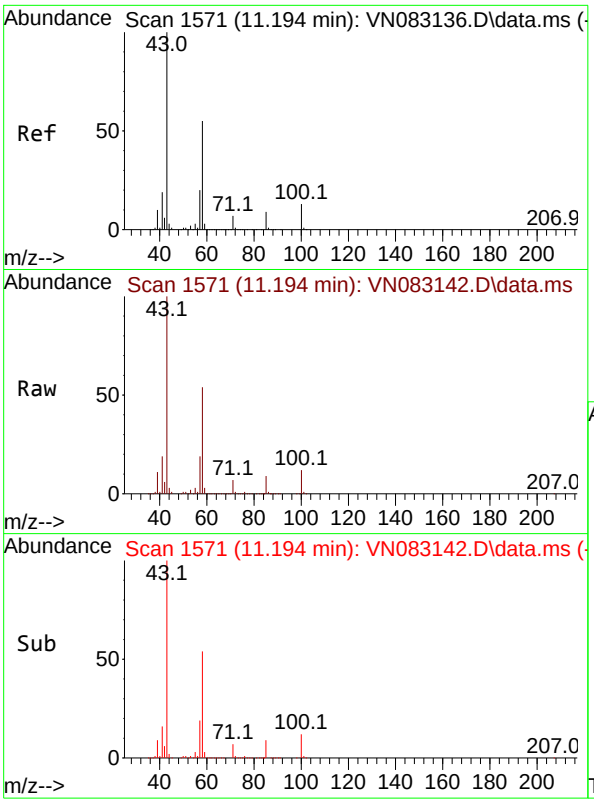



#58
2-Chloroethyl Vinyl ether
Concen: 244.918 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 63 Resp: 472357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.6 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 224.916 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 66103

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 54.6 | 24.6 | 73.8 |

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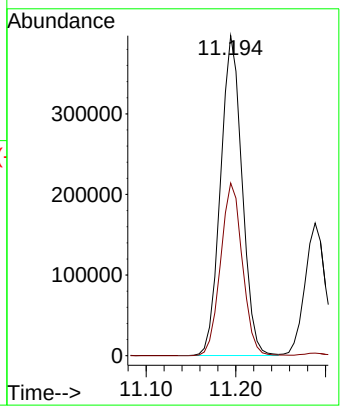
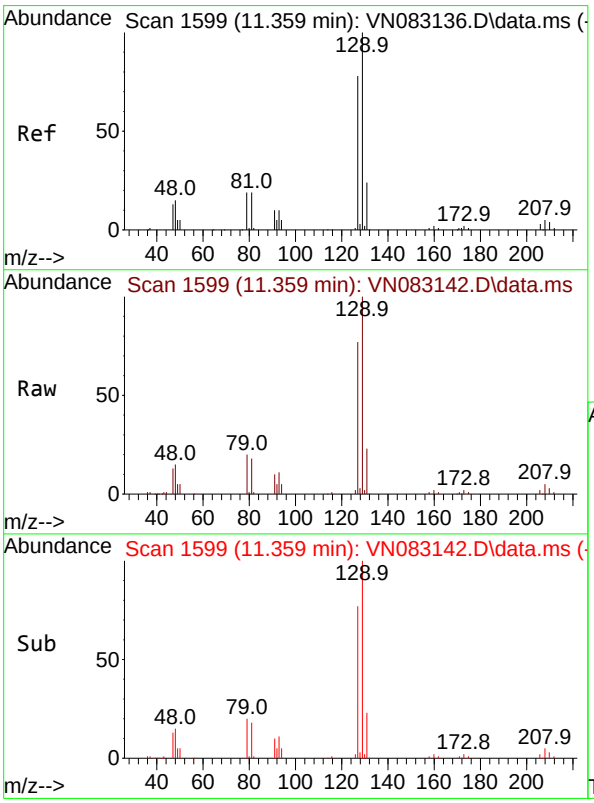
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

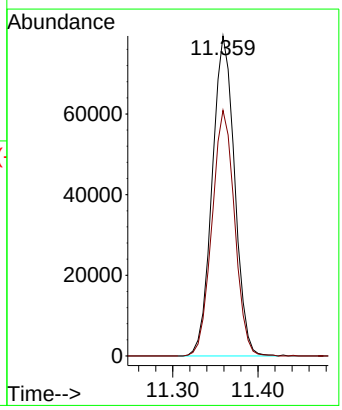


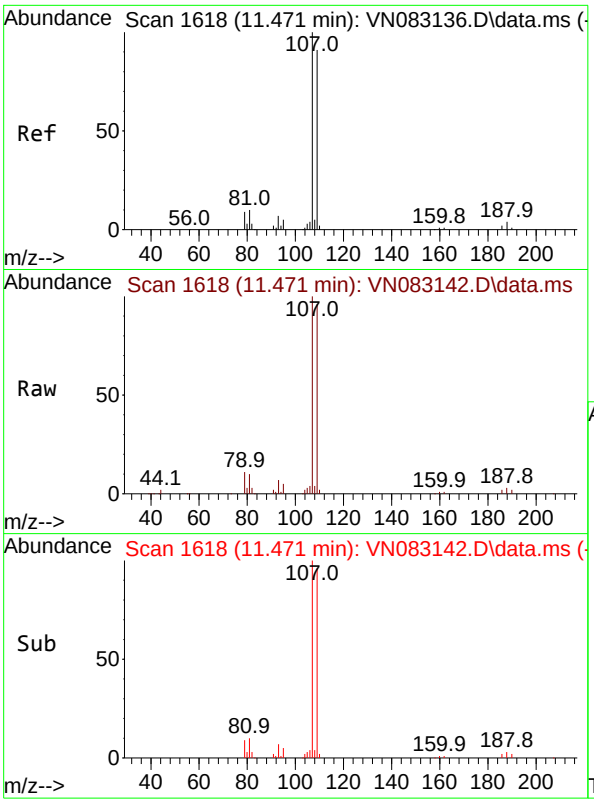




#60
Dibromochloromethane
Concen: 49.513 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:129 Resp: 144886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.3 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 47.133 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

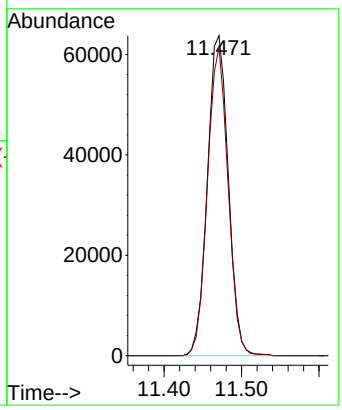
Tgt Ion:107 Resp: 11983

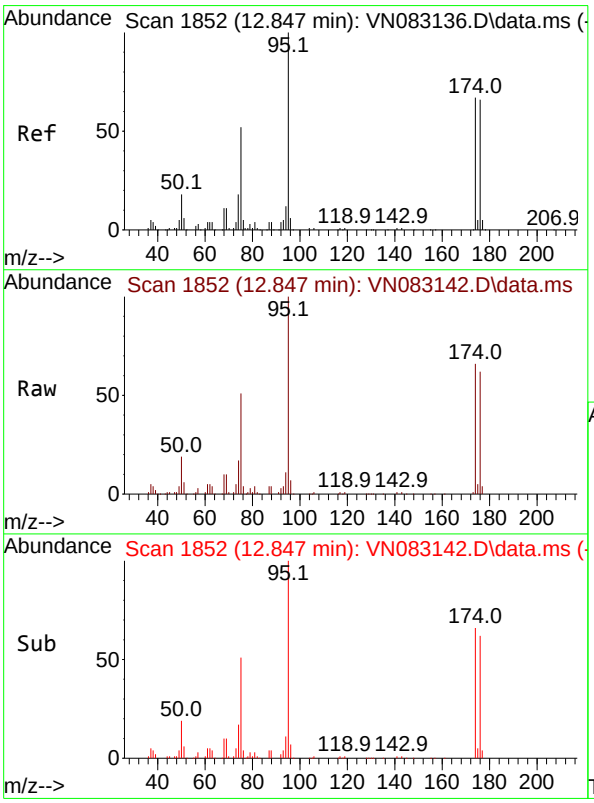
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.5 | 73.7 | 110.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

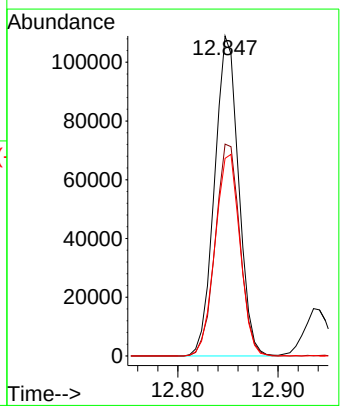


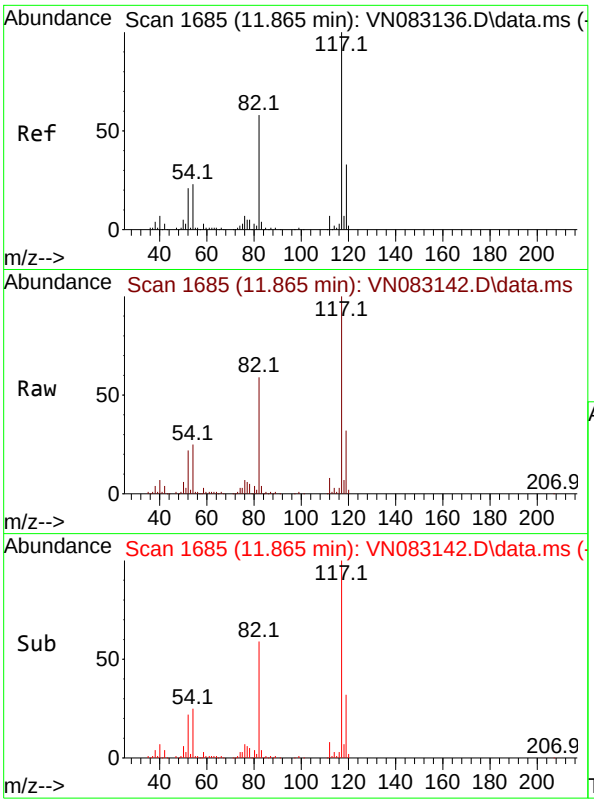




#62
4-Bromofluorobenzene
Concen: 52.574 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 95 Resp: 181344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 68.0 | 0.0 | 159.2 |
| 176 | 65.5 | 0.0 | 147.6 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:117 Resp: 33095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.4 | 47.5 | 71.3 |
| 119 | 31.9 | 25.6 | 38.4 |

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ICVVN080724

**Manual Integrations**
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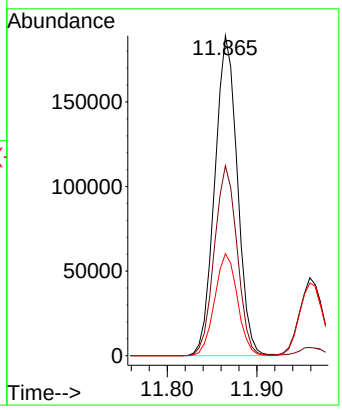
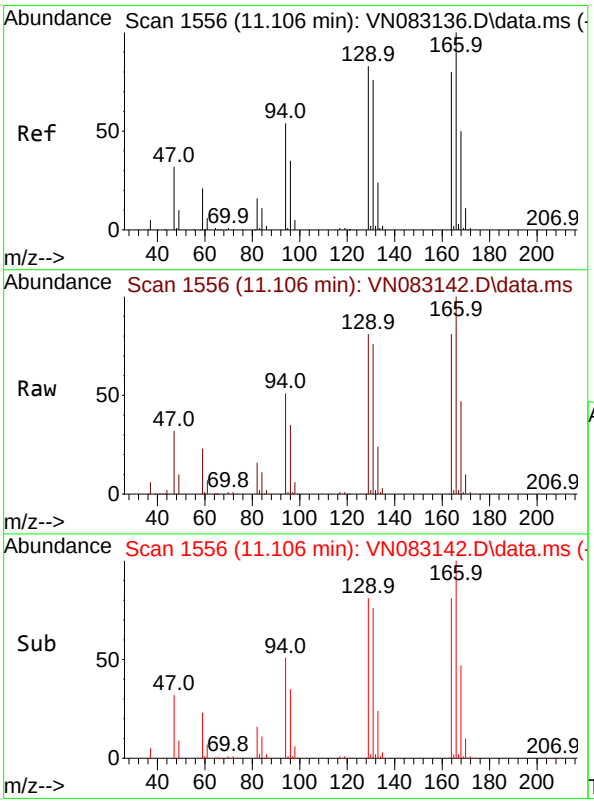
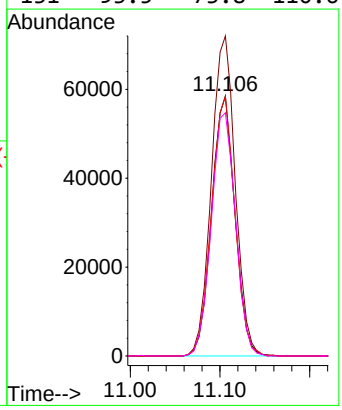


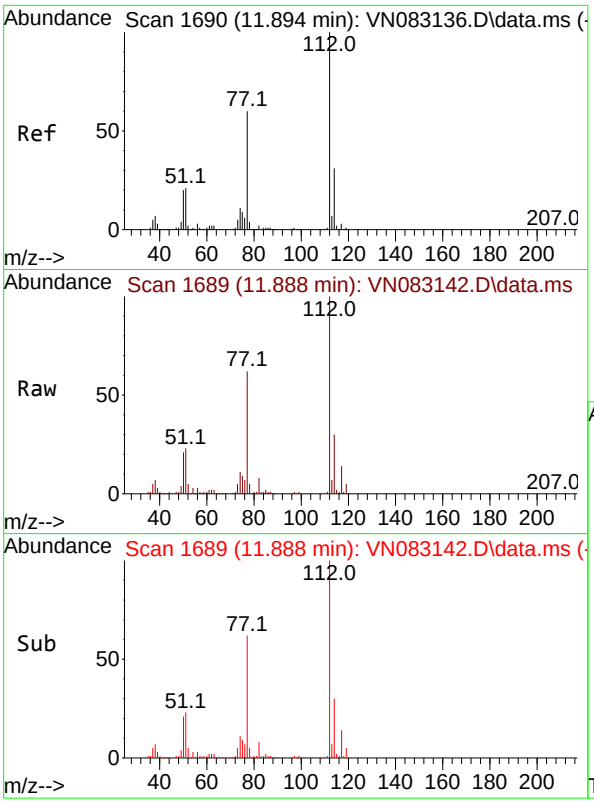




#64
Tetrachloroethene
Concen: 48.175 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:164 Resp: 105591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 123.0 | 101.4 | 152.0 |
| 129 | 99.7 | 75.7 | 113.5 |
| 131 | 93.5 | 73.8 | 110.6 |

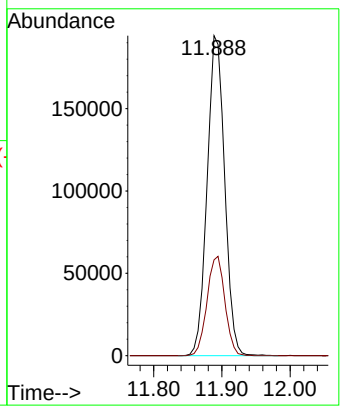





#65
Chlorobenzene
Concen: 47.522 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:112 Resp: 34756

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 29.9 | 26.2 | 39.2 |




**Instrument :**
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ICVVN080724

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Reviewed By :John Carlone 08/08/2024
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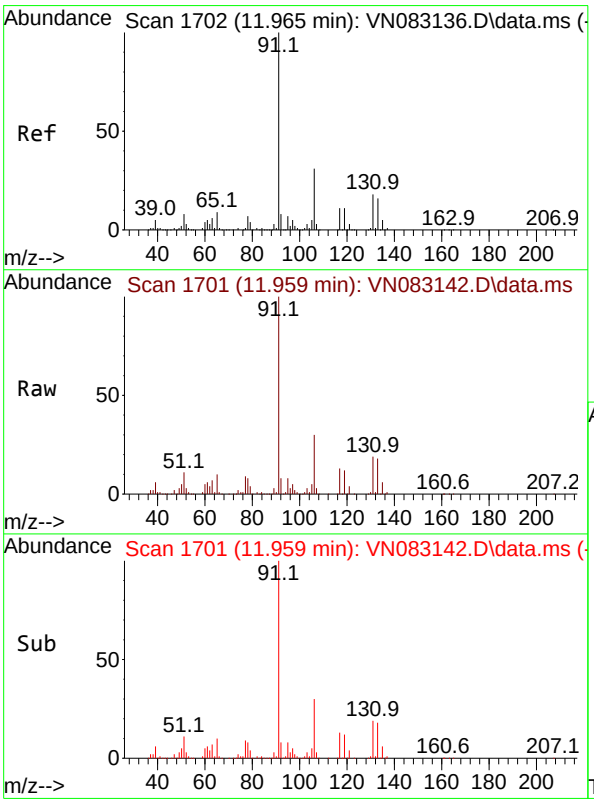
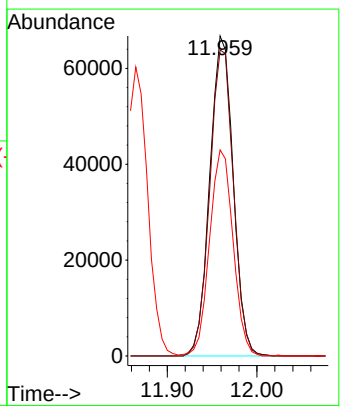
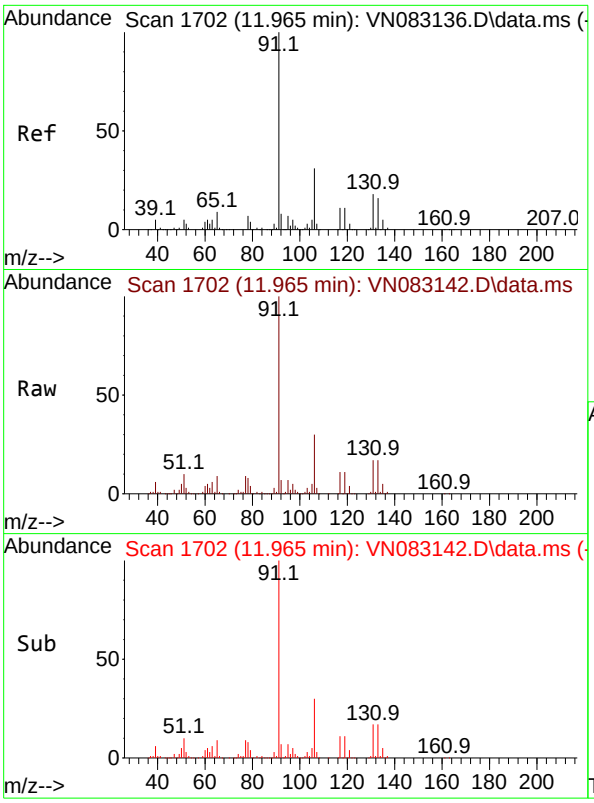



#66
1,1,1,2-Tetrachloroethane
Concen: 46.843 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:131 Resp: 120826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 97.1 | 47.3 | 142.0 |
| 119 | 64.8 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 47.764 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 91 Resp: 64082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.4 | 24.0 | 36.0 |

**Instrument :**
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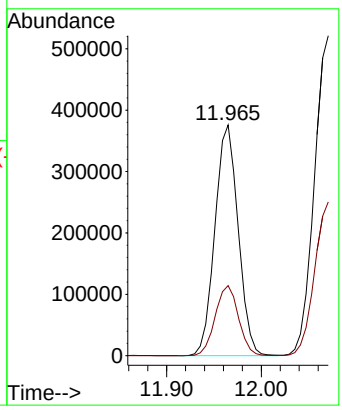
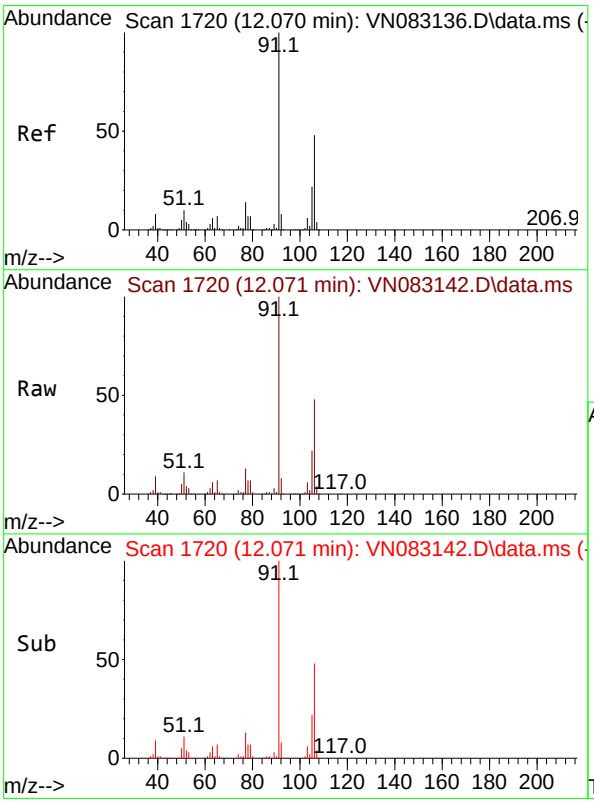
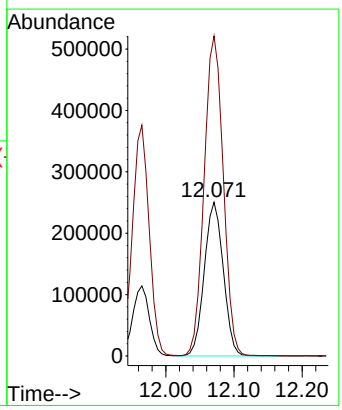


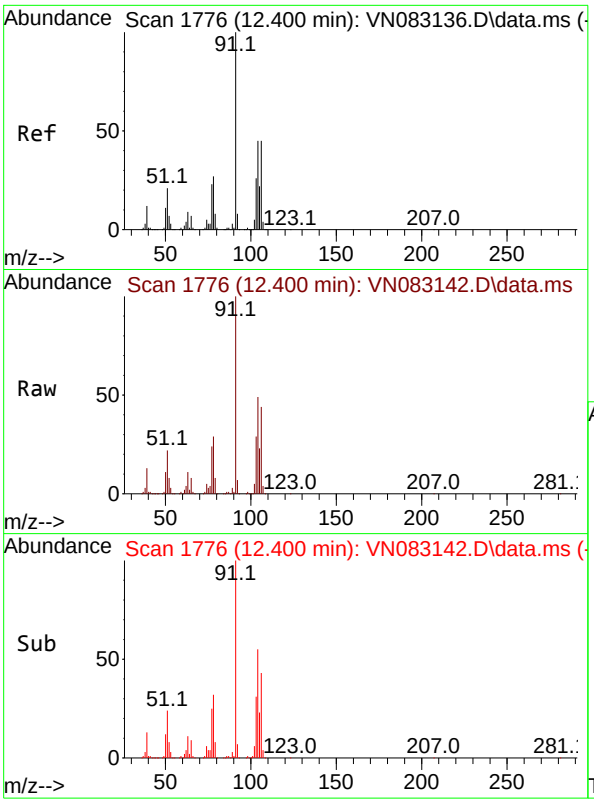




#68
m/p-Xylenes
Concen: 96.434 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:106 Resp: 484653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.2 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 46.662 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:106 Resp: 23129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 227.0 | 111.3 | 333.9 |

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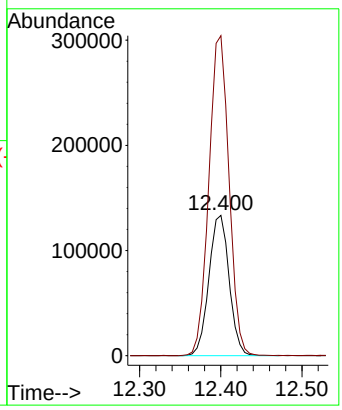
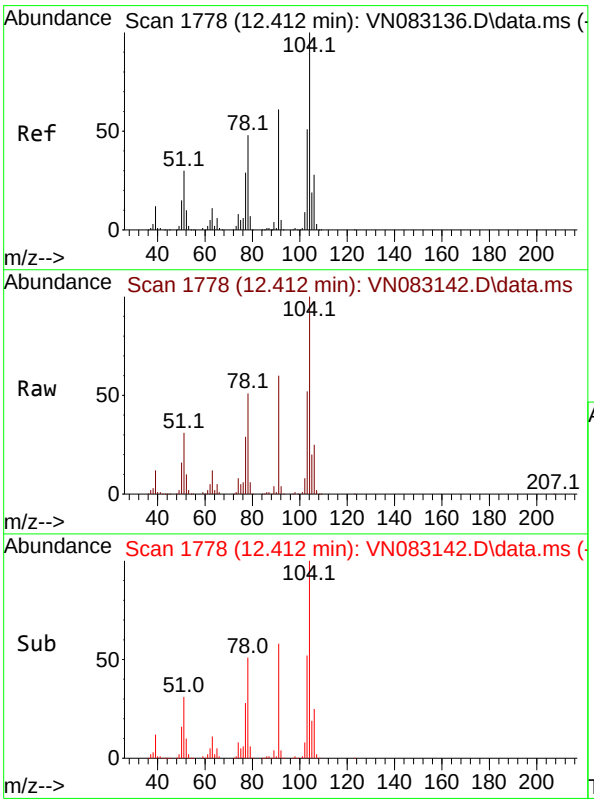
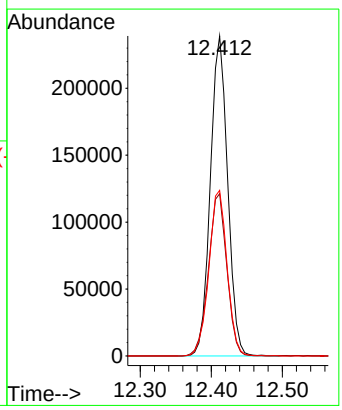


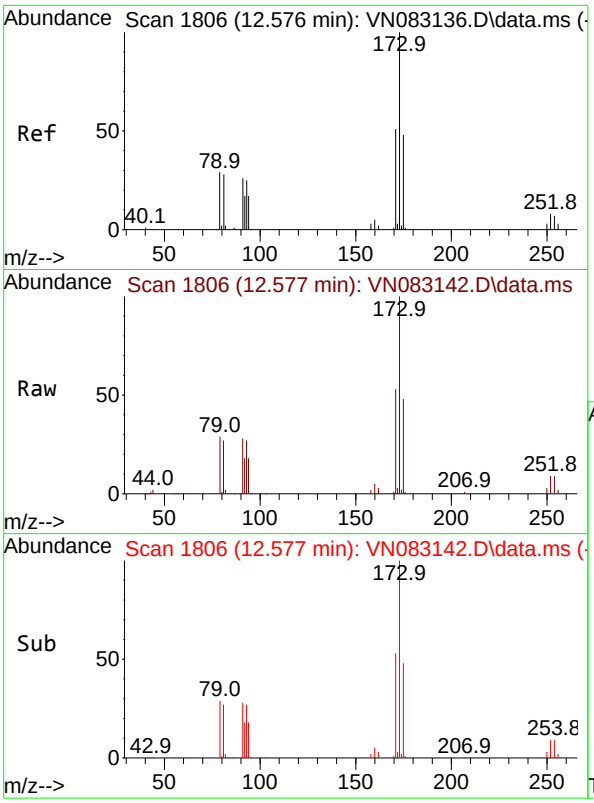




#70
Styrene
Concen: 48.487 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:104 Resp: 403657

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.9 | 41.6 | 62.4 |
| 103 | 54.6 | 44.0 | 66.0 |

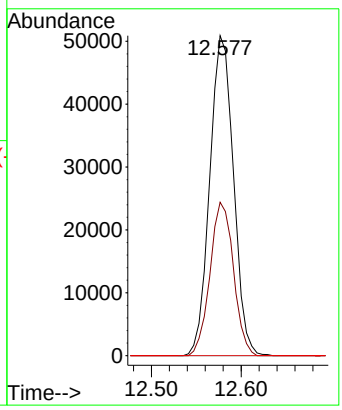





#71
Bromoform
Concen: 47.797 ug/l
RT: 12.577 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:173 Resp: 9339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.4 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |

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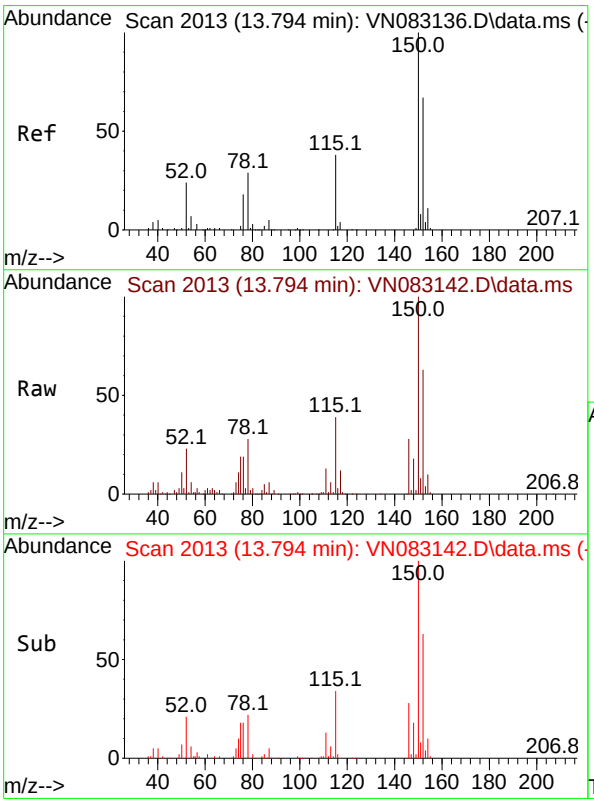
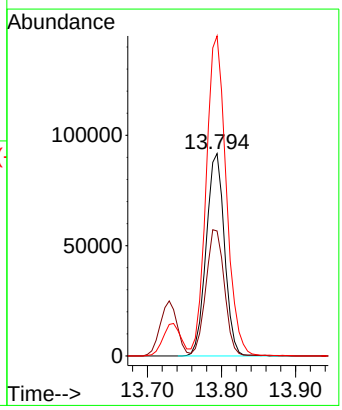
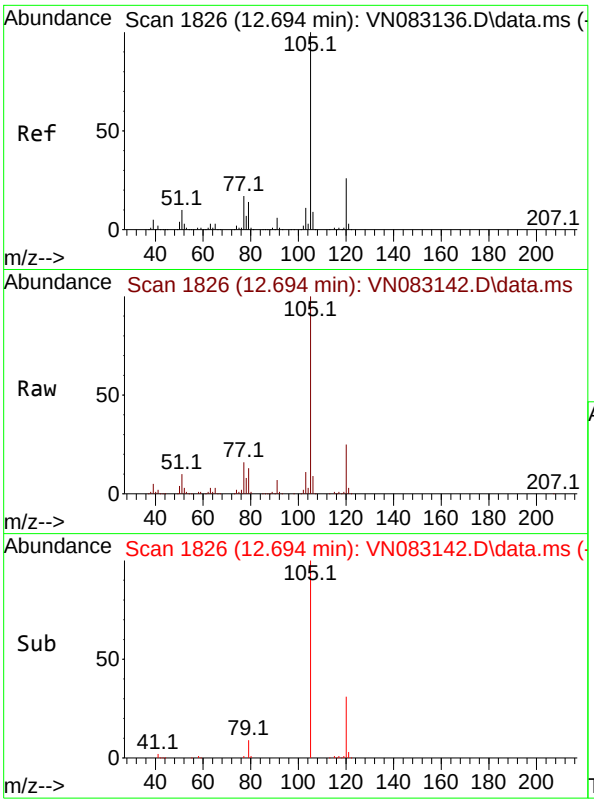



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:152 Resp: 157193

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.3 | 30.6 | 91.6 |
| 150 | 172.2 | 0.0 | 348.6 |






#73
Isopropylbenzene
Concen: 46.893 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:105 Resp: 61654

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.0 | 12.9 | 38.6 |

**Instrument :**
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ICVVN080724

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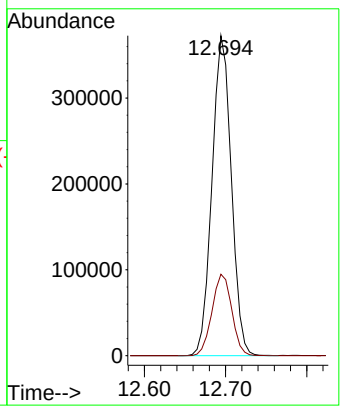
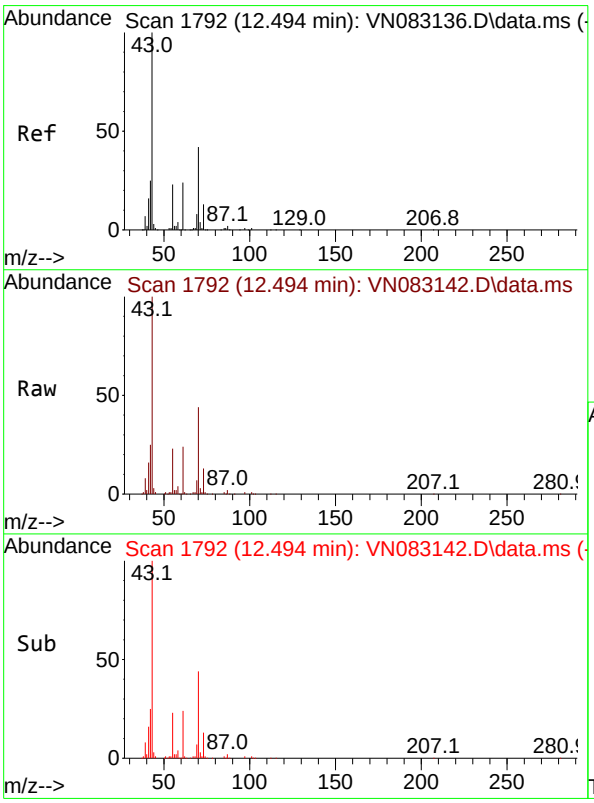
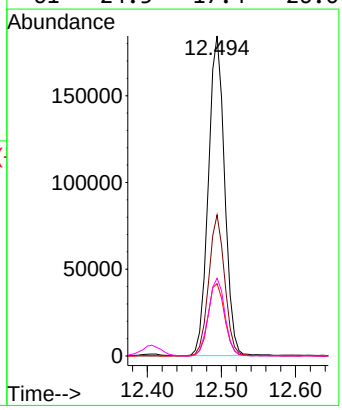


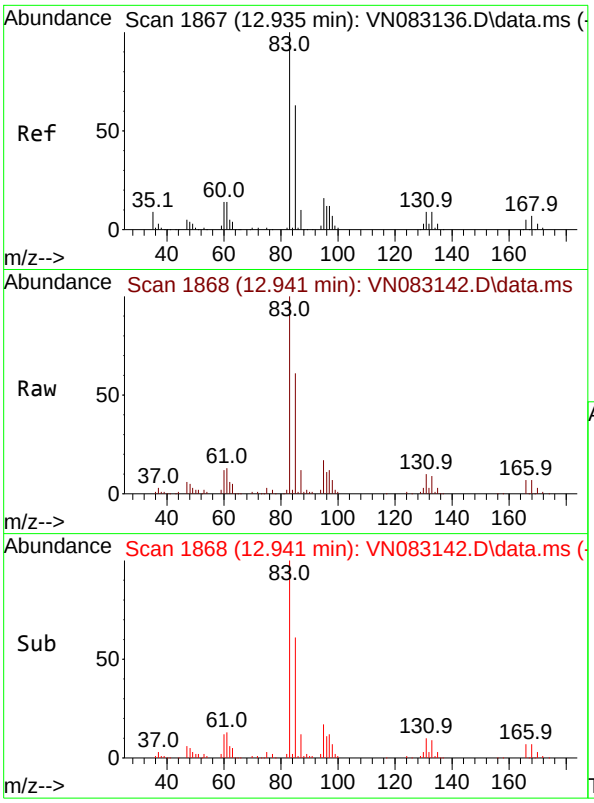




#74
N-amyl acetate
Concen: 43.748 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 43 Resp: 281352

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 43.1 | 29.8 | 44.6 |
| 55 | 23.3 | 18.7 | 28.1 |
| 61 | 24.5 | 17.4 | 26.0 |






#75
1,1,2,2-Tetrachloroethane
Concen: 43.016 ug/l
RT: 12.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 83 Resp: 15996

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.6 | 5.0 | 14.9 |
| 85 | 64.5 | 31.9 | 95.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
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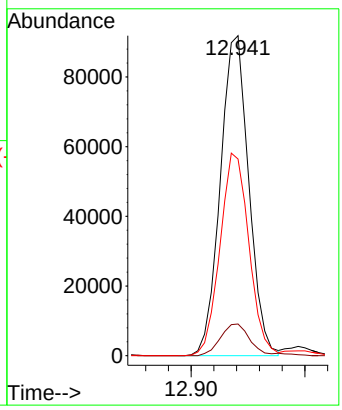
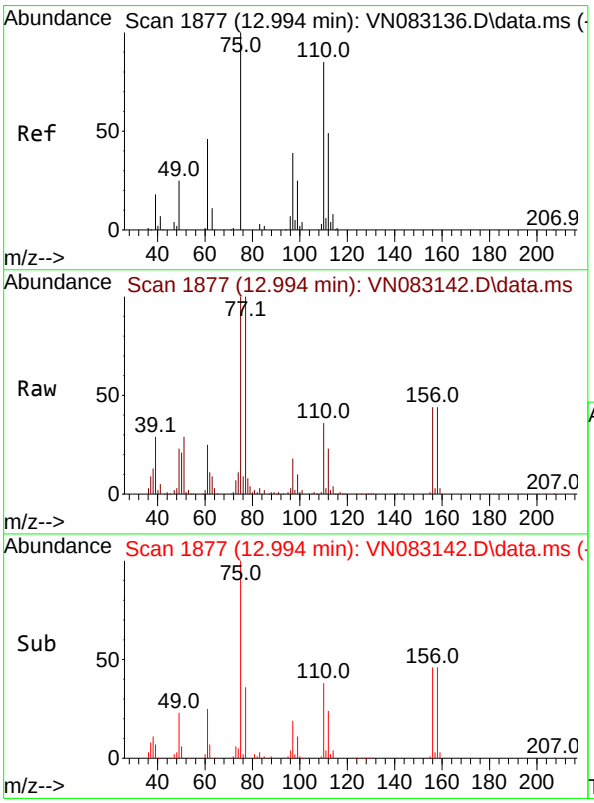
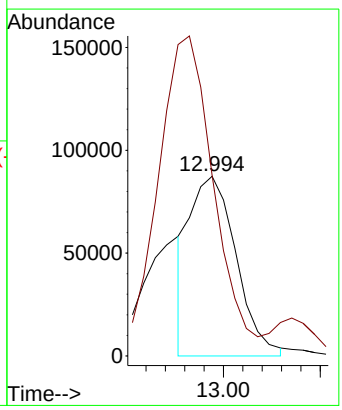


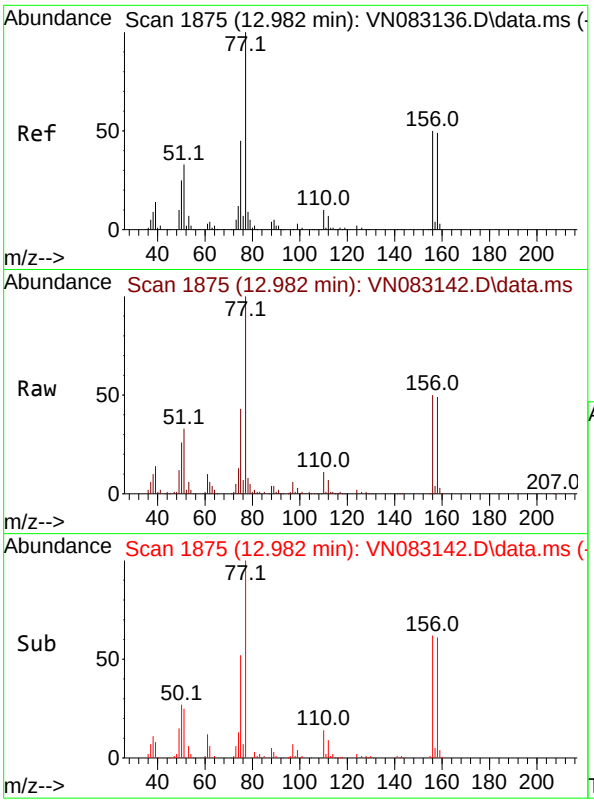




#76
1,2,3-Trichloropropane
Concen: 42.119 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 145309

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 214.8 | 110.9 | 332.6 |






#77
Bromobenzene
Concen: 46.649 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

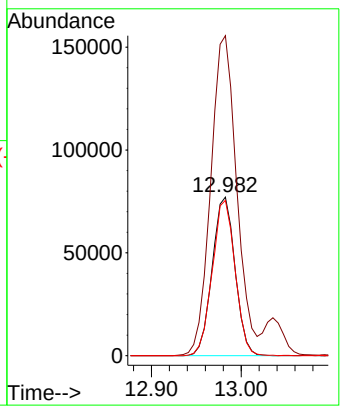
Tgt Ion:156 Resp: 13624

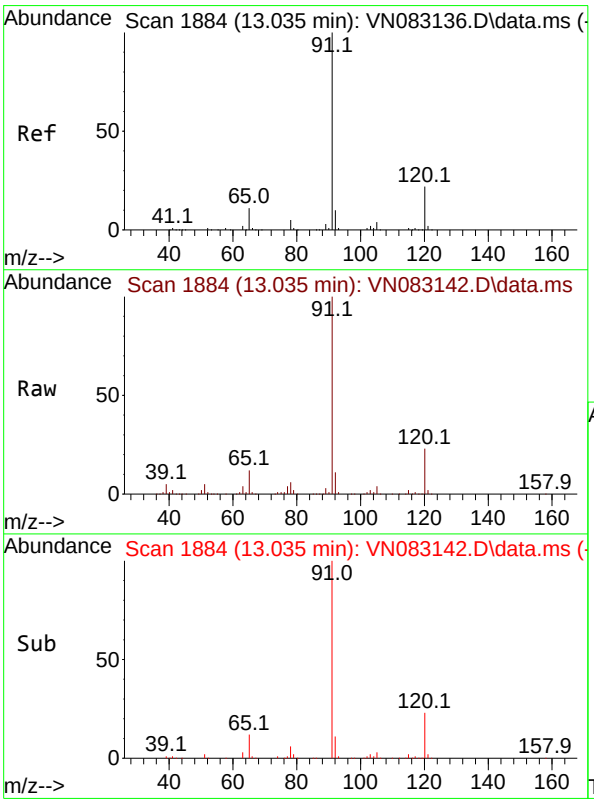
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 229.1 | 111.3 | 333.8 |
| 158 | 98.0 | 48.3 | 144.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024

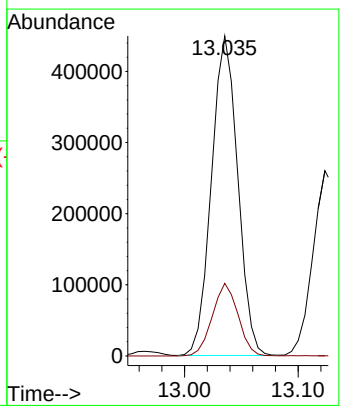


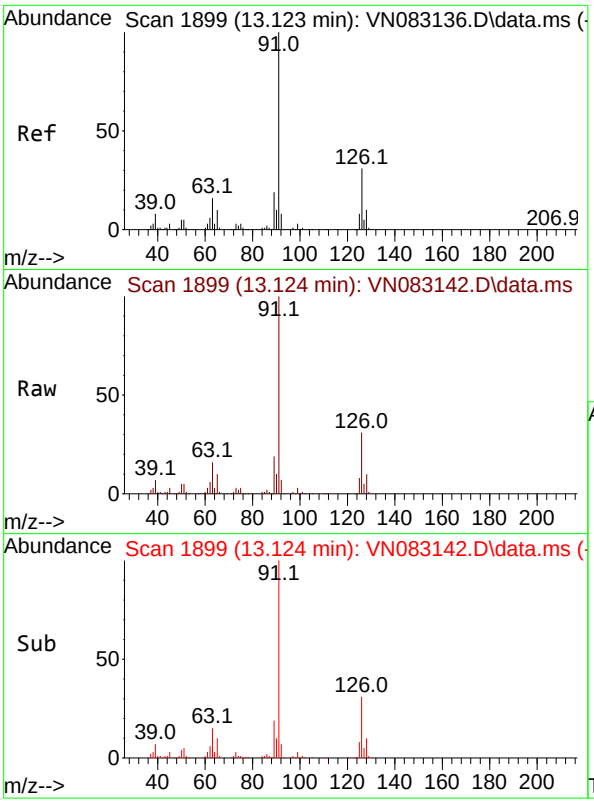




#78
n-propylbenzene
Concen: 47.678 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 91 Resp: 721825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.2 | 10.9 | 32.9 |






#79
2-Chlorotoluene
Concen: 46.398 ug/l
RT: 13.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 91 Resp: 44535

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.1 | 16.2 | 48.6 |

**Instrument :**
MSVOA_N
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ICVVN080724

**Manual Integrations**
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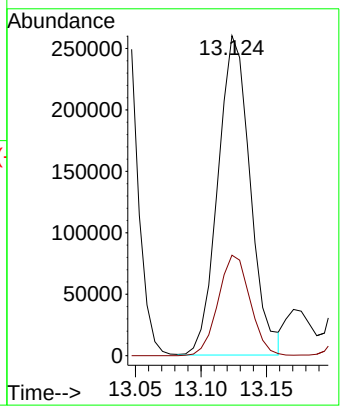
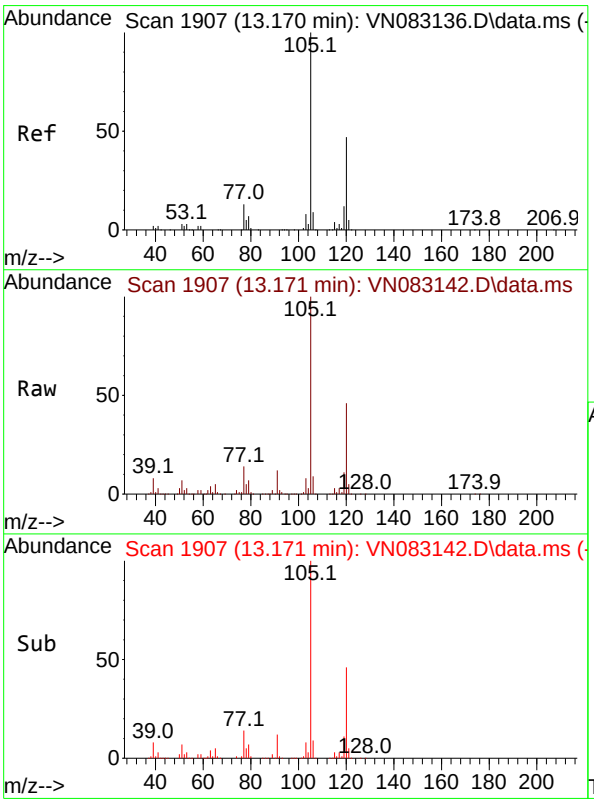
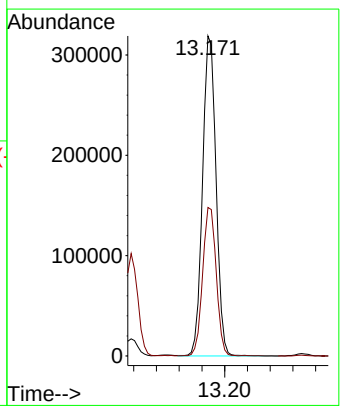


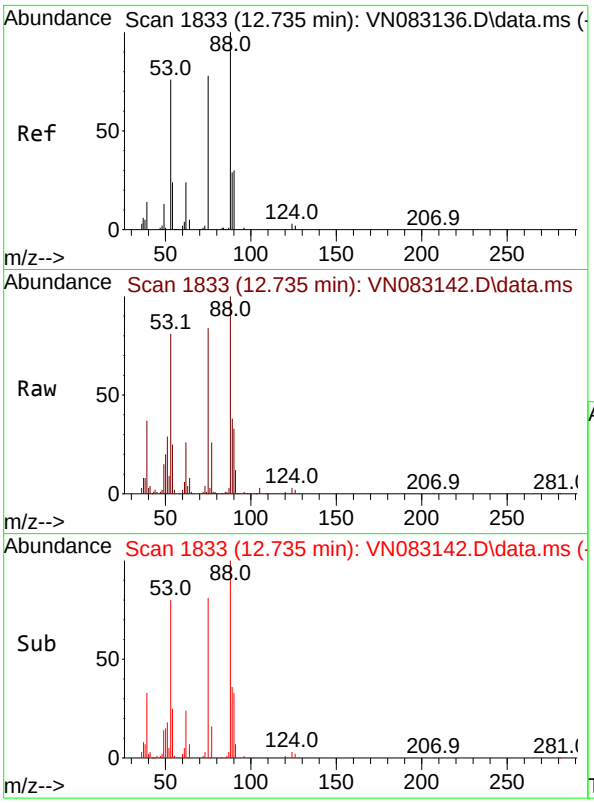




#80
1,3,5-Trimethylbenzene
Concen: 47.673 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:105 Resp: 524769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.9 | 24.3 | 72.8 |

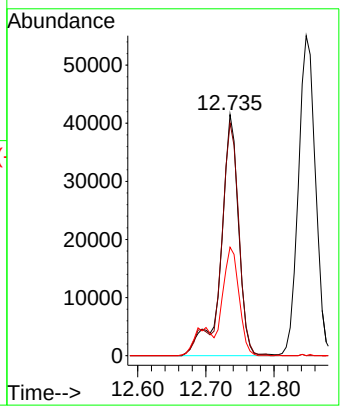





#81
trans-1,4-Dichloro-2-butene
Concen: 47.070 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 7465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 89.6 | 88.4 | 132.6 |
| 89 | 41.1 | 36.3 | 54.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
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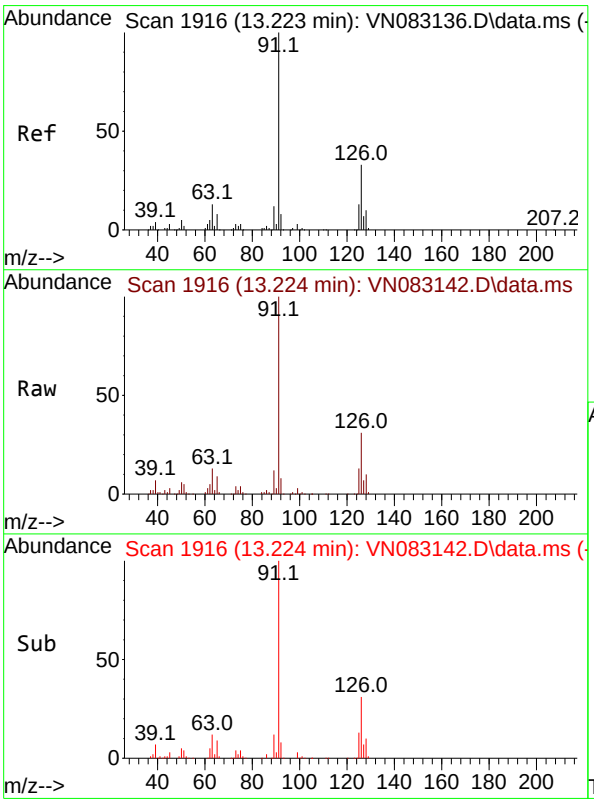
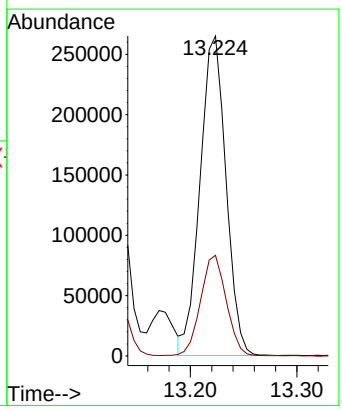
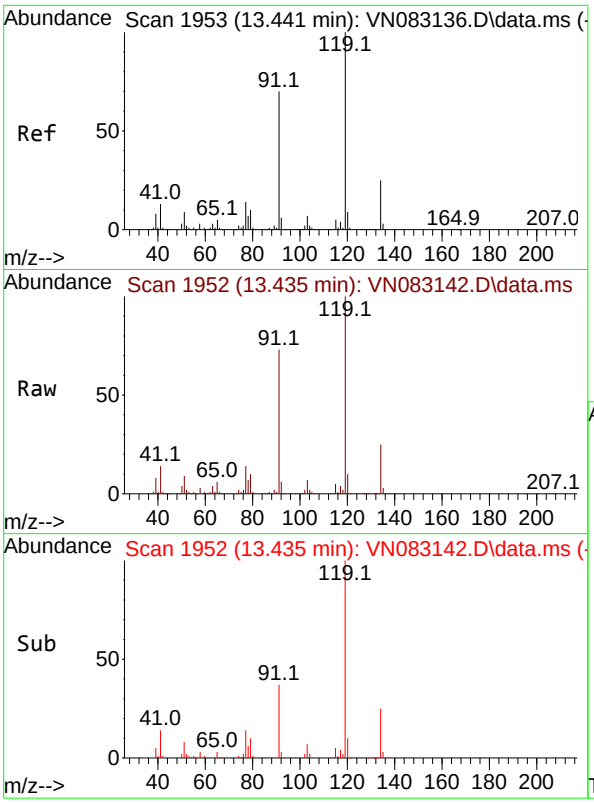



#82
4-Chlorotoluene
Concen: 46.512 ug/l
RT: 13.224 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 91 Resp: 447810

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.2 | 16.2 | 48.6 |

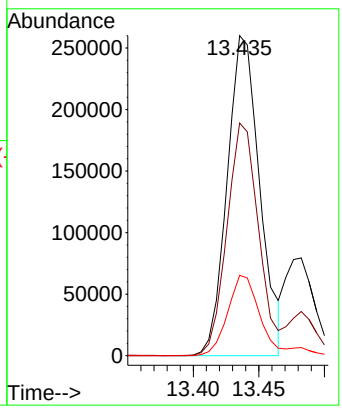





#83
tert-Butylbenzene
Concen: 46.173 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:119 Resp: 45010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.4 | 35.0 | 105.1 |
| 134 | 24.4 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
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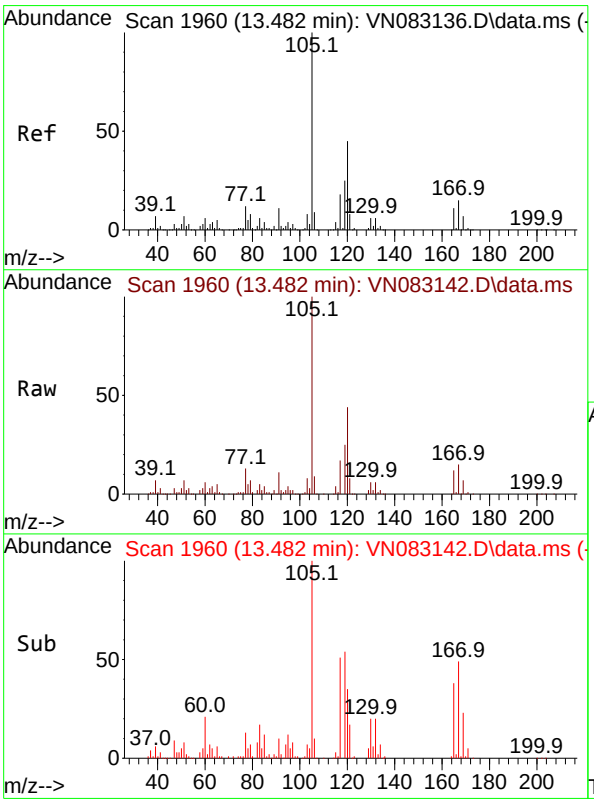
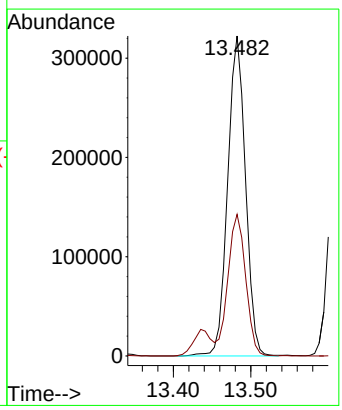
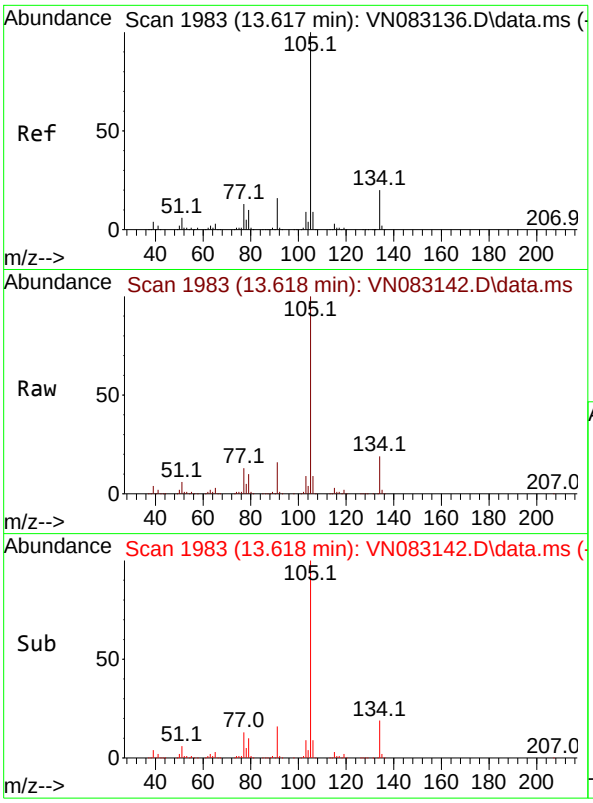



#84
1,2,4-Trimethylbenzene
Concen: 46.493 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:105 Resp: 515759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.4 | 21.9 | 65.8 |






#85
sec-Butylbenzene
Concen: 47.018 ug/l
RT: 13.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:105 Resp: 62540

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.5 | 9.8 | 29.3 |

**Instrument :**
MSVOA_N
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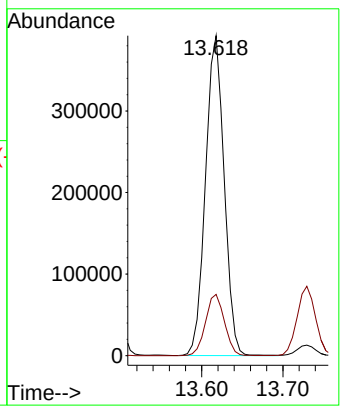
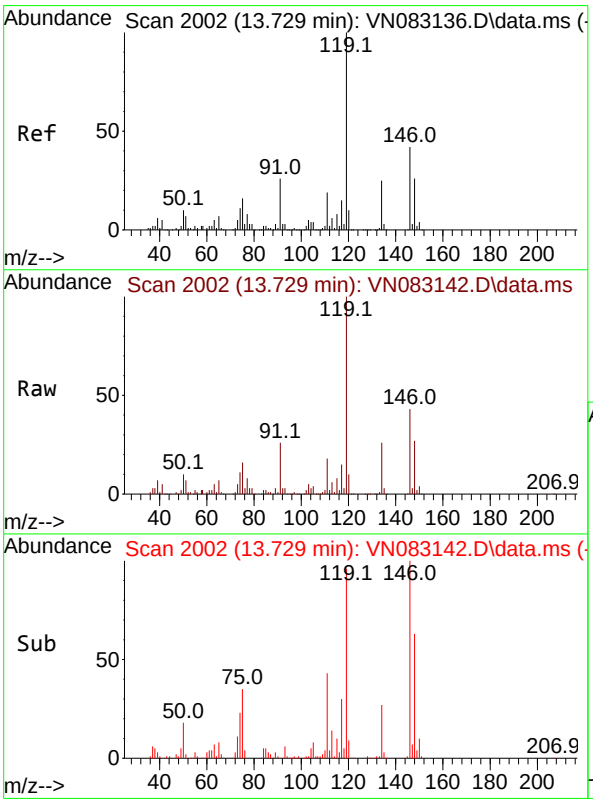
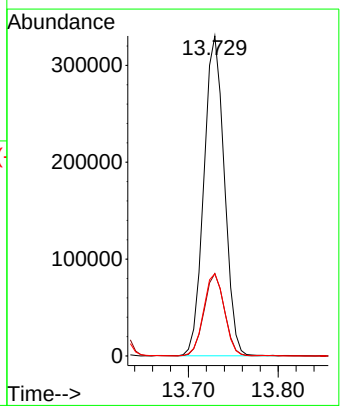


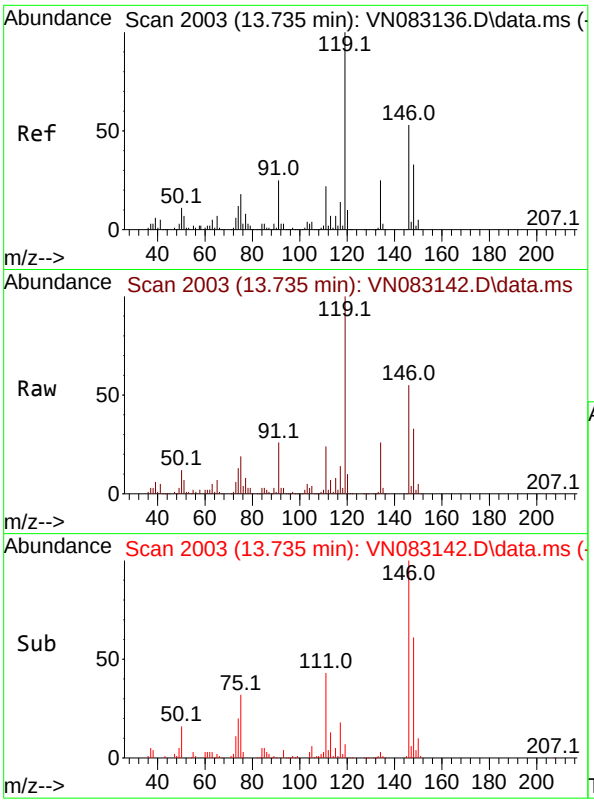




#86
p-Isopropyltoluene
Concen: 47.566 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:119 Resp: 522411

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.6 | 13.0 | 39.0 |
| 91 | 25.9 | 12.3 | 36.9 |

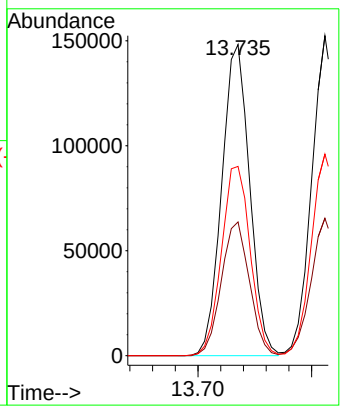





#87
1,3-Dichlorobenzene
Concen: 45.959 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:146 Resp: 25257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.4 | 20.6 | 61.9 |
| 148 | 62.8 | 31.8 | 95.3 |

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MSVOA_N
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ICVVN080724

**Manual Integrations**
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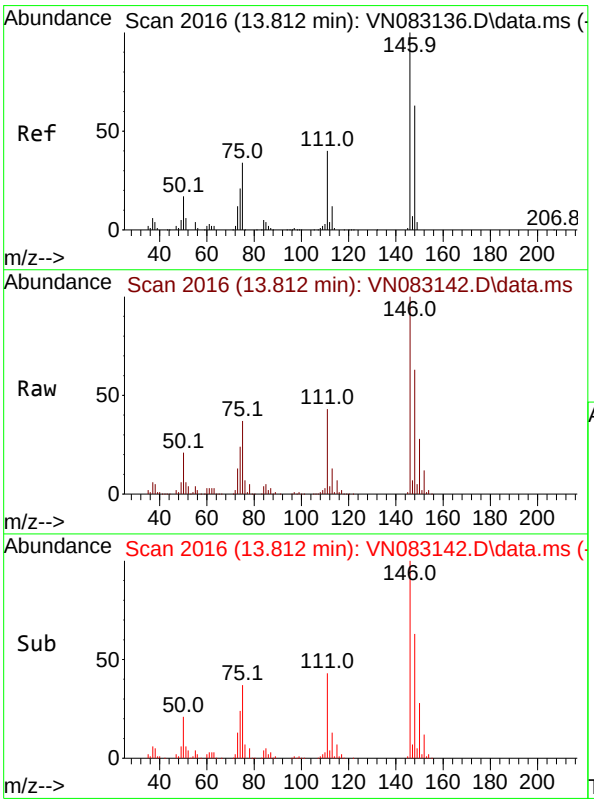
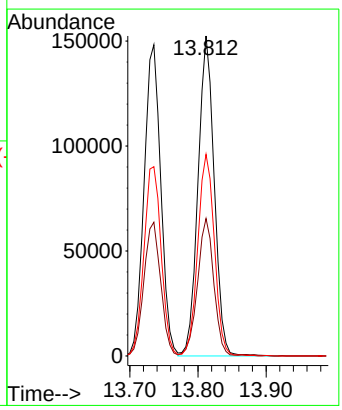
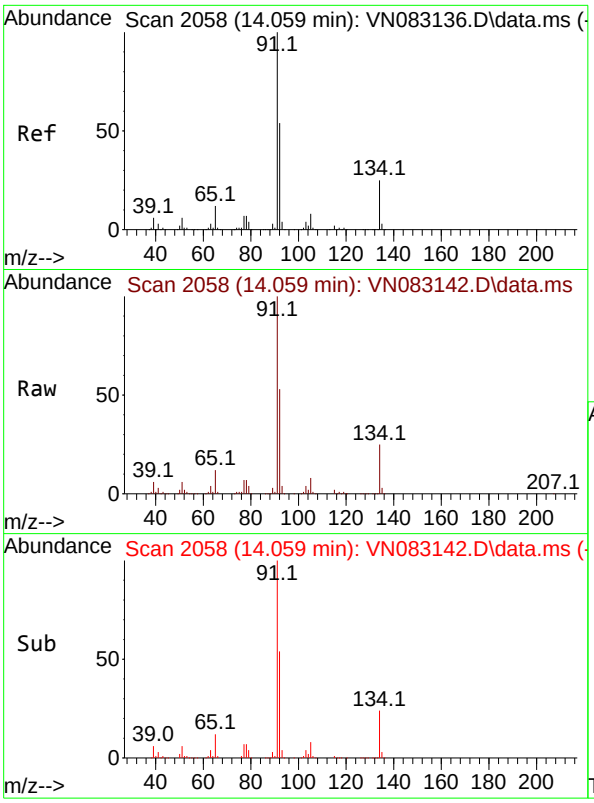



#88
1,4-Dichlorobenzene
Concen: 45.499 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:146 Resp: 252088

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.6 | 20.1 | 60.3 |
| 148 | 64.5 | 32.2 | 96.6 |

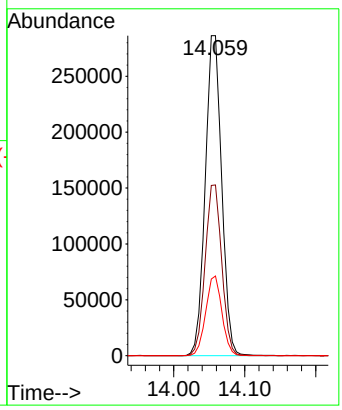





#89
n-Butylbenzene
Concen: 48.489 ug/l
RT: 14.059 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 91 Resp: 46144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.9 | 26.1 | 78.3 |
| 134 | 24.5 | 12.1 | 36.3 |




**Instrument :**
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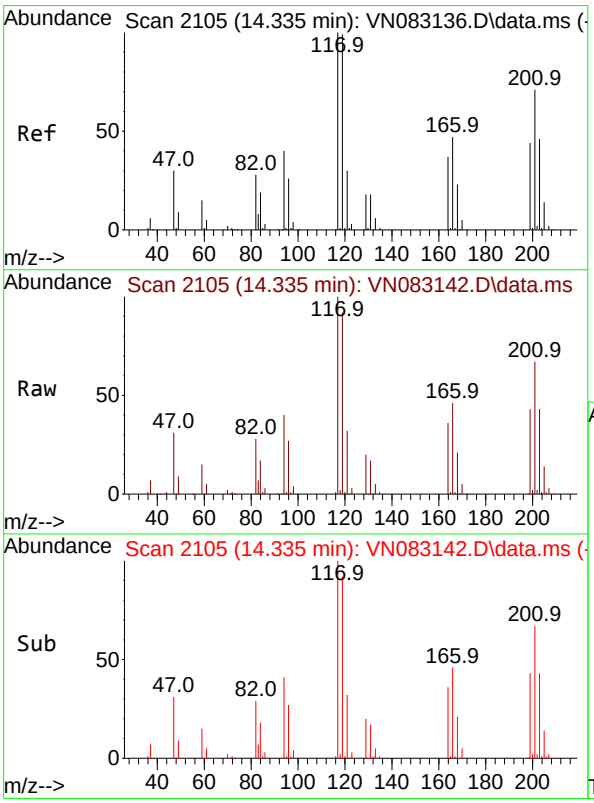
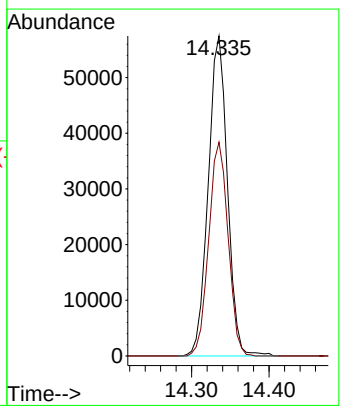
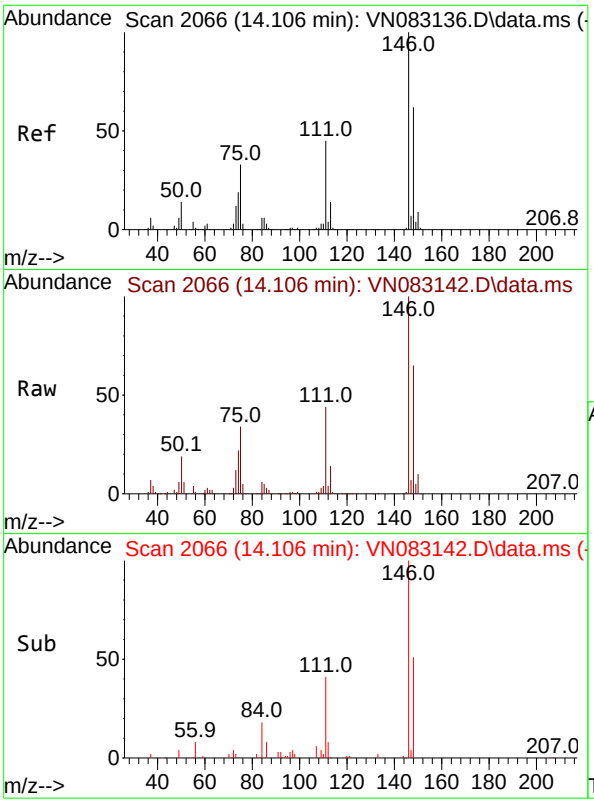



#90
Hexachloroethane
Concen: 46.741 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:117 Resp: 99176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.3 | 35.8 | 107.3 |

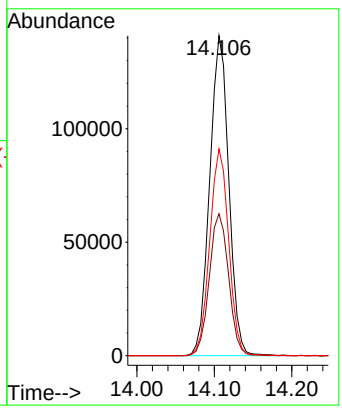





#91
1,2-Dichlorobenzene
Concen: 45.255 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:146 Resp: 24067

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.2 | 21.4 | 64.2 |
| 148 | 64.4 | 32.1 | 96.5 |

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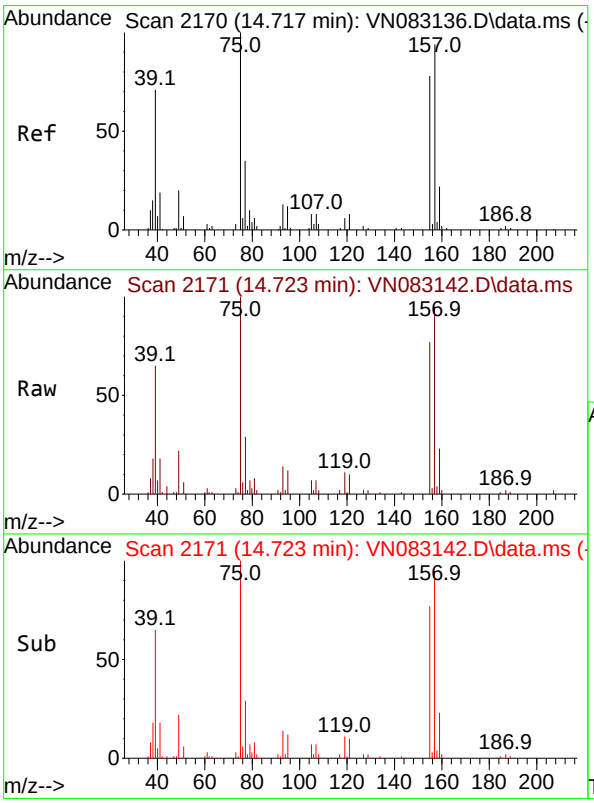
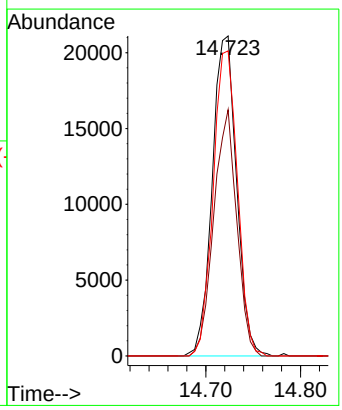
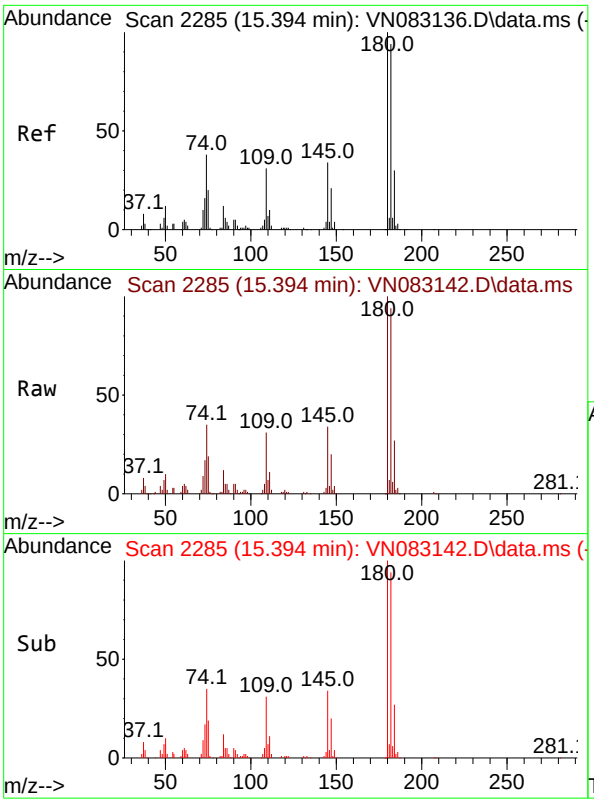



#92
1,2-Dibromo-3-Chloropropane
Concen: 41.753 ug/l
RT: 14.723 min Scan# 2171
Delta R.T. 0.006 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion: 75 Resp: 37677

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 72.8 | 36.6 | 109.8 |
| 157 | 95.3 | 46.9 | 140.6 |

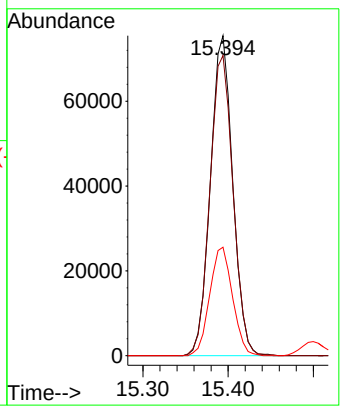





#93
1,2,4-Trichlorobenzene
Concen: 46.054 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:180 Resp: 13721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.2 | 47.3 | 141.8 |
| 145 | 34.6 | 15.7 | 47.1 |

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MSVOA_N
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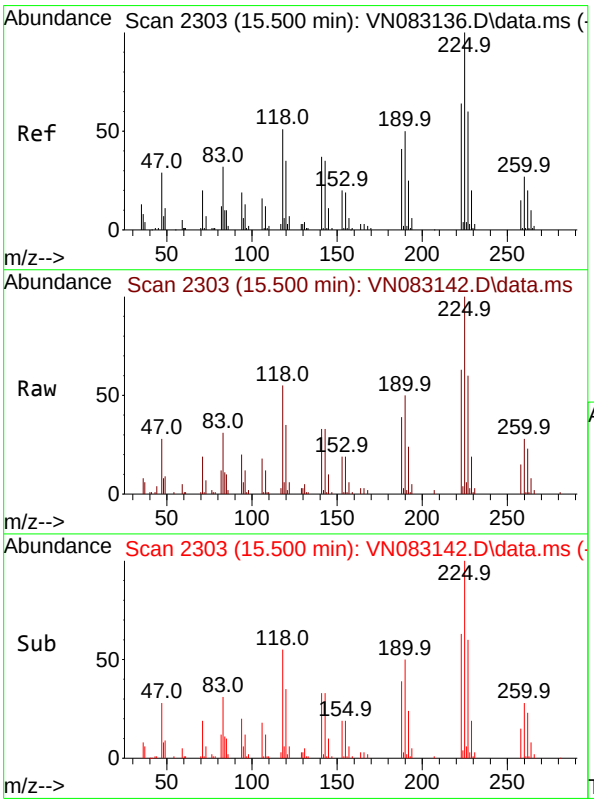
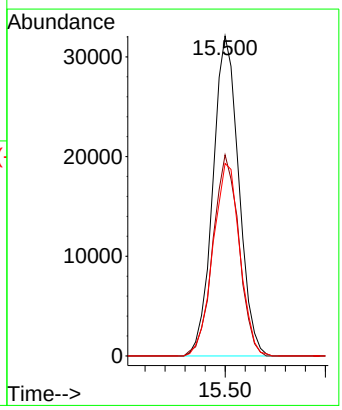
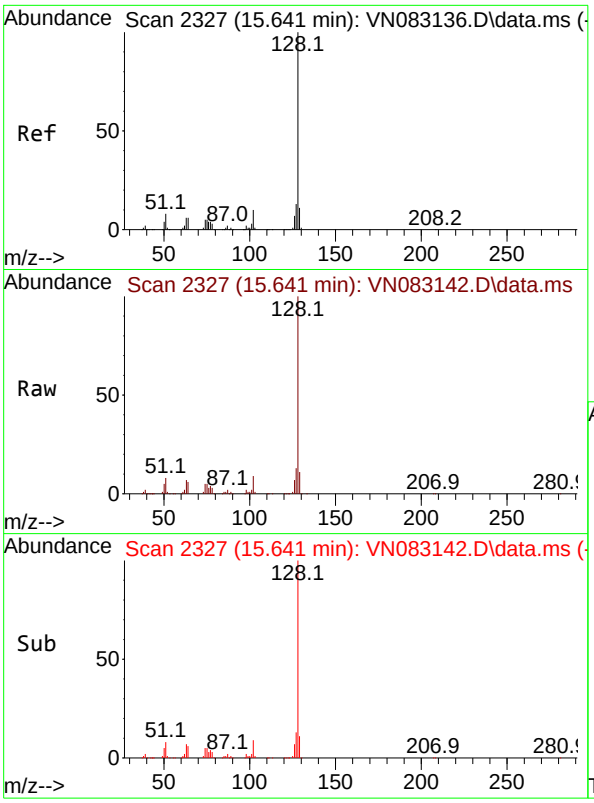



#94
Hexachlorobutadiene
Concen: 43.315 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:225 Resp: 57394

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.3 | 31.9 | 95.7 |
| 227 | 62.6 | 32.5 | 97.5 |

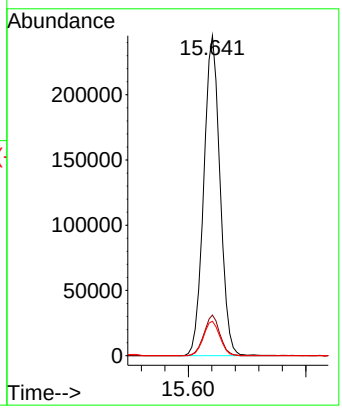





#95
Naphthalene
Concen: 44.692 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:128 Resp: 47167

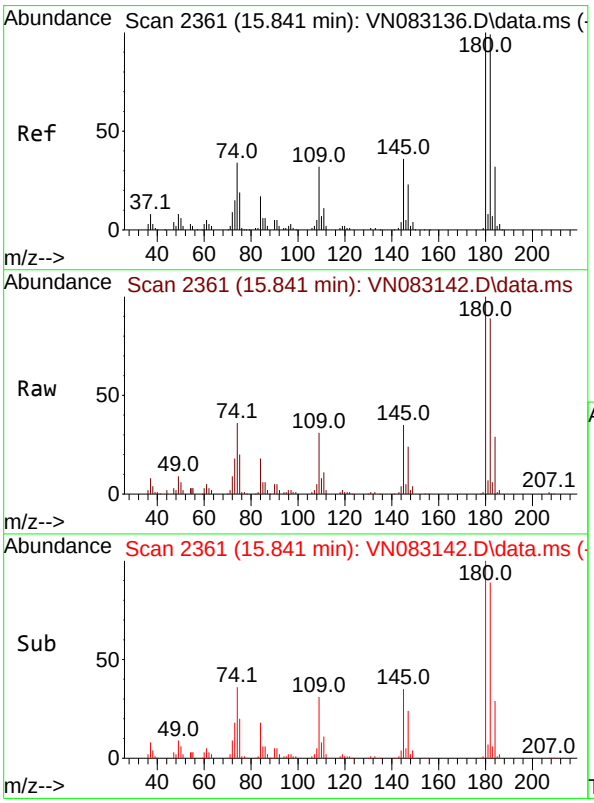
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.4 | 10.6 | 16.0 |
| 129 | 10.8 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

**Manual Integrations**
**APPROVED**

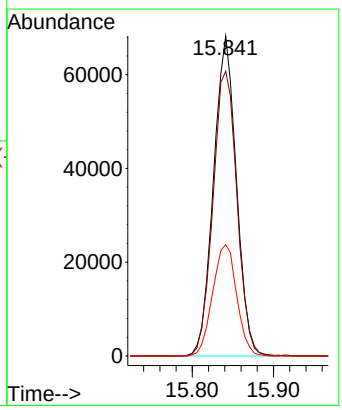
Reviewed By :John Carlone 08/08/2024
Supervised By :Mahesh Dadoda 08/09/2024




#96
1,2,3-Trichlorobenzene
Concen: 45.221 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.000 min
Lab File: VN083142.D
Acq: 07 Aug 2024 14:49

Tgt Ion:180 Resp: 133315

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.7 | 48.9 | 146.8 |
| 145 | 36.6 | 16.8 | 50.4 |



# Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 1.000 | 1.000 | 0.0 | 109 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.567 | 0.534 | 5.8 | 102 | 0.00 |
| 3 | P | Chloromethane | 0.581 | 0.537 | 7.6 | 99 | 0.00 |
| 4 | C | Vinyl Chloride | 0.592 | 0.544 | 8.1# | 99 | 0.00 |
| 5 | T | Bromomethane | 0.368 | 0.316 | 14.1 | 97 | 0.00 |
| 6 | T | Chloroethane | 0.371 | 0.324 | 12.7 | 99 | 0.00 |
| 7 | T | Trichlorofluoromethane | 0.979 | 0.922 | 5.8 | 101 | 0.00 |
| 8 | T | Diethyl Ether | 0.364 | 0.337 | 7.4 | 100 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.539 | 0.509 | 5.6 | 101 | 0.00 |
| 10 | T | Methyl Iodide | 0.710 | 0.672 | 5.4 | 99 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.148 | 0.123 | 16.9 | 92 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 0.554 | 0.505 | 8.8# | 101 | 0.00 |
| 13 | T | Acrolein | 0.096 | 0.084 | 12.5 | 90 | 0.00 |
| 14 | T | Allyl chloride | 1.047 | 0.862 | 17.7 | 101 | 0.00 |
| 15 | T | Acrylonitrile | 0.304 | 0.265 | 12.8 | 95 | 0.00 |
| 16 | T | Acetone | 0.278 | 0.235 | 15.5 | 90 | 0.00 |
| 17 | T | Carbon Disulfide | 1.622 | 1.417 | 12.6 | 99 | 0.00 |
| 18 | T | Methyl Acetate | 0.830 | 0.704 | 15.2 | 99 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 2.001 | 1.872 | 6.4 | 101 | 0.00 |
| 20 | T | Methylene Chloride | 0.641 | 0.559 | 12.8 | 102 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.573 | 0.523 | 8.7 | 99 | -0.01 |
| 22 | T | Diisopropyl ether | 1.969 | 1.846 | 6.2 | 100 | 0.00 |
| 23 | T | Vinyl Acetate | 2.018 | 1.900 | 5.8 | 99 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.073 | 1.002 | 6.6 | 101 | 0.00 |
| 25 | T | 2-Butanone | 0.428 | 0.362 | 15.4 | 93 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.997 | 0.954 | 4.3 | 102 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.691 | 0.638 | 7.7 | 101 | 0.00 |
| 28 | T | Bromochloromethane | 0.439 | 0.403 | 8.2 | 100 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.276 | 0.246 | 10.9 | 96 | 0.00 |
| 30 | C | Chloroform | 1.115 | 1.057 | 5.2# | 101 | 0.00 |
| 31 | T | Cyclohexane | 1.055 | 0.917 | 13.1 | 102 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.055 | 0.995 | 5.7 | 101 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.712 | 0.720 | -1.1 | 105 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 109 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.312 | 0.322 | -3.2 | 106 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.472 | 0.451 | 4.4 | 103 | 0.00 |
| 37 | T | Ethyl Acetate | 0.529 | 0.456 | 13.8 | 100 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.532 | 0.509 | 4.3 | 102 | 0.00 |
| 39 | T | Methylcyclohexane | 0.580 | 0.555 | 4.3 | 101 | 0.00 |
| 40 | TM | Benzene | 1.406 | 1.340 | 4.7 | 101 | 0.00 |
| 41 | T | Methacrylonitrile | 0.301 | 0.259 | 14.0 | 99 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.512 | 0.485 | 5.3 | 102 | 0.00 |
| 43 | T | Isopropyl Acetate | 1.211 | 0.841 | 30.6# | 100 | 0.00 |
| 44 | TM | Trichloroethene | 0.335 | 0.321 | 4.2 | 102 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.334 | 0.322 | 3.6# | 101 | 0.00 |
| 46 | T | Dibromomethane | 0.239 | 0.225 | 5.9 | 98 | 0.00 |
| 47 | T | Bromodichloromethane | 0.537 | 0.505 | 6.0 | 102 | 0.00 |
| 48 | T | Methyl methacrylate | 0.437 | 0.390 | 10.8 | 100 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 0.008 | 0.007 | 12.5 | 93 | 0.00 |
| 50 | S | Toluene-d8 | 1.164 | 1.215 | -4.4 | 105 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.500 | 0.462 | 7.6 | 97 | 0.00 |
| 52 | CM | Toluene | 0.889 | 0.862 | 3.0# | 101 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.551 | 0.549 | 0.4 | 100 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.586 | 0.568 | 3.1 | 102 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.318 | 0.308 | 3.1 | 101 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.600 | 0.569 | 5.2 | 99 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.568 | 0.538 | 5.3 | 99 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.254 | 0.249 | 2.0 | 104 | 0.00 |
| 59 | T | 2-Hexanone | 0.387 | 0.348 | 10.1 | 96 | 0.00 |
| 60 | T | Dibromochloromethane | 0.385 | 0.381 | 1.0 | 100 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.335 | 0.315 | 6.0 | 99 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.454 | 0.477 | -5.1 | 106 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 109 | 0.00 |
| 64 | T | Tetrachloroethene | 0.331 | 0.319 | 3.6 | 102 | 0.00 |
| 65 | PM | Chlorobenzene | 1.105 | 1.050 | 5.0 | 100 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.390 | 0.365 | 6.4 | 100 | 0.00 |
| 67 | C | Ethyl Benzene | 2.027 | 1.936 | 4.5# | 102 | 0.00 |
| 68 | T | m/p-Xylenes | 0.759 | 0.732 | 3.6 | 102 | 0.00 |
| 69 | T | o-Xylene | 0.749 | 0.699 | 6.7 | 99 | 0.00 |
| 70 | T | Styrene | 1.258 | 1.220 | 3.0 | 100 | 0.00 |
| 71 | P | Bromoform | 0.295 | 0.282 | 4.4 | 97 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 110 | 0.00 |
| 73 | T | Isopropylbenzene | 4.182 | 3.922 | 6.2 | 101 | 0.00 |
| 74 | T | N-amyl acetate | 2.046 | 1.790 | 12.5 | 98 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.183 | 1.018 | 13.9 | 96 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.097 | 0.924 | 15.8 | 95 | 0.00 |
| 77 | T | Bromobenzene | 0.929 | 0.867 | 6.7 | 99 | 0.00 |
| 78 | T | n-propylbenzene | 4.816 | 4.592 | 4.7 | 101 | 0.00 |
| 79 | T | 2-Chlorotoluene | 3.053 | 2.833 | 7.2 | 101 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.501 | 3.338 | 4.7 | 102 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.504 | 0.475 | 5.8 | 105 | 0.00 |
| 82 | T | 4-Chlorotoluene | 3.062 | 2.849 | 7.0 | 101 | 0.00 |
| 83 | T | tert-Butylbenzene | 3.101 | 2.863 | 7.7 | 99 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.529 | 3.281 | 7.0 | 98 | 0.00 |
| 85 | T | sec-Butylbenzene | 4.231 | 3.979 | 6.0 | 99 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.493 | 3.323 | 4.9 | 99 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.748 | 1.607 | 8.1 | 99 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.762 | 1.604 | 9.0 | 99 | 0.00 |
| 89 | T | n-Butylbenzene | 3.027 | 2.935 | 3.0 | 100 | 0.00 |
| 90 | T | Hexachloroethane | 0.675 | 0.631 | 6.5 | 100 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.692 | 1.531 | 9.5 | 98 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.287 | 0.240 | 16.4 | 93 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.948 | 0.873 | 7.9 | 97 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.421 | 0.365 | 13.3 | 98 | 0.00 |
| 95 | T | Naphthalene | 3.357 | 3.001 | 10.6 | 94 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 0.938 | 0.848 | 9.6 | 97 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

# Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 50.000 | 50.000 | 0.0 | 109 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 47.102 | 5.8 | 102 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 46.238 | 7.5 | 99 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 45.937 | 8.1# | 99 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 42.984 | 14.0 | 97 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 43.725 | 12.5 | 99 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 47.124 | 5.8 | 101 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 46.259 | 7.5 | 100 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 47.176 | 5.6 | 101 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 47.349 | 5.3 | 99 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 208.135 | 16.7 | 92 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 45.562 | 8.9# | 101 | 0.00 |
| 13 | T | Acrolein | 250.000 | 217.571 | 13.0 | 90 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 41.173 | 17.7 | 101 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 217.950 | 12.8 | 95 | 0.00 |
| 16 | T | Acetone | 250.000 | 210.840 | 15.7 | 90 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 43.689 | 12.6 | 99 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 42.397 | 15.2 | 99 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 46.781 | 6.4 | 101 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 43.645 | 12.7 | 102 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 45.671 | 8.7 | 99 | -0.01 |
| 22 | T | Diisopropyl ether | 50.000 | 46.881 | 6.2 | 100 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 235.414 | 5.8 | 99 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 46.685 | 6.6 | 101 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 211.782 | 15.3 | 93 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 47.853 | 4.3 | 102 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 46.113 | 7.8 | 101 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 45.986 | 8.0 | 100 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 222.147 | 11.1 | 96 | 0.00 |
| 30 | C | Chloroform | 50.000 | 47.387 | 5.2# | 101 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 43.474 | 13.1 | 102 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 47.135 | 5.7 | 101 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 50.583 | -1.2 | 105 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 109 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 51.549 | -3.1 | 106 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 47.732 | 4.5 | 103 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 43.124 | 13.8 | 100 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 47.904 | 4.2 | 102 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 47.821 | 4.4 | 101 | 0.00 |
| 40 | TM | Benzene | 50.000 | 47.635 | 4.7 | 101 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 43.013 | 14.0 | 99 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 47.310 | 5.4 | 102 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 45.577 | 8.8 | 100 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 47.994 | 4.0 | 102 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 48.208 | 3.6# | 101 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 47.124 | 5.8 | 98 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 47.047 | 5.9 | 102 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 44.609 | 10.8 | 100 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 1000.000 | 885.211 | 11.5 | 93 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 52.175 | -4.3 | 105 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 230.917 | 7.6 | 97 | 0.00 |
| 52 | CM | Toluene | 50.000 | 48.520 | 3.0# | 101 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 49.776 | 0.4 | 100 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 48.487 | 3.0 | 102 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 48.351 | 3.3 | 101 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 47.395 | 5.2 | 99 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 47.391 | 5.2 | 99 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 244.918 | 2.0 | 104 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 224.916 | 10.0 | 96 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 49.513 | 1.0 | 100 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 47.133 | 5.7 | 99 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 52.574 | -5.1 | 106 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 109 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 48.175 | 3.7 | 102 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 47.522 | 5.0 | 100 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 46.843 | 6.3 | 100 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 47.764 | 4.5# | 102 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 96.434 | 3.6 | 102 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 46.662 | 6.7 | 99 | 0.00 |
| 70 | T | Styrene | 50.000 | 48.487 | 3.0 | 100 | 0.00 |
| 71 | P | Bromoform | 50.000 | 47.797 | 4.4 | 97 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 110 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 46.893 | 6.2 | 101 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 43.748 | 12.5 | 98 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 43.016 | 14.0 | 96 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 42.119 | 15.8 | 95 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 46.649 | 6.7 | 99 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 47.678 | 4.6 | 101 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 46.398 | 7.2 | 101 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 47.673 | 4.7 | 102 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 47.070 | 5.9 | 105 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 46.512 | 7.0 | 101 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 46.173 | 7.7 | 99 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 46.493 | 7.0 | 98 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 47.018 | 6.0 | 99 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 47.566 | 4.9 | 99 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 45.959 | 8.1 | 99 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 45.499 | 9.0 | 99 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 48.489 | 3.0 | 100 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 46.741 | 6.5 | 100 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 45.255 | 9.5 | 98 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 41.753 | 16.5 | 93 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 46.054 | 7.9 | 97 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 43.315 | 13.4 | 98 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 44.692 | 10.6 | 94 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083142.D
Acq On : 07 Aug 2024 14:49
Operator : JC\MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
ICVVN080724

Quant Time: Aug 08 06:35:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 45.221 | 9.6 | 97 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VN083225.D**

Alliance TECHNICAL GROUP

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

# VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG No.: P3429

Instrument ID: MSVOA_N Calibration Date/Time: 08/12/2024 09:48

Lab File ID: VN083225.D Init. Calib. Date(s): 08/07/2024 08/07/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:33 12:34

GC Column: RXI-624 ID: 0.25 (mm)

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.567 | 0.591 | | 4.23 | 20 |
| Chloromethane | 0.581 | 0.583 | 0.1 | 0.34 | 20 |
| Vinyl Chloride | 0.592 | 0.608 | | 2.7 | 20 |
| Bromomethane | 0.368 | 0.385 | | 4.62 | 20 |
| 1,1,2-Trichlorotrifluoroethane | 0.539 | 0.582 | | 7.98 | 20 |
| Acetone | 0.278 | 0.307 | | 10.43 | 20 |
| Carbon Disulfide | 1.622 | 1.491 | | -8.08 | 20 |
| Methyl tert-butyl Ether | 2.001 | 2.059 | | 2.9 | 20 |
| Methylene Chloride | 0.641 | 0.615 | | -4.06 | 20 |
| trans-1,2-Dichloroethene | 0.573 | 0.569 | | -0.7 | 20 |
| Cyclohexane | 1.055 | 0.991 | | -6.07 | 20 |
| 2-Butanone | 0.428 | 0.411 | | -3.97 | 20 |
| Carbon Tetrachloride | 0.532 | 0.586 | | 10.15 | 20 |
| cis-1,2-Dichloroethene | 0.691 | 0.707 | | 2.32 | 20 |
| Chloroform | 1.115 | 1.206 | | 8.16 | 20 |
| 1,1,1-Trichloroethane | 1.055 | 1.119 | | 6.07 | 20 |
| Methylcyclohexane | 0.580 | 0.609 | | 5 | 20 |
| Benzene | 1.406 | 1.496 | | 6.4 | 20 |
| 1,2-Dichloroethane | 0.512 | 0.557 | | 8.79 | 20 |
| Trichloroethene | 0.335 | 0.356 | | 6.27 | 20 |
| Bromodichloromethane | 0.537 | 0.580 | | 8.01 | 20 |
| Toluene | 0.889 | 0.963 | | 8.32 | 20 |
| 1,1,2-Trichloroethane | 0.318 | 0.347 | | 9.12 | 20 |
| Dibromochloromethane | 0.385 | 0.425 | | 10.39 | 20 |
| Tetrachloroethene | 0.331 | 0.353 | | 6.65 | 20 |
| Chlorobenzene | 1.105 | 1.171 | 0.3 | 5.97 | 20 |
| Ethyl Benzene | 2.027 | 2.160 | | 6.56 | 20 |
| m/p-Xylenes | 0.759 | 0.814 | | 7.25 | 20 |
| o-Xylene | 0.749 | 0.784 | | 4.67 | 20 |
| Isopropylbenzene | 4.182 | 4.339 | | 3.75 | 20 |
| 1,4-Dichlorobenzene | 1.762 | 1.825 | | 3.58 | 20 |
| 1,2-Dichlorobenzene | 1.692 | 1.726 | | 2.01 | 20 |
| 1,2-Dichloroethane-d4 | 0.712 | 0.796 | | 11.8 | 20 |
| Dibromofluoromethane | 0.312 | 0.343 | | 9.94 | 20 |
| Toluene-d8 | 1.164 | 1.296 | | 11.34 | 20 |
| 4-Bromofluorobenzene | 0.454 | 0.507 | | 11.67 | 20 |

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083225.D
Acq On : 12 Aug 2024 09:48
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 04:10:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 179688 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 304896 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 267164 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 128278 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 143028 | 55.922 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 111.840% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 104502 | 54.912 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 109.820% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 395152 | 55.663 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 111.320% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 154465 | 55.812 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 111.620% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 106167 | 52.102 | ug/l | 97 |
| 3) Chloromethane | 2.365 | 50 | 104742 | 50.208 | ug/l | 99 |
| 4) Vinyl Chloride | 2.518 | 62 | 109254 | 51.324 | ug/l | 97 |
| 5) Bromomethane | 2.948 | 94 | 69185 | 52.379 | ug/l | 96 |
| 6) Chloroethane | 3.118 | 64 | 68932 | 51.759 | ug/l | 98 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 189534 | 53.897 | ug/l | 100 |
| 8) Diethyl Ether | 3.959 | 74 | 65541 | 50.087 | ug/l | 85 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 104659 | 53.981 | ug/l | 99 |
| 10) Methyl Iodide | 4.583 | 142 | 129623 | 50.825 | ug/l | 96 |
| 11) Tert butyl alcohol | 5.524 | 59 | 127596 | 240.055 | ug/l | 98 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 97400 | 48.898 | ug/l | 91 |
| 13) Acrolein | 4.177 | 56 | 87627 | 252.950 | ug/l | 99 |
| 14) Allyl chloride | 5.018 | 41 | 165647 | 44.007 | ug/l | 94 |
| 15) Acrylonitrile | 5.718 | 53 | 262352 | 239.993 | ug/l | 100 |
| 16) Acetone | 4.424 | 43 | 275489 | 275.268 | ug/l | 98 |
| 17) Carbon Disulfide | 4.712 | 76 | 267918 | 45.969 | ug/l | 99 |
| 18) Methyl Acetate | 5.018 | 43 | 147849 | 49.583 | ug/l | 92 |
| 19) Methyl tert-butyl Ether | 5.795 | 73 | 370016 | 51.465 | ug/l | 99 |
| 20) Methylene Chloride | 5.271 | 84 | 110503 | 47.976 | ug/l | 83 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 102315 | 49.699 | ug/l | 89 |
| 22) Diisopropyl ether | 6.671 | 45 | 368873 | 52.134 | ug/l | 95 |
| 23) Vinyl Acetate | 6.600 | 43 | 1888229 | 260.362 | ug/l | 95 |
| 24) 1,1-Dichloroethane | 6.565 | 63 | 202988 | 52.633 | ug/l | 98 |
| 25) 2-Butanone | 7.483 | 43 | 369634 | 240.537 | ug/l | 93 |
| 26) 2,2-Dichloropropane | 7.489 | 77 | 200252 | 55.911 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.489 | 96 | 126965 | 51.108 | ug/l | 95 |
| 28) Bromochloromethane | 7.812 | 49 | 81813 | 51.908 | ug/l | 86 |
| 29) Tetrahydrofuran | 7.836 | 42 | 234788 | 236.354 | ug/l | 89 |
| 30) Chloroform | 7.965 | 83 | 216764 | 54.100 | ug/l | 99 |
| 31) Cyclohexane | 8.253 | 56 | 178073 | 46.981 | ug/l | 94 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 201020 | 53.003 | ug/l | 97 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 151169 | 52.510 | ug/l | 100 |
| 37) Ethyl Acetate | 7.559 | 43 | 151279 | 46.932 | ug/l # | 98 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 178753 | 55.128 | ug/l | 97 |
| 39) Methylcyclohexane | 9.600 | 83 | 185545 | 52.473 | ug/l | 93 |
| 40) Benzene | 8.606 | 78 | 456196 | 53.193 | ug/l | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083225.D
Acq On : 12 Aug 2024 09:48
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 04:10:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.771 | 41 | 88370 | 48.217 | ug/l | | 96 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 169788 | 54.347 | ug/l | | 99 |
| 43) Isopropyl Acetate | 8.689 | 43 | 282277 | 50.529 | ug/l | # | 94 |
| 44) Trichloroethene | 9.353 | 130 | 108403 | 53.104 | ug/l | | 93 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 109843 | 53.957 | ug/l | | 98 |
| 46) Dibromomethane | 9.712 | 93 | 79172 | 54.334 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 176954 | 54.085 | ug/l | | 100 |
| 48) Methyl methacrylate | 9.677 | 41 | 131746 | 49.438 | ug/l | | 93 |
| 49) 1,4-Dioxane | 9.700 | 88 | 43204 | 898.633 | ug/l | | 97 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 772166 | 253.325 | ug/l | | 93 |
| 52) Toluene | 10.630 | 92 | 293708 | 54.202 | ug/l | | 98 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 185568 | 55.216 | ug/l | | 99 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 193978 | 54.265 | ug/l | | 92 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 105866 | 54.516 | ug/l | | 97 |
| 56) Ethyl methacrylate | 10.871 | 69 | 190644 | 52.076 | ug/l | | 88 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 187296 | 54.111 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 400965 | 259.113 | ug/l | | 96 |
| 59) 2-Hexanone | 11.194 | 43 | 593714 | 251.771 | ug/l | | 93 |
| 60) Dibromochloromethane | 11.359 | 129 | 129486 | 55.151 | ug/l | | 100 |
| 61) 1,2-Dibromoethane | 11.471 | 107 | 108519 | 53.196 | ug/l | | 97 |
| 64) Tetrachloroethene | 11.106 | 164 | 94303 | 53.298 | ug/l | | 97 |
| 65) Chlorobenzene | 11.894 | 112 | 312834 | 52.987 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 111819 | 53.701 | ug/l | | 98 |
| 67) Ethyl Benzene | 11.965 | 91 | 576944 | 53.269 | ug/l | | 99 |
| 68) m/p-Xylenes | 12.071 | 106 | 434899 | 107.195 | ug/l | | 98 |
| 69) o-Xylene | 12.400 | 106 | 209334 | 52.315 | ug/l | | 98 |
| 70) Styrene | 12.412 | 104 | 362959 | 54.007 | ug/l | | 98 |
| 71) Bromoform | 12.576 | 173 | 85089 | 53.942 | ug/l | # | 100 |
| 73) Isopropylbenzene | 12.694 | 105 | 556582 | 51.874 | ug/l | | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 244139 | 46.518 | ug/l | | 95 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 147975 | 48.762 | ug/l | | 98 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 135692m | 48.197 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 124716 | 52.326 | ug/l | | 96 |
| 78) n-propylbenzene | 13.035 | 91 | 654772 | 52.997 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.124 | 91 | 404389 | 51.627 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.171 | 105 | 471752 | 52.517 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 60244 | 46.546 | ug/l | | 93 |
| 82) 4-Chlorotoluene | 13.224 | 91 | 410875 | 52.295 | ug/l | | 97 |
| 83) tert-Butylbenzene | 13.441 | 119 | 410725 | 51.631 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 477317 | 52.727 | ug/l | | 99 |
| 85) sec-Butylbenzene | 13.618 | 105 | 567147 | 52.249 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 479994 | 53.556 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 232420 | 51.823 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 234120 | 51.781 | ug/l | | 98 |
| 89) n-Butylbenzene | 14.053 | 91 | 431446 | 55.556 | ug/l | | 99 |
| 90) Hexachloroethane | 14.335 | 117 | 90014 | 51.985 | ug/l | | 93 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 221401 | 51.015 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.718 | 75 | 33146 | 45.011 | ug/l | | 98 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 127272 | 52.346 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 52994 | 49.009 | ug/l | | 98 |
| 95) Naphthalene | 15.641 | 128 | 420146 | 48.783 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 122246 | 50.813 | ug/l | | 98 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083225.D
Acq On : 12 Aug 2024 09:48
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 04:10:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

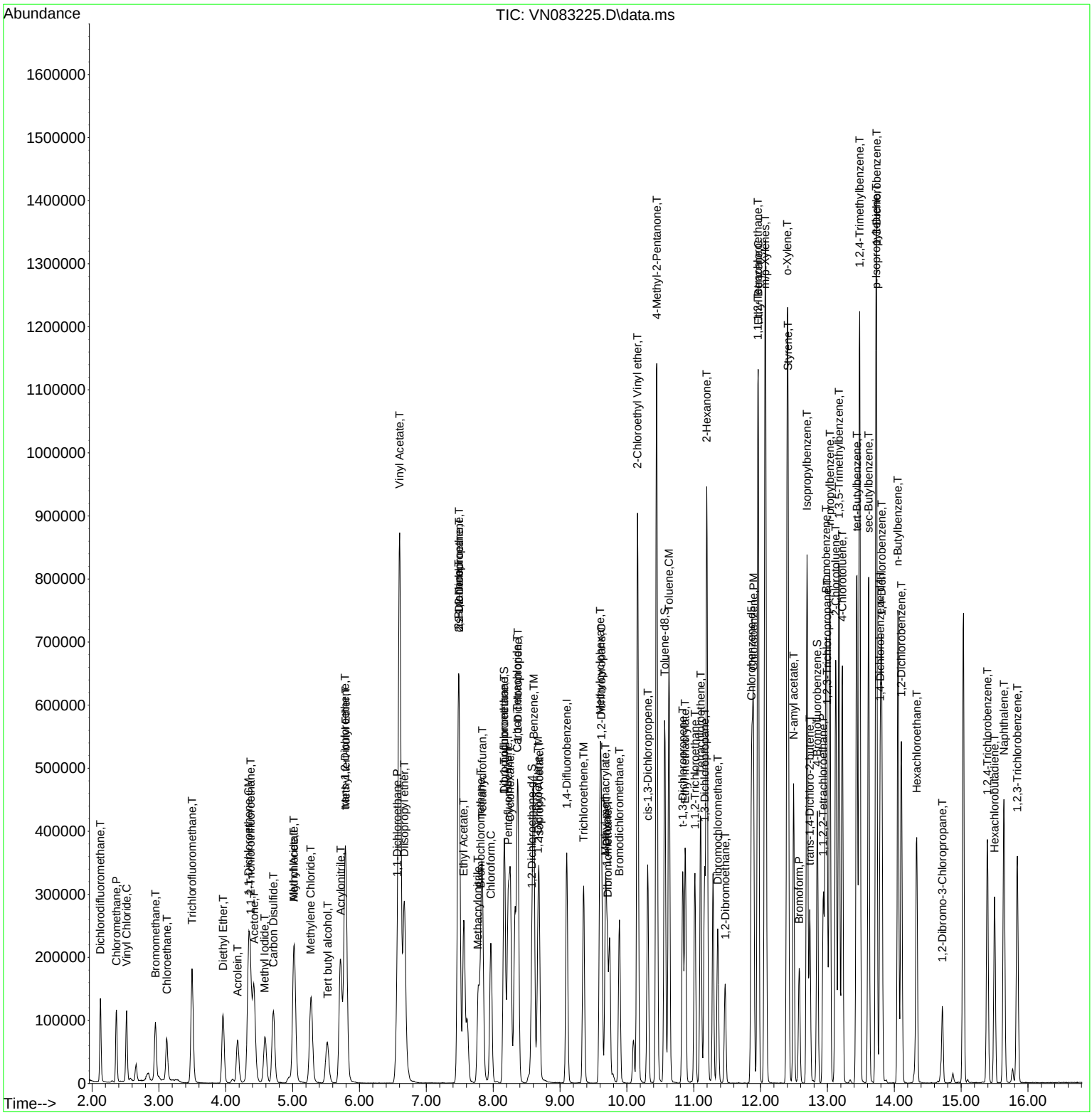
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083225.D
Acq On : 12 Aug 2024 09:48
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

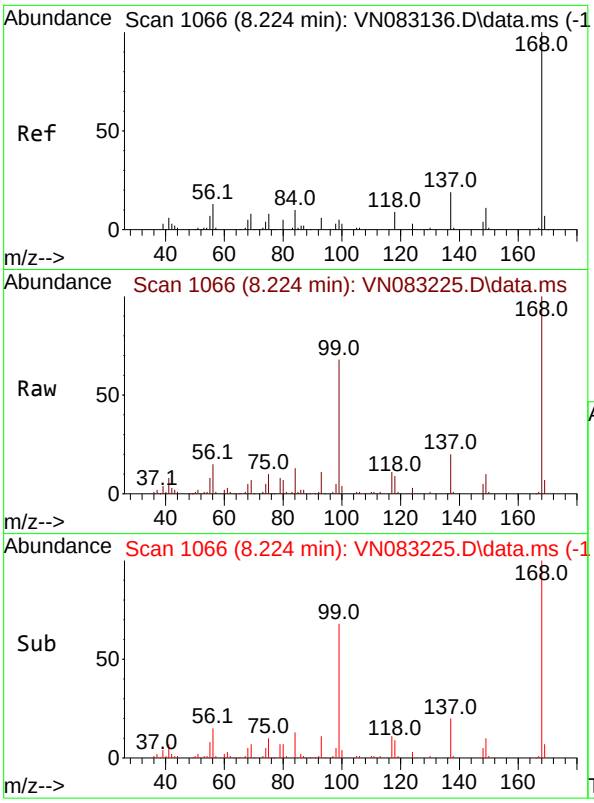
Quant Time: Aug 13 04:10:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

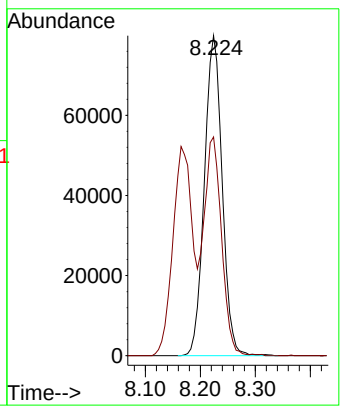





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:168 Resp: 17968

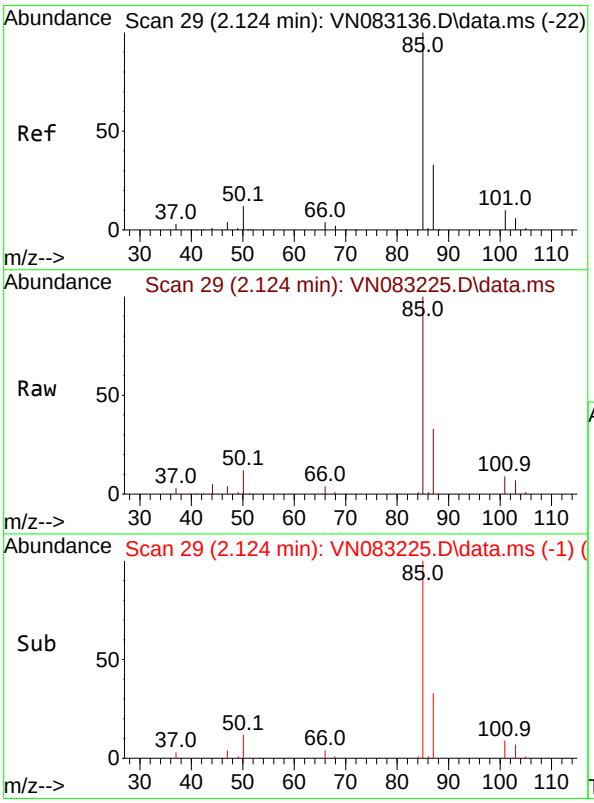
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 68.3 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

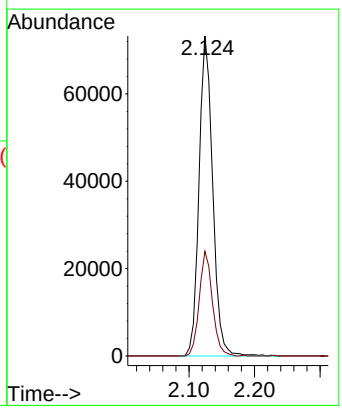
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

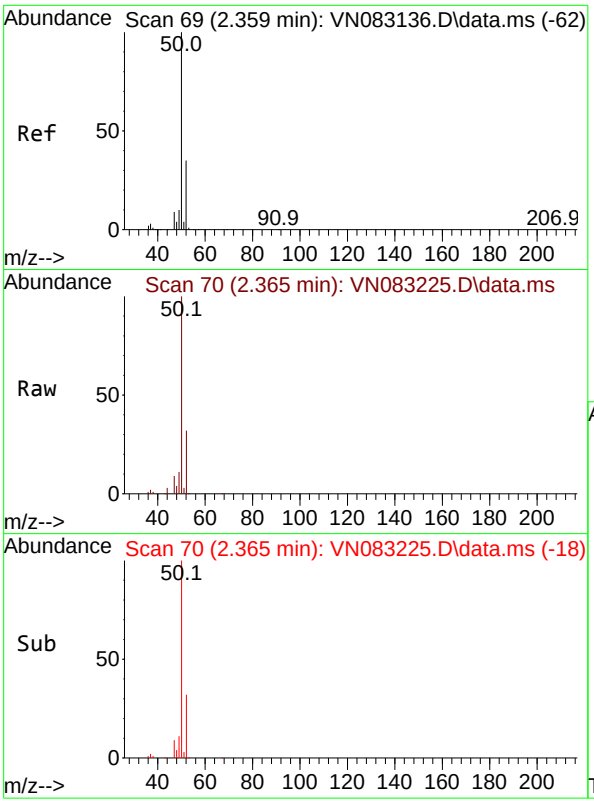



#2
Dichlorodifluoromethane
Concen: 52.102 ug/l
RT: 2.124 min Scan# 29
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 85 Resp: 106167

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.7 | 15.7 | 47.0 |

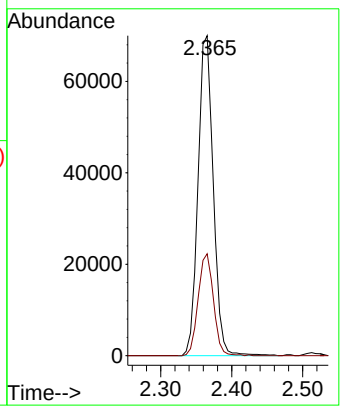





#3
Chloromethane
Concen: 50.208 ug/l
RT: 2.365 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 50 Resp: 10474

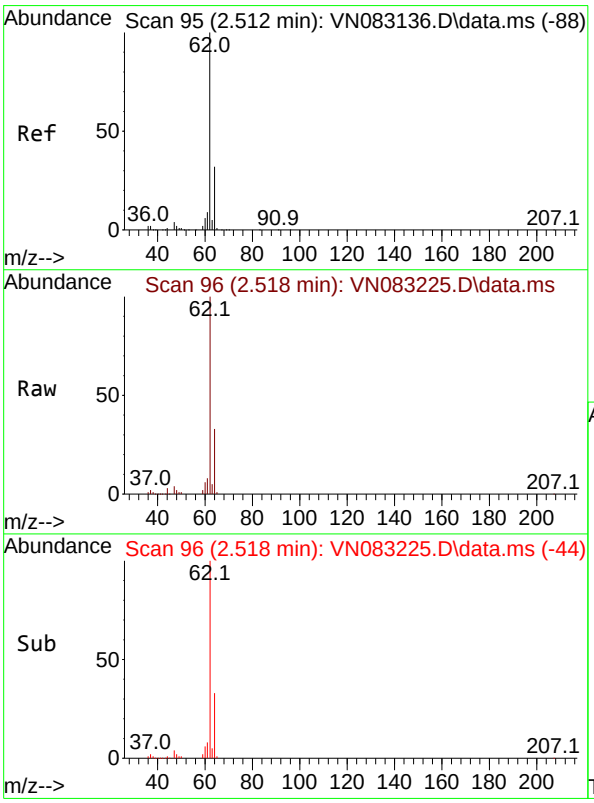
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.8 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

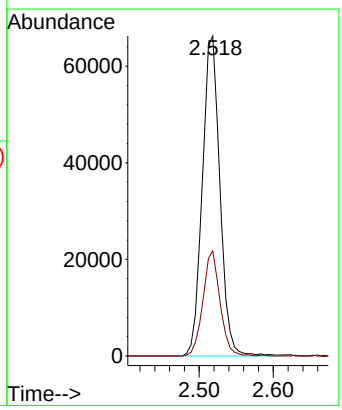
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

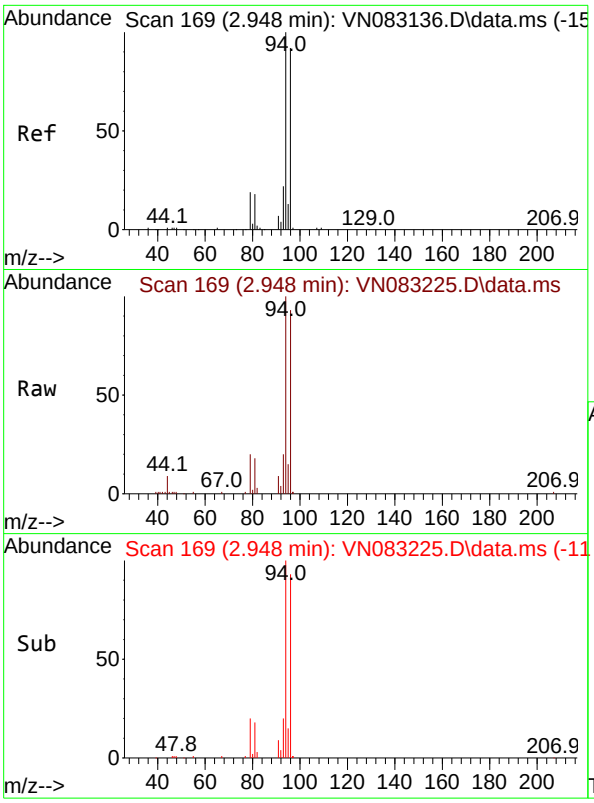



#4
Vinyl Chloride
Concen: 51.324 ug/l
RT: 2.518 min Scan# 96
Delta R.T. 0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 62 Resp: 109254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.8 | 25.0 | 37.6 |






#5
Bromomethane
Concen: 52.379 ug/l
RT: 2.948 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 94 Resp: 6918

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 93.3 | 78.0 | 117.0 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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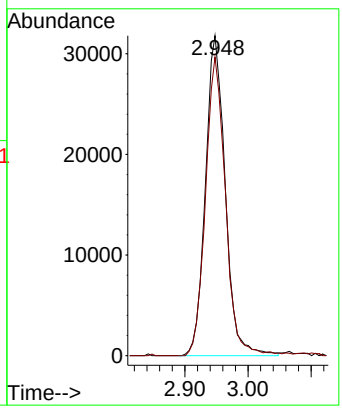
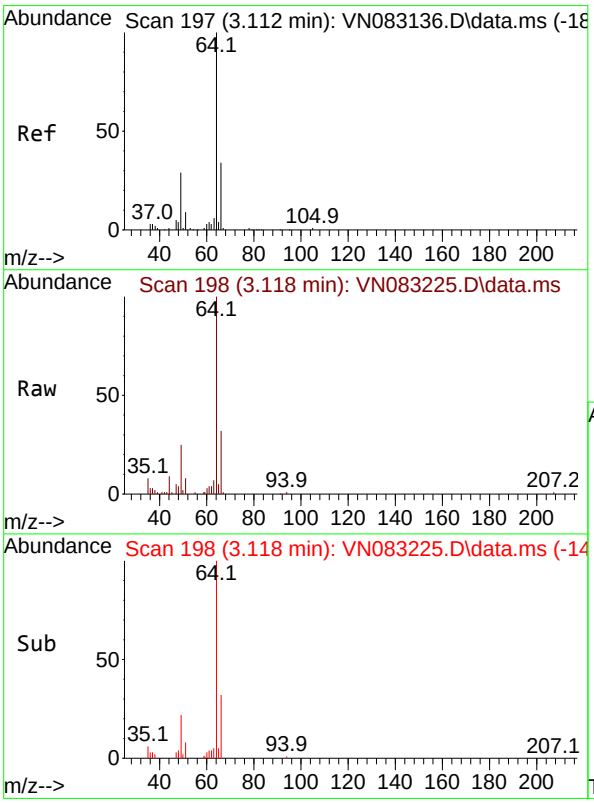
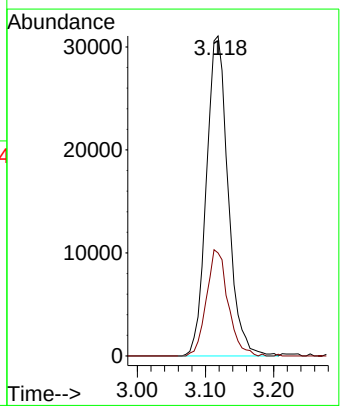


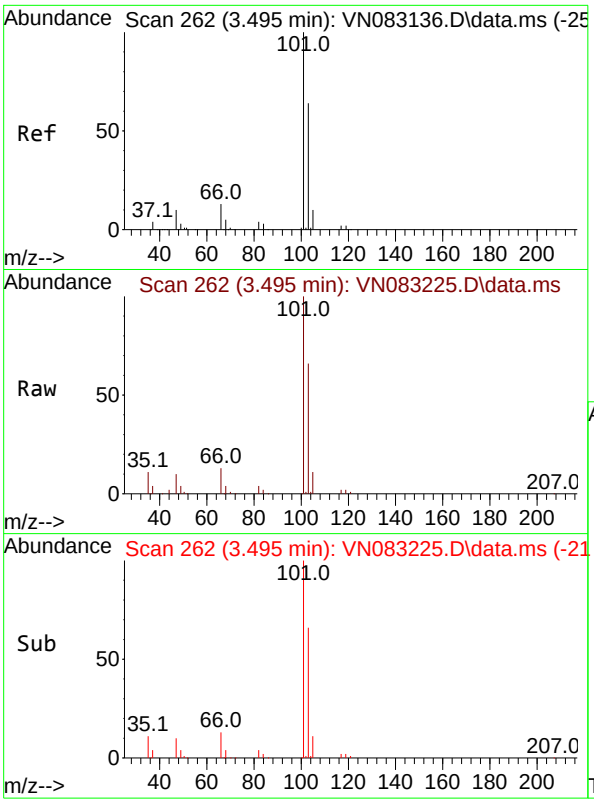




#6
Chloroethane
Concen: 51.759 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 64 Resp: 68932

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.2 | 26.6 | 40.0 |






#7
Trichlorofluoromethane
Concen: 53.897 ug/l
RT: 3.495 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:101 Resp: 18953

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.1 | 52.7 | 79.1 |

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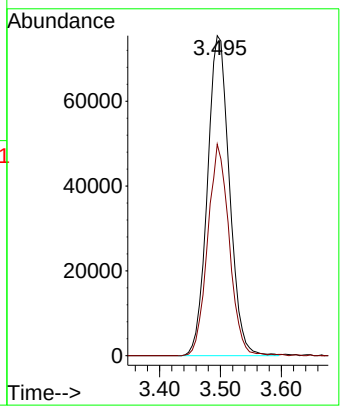
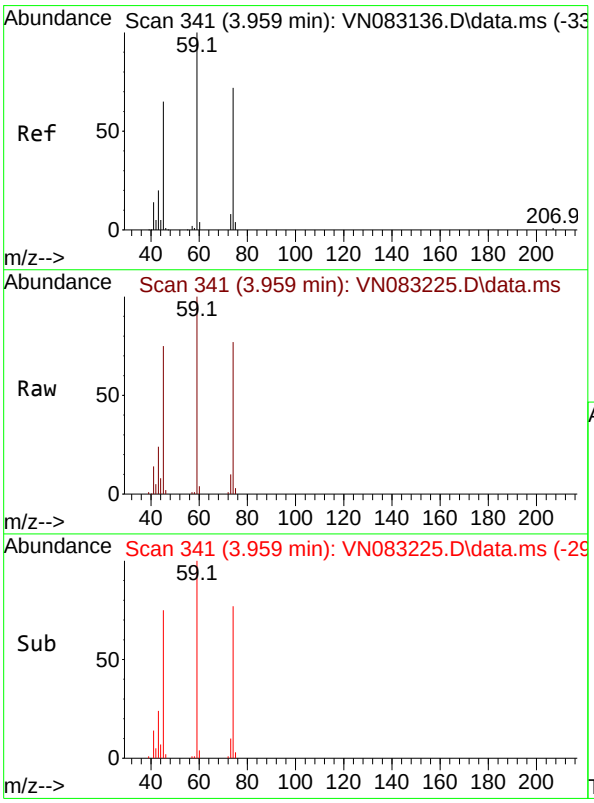
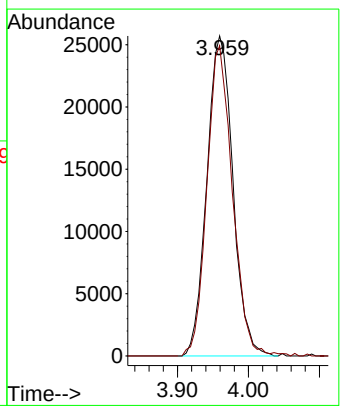


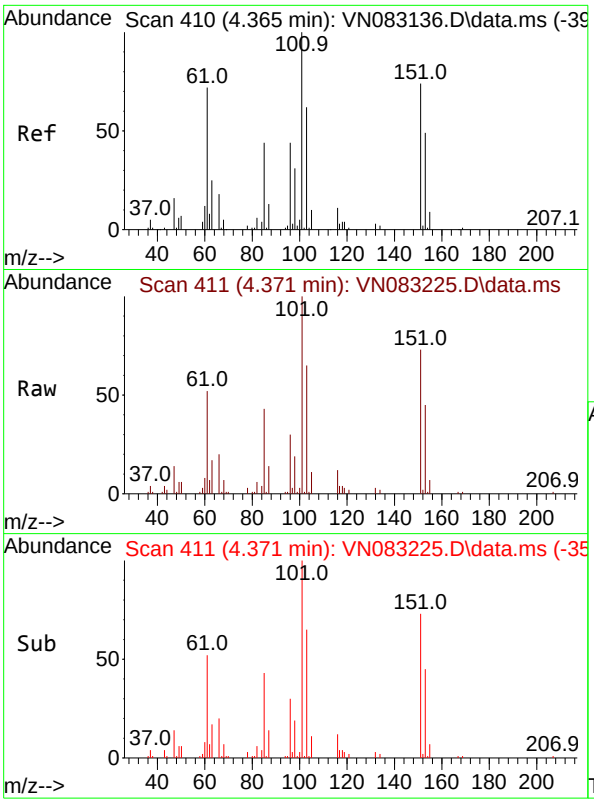




#8
Diethyl Ether
Concen: 50.087 ug/l
RT: 3.959 min Scan# 341
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 74 Resp: 65541

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 94.8 | 55.5 | 166.3 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 53.981 ug/l
RT: 4.371 min Scan# 4
Delta R.T. 0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:101 Resp: 10465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.8 | 38.3 | 57.5 |
| 151 | 73.2 | 59.3 | 88.9 |

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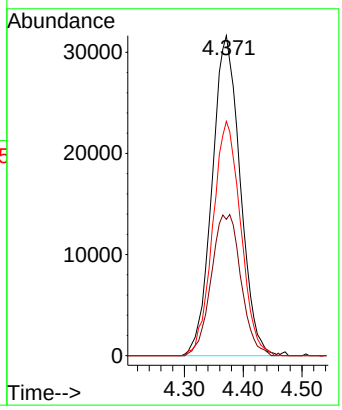
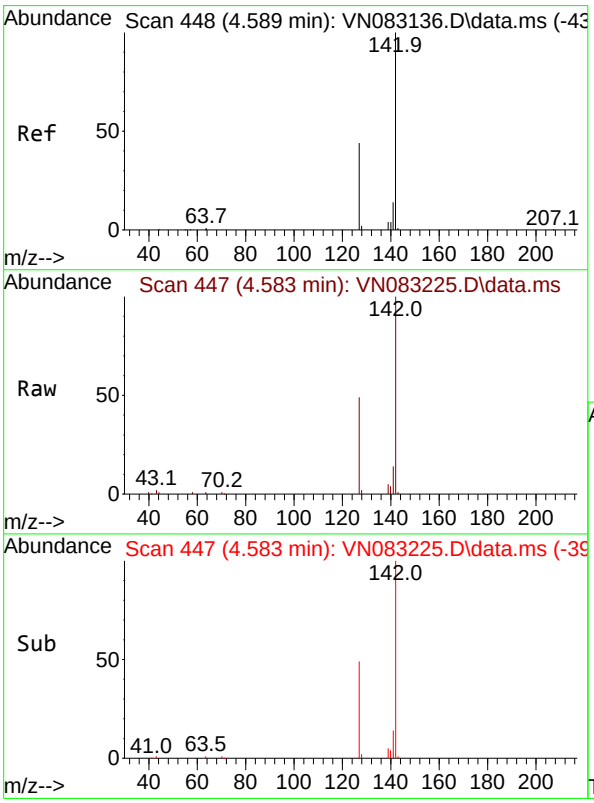
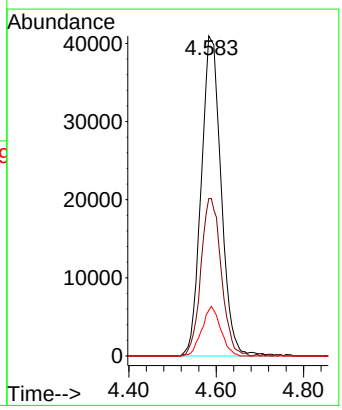


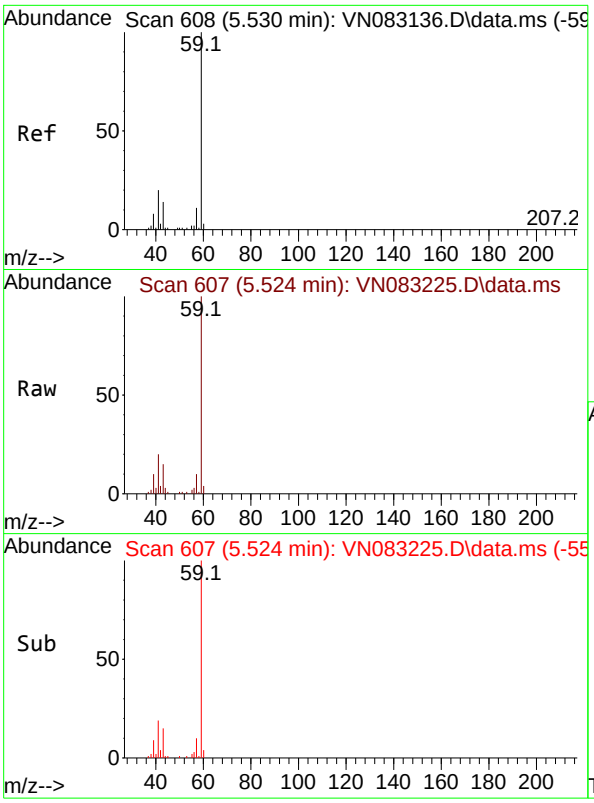




#10
Methyl Iodide
Concen: 50.825 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:142 Resp: 129623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 49.2 | 37.5 | 56.3 |
| 141 | 14.2 | 13.1 | 19.7 |






#11
Tert butyl alcohol
Concen: 240.055 ug/l
RT: 5.524 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 59 Resp: 12759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.4 | 8.9 | 13.3 |

**Instrument :**
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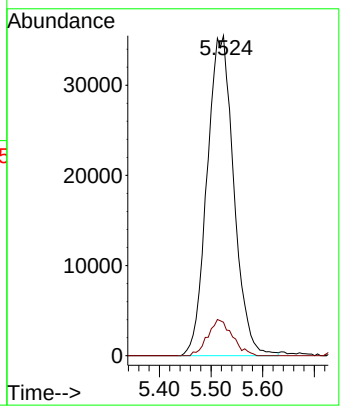
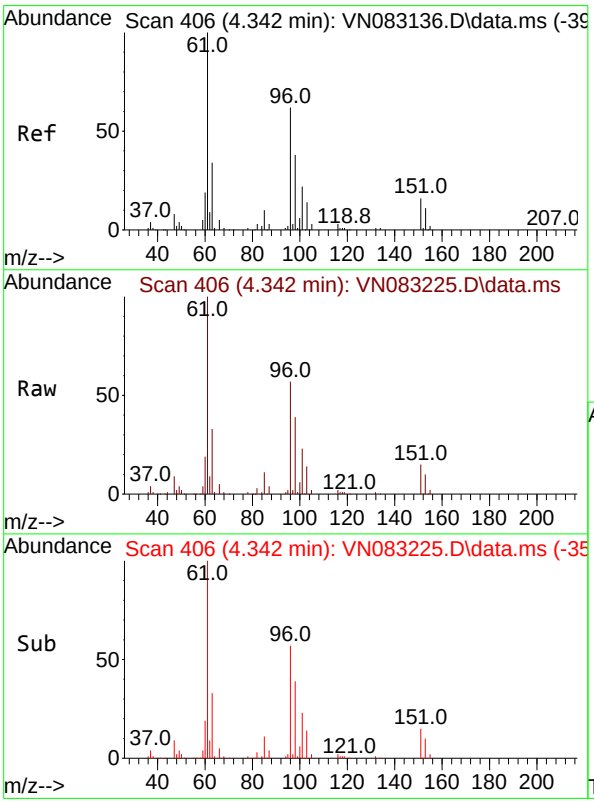
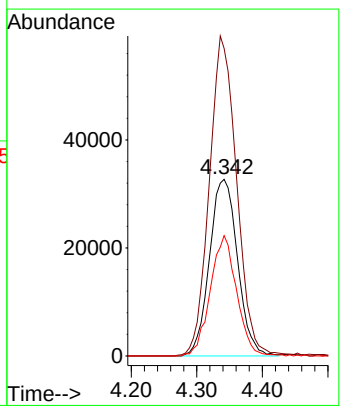


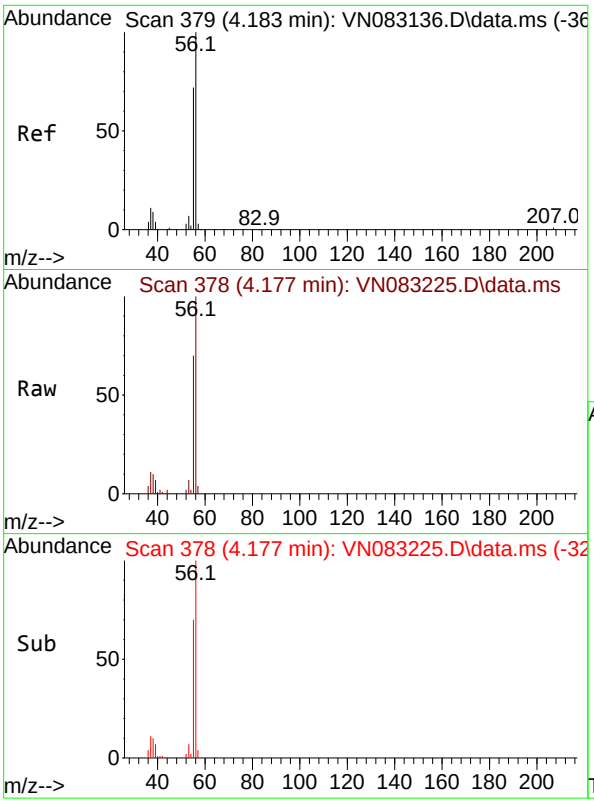




#12
1,1-Dichloroethene
Concen: 48.898 ug/l
RT: 4.342 min Scan# 406
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 96 Resp: 97400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 173.6 | 149.7 | 224.5 |
| 98 | 68.1 | 50.1 | 75.1 |

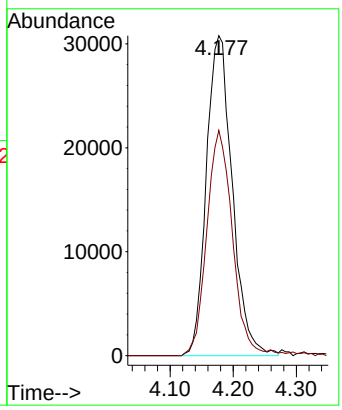





#13
Acrolein
Concen: 252.950 ug/l
RT: 4.177 min Scan# 3
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 56 Resp: 8762

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 69.9 | 56.4 | 84.6 |

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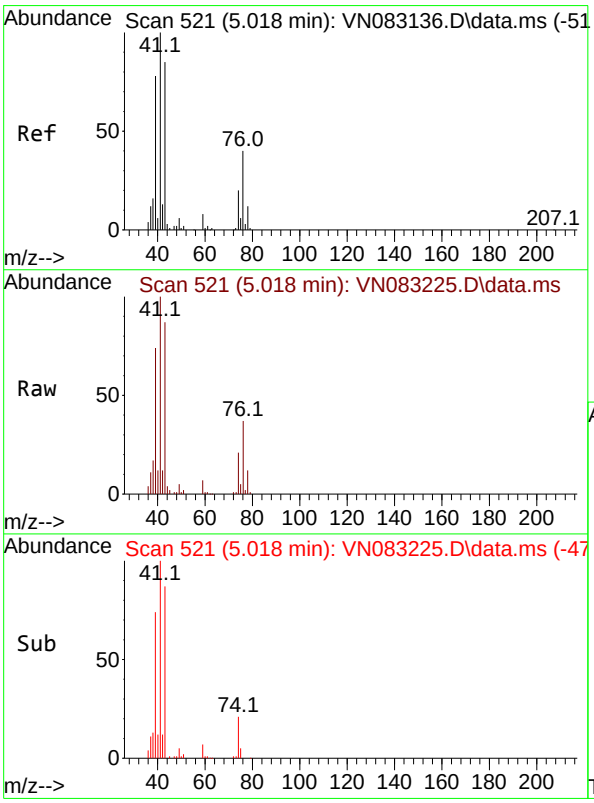
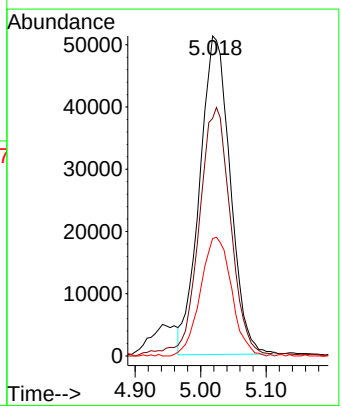
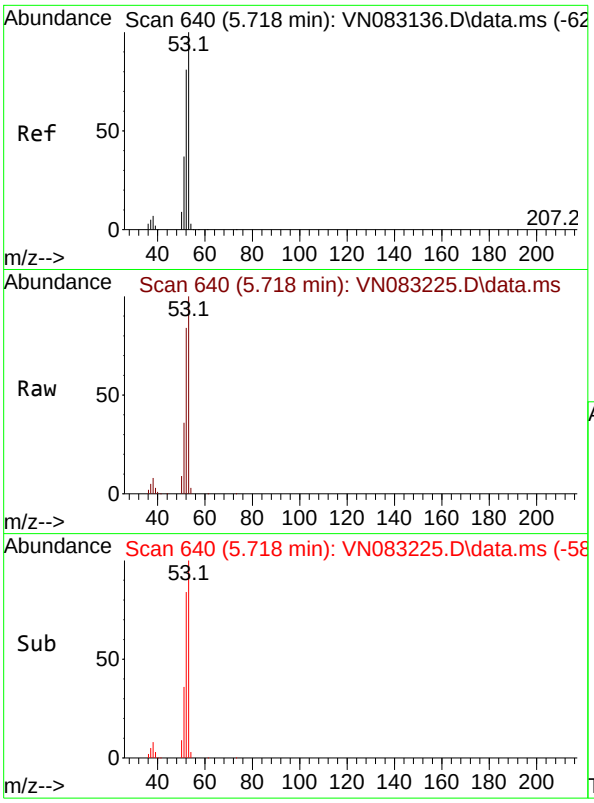



#14
Allyl chloride
Concen: 44.007 ug/l
RT: 5.018 min Scan# 521
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 41 Resp: 165647

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 81.0 | 67.8 | 101.6 |
| 76 | 38.0 | 25.8 | 38.8 |






#15
Acrylonitrile
Concen: 239.993 ug/l
RT: 5.718 min Scan# 64
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 53 Resp: 26235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.4 | 66.6 | 100.0 |
| 51 | 37.0 | 30.1 | 45.1 |

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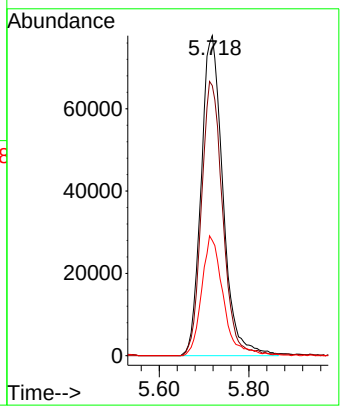
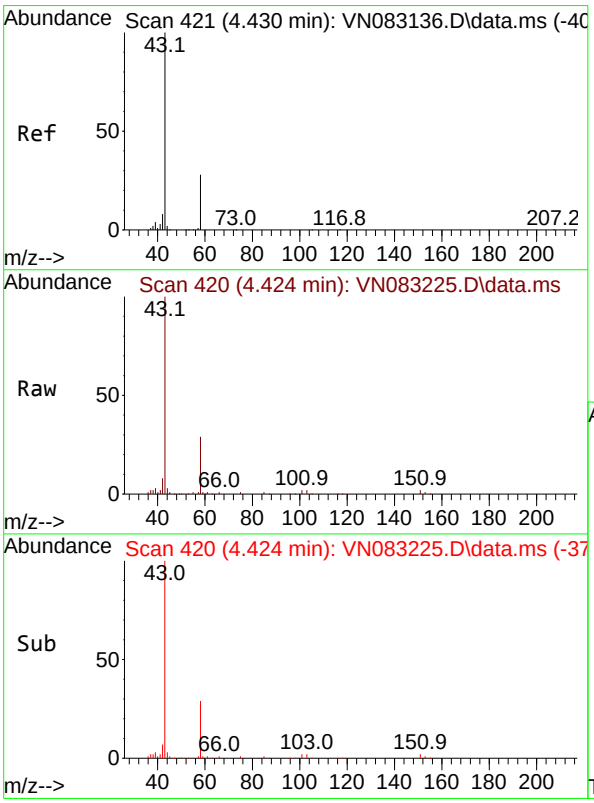
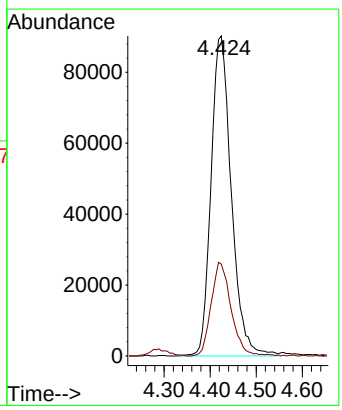


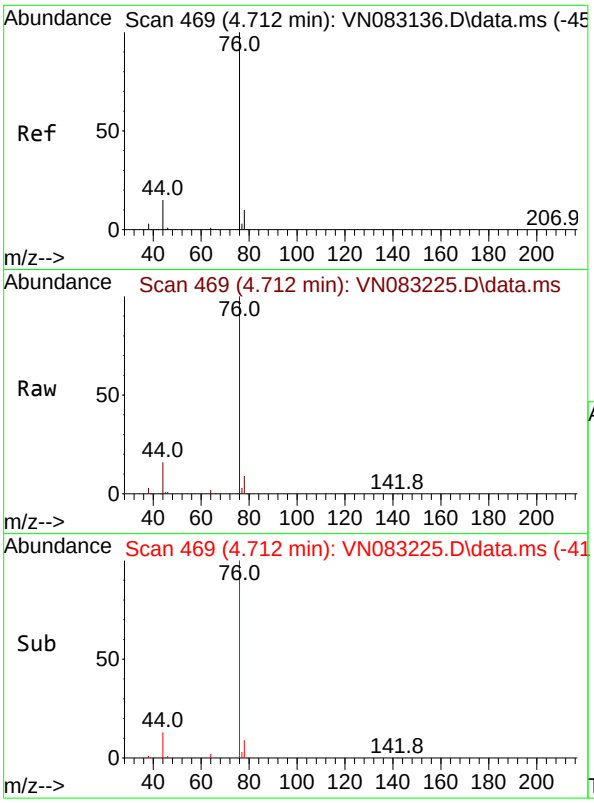




#16
Acetone
Concen: 275.268 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 43 Resp: 275489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.4 | 21.8 | 32.6 |

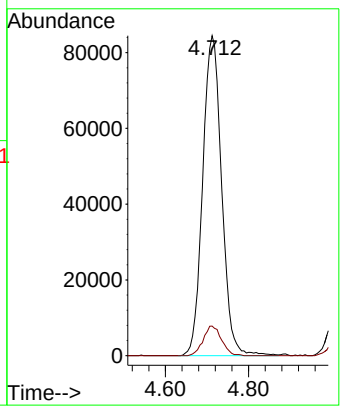





#17
Carbon Disulfide
Concen: 45.969 ug/l
RT: 4.712 min Scan# 4
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 76 Resp: 26791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.2 | 7.2 | 10.8 |

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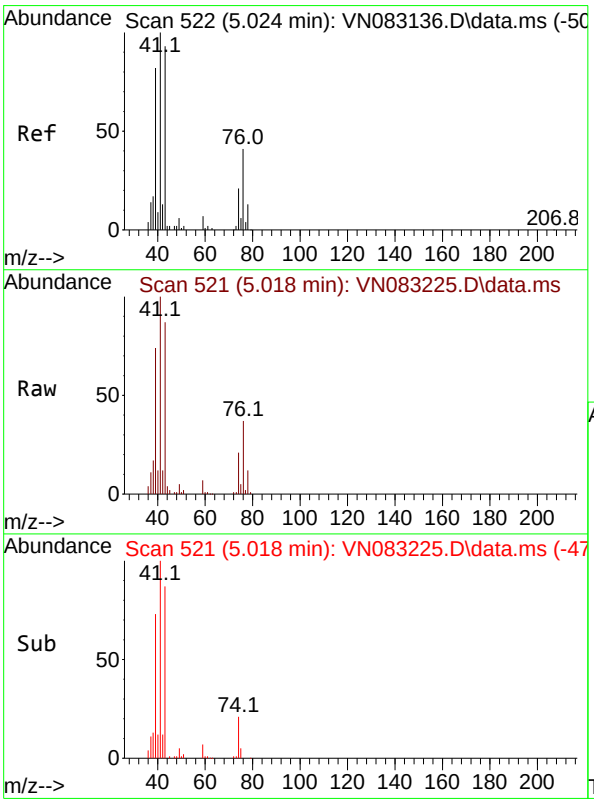
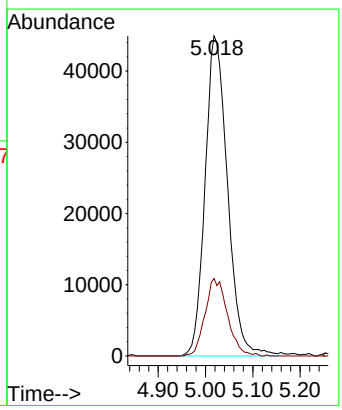
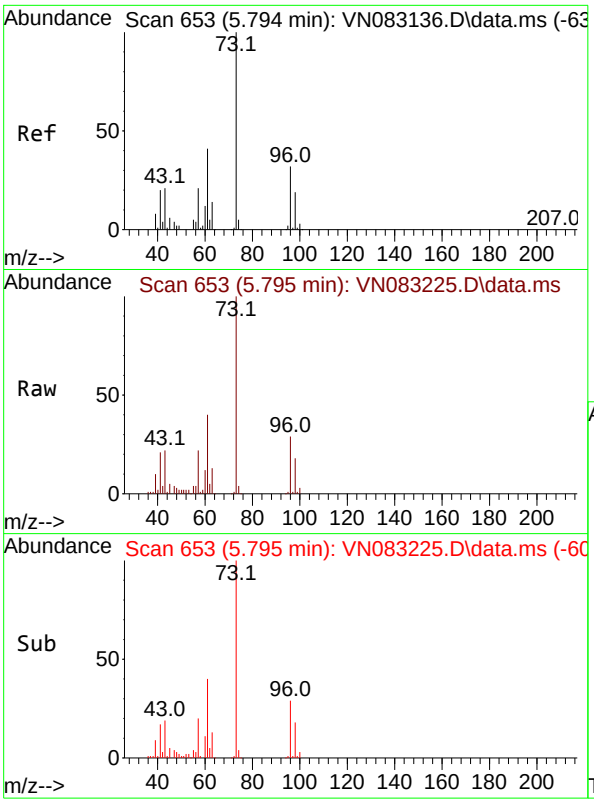



#18
Methyl Acetate
Concen: 49.583 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 43 Resp: 147849

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 24.2 | 16.3 | 24.5 |

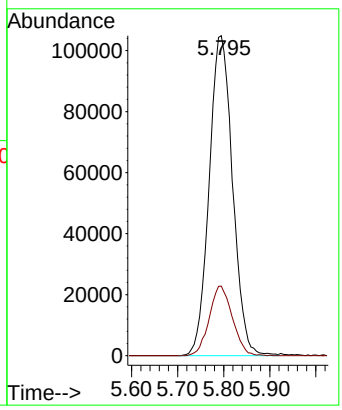





#19
Methyl tert-butyl Ether
Concen: 51.465 ug/l
RT: 5.795 min Scan# 6
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 73 Resp: 37001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.8 | 17.9 | 26.9 |

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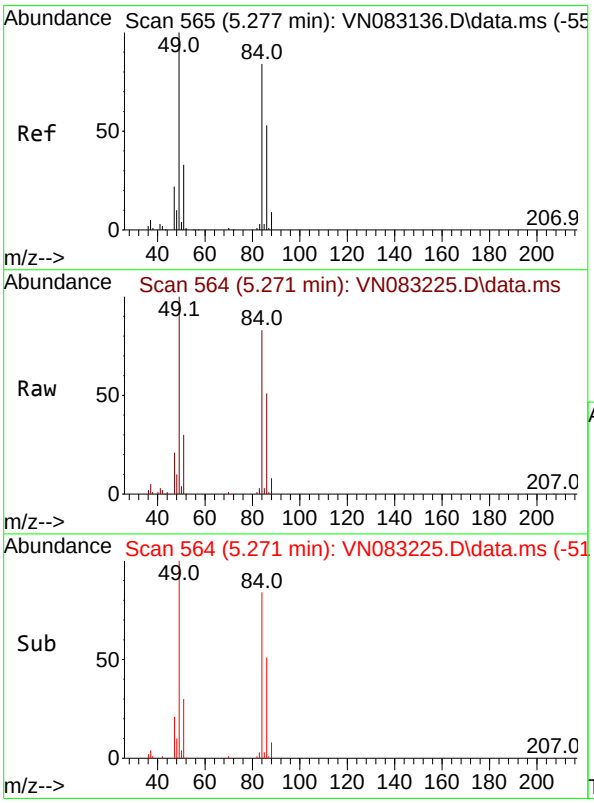
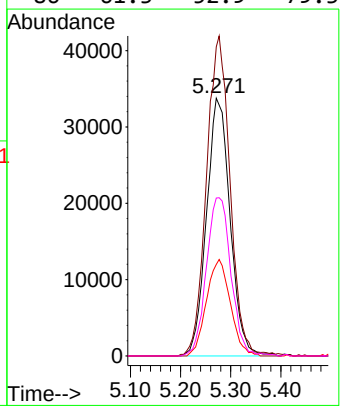
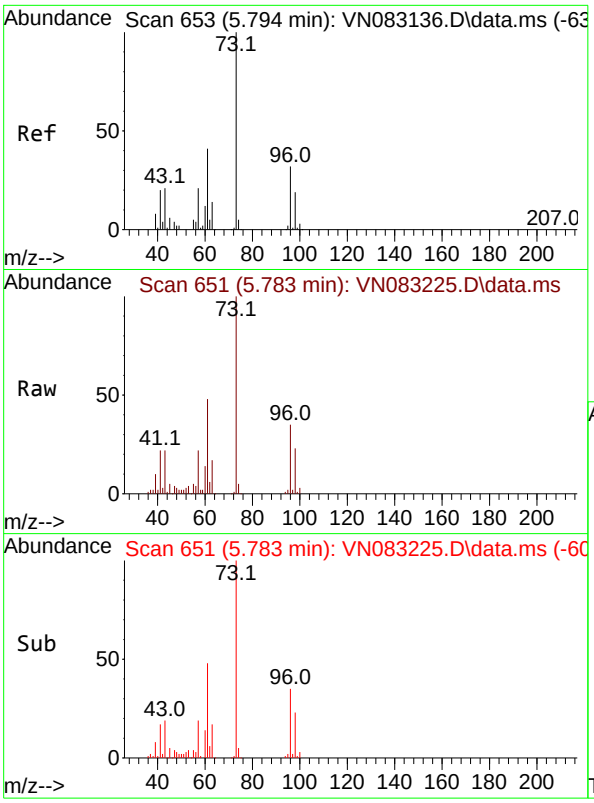



#20
Methylene Chloride
Concen: 47.976 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 84 Resp: 110503

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 119.9 | 119.6 | 179.4 |
| 51 | 35.5 | 34.8 | 52.2 |
| 86 | 61.3 | 52.9 | 79.3 |

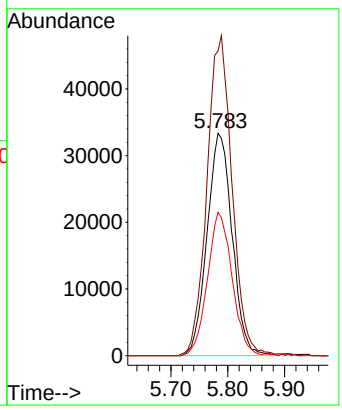





#21
trans-1,2-Dichloroethene
Concen: 49.699 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 96 Resp: 10231

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 137.1 | 123.4 | 185.2 |
| 98 | 64.5 | 49.3 | 73.9 |

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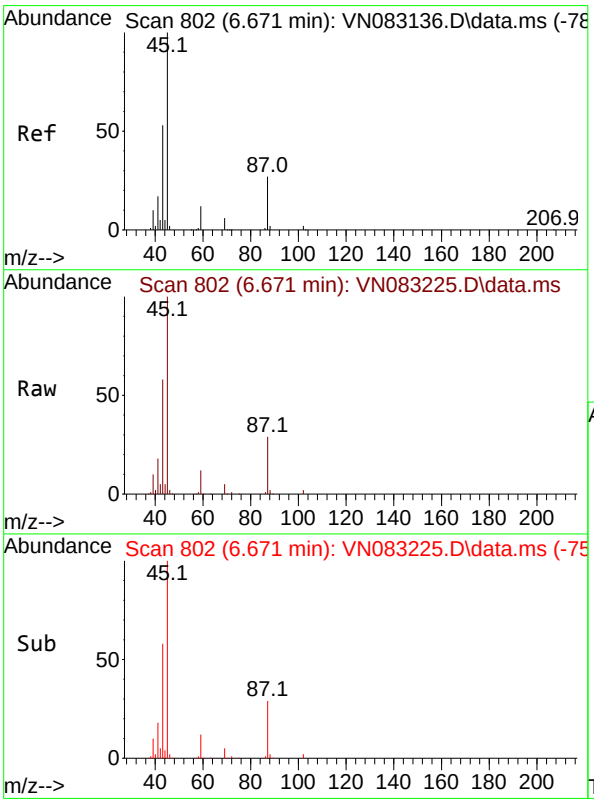
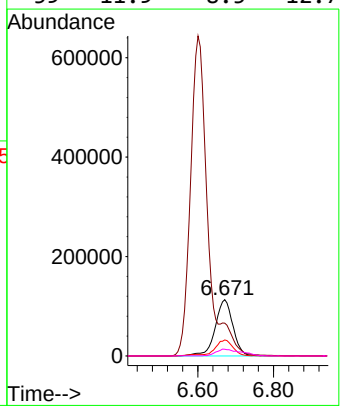
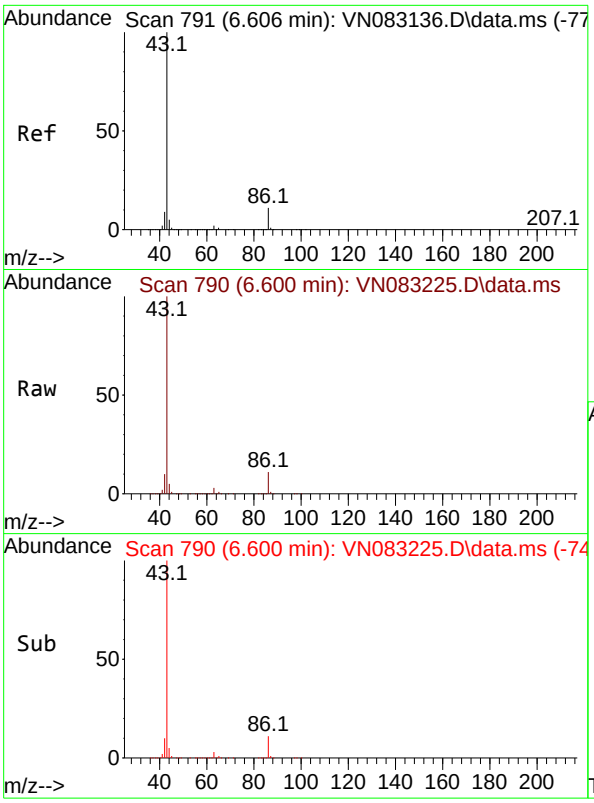



#22
Diisopropyl ether
Concen: 52.134 ug/l
RT: 6.671 min Scan# 802
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 45 Resp: 368873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 57.4 | 44.0 | 66.0 |
| 87 | 28.4 | 19.7 | 29.5 |
| 59 | 11.9 | 8.5 | 12.7 |






#23
Vinyl Acetate
Concen: 260.362 ug/l
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 43 Resp: 188822

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.9 | 7.3 | 10.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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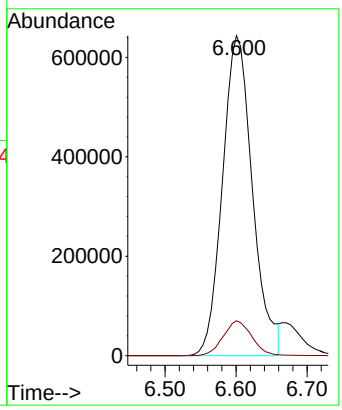
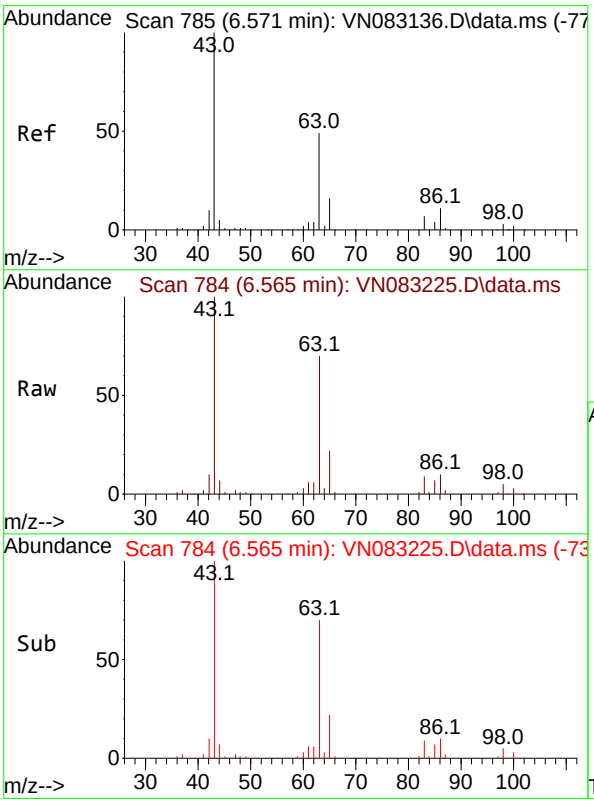
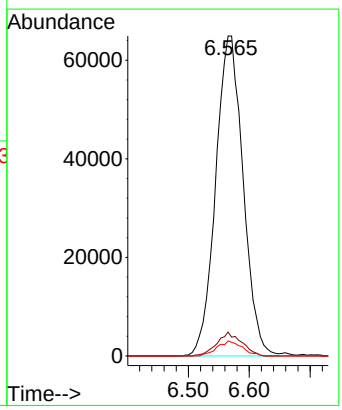


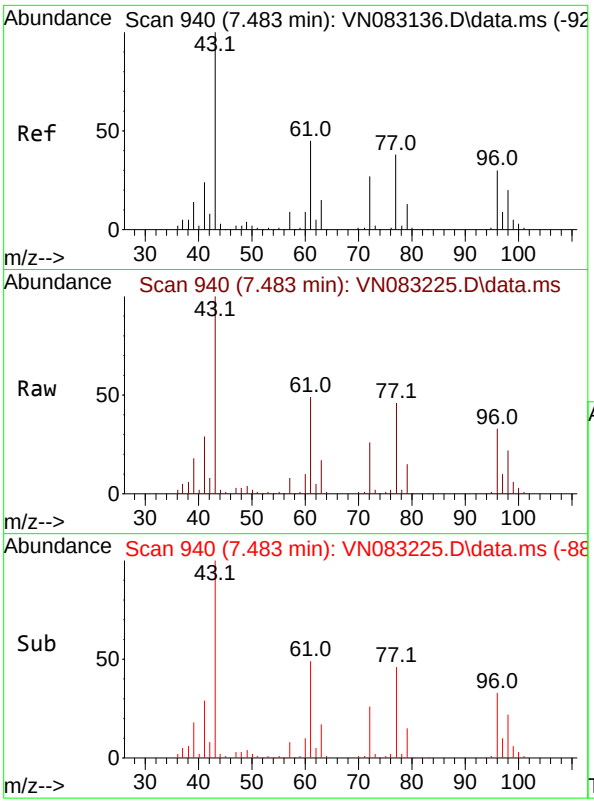




#24
1,1-Dichloroethane
Concen: 52.633 ug/l
RT: 6.565 min Scan# 784
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 63 Resp: 202988

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.5 | 3.3 | 9.9 |
| 100 | 4.7 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 240.537 ug/l
RT: 7.483 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 43 Resp: 36963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 26.1 | 18.2 | 27.2 |

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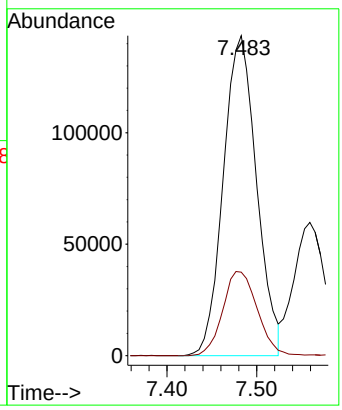
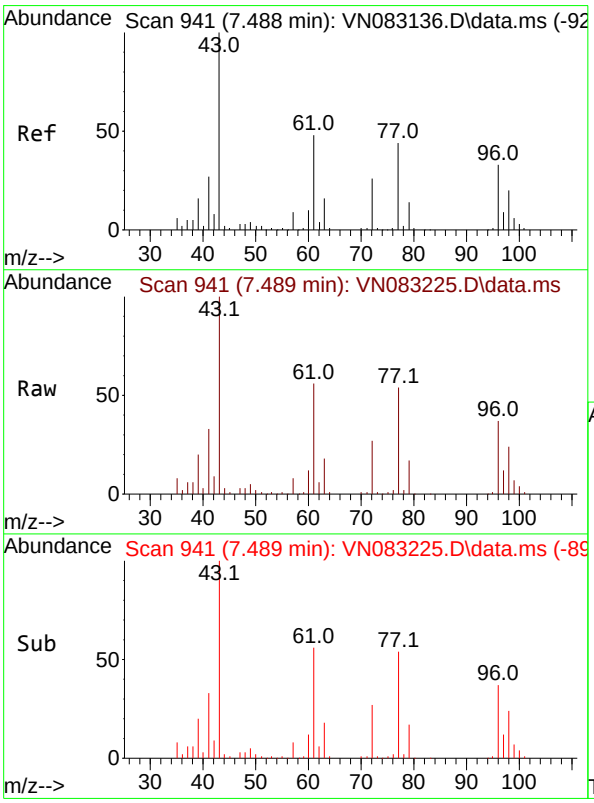
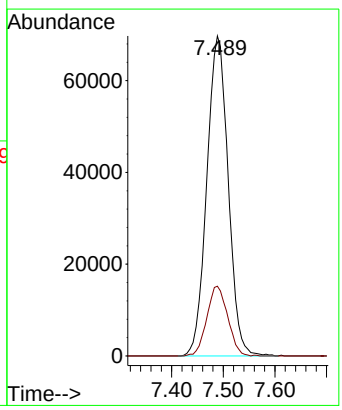


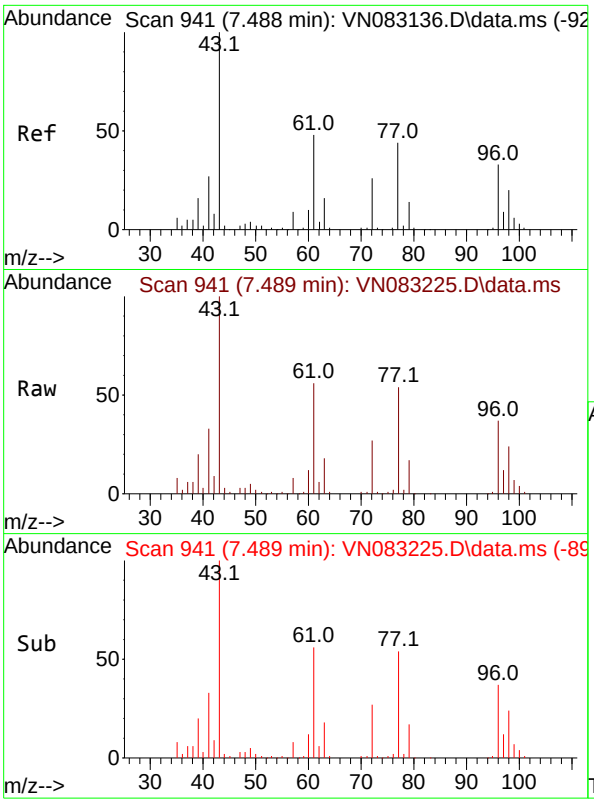




#26
2,2-Dichloropropane
Concen: 55.911 ug/l
RT: 7.489 min Scan# 941
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 77 Resp: 200252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.3 | 10.3 | 30.9 |






#27
cis-1,2-Dichloroethene
Concen: 51.108 ug/l
RT: 7.489 min Scan# 94
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 96 Resp: 12696

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 155.7 | 0.0 | 329.6 |
| 98 | 65.0 | 0.0 | 128.6 |

**Instrument :**
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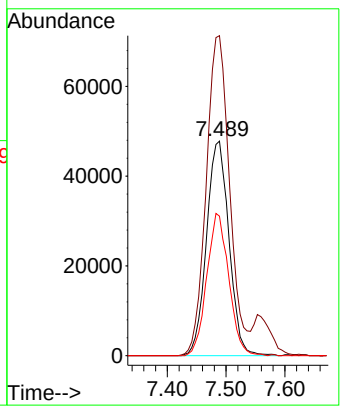
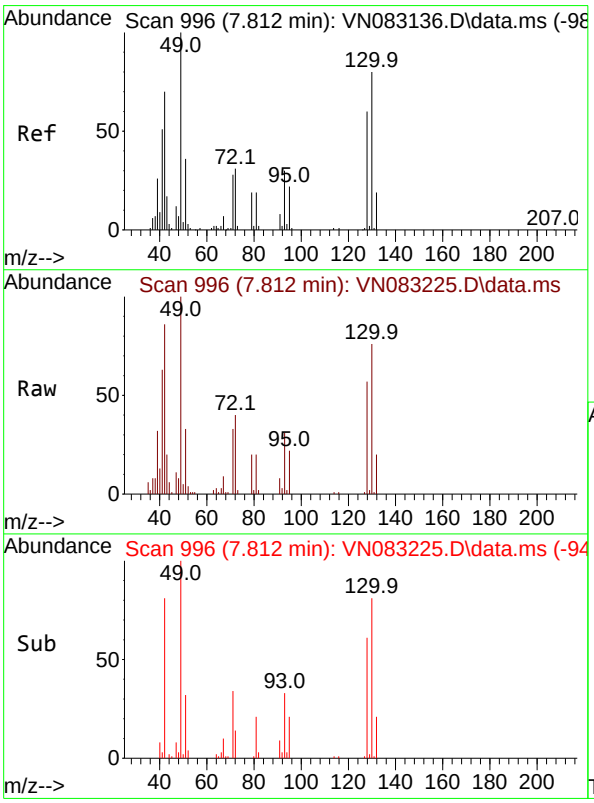
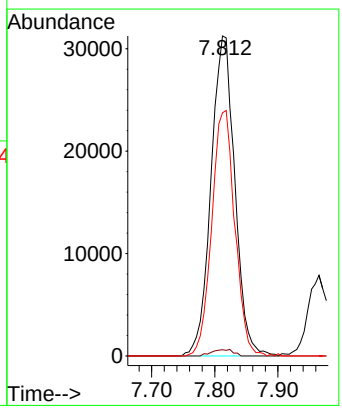


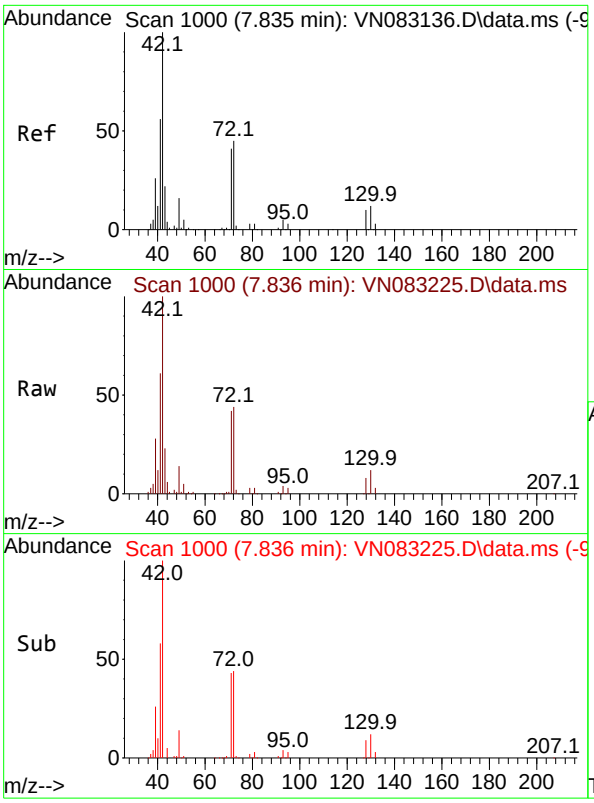




#28
Bromochloromethane
Concen: 51.908 ug/l
RT: 7.812 min Scan# 996
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 49 Resp: 81813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.8 | 0.0 | 3.8 |
| 130 | 74.2 | 50.5 | 75.7 |

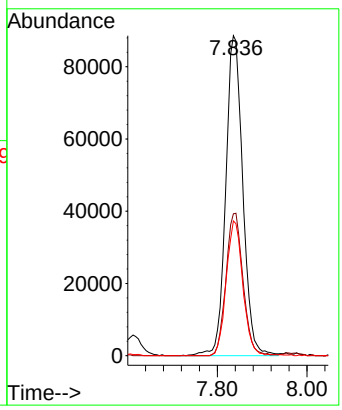





#29
Tetrahydrofuran
Concen: 236.354 ug/l
RT: 7.836 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 42 Resp: 23478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 44.4 | 30.0 | 45.0 |
| 71 | 40.9 | 28.3 | 42.5 |

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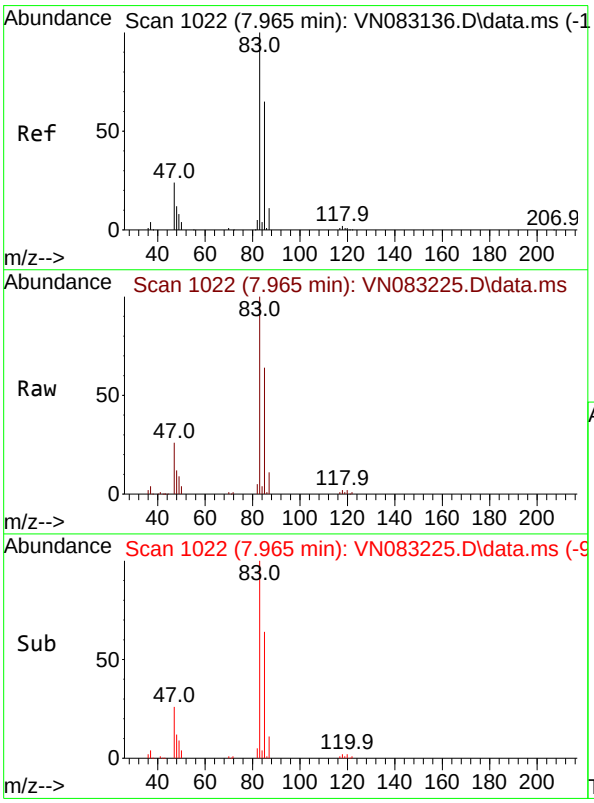
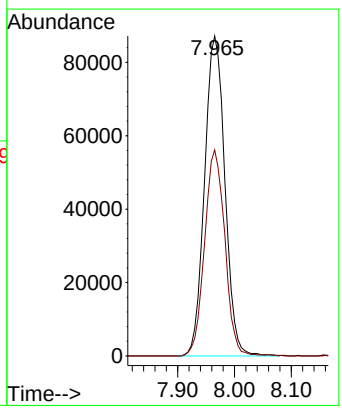
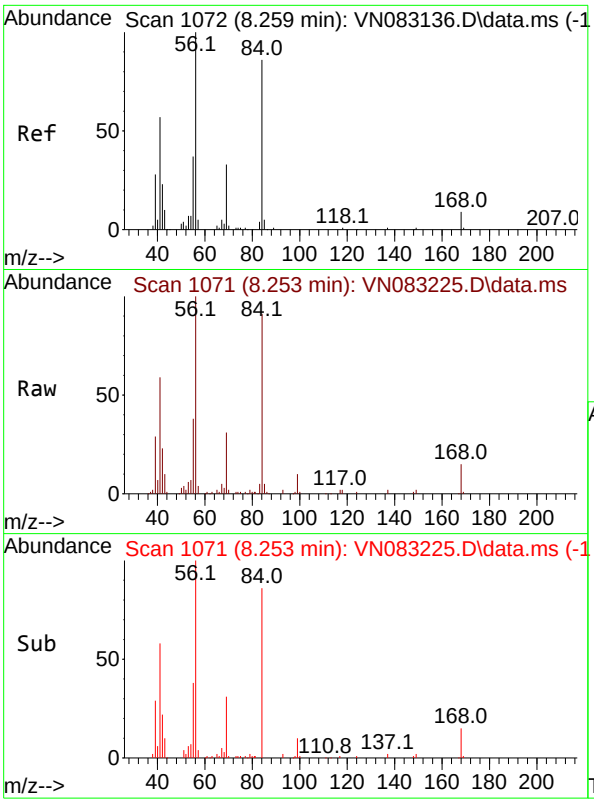



#30
Chloroform
Concen: 54.100 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 83 Resp: 216764

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.4 | 50.9 | 76.3 |






#31
Cyclohexane
Concen: 46.981 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 56 Resp: 17807

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.6 | 24.5 | 36.7 |
| 84 | 89.5 | 66.0 | 99.0 |

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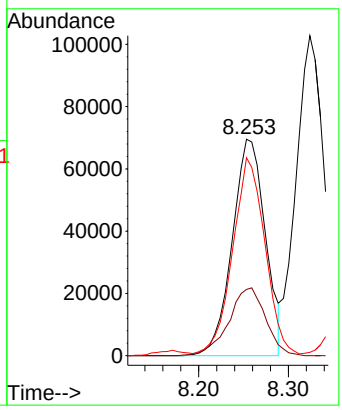
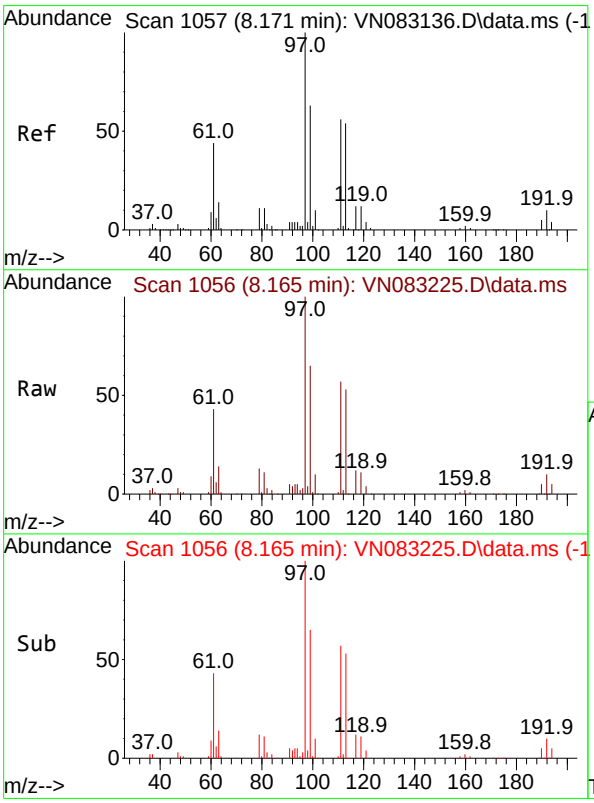
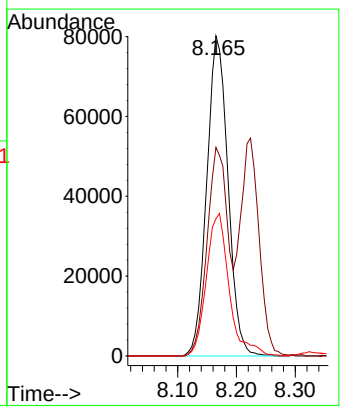


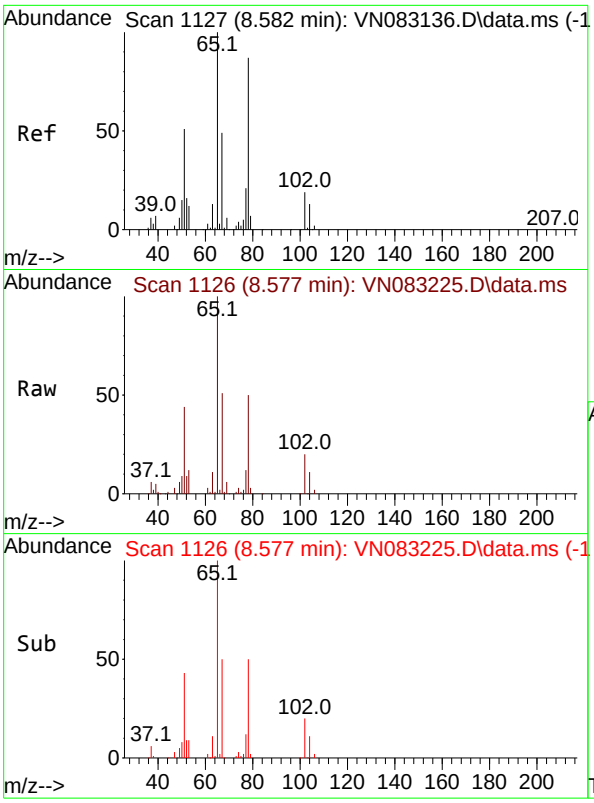




#32
1,1,1-Trichloroethane
Concen: 53.003 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 97 Resp: 201020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.3 | 52.0 | 78.0 |
| 61 | 48.0 | 42.1 | 63.1 |

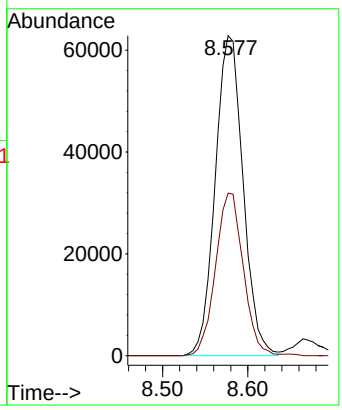





#33
1,2-Dichloroethane-d4
Concen: 55.922 ug/l
RT: 8.577 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 65 Resp: 14302

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.8 | 0.0 | 104.4 |

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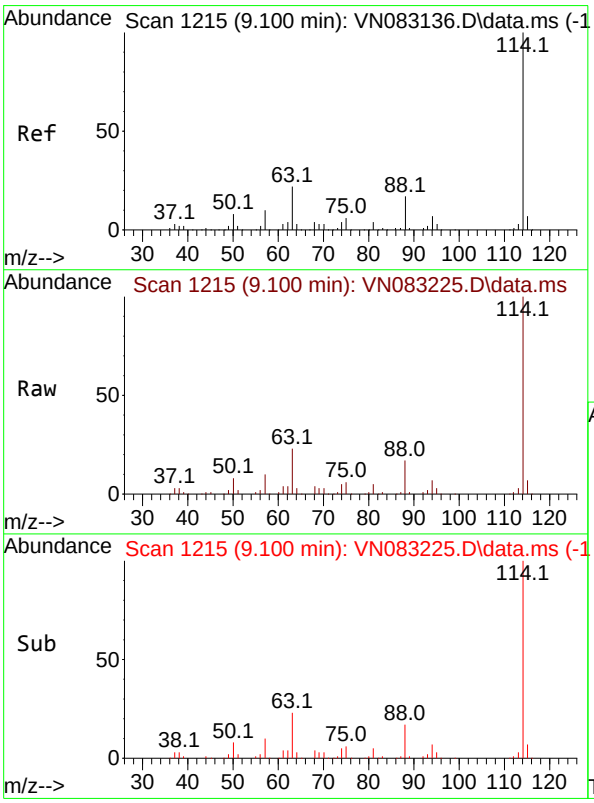
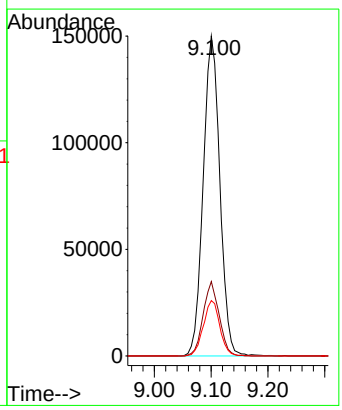
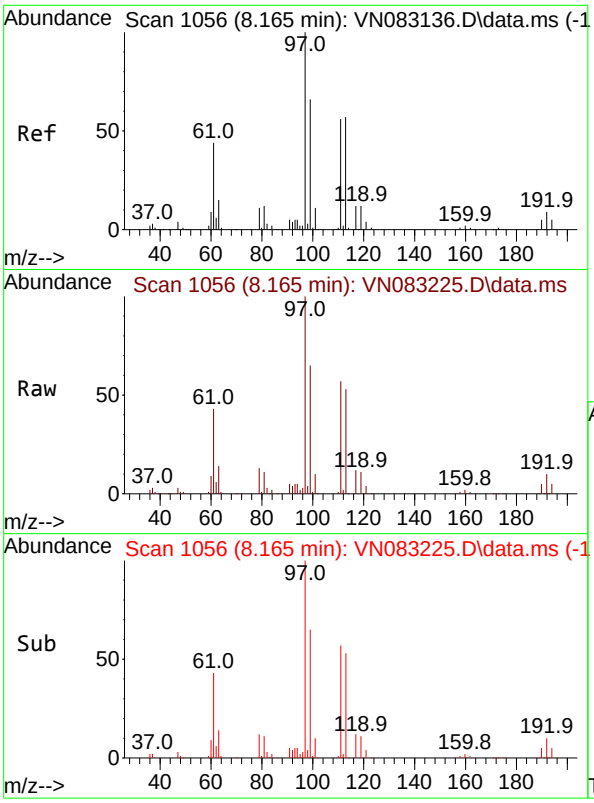



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:114 Resp: 304896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.3 | 0.0 | 44.6 |
| 88 | 17.3 | 0.0 | 31.4 |

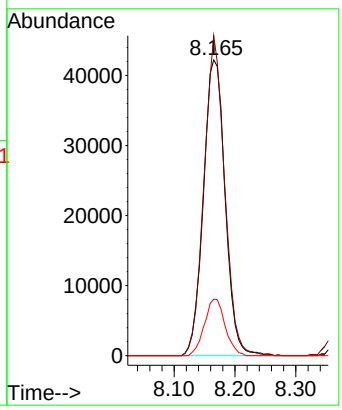





#35
Dibromofluoromethane
Concen: 54.912 ug/l
RT: 8.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:113 Resp: 10450

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.9 | 82.4 | 123.6 |
| 192 | 18.3 | 14.9 | 22.3 |

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VSTDCCC050

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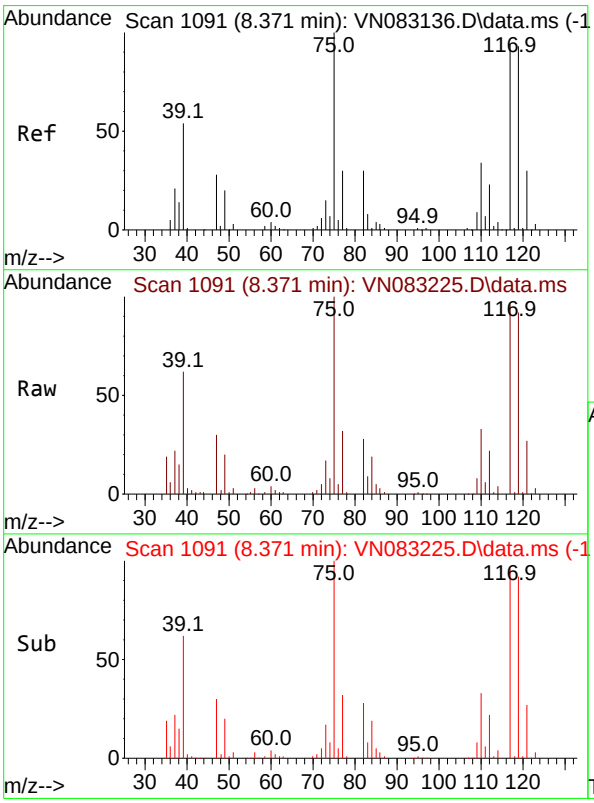
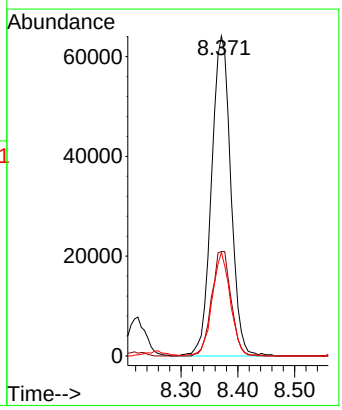
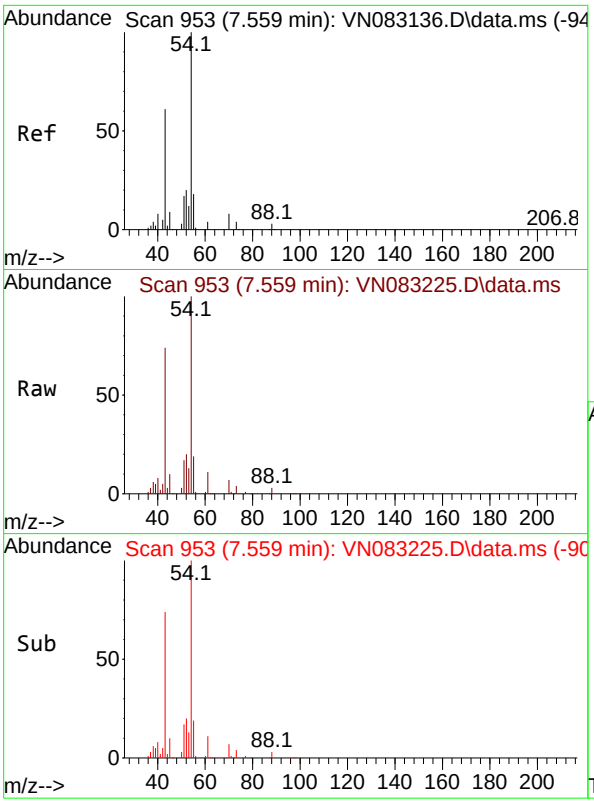



#36
1,1-Dichloropropene
Concen: 52.510 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 75 Resp: 151169

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 32.9 | 16.3 | 48.9 |
| 77 | 30.6 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 46.932 ug/l
RT: 7.559 min Scan# 9
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 43 Resp: 15127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 11.6 | 9.3 | 13.9 |
| 70 | 10.8 | 7.0 | 10.6 |

**Instrument :**
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**ClientSampleId :**
VSTDCCC050

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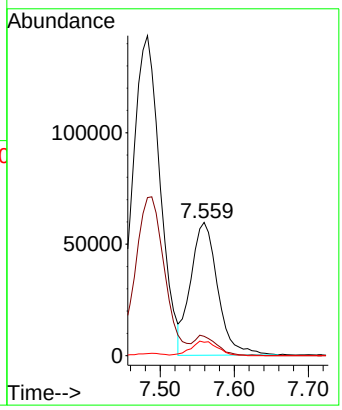
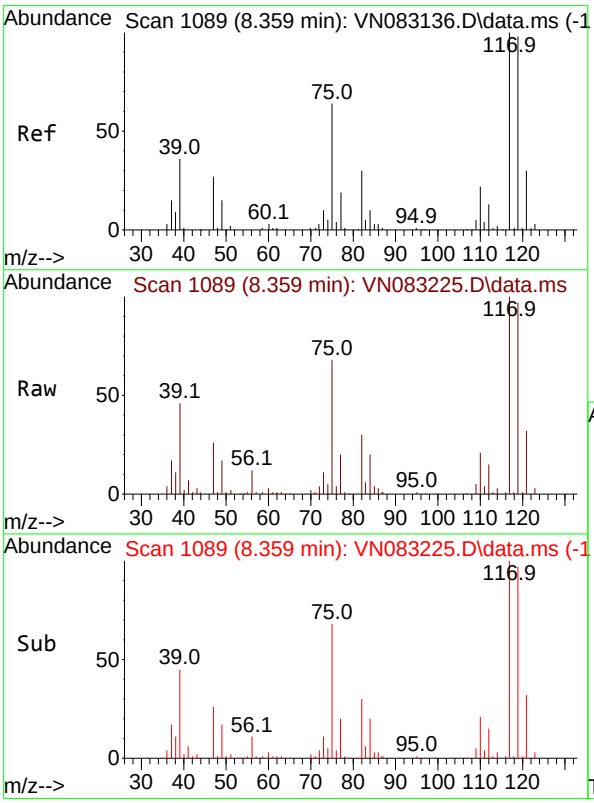
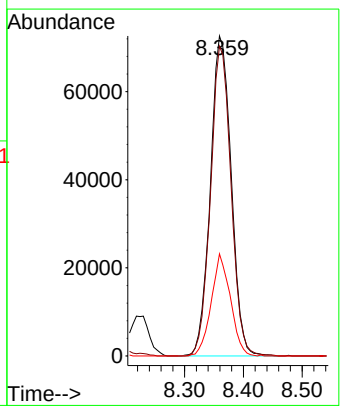


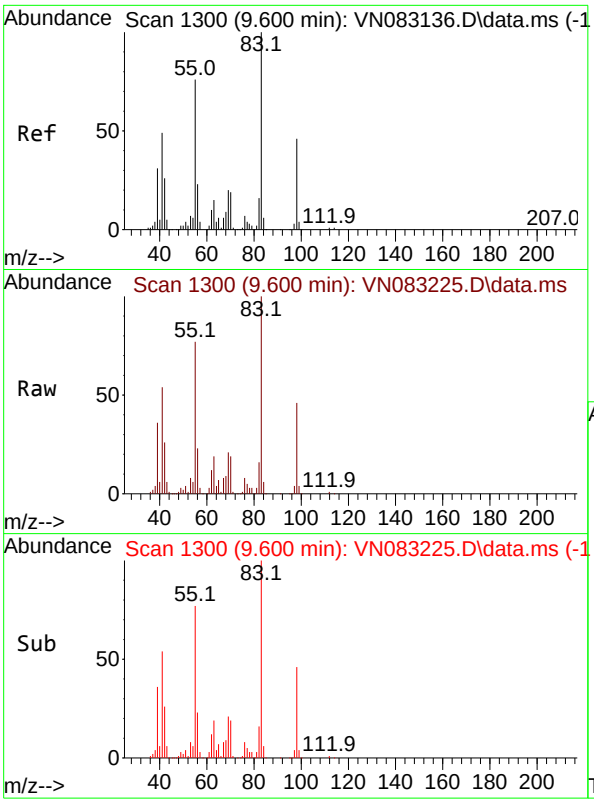




#38
Carbon Tetrachloride
Concen: 55.128 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:117 Resp: 178753

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 96.8 | 74.9 | 112.3 |
| 121 | 31.9 | 24.3 | 36.5 |






#39
Methylcyclohexane
Concen: 52.473 ug/l
RT: 9.600 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 83 Resp: 18554

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 77.5 | 66.4 | 99.6 |
| 98 | 45.6 | 40.7 | 61.1 |

**Instrument :**
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**ClientSampleId :**
VSTDCCC050

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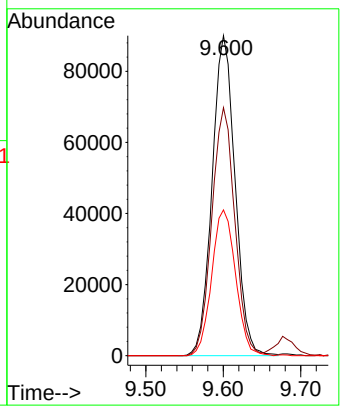
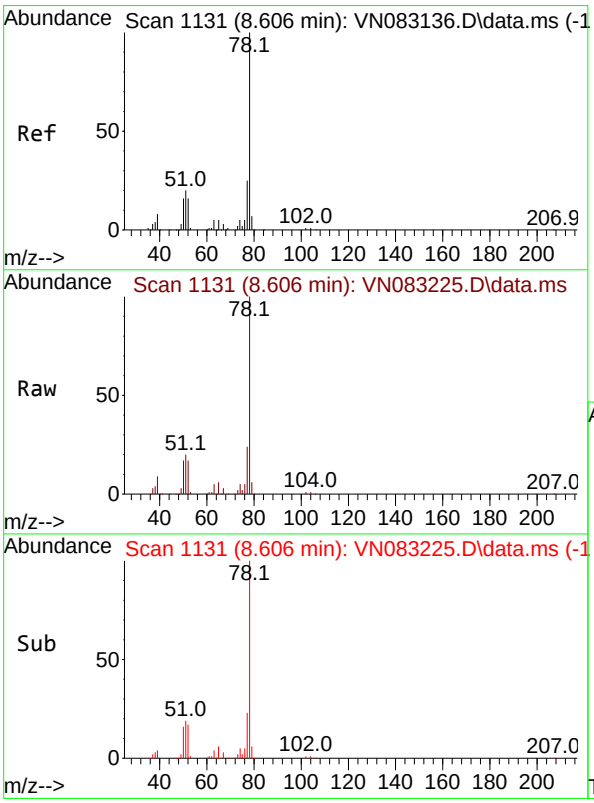
Supervised By :Semsettin Yesilyurt 08/13/2024

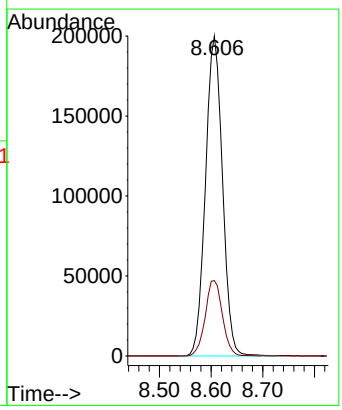


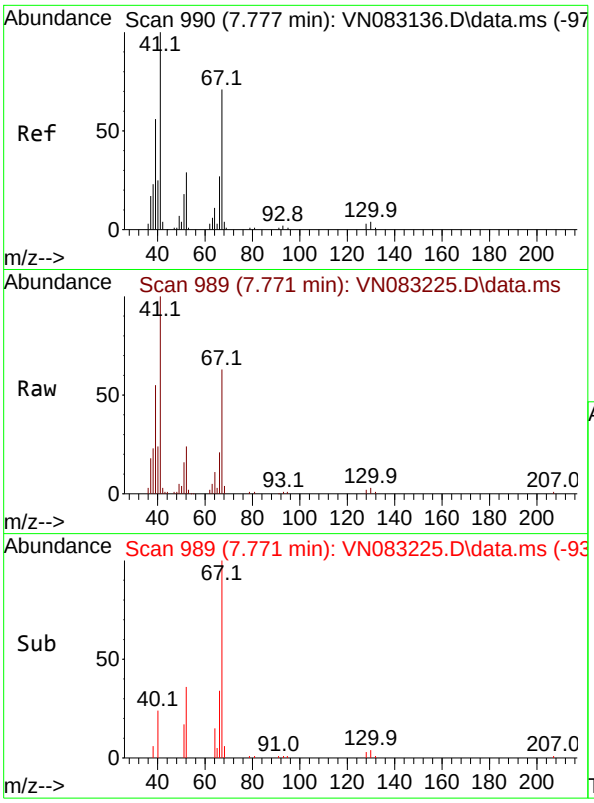




#40
Benzene
Concen: 53.193 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 78 Resp: 456196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.5 | 19.0 | 28.4 |

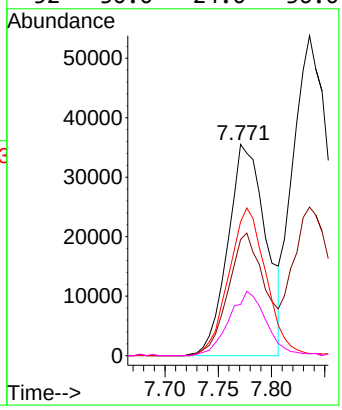





#41
Methacrylonitrile
Concen: 48.217 ug/l
RT: 7.771 min Scan# 9
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 41 Resp: 8837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 56.3 | 45.5 | 68.3 |
| 67 | 69.0 | 50.5 | 75.7 |
| 52 | 30.0 | 24.0 | 36.0 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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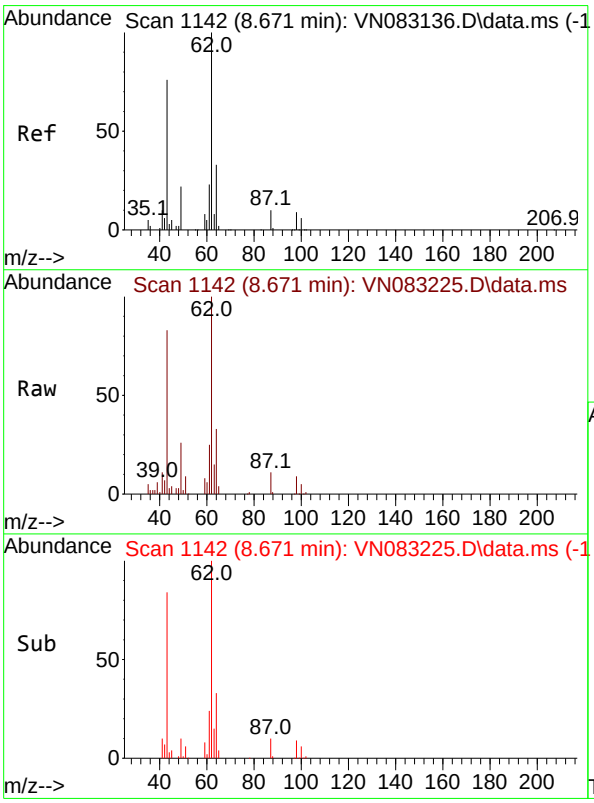
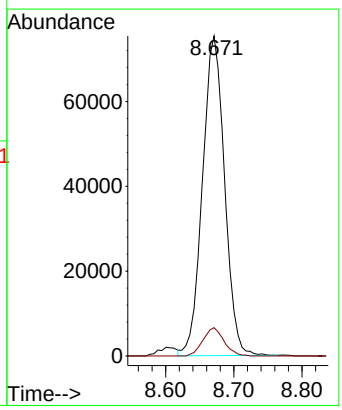
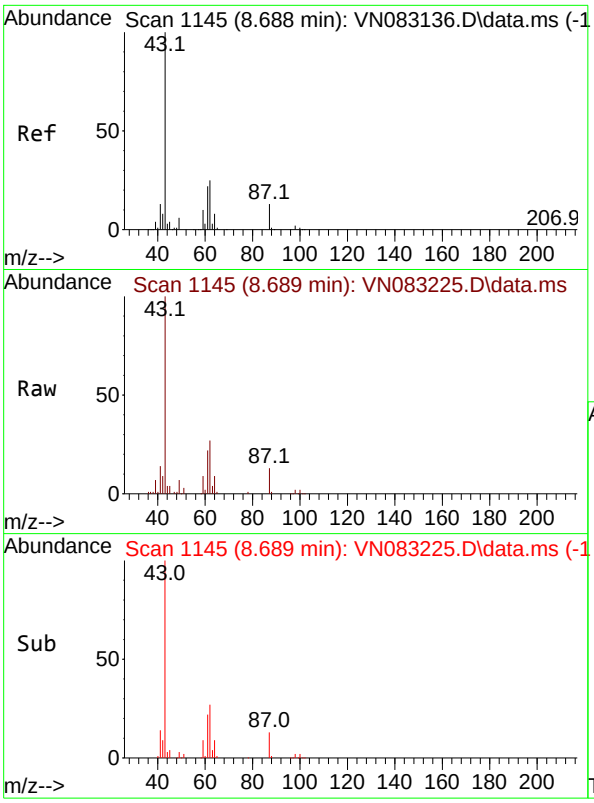



#42
1,2-Dichloroethane
Concen: 54.347 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 62 Resp: 169788

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.4 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 50.529 ug/l
RT: 8.689 min Scan# 1
Delta R.T. 0.001 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 43 Resp: 28227

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 24.6 | 17.8 | 26.6 |
| 87 | 12.7 | 8.2 | 12.2 |

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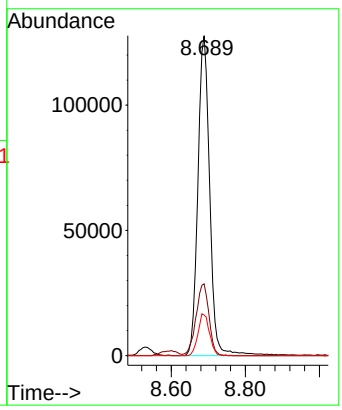
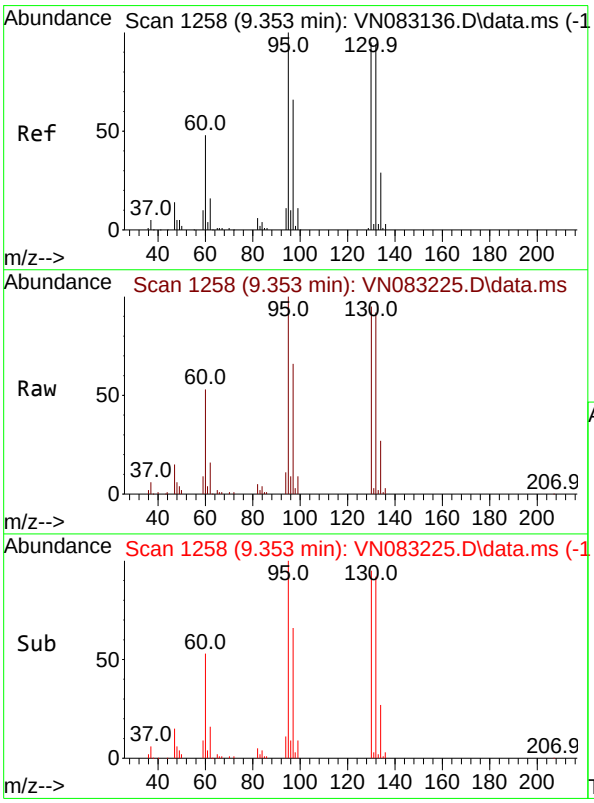
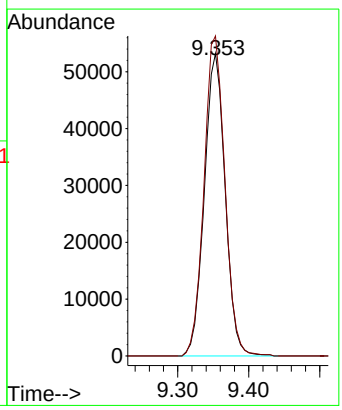


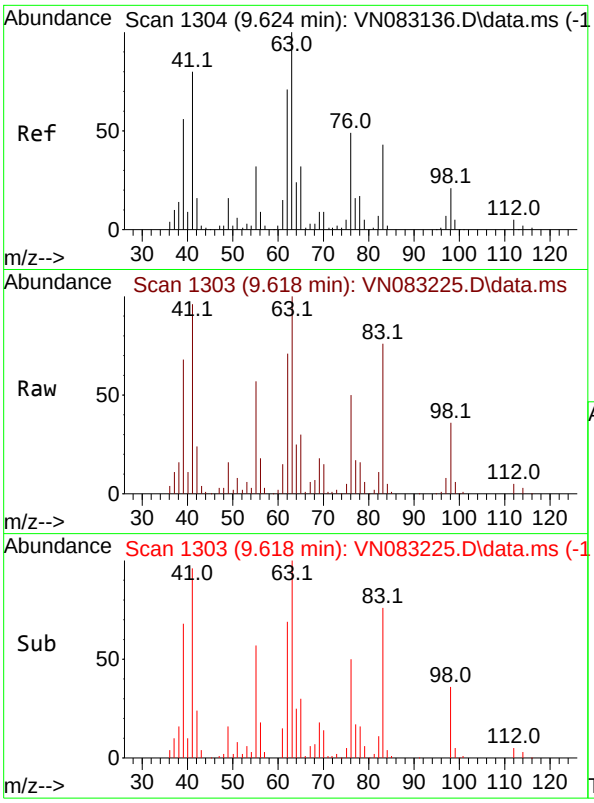




#44
Trichloroethene
Concen: 53.104 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:130 Resp: 108403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 105.8 | 0.0 | 197.8 |






#45
1,2-Dichloropropane
Concen: 53.957 ug/l
RT: 9.618 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 63 Resp: 10984

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 29.6 | 24.4 | 36.6 |

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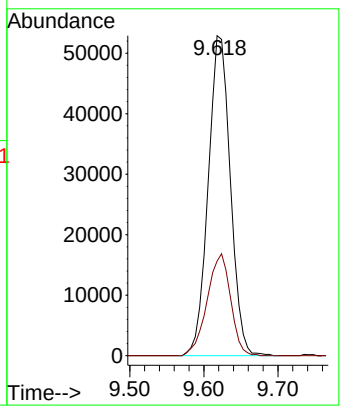
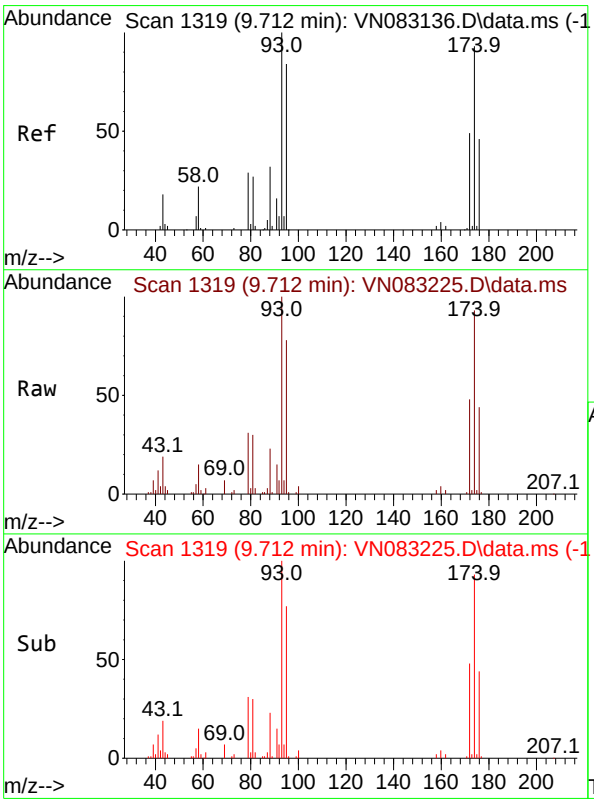
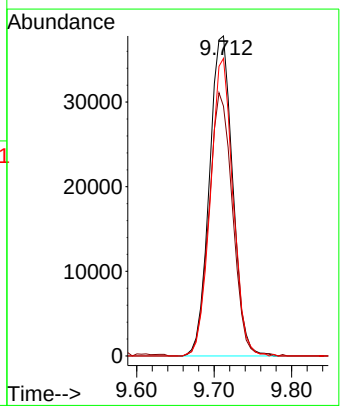


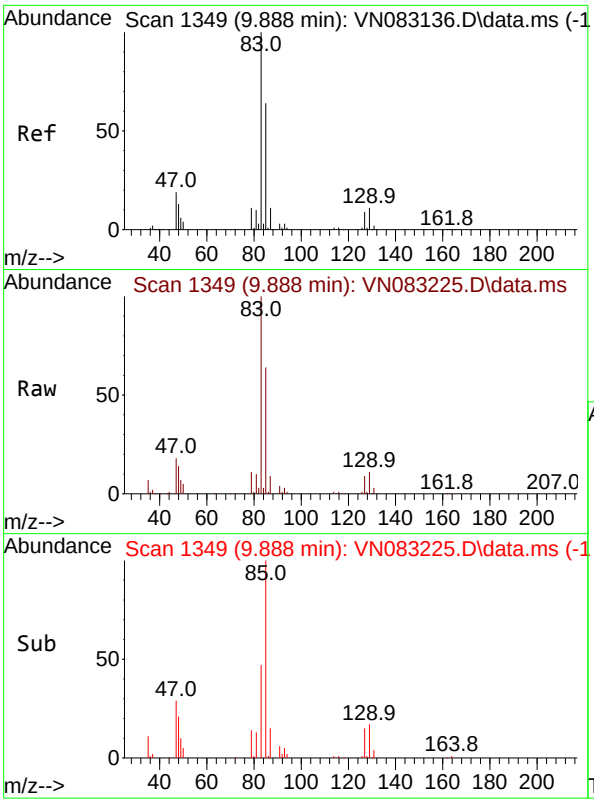




#46
Dibromomethane
Concen: 54.334 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 93 Resp: 79172

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.1 | 65.8 | 98.6 |
| 174 | 90.0 | 71.7 | 107.5 |

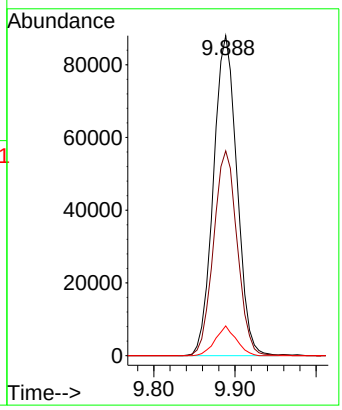





#47
Bromodichloromethane
Concen: 54.085 ug/l
RT: 9.888 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 83 Resp: 17695

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.0 | 51.1 | 76.7 |
| 127 | 9.3 | 7.2 | 10.8 |

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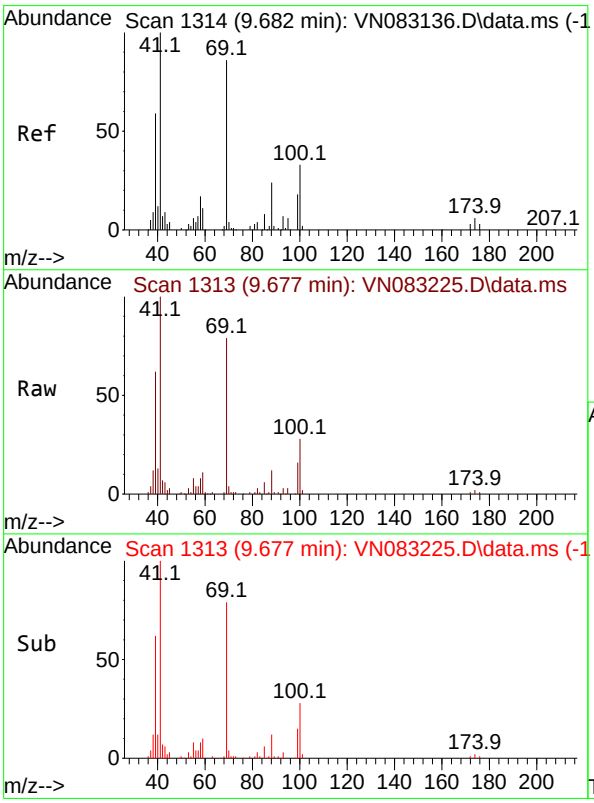
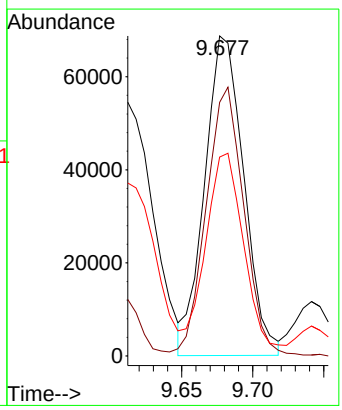
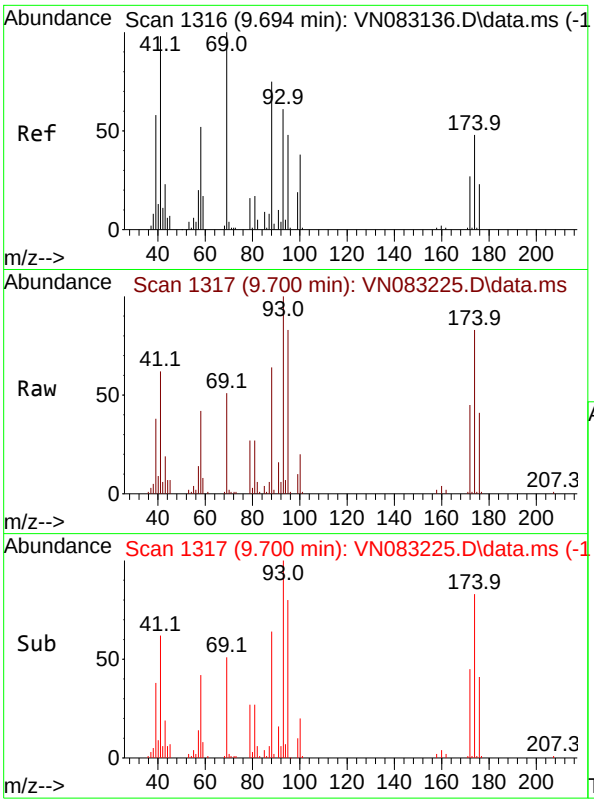



#48
Methyl methacrylate
Concen: 49.438 ug/l
RT: 9.677 min Scan# 1313
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 41 Resp: 131746

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 81.2 | 56.3 | 84.5 |
| 39 | 63.3 | 50.3 | 75.5 |






#49
1,4-Dioxane
Concen: 898.633 ug/l
RT: 9.700 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 88 Resp: 4320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 31.6 | 27.8 | 41.8 |
| 58 | 72.3 | 59.4 | 89.0 |

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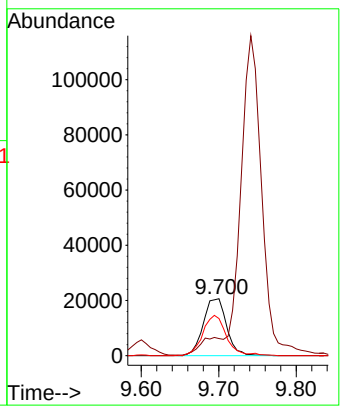
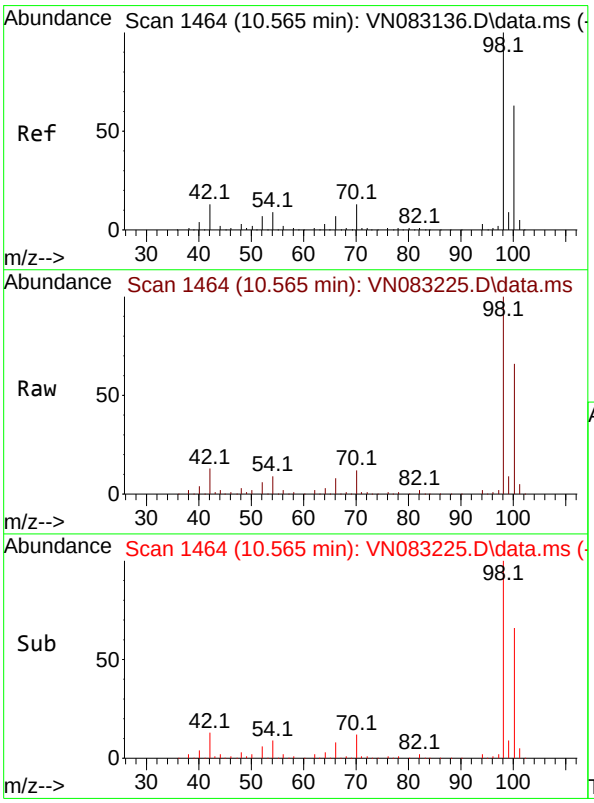
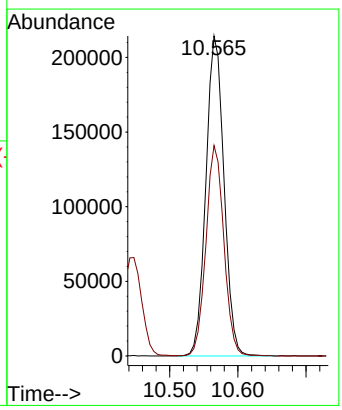


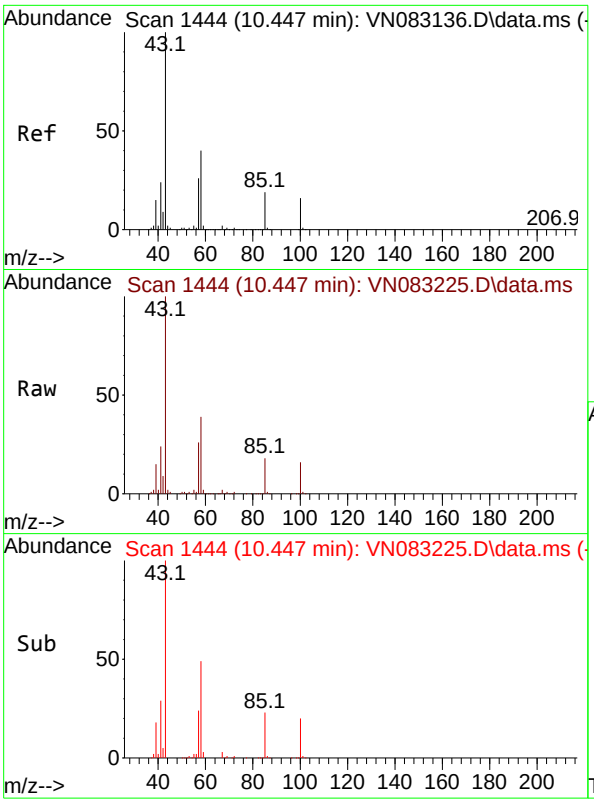




#50
Toluene-d8
Concen: 55.663 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 98 Resp: 395152

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.2 | 51.5 | 77.3 |






#51
4-Methyl-2-Pentanone
Concen: 253.325 ug/l
RT: 10.447 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 43 Resp: 77216

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 39.3 | 28.2 | 42.4 |

**Instrument :**
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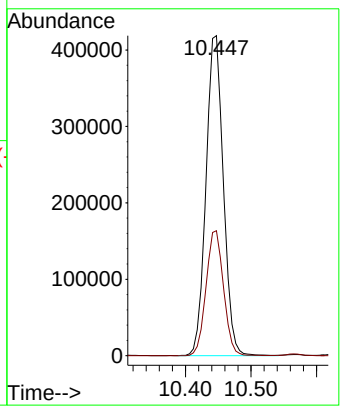
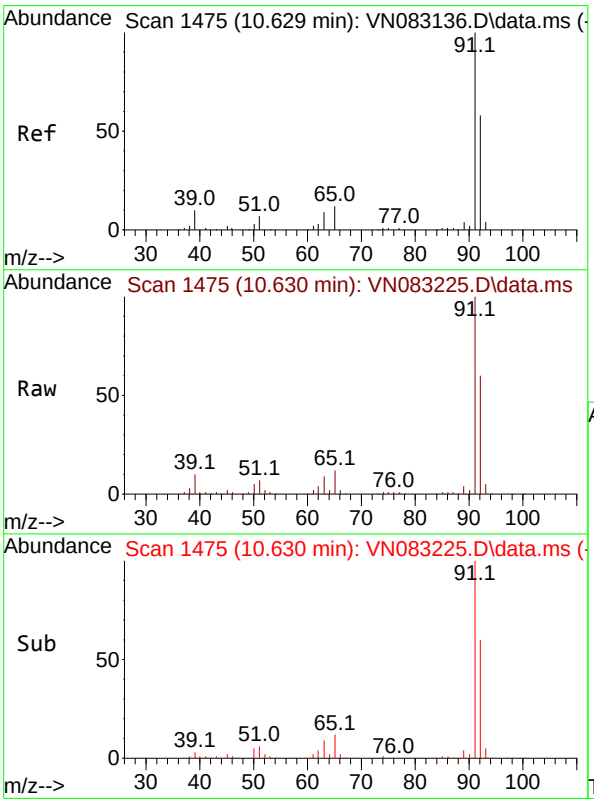
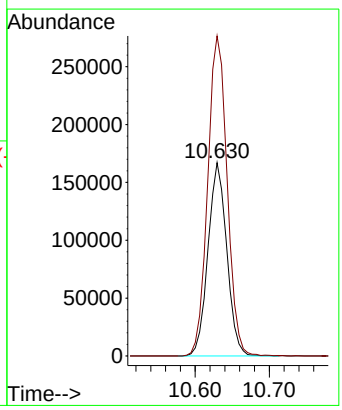


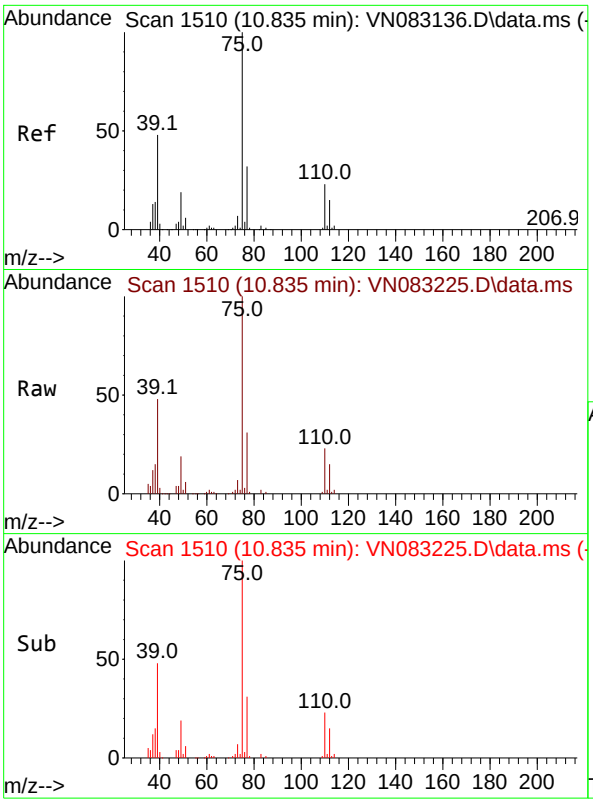




#52
Toluene
Concen: 54.202 ug/l
RT: 10.630 min Scan# 1475
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 92 Resp: 293708

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 171.5 | 139.4 | 209.0 |

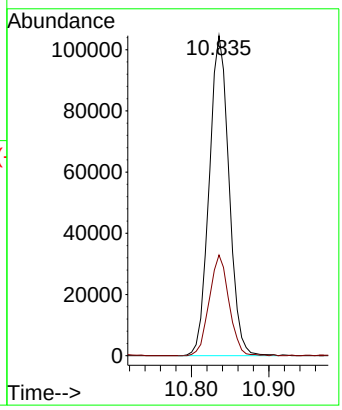





#53
t-1,3-Dichloropropene
Concen: 55.216 ug/l
RT: 10.835 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 75 Resp: 18556

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.4 | 25.7 | 38.5 |

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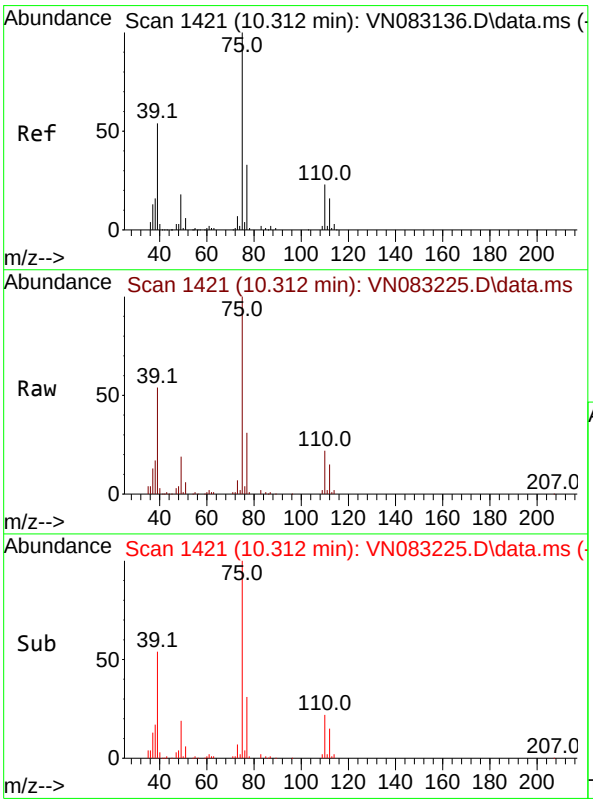
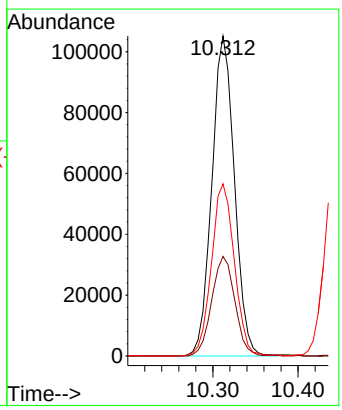
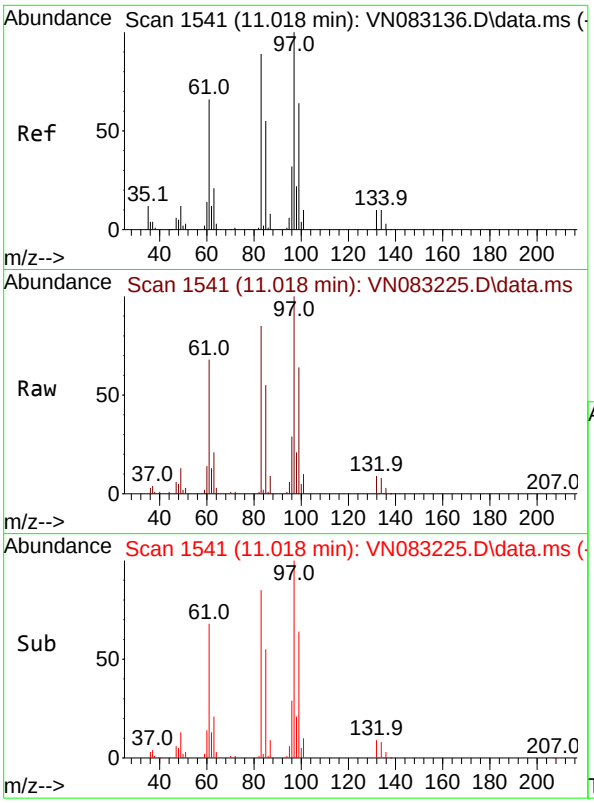



#54
cis-1,3-Dichloropropene
Concen: 54.265 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 75 Resp: 193978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.1 | 24.3 | 36.5 |
| 39 | 53.8 | 50.5 | 75.7 |

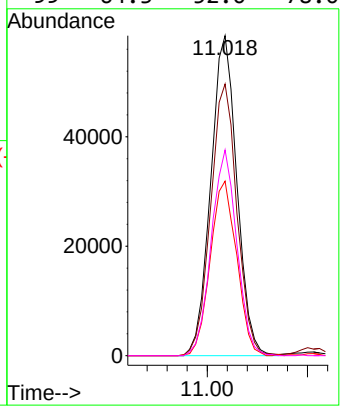





#55
1,1,2-Trichloroethane
Concen: 54.516 ug/l
RT: 11.018 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 97 Resp: 10586

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 84.9 | 71.4 | 107.0 |
| 85 | 54.6 | 45.8 | 68.6 |
| 99 | 64.3 | 52.0 | 78.0 |

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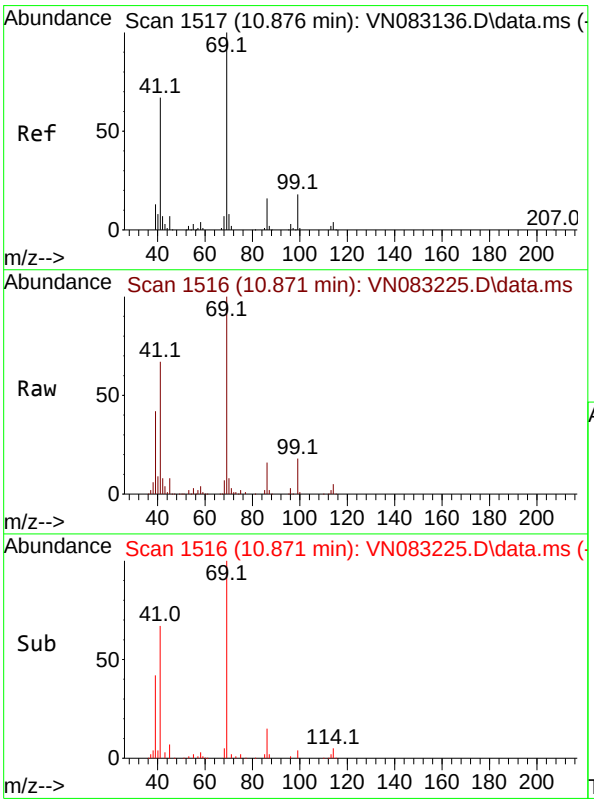
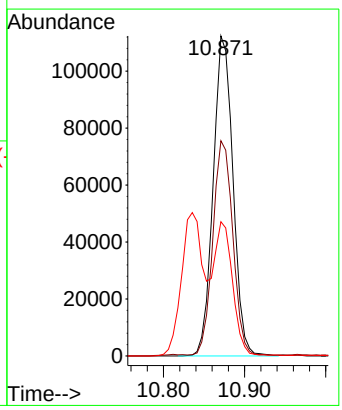
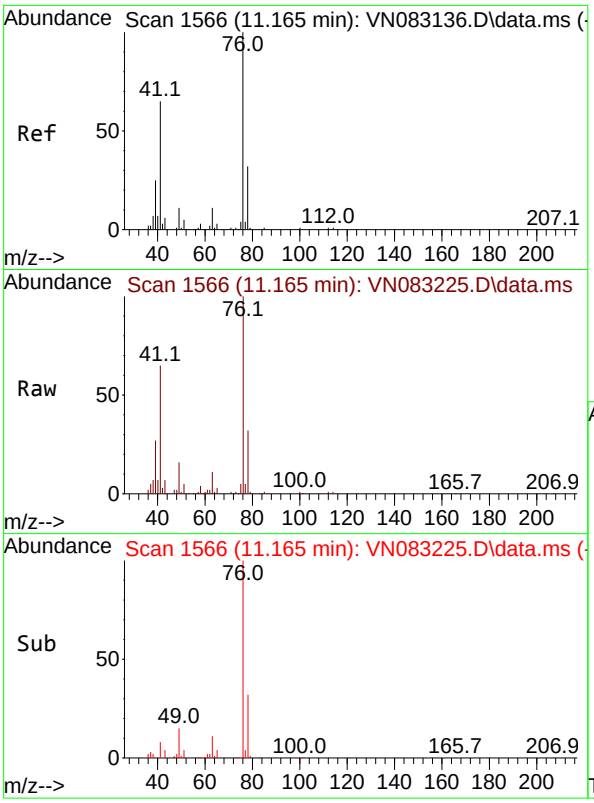



#56
Ethyl methacrylate
Concen: 52.076 ug/l
RT: 10.871 min Scan# 1516
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 69 Resp: 190644

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 67.6 | 63.4 | 95.2 |
| 39 | 40.7 | 37.4 | 56.0 |

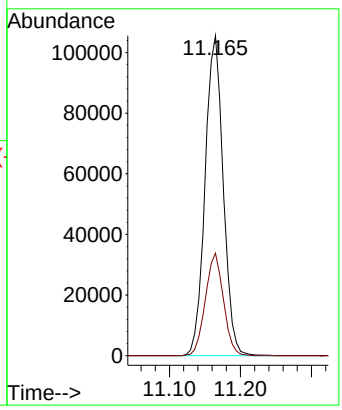





#57
1,3-Dichloropropane
Concen: 54.111 ug/l
RT: 11.165 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 76 Resp: 18729

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.9 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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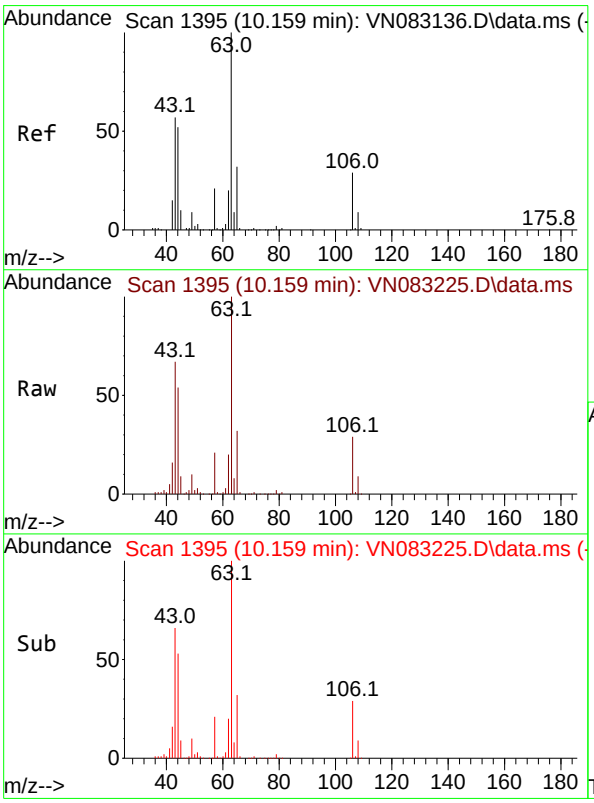
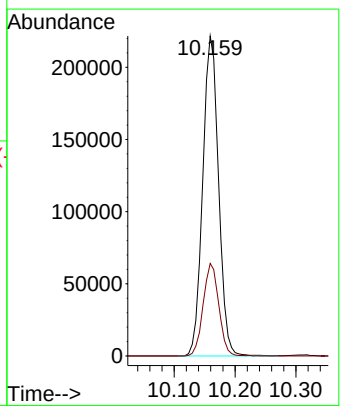
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

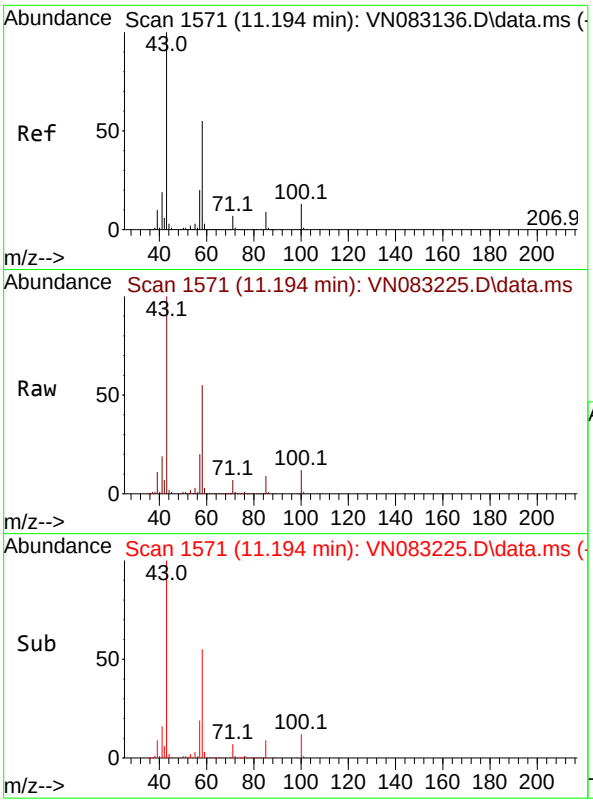



#58
2-Chloroethyl Vinyl ether
Concen: 259.113 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 63 Resp: 400965

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.5 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 251.771 ug/l
RT: 11.194 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 43 Resp: 59371

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 54.0 | 24.6 | 73.8 |

**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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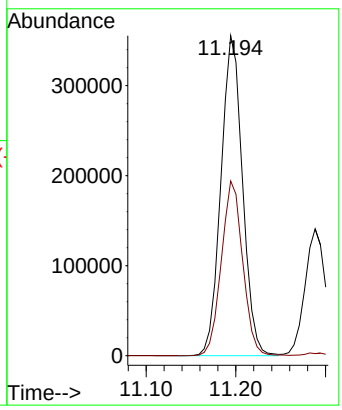
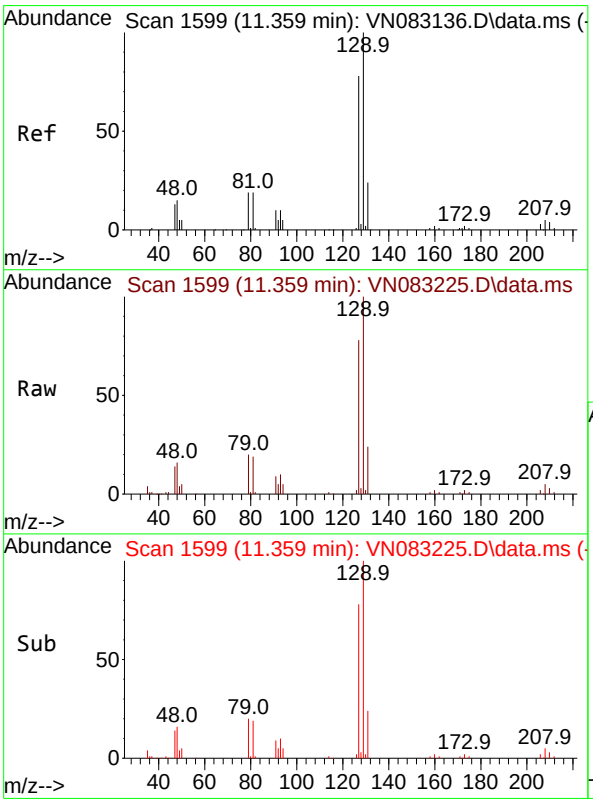
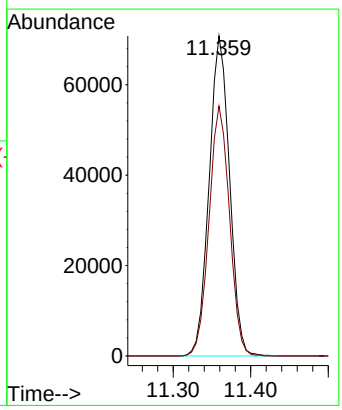


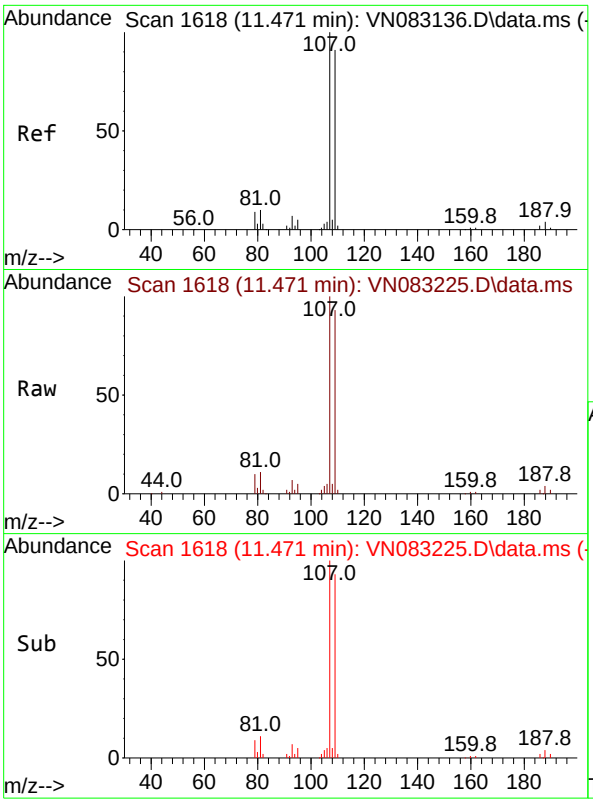




#60
Dibromochloromethane
Concen: 55.151 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:129 Resp: 129486

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.2 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 53.196 ug/l
RT: 11.471 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:107 Resp: 10851

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 95.4 | 73.7 | 110.5 |

**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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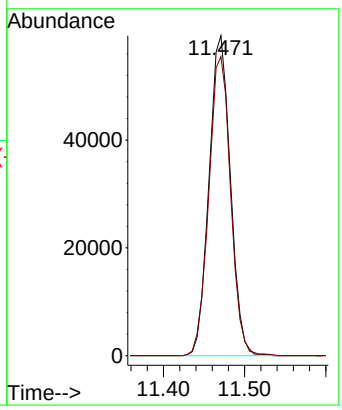
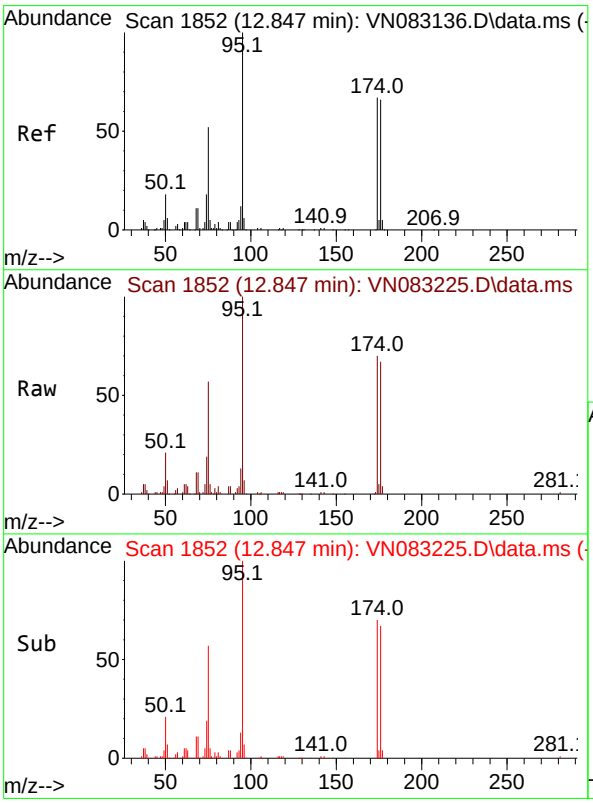
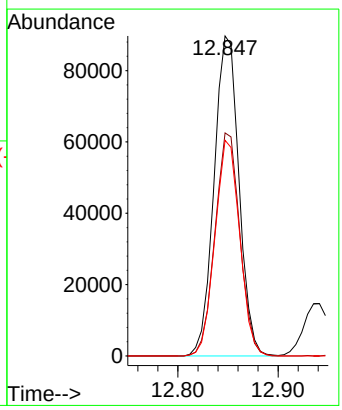


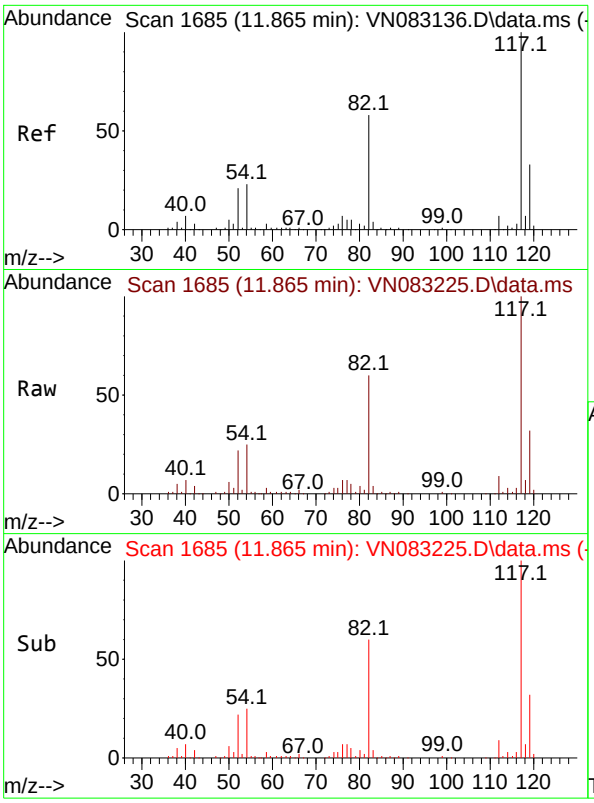




#62
4-Bromofluorobenzene
Concen: 55.812 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 95 Resp: 154465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.7 | 0.0 | 159.2 |
| 176 | 67.1 | 0.0 | 147.6 |

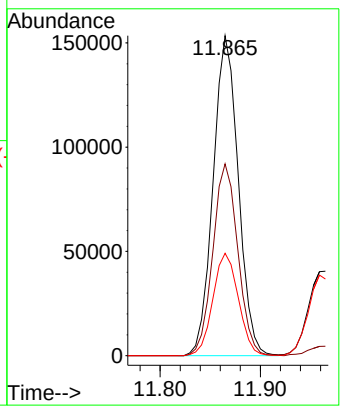





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:117 Resp: 26716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.0 | 47.5 | 71.3 |
| 119 | 32.0 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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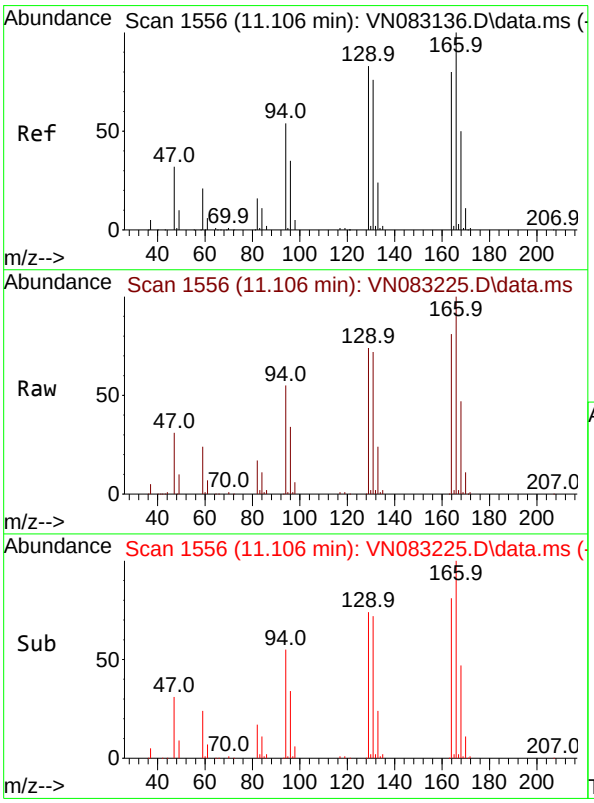
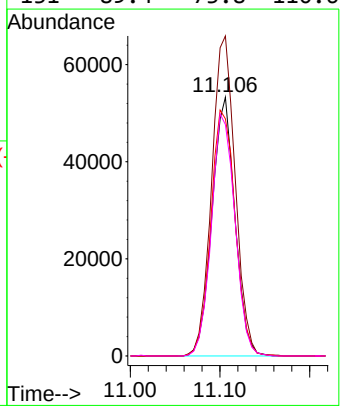
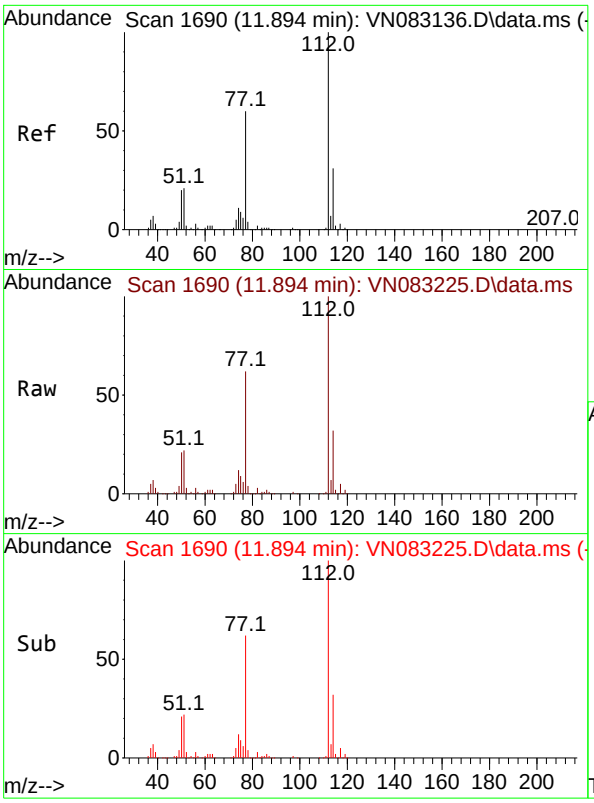



#64
Tetrachloroethene
Concen: 53.298 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:164 Resp: 94303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 123.7 | 101.4 | 152.0 |
| 129 | 91.7 | 75.7 | 113.5 |
| 131 | 89.4 | 73.8 | 110.6 |






#65
Chlorobenzene
Concen: 52.987 ug/l
RT: 11.894 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:112 Resp: 31283

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.9 | 26.2 | 39.2 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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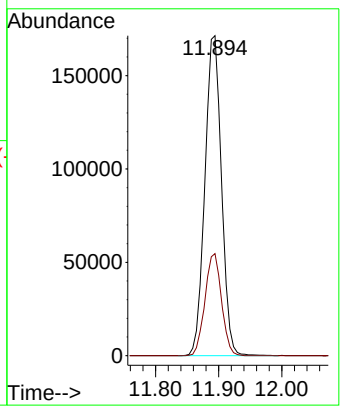
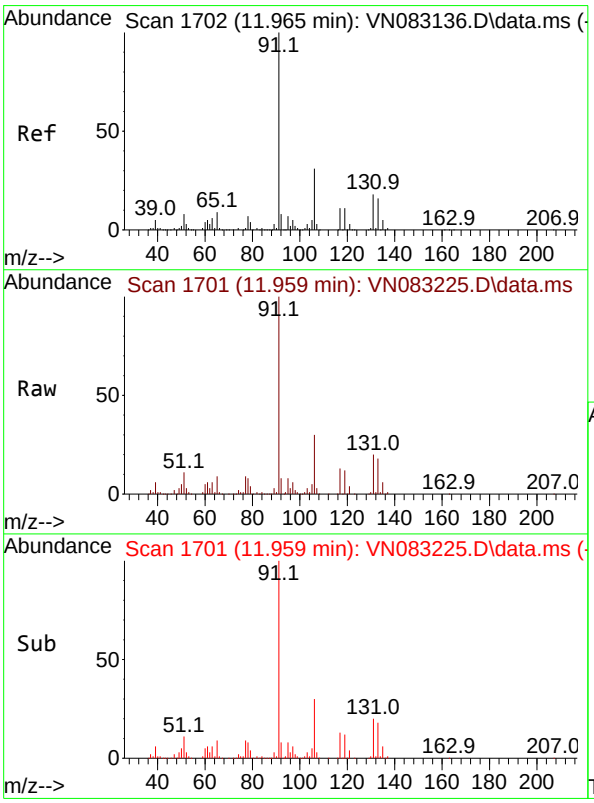
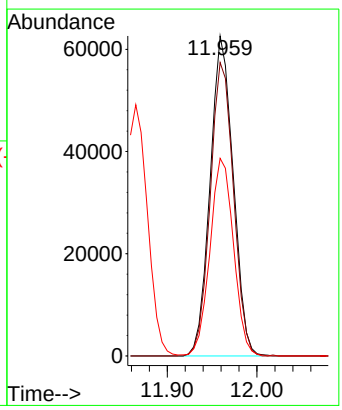


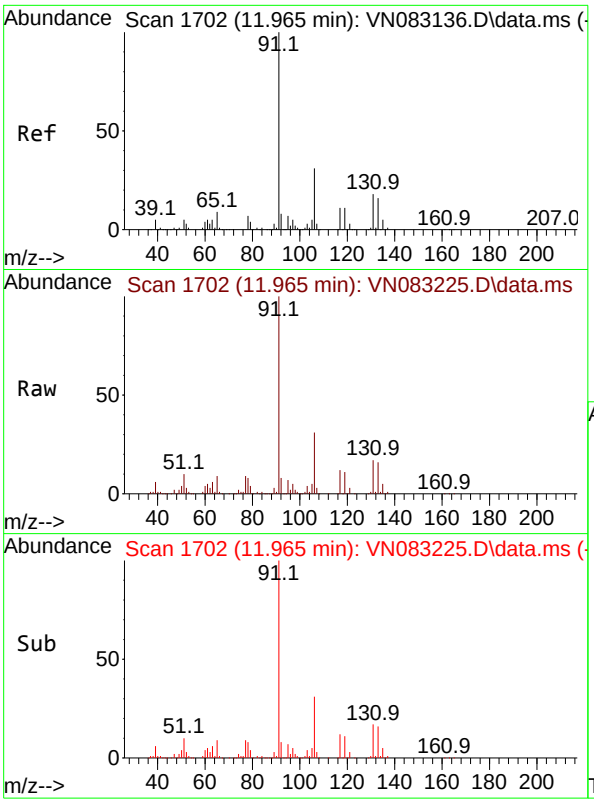




#66
1,1,1,2-Tetrachloroethane
Concen: 53.701 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:131 Resp: 111819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 92.5 | 47.3 | 142.0 |
| 119 | 63.0 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 53.269 ug/l
RT: 11.965 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 91 Resp: 57694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.5 | 24.0 | 36.0 |

**Instrument :**
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VSTDCCC050

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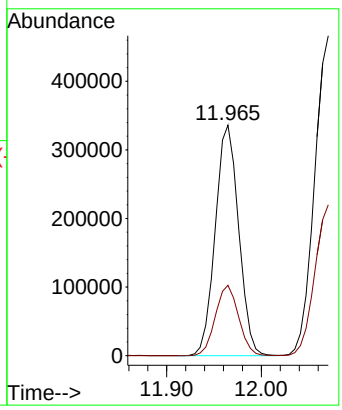
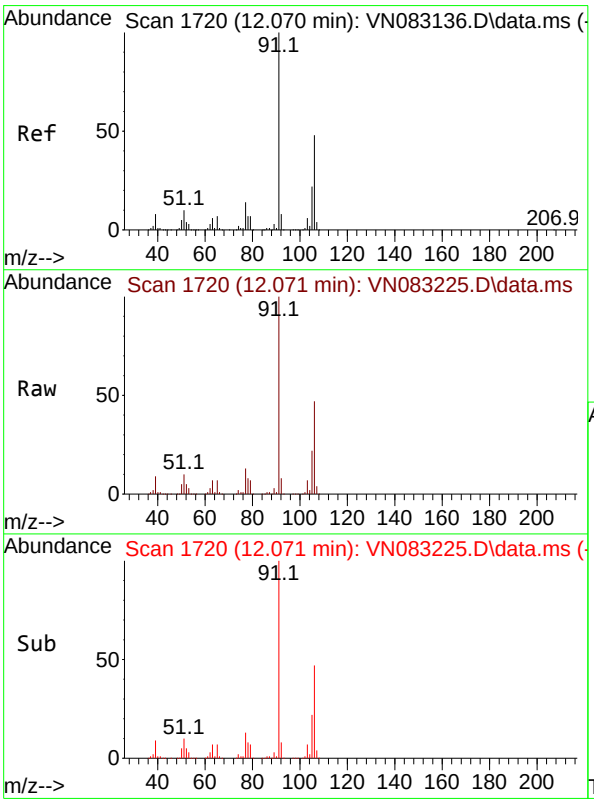
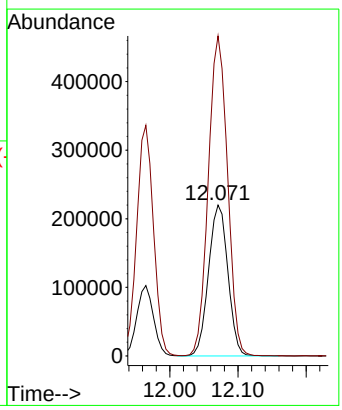


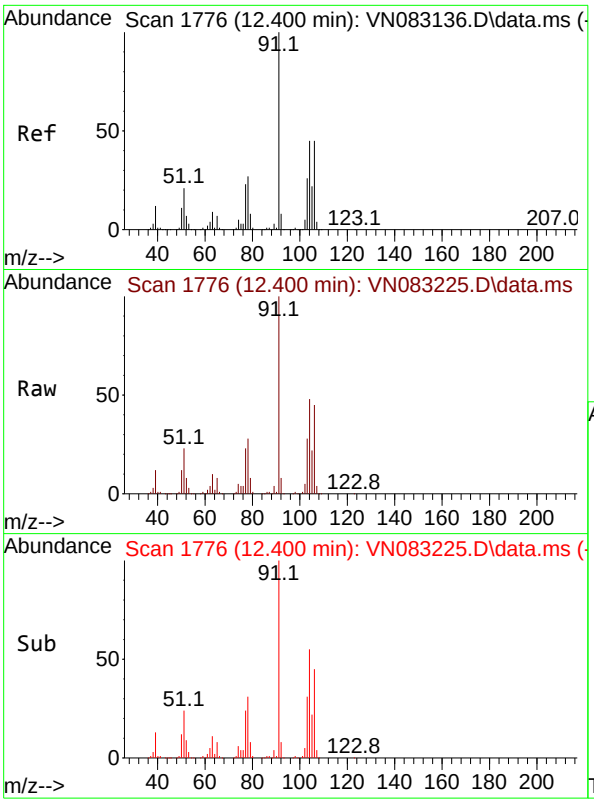




#68
m/p-Xylenes
Concen: 107.195 ug/l
RT: 12.071 min Scan# 1720
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:106 Resp: 434899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.2 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 52.315 ug/l
RT: 12.400 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:106 Resp: 20933

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 226.0 | 111.3 | 333.9 |

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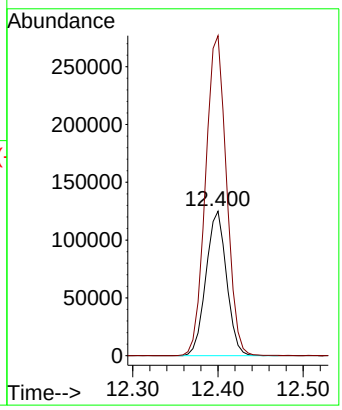
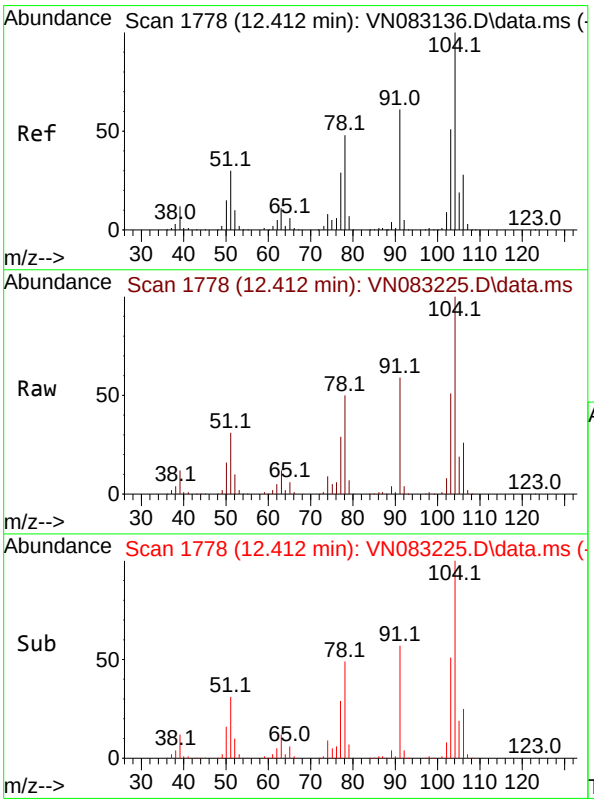
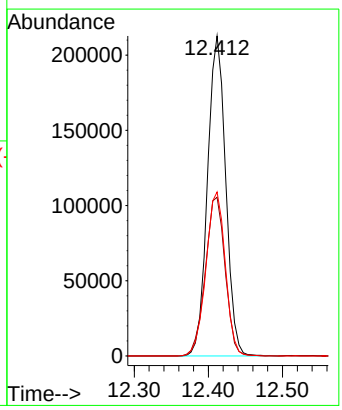


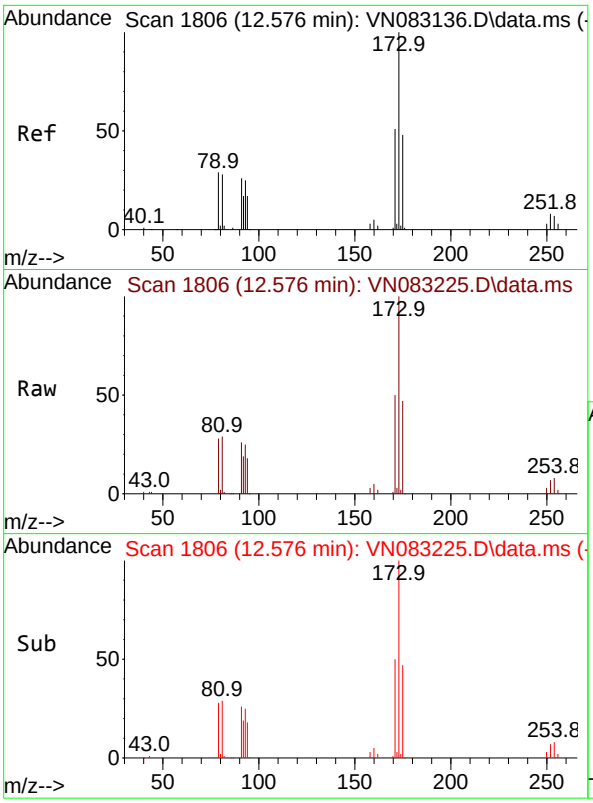




#70
Styrene
Concen: 54.007 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:104 Resp: 362959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 54.0 | 41.6 | 62.4 |
| 103 | 54.6 | 44.0 | 66.0 |

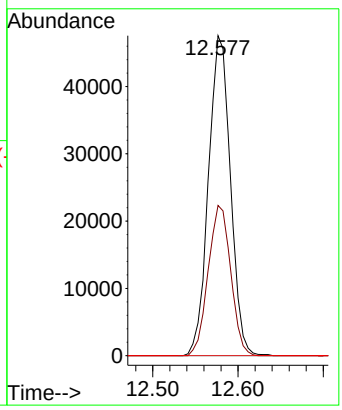





#71
Bromoform
Concen: 53.942 ug/l
RT: 12.576 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:173 Resp: 8508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.2 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
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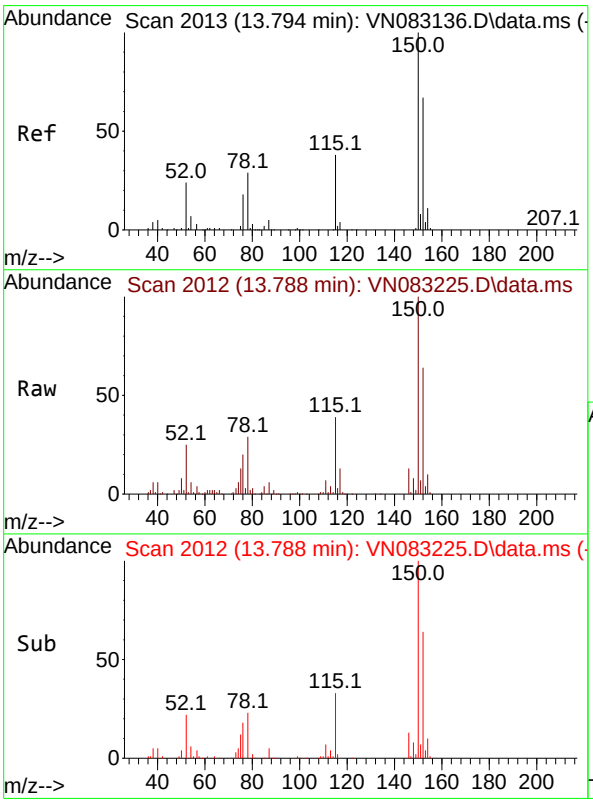
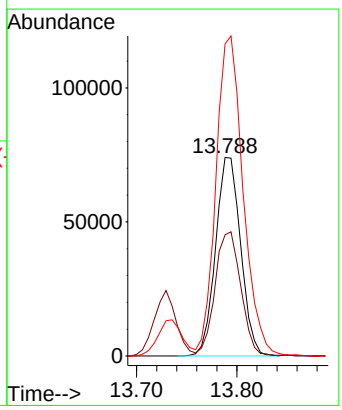
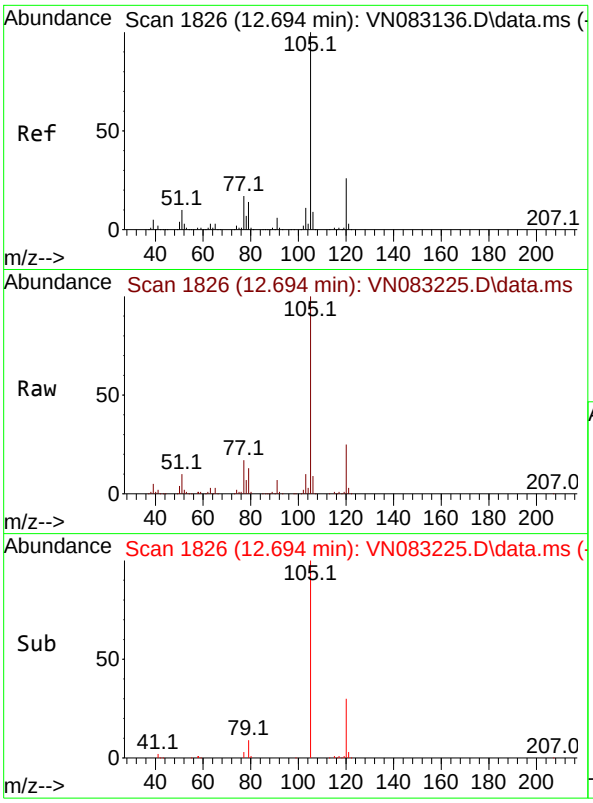



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:152 Resp: 128278

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.5 | 30.6 | 91.6 |
| 150 | 174.9 | 0.0 | 348.6 |






#73
Isopropylbenzene
Concen: 51.874 ug/l
RT: 12.694 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:105 Resp: 55658

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.4 | 12.9 | 38.6 |

**Instrument :**
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VSTDCCC050

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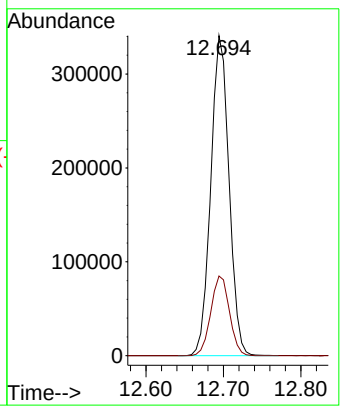
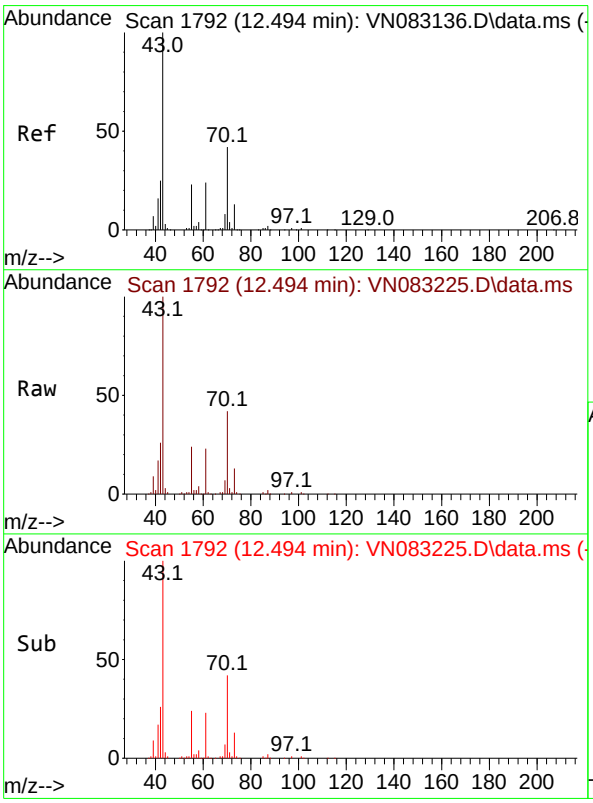
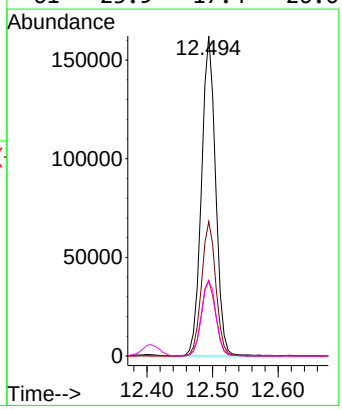


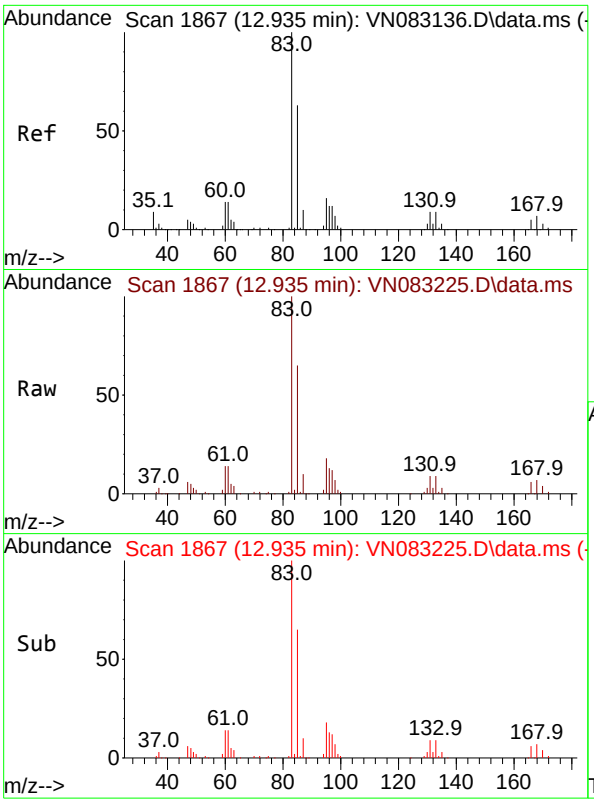




#74
N-amyl acetate
Concen: 46.518 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 43 Resp: 244139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 42.3 | 29.8 | 44.6 |
| 55 | 24.1 | 18.7 | 28.1 |
| 61 | 23.9 | 17.4 | 26.0 |






#75
1,1,2,2-Tetrachloroethane
Concen: 48.762 ug/l
RT: 12.935 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

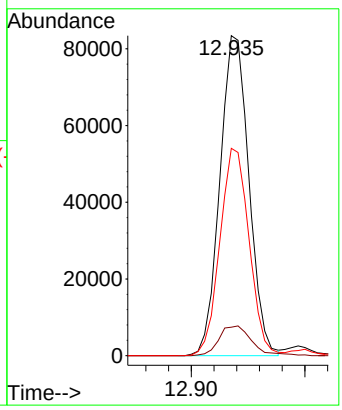
Tgt Ion: 83 Resp: 14797

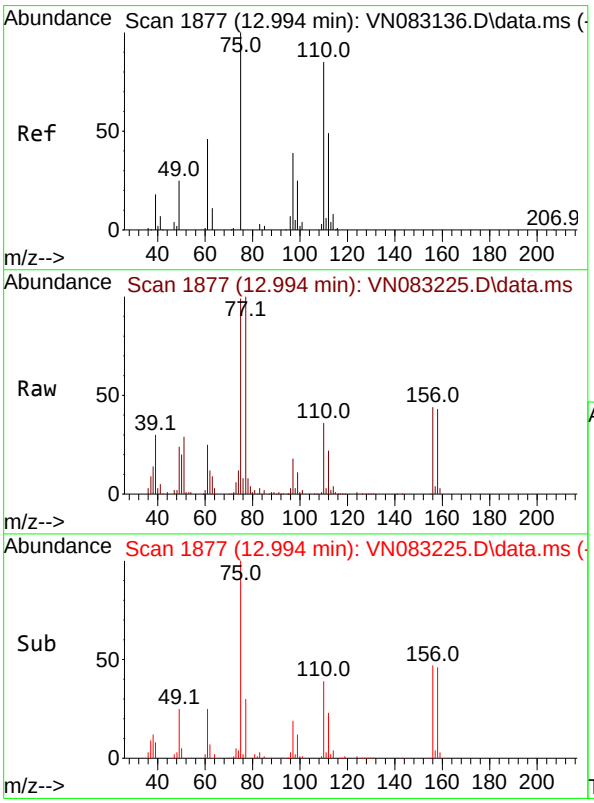
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.5 | 5.0 | 14.9 |
| 85 | 65.3 | 31.9 | 95.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

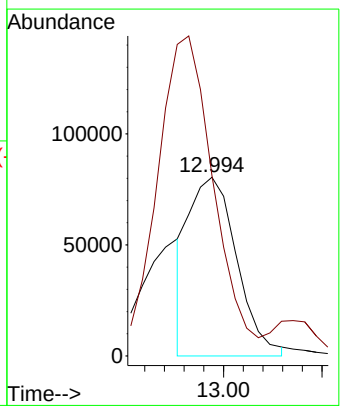


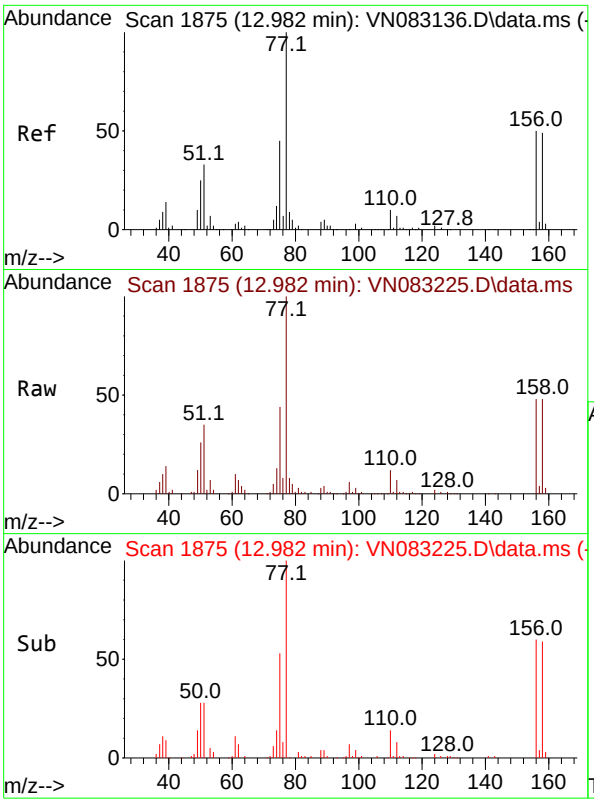




#76
1,2,3-Trichloropropane
Concen: 48.197 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 75 Resp: 135692

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 211.7 | 110.9 | 332.6 |

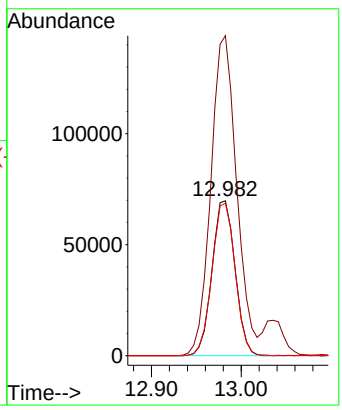





#77
Bromobenzene
Concen: 52.326 ug/l
RT: 12.982 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:156 Resp: 12471

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 230.4 | 111.3 | 333.8 |
| 158 | 98.6 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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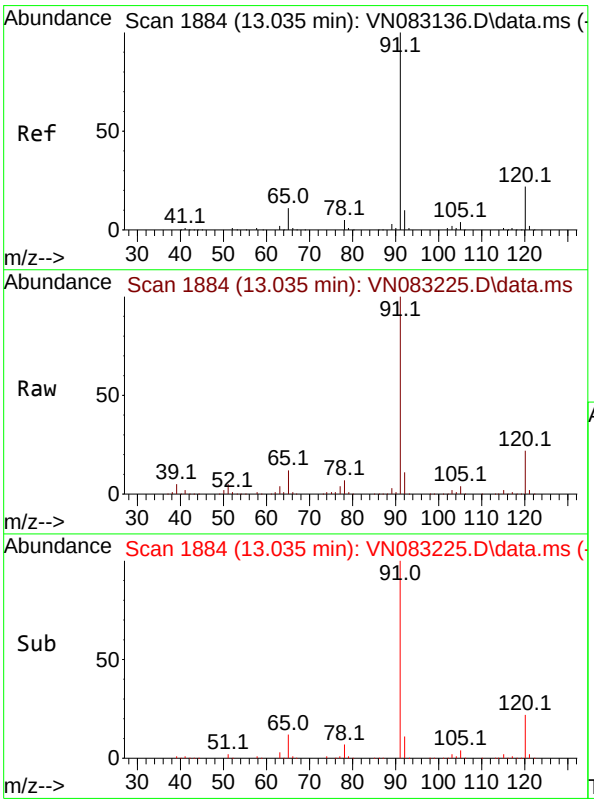
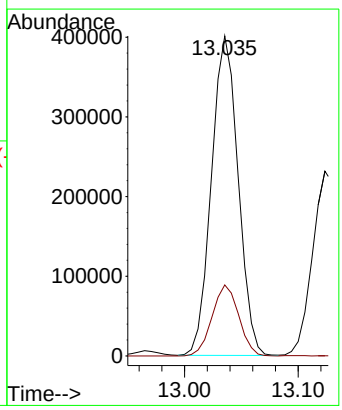
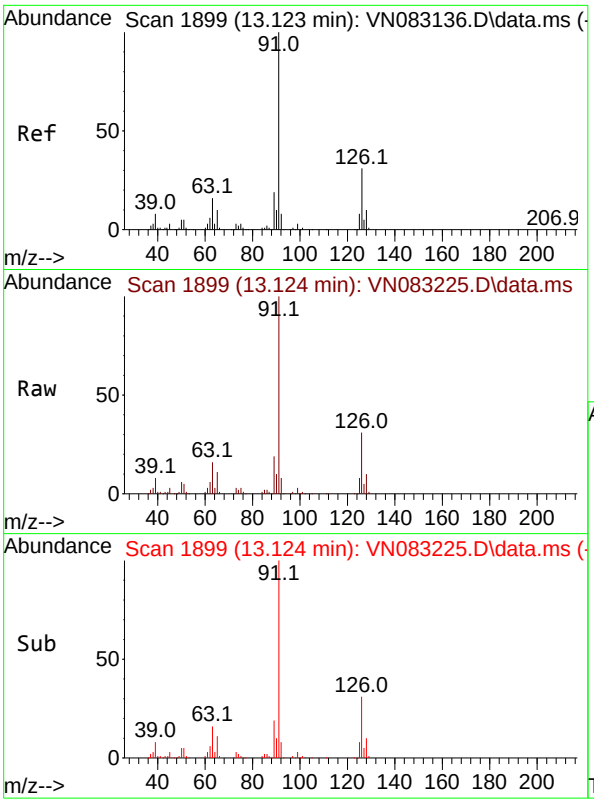



#78
n-propylbenzene
Concen: 52.997 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 91 Resp: 654772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.2 | 10.9 | 32.9 |






#79
2-Chlorotoluene
Concen: 51.627 ug/l
RT: 13.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 91 Resp: 40438

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.9 | 16.2 | 48.6 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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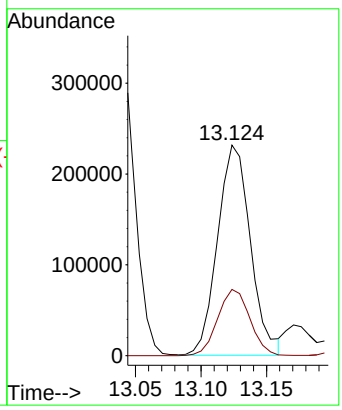
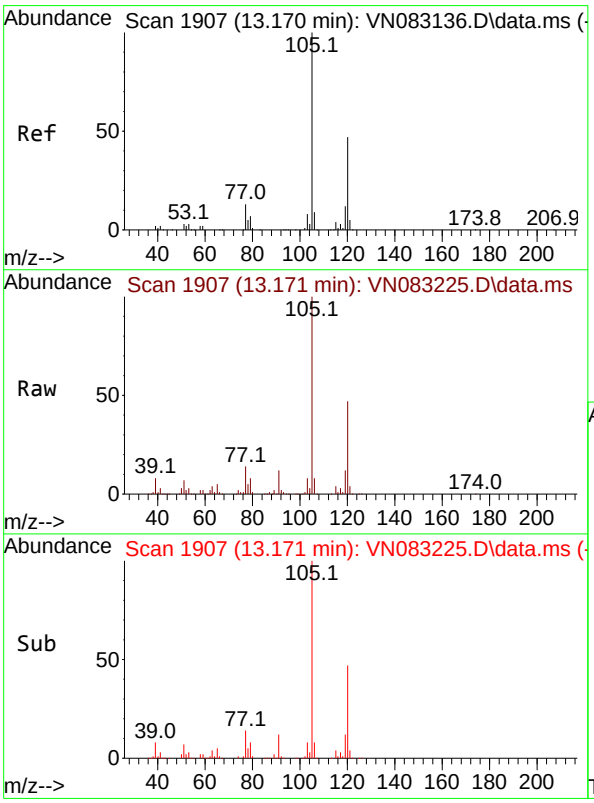
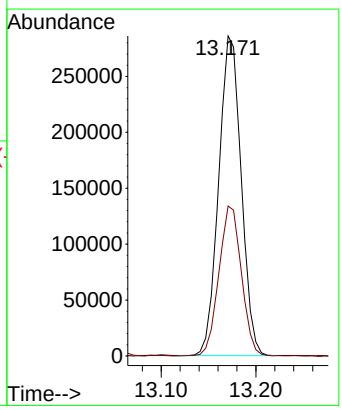


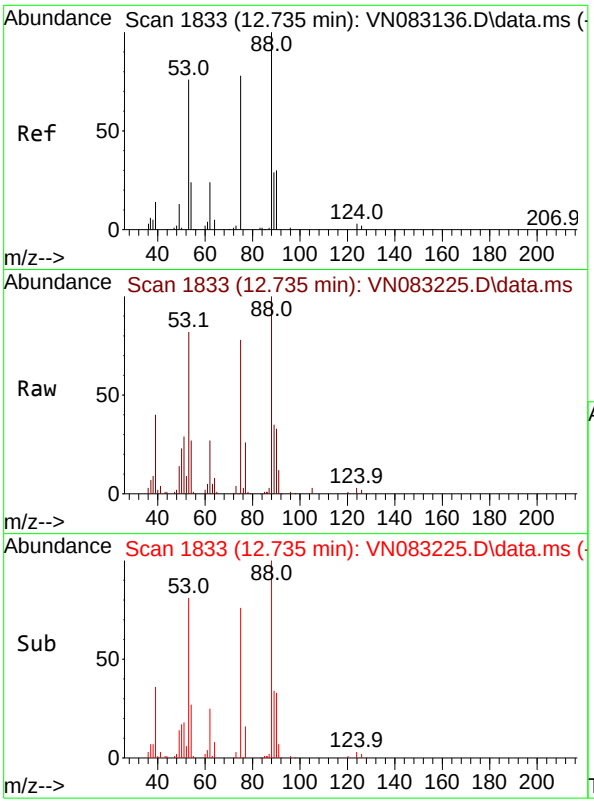




#80
1,3,5-Trimethylbenzene
Concen: 52.517 ug/l
RT: 13.171 min Scan# 1907
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:105 Resp: 471752

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.1 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 46.546 ug/l
RT: 12.735 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 75 Resp: 6024

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 100.6 | 88.4 | 132.6 |
| 89 | 44.9 | 36.3 | 54.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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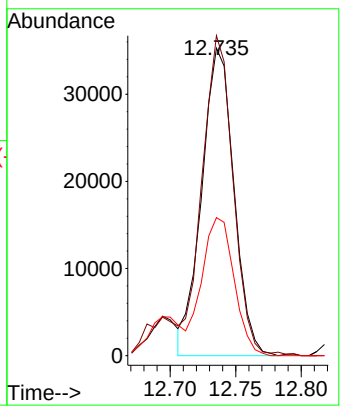
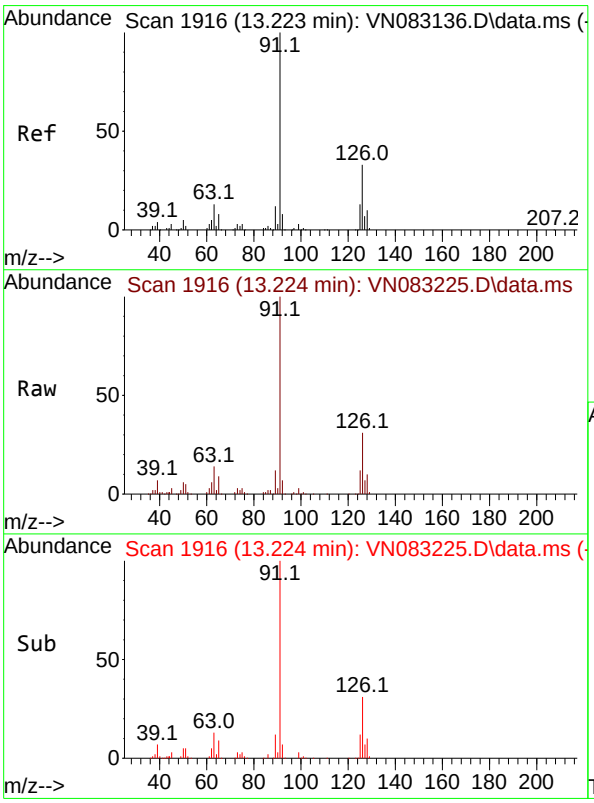
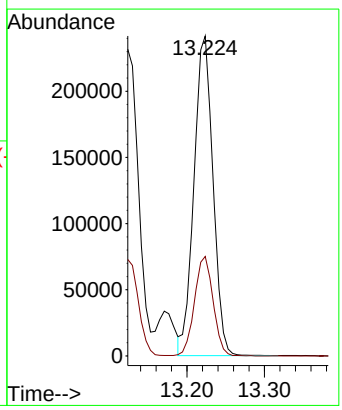


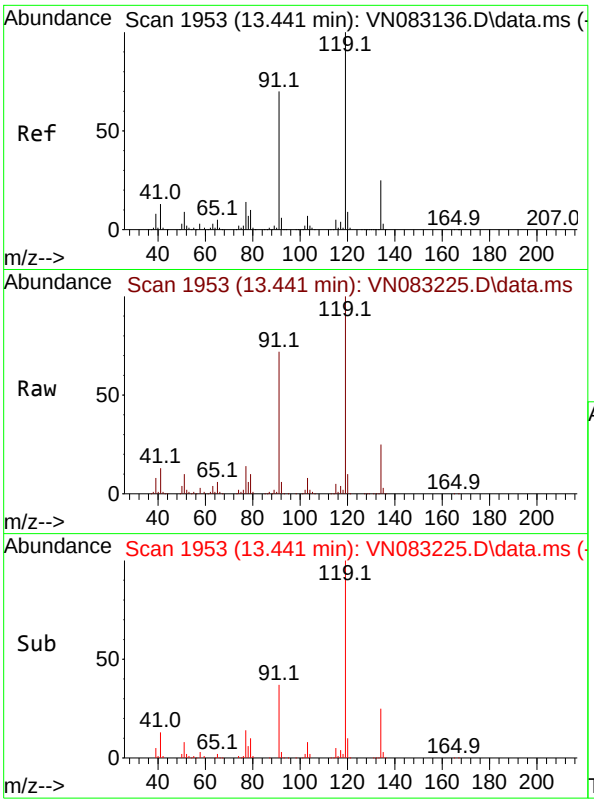




#82
4-Chlorotoluene
Concen: 52.295 ug/l
RT: 13.224 min Scan# 1916
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 91 Resp: 410875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.6 | 16.2 | 48.6 |

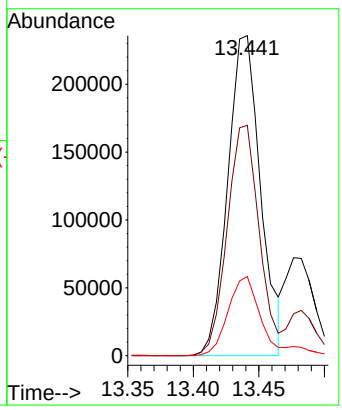





#83
tert-Butylbenzene
Concen: 51.631 ug/l
RT: 13.441 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:119 Resp: 41072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.4 | 35.0 | 105.1 |
| 134 | 25.8 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
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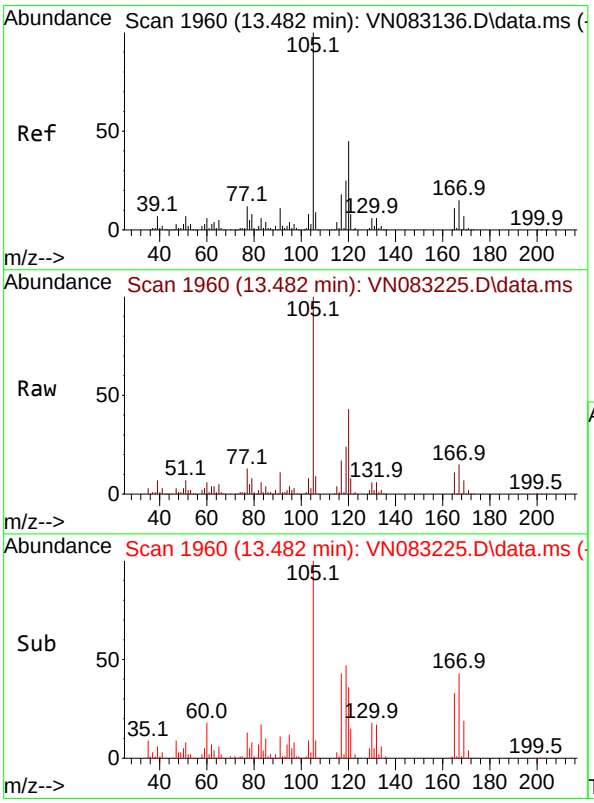
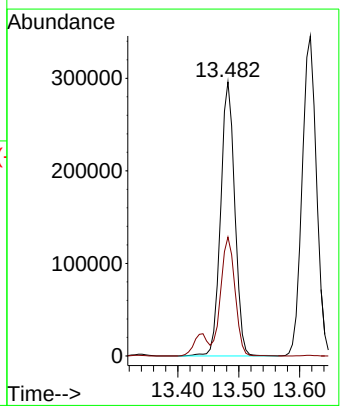
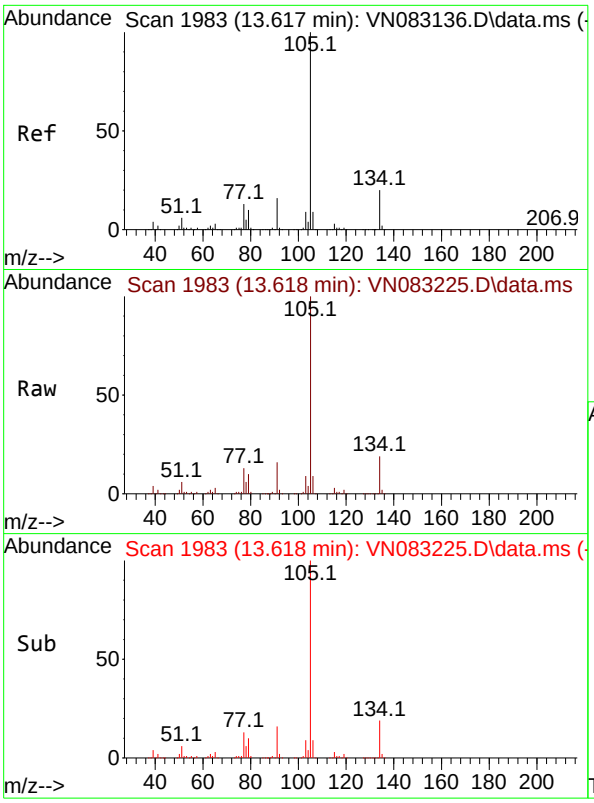



#84
1,2,4-Trimethylbenzene
Concen: 52.727 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:105 Resp: 477317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.4 | 21.9 | 65.8 |






#85
sec-Butylbenzene
Concen: 52.249 ug/l
RT: 13.618 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:105 Resp: 56714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.6 | 9.8 | 29.3 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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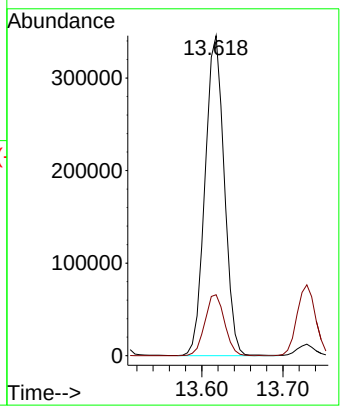
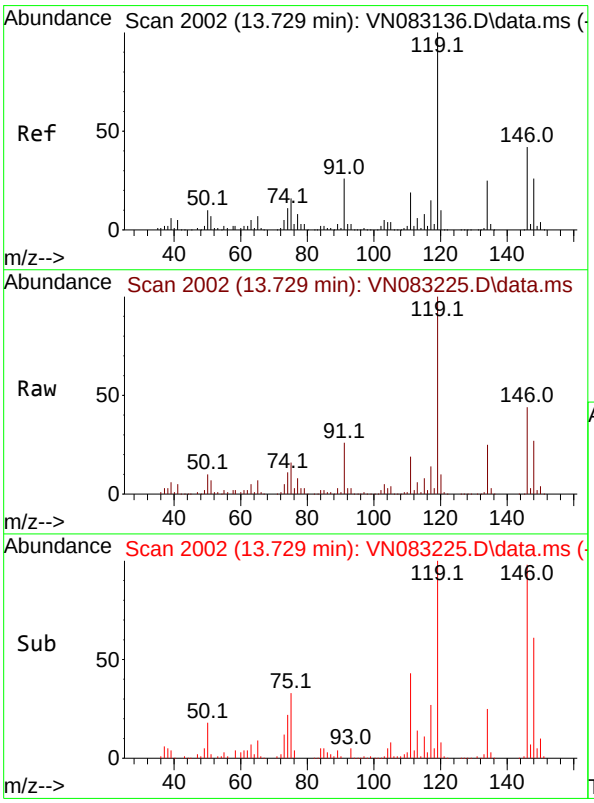
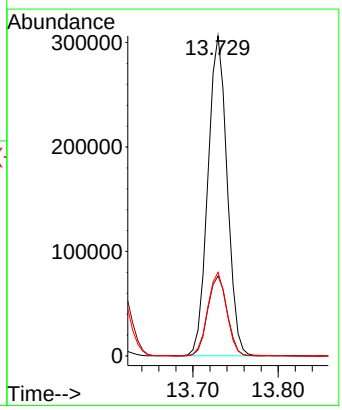


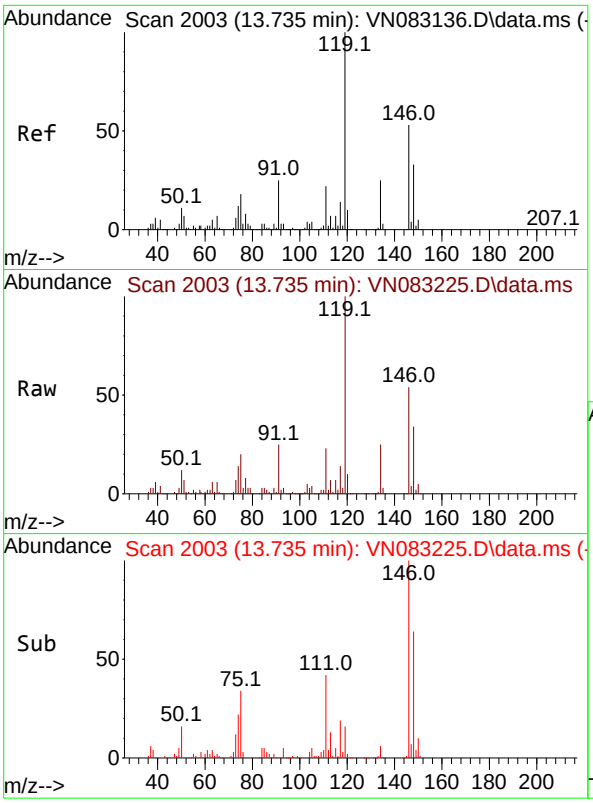




#86
p-Isopropyltoluene
Concen: 53.556 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:119 Resp: 479994

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.2 | 13.0 | 39.0 |
| 91 | 25.8 | 12.3 | 36.9 |

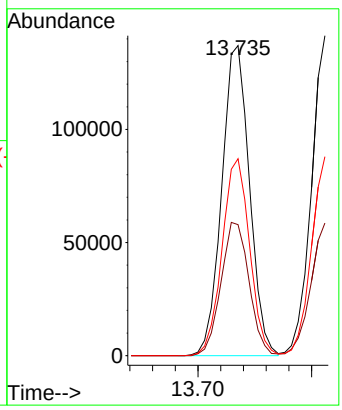





#87
1,3-Dichlorobenzene
Concen: 51.823 ug/l
RT: 13.735 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:146 Resp: 23242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.6 | 20.6 | 61.9 |
| 148 | 63.1 | 31.8 | 95.3 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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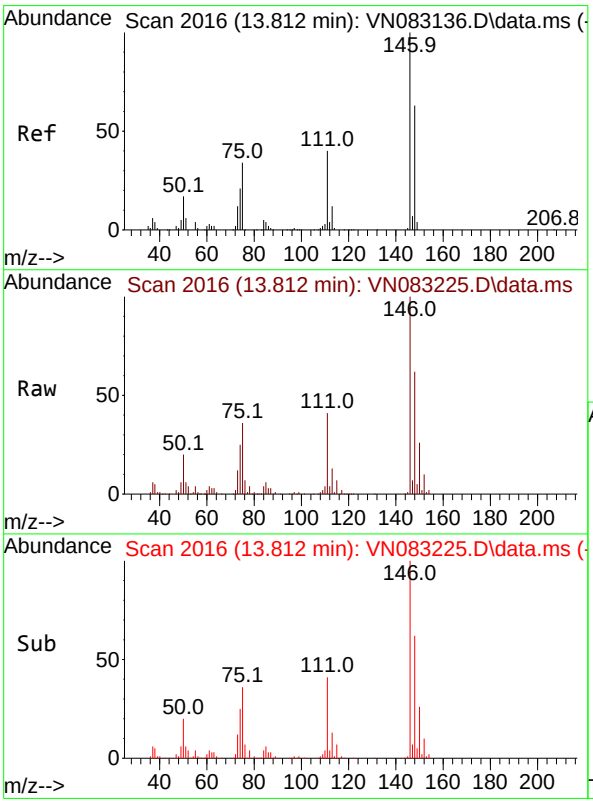
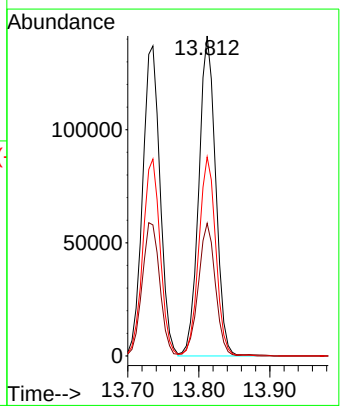
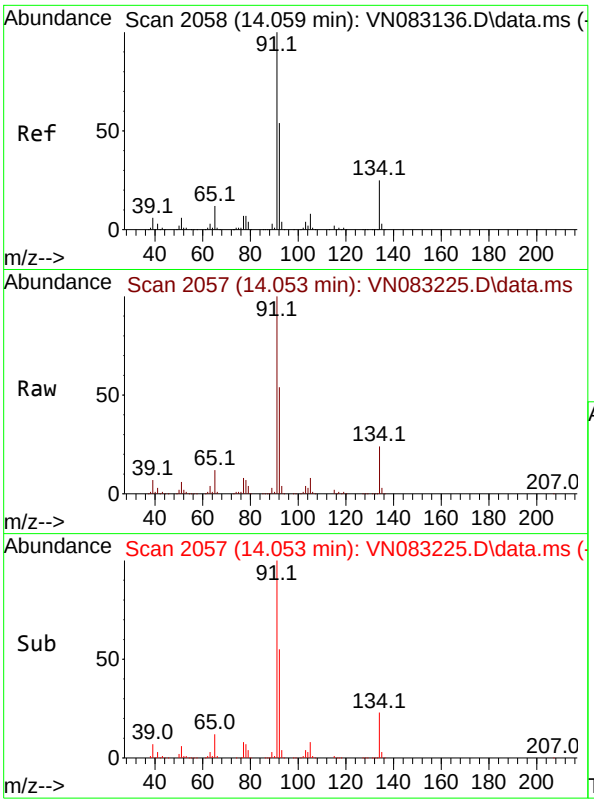



#88
1,4-Dichlorobenzene
Concen: 51.781 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:146 Resp: 234120

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.4 | 20.1 | 60.3 |
| 148 | 62.4 | 32.2 | 96.6 |






#89
n-Butylbenzene
Concen: 55.556 ug/l
RT: 14.053 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 91 Resp: 43144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.5 | 26.1 | 78.3 |
| 134 | 24.2 | 12.1 | 36.3 |

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VSTDCCC050

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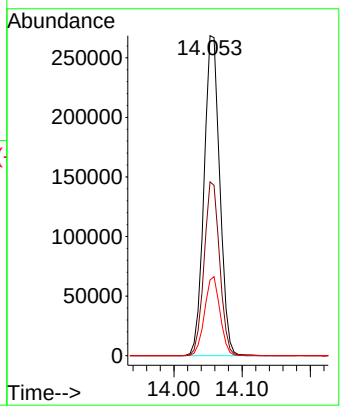
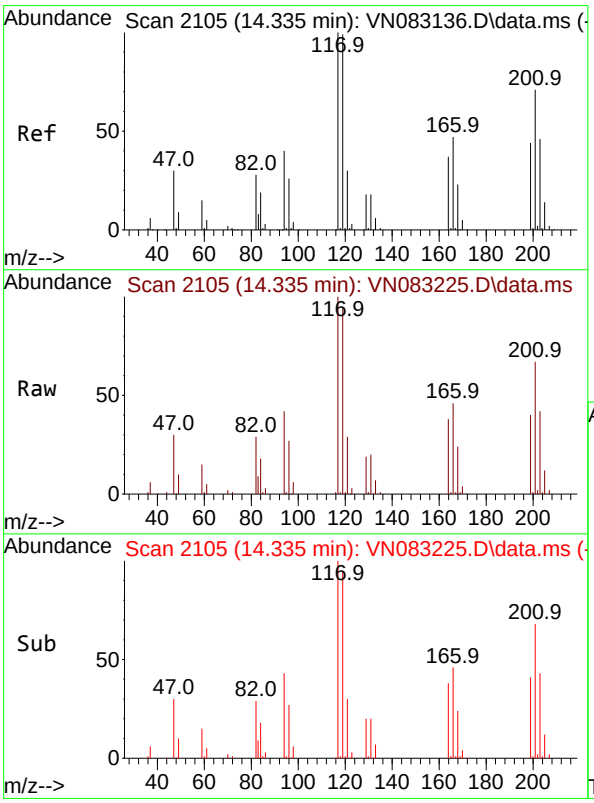
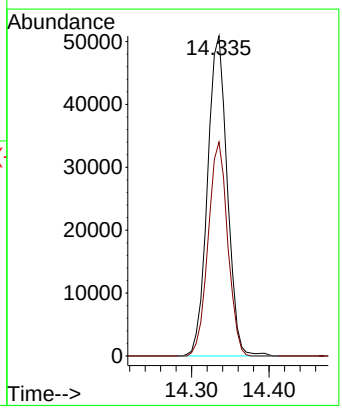


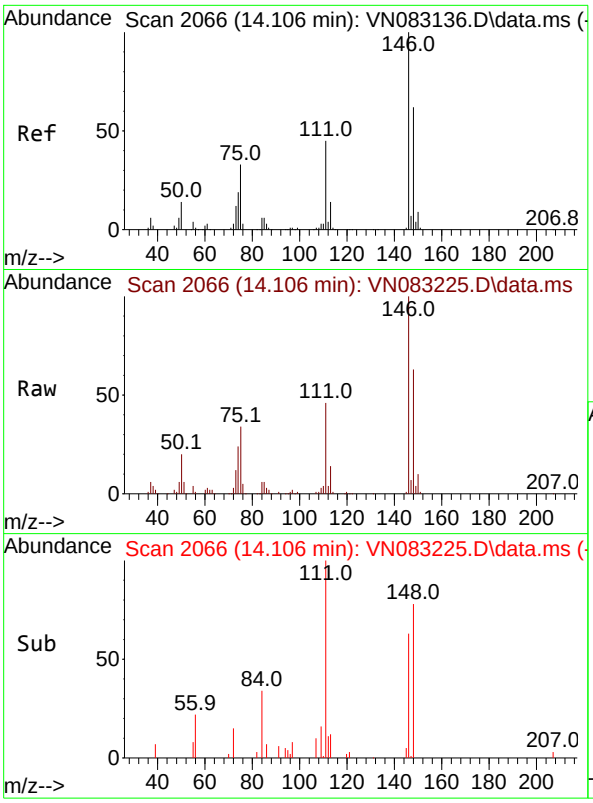




#90
Hexachloroethane
Concen: 51.985 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:117 Resp: 90014

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 66.0 | 35.8 | 107.3 |

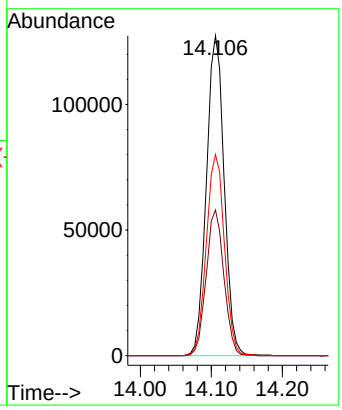





#91
1,2-Dichlorobenzene
Concen: 51.015 ug/l
RT: 14.106 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:146 Resp: 22140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.5 | 21.4 | 64.2 |
| 148 | 64.1 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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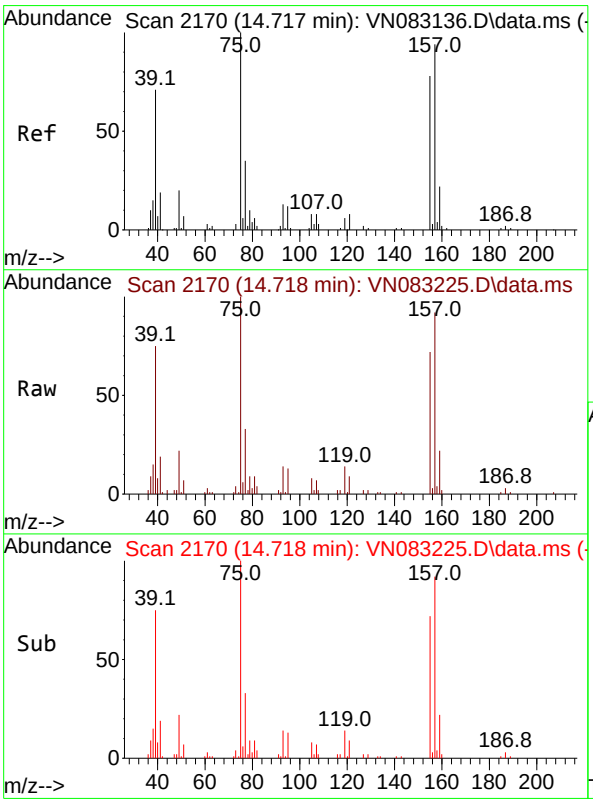
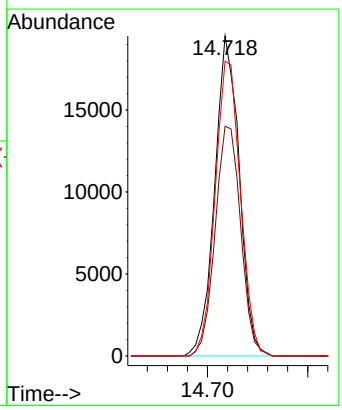
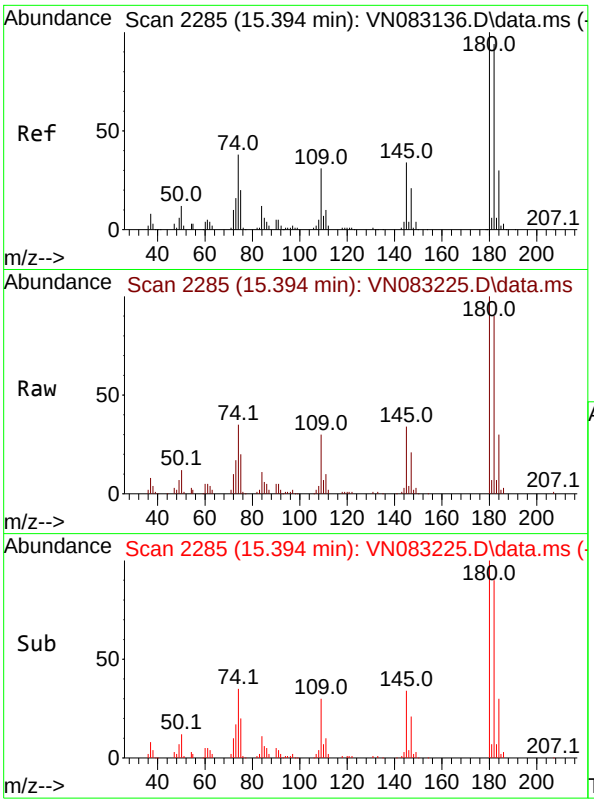



#92
1,2-Dibromo-3-Chloropropane
Concen: 45.011 ug/l
RT: 14.718 min Scan# 2170
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion: 75 Resp: 33146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 74.7 | 36.6 | 109.8 |
| 157 | 95.0 | 46.9 | 140.6 |






#93
1,2,4-Trichlorobenzene
Concen: 52.346 ug/l
RT: 15.394 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

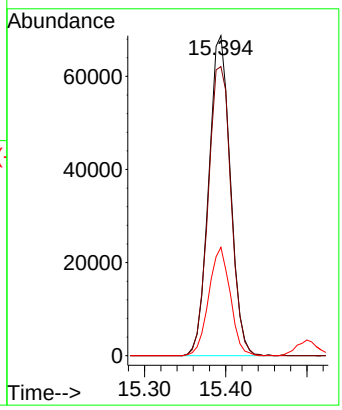
Tgt Ion:180 Resp: 12727

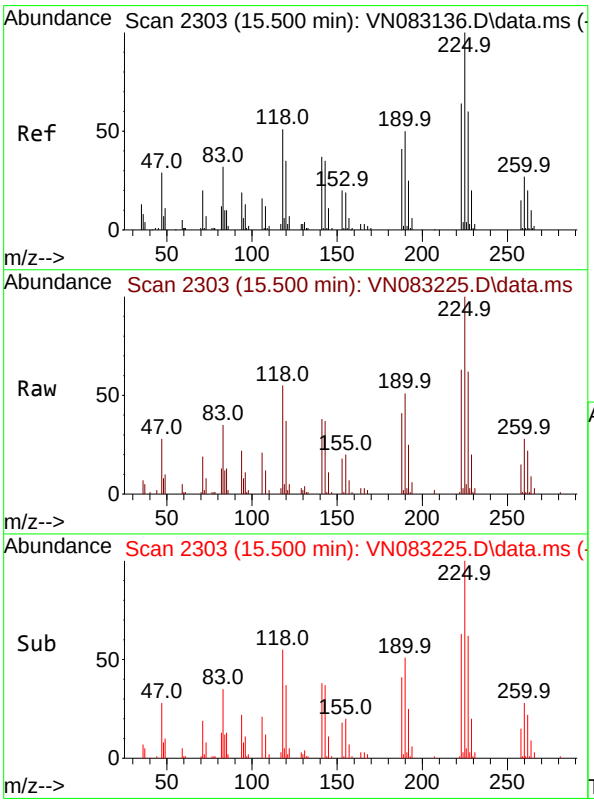
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.2 | 47.3 | 141.8 |
| 145 | 33.6 | 15.7 | 47.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

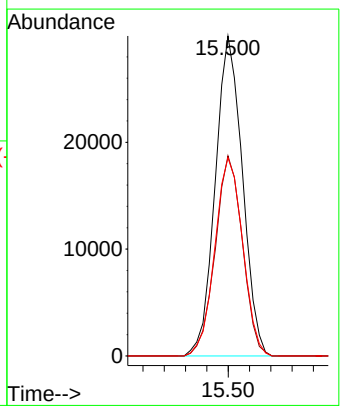


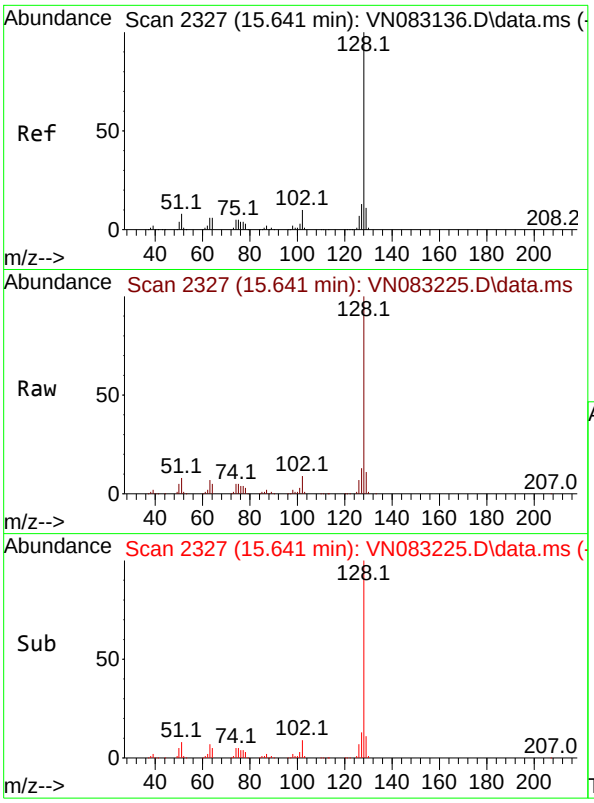




#94
Hexachlorobutadiene
Concen: 49.009 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:225 Resp: 52994

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.6 | 31.9 | 95.7 |
| 227 | 63.5 | 32.5 | 97.5 |

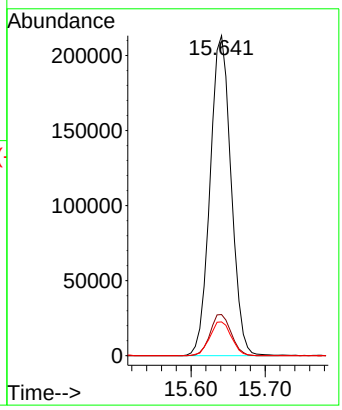





#95
Naphthalene
Concen: 48.783 ug/l
RT: 15.641 min Scan# 2
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:128 Resp: 42014

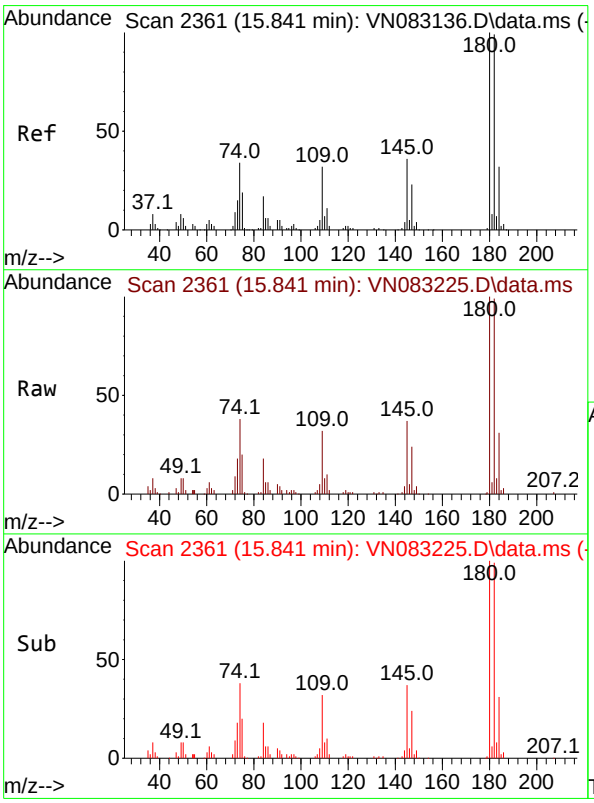
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.9 | 10.6 | 16.0 |
| 129 | 10.9 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

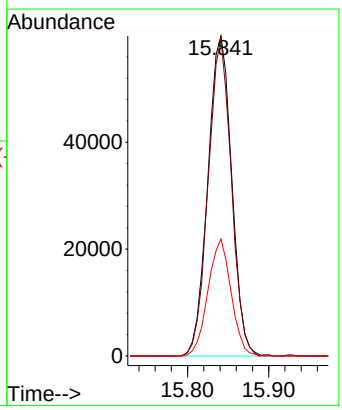
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024




#96
1,2,3-Trichlorobenzene
Concen: 50.813 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. 0.000 min
Lab File: VN083225.D
Acq: 12 Aug 2024 09:48

Tgt Ion:180 Resp: 122246

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.0 | 48.9 | 146.8 |
| 145 | 35.3 | 16.8 | 50.4 |



Sample Results: **VN083225.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083225.D
Acq On : 12 Aug 2024 09:48
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 13 04:10:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 1.000 | 1.000 | 0.0 | 88 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.567 | 0.591 | -4.2 | 91 | 0.00 |
| 3 | P | Chloromethane | 0.581 | 0.583 | -0.3 | 86 | 0.00 |
| 4 | C | Vinyl Chloride | 0.592 | 0.608 | -2.7# | 89 | 0.00 |
| 5 | T | Bromomethane | 0.368 | 0.385 | -4.6 | 95 | 0.00 |
| 6 | T | Chloroethane | 0.371 | 0.384 | -3.5 | 94 | 0.00 |
| 7 | T | Trichlorofluoromethane | 0.979 | 1.055 | -7.8 | 93 | 0.00 |
| 8 | T | Diethyl Ether | 0.364 | 0.365 | -0.3 | 87 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.539 | 0.582 | -8.0 | 93 | 0.00 |
| 10 | T | Methyl Iodide | 0.710 | 0.721 | -1.5 | 85 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.148 | 0.142 | 4.1 | 85 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 0.554 | 0.542 | 2.2# | 87 | 0.00 |
| 13 | T | Acrolein | 0.096 | 0.098 | -2.1 | 84 | 0.00 |
| 14 | T | Allyl chloride | 1.047 | 0.922 | 11.9 | 87 | 0.00 |
| 15 | T | Acrylonitrile | 0.304 | 0.292 | 3.9 | 84 | 0.00 |
| 16 | T | Acetone | 0.278 | 0.307 | -10.4 | 94 | 0.00 |
| 17 | T | Carbon Disulfide | 1.622 | 1.491 | 8.1 | 84 | 0.00 |
| 18 | T | Methyl Acetate | 0.830 | 0.823 | 0.8 | 93 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 2.001 | 2.059 | -2.9 | 89 | 0.00 |
| 20 | T | Methylene Chloride | 0.641 | 0.615 | 4.1 | 90 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.573 | 0.569 | 0.7 | 87 | -0.01 |
| 22 | T | Diisopropyl ether | 1.969 | 2.053 | -4.3 | 90 | 0.00 |
| 23 | T | Vinyl Acetate | 2.018 | 2.102 | -4.2 | 88 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.073 | 1.130 | -5.3 | 91 | 0.00 |
| 25 | T | 2-Butanone | 0.428 | 0.411 | 4.0 | 85 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.997 | 1.114 | -11.7 | 96 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.691 | 0.707 | -2.3 | 90 | 0.00 |
| 28 | T | Bromochloromethane | 0.439 | 0.455 | -3.6 | 91 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.276 | 0.261 | 5.4 | 82 | 0.00 |
| 30 | C | Chloroform | 1.115 | 1.206 | -8.2# | 93 | 0.00 |
| 31 | T | Cyclohexane | 1.055 | 0.991 | 6.1 | 88 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.055 | 1.119 | -6.1 | 91 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.712 | 0.796 | -11.8 | 94 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 87 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.312 | 0.343 | -9.9 | 90 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.472 | 0.496 | -5.1 | 91 | 0.00 |
| 37 | T | Ethyl Acetate | 0.529 | 0.496 | 6.2 | 87 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.532 | 0.586 | -10.2 | 94 | 0.00 |
| 39 | T | Methylcyclohexane | 0.580 | 0.609 | -5.0 | 89 | 0.00 |
| 40 | TM | Benzene | 1.406 | 1.496 | -6.4 | 90 | 0.00 |
| 41 | T | Methacrylonitrile | 0.301 | 0.290 | 3.7 | 89 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.512 | 0.557 | -8.8 | 94 | 0.00 |
| 43 | T | Isopropyl Acetate | 1.211 | 0.926 | 23.5 | 88 | 0.00 |
| 44 | TM | Trichloroethene | 0.335 | 0.356 | -6.3 | 90 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.334 | 0.360 | -7.8# | 91 | 0.00 |
| 46 | T | Dibromomethane | 0.239 | 0.260 | -8.8 | 91 | 0.00 |
| 47 | T | Bromodichloromethane | 0.537 | 0.580 | -8.0 | 94 | 0.00 |
| 48 | T | Methyl methacrylate | 0.437 | 0.432 | 1.1 | 89 | 0.00 |

Sample Results: **VN083225.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083225.D
Acq On : 12 Aug 2024 09:48
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 13 04:10:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 0.008 | 0.007 | 12.5 | 76 | 0.00 |
| 50 | S | Toluene-d8 | 1.164 | 1.296 | -11.3 | 90 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.500 | 0.507 | -1.4 | 86 | 0.00 |
| 52 | CM | Toluene | 0.889 | 0.963 | -8.3# | 91 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.551 | 0.609 | -10.5 | 89 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.586 | 0.636 | -8.5 | 92 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.318 | 0.347 | -9.1 | 91 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.600 | 0.625 | -4.2 | 88 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.568 | 0.614 | -8.1 | 91 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.254 | 0.263 | -3.5 | 88 | 0.00 |
| 59 | T | 2-Hexanone | 0.387 | 0.389 | -0.5 | 86 | 0.00 |
| 60 | T | Dibromochloromethane | 0.385 | 0.425 | -10.4 | 90 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.335 | 0.356 | -6.3 | 90 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.454 | 0.507 | -11.7 | 90 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 88 | 0.00 |
| 64 | T | Tetrachloroethene | 0.331 | 0.353 | -6.6 | 91 | 0.00 |
| 65 | PM | Chlorobenzene | 1.105 | 1.171 | -6.0 | 90 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.390 | 0.419 | -7.4 | 92 | 0.00 |
| 67 | C | Ethyl Benzene | 2.027 | 2.160 | -6.6# | 92 | 0.00 |
| 68 | T | m/p-Xylenes | 0.759 | 0.814 | -7.2 | 91 | 0.00 |
| 69 | T | o-Xylene | 0.749 | 0.784 | -4.7 | 89 | 0.00 |
| 70 | T | Styrene | 1.258 | 1.359 | -8.0 | 90 | 0.00 |
| 71 | P | Bromoform | 0.295 | 0.318 | -7.8 | 88 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 89 | 0.00 |
| 73 | T | Isopropylbenzene | 4.182 | 4.339 | -3.8 | 91 | 0.00 |
| 74 | T | N-amyl acetate | 2.046 | 1.903 | 7.0 | 85 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.183 | 1.154 | 2.5 | 88 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.097 | 1.058 | 3.6 | 89 | 0.00 |
| 77 | T | Bromobenzene | 0.929 | 0.972 | -4.6 | 91 | 0.00 |
| 78 | T | n-propylbenzene | 4.816 | 5.104 | -6.0 | 92 | 0.00 |
| 79 | T | 2-Chlorotoluene | 3.053 | 3.152 | -3.2 | 92 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.501 | 3.678 | -5.1 | 92 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.504 | 0.470 | 6.7 | 85 | 0.00 |
| 82 | T | 4-Chlorotoluene | 3.062 | 3.203 | -4.6 | 92 | 0.00 |
| 83 | T | tert-Butylbenzene | 3.101 | 3.202 | -3.3 | 91 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.529 | 3.721 | -5.4 | 91 | 0.00 |
| 85 | T | sec-Butylbenzene | 4.231 | 4.421 | -4.5 | 90 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.493 | 3.742 | -7.1 | 91 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.748 | 1.812 | -3.7 | 91 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.762 | 1.825 | -3.6 | 92 | 0.00 |
| 89 | T | n-Butylbenzene | 3.027 | 3.363 | -11.1 | 94 | 0.00 |
| 90 | T | Hexachloroethane | 0.675 | 0.702 | -4.0 | 91 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.692 | 1.726 | -2.0 | 91 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.287 | 0.258 | 10.1 | 82 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.948 | 0.992 | -4.6 | 90 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.421 | 0.413 | 1.9 | 90 | 0.00 |
| 95 | T | Naphthalene | 3.357 | 3.275 | 2.4 | 84 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083225.D
Acq On : 12 Aug 2024 09:48
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 13 04:10:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 0.938 | 0.953 | -1.6 | 89 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VN083225.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083225.D
Acq On : 12 Aug 2024 09:48
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 13 04:10:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 50.000 | 50.000 | 0.0 | 88 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 52.102 | -4.2 | 91 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 50.208 | -0.4 | 86 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 51.324 | -2.6# | 89 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 52.379 | -4.8 | 95 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 51.759 | -3.5 | 94 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 53.897 | -7.8 | 93 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 50.087 | -0.2 | 87 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 53.981 | -8.0 | 93 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 50.825 | -1.7 | 85 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 240.055 | 4.0 | 85 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 48.898 | 2.2# | 87 | 0.00 |
| 13 | T | Acrolein | 250.000 | 252.950 | -1.2 | 84 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 44.007 | 12.0 | 87 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 239.993 | 4.0 | 84 | 0.00 |
| 16 | T | Acetone | 250.000 | 275.268 | -10.1 | 94 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 45.969 | 8.1 | 84 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 49.583 | 0.8 | 93 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 51.465 | -2.9 | 89 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 47.976 | 4.0 | 90 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 49.699 | 0.6 | 87 | -0.01 |
| 22 | T | Diisopropyl ether | 50.000 | 52.134 | -4.3 | 90 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 260.362 | -4.1 | 88 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 52.633 | -5.3 | 91 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 240.537 | 3.8 | 85 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 55.911 | -11.8 | 96 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 51.108 | -2.2 | 90 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 51.908 | -3.8 | 91 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 236.354 | 5.5 | 82 | 0.00 |
| 30 | C | Chloroform | 50.000 | 54.100 | -8.2# | 93 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 46.981 | 6.0 | 88 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 53.003 | -6.0 | 91 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 55.922 | -11.8 | 94 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 87 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 54.912 | -9.8 | 90 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 52.510 | -5.0 | 91 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 46.932 | 6.1 | 87 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 55.128 | -10.3 | 94 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 52.473 | -4.9 | 89 | 0.00 |
| 40 | TM | Benzene | 50.000 | 53.193 | -6.4 | 90 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 48.217 | 3.6 | 89 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 54.347 | -8.7 | 94 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 50.529 | -1.1 | 88 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 53.104 | -6.2 | 90 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 53.957 | -7.9# | 91 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 54.334 | -8.7 | 91 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 54.085 | -8.2 | 94 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 49.438 | 1.1 | 89 | 0.00 |

Sample Results: **VN083225.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083225.D
Acq On : 12 Aug 2024 09:48
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 13 04:10:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 1000.000 | 898.633 | 10.1 | 76 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 55.663 | -11.3 | 90 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 253.325 | -1.3 | 86 | 0.00 |
| 52 | CM | Toluene | 50.000 | 54.202 | -8.4# | 91 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 55.216 | -10.4 | 89 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 54.265 | -8.5 | 92 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 54.516 | -9.0 | 91 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 52.076 | -4.2 | 88 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 54.111 | -8.2 | 91 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 259.113 | -3.6 | 88 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 251.771 | -0.7 | 86 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 55.151 | -10.3 | 90 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 53.196 | -6.4 | 90 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 55.812 | -11.6 | 90 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 88 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 53.298 | -6.6 | 91 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 52.987 | -6.0 | 90 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 53.701 | -7.4 | 92 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 53.269 | -6.5# | 92 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 107.195 | -7.2 | 91 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 52.315 | -4.6 | 89 | 0.00 |
| 70 | T | Styrene | 50.000 | 54.007 | -8.0 | 90 | 0.00 |
| 71 | P | Bromoform | 50.000 | 53.942 | -7.9 | 88 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 89 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 51.874 | -3.7 | 91 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 46.518 | 7.0 | 85 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 48.762 | 2.5 | 88 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 48.197 | 3.6 | 89 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 52.326 | -4.7 | 91 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 52.997 | -6.0 | 92 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 51.627 | -3.3 | 92 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 52.517 | -5.0 | 92 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 46.546 | 6.9 | 85 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 52.295 | -4.6 | 92 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 51.631 | -3.3 | 91 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 52.727 | -5.5 | 91 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 52.249 | -4.5 | 90 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 53.556 | -7.1 | 91 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 51.823 | -3.6 | 91 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 51.781 | -3.6 | 92 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 55.556 | -11.1 | 94 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 51.985 | -4.0 | 91 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 51.015 | -2.0 | 91 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 45.011 | 10.0 | 82 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 52.346 | -4.7 | 90 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 49.009 | 2.0 | 90 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 48.783 | 2.4 | 84 | 0.00 |

Sample Results: **VN083225.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083225.D
Acq On : 12 Aug 2024 09:48
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 13 04:10:33 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 50.813 | -1.6 | 89 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VN083246.D**

Alliance TECHNICAL GROUP

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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG No.: P3429

Instrument ID: MSVOA_N Calibration Date/Time: 08/13/2024 10:18

Lab File ID: VN083246.D Init. Calib. Date(s): 08/07/2024 08/07/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:33 12:34

GC Column: RXI-624 ID: 0.25 (mm)

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.567 | 0.543 | | -4.23 | 20 |
| Chloromethane | 0.581 | 0.552 | 0.1 | -4.99 | 20 |
| Vinyl Chloride | 0.592 | 0.583 | | -1.52 | 20 |
| Bromomethane | 0.368 | 0.364 | | -1.09 | 20 |
| 1,1,2-Trichlorotrifluoroethane | 0.539 | 0.549 | | 1.86 | 20 |
| Acetone | 0.278 | 0.290 | | 4.32 | 20 |
| Carbon Disulfide | 1.622 | 1.379 | | -14.98 | 20 |
| Methyl tert-butyl Ether | 2.001 | 2.005 | | 0.2 | 20 |
| Methylene Chloride | 0.641 | 0.597 | | -6.86 | 20 |
| trans-1,2-Dichloroethene | 0.573 | 0.548 | | -4.36 | 20 |
| Cyclohexane | 1.055 | 0.949 | | -10.05 | 20 |
| 2-Butanone | 0.428 | 0.402 | | -6.07 | 20 |
| Carbon Tetrachloride | 0.532 | 0.541 | | 1.69 | 20 |
| cis-1,2-Dichloroethene | 0.691 | 0.688 | | -0.43 | 20 |
| Chloroform | 1.115 | 1.176 | | 5.47 | 20 |
| 1,1,1-Trichloroethane | 1.055 | 1.096 | | 3.89 | 20 |
| Methylcyclohexane | 0.580 | 0.556 | | -4.14 | 20 |
| Benzene | 1.406 | 1.424 | | 1.28 | 20 |
| 1,2-Dichloroethane | 0.512 | 0.536 | | 4.69 | 20 |
| Trichloroethene | 0.335 | 0.337 | | 0.6 | 20 |
| Bromodichloromethane | 0.537 | 0.549 | | 2.23 | 20 |
| Toluene | 0.889 | 0.901 | | 1.35 | 20 |
| 1,1,2-Trichloroethane | 0.318 | 0.334 | | 5.03 | 20 |
| Dibromochloromethane | 0.385 | 0.413 | | 7.27 | 20 |
| Tetrachloroethene | 0.331 | 0.327 | | -1.21 | 20 |
| Chlorobenzene | 1.105 | 1.113 | 0.3 | 0.72 | 20 |
| Ethyl Benzene | 2.027 | 2.048 | | 1.04 | 20 |
| m/p-Xylenes | 0.759 | 0.771 | | 1.58 | 20 |
| o-Xylene | 0.749 | 0.758 | | 1.2 | 20 |
| Isopropylbenzene | 4.182 | 4.089 | | -2.22 | 20 |
| 1,4-Dichlorobenzene | 1.762 | 1.696 | | -3.75 | 20 |
| 1,2-Dichlorobenzene | 1.692 | 1.632 | | -3.55 | 20 |
| 1,2-Dichloroethane-d4 | 0.712 | 0.742 | | 4.21 | 20 |
| Dibromofluoromethane | 0.312 | 0.317 | | 1.6 | 20 |
| Toluene-d8 | 1.164 | 1.180 | | 1.38 | 20 |
| 4-Bromofluorobenzene | 0.454 | 0.461 | | 1.54 | 20 |

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083246.D
Acq On : 13 Aug 2024 10:18
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 01:37:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 178090 | 50.000 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 308255 | 50.000 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 271780 | 50.000 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 132143 | 50.000 | ug/l | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.576 | 65 | 132203 | 52.153 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 104.300% | | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 97621 | 50.737 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.480% | | | | |
| 50) Toluene-d8 | 10.565 | 98 | 363620 | 50.663 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 101.320% | | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 142178 | 50.813 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 101.620% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 96664 | 47.864 | ug/l | | 99 |
| 3) Chloromethane | 2.359 | 50 | 98368 | 47.575 | ug/l | | 99 |
| 4) Vinyl Chloride | 2.518 | 62 | 103758 | 49.180 | ug/l | | 98 |
| 5) Bromomethane | 2.947 | 94 | 64825 | 49.518 | ug/l | | 99 |
| 6) Chloroethane | 3.112 | 64 | 68510 | 51.904 | ug/l | | 99 |
| 7) Trichlorofluoromethane | 3.494 | 101 | 181998 | 52.219 | ug/l | | 98 |
| 8) Diethyl Ether | 3.959 | 74 | 63431 | 48.909 | ug/l | | 85 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 97771 | 50.881 | ug/l | | 99 |
| 10) Methyl Iodide | 4.589 | 142 | 124402 | 49.216 | ug/l | | 94 |
| 11) Tert butyl alcohol | 5.518 | 59 | 128834 | 244.559 | ug/l | | 98 |
| 12) 1,1-Dichloroethene | 4.347 | 96 | 94170 | 47.701 | ug/l | | 84 |
| 13) Acrolein | 4.177 | 56 | 81114 | 236.250 | ug/l | | 99 |
| 14) Allyl chloride | 5.018 | 41 | 157318 | 42.169 | ug/l | | 93 |
| 15) Acrylonitrile | 5.718 | 53 | 254823 | 235.198 | ug/l | | 100 |
| 16) Acetone | 4.424 | 43 | 258238 | 260.346 | ug/l | | 99 |
| 17) Carbon Disulfide | 4.712 | 76 | 245576 | 42.513 | ug/l | | 100 |
| 18) Methyl Acetate | 5.024 | 43 | 142874 | 48.345 | ug/l | | 93 |
| 19) Methyl tert-butyl Ether | 5.794 | 73 | 357068 | 50.110 | ug/l | | 98 |
| 20) Methylene Chloride | 5.271 | 84 | 106255 | 46.546 | ug/l | | 87 |
| 21) trans-1,2-Dichloroethene | 5.788 | 96 | 97617 | 47.842 | ug/l | | 95 |
| 22) Diisopropyl ether | 6.671 | 45 | 354751 | 50.588 | ug/l | | 97 |
| 23) Vinyl Acetate | 6.600 | 43 | 1823271m | 253.661 | ug/l | | |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 197517 | 51.674 | ug/l | | 99 |
| 25) 2-Butanone | 7.482 | 43 | 357852 | 234.960 | ug/l | | 92 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 188000 | 52.961 | ug/l | | 98 |
| 27) cis-1,2-Dichloroethene | 7.482 | 96 | 122563 | 49.779 | ug/l | | 94 |
| 28) Bromochloromethane | 7.812 | 49 | 78972 | 50.555 | ug/l | | 87 |
| 29) Tetrahydrofuran | 7.835 | 42 | 227980 | 231.559 | ug/l | # | 87 |
| 30) Chloroform | 7.965 | 83 | 209389 | 52.728 | ug/l | | 100 |
| 31) Cyclohexane | 8.253 | 56 | 168933 | 44.970 | ug/l | | 98 |
| 32) 1,1,1-Trichloroethane | 8.165 | 97 | 195254 | 51.945 | ug/l | | 96 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 144432 | 49.623 | ug/l | | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 151069 | 46.356 | ug/l | # | 95 |
| 38) Carbon Tetrachloride | 8.365 | 117 | 166807 | 50.883 | ug/l | | 98 |
| 39) Methylcyclohexane | 9.600 | 83 | 171487 | 47.969 | ug/l | | 94 |
| 40) Benzene | 8.606 | 78 | 438884 | 50.617 | ug/l | | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083246.D
Acq On : 13 Aug 2024 10:18
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 01:37:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 85938 | 46.379 | ug/l | | 96 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 165275 | 52.326 | ug/l | | 98 |
| 43) Isopropyl Acetate | 8.688 | 43 | 272852 | 48.153 | ug/l | # | 95 |
| 44) Trichloroethene | 9.353 | 130 | 103946 | 50.366 | ug/l | | 92 |
| 45) 1,2-Dichloropropane | 9.618 | 63 | 106139 | 51.570 | ug/l | | 98 |
| 46) Dibromomethane | 9.712 | 93 | 77183 | 52.392 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 169381 | 51.206 | ug/l | | 99 |
| 48) Methyl methacrylate | 9.676 | 41 | 127076 | 47.166 | ug/l | | 92 |
| 49) 1,4-Dioxane | 9.694 | 88 | 42495 | 874.255 | ug/l | | 98 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 758114 | 246.005 | ug/l | | 94 |
| 52) Toluene | 10.629 | 92 | 277827 | 50.713 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 178945 | 52.665 | ug/l | | 98 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 184717 | 51.111 | ug/l | | 92 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 102947 | 52.435 | ug/l | | 96 |
| 56) Ethyl methacrylate | 10.870 | 69 | 183747 | 49.645 | ug/l | | 89 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 184479 | 52.717 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 405122 | 258.946 | ug/l | | 95 |
| 59) 2-Hexanone | 11.194 | 43 | 568842 | 238.595 | ug/l | | 93 |
| 60) Dibromochloromethane | 11.359 | 129 | 127283 | 53.622 | ug/l | | 97 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 105890 | 51.342 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.106 | 164 | 89002 | 49.447 | ug/l | | 96 |
| 65) Chlorobenzene | 11.894 | 112 | 302624 | 50.387 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 107111 | 50.567 | ug/l | | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 556470 | 50.506 | ug/l | | 100 |
| 68) m/p-Xylenes | 12.070 | 106 | 418879 | 101.492 | ug/l | | 98 |
| 69) o-Xylene | 12.400 | 106 | 206065 | 50.624 | ug/l | | 99 |
| 70) Styrene | 12.412 | 104 | 348418 | 50.963 | ug/l | | 98 |
| 71) Bromoform | 12.576 | 173 | 83212 | 51.856 | ug/l | # | 98 |
| 73) Isopropylbenzene | 12.694 | 105 | 540283 | 48.882 | ug/l | | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 238687 | 44.149 | ug/l | | 94 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 149722 | 47.894 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 133276m | 45.954 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 121587 | 49.521 | ug/l | | 98 |
| 78) n-propylbenzene | 13.035 | 91 | 630102 | 49.509 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 391819 | 48.559 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 454104 | 49.074 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 57698 | 43.275 | ug/l | | 99 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 395134 | 48.820 | ug/l | | 97 |
| 83) tert-Butylbenzene | 13.435 | 119 | 395662 | 48.282 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 457979 | 49.111 | ug/l | | 99 |
| 85) sec-Butylbenzene | 13.617 | 105 | 550323 | 49.216 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 459639 | 49.784 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 221346 | 47.911 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 13.811 | 146 | 224098 | 48.114 | ug/l | | 98 |
| 89) n-Butylbenzene | 14.053 | 91 | 395753 | 49.469 | ug/l | | 97 |
| 90) Hexachloroethane | 14.335 | 117 | 86978 | 48.762 | ug/l | | 93 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 215635 | 48.233 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 33331 | 43.939 | ug/l | | 99 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 121044 | 48.328 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 48967 | 43.961 | ug/l | | 97 |
| 95) Naphthalene | 15.641 | 128 | 410232 | 46.239 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 118663 | 47.881 | ug/l | | 96 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083246.D
Acq On : 13 Aug 2024 10:18
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 01:37:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

Sample Results: **VN083246.D**

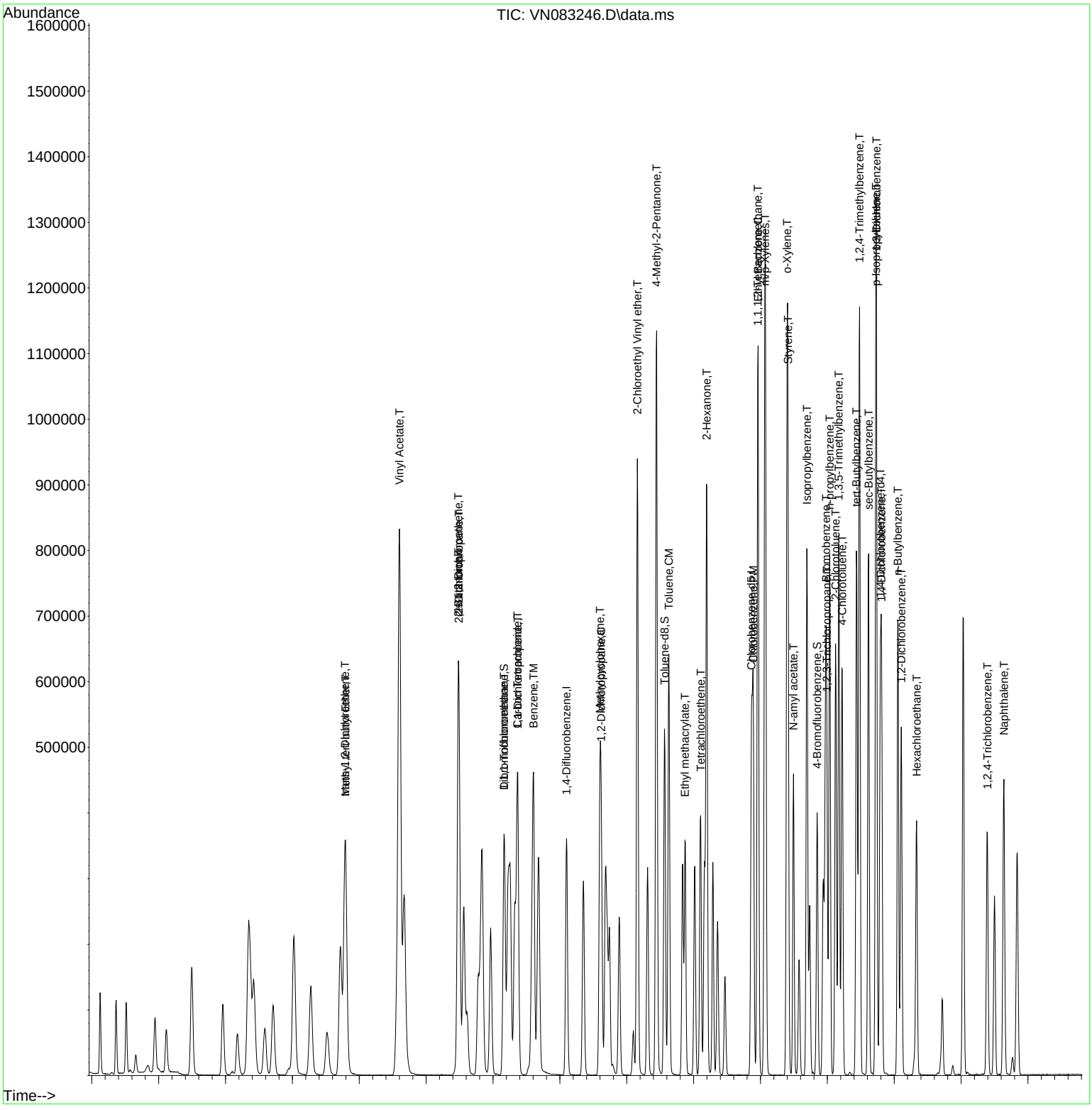
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083246.D
Acq On : 13 Aug 2024 10:18
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

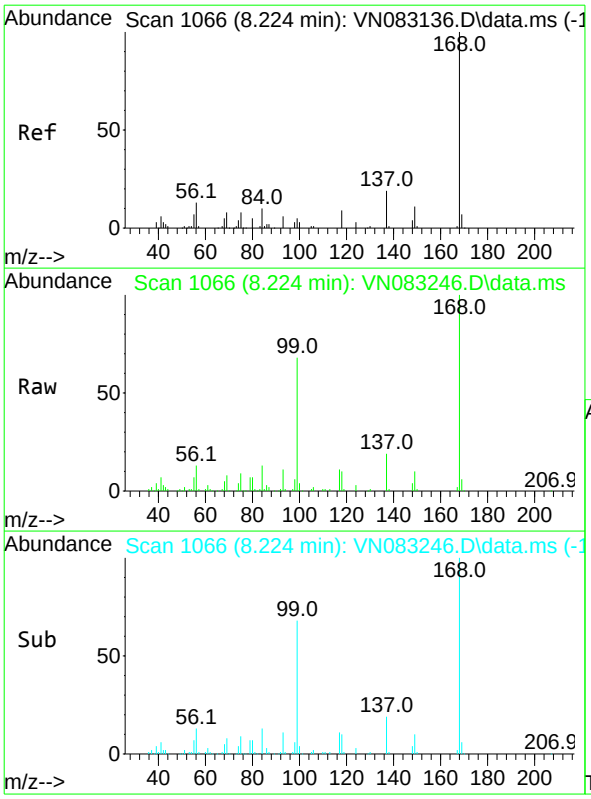
Quant Time: Aug 14 01:37:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024






#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

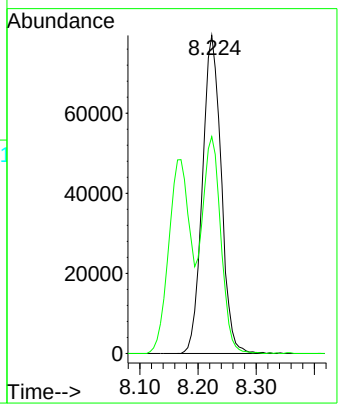
Tgt Ion:168 Resp: 178090

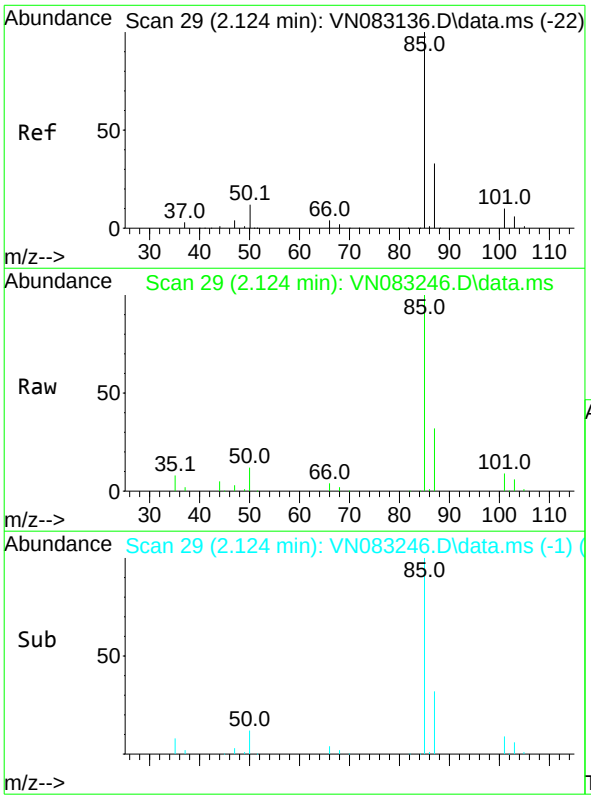
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 68.0 | 48.2 | 72.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

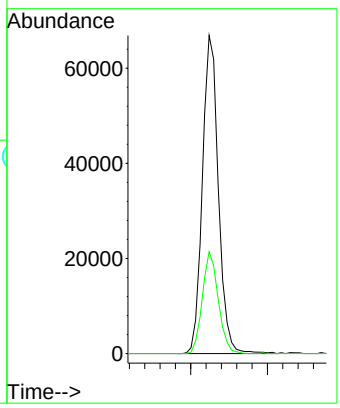


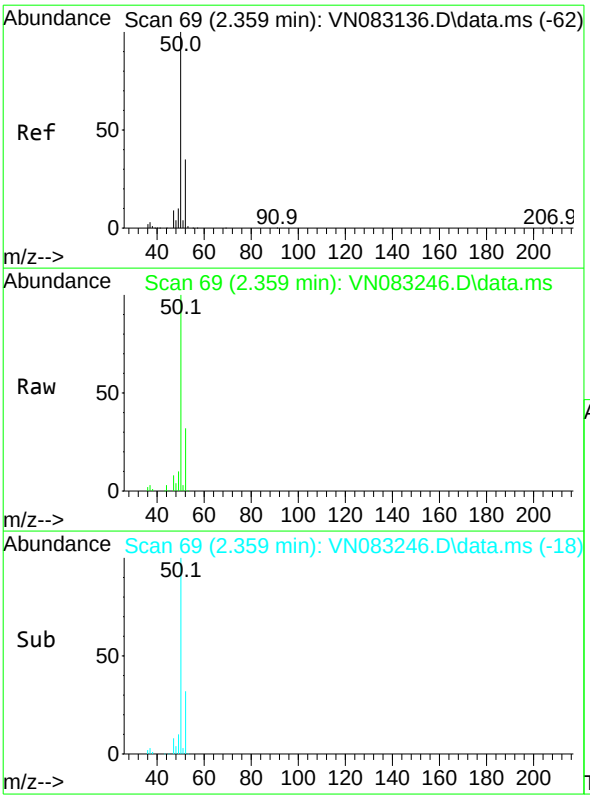




#2
Dichlorodifluoromethane
Concen: 47.864 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 85 Resp: 96664

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.0 | 15.7 | 47.0 |

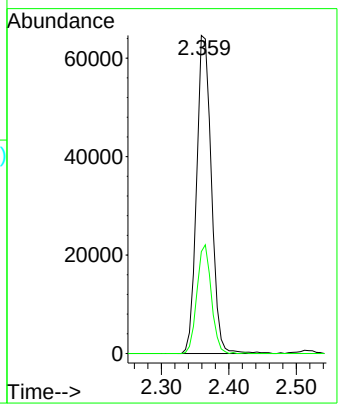





#3
Chloromethane
Concen: 47.575 ug/l
RT: 2.359 min Scan# 69
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 50 Resp: 98368

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.0 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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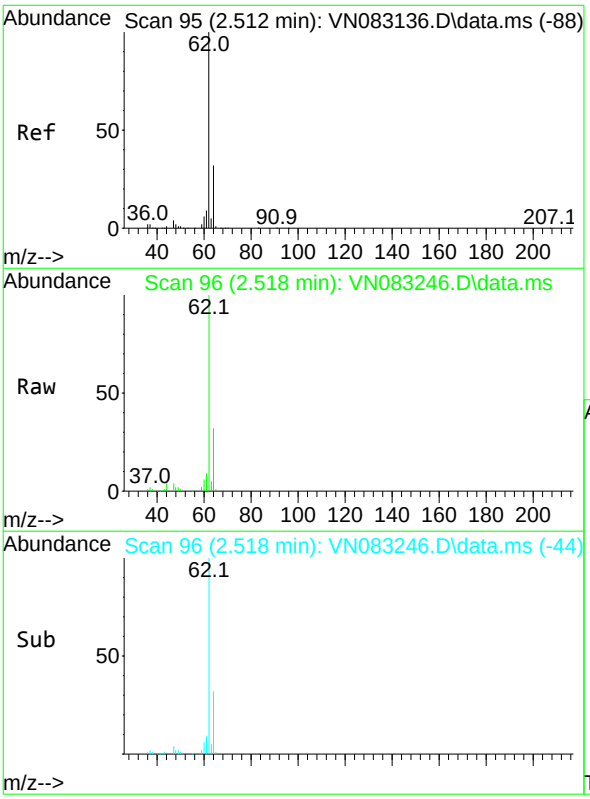
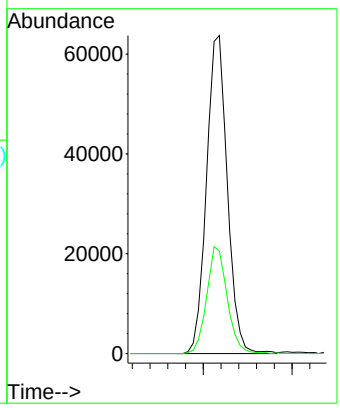
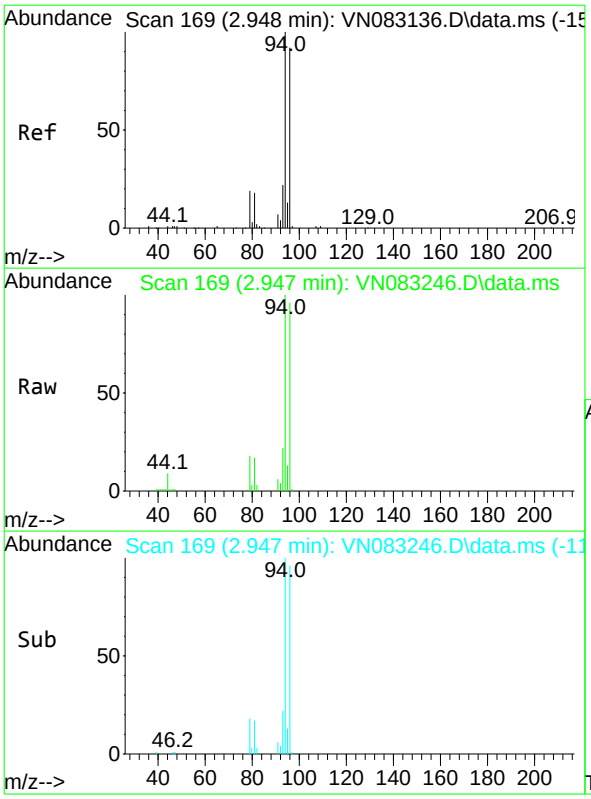



#4
Vinyl Chloride
Concen: 49.180 ug/l
RT: 2.518 min Scan# 96
Delta R.T. 0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 62 Resp: 103758

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.3 | 25.0 | 37.6 |

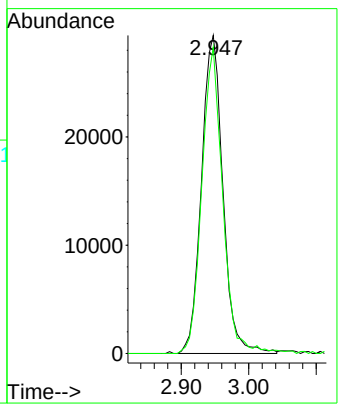





#5
Bromomethane
Concen: 49.518 ug/l
RT: 2.947 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 94 Resp: 64825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 96.3 | 78.0 | 117.0 |




**Instrument :**
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VSTDCCC050

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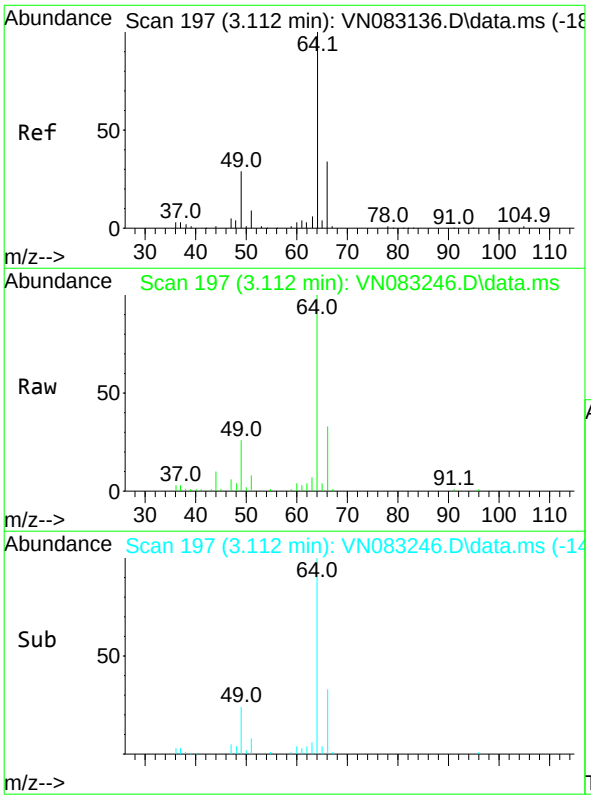
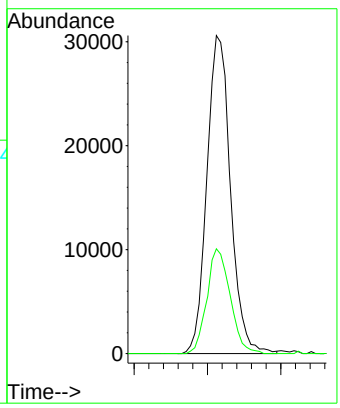
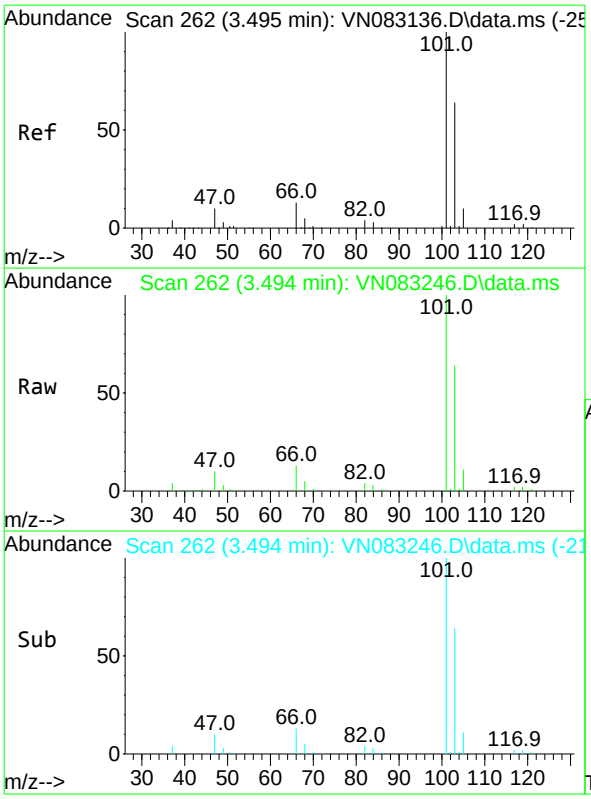



#6
Chloroethane
Concen: 51.904 ug/l
RT: 3.112 min Scan# 197
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 64 Resp: 68510

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.9 | 26.6 | 40.0 |

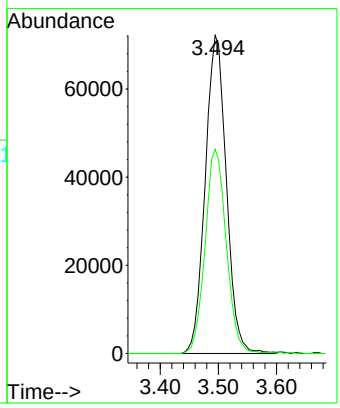





#7
Trichlorofluoromethane
Concen: 52.219 ug/l
RT: 3.494 min Scan# 26
Delta R.T. -0.001 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:101 Resp: 181998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.2 | 52.7 | 79.1 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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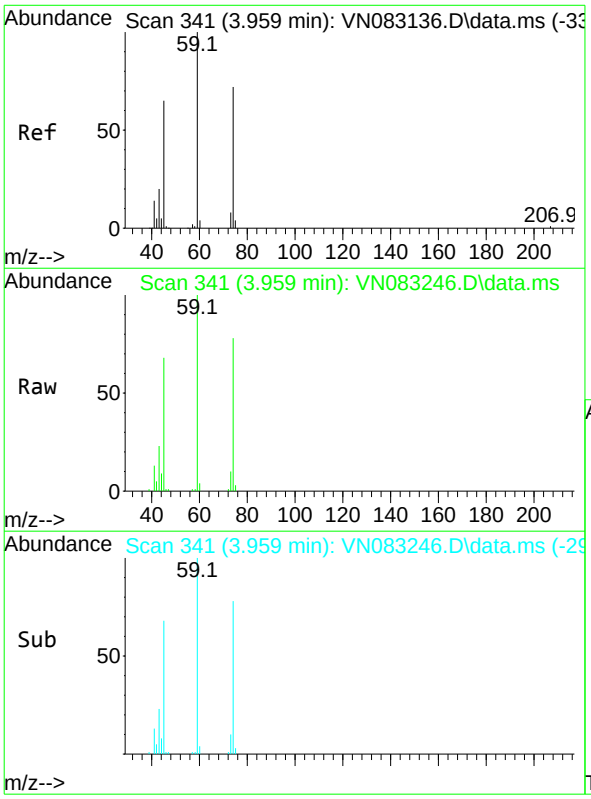
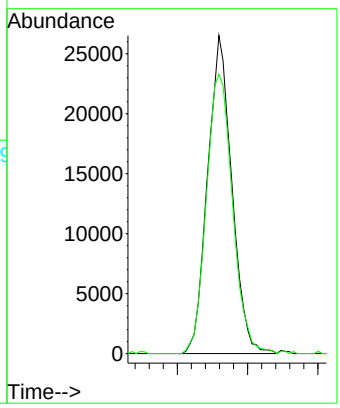
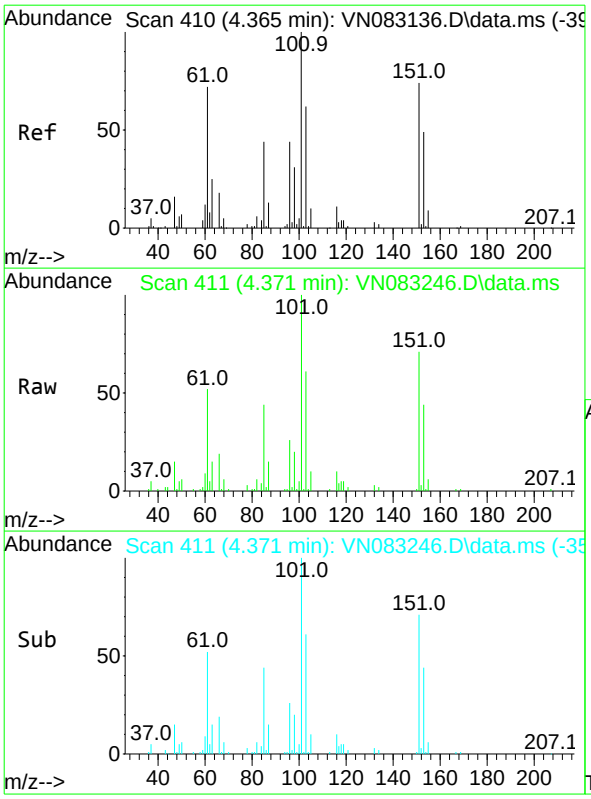



#8
Diethyl Ether
Concen: 48.909 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 74 Resp: 63431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 95.0 | 55.5 | 166.3 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 50.881 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

Tgt Ion:101 Resp: 97771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.9 | 38.3 | 57.5 |
| 151 | 75.3 | 59.3 | 88.9 |

**Manual Integrations**
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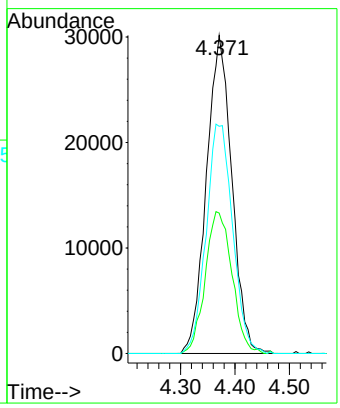
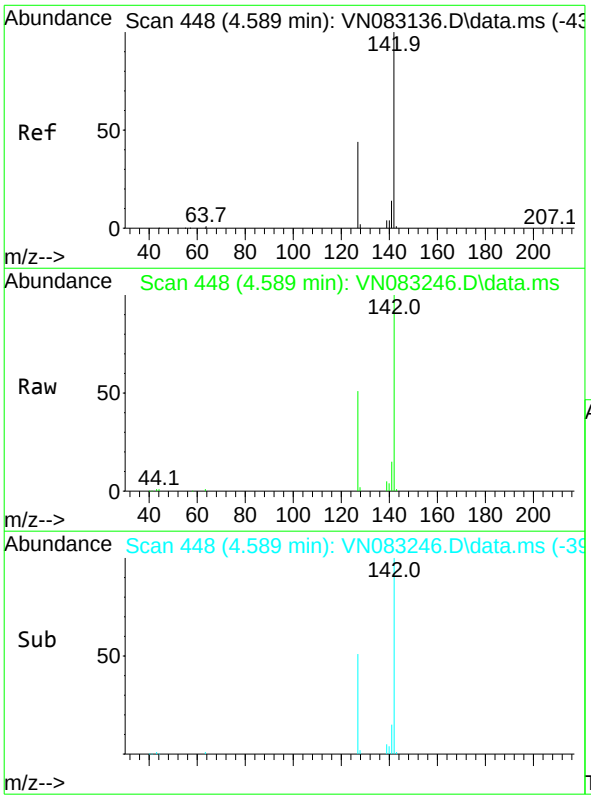
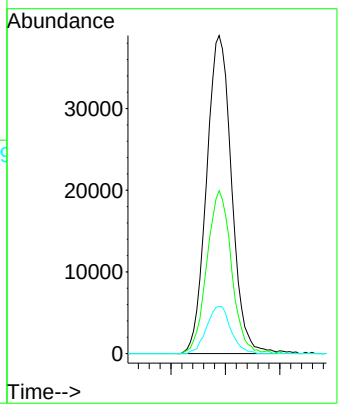


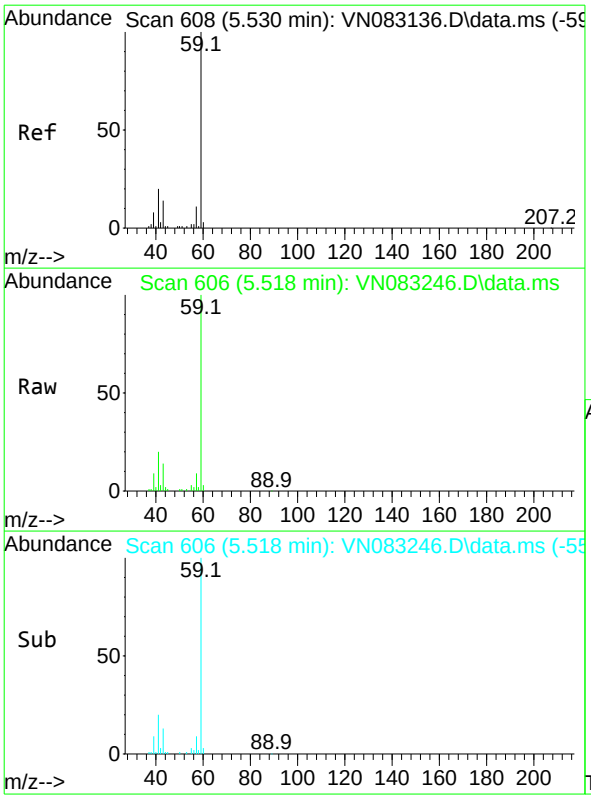




#10
Methyl Iodide
Concen: 49.216 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:142 Resp: 124402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 51.2 | 37.5 | 56.3 |
| 141 | 14.8 | 13.1 | 19.7 |

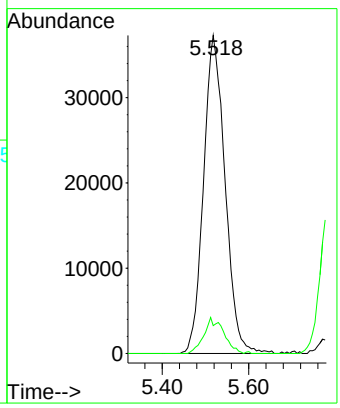





#11
Tert butyl alcohol
Concen: 244.559 ug/l
RT: 5.518 min Scan# 60
Delta R.T. -0.012 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 59 Resp: 128834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.4 | 8.9 | 13.3 |




**Instrument :**
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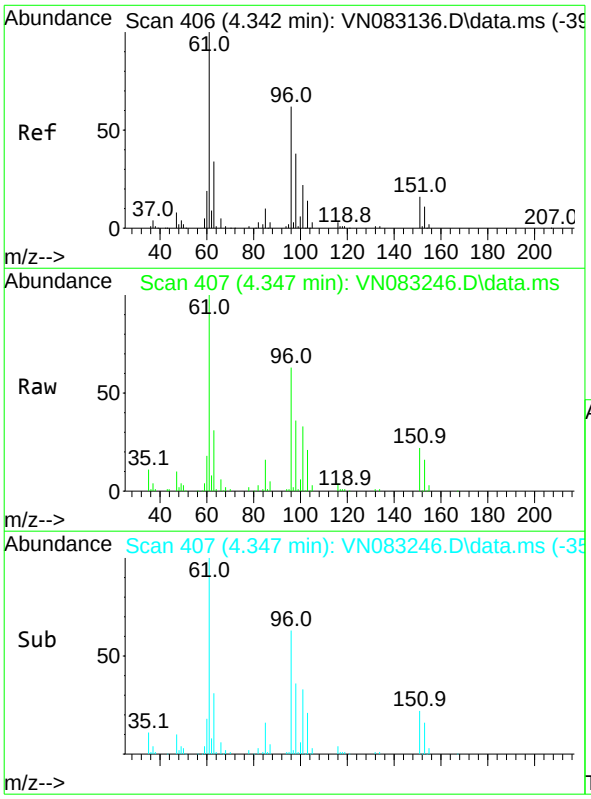
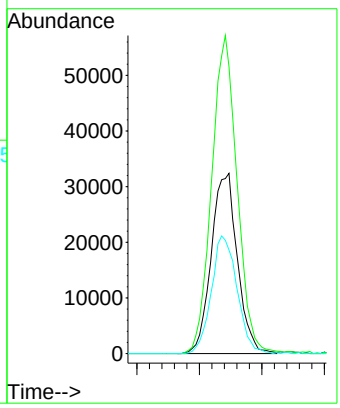
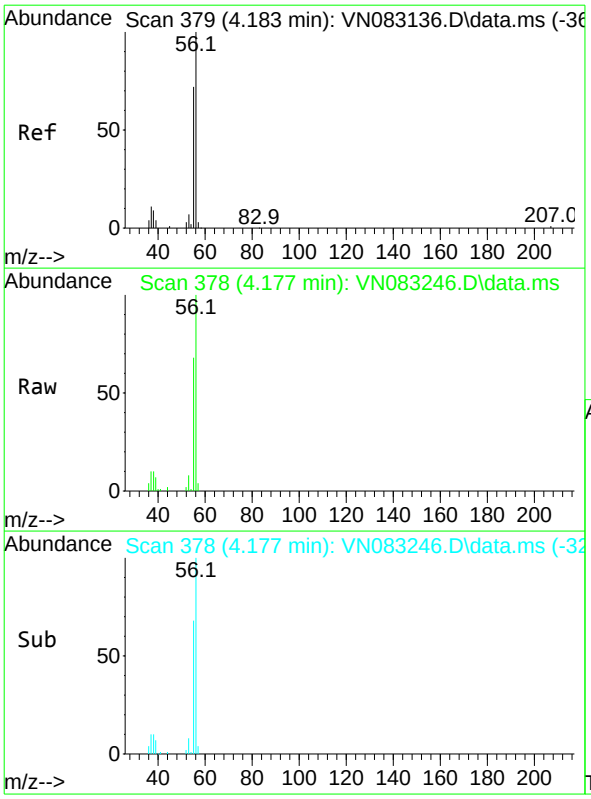



#12
1,1-Dichloroethene
Concen: 47.701 ug/l
RT: 4.347 min Scan# 407
Delta R.T. 0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 96 Resp: 94170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 159.2 | 149.7 | 224.5 |
| 98 | 57.4 | 50.1 | 75.1 |

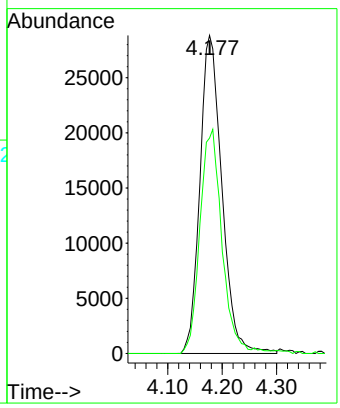





#13
Acrolein
Concen: 236.250 ug/l
RT: 4.177 min Scan# 37
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 56 Resp: 81114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 69.7 | 56.4 | 84.6 |

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VSTDCCC050

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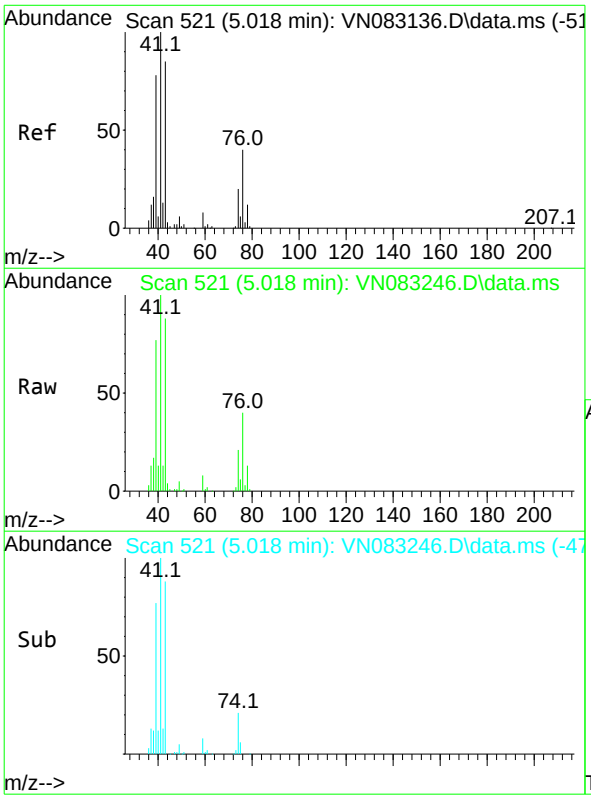
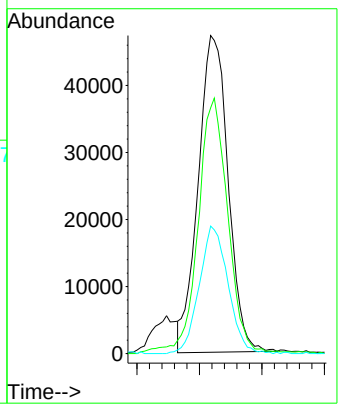
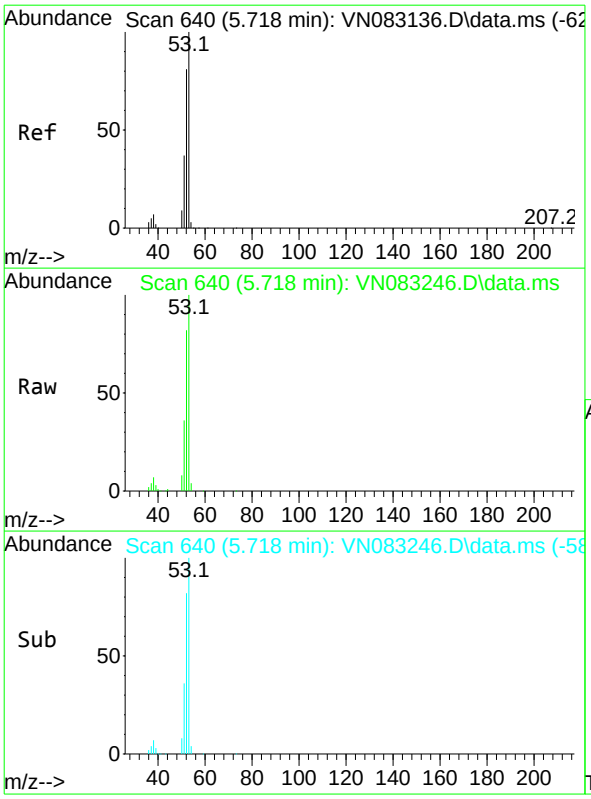



#14
Allyl chloride
Concen: 42.169 ug/l
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 41 Resp: 157318

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 80.3 | 67.8 | 101.6 |
| 76 | 38.7 | 25.8 | 38.8 |

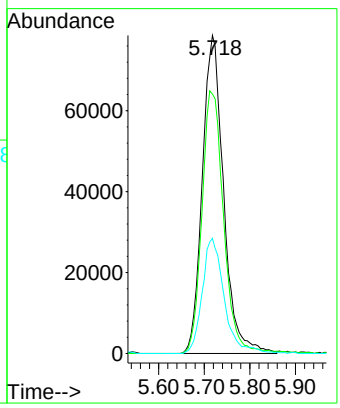





#15
Acrylonitrile
Concen: 235.198 ug/l
RT: 5.718 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 53 Resp: 254823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.8 | 66.6 | 100.0 |
| 51 | 37.4 | 30.1 | 45.1 |

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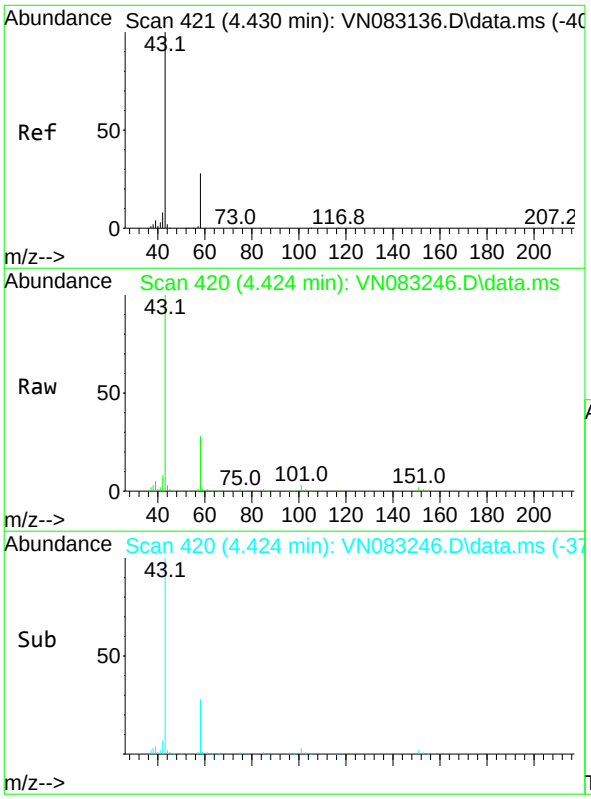
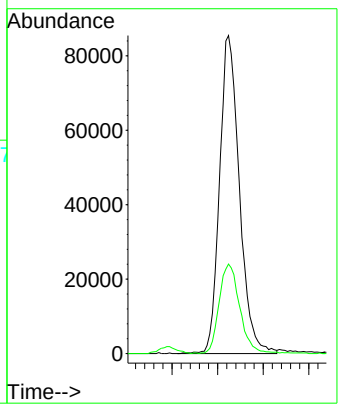
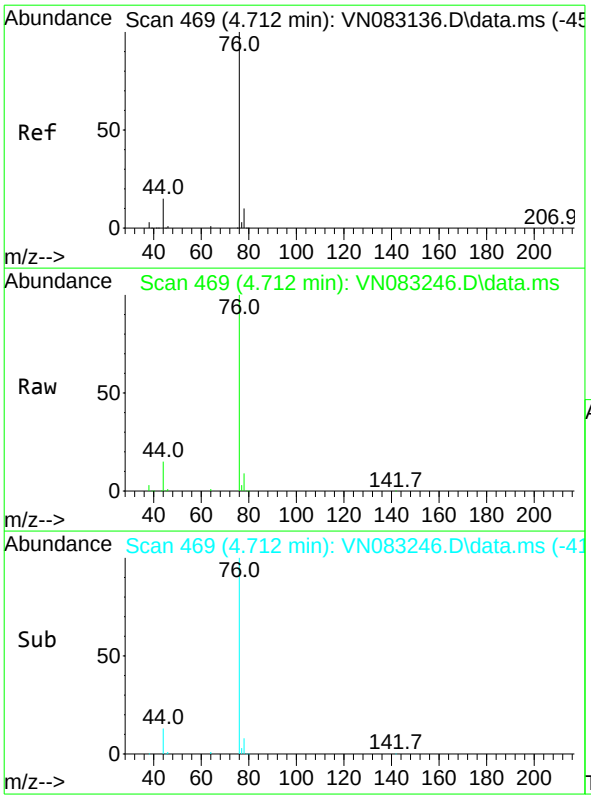



#16
Acetone
Concen: 260.346 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 43 Resp: 258238

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.7 | 21.8 | 32.6 |






#17
Carbon Disulfide
Concen: 42.513 ug/l
RT: 4.712 min Scan# 46
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 76 Resp: 245576

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.9 | 7.2 | 10.8 |

**Instrument :**
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VSTDCCC050

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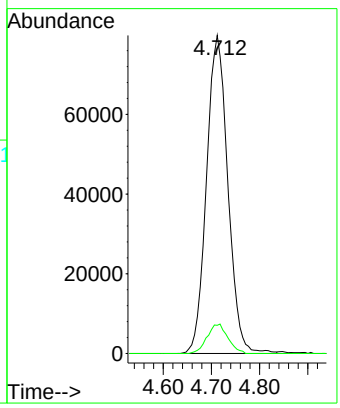
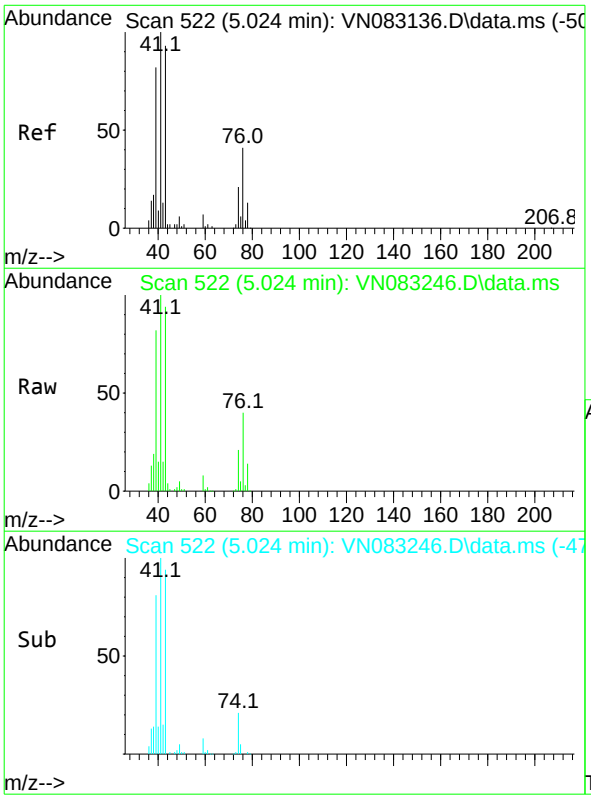
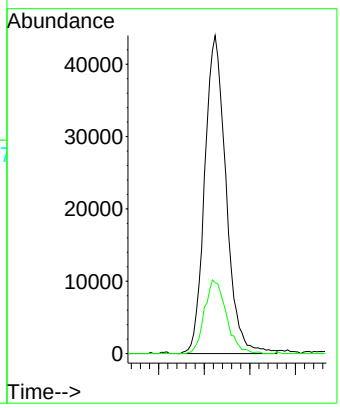


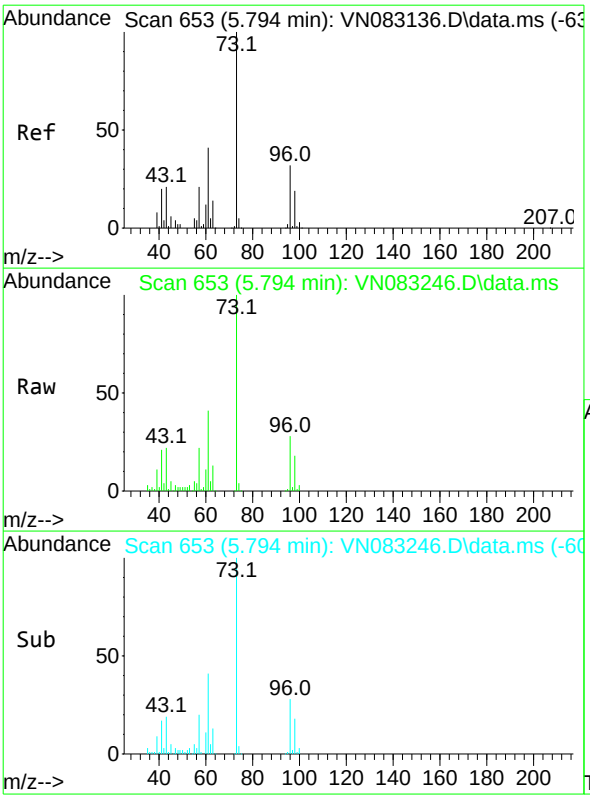




#18
Methyl Acetate
Concen: 48.345 ug/l
RT: 5.024 min Scan# 522
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 43 Resp: 142874

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 23.7 | 16.3 | 24.5 |

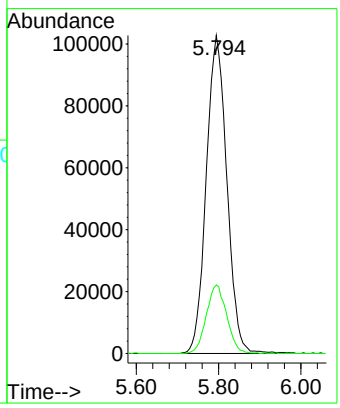





#19
Methyl tert-butyl Ether
Concen: 50.110 ug/l
RT: 5.794 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 73 Resp: 357068

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.6 | 17.9 | 26.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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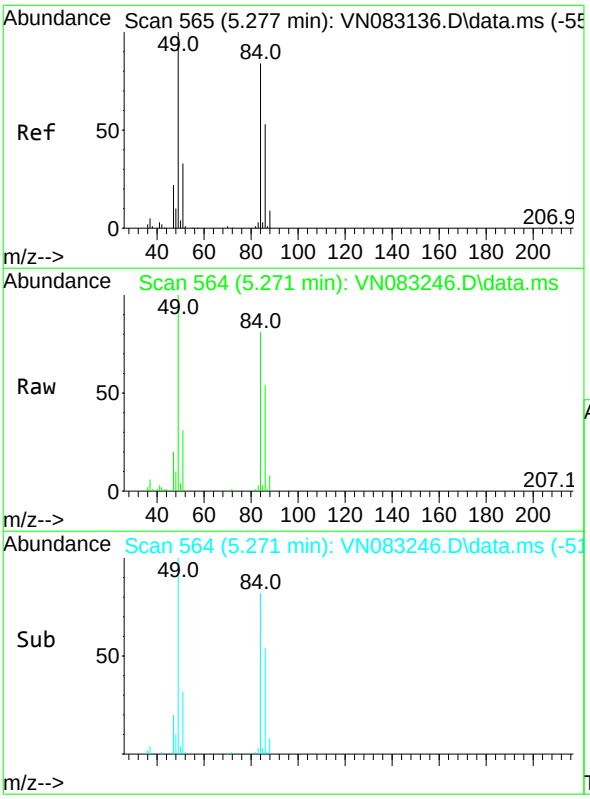
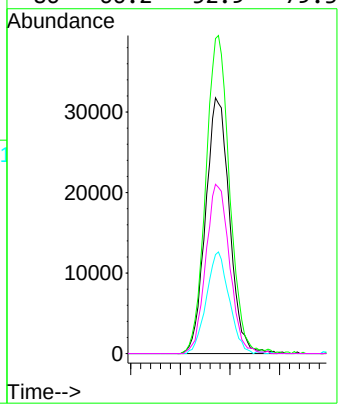
Supervised By :Semsettin Yesilyurt 08/14/2024

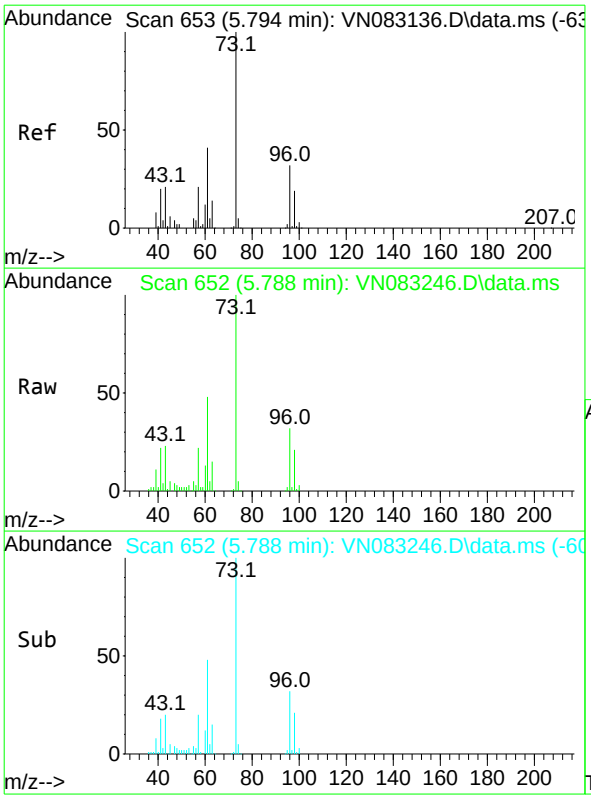



#20
Methylene Chloride
Concen: 46.546 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 84 Resp: 106255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 123.2 | 119.6 | 179.4 |
| 51 | 38.7 | 34.8 | 52.2 |
| 86 | 66.2 | 52.9 | 79.3 |

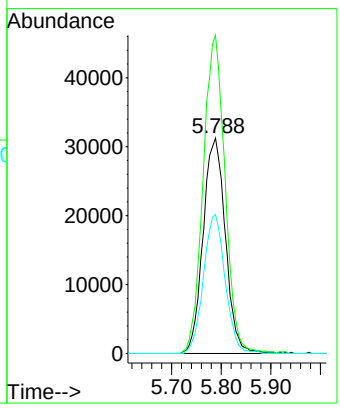





#21
trans-1,2-Dichloroethene
Concen: 47.842 ug/l
RT: 5.788 min Scan# 65
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 96 Resp: 97617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 147.6 | 123.4 | 185.2 |
| 98 | 64.6 | 49.3 | 73.9 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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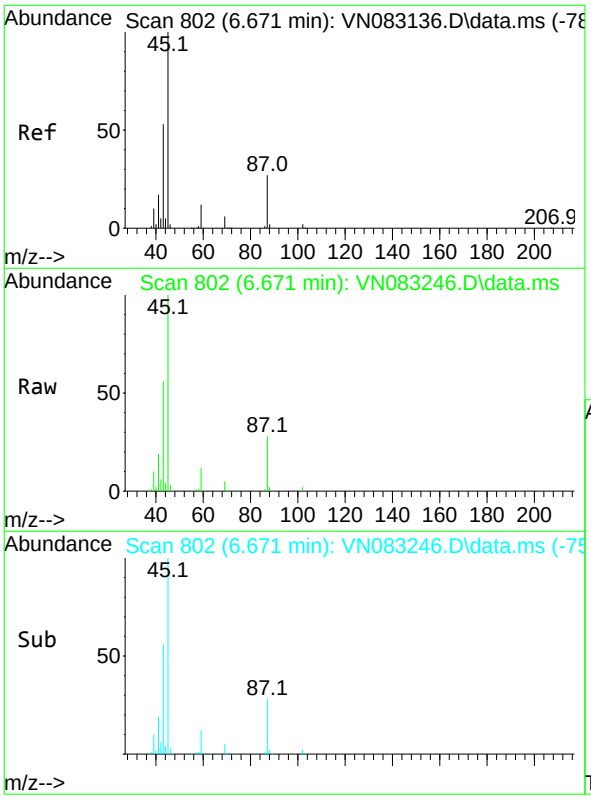
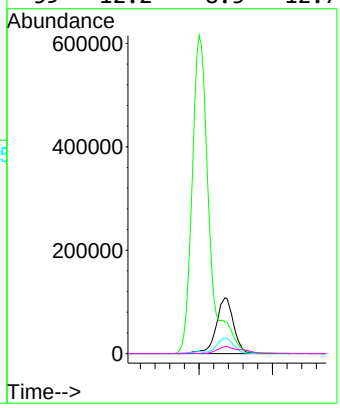
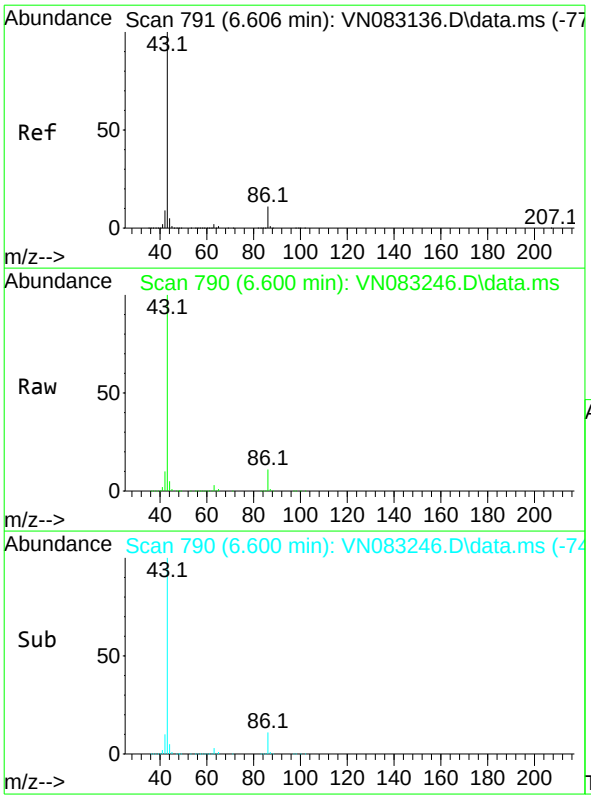



#22
Diisopropyl ether
Concen: 50.588 ug/l
RT: 6.671 min Scan# 802
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 45 Resp: 354751

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 55.5 | 44.0 | 66.0 |
| 87 | 27.5 | 19.7 | 29.5 |
| 59 | 12.2 | 8.5 | 12.7 |

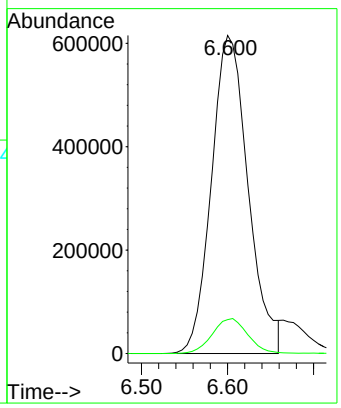





#23
Vinyl Acetate
Concen: 253.661 ug/l m
RT: 6.600 min Scan# 79
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 43 Resp: 1823271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.6 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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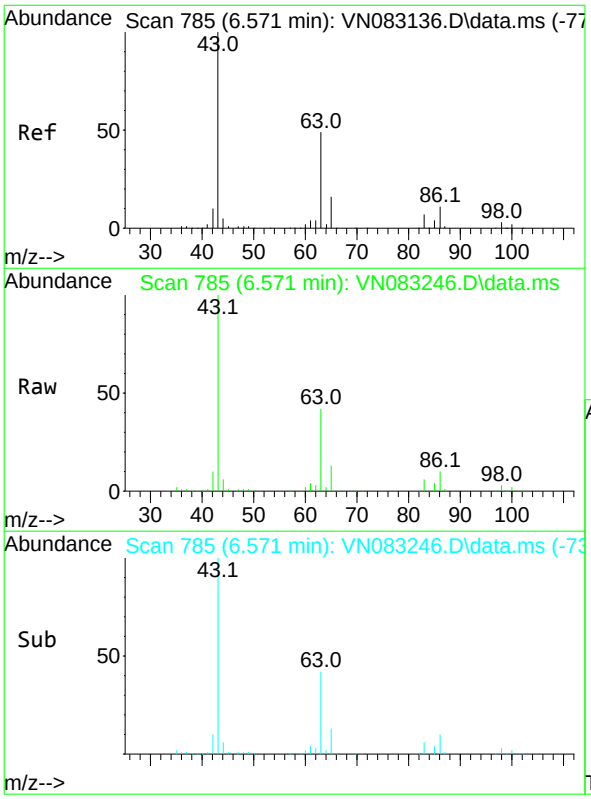
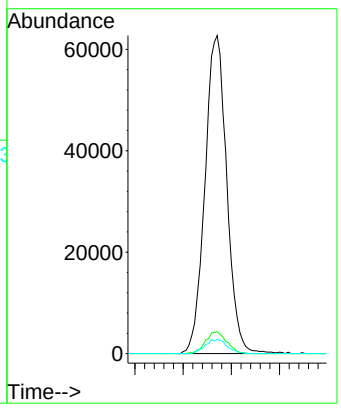
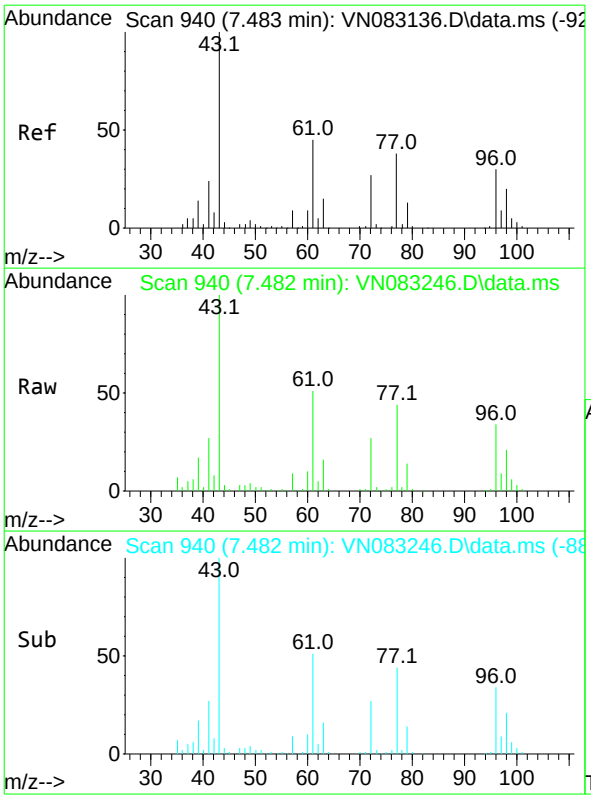



#24
1,1-Dichloroethane
Concen: 51.674 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 63 Resp: 197517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.9 | 3.3 | 9.9 |
| 100 | 4.5 | 2.0 | 6.0 |

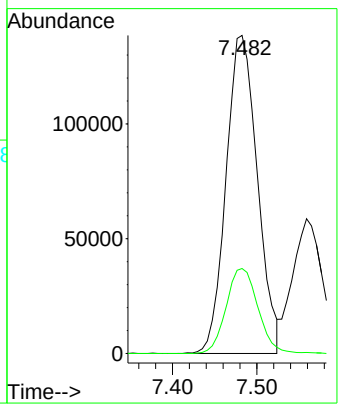





#25
2-Butanone
Concen: 234.960 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 43 Resp: 357852

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 26.7 | 18.2 | 27.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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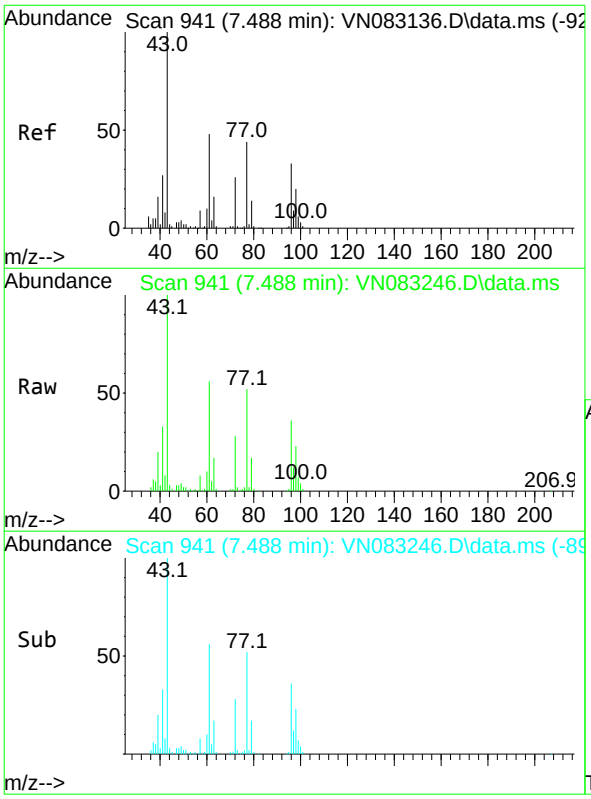
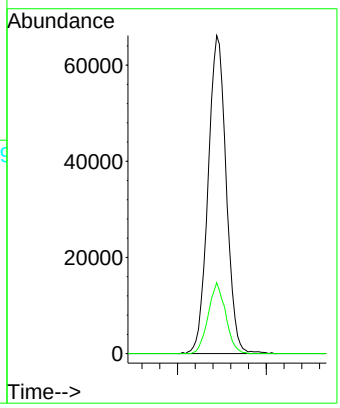
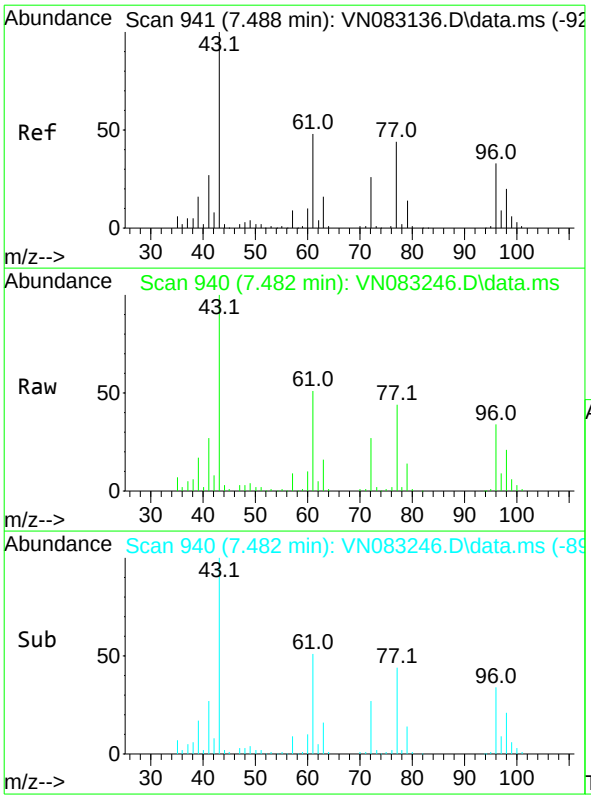



#26
2,2-Dichloropropane
Concen: 52.961 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 77 Resp: 188000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.4 | 10.3 | 30.9 |






#27
cis-1,2-Dichloroethene
Concen: 49.779 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

Tgt Ion: 96 Resp: 122563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 154.5 | 0.0 | 329.6 |
| 98 | 64.2 | 0.0 | 128.6 |

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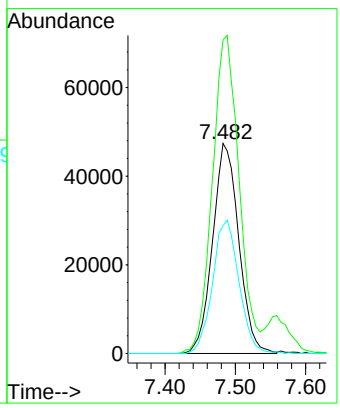
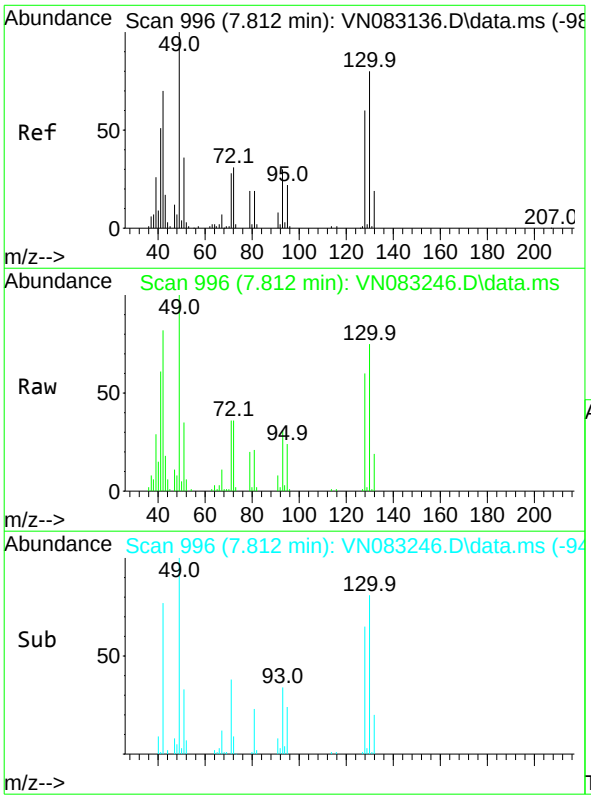
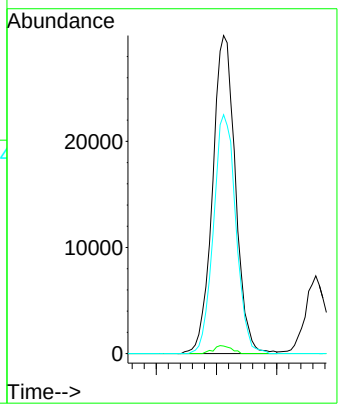


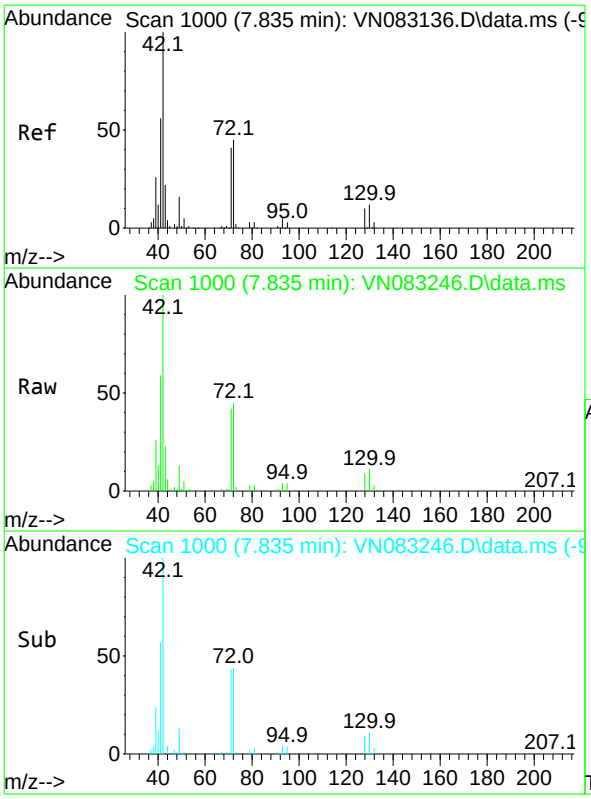




#28
Bromochloromethane
Concen: 50.555 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 49 Resp: 78972

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.0 | 0.0 | 3.8 |
| 130 | 73.7 | 50.5 | 75.7 |






#29
Tetrahydrofuran
Concen: 231.559 ug/l
RT: 7.835 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 42 Resp: 227980

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 45.1 | 30.0 | 45.0# |
| 71 | 42.6 | 28.3 | 42.5# |

**Instrument :**
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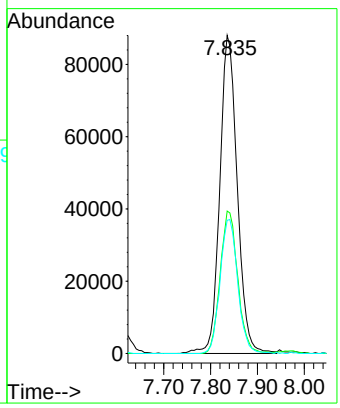
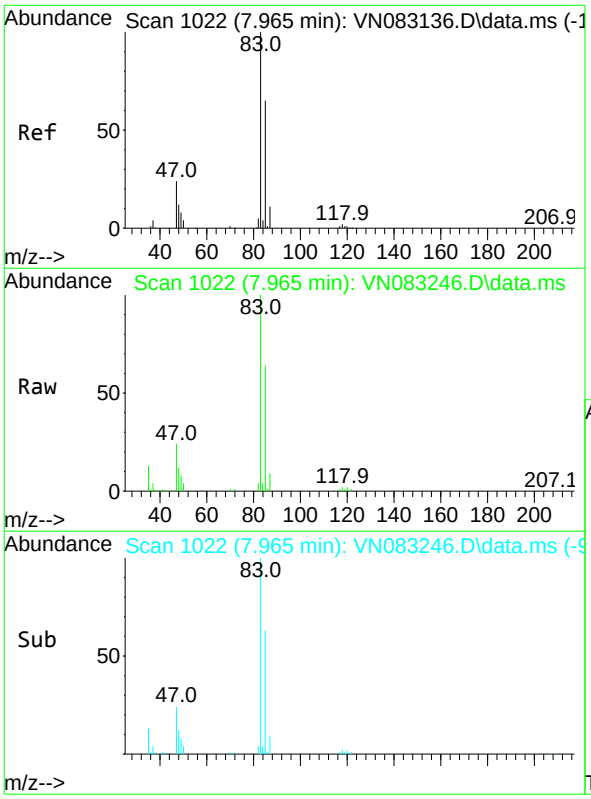
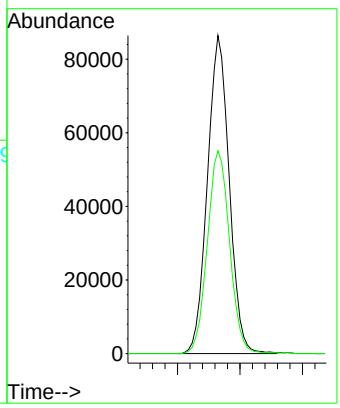


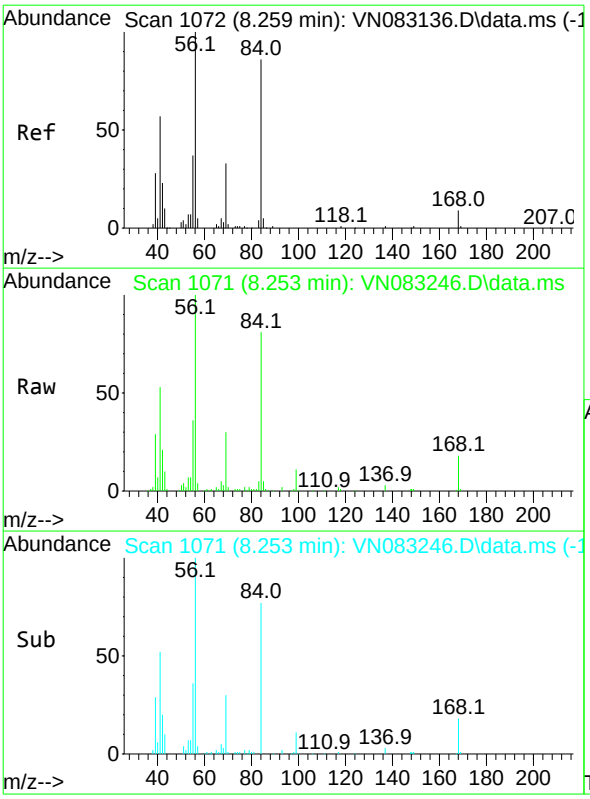




#30
Chloroform
Concen: 52.728 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 83 Resp: 209389

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.8 | 50.9 | 76.3 |

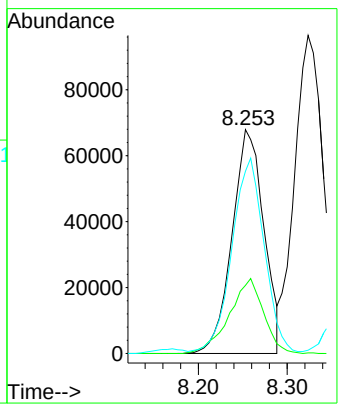





#31
Cyclohexane
Concen: 44.970 ug/l
RT: 8.253 min Scan# 10
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 56 Resp: 168933

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.4 | 24.5 | 36.7 |
| 84 | 79.7 | 66.0 | 99.0 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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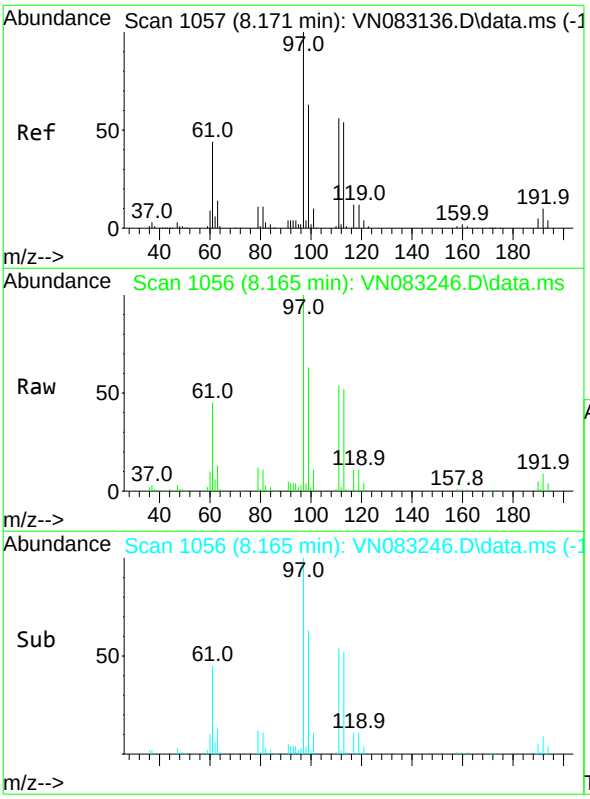
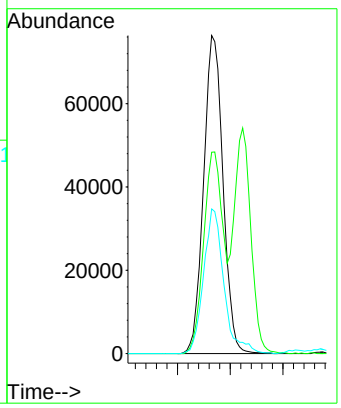
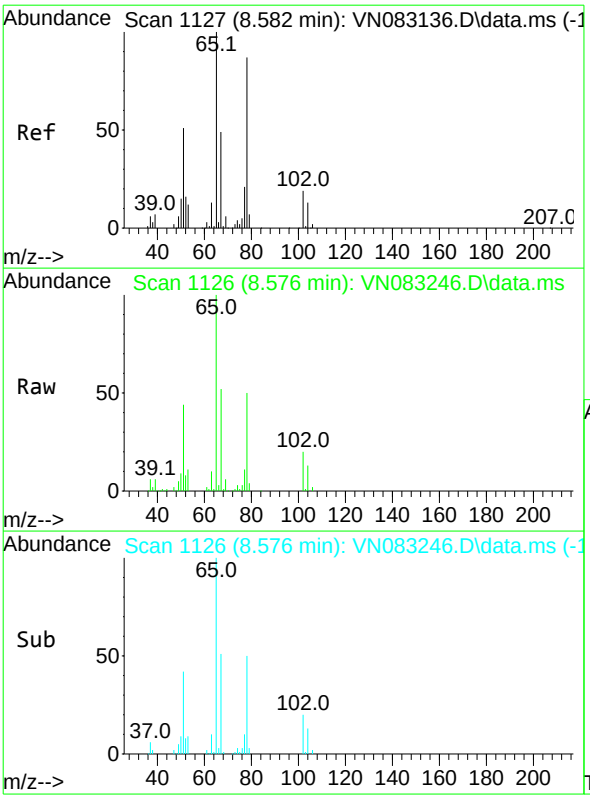



#32
1,1,1-Trichloroethane
Concen: 51.945 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 97 Resp: 195254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 63.2 | 52.0 | 78.0 |
| 61 | 47.7 | 42.1 | 63.1 |

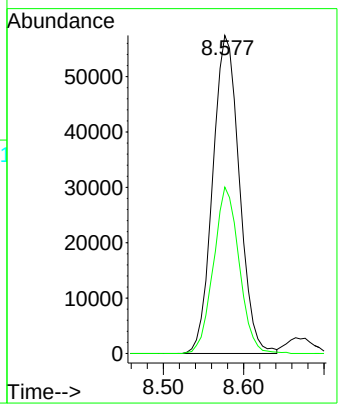





#33
1,2-Dichloroethane-d4
Concen: 52.153 ug/l
RT: 8.576 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 65 Resp: 132203

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.5 | 0.0 | 104.4 |

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VSTDCCC050

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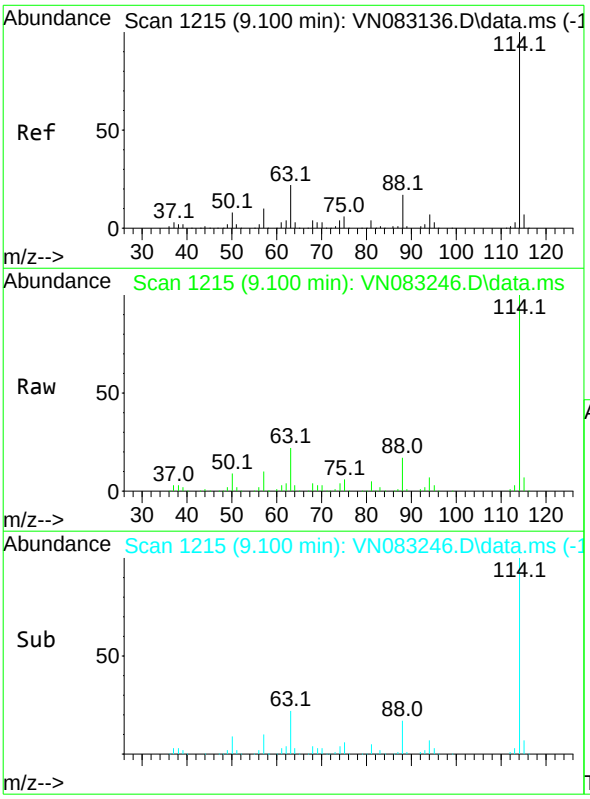
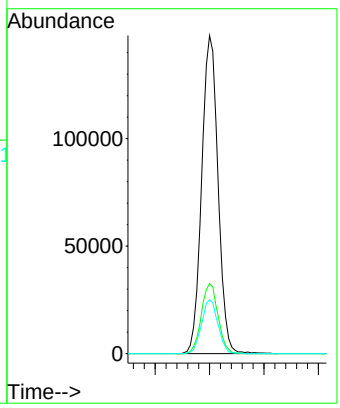
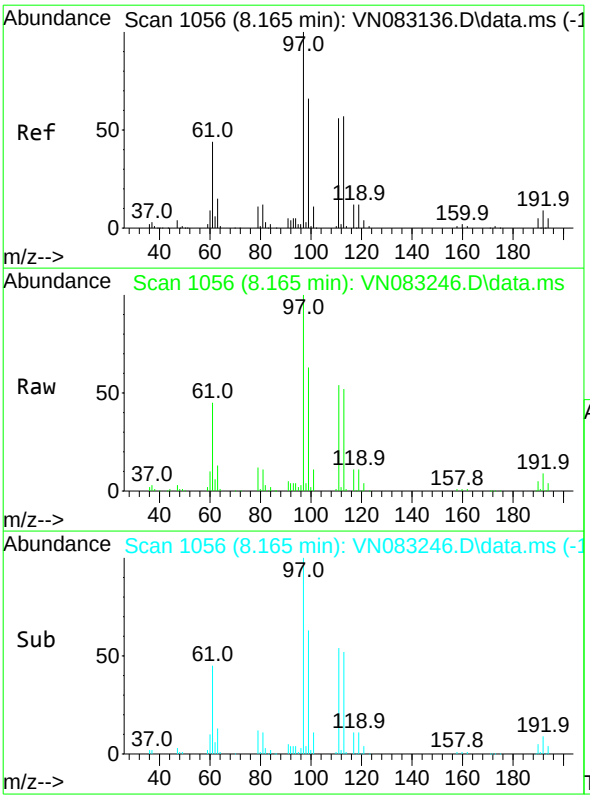



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:114 Resp: 308255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.0 | 0.0 | 44.6 |
| 88 | 16.9 | 0.0 | 31.4 |

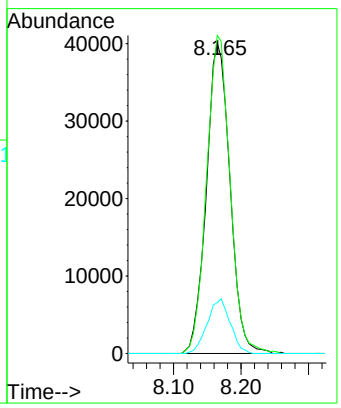





#35
Dibromofluoromethane
Concen: 50.737 ug/l
RT: 8.165 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:113 Resp: 97621

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.9 | 82.4 | 123.6 |
| 192 | 17.1 | 14.9 | 22.3 |




**Instrument :**
MSVOA_N
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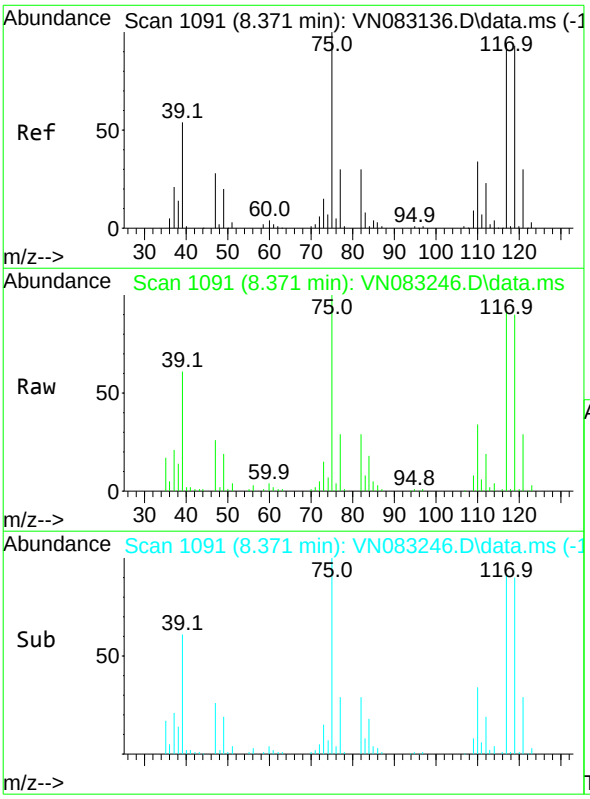
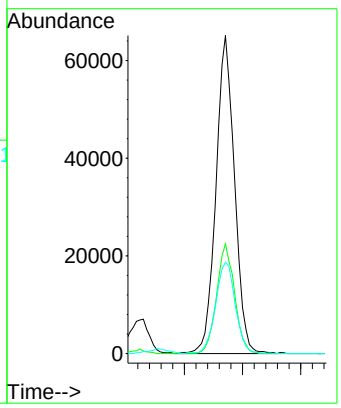
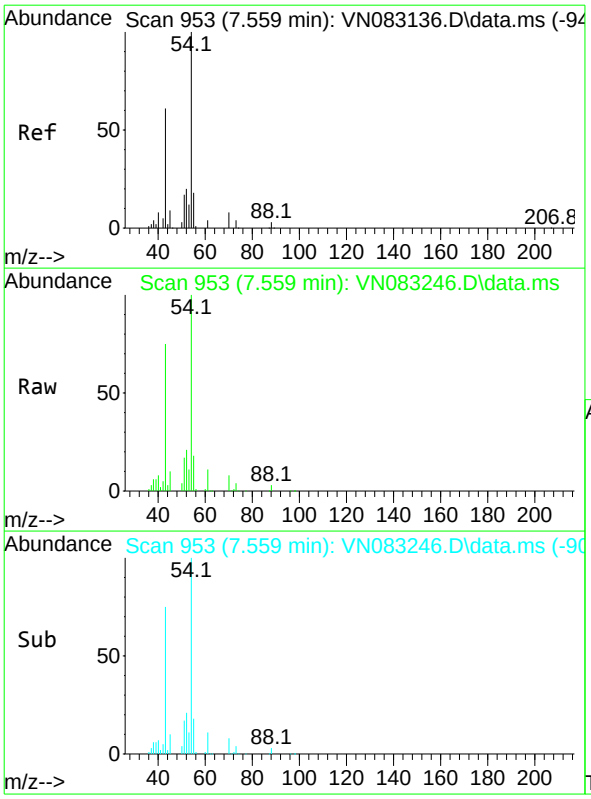



#36
1,1-Dichloropropene
Concen: 49.623 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 75 Resp: 144432

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.3 | 16.3 | 48.9 |
| 77 | 30.5 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 46.356 ug/l
RT: 7.559 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

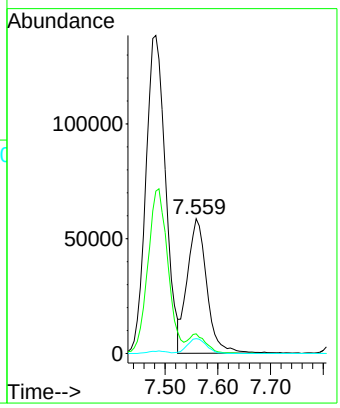
Tgt Ion: 43 Resp: 151069

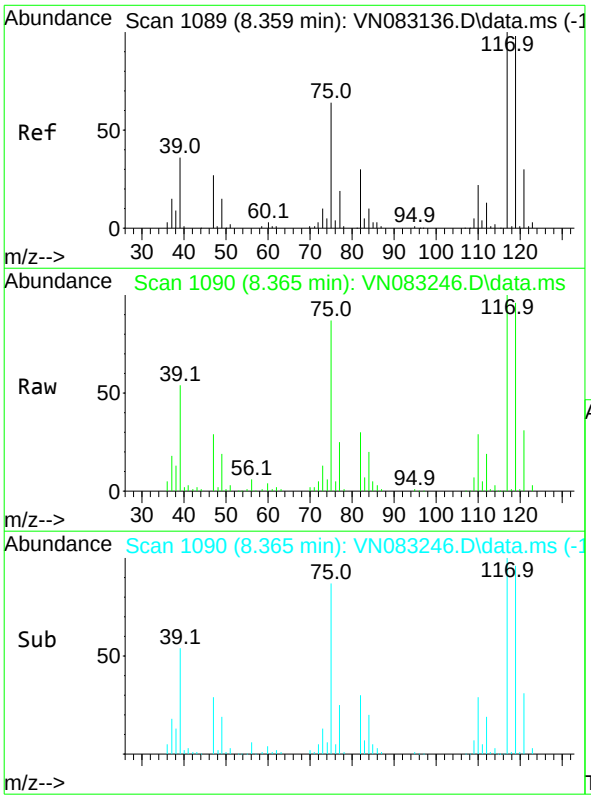
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.3 | 9.3 | 13.9 |
| 70 | 10.8 | 7.0 | 10.6# |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

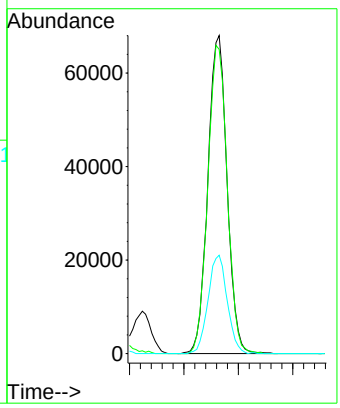


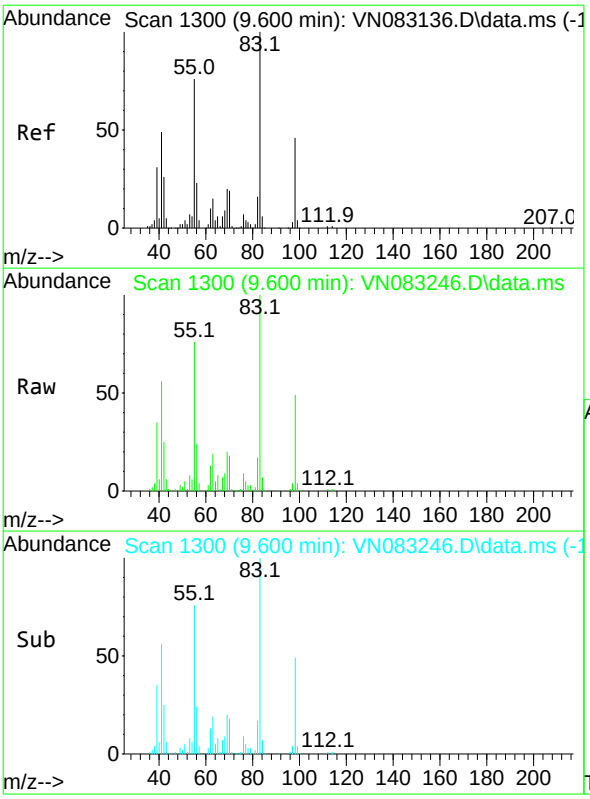




#38
Carbon Tetrachloride
Concen: 50.883 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:117 Resp: 166807

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 95.6 | 74.9 | 112.3 |
| 121 | 30.9 | 24.3 | 36.5 |






#39
Methylcyclohexane
Concen: 47.969 ug/l
RT: 9.600 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

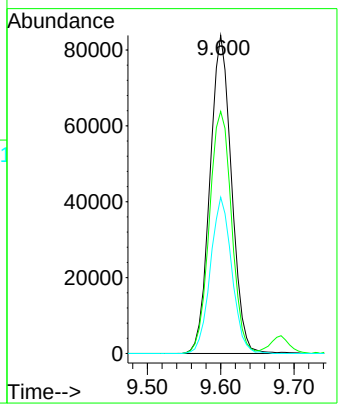
**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

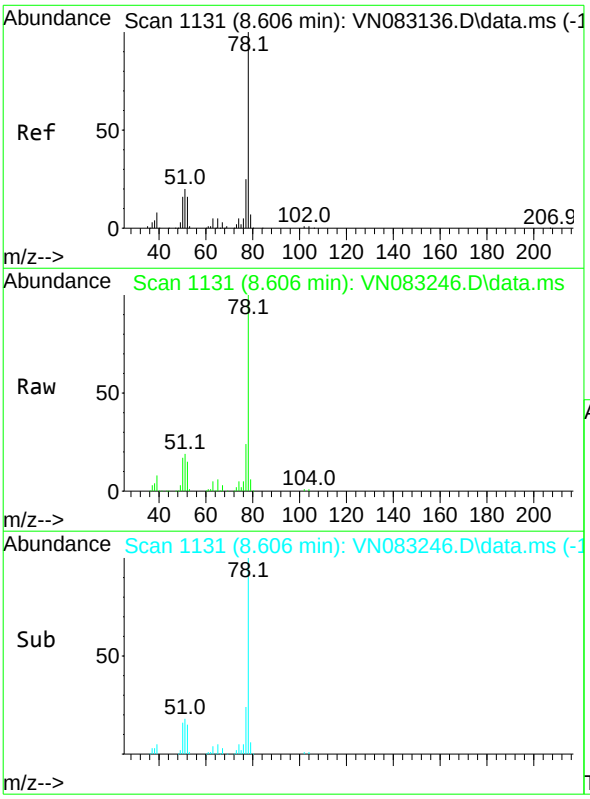
Tgt Ion: 83 Resp: 171487

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 76.1 | 66.4 | 99.6 |
| 98 | 49.1 | 40.7 | 61.1 |

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

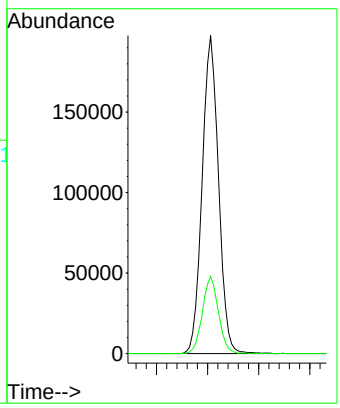


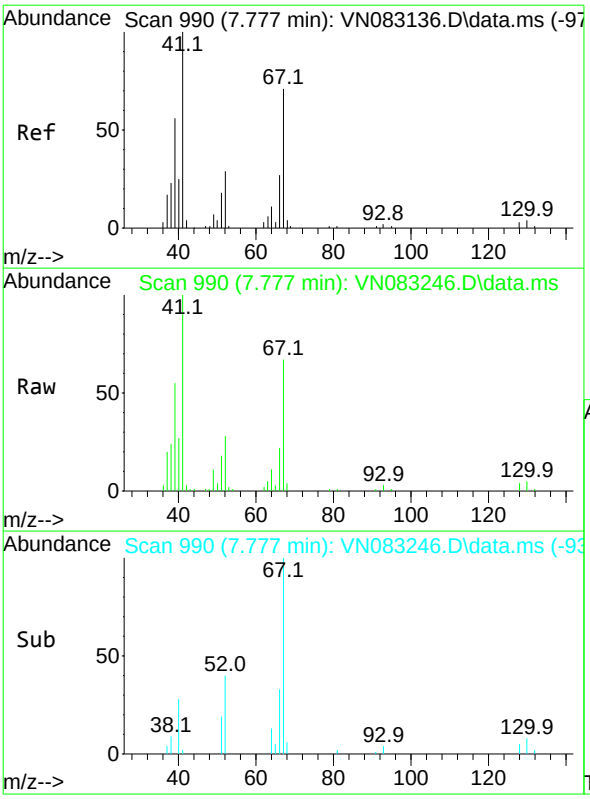




#40
Benzene
Concen: 50.617 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 78 Resp: 438884

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.2 | 19.0 | 28.4 |

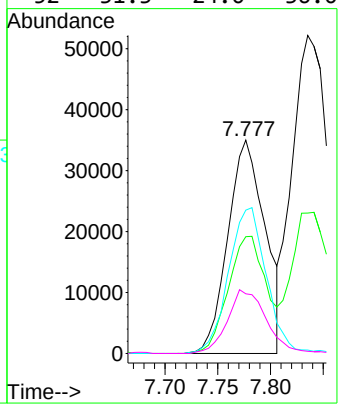





#41
Methacrylonitrile
Concen: 46.379 ug/l
RT: 7.777 min Scan# 99
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 41 Resp: 85938

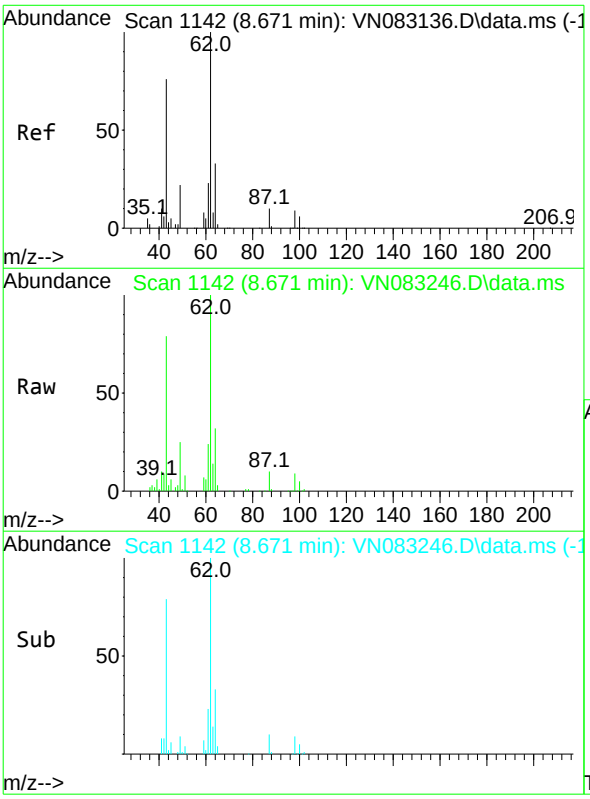
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 56.1 | 45.5 | 68.3 |
| 67 | 69.6 | 50.5 | 75.7 |
| 52 | 31.3 | 24.0 | 36.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

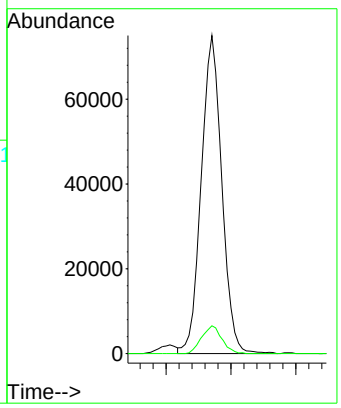
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

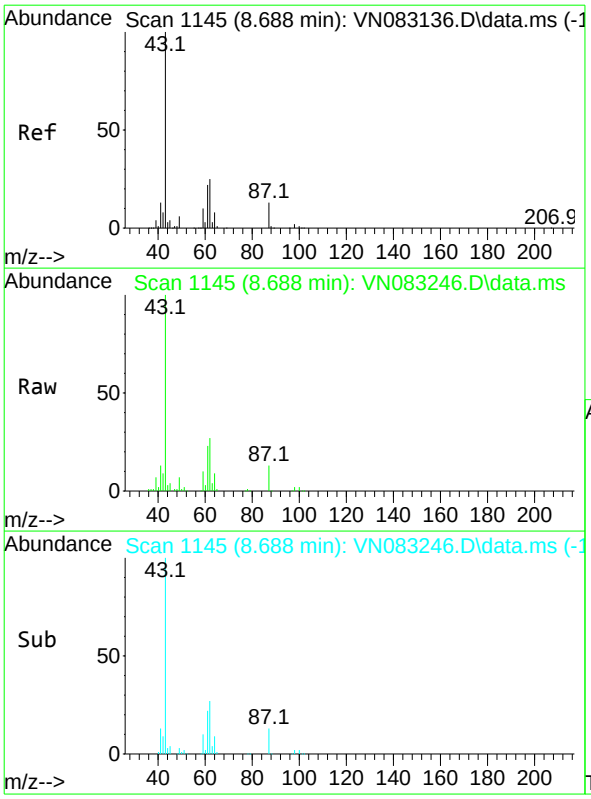



#42
1,2-Dichloroethane
Concen: 52.326 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 62 Resp: 165275

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.6 | 0.0 | 15.8 |

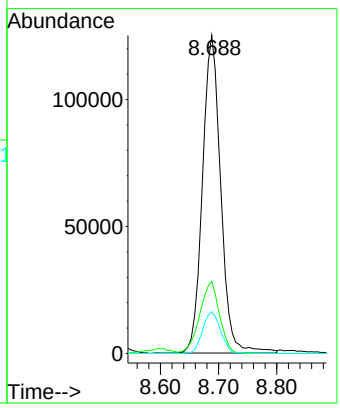





#43
Isopropyl Acetate
Concen: 48.153 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 43 Resp: 272852

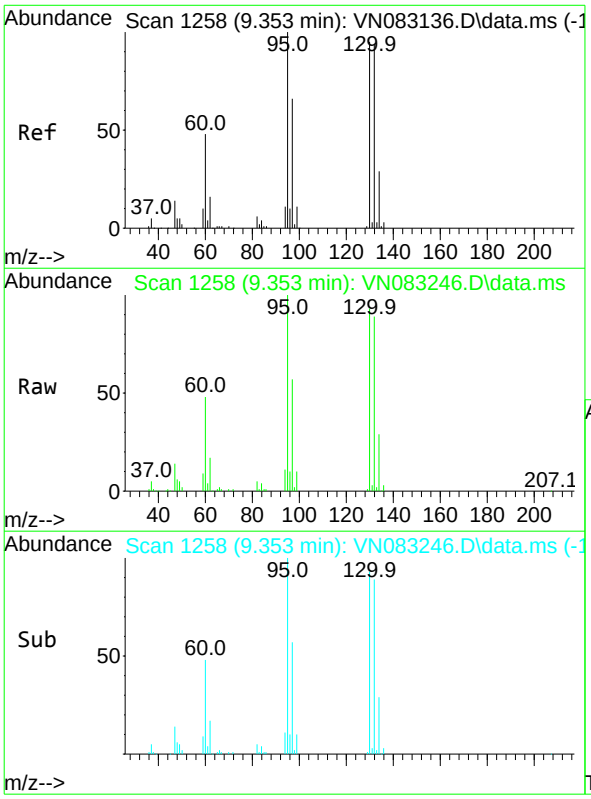
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 24.2 | 17.8 | 26.6 |
| 87 | 12.8 | 8.2 | 12.2# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

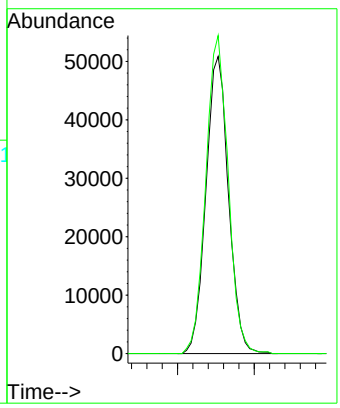
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

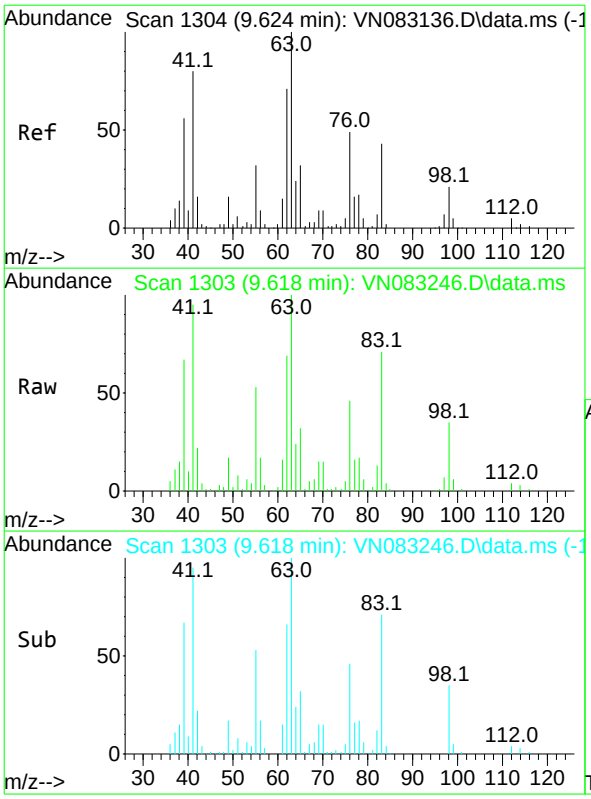



#44
Trichloroethene
Concen: 50.366 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:130 Resp: 103946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 107.0 | 0.0 | 197.8 |






#45
1,2-Dichloropropane
Concen: 51.570 ug/l
RT: 9.618 min Scan# 13
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 63 Resp: 106139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.7 | 24.4 | 36.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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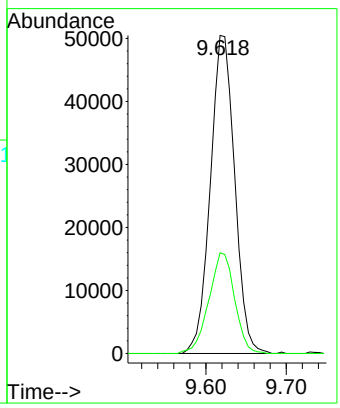
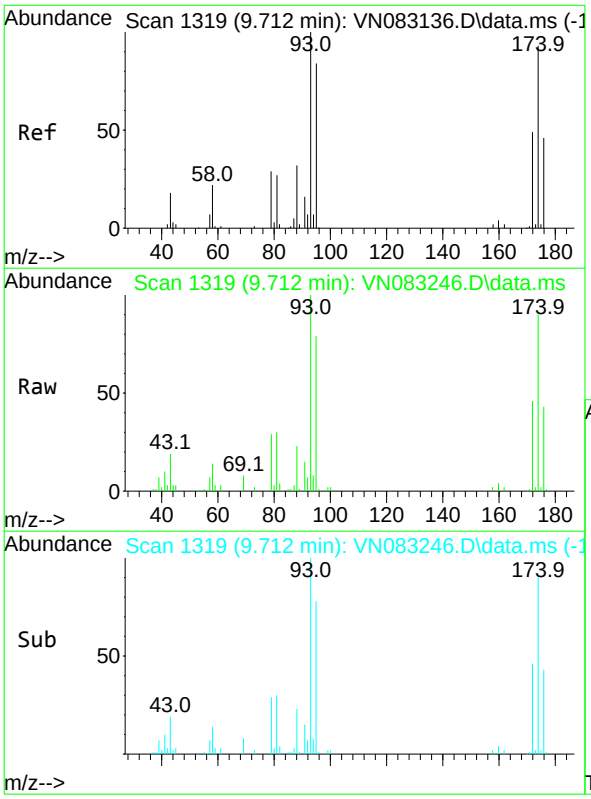
Supervised By :Semsettin Yesilyurt 08/14/2024

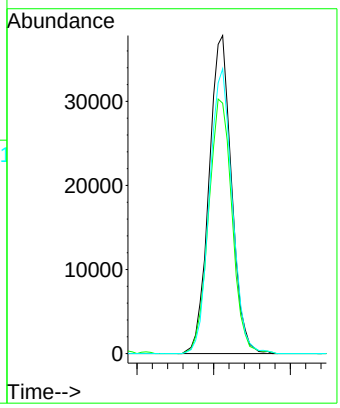


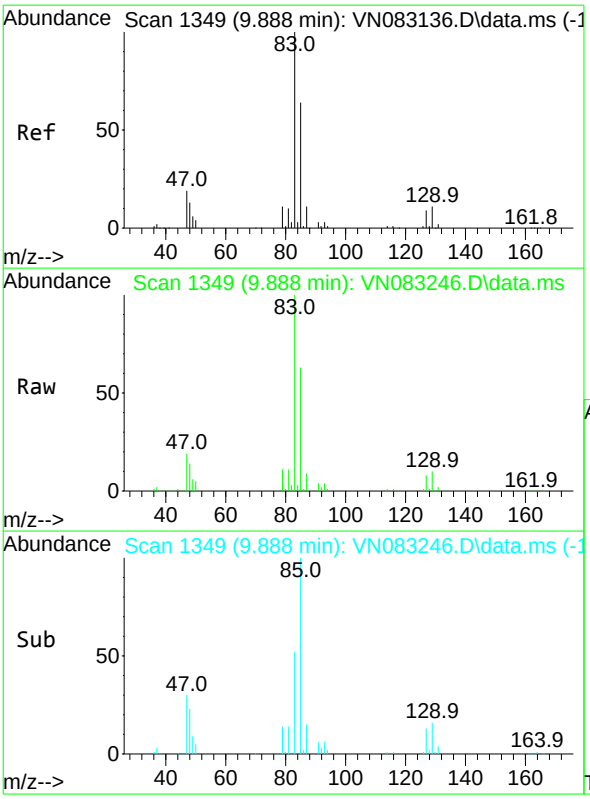




#46
Dibromomethane
Concen: 52.392 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 93 Resp: 77183

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.0 | 65.8 | 98.6 |
| 174 | 90.2 | 71.7 | 107.5 |

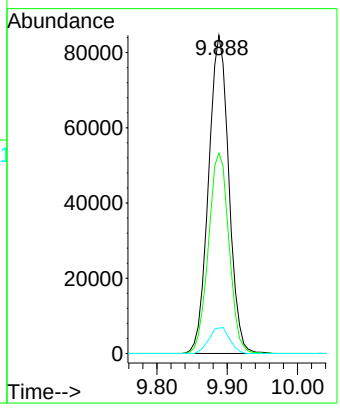





#47
Bromodichloromethane
Concen: 51.206 ug/l
RT: 9.888 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 83 Resp: 169381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.0 | 51.1 | 76.7 |
| 127 | 8.0 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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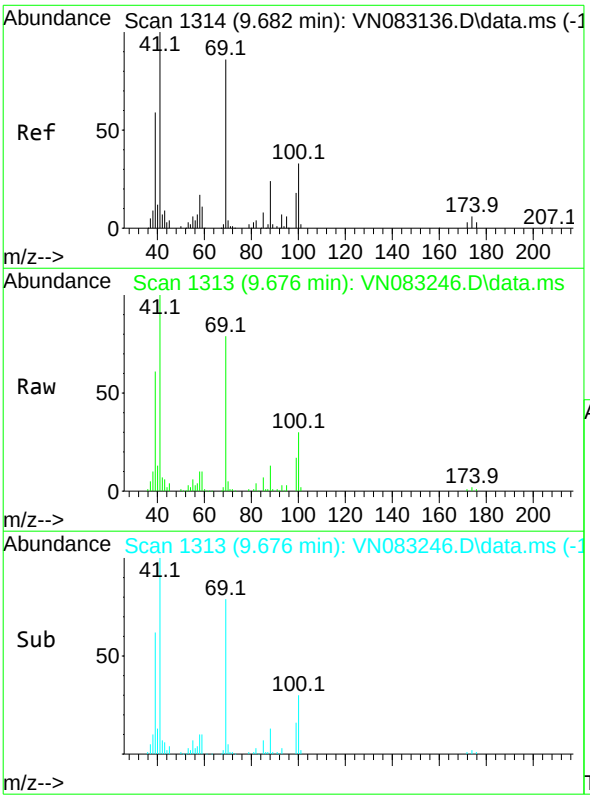
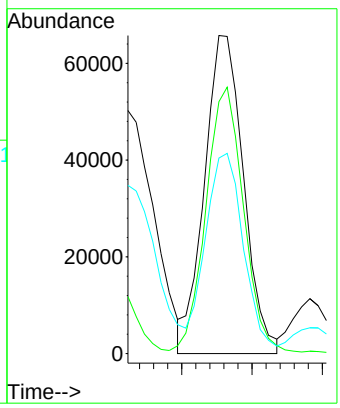
Supervised By :Semsettin Yesilyurt 08/14/2024

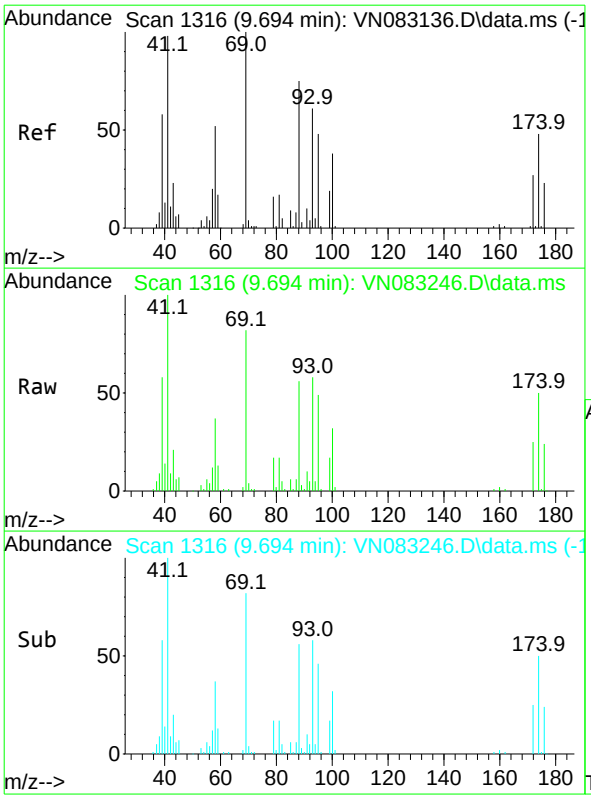



#48
Methyl methacrylate
Concen: 47.166 ug/l
RT: 9.676 min Scan# 1313
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 41 Resp: 127076

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 81.4 | 56.3 | 84.5 |
| 39 | 61.5 | 50.3 | 75.5 |

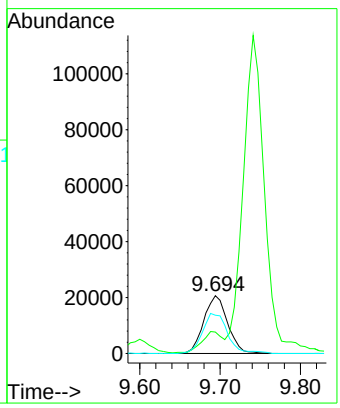





#49
1,4-Dioxane
Concen: 874.255 ug/l
RT: 9.694 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 88 Resp: 42495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 32.3 | 27.8 | 41.8 |
| 58 | 73.2 | 59.4 | 89.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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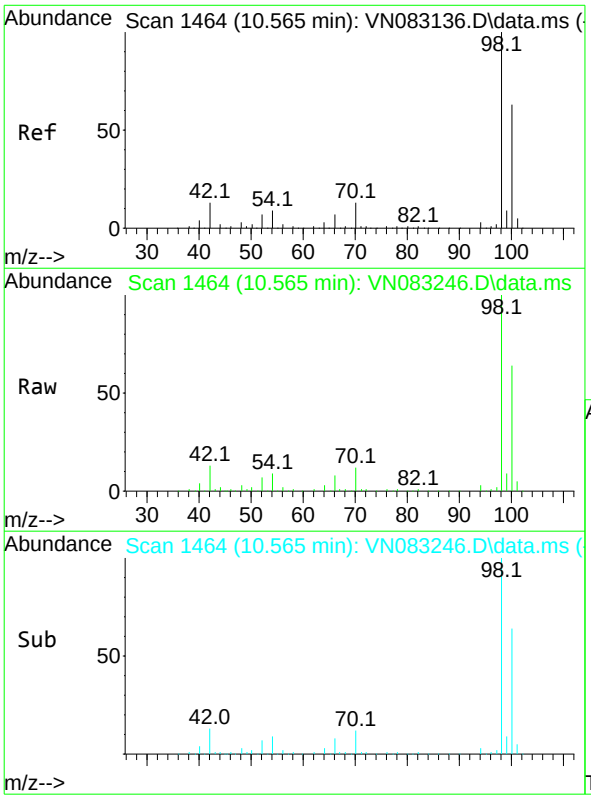
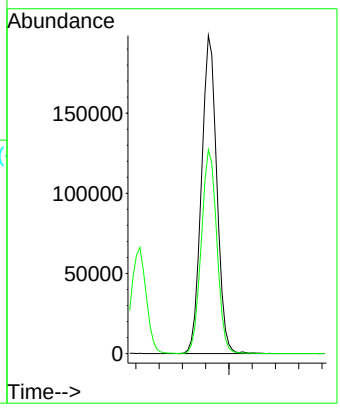
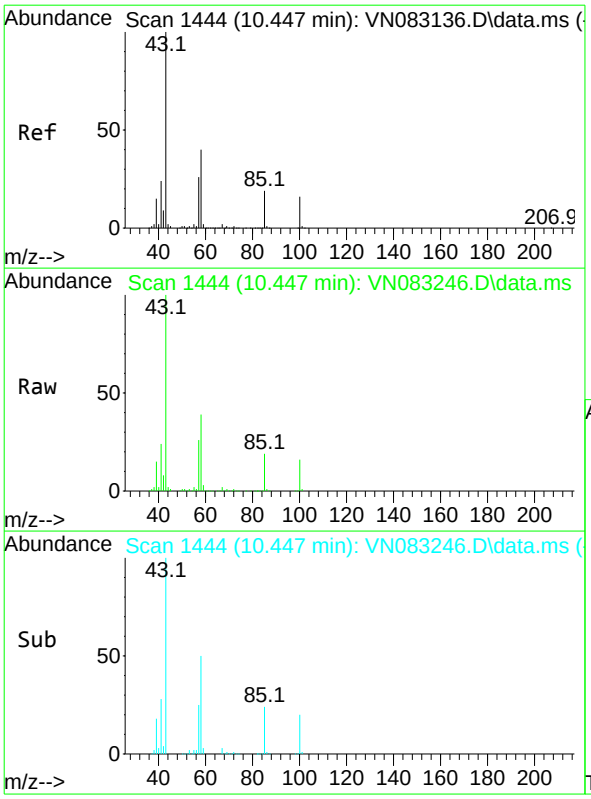



#50
Toluene-d8
Concen: 50.663 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 98 Resp: 363620

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.0 | 51.5 | 77.3 |






#51
4-Methyl-2-Pentanone
Concen: 246.005 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 43 Resp: 758114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 38.8 | 28.2 | 42.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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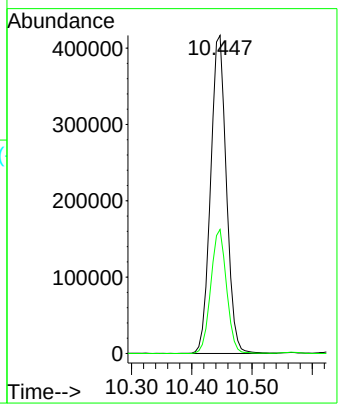
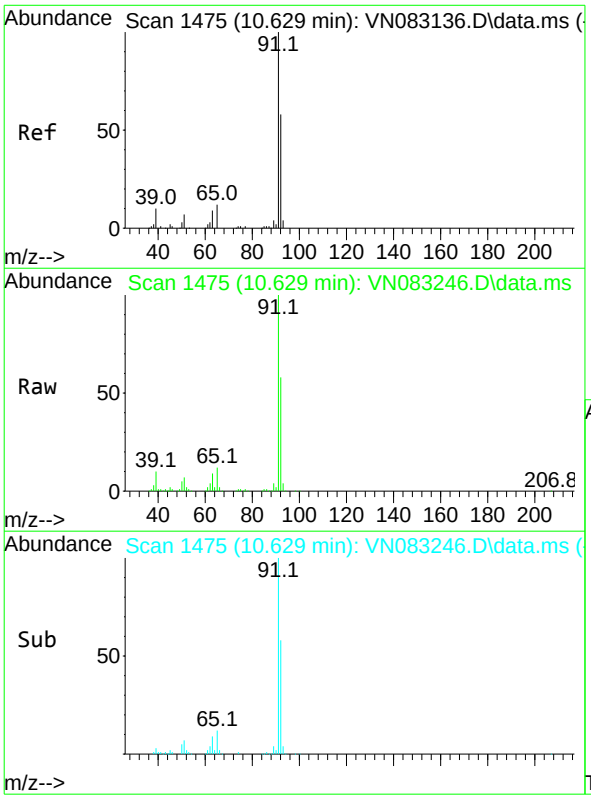
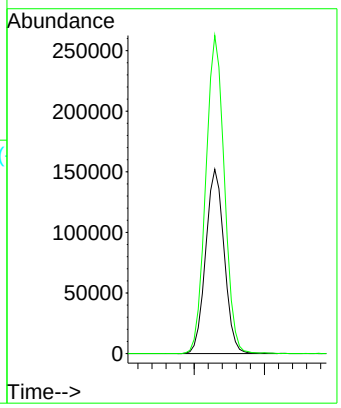


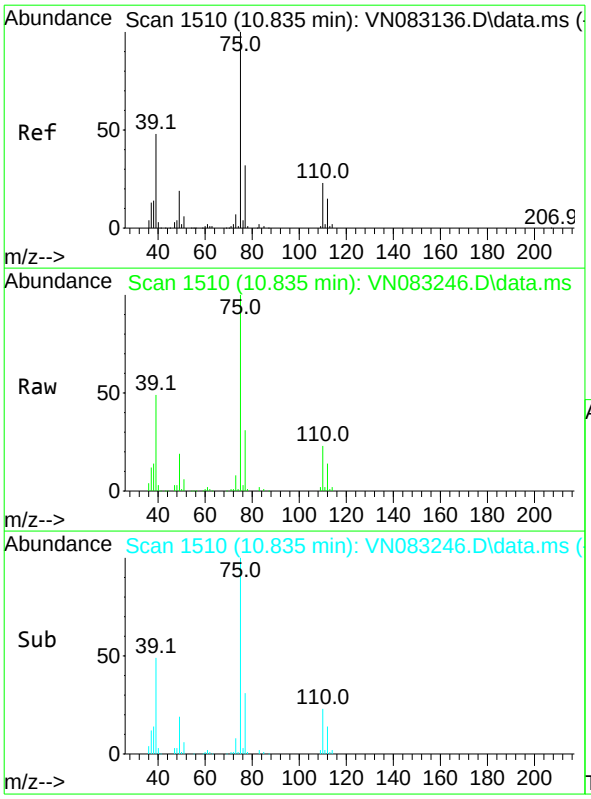




#52
Toluene
Concen: 50.713 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 92 Resp: 277827

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.1 | 139.4 | 209.0 |

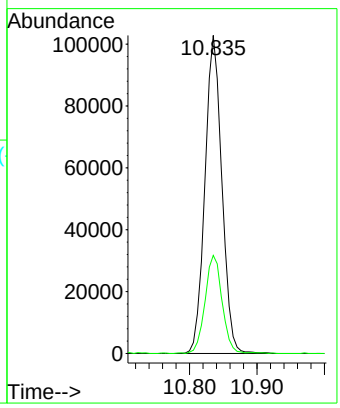





#53
t-1,3-Dichloropropene
Concen: 52.665 ug/l
RT: 10.835 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 75 Resp: 178945

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.8 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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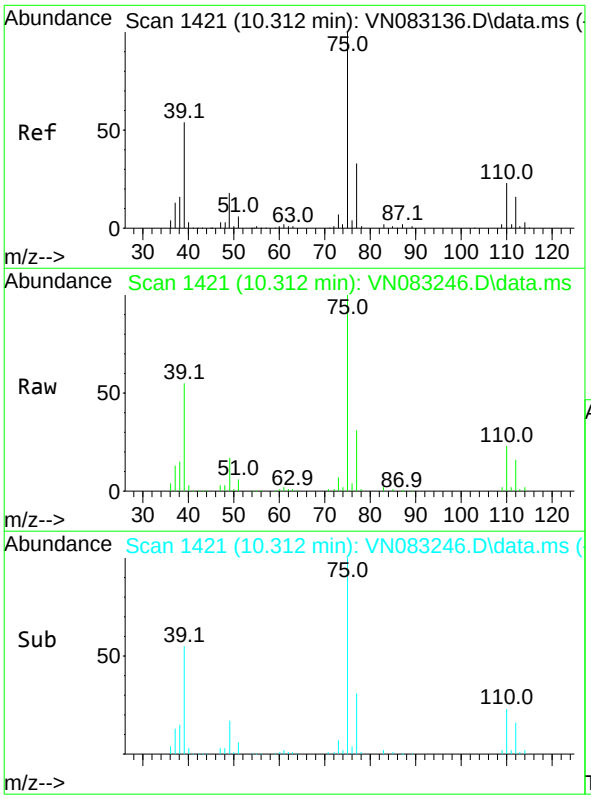
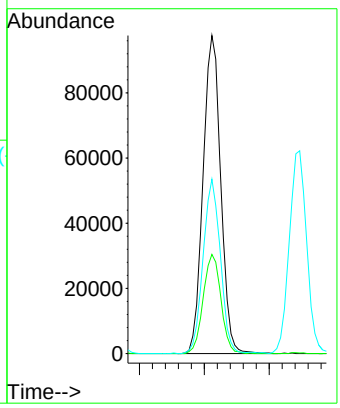
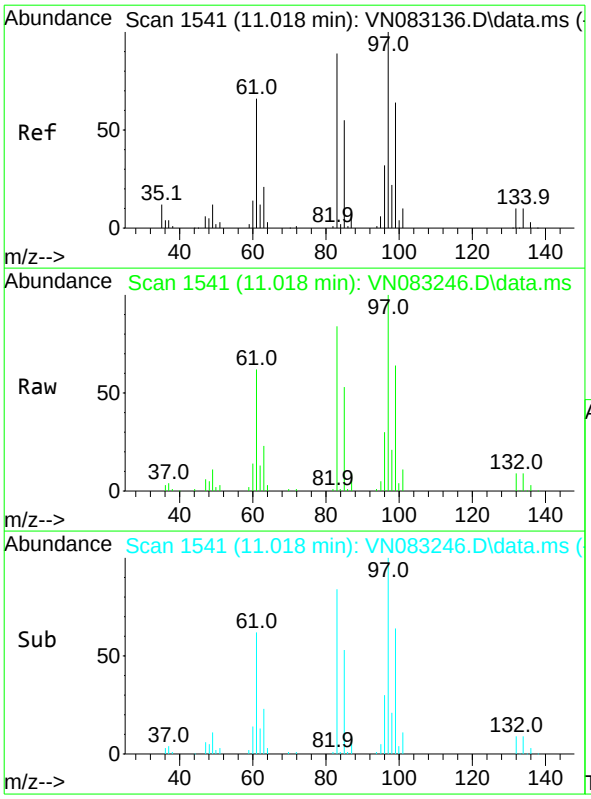



#54
cis-1,3-Dichloropropene
Concen: 51.111 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 75 Resp: 184717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.2 | 24.3 | 36.5 |
| 39 | 54.8 | 50.5 | 75.7 |

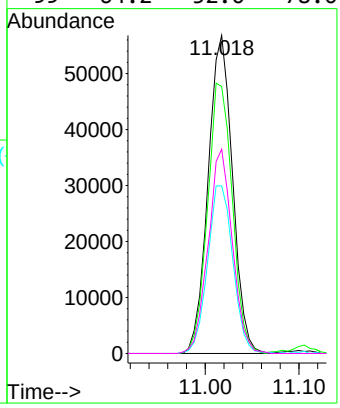





#55
1,1,2-Trichloroethane
Concen: 52.435 ug/l
RT: 11.018 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 97 Resp: 102947

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 83.9 | 71.4 | 107.0 |
| 85 | 52.7 | 45.8 | 68.6 |
| 99 | 64.2 | 52.0 | 78.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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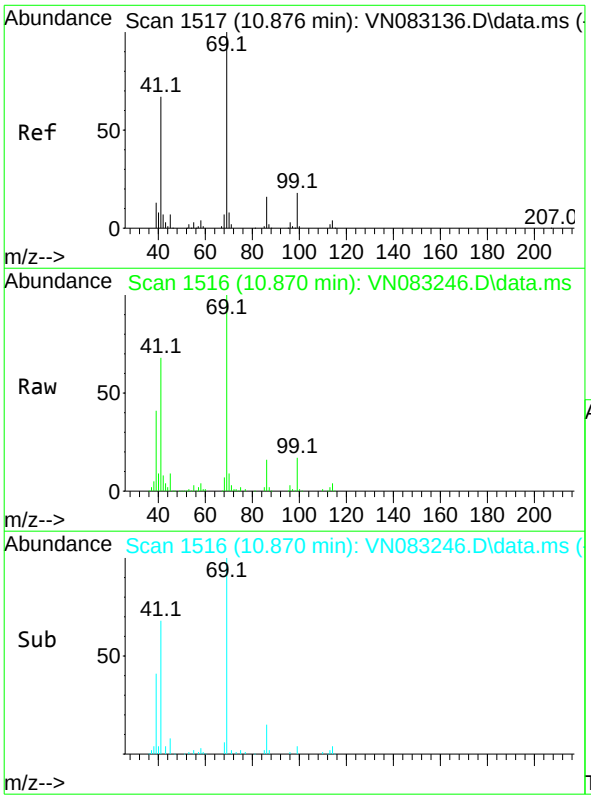
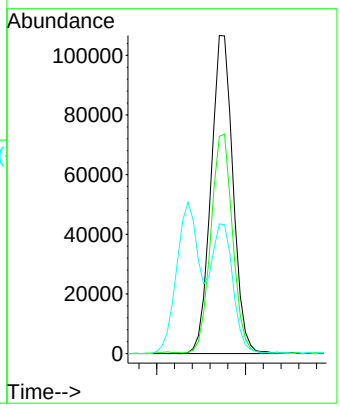
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

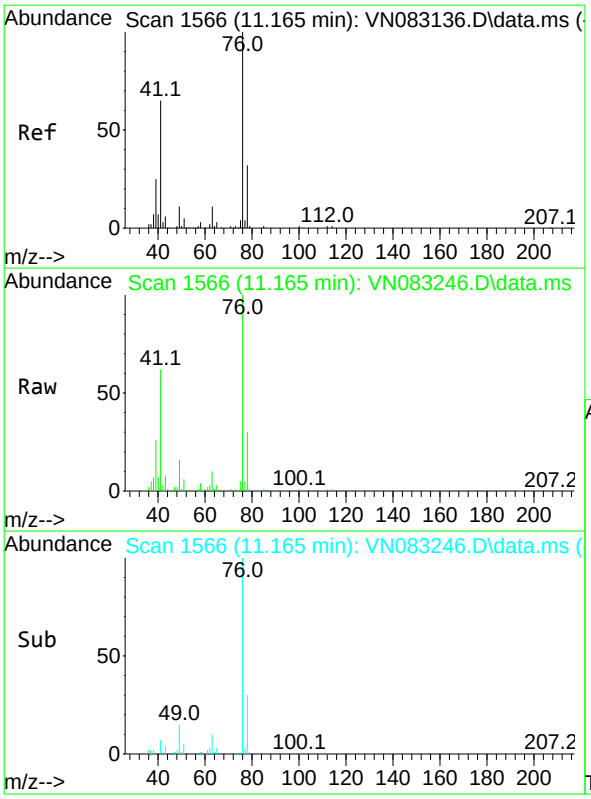



#56
Ethyl methacrylate
Concen: 49.645 ug/l
RT: 10.870 min Scan# 1516
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 69 Resp: 183747

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 68.0 | 63.4 | 95.2 |
| 39 | 41.1 | 37.4 | 56.0 |

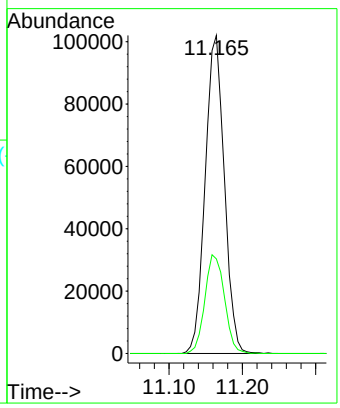





#57
1,3-Dichloropropane
Concen: 52.717 ug/l
RT: 11.165 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 76 Resp: 184479

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.8 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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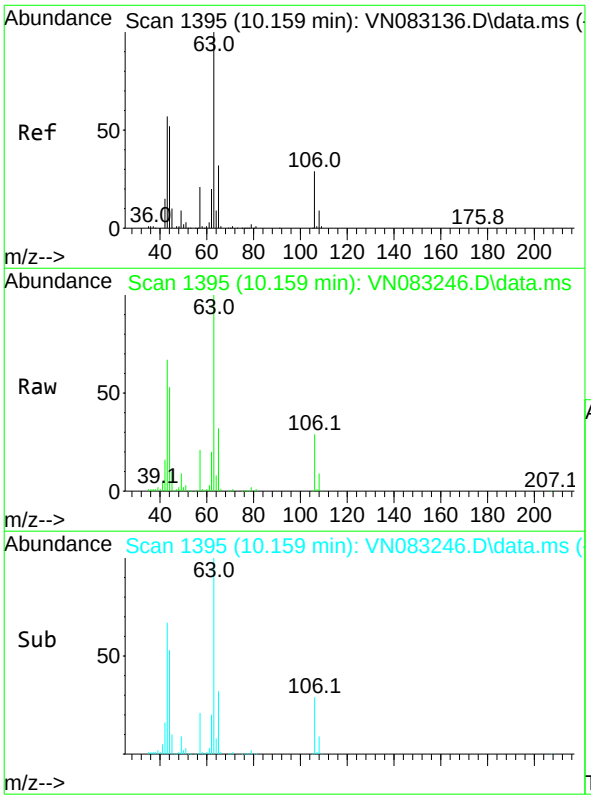
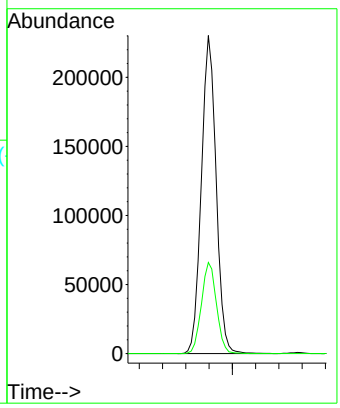
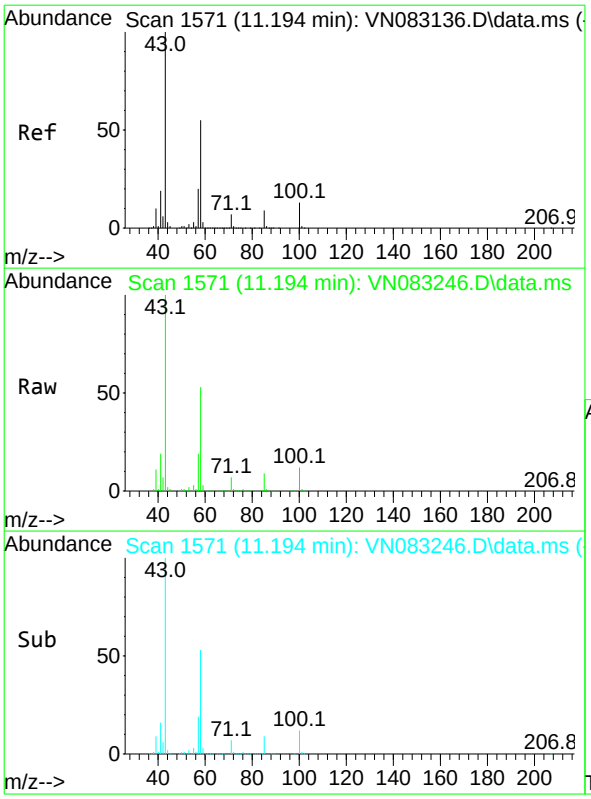



#58
2-Chloroethyl Vinyl ether
Concen: 258.946 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 63 Resp: 405122

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 29.1 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 238.595 ug/l
RT: 11.194 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 43 Resp: 568842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 54.0 | 24.6 | 73.8 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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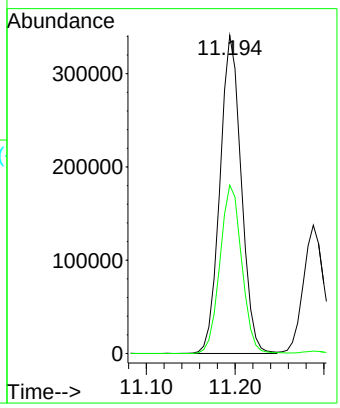
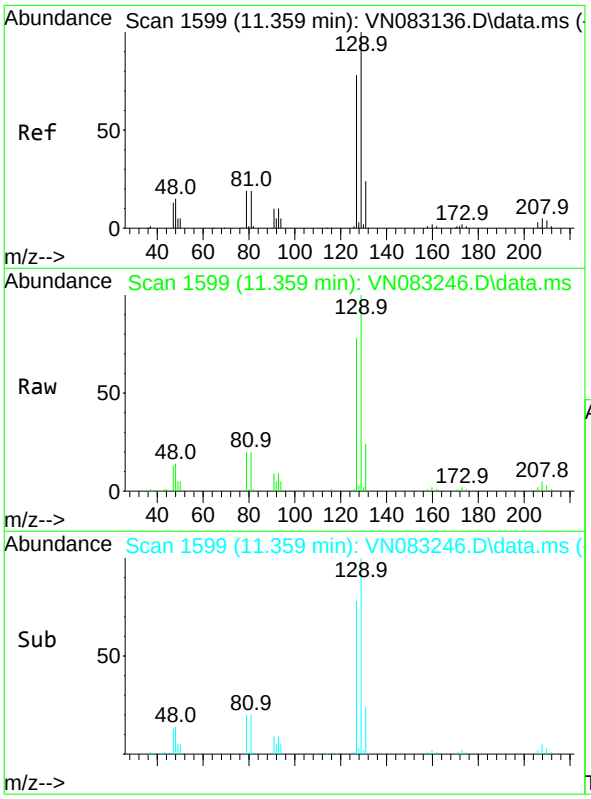
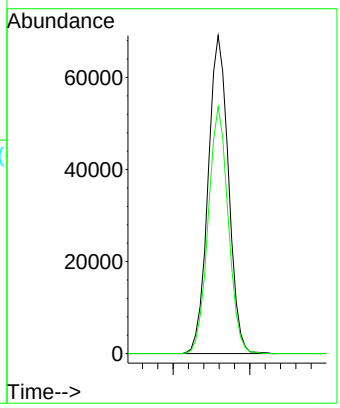


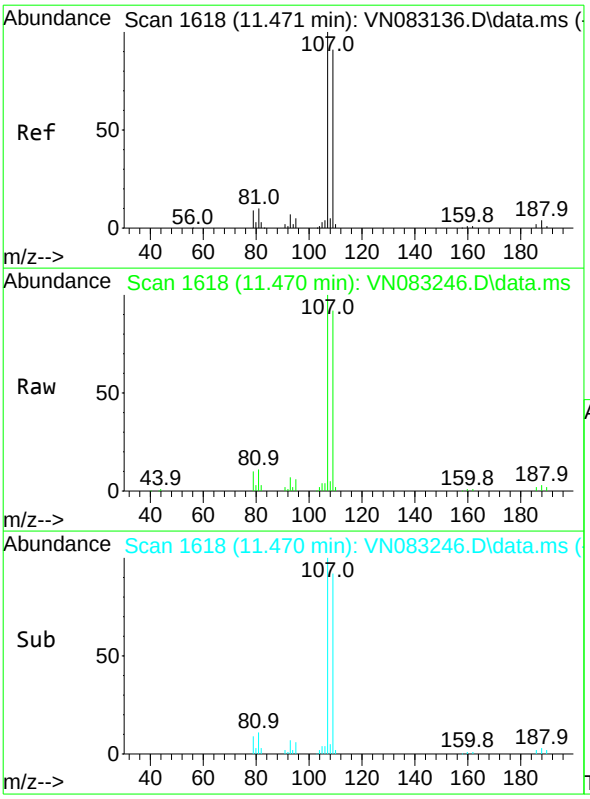




#60
Dibromochloromethane
Concen: 53.622 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:129 Resp: 127283

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.2 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 51.342 ug/l
RT: 11.470 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:107 Resp: 105890

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.1 | 73.7 | 110.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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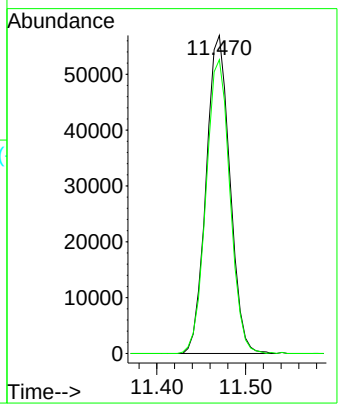
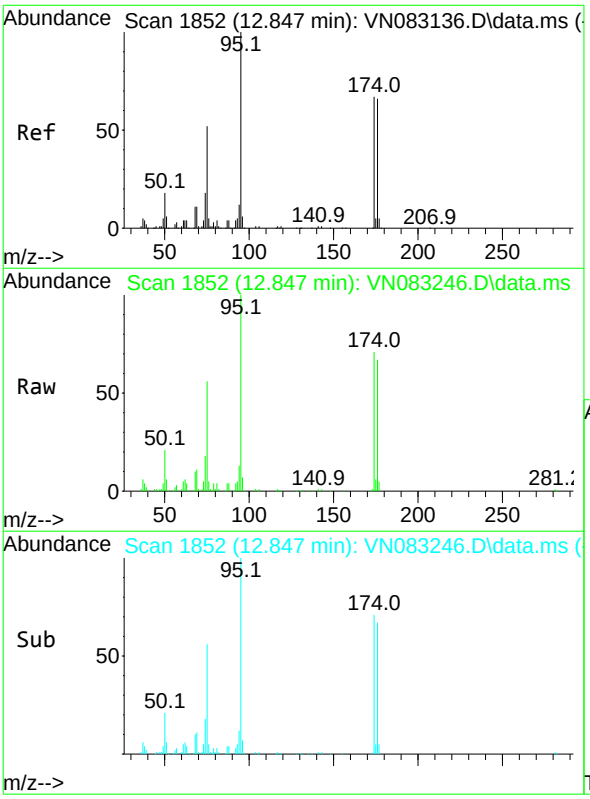
Supervised By :Semsettin Yesilyurt 08/14/2024

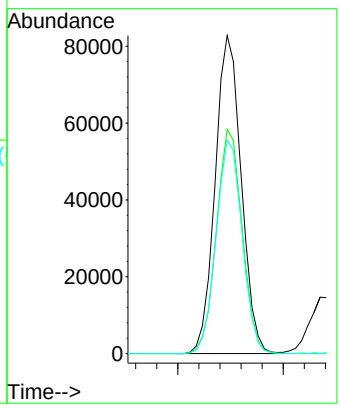


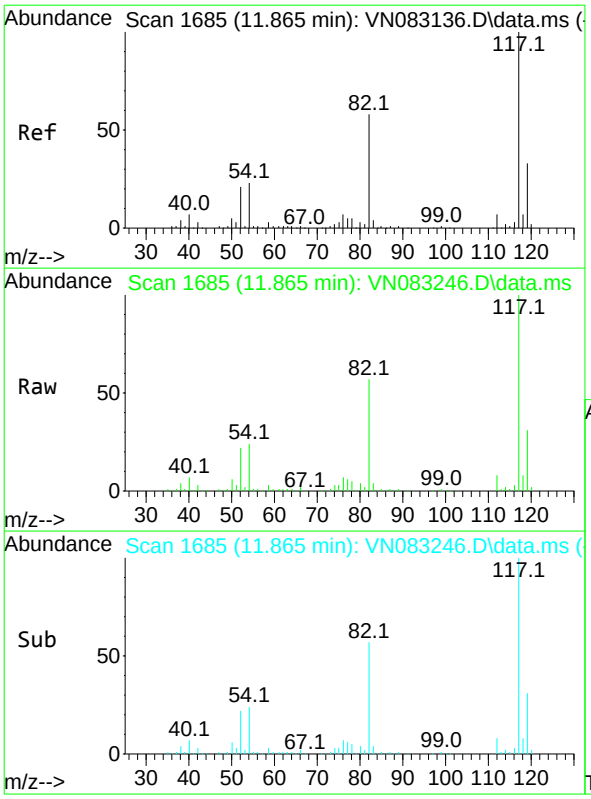




#62
4-Bromofluorobenzene
Concen: 50.813 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 95 Resp: 142178

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.8 | 0.0 | 159.2 |
| 176 | 66.9 | 0.0 | 147.6 |

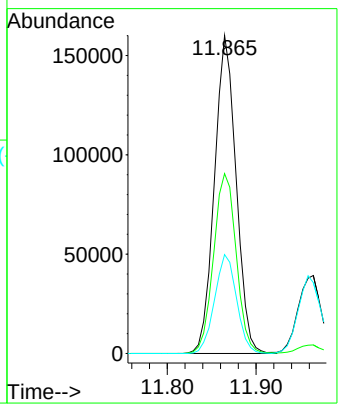





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:117 Resp: 271780

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 56.5 | 47.5 | 71.3 |
| 119 | 31.1 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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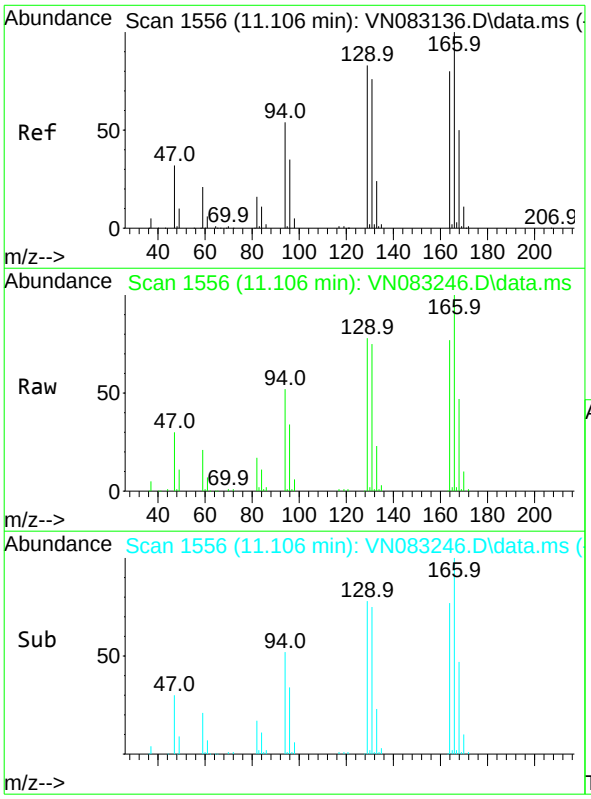
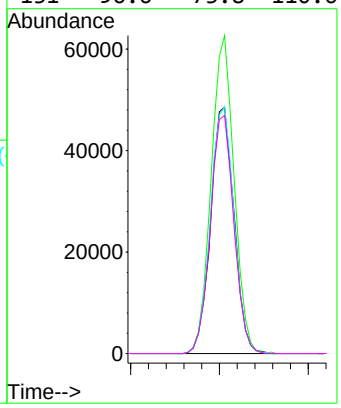
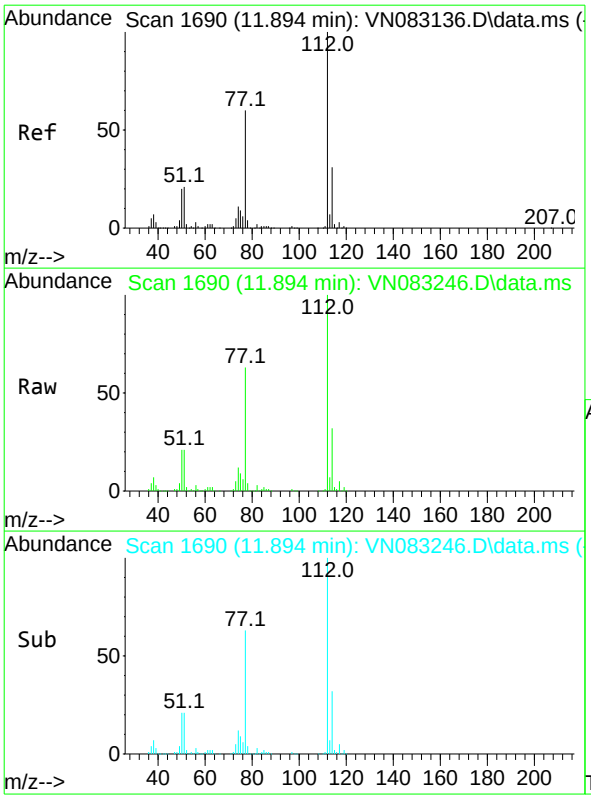



#64
Tetrachloroethene
Concen: 49.447 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:164 Resp: 89002

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 129.0 | 101.4 | 152.0 |
| 129 | 100.2 | 75.7 | 113.5 |
| 131 | 96.6 | 73.8 | 110.6 |






#65
Chlorobenzene
Concen: 50.387 ug/l
RT: 11.894 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:112 Resp: 302624

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.6 | 26.2 | 39.2 |

**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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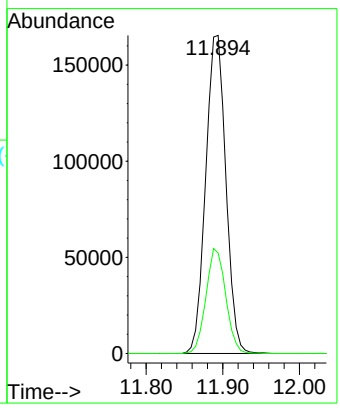
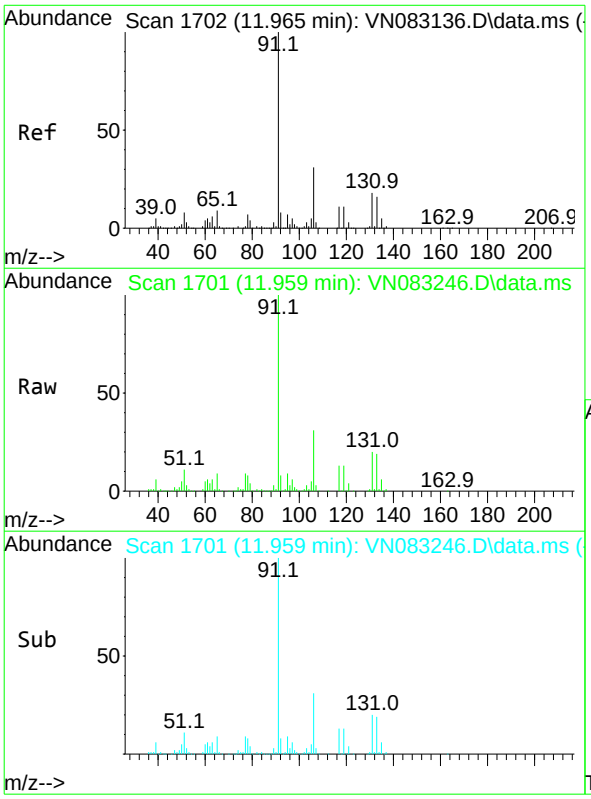
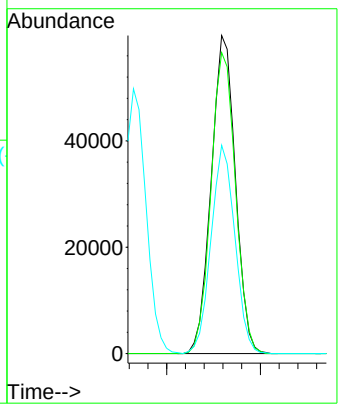


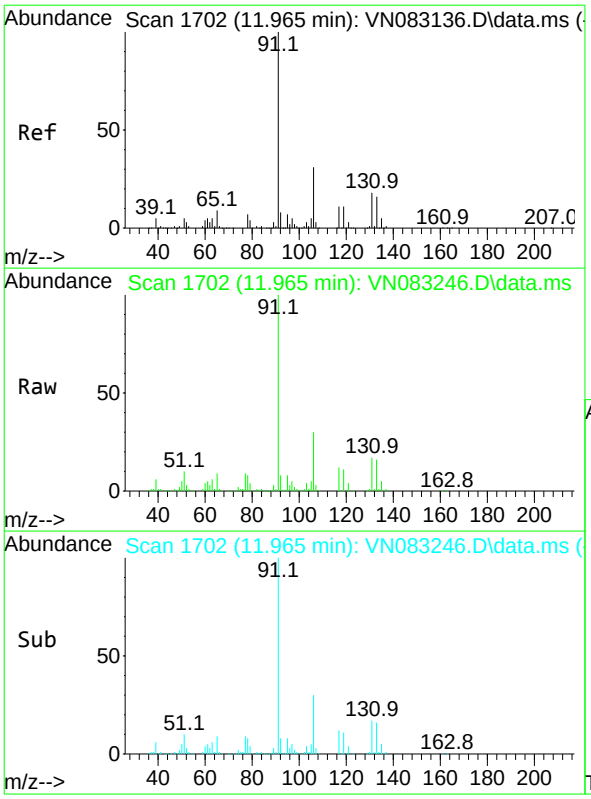




#66
1,1,1,2-Tetrachloroethane
Concen: 50.567 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:131 Resp: 107111

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.9 | 47.3 | 142.0 |
| 119 | 64.6 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 50.506 ug/l
RT: 11.965 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 91 Resp: 556470

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.2 | 24.0 | 36.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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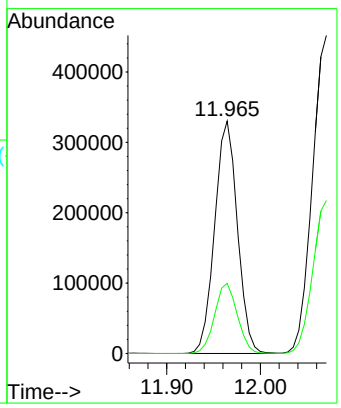
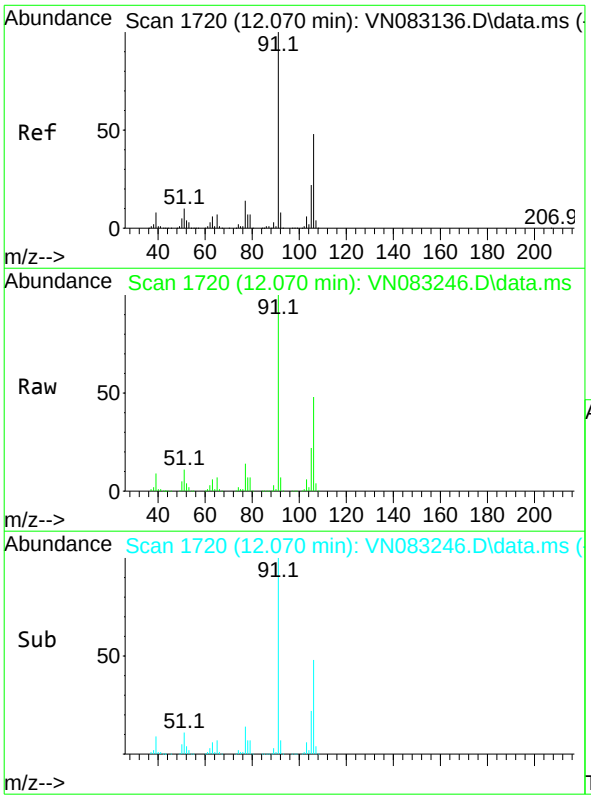
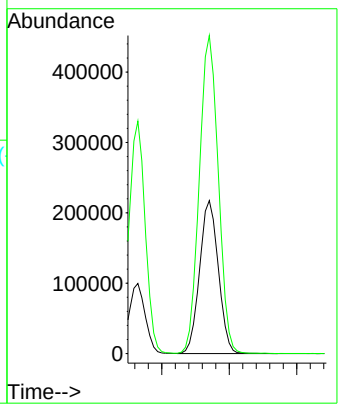


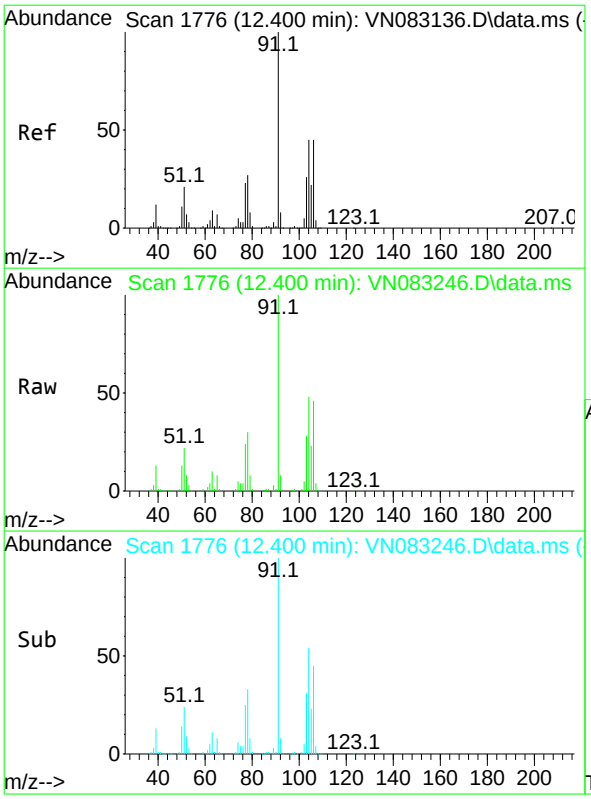




#68
m/p-Xylenes
Concen: 101.492 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:106 Resp: 418879

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.8 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 50.624 ug/l
RT: 12.400 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:106 Resp: 206065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.4 | 111.3 | 333.9 |

**Instrument :**
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VSTDCCC050

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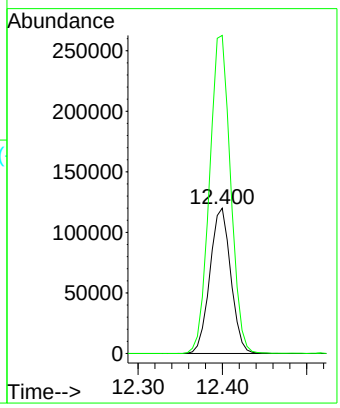
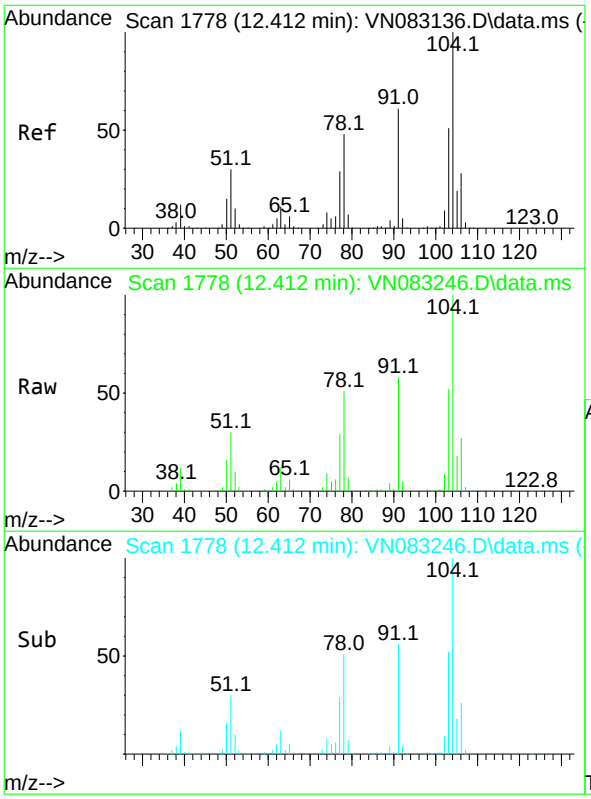
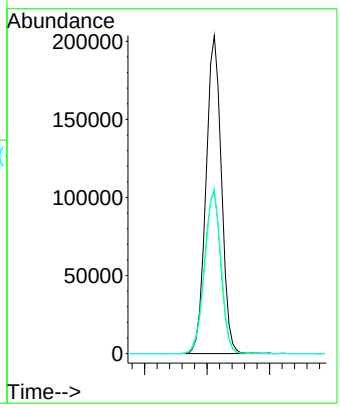


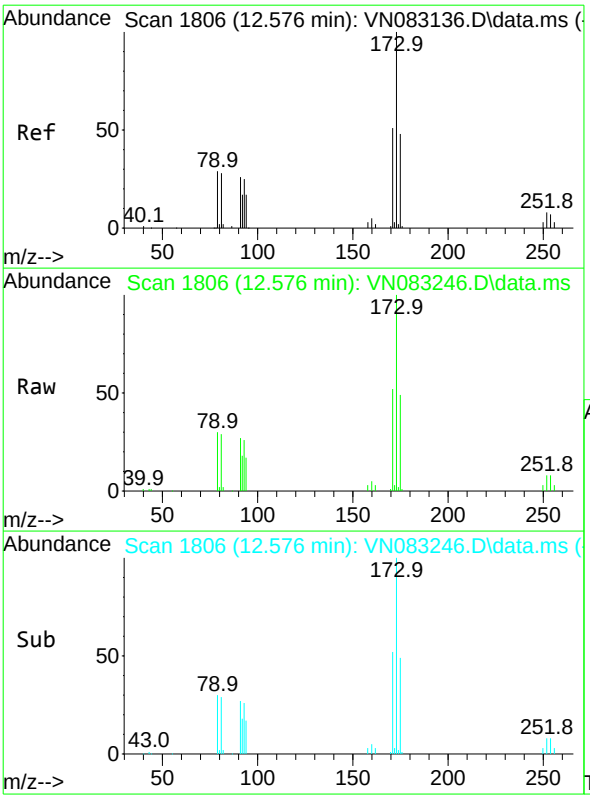




#70
Styrene
Concen: 50.963 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:104 Resp: 348418

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 54.4 | 41.6 | 62.4 |
| 103 | 54.8 | 44.0 | 66.0 |






#71
Bromoform
Concen: 51.856 ug/l
RT: 12.576 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

Tgt Ion:173 Resp: 83212

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.7 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |

**Manual Integrations**
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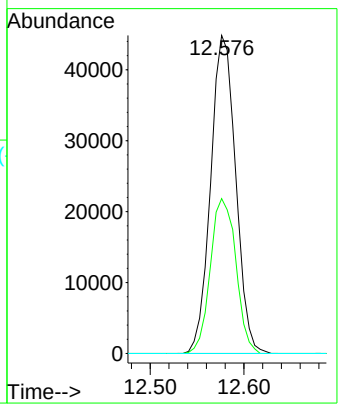
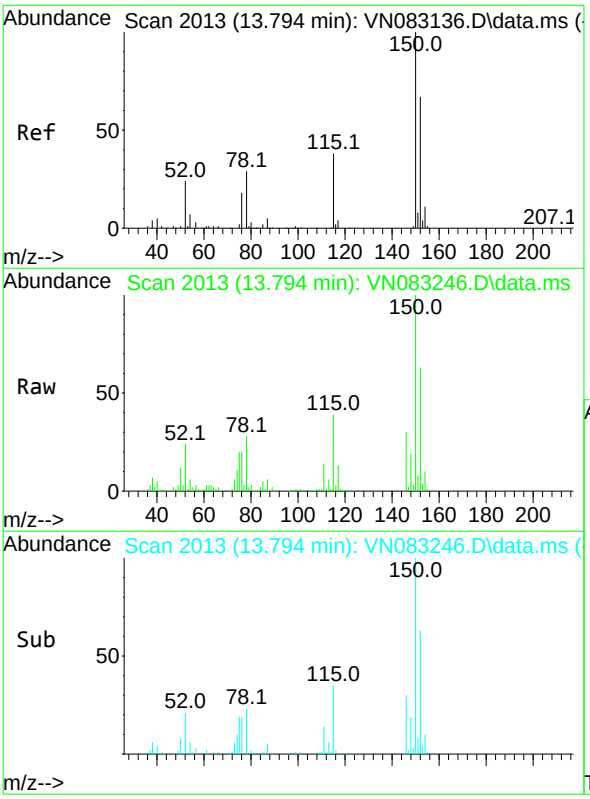
Supervised By :Semsettin Yesilyurt 08/14/2024

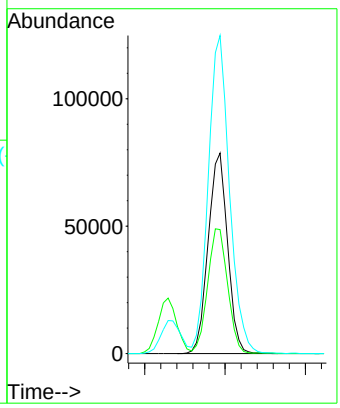


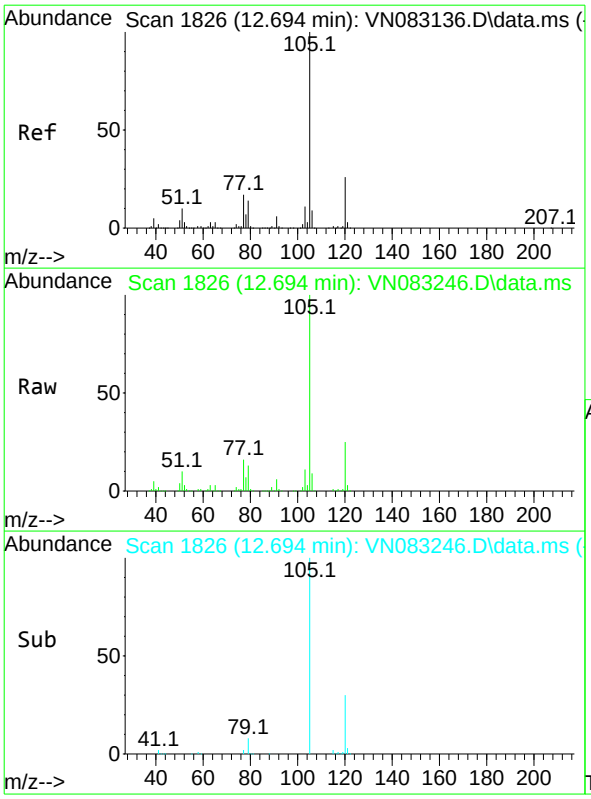




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:152 Resp: 132143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.1 | 30.6 | 91.6 |
| 150 | 172.8 | 0.0 | 348.6 |






#73
Isopropylbenzene
Concen: 48.882 ug/l
RT: 12.694 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

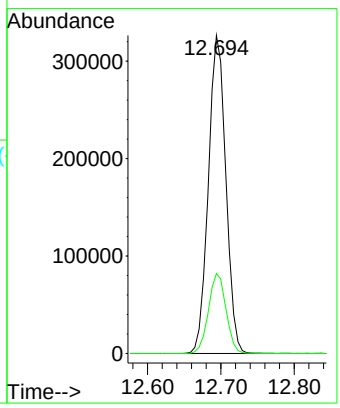
**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

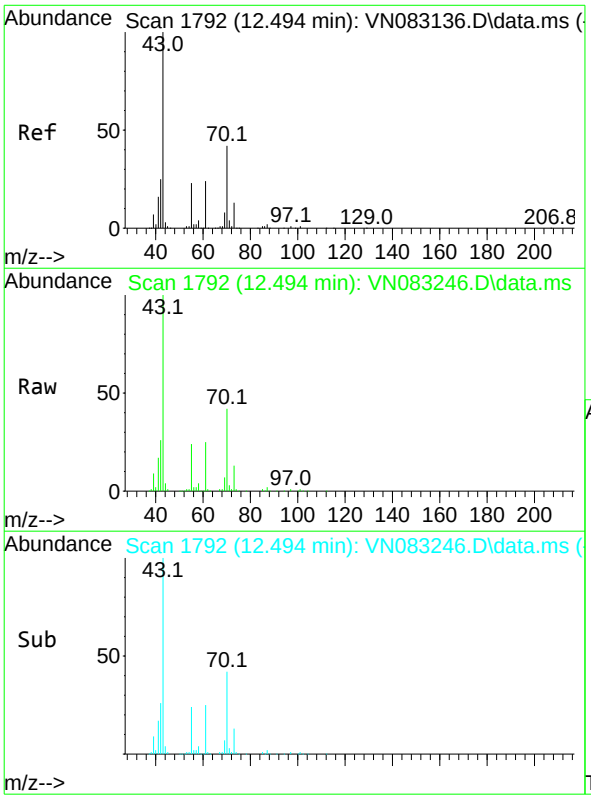
Tgt Ion:105 Resp: 540283

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.2 | 12.9 | 38.6 |

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

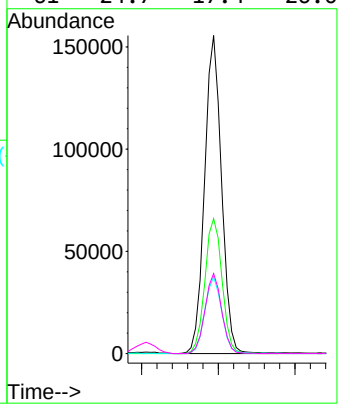


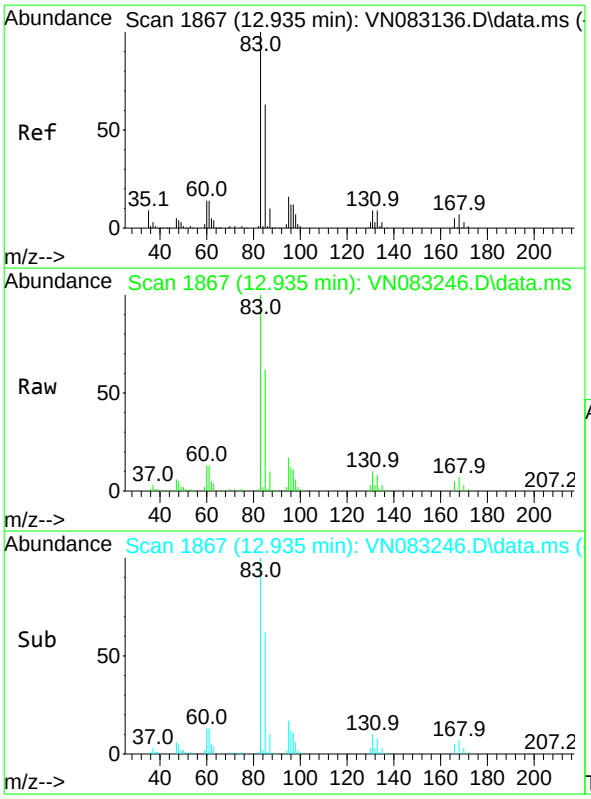




#74
N-amyl acetate
Concen: 44.149 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 43 Resp: 238687

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 42.9 | 29.8 | 44.6 |
| 55 | 24.0 | 18.7 | 28.1 |
| 61 | 24.7 | 17.4 | 26.0 |






#75
1,1,2,2-Tetrachloroethane
Concen: 47.894 ug/l
RT: 12.935 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 83 Resp: 149722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.4 | 5.0 | 14.9 |
| 85 | 64.0 | 31.9 | 95.7 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

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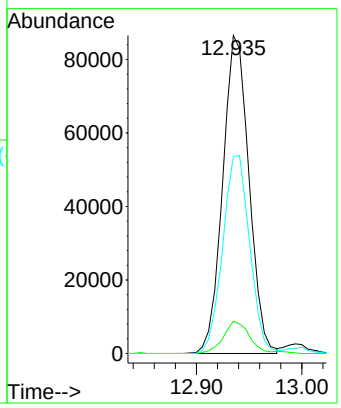
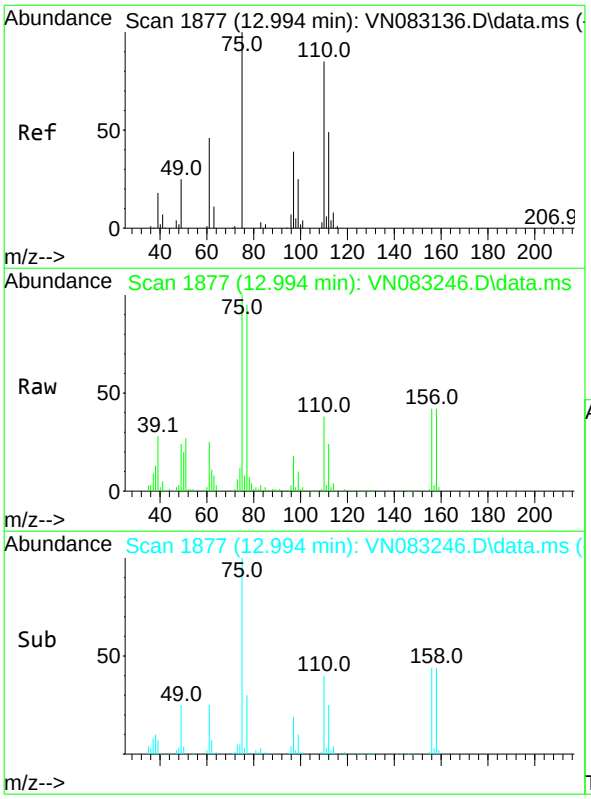
Supervised By :Semsettin Yesilyurt 08/14/2024

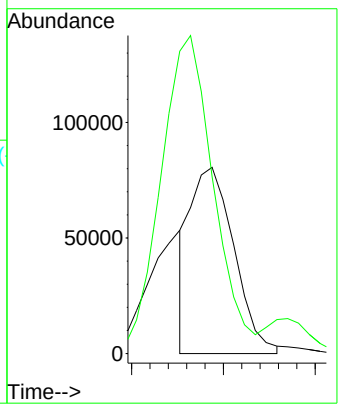


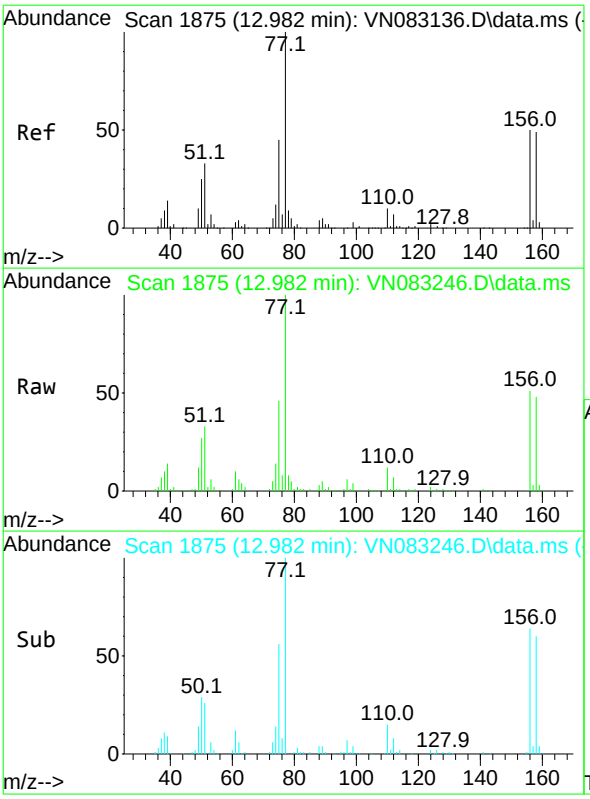




#76
1,2,3-Trichloropropane
Concen: 45.954 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 75 Resp: 133276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 205.7 | 110.9 | 332.6 |

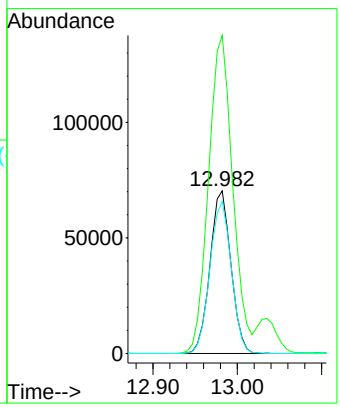





#77
Bromobenzene
Concen: 49.521 ug/l
RT: 12.982 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:156 Resp: 121587

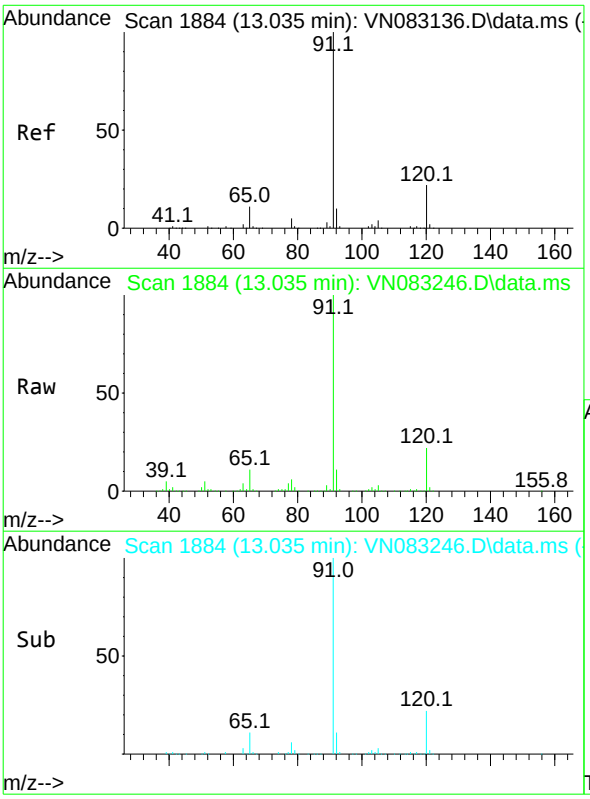
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 225.5 | 111.3 | 333.8 |
| 158 | 95.4 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

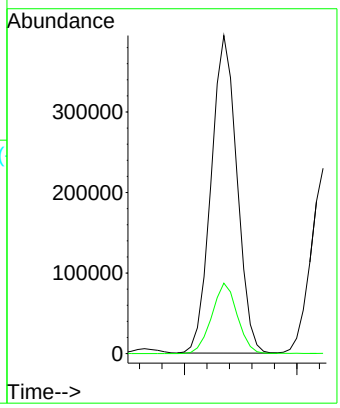
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

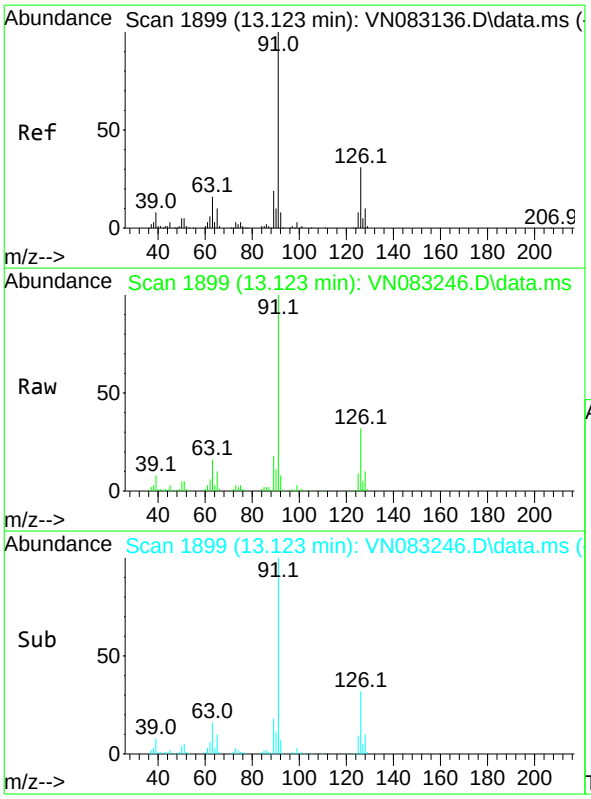



#78
n-propylbenzene
Concen: 49.509 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 91 Resp: 630102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.8 | 10.9 | 32.9 |

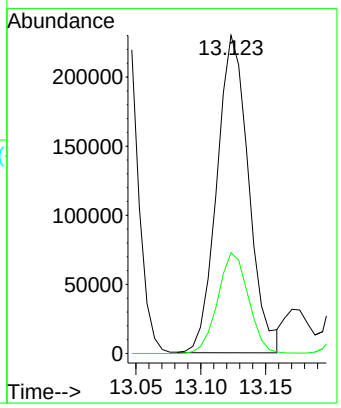





#79
2-Chlorotoluene
Concen: 48.559 ug/l
RT: 13.123 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 91 Resp: 391819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.6 | 16.2 | 48.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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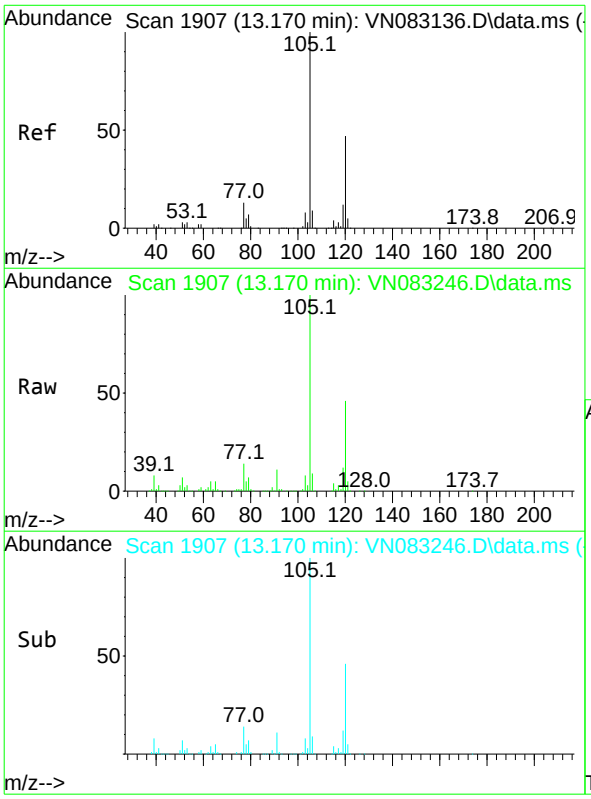
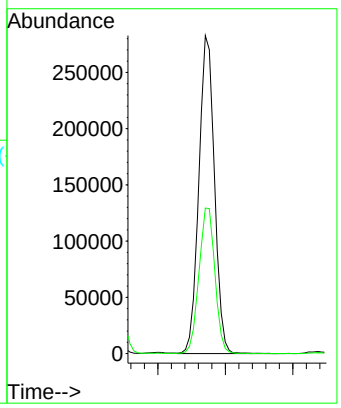
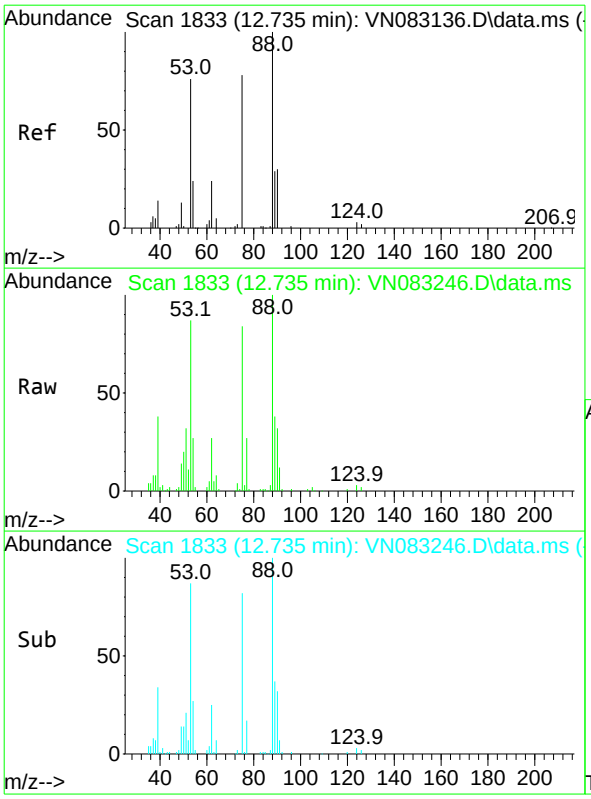



#80
1,3,5-Trimethylbenzene
Concen: 49.074 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:105 Resp: 454104

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.9 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 43.275 ug/l
RT: 12.735 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 75 Resp: 57698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 111.9 | 88.4 | 132.6 |
| 89 | 44.8 | 36.3 | 54.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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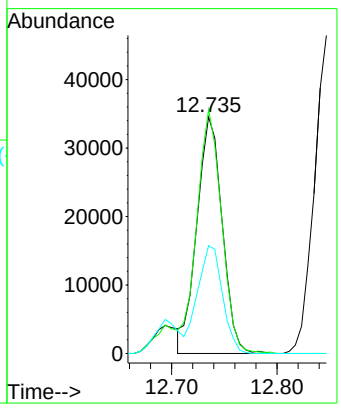
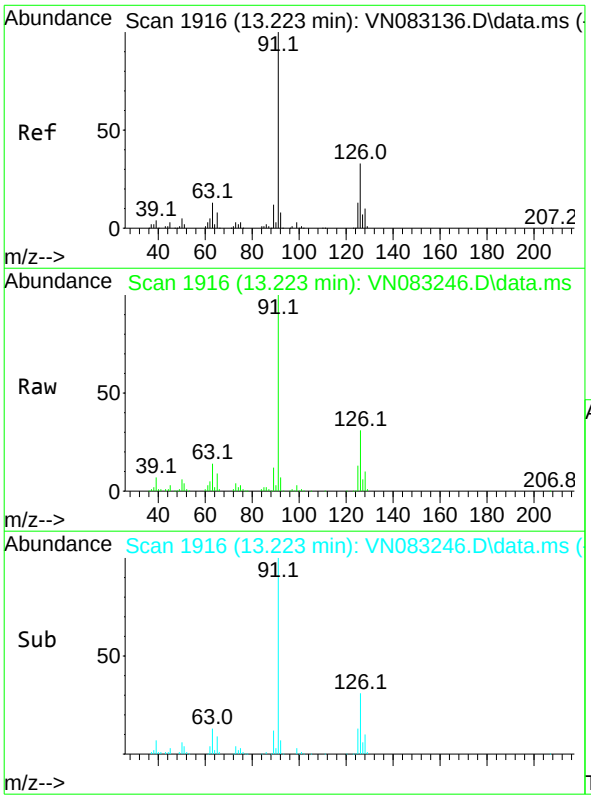
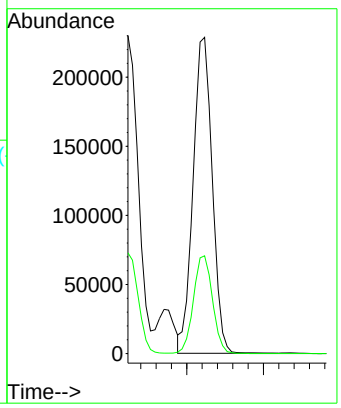


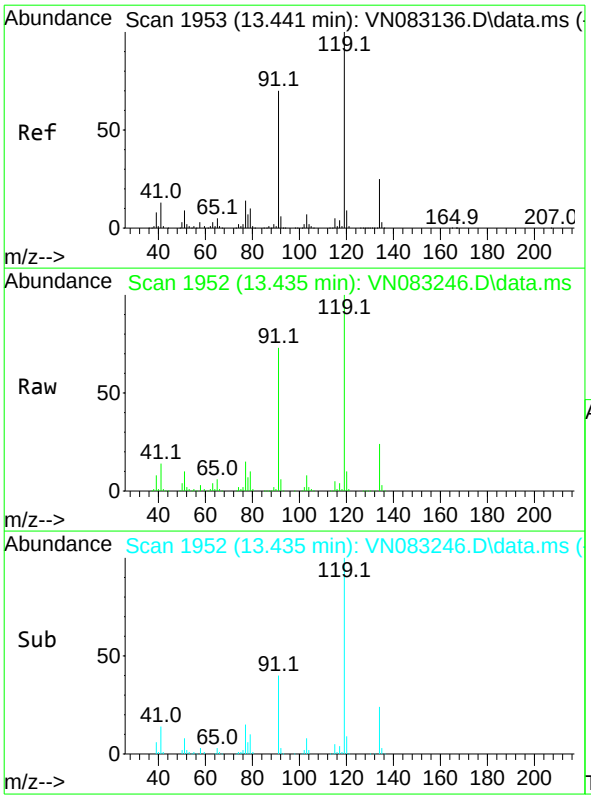




#82
4-Chlorotoluene
Concen: 48.820 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 91 Resp: 395134

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.0 | 16.2 | 48.6 |

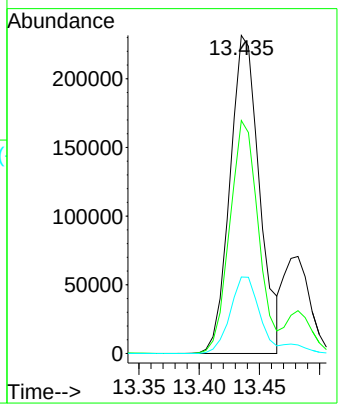





#83
tert-Butylbenzene
Concen: 48.282 ug/l
RT: 13.435 min Scan# 19
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:119 Resp: 395662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.7 | 35.0 | 105.1 |
| 134 | 26.1 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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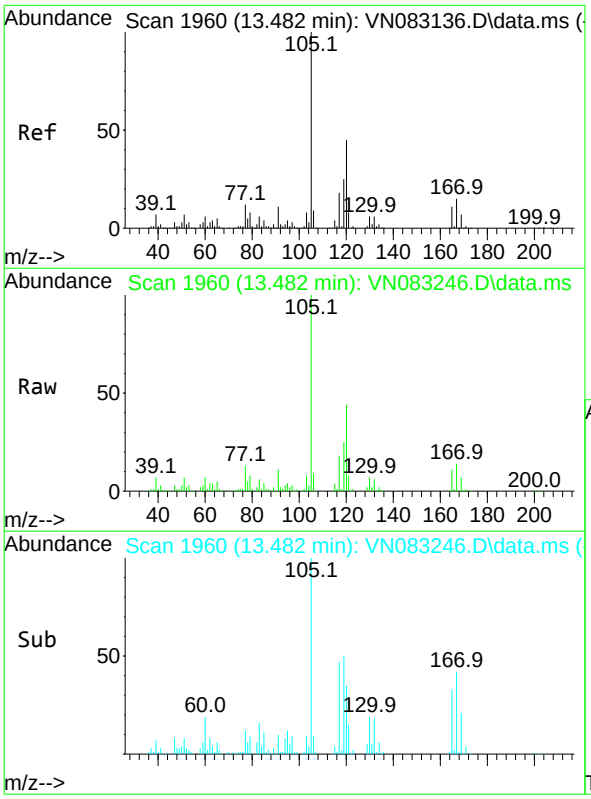
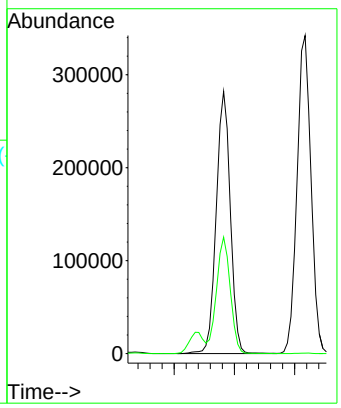
Supervised By :Semsettin Yesilyurt 08/14/2024

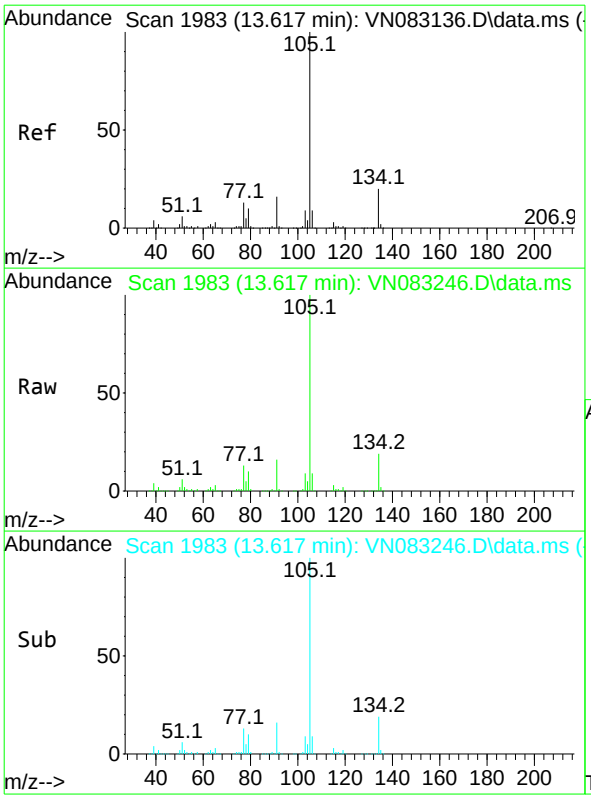



#84
1,2,4-Trimethylbenzene
Concen: 49.111 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:105 Resp: 457979

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.5 | 21.9 | 65.8 |

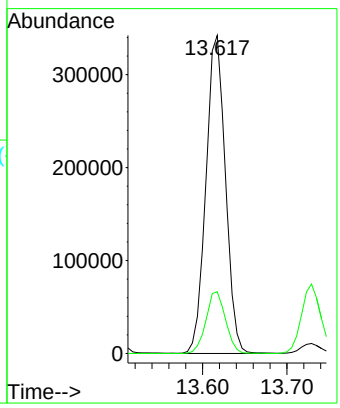





#85
sec-Butylbenzene
Concen: 49.216 ug/l
RT: 13.617 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:105 Resp: 550323

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.5 | 9.8 | 29.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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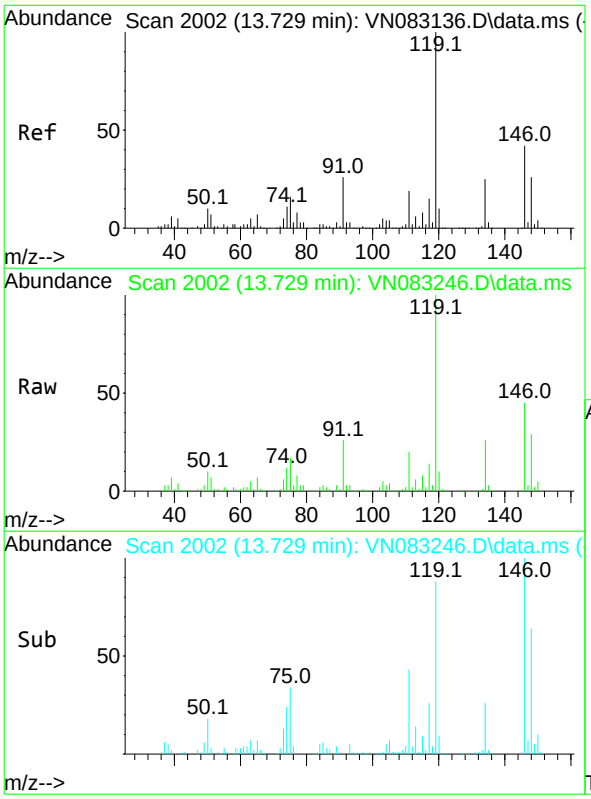
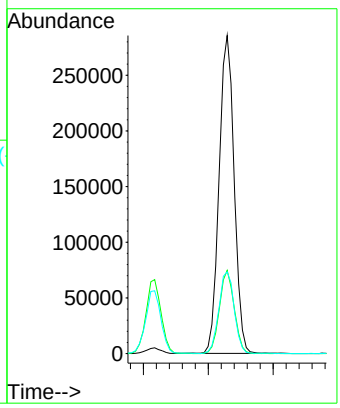
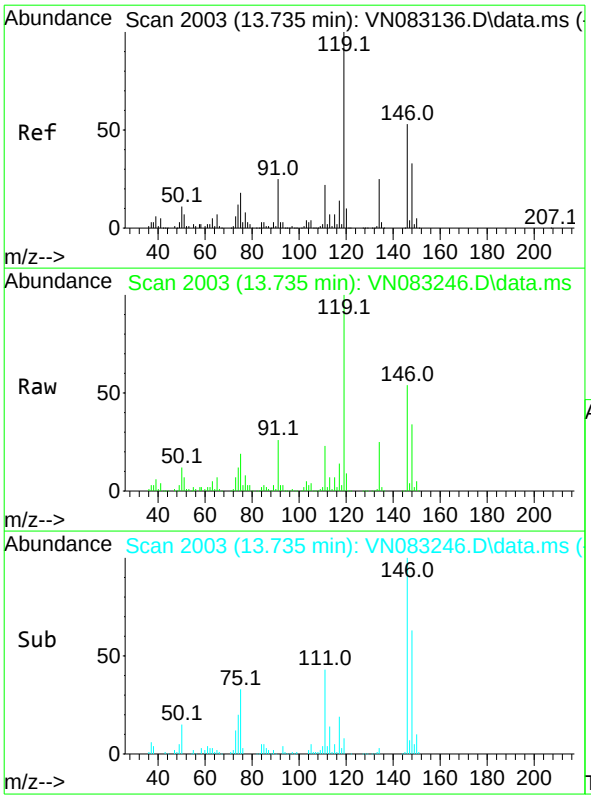



#86
p-Isopropyltoluene
Concen: 49.784 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:119 Resp: 459639

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.7 | 13.0 | 39.0 |
| 91 | 26.3 | 12.3 | 36.9 |

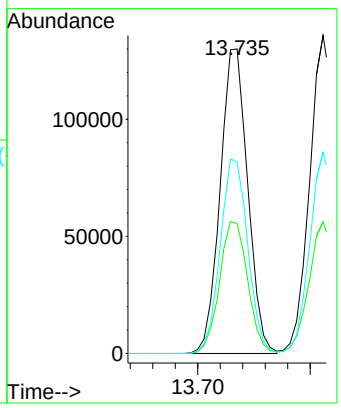





#87
1,3-Dichlorobenzene
Concen: 47.911 ug/l
RT: 13.735 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:146 Resp: 221346

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.3 | 20.6 | 61.9 |
| 148 | 63.9 | 31.8 | 95.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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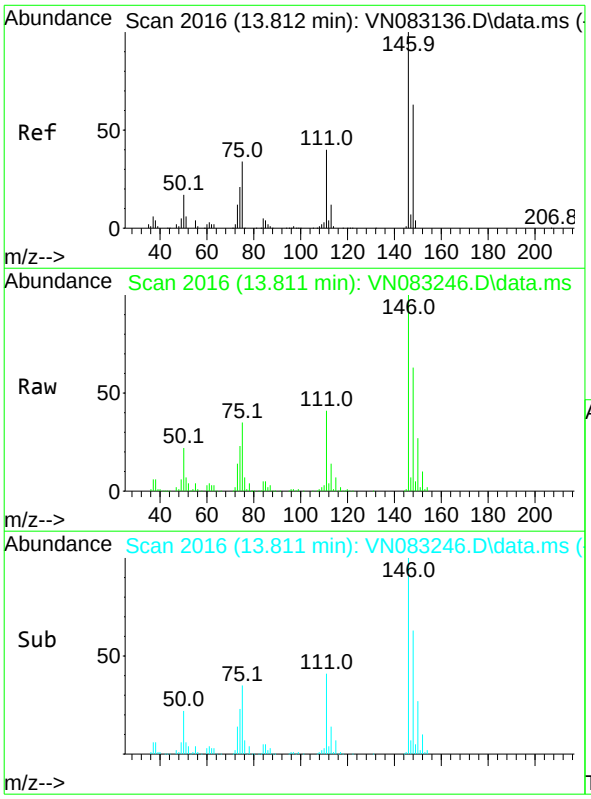
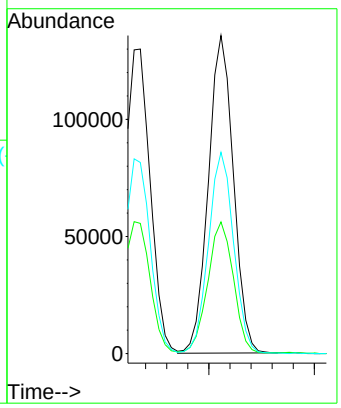
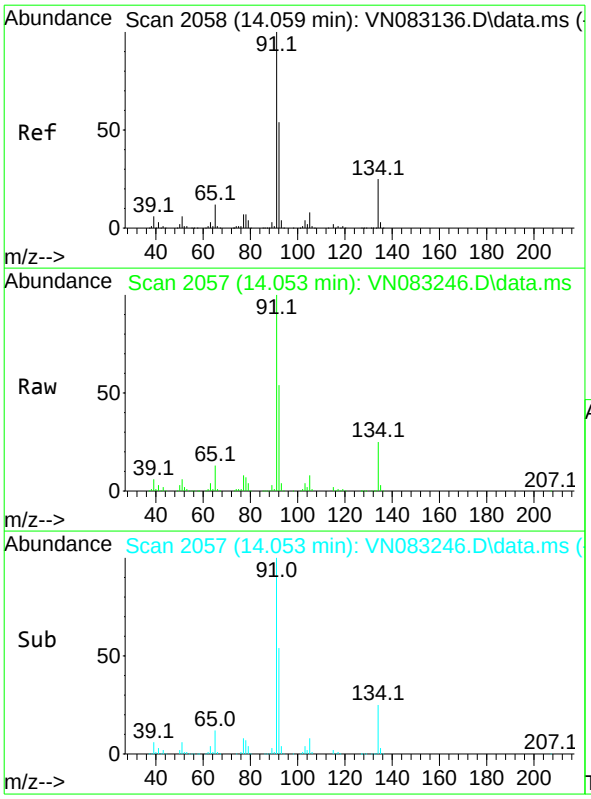



#88
1,4-Dichlorobenzene
Concen: 48.114 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:146 Resp: 224098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.2 | 20.1 | 60.3 |
| 148 | 63.9 | 32.2 | 96.6 |

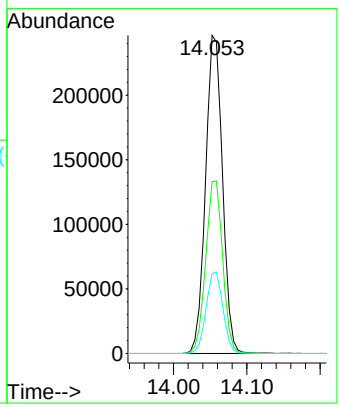





#89
n-Butylbenzene
Concen: 49.469 ug/l
RT: 14.053 min Scan# 20
Delta R.T. -0.006 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 91 Resp: 395753

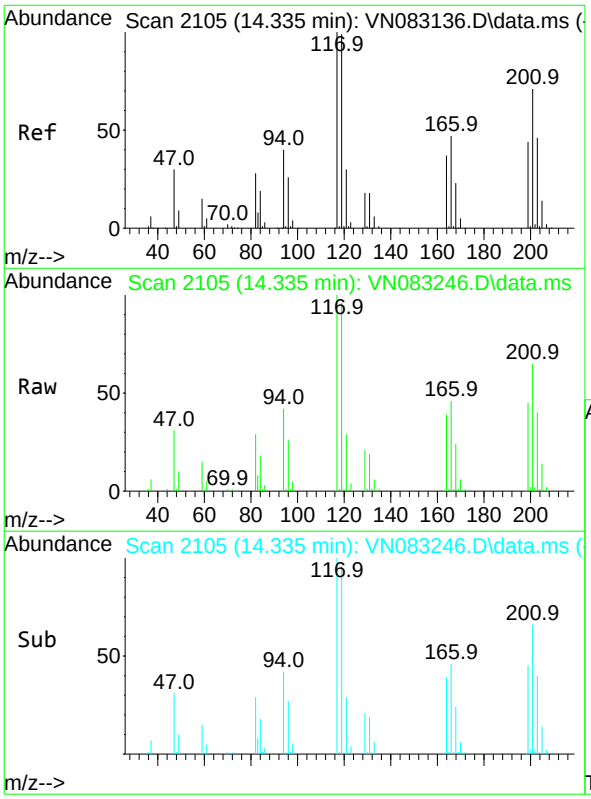
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.3 | 26.1 | 78.3 |
| 134 | 25.4 | 12.1 | 36.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

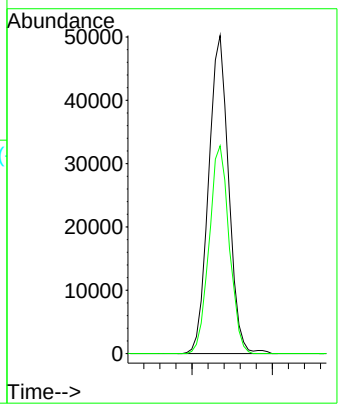
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

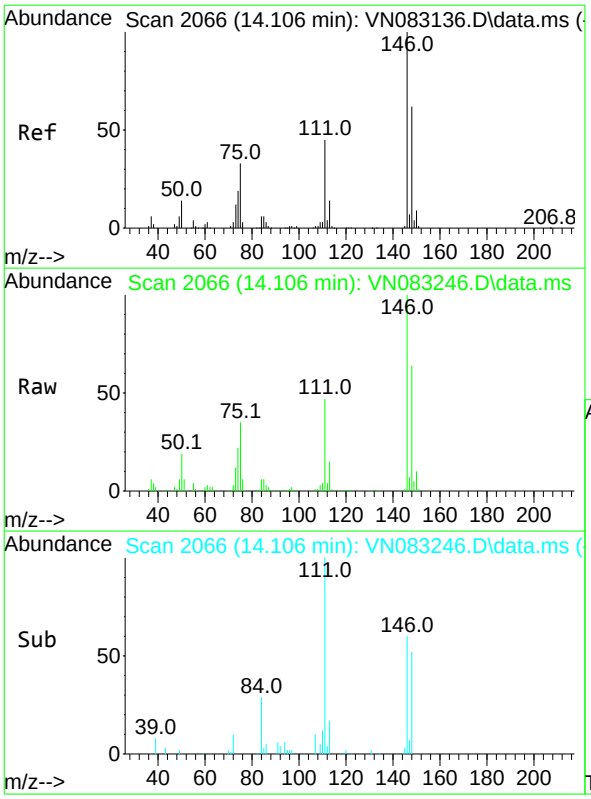



#90
Hexachloroethane
Concen: 48.762 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:117 Resp: 86978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.4 | 35.8 | 107.3 |

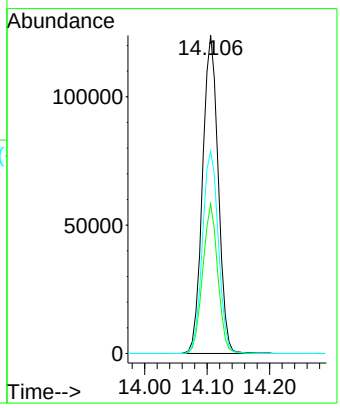





#91
1,2-Dichlorobenzene
Concen: 48.233 ug/l
RT: 14.106 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:146 Resp: 215635

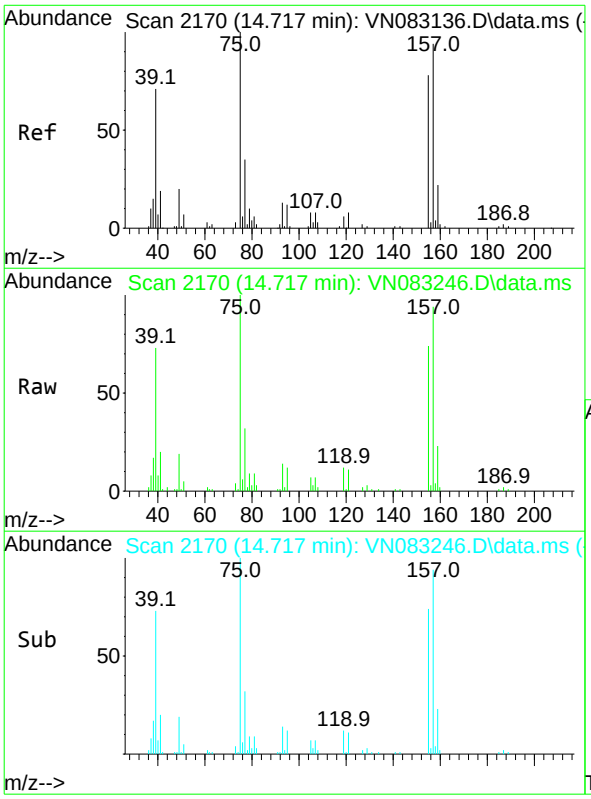
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.1 | 21.4 | 64.2 |
| 148 | 64.5 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

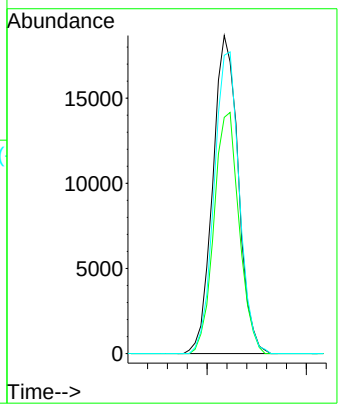
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

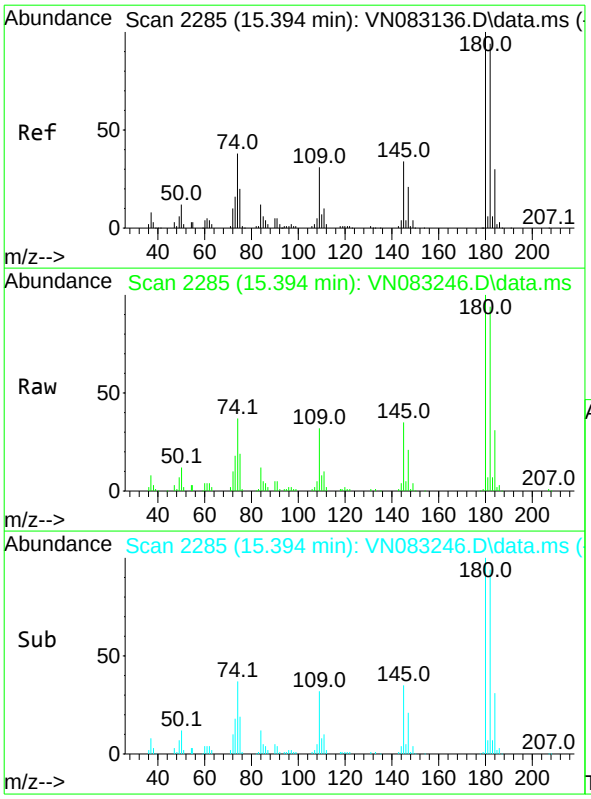



#92
1,2-Dibromo-3-Chloropropane
Concen: 43.939 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion: 75 Resp: 33331

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 75.0 | 36.6 | 109.8 |
| 157 | 93.5 | 46.9 | 140.6 |






#93
1,2,4-Trichlorobenzene
Concen: 48.328 ug/l
RT: 15.394 min Scan# 22
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

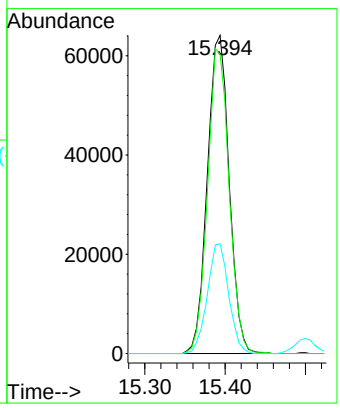
**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

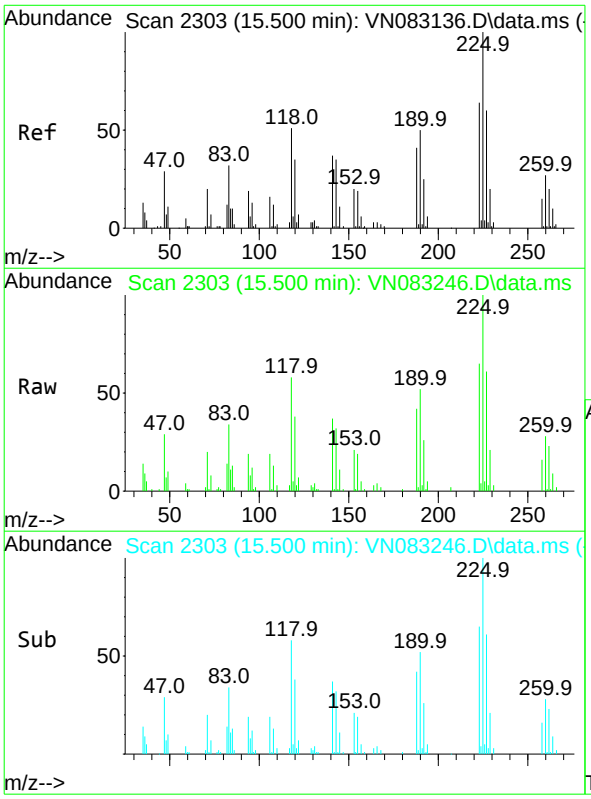
Tgt Ion:180 Resp: 121044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.5 | 47.3 | 141.8 |
| 145 | 33.7 | 15.7 | 47.1 |

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

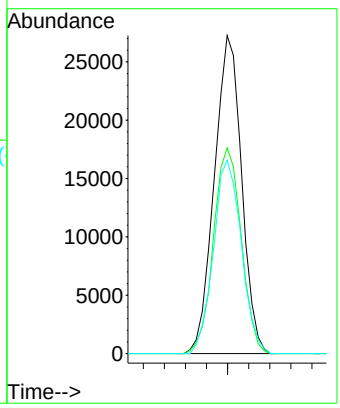


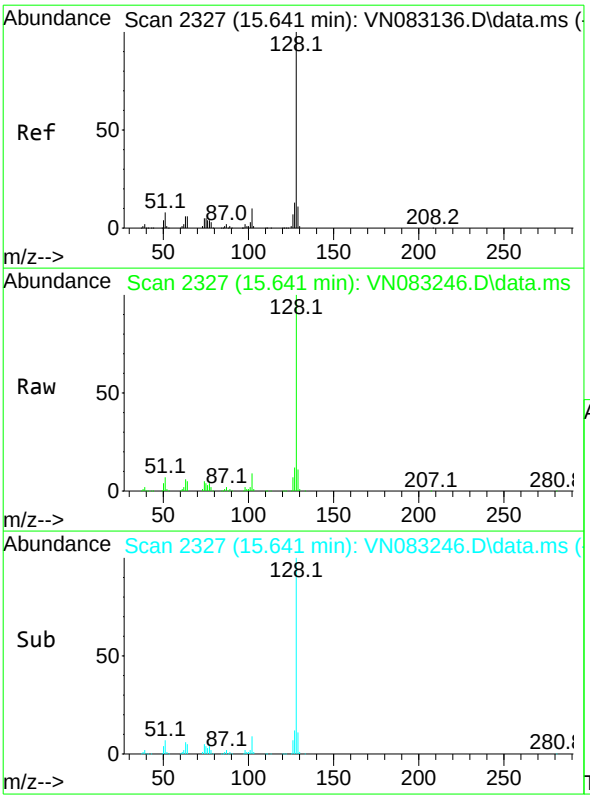




#94
Hexachlorobutadiene
Concen: 43.961 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:225 Resp: 48967

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 65.7 | 31.9 | 95.7 |
| 227 | 62.3 | 32.5 | 97.5 |






#95
Naphthalene
Concen: 46.239 ug/l
RT: 15.641 min Scan# 23
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

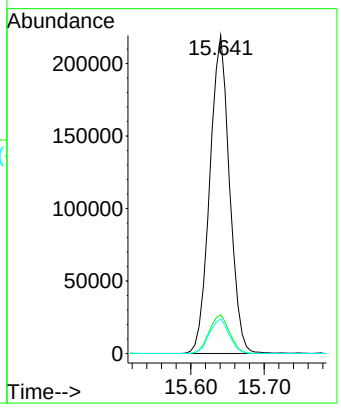
Tgt Ion:128 Resp: 410232

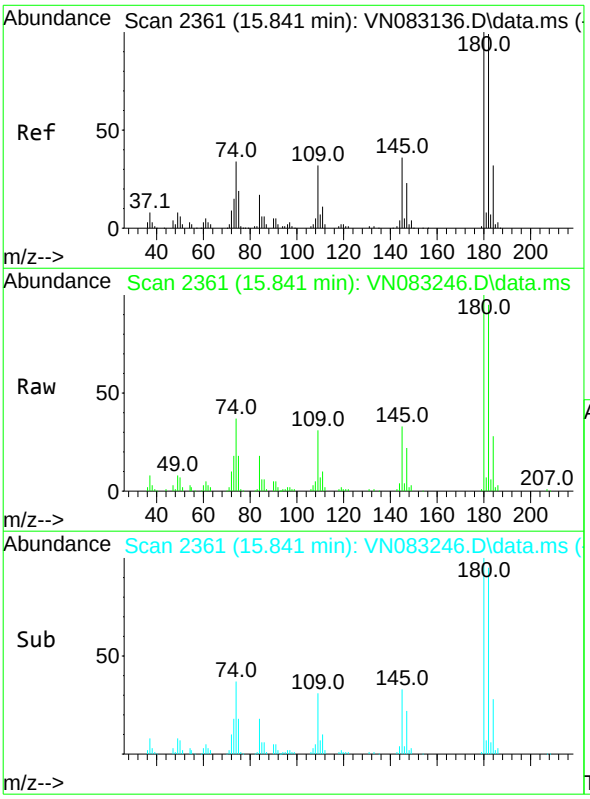
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.5 | 10.6 | 16.0 |
| 129 | 10.9 | 8.6 | 12.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

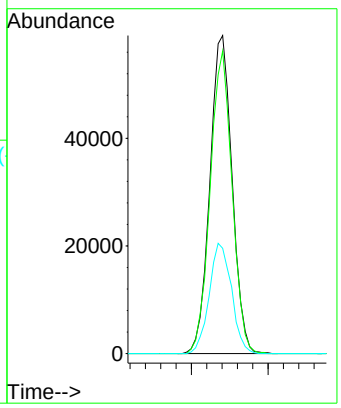



#96
1,2,3-Trichlorobenzene
Concen: 47.881 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083246.D
Acq: 13 Aug 2024 10:18

Tgt Ion:180 Resp: 118663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.7 | 48.9 | 146.8 |
| 145 | 34.8 | 16.8 | 50.4 |



Evaluate Continuing Calibration Report

Sample Results: **VN083246.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083246.D
Acq On : 13 Aug 2024 10:18
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 01:37:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 1.000 | 1.000 | 0.0 | 87 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.567 | 0.543 | 4.2 | 83 | 0.00 |
| 3 | P | Chloromethane | 0.581 | 0.552 | 5.0 | 81 | 0.00 |
| 4 | C | Vinyl Chloride | 0.592 | 0.583 | 1.5# | 85 | 0.00 |
| 5 | T | Bromomethane | 0.368 | 0.364 | 1.1 | 89 | 0.00 |
| 6 | T | Chloroethane | 0.371 | 0.385 | -3.8 | 94 | 0.00 |
| 7 | T | Trichlorofluoromethane | 0.979 | 1.022 | -4.4 | 89 | 0.00 |
| 8 | T | Diethyl Ether | 0.364 | 0.356 | 2.2 | 84 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.539 | 0.549 | -1.9 | 87 | 0.00 |
| 10 | T | Methyl Iodide | 0.710 | 0.699 | 1.5 | 82 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.148 | 0.145 | 2.0 | 86 | -0.01 |
| 12 | CM | 1,1-Dichloroethene | 0.554 | 0.529 | 4.5# | 84 | 0.00 |
| 13 | T | Acrolein | 0.096 | 0.091 | 5.2 | 78 | 0.00 |
| 14 | T | Allyl chloride | 1.047 | 0.883 | 15.7 | 82 | 0.00 |
| 15 | T | Acrylonitrile | 0.304 | 0.286 | 5.9 | 81 | 0.00 |
| 16 | T | Acetone | 0.278 | 0.290 | -4.3 | 88 | 0.00 |
| 17 | T | Carbon Disulfide | 1.622 | 1.379 | 15.0 | 77 | 0.00 |
| 18 | T | Methyl Acetate | 0.830 | 0.802 | 3.4 | 90 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 2.001 | 2.005 | -0.2 | 86 | 0.00 |
| 20 | T | Methylene Chloride | 0.641 | 0.597 | 6.9 | 87 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.573 | 0.548 | 4.4 | 83 | 0.00 |
| 22 | T | Diisopropyl ether | 1.969 | 1.992 | -1.2 | 86 | 0.00 |
| 23 | T | Vinyl Acetate | 2.018 | 2.048 | -1.5 | 85 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.073 | 1.109 | -3.4 | 89 | 0.00 |
| 25 | T | 2-Butanone | 0.428 | 0.402 | 6.1 | 82 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.997 | 1.056 | -5.9 | 90 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.691 | 0.688 | 0.4 | 87 | 0.00 |
| 28 | T | Bromochloromethane | 0.439 | 0.443 | -0.9 | 88 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.276 | 0.256 | 7.2 | 80 | 0.00 |
| 30 | C | Chloroform | 1.115 | 1.176 | -5.5# | 90 | 0.00 |
| 31 | T | Cyclohexane | 1.055 | 0.949 | 10.0 | 84 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.055 | 1.096 | -3.9 | 89 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.712 | 0.742 | -4.2 | 87 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 88 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.312 | 0.317 | -1.6 | 84 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.472 | 0.469 | 0.6 | 87 | 0.00 |
| 37 | T | Ethyl Acetate | 0.529 | 0.490 | 7.4 | 87 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.532 | 0.541 | -1.7 | 88 | 0.00 |
| 39 | T | Methylcyclohexane | 0.580 | 0.556 | 4.1 | 82 | 0.00 |
| 40 | TM | Benzene | 1.406 | 1.424 | -1.3 | 87 | 0.00 |
| 41 | T | Methacrylonitrile | 0.301 | 0.279 | 7.3 | 87 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.512 | 0.536 | -4.7 | 91 | 0.00 |
| 43 | T | Isopropyl Acetate | 1.211 | 0.885 | 26.9# | 85 | 0.00 |
| 44 | TM | Trichloroethene | 0.335 | 0.337 | -0.6 | 87 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.334 | 0.344 | -3.0# | 88 | 0.00 |
| 46 | T | Dibromomethane | 0.239 | 0.250 | -4.6 | 88 | 0.00 |
| 47 | T | Bromodichloromethane | 0.537 | 0.549 | -2.2 | 90 | 0.00 |
| 48 | T | Methyl methacrylate | 0.437 | 0.412 | 5.7 | 86 | 0.00 |

Sample Results: **VN083246.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083246.D
Acq On : 13 Aug 2024 10:18
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 01:37:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 0.008 | 0.007 | 12.5 | 75 | 0.00 |
| 50 | S | Toluene-d8 | 1.164 | 1.180 | -1.4 | 83 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.500 | 0.492 | 1.6 | 84 | 0.00 |
| 52 | CM | Toluene | 0.889 | 0.901 | -1.3# | 86 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.551 | 0.581 | -5.4 | 86 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.586 | 0.599 | -2.2 | 87 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.318 | 0.334 | -5.0 | 88 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.600 | 0.596 | 0.7 | 84 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.568 | 0.598 | -5.3 | 89 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.254 | 0.263 | -3.5 | 89 | 0.00 |
| 59 | T | 2-Hexanone | 0.387 | 0.369 | 4.7 | 82 | 0.00 |
| 60 | T | Dibromochloromethane | 0.385 | 0.413 | -7.3 | 88 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.335 | 0.344 | -2.7 | 87 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.454 | 0.461 | -1.5 | 83 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 90 | 0.00 |
| 64 | T | Tetrachloroethene | 0.331 | 0.327 | 1.2 | 86 | 0.00 |
| 65 | PM | Chlorobenzene | 1.105 | 1.113 | -0.7 | 87 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.390 | 0.394 | -1.0 | 88 | 0.00 |
| 67 | C | Ethyl Benzene | 2.027 | 2.048 | -1.0# | 88 | 0.00 |
| 68 | T | m/p-Xylenes | 0.759 | 0.771 | -1.6 | 88 | 0.00 |
| 69 | T | o-Xylene | 0.749 | 0.758 | -1.2 | 88 | 0.00 |
| 70 | T | Styrene | 1.258 | 1.282 | -1.9 | 86 | 0.00 |
| 71 | P | Bromoform | 0.295 | 0.306 | -3.7 | 86 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 92 | 0.00 |
| 73 | T | Isopropylbenzene | 4.182 | 4.089 | 2.2 | 89 | 0.00 |
| 74 | T | N-amyl acetate | 2.046 | 1.806 | 11.7 | 83 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.183 | 1.133 | 4.2 | 89 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.097 | 1.009 | 8.0 | 87 | 0.00 |
| 77 | T | Bromobenzene | 0.929 | 0.920 | 1.0 | 88 | 0.00 |
| 78 | T | n-propylbenzene | 4.816 | 4.768 | 1.0 | 88 | 0.00 |
| 79 | T | 2-Chlorotoluene | 3.053 | 2.965 | 2.9 | 89 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.501 | 3.436 | 1.9 | 88 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.504 | 0.437 | 13.3 | 82 | 0.00 |
| 82 | T | 4-Chlorotoluene | 3.062 | 2.990 | 2.4 | 89 | 0.00 |
| 83 | T | tert-Butylbenzene | 3.101 | 2.994 | 3.5 | 87 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.529 | 3.466 | 1.8 | 87 | 0.00 |
| 85 | T | sec-Butylbenzene | 4.231 | 4.165 | 1.6 | 87 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.493 | 3.478 | 0.4 | 87 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.748 | 1.675 | 4.2 | 87 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.762 | 1.696 | 3.7 | 88 | 0.00 |
| 89 | T | n-Butylbenzene | 3.027 | 2.995 | 1.1 | 86 | 0.00 |
| 90 | T | Hexachloroethane | 0.675 | 0.658 | 2.5 | 88 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.692 | 1.632 | 3.5 | 88 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.287 | 0.252 | 12.2 | 83 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.948 | 0.916 | 3.4 | 86 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.421 | 0.371 | 11.9 | 83 | 0.00 |
| 95 | T | Naphthalene | 3.357 | 3.104 | 7.5 | 82 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083246.D
Acq On : 13 Aug 2024 10:18
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 01:37:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 0.938 | 0.898 | 4.3 | 86 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VN083246.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083246.D
Acq On : 13 Aug 2024 10:18
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 01:37:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 50.000 | 50.000 | 0.0 | 87 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 47.864 | 4.3 | 83 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 47.575 | 4.8 | 81 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 49.180 | 1.6# | 85 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 49.518 | 1.0 | 89 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 51.904 | -3.8 | 94 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 52.219 | -4.4 | 89 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 48.909 | 2.2 | 84 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 50.881 | -1.8 | 87 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 49.216 | 1.6 | 82 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 244.559 | 2.2 | 86 | -0.01 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 47.701 | 4.6# | 84 | 0.00 |
| 13 | T | Acrolein | 250.000 | 236.250 | 5.5 | 78 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 42.169 | 15.7 | 82 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 235.198 | 5.9 | 81 | 0.00 |
| 16 | T | Acetone | 250.000 | 260.346 | -4.1 | 88 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 42.513 | 15.0 | 77 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 48.345 | 3.3 | 90 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 50.110 | -0.2 | 86 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 46.546 | 6.9 | 87 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 47.842 | 4.3 | 83 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 50.588 | -1.2 | 86 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 253.661 | -1.5 | 85 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 51.674 | -3.3 | 89 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 234.960 | 6.0 | 82 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 52.961 | -5.9 | 90 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 49.779 | 0.4 | 87 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 50.555 | -1.1 | 88 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 231.559 | 7.4 | 80 | 0.00 |
| 30 | C | Chloroform | 50.000 | 52.728 | -5.5# | 90 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 44.970 | 10.1 | 84 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 51.945 | -3.9 | 89 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 52.153 | -4.3 | 87 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 88 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 50.737 | -1.5 | 84 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 49.623 | 0.8 | 87 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 46.356 | 7.3 | 87 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 50.883 | -1.8 | 88 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 47.969 | 4.1 | 82 | 0.00 |
| 40 | TM | Benzene | 50.000 | 50.617 | -1.2 | 87 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 46.379 | 7.2 | 87 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 52.326 | -4.7 | 91 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 48.153 | 3.7 | 85 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 50.366 | -0.7 | 87 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 51.570 | -3.1# | 88 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 52.392 | -4.8 | 88 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 51.206 | -2.4 | 90 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 47.166 | 5.7 | 86 | 0.00 |

Sample Results: **VN083246.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083246.D
Acq On : 13 Aug 2024 10:18
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 01:37:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 1000.000 | 874.255 | 12.6 | 75 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 50.663 | -1.3 | 83 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 246.005 | 1.6 | 84 | 0.00 |
| 52 | CM | Toluene | 50.000 | 50.713 | -1.4# | 86 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 52.665 | -5.3 | 86 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 51.111 | -2.2 | 87 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 52.435 | -4.9 | 88 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 49.645 | 0.7 | 84 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 52.717 | -5.4 | 89 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 258.946 | -3.6 | 89 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 238.595 | 4.6 | 82 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 53.622 | -7.2 | 88 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 51.342 | -2.7 | 87 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 50.813 | -1.6 | 83 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 90 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 49.447 | 1.1 | 86 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 50.387 | -0.8 | 87 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 50.567 | -1.1 | 88 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 50.506 | -1.0# | 88 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 101.492 | -1.5 | 88 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 50.624 | -1.2 | 88 | 0.00 |
| 70 | T | Styrene | 50.000 | 50.963 | -1.9 | 86 | 0.00 |
| 71 | P | Bromoform | 50.000 | 51.856 | -3.7 | 86 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 92 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 48.882 | 2.2 | 89 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 44.149 | 11.7 | 83 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 47.894 | 4.2 | 89 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 45.954 | 8.1 | 87 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 49.521 | 1.0 | 88 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 49.509 | 1.0 | 88 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 48.559 | 2.9 | 89 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 49.074 | 1.9 | 88 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 43.275 | 13.5 | 82 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 48.820 | 2.4 | 89 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 48.282 | 3.4 | 87 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 49.111 | 1.8 | 87 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 49.216 | 1.6 | 87 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 49.784 | 0.4 | 87 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 47.911 | 4.2 | 87 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 48.114 | 3.8 | 88 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 49.469 | 1.1 | 86 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 48.762 | 2.5 | 88 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 48.233 | 3.5 | 88 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 43.939 | 12.1 | 83 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 48.328 | 3.3 | 86 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 43.961 | 12.1 | 83 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 46.239 | 7.5 | 82 | 0.00 |

Sample Results: **VN083246.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083246.D
Acq On : 13 Aug 2024 10:18
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 01:37:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 47.881 | 4.2 | 86 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VN083295.D**

Alliance TECHNICAL GROUP

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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JACO05

Lab Code: CHEM Case No.: P3429 SAS No.: P3429 SDG No.: P3429

Instrument ID: MSVOA_N Calibration Date/Time: 08/14/2024 12:41

Lab File ID: VN083295.D Init. Calib. Date(s): 08/07/2024 08/07/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:33 12:34

GC Column: RXI-624 ID: 0.25 (mm)

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.567 | 0.535 | | -5.64 | 20 |
| Chloromethane | 0.581 | 0.541 | 0.1 | -6.89 | 20 |
| Vinyl Chloride | 0.592 | 0.580 | | -2.03 | 20 |
| Bromomethane | 0.368 | 0.326 | | -11.41 | 20 |
| 1,1,2-Trichlorotrifluoroethane | 0.539 | 0.554 | | 2.78 | 20 |
| Acetone | 0.278 | 0.244 | | -12.23 | 20 |
| Carbon Disulfide | 1.622 | 1.333 | | -17.82 | 20 |
| Methyl tert-butyl Ether | 2.001 | 2.005 | | 0.2 | 20 |
| Methylene Chloride | 0.641 | 0.596 | | -7.02 | 20 |
| trans-1,2-Dichloroethene | 0.573 | 0.543 | | -5.24 | 20 |
| Cyclohexane | 1.055 | 0.966 | | -8.44 | 20 |
| 2-Butanone | 0.428 | 0.402 | | -6.07 | 20 |
| Carbon Tetrachloride | 0.532 | 0.548 | | 3.01 | 20 |
| cis-1,2-Dichloroethene | 0.691 | 0.680 | | -1.59 | 20 |
| Chloroform | 1.115 | 1.186 | | 6.37 | 20 |
| 1,1,1-Trichloroethane | 1.055 | 1.088 | | 3.13 | 20 |
| Methylcyclohexane | 0.580 | 0.559 | | -3.62 | 20 |
| Benzene | 1.406 | 1.433 | | 1.92 | 20 |
| 1,2-Dichloroethane | 0.512 | 0.547 | | 6.84 | 20 |
| Trichloroethene | 0.335 | 0.341 | | 1.79 | 20 |
| Bromodichloromethane | 0.537 | 0.551 | | 2.61 | 20 |
| Toluene | 0.889 | 0.921 | | 3.6 | 20 |
| 1,1,2-Trichloroethane | 0.318 | 0.338 | | 6.29 | 20 |
| Dibromochloromethane | 0.385 | 0.416 | | 8.05 | 20 |
| Tetrachloroethene | 0.331 | 0.333 | | 0.6 | 20 |
| Chlorobenzene | 1.105 | 1.119 | 0.3 | 1.27 | 20 |
| Ethyl Benzene | 2.027 | 2.073 | | 2.27 | 20 |
| m/p-Xylenes | 0.759 | 0.775 | | 2.11 | 20 |
| o-Xylene | 0.749 | 0.756 | | 0.94 | 20 |
| Isopropylbenzene | 4.182 | 4.049 | | -3.18 | 20 |
| 1,4-Dichlorobenzene | 1.762 | 1.724 | | -2.16 | 20 |
| 1,2-Dichlorobenzene | 1.692 | 1.685 | | -0.41 | 20 |
| 1,2-Dichloroethane-d4 | 0.712 | 0.742 | | 4.21 | 20 |
| Dibromofluoromethane | 0.312 | 0.320 | | 2.56 | 20 |
| Toluene-d8 | 1.164 | 1.193 | | 2.49 | 20 |
| 4-Bromofluorobenzene | 0.454 | 0.479 | | 5.51 | 20 |

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 165534 | 50.000 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 282606 | 50.000 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 250996 | 50.000 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 122669 | 50.000 | ug/l | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.582 | 65 | 122826 | 52.129 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 104.260% | | | | |
| 35) Dibromofluoromethane | 8.171 | 113 | 90305 | 51.194 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 102.380% | | | | |
| 50) Toluene-d8 | 10.565 | 98 | 337123 | 51.234 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 102.460% | | | | |
| 62) 4-Bromofluorobenzene | 12.853 | 95 | 135336 | 52.757 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 105.520% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 88523 | 47.158 | ug/l | | 98 |
| 3) Chloromethane | 2.365 | 50 | 89486 | 46.562 | ug/l | | 96 |
| 4) Vinyl Chloride | 2.512 | 62 | 96057 | 48.983 | ug/l | | 96 |
| 5) Bromomethane | 2.942 | 94 | 53952 | 44.339 | ug/l | | 100 |
| 6) Chloroethane | 3.112 | 64 | 61671 | 50.266 | ug/l | | 97 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 169822 | 52.421 | ug/l | | 97 |
| 8) Diethyl Ether | 3.959 | 74 | 57654 | 47.827 | ug/l | | 87 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 91744 | 51.366 | ug/l | | 99 |
| 10) Methyl Iodide | 4.583 | 142 | 96810 | 41.205 | ug/l | | 93 |
| 11) Tert butyl alcohol | 5.524 | 59 | 122885 | 250.960 | ug/l | | 99 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 86237 | 46.996 | ug/l | | 87 |
| 13) Acrolein | 4.183 | 56 | 76414 | 239.443 | ug/l | | 98 |
| 14) Allyl chloride | 5.024 | 41 | 159911 | 46.115 | ug/l | | 89 |
| 15) Acrylonitrile | 5.718 | 53 | 244473 | 242.760 | ug/l | | 98 |
| 16) Acetone | 4.424 | 43 | 202275 | 219.394 | ug/l | | 99 |
| 17) Carbon Disulfide | 4.706 | 76 | 220684 | 41.102 | ug/l | | 99 |
| 18) Methyl Acetate | 5.030 | 43 | 136868 | 49.826 | ug/l | | 92 |
| 19) Methyl tert-butyl Ether | 5.794 | 73 | 331920 | 50.114 | ug/l | | 99 |
| 20) Methylene Chloride | 5.277 | 84 | 98695 | 46.513 | ug/l | # | 78 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 89928 | 47.417 | ug/l | | 90 |
| 22) Diisopropyl ether | 6.677 | 45 | 332029 | 50.939 | ug/l | | 98 |
| 23) Vinyl Acetate | 6.600 | 43 | 1823939 | 273.001 | ug/l | | 96 |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 181204 | 51.002 | ug/l | | 100 |
| 25) 2-Butanone | 7.482 | 43 | 332401 | 234.803 | ug/l | | 92 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 154672 | 46.878 | ug/l | | 98 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 112641 | 49.219 | ug/l | | 94 |
| 28) Bromochloromethane | 7.812 | 49 | 72630 | 50.022 | ug/l | | 85 |
| 29) Tetrahydrofuran | 7.841 | 42 | 212863 | 232.605 | ug/l | # | 87 |
| 30) Chloroform | 7.965 | 83 | 196262 | 53.171 | ug/l | | 98 |
| 31) Cyclohexane | 8.259 | 56 | 159977 | 45.816 | ug/l | | 98 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 180121 | 51.554 | ug/l | | 97 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 134252 | 50.312 | ug/l | | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 137359 | 45.975 | ug/l | # | 95 |
| 38) Carbon Tetrachloride | 8.365 | 117 | 154915 | 51.545 | ug/l | | 99 |
| 39) Methylcyclohexane | 9.600 | 83 | 157882 | 48.172 | ug/l | | 98 |
| 40) Benzene | 8.606 | 78 | 404907 | 50.937 | ug/l | | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 78258 | 46.068 ug/l | 93 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 154557 | 53.374 ug/l | 98 |
| 43) Isopropyl Acetate | 8.688 | 43 | 252838 | 48.708 ug/l # | 94 |
| 44) Trichloroethene | 9.353 | 130 | 96274 | 50.883 ug/l | 98 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 100079 | 53.038 ug/l | 99 |
| 46) Dibromomethane | 9.712 | 93 | 72298 | 53.530 ug/l | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 155782 | 51.369 ug/l | 99 |
| 48) Methyl methacrylate | 9.682 | 41 | 117620 | 47.618 ug/l | 92 |
| 49) 1,4-Dioxane | 9.694 | 88 | 42819 | 960.872 ug/l | 95 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 714918 | 253.043 ug/l | 93 |
| 52) Toluene | 10.629 | 92 | 260237 | 51.813 ug/l | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 161721 | 51.915 ug/l | 97 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 168161 | 50.753 ug/l | 91 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 95596 | 53.110 ug/l | 98 |
| 56) Ethyl methacrylate | 10.876 | 69 | 172350 | 50.792 ug/l | 88 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 169602 | 52.864 ug/l | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 364003 | 253.780 ug/l | 97 |
| 59) 2-Hexanone | 11.194 | 43 | 532597 | 243.668 ug/l | 92 |
| 60) Dibromochloromethane | 11.359 | 129 | 117651 | 54.062 ug/l | 98 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 97558 | 51.595 ug/l | 97 |
| 64) Tetrachloroethene | 11.106 | 164 | 83497 | 50.230 ug/l | 95 |
| 65) Chlorobenzene | 11.894 | 112 | 280885 | 50.640 ug/l | 97 |
| 66) 1,1,1,2-Tetrachloroethane | 11.965 | 131 | 99691 | 50.961 ug/l | 99 |
| 67) Ethyl Benzene | 11.965 | 91 | 520196 | 51.124 ug/l | 99 |
| 68) m/p-Xylenes | 12.070 | 106 | 388963 | 102.048 ug/l | 98 |
| 69) o-Xylene | 12.400 | 106 | 189655 | 50.450 ug/l | 100 |
| 70) Styrene | 12.412 | 104 | 327524 | 51.874 ug/l | 98 |
| 71) Bromoform | 12.582 | 173 | 74422 | 50.218 ug/l # | 97 |
| 73) Isopropylbenzene | 12.694 | 105 | 496635 | 48.403 ug/l | 100 |
| 74) N-amyl acetate | 12.494 | 43 | 224010 | 44.635 ug/l | 94 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 140246 | 48.328 ug/l | 98 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 128158m | 47.602 ug/l | |
| 77) Bromobenzene | 12.982 | 156 | 113178 | 49.656 ug/l | 97 |
| 78) n-propylbenzene | 13.035 | 91 | 590000 | 49.938 ug/l | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 367969 | 49.125 ug/l | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.176 | 105 | 428037 | 49.829 ug/l | 97 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 56887 | 45.962 ug/l | 86 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 364156 | 48.468 ug/l | 98 |
| 83) tert-Butylbenzene | 13.441 | 119 | 371735 | 48.866 ug/l | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 430444 | 49.723 ug/l | 100 |
| 85) sec-Butylbenzene | 13.617 | 105 | 517202 | 49.826 ug/l | 100 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 434576 | 50.705 ug/l | 98 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 213990 | 49.896 ug/l | 98 |
| 88) 1,4-Dichlorobenzene | 13.811 | 146 | 211478 | 48.912 ug/l | 98 |
| 89) n-Butylbenzene | 14.059 | 91 | 382193 | 51.464 ug/l | 98 |
| 90) Hexachloroethane | 14.335 | 117 | 78059 | 47.142 ug/l | 93 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 206688 | 49.802 ug/l | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 30853 | 43.813 ug/l | 99 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 112669 | 48.458 ug/l | 97 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 46384 | 44.858 ug/l | 98 |
| 95) Naphthalene | 15.641 | 128 | 389373 | 47.278 ug/l | 98 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 110529 | 48.043 ug/l | 97 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

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Supervised By :Semsettin Yesilyurt 08/15/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**

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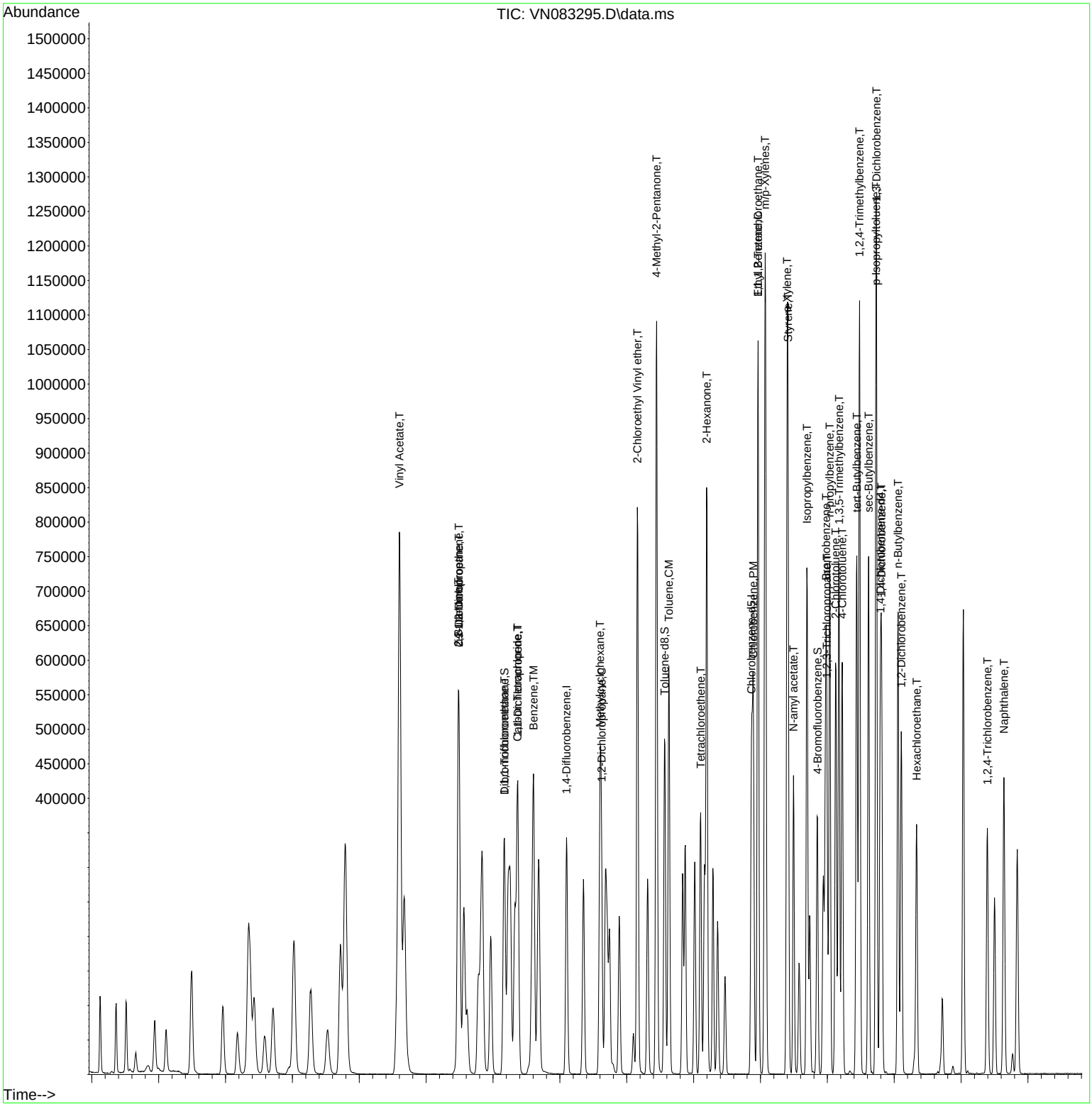
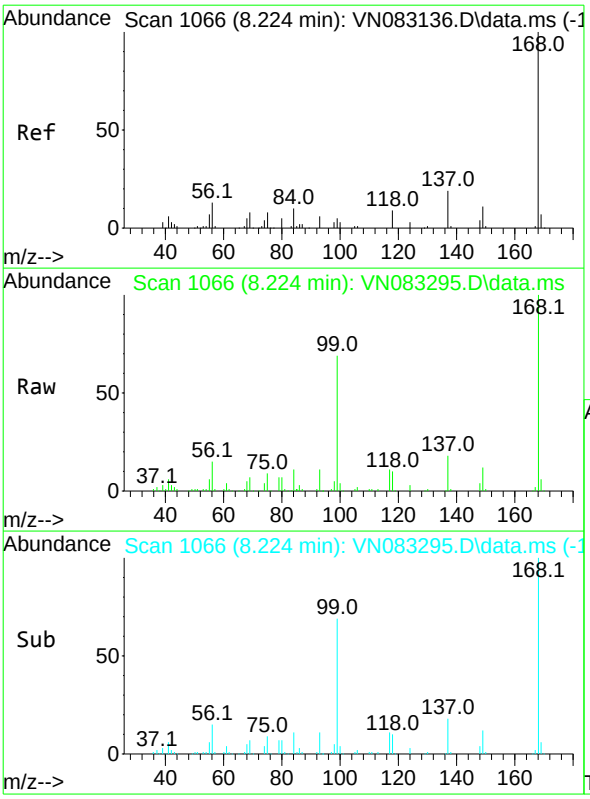
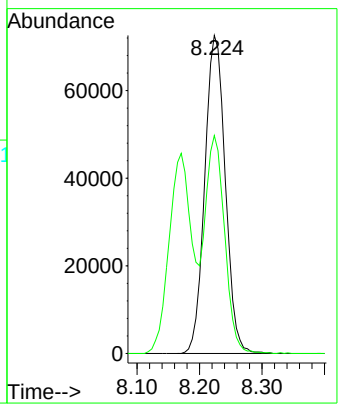





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:168 Resp: 165534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 68.5 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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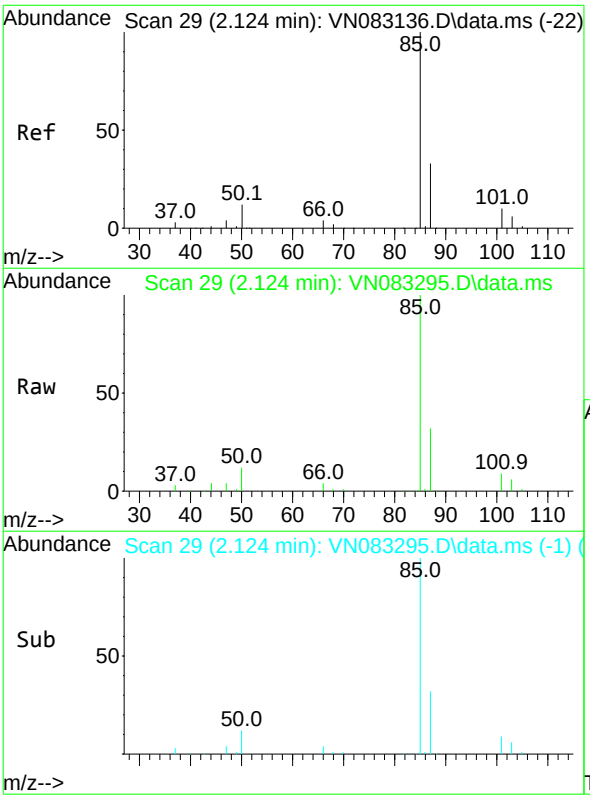
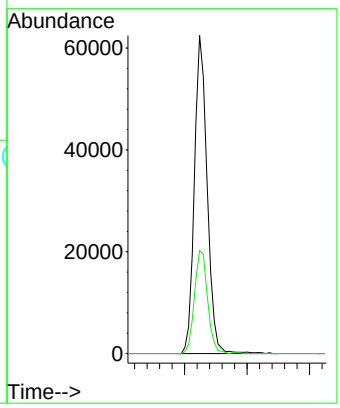
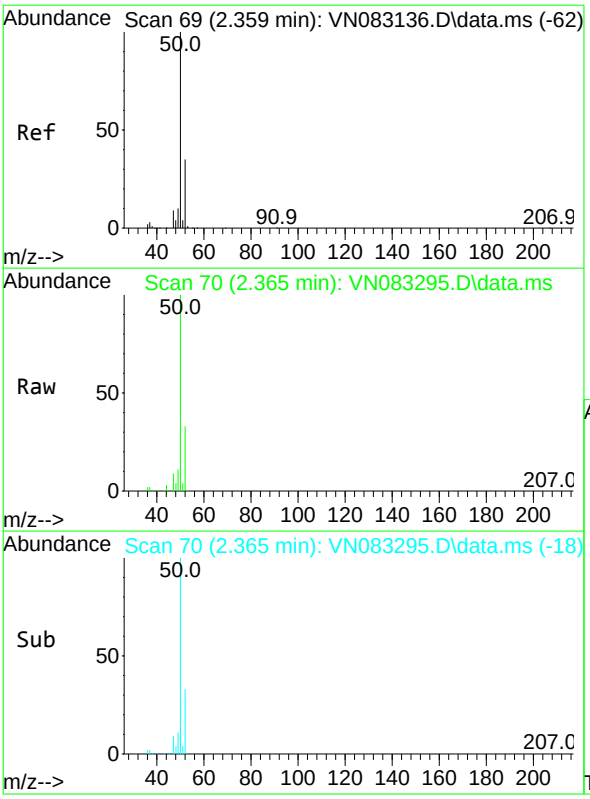



#2
Dichlorodifluoromethane
Concen: 47.158 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 85 Resp: 88523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.4 | 15.7 | 47.0 |

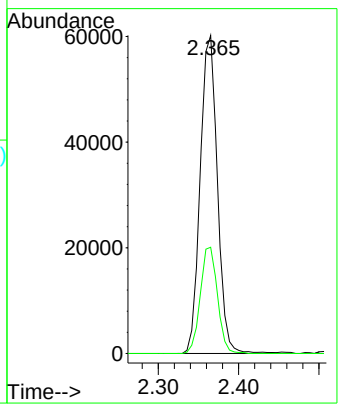





#3
Chloromethane
Concen: 46.562 ug/l
RT: 2.365 min Scan# 70
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 50 Resp: 89486

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.4 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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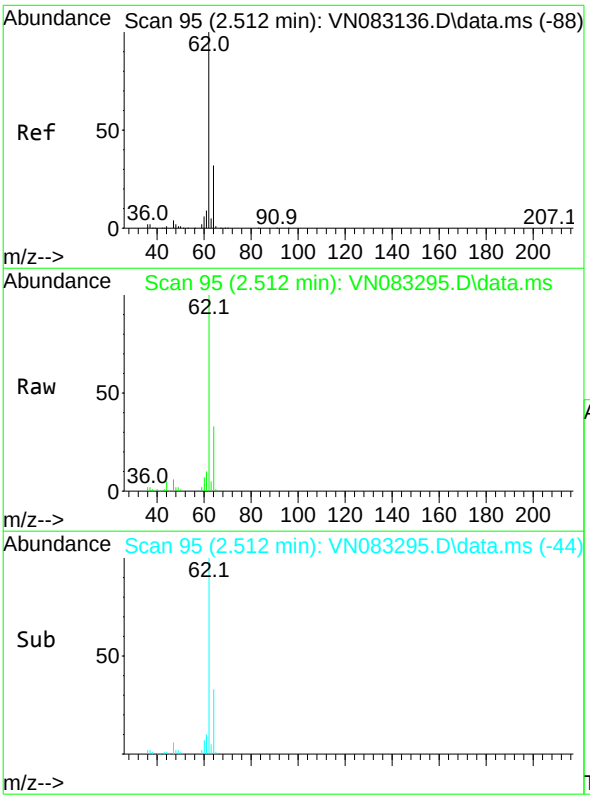
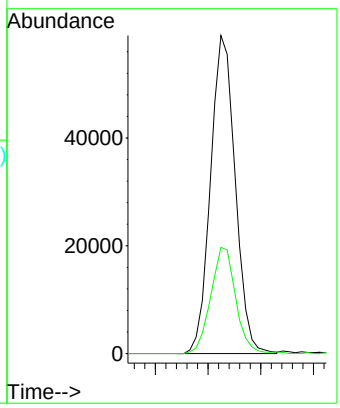
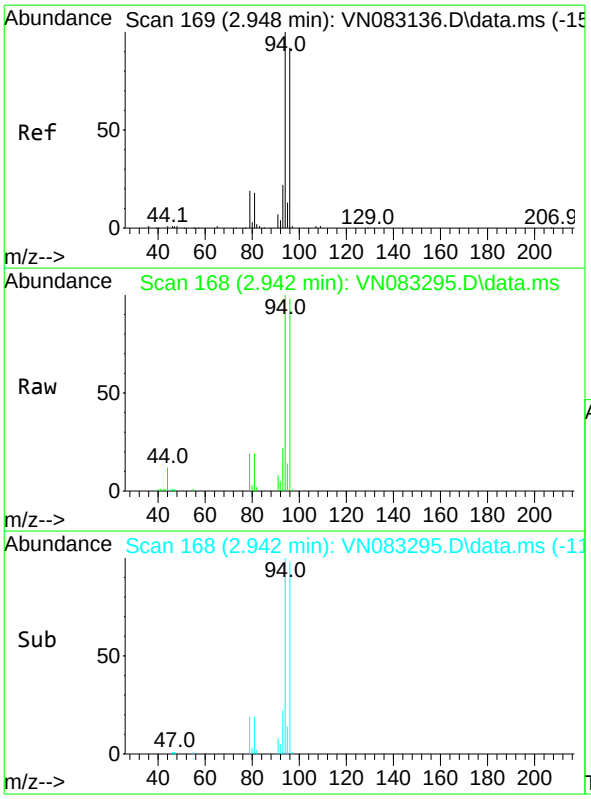



#4
Vinyl Chloride
Concen: 48.983 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 62 Resp: 96057

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 33.4 | 25.0 | 37.6 |

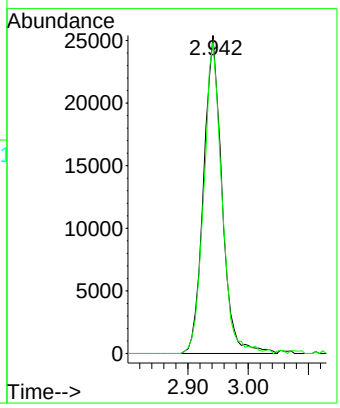





#5
Bromomethane
Concen: 44.339 ug/l
RT: 2.942 min Scan# 16
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 94 Resp: 53952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 97.5 | 78.0 | 117.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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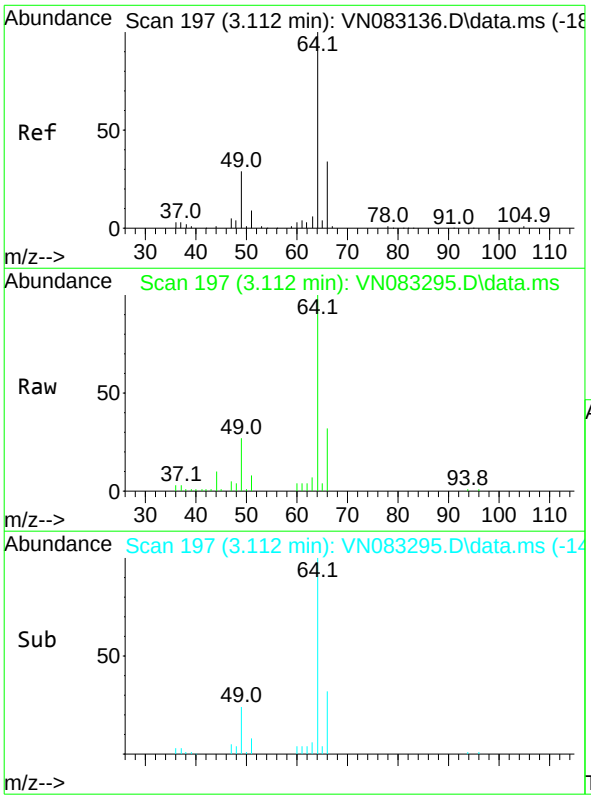
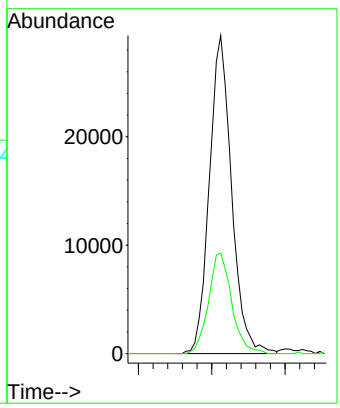
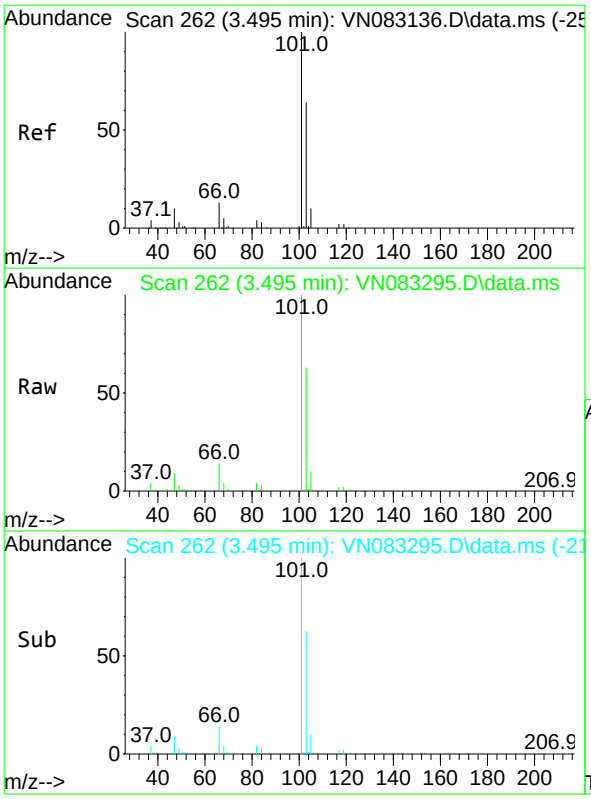



#6
Chloroethane
Concen: 50.266 ug/l
RT: 3.112 min Scan# 197
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 64 Resp: 61671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.6 | 26.6 | 40.0 |

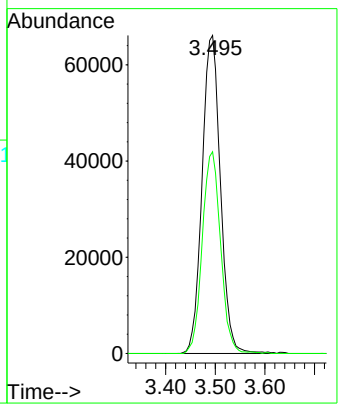





#7
Trichlorofluoromethane
Concen: 52.421 ug/l
RT: 3.495 min Scan# 26
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:101 Resp: 169822

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 63.4 | 52.7 | 79.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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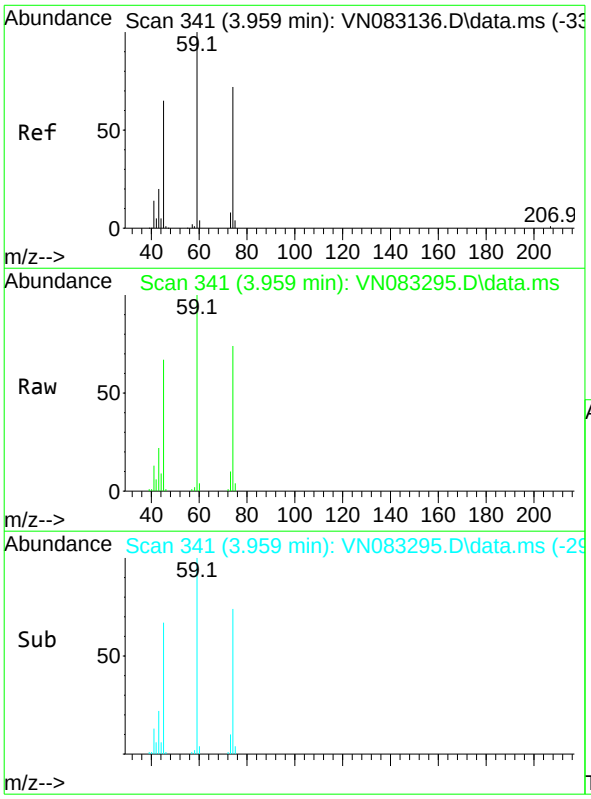
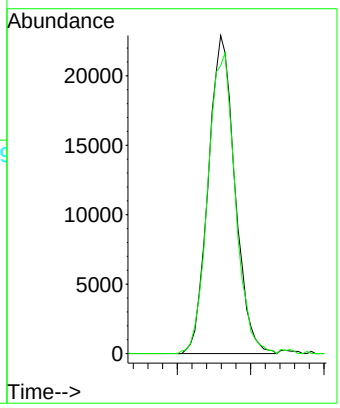
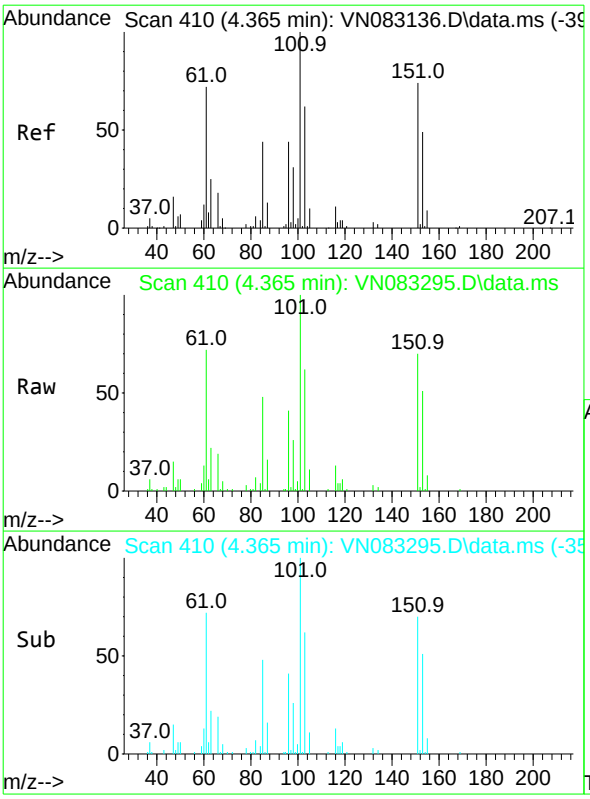



#8
Diethyl Ether
Concen: 47.827 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 74 Resp: 57654

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 97.2 | 55.5 | 166.3 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 51.366 ug/l
RT: 4.365 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

Tgt Ion:101 Resp: 91744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.9 | 38.3 | 57.5 |
| 151 | 73.4 | 59.3 | 88.9 |

**Manual Integrations**
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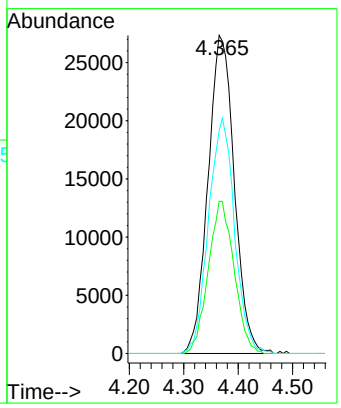
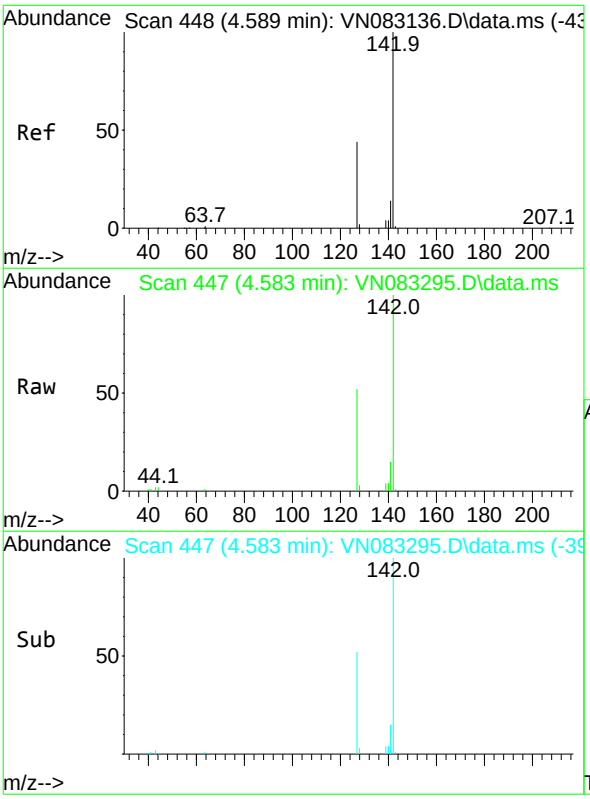
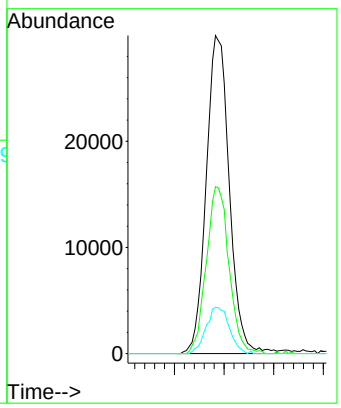


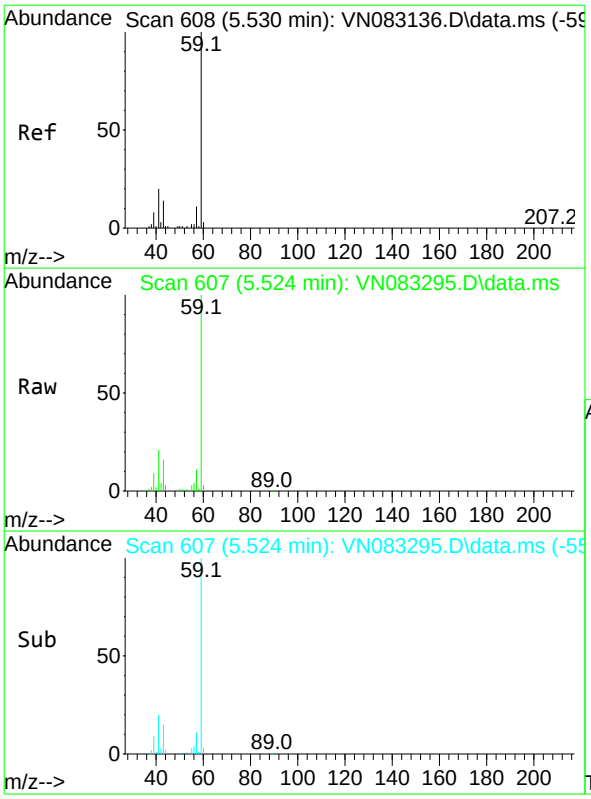




#10
Methyl Iodide
Concen: 41.205 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:142 Resp: 96810

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 52.5 | 37.5 | 56.3 |
| 141 | 14.5 | 13.1 | 19.7 |

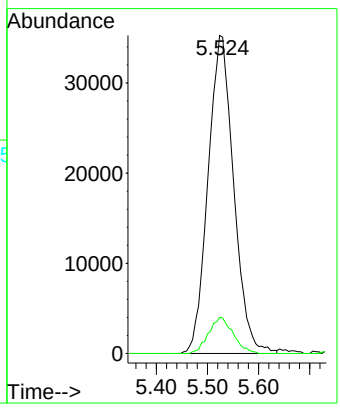





#11
Tert butyl alcohol
Concen: 250.960 ug/l
RT: 5.524 min Scan# 60
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 59 Resp: 122885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.9 | 8.9 | 13.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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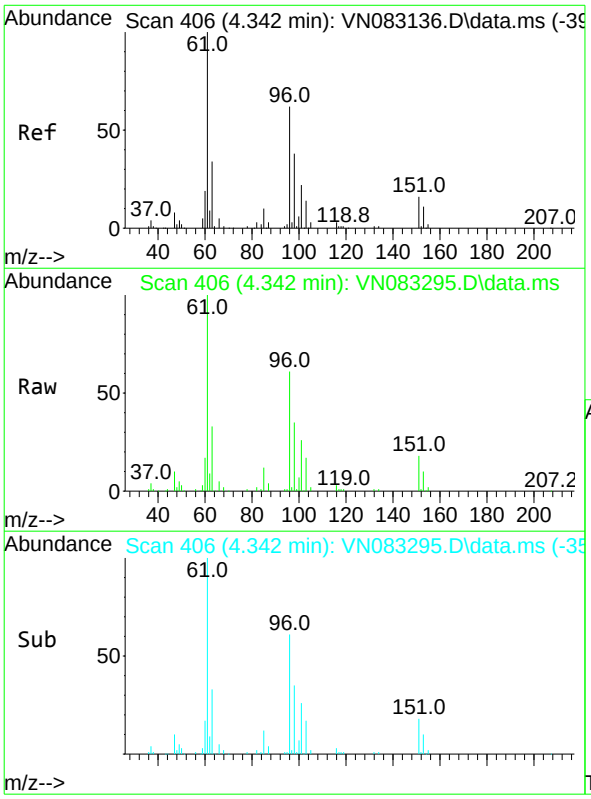
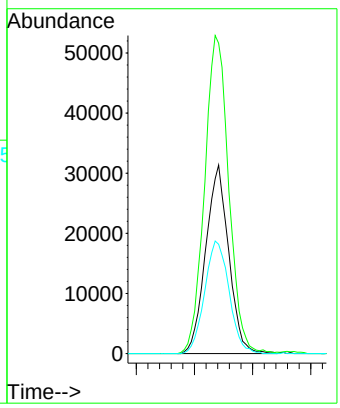
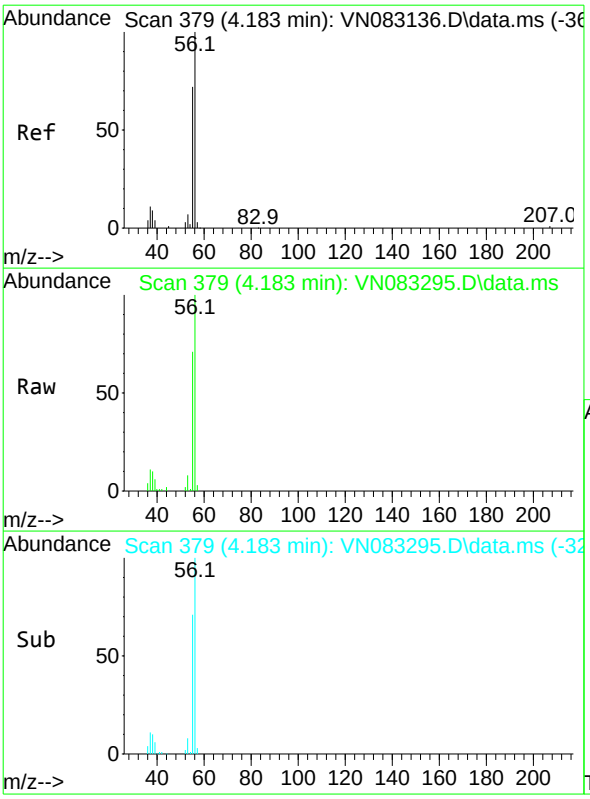



#12
1,1-Dichloroethene
Concen: 46.996 ug/l
RT: 4.342 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 96 Resp: 86237

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 164.6 | 149.7 | 224.5 |
| 98 | 58.0 | 50.1 | 75.1 |

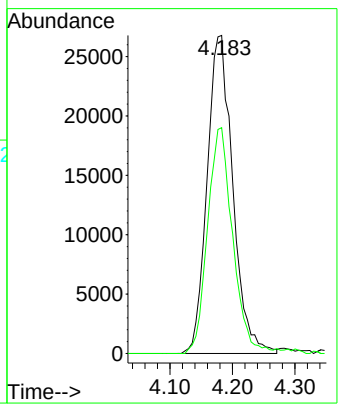





#13
Acrolein
Concen: 239.443 ug/l
RT: 4.183 min Scan# 37
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 56 Resp: 76414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 69.2 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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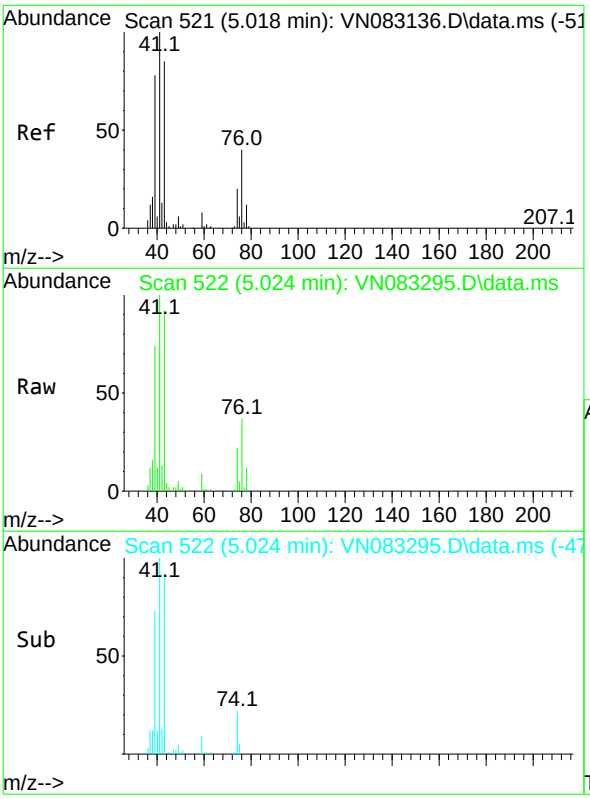
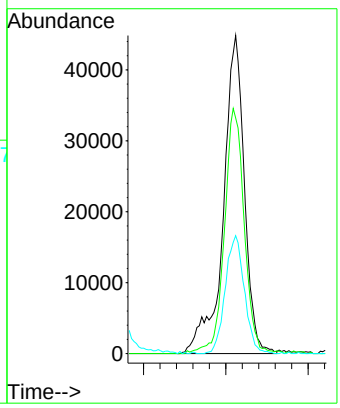
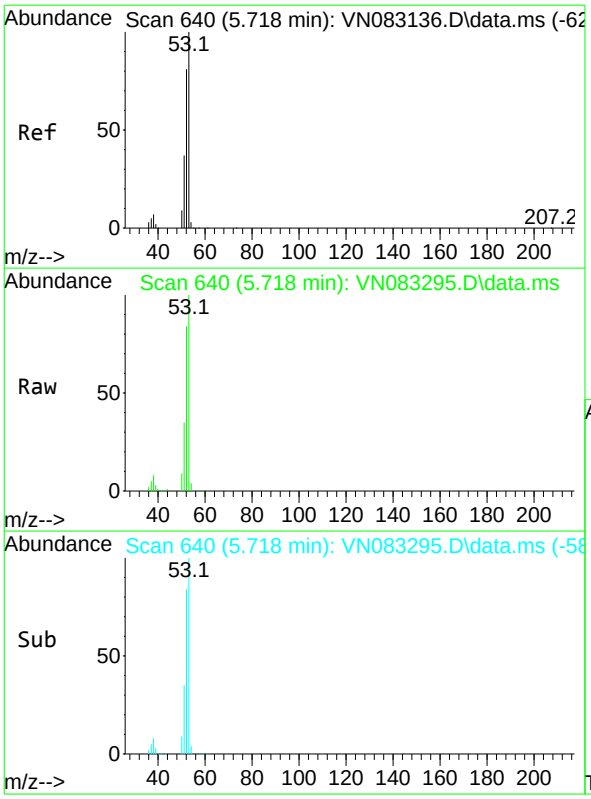



#14
Allyl chloride
Concen: 46.115 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 41 Resp: 159911

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 72.1 | 67.8 | 101.6 |
| 76 | 33.5 | 25.8 | 38.8 |

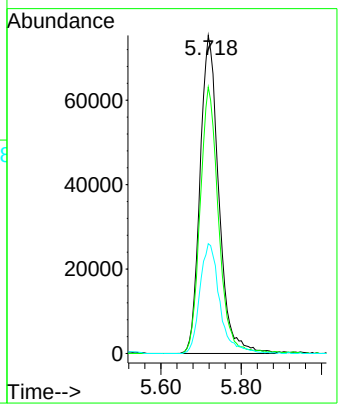





#15
Acrylonitrile
Concen: 242.760 ug/l
RT: 5.718 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 53 Resp: 244473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.5 | 66.6 | 100.0 |
| 51 | 36.6 | 30.1 | 45.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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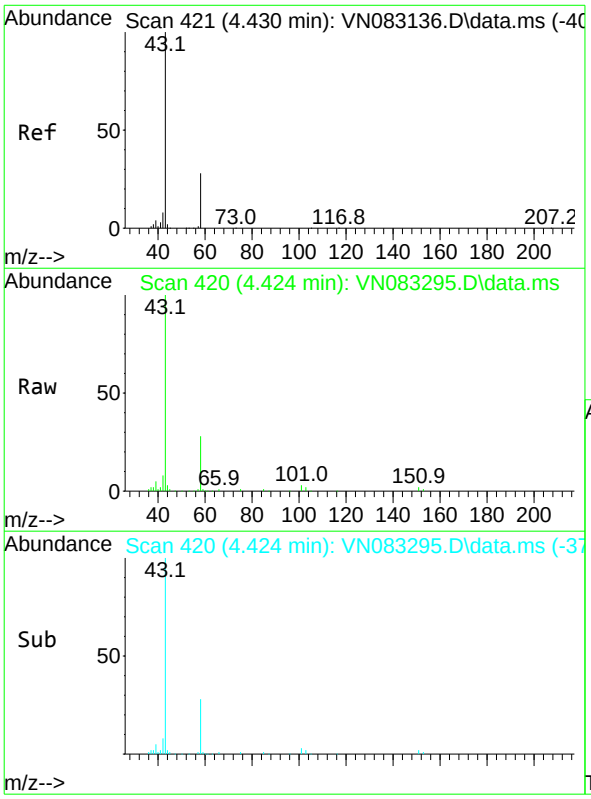
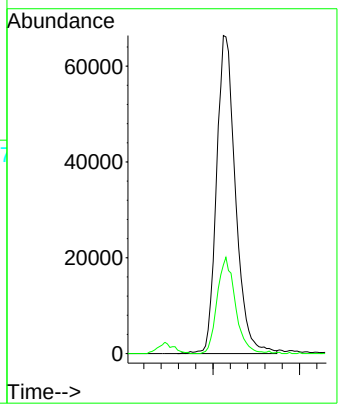
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

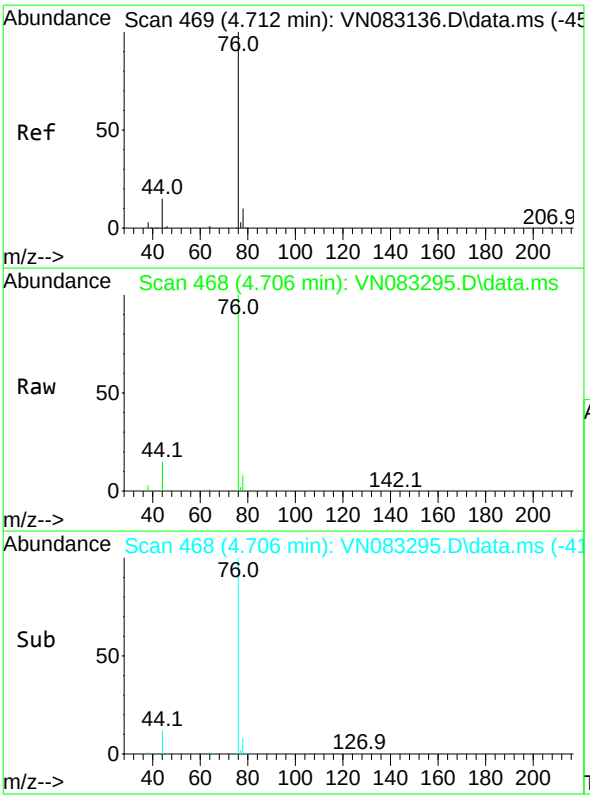



#16
Acetone
Concen: 219.394 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 202275

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.5 | 21.8 | 32.6 |

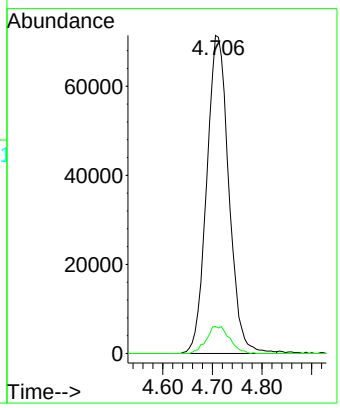





#17
Carbon Disulfide
Concen: 41.102 ug/l
RT: 4.706 min Scan# 46
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 76 Resp: 220684

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.5 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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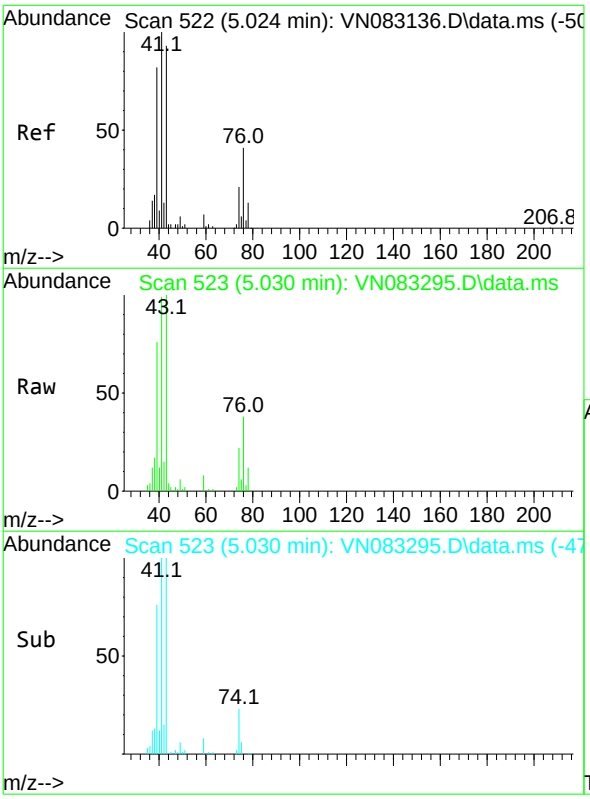
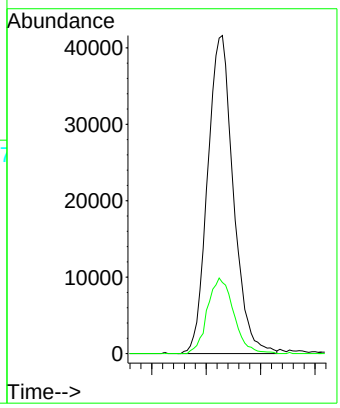
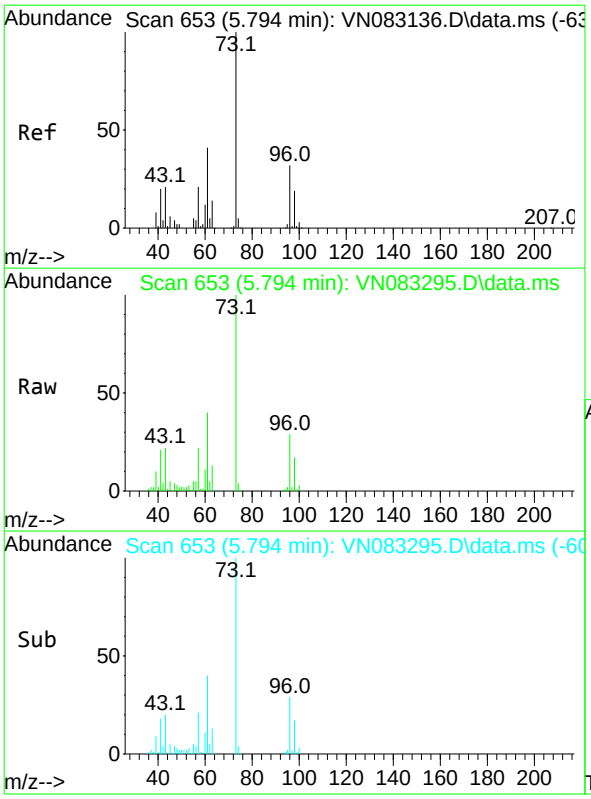



#18
Methyl Acetate
Concen: 49.826 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 136868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 24.2 | 16.3 | 24.5 |

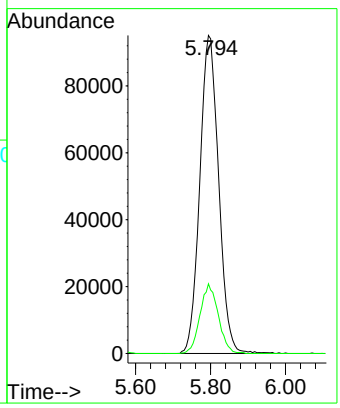





#19
Methyl tert-butyl Ether
Concen: 50.114 ug/l
RT: 5.794 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 73 Resp: 331920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.9 | 17.9 | 26.9 |

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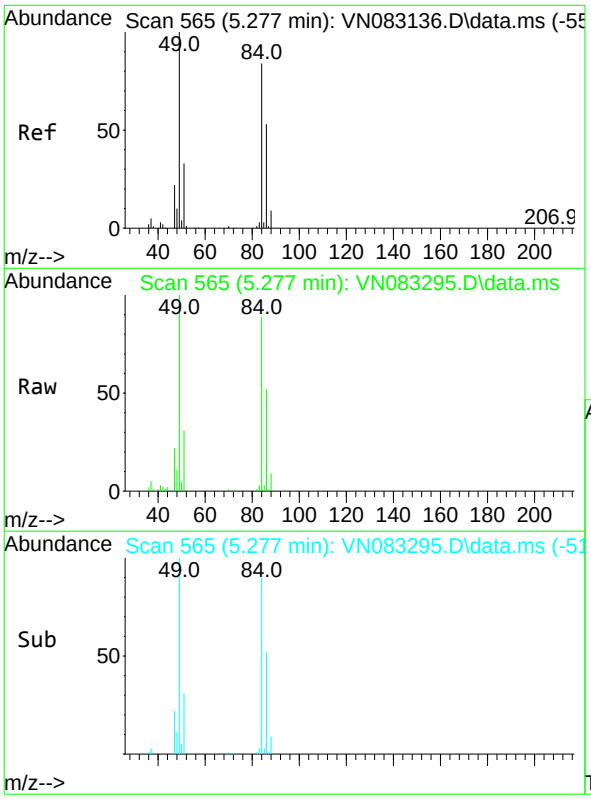
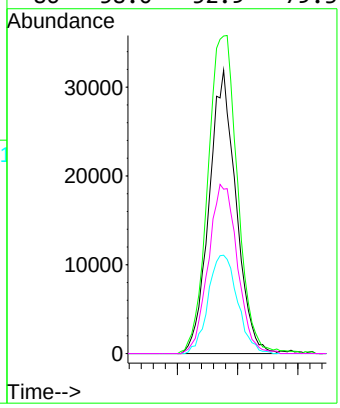
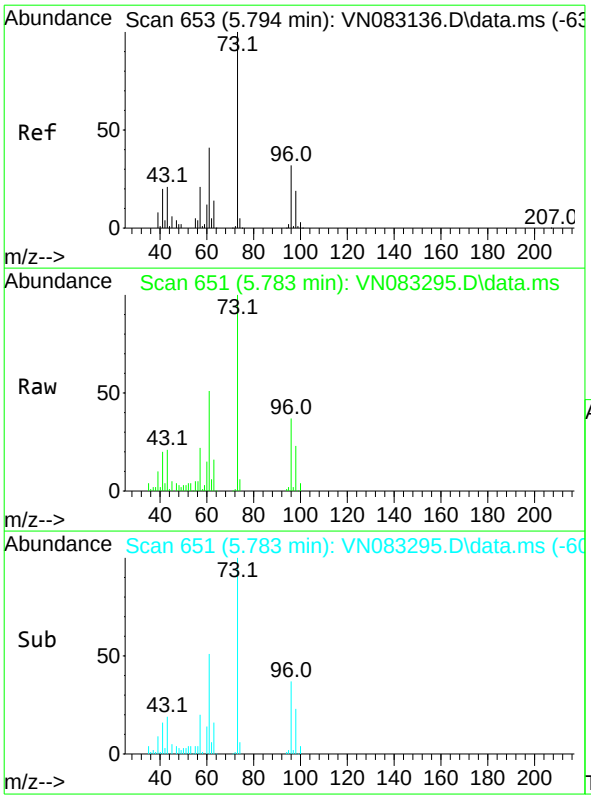



#20
Methylene Chloride
Concen: 46.513 ug/l
RT: 5.277 min Scan# 565
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 84 Resp: 98695

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 112.1 | 119.6 | 179.4# |
| 51 | 34.7 | 34.8 | 52.2# |
| 86 | 58.0 | 52.9 | 79.3 |

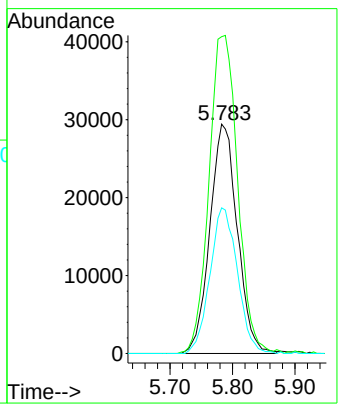





#21
trans-1,2-Dichloroethene
Concen: 47.417 ug/l
RT: 5.783 min Scan# 65
Delta R.T. -0.012 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 96 Resp: 89928

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 138.1 | 123.4 | 185.2 |
| 98 | 63.5 | 49.3 | 73.9 |

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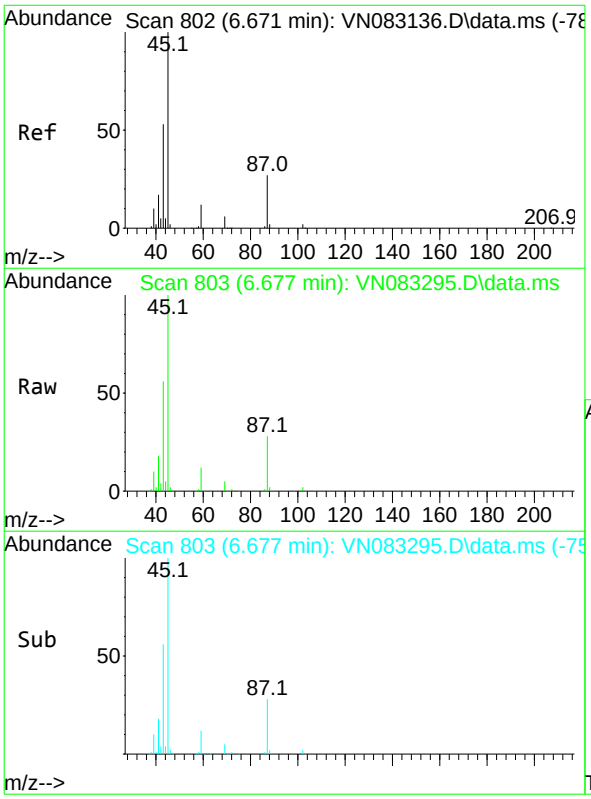
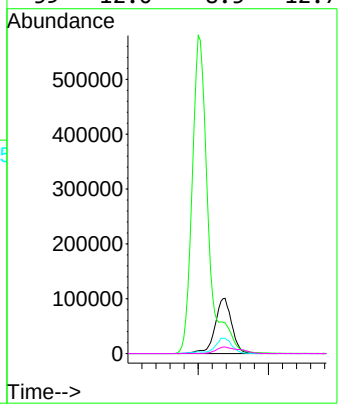
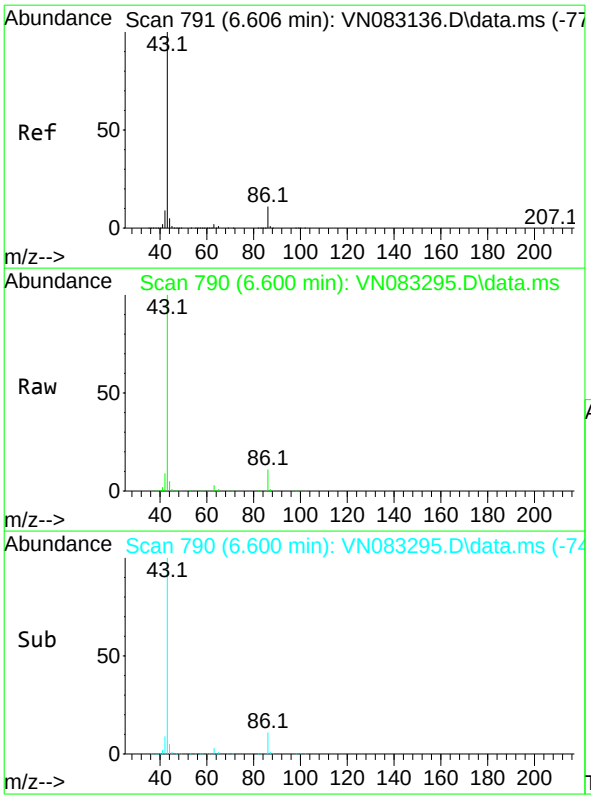



#22
Diisopropyl ether
Concen: 50.939 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 45 Resp: 332029

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 55.3 | 44.0 | 66.0 |
| 87 | 27.8 | 19.7 | 29.5 |
| 59 | 12.0 | 8.5 | 12.7 |

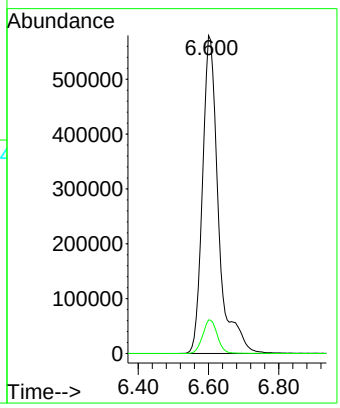





#23
Vinyl Acetate
Concen: 273.001 ug/l
RT: 6.600 min Scan# 79
Delta R.T. -0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 1823939

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.6 | 7.3 | 10.9 |

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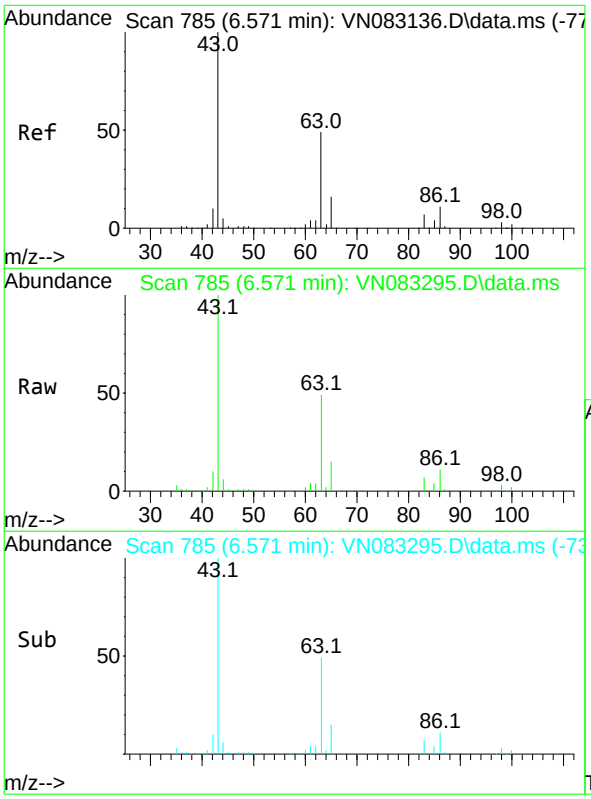
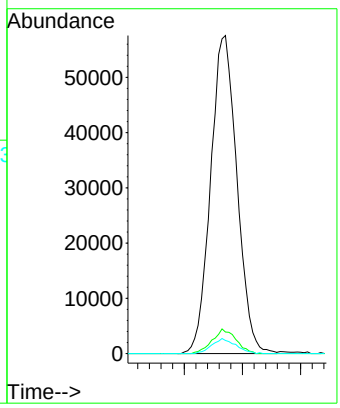
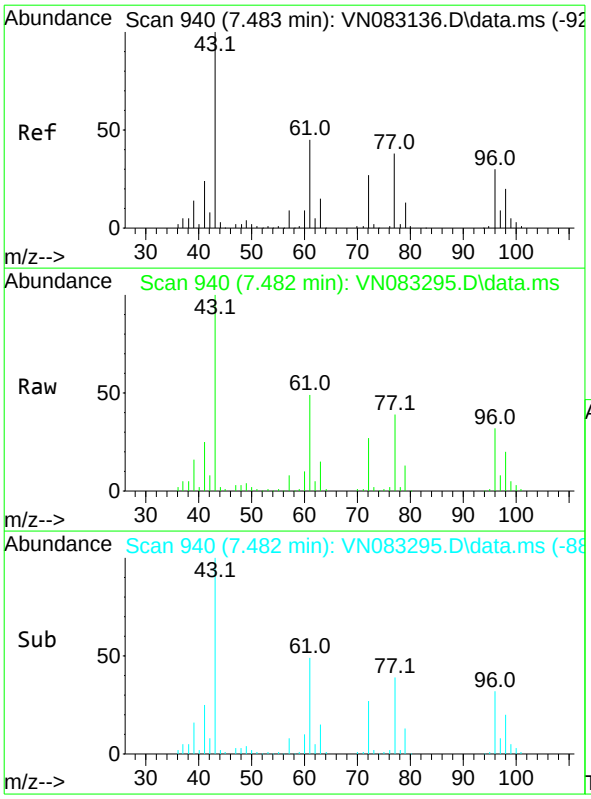



#24
1,1-Dichloroethane
Concen: 51.002 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 63 Resp: 181204

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.8 | 3.3 | 9.9 |
| 100 | 4.1 | 2.0 | 6.0 |

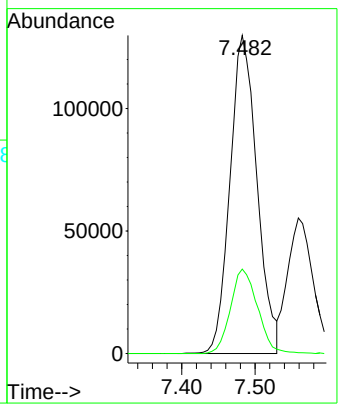





#25
2-Butanone
Concen: 234.803 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 332401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 26.5 | 18.2 | 27.2 |




**Instrument :**
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VSTDCCC050

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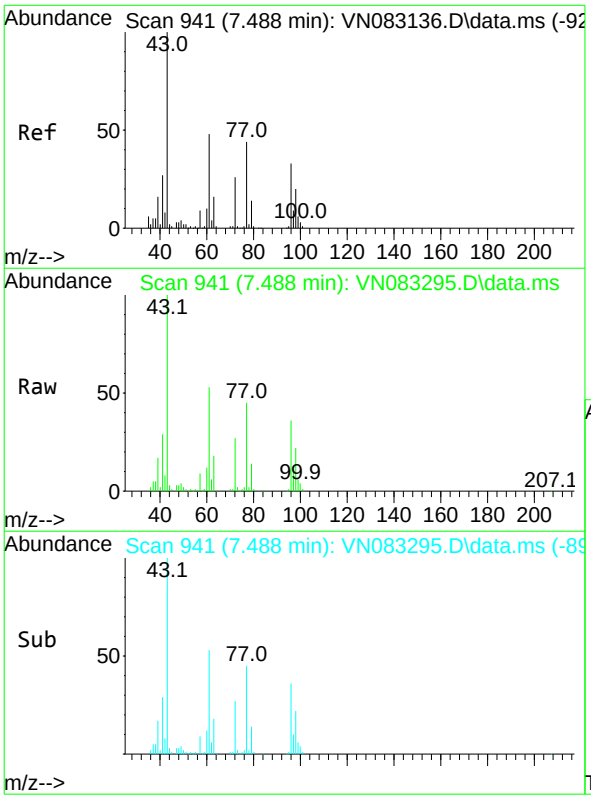
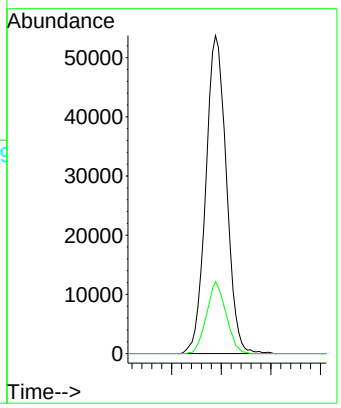
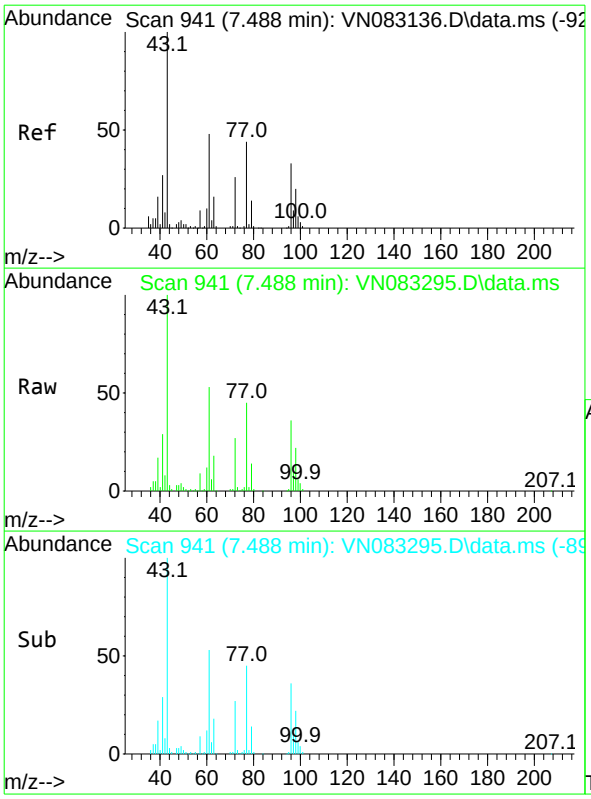



#26
2,2-Dichloropropane
Concen: 46.878 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 77 Resp: 154672

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.4 | 10.3 | 30.9 |






#27
cis-1,2-Dichloroethene
Concen: 49.219 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

Tgt Ion: 96 Resp: 112641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 153.9 | 0.0 | 329.6 |
| 98 | 64.1 | 0.0 | 128.6 |

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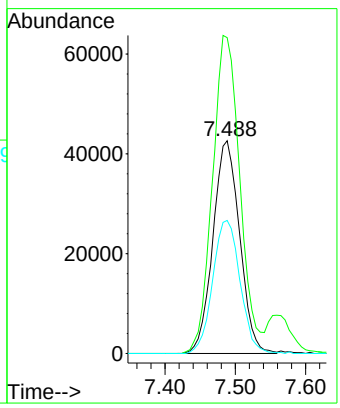
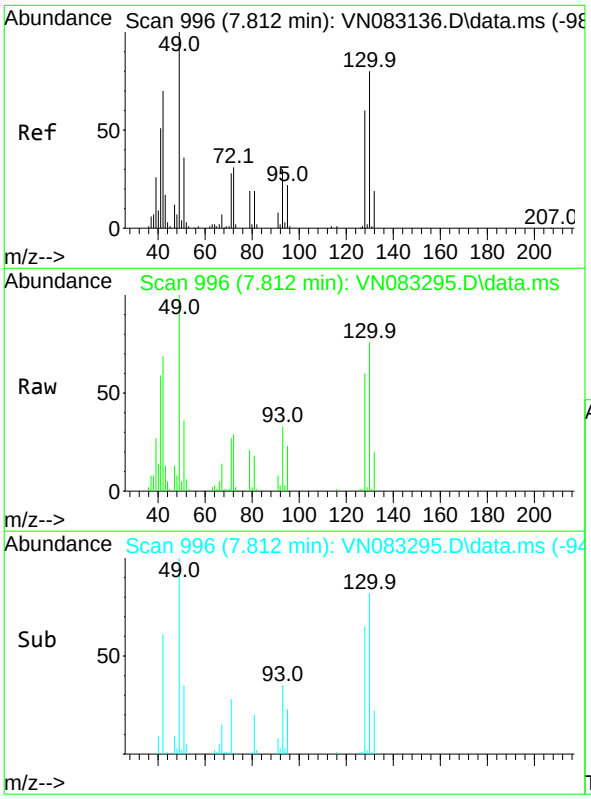
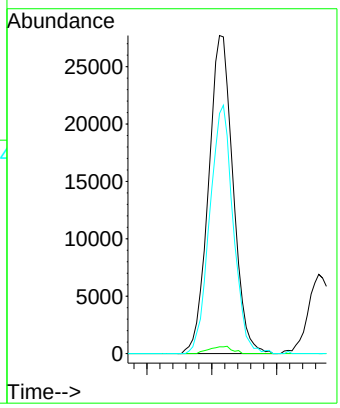


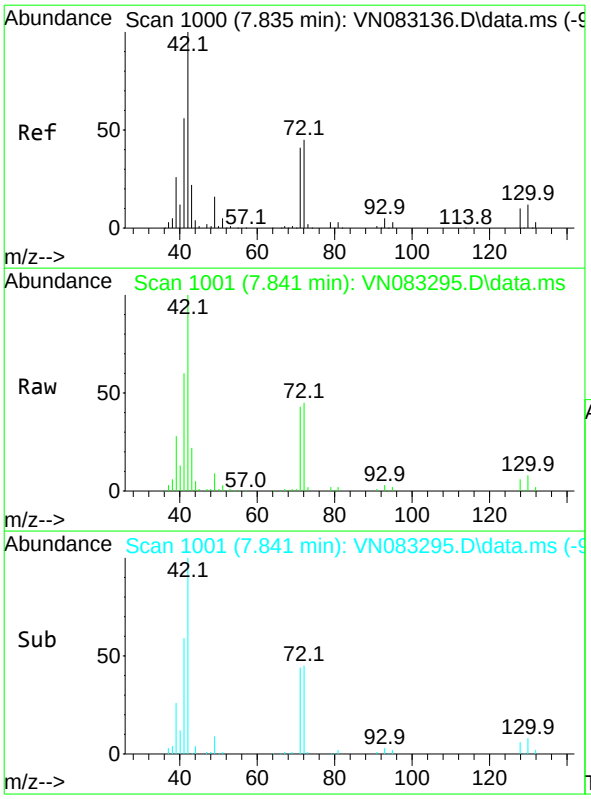




#28
Bromochloromethane
Concen: 50.022 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 49 Resp: 72630

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.1 | 0.0 | 3.8 |
| 130 | 74.7 | 50.5 | 75.7 |

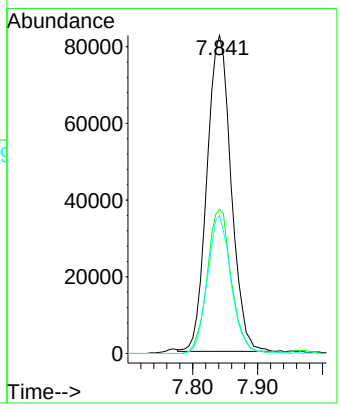





#29
Tetrahydrofuran
Concen: 232.605 ug/l
RT: 7.841 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 42 Resp: 212863

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 45.5 | 30.0 | 45.0# |
| 71 | 42.9 | 28.3 | 42.5# |

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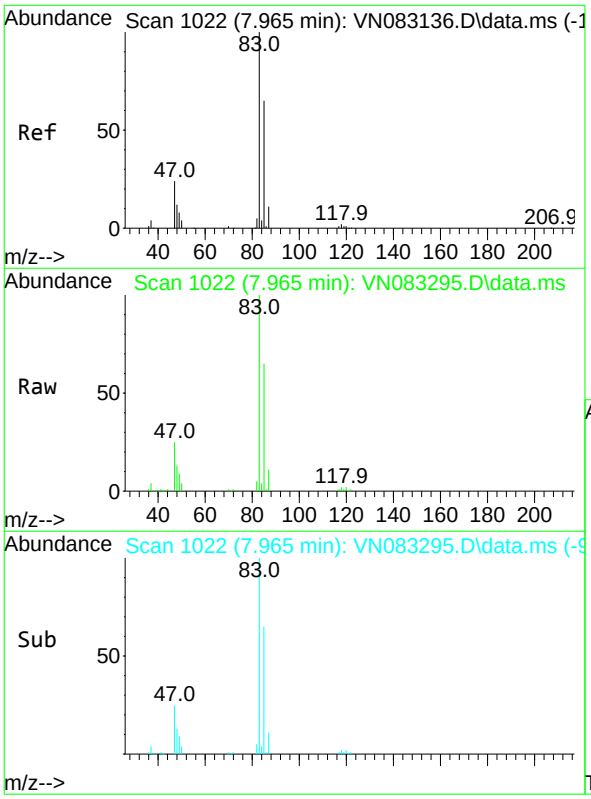
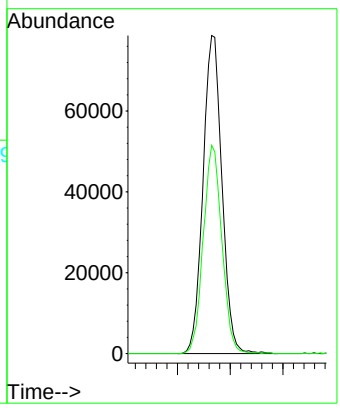
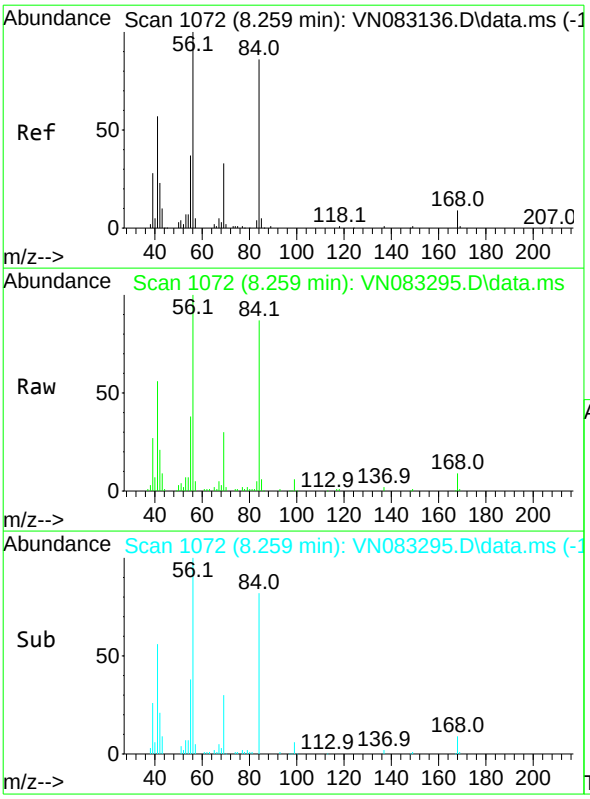



#30
Chloroform
Concen: 53.171 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 83 Resp: 196262

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.5 | 50.9 | 76.3 |






#31
Cyclohexane
Concen: 45.816 ug/l
RT: 8.259 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 56 Resp: 159977

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.5 | 24.5 | 36.7 |
| 84 | 84.7 | 66.0 | 99.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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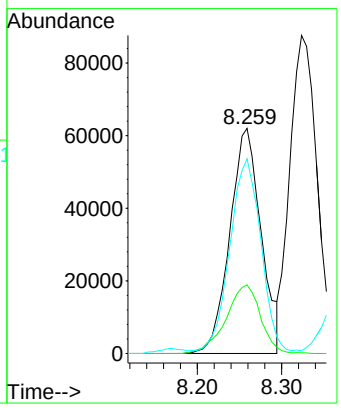
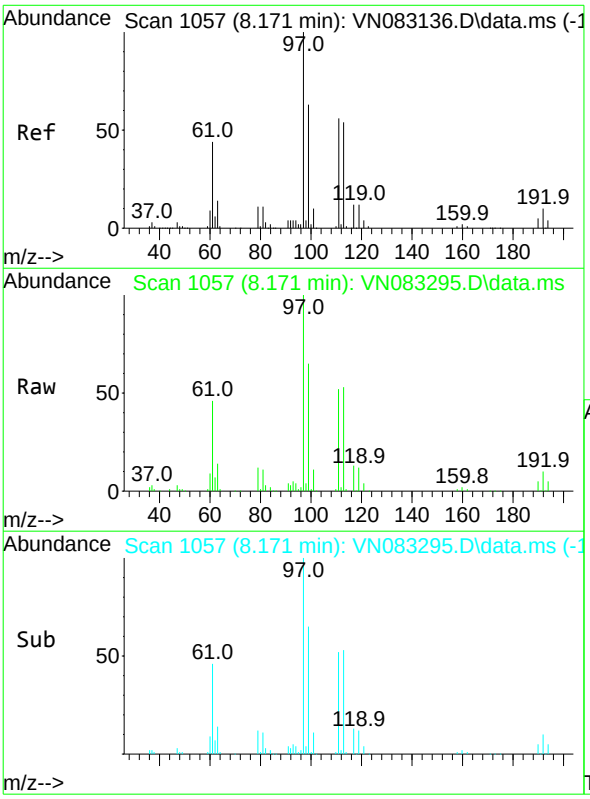
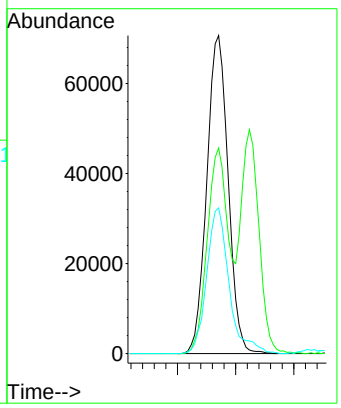


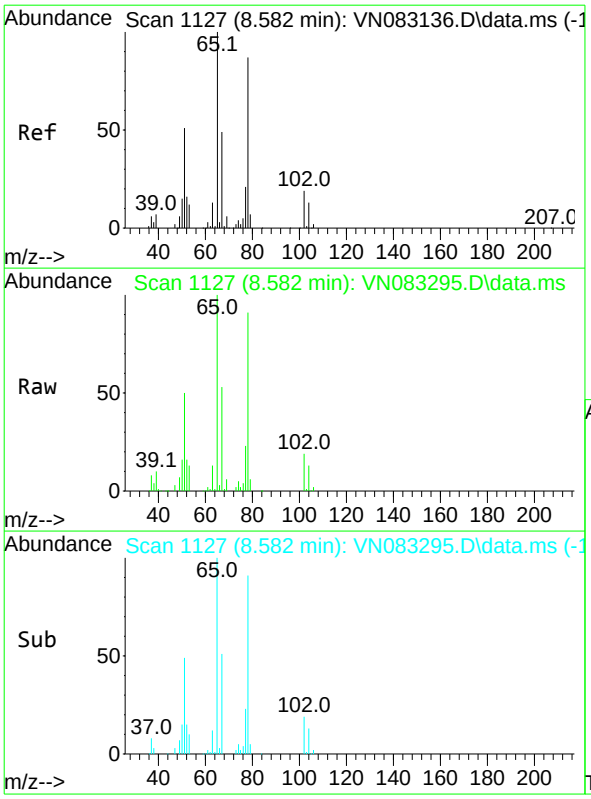




#32
1,1,1-Trichloroethane
Concen: 51.554 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 97 Resp: 180121

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 65.7 | 52.0 | 78.0 |
| 61 | 48.1 | 42.1 | 63.1 |

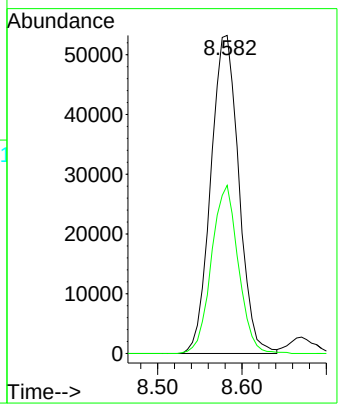





#33
1,2-Dichloroethane-d4
Concen: 52.129 ug/l
RT: 8.582 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 65 Resp: 122826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.7 | 0.0 | 104.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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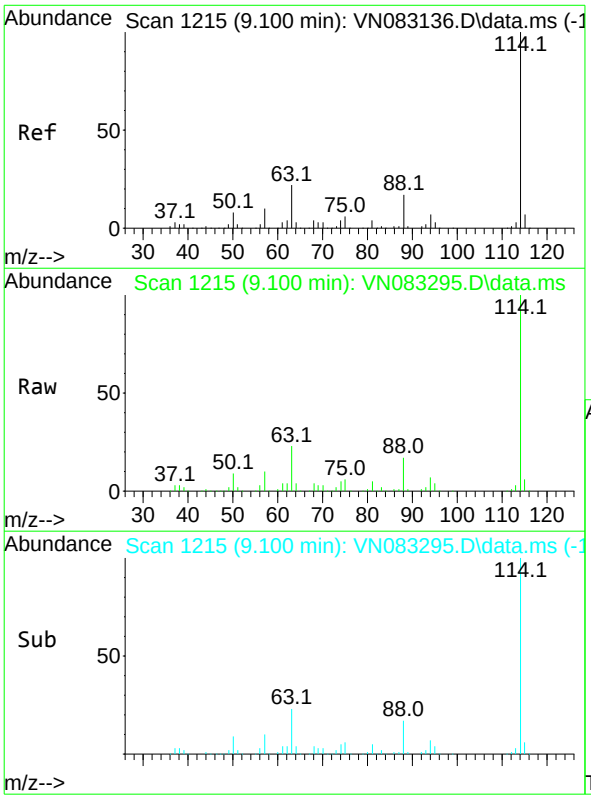
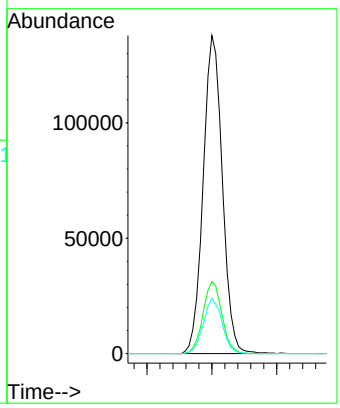
Supervised By :Semsettin Yesilyurt 08/15/2024

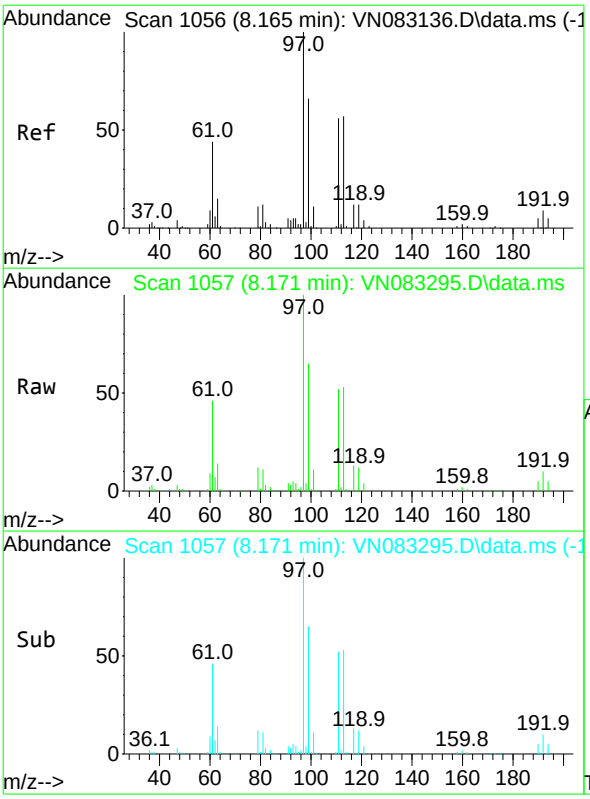



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:114 Resp: 282606

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.6 | 0.0 | 44.6 |
| 88 | 17.3 | 0.0 | 31.4 |

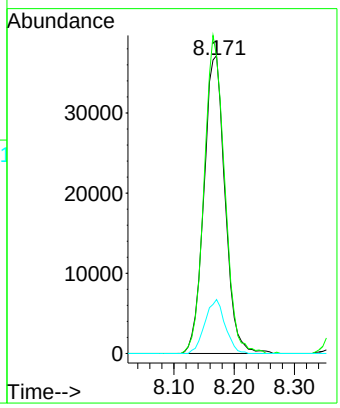





#35
Dibromofluoromethane
Concen: 51.194 ug/l
RT: 8.171 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:113 Resp: 90305

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.3 | 82.4 | 123.6 |
| 192 | 17.3 | 14.9 | 22.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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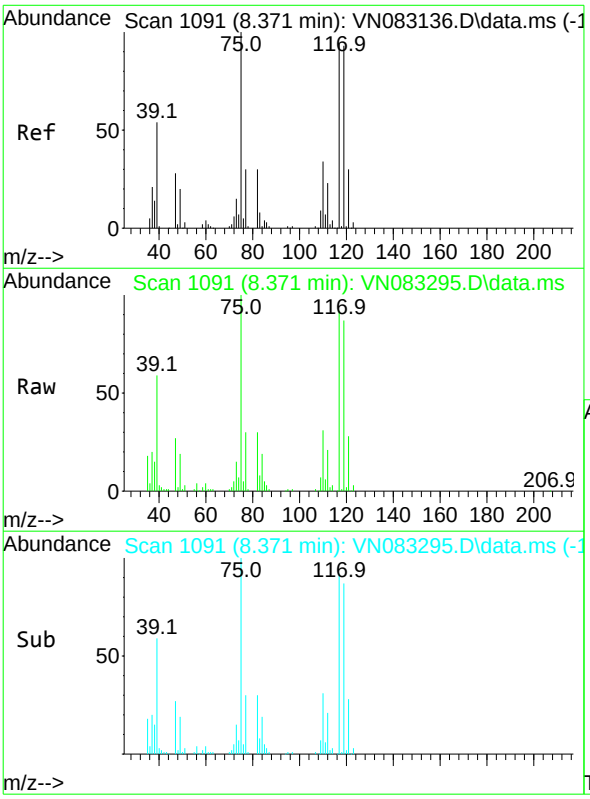
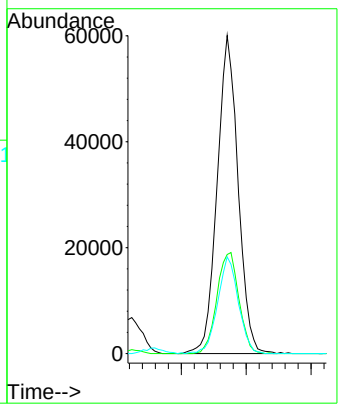
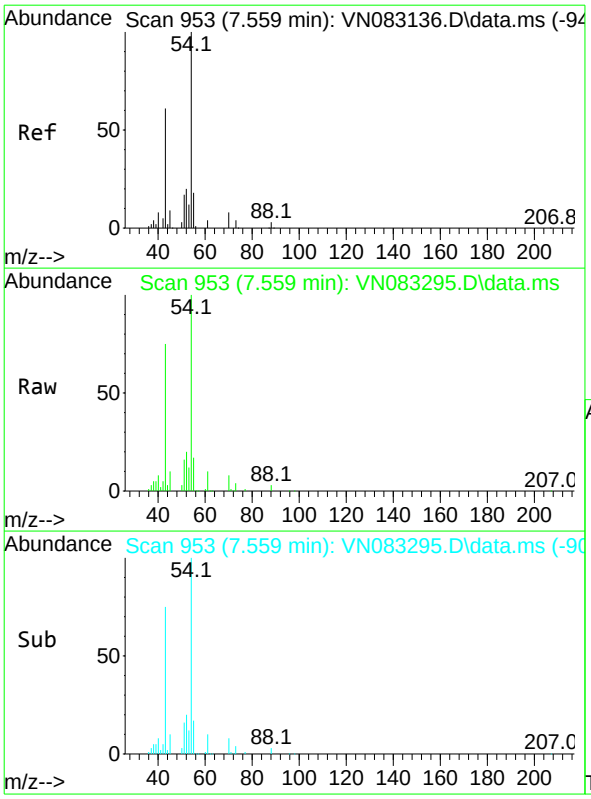



#36
1,1-Dichloropropene
Concen: 50.312 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 134252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.4 | 16.3 | 48.9 |
| 77 | 30.1 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 45.975 ug/l
RT: 7.559 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 137359

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.0 | 9.3 | 13.9 |
| 70 | 10.9 | 7.0 | 10.6# |

**Instrument :**
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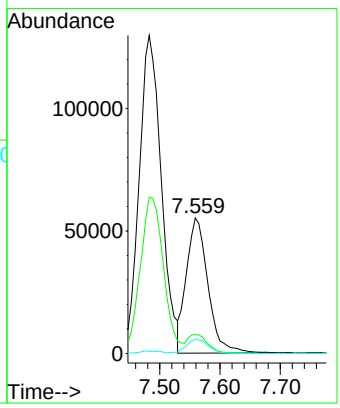
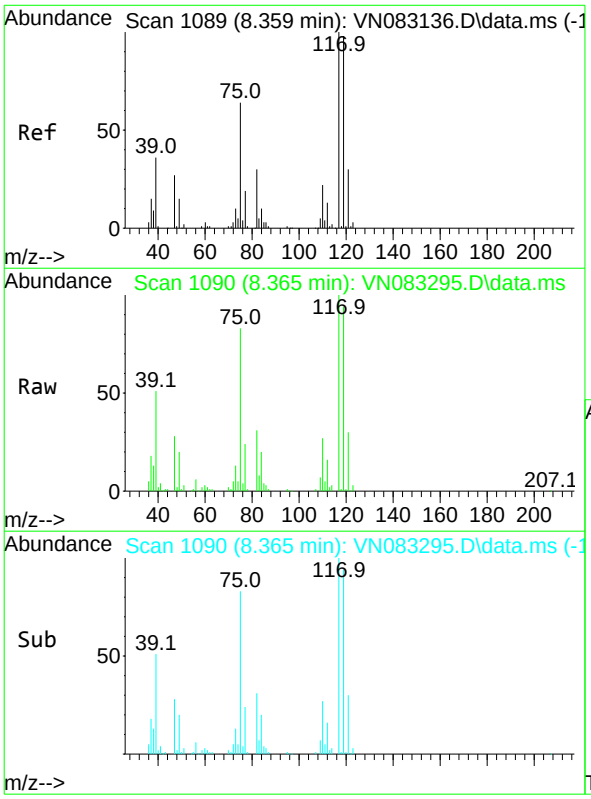
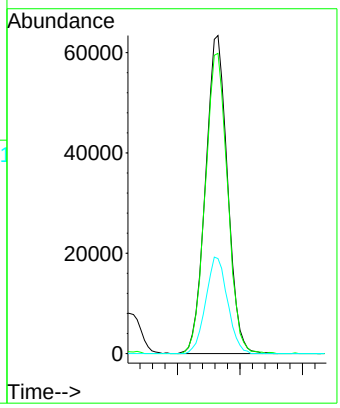


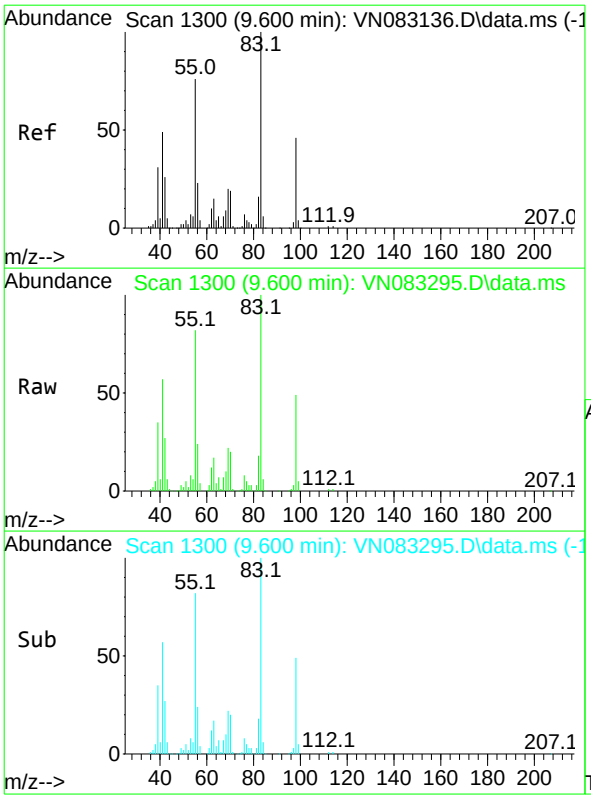




#38
Carbon Tetrachloride
Concen: 51.545 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:117 Resp: 154915

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.4 | 74.9 | 112.3 |
| 121 | 29.9 | 24.3 | 36.5 |






#39
Methylcyclohexane
Concen: 48.172 ug/l
RT: 9.600 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 83 Resp: 157882

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 81.9 | 66.4 | 99.6 |
| 98 | 49.2 | 40.7 | 61.1 |

**Instrument :**
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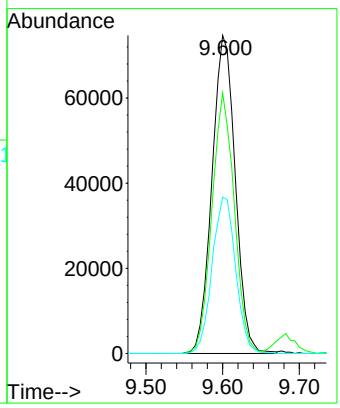
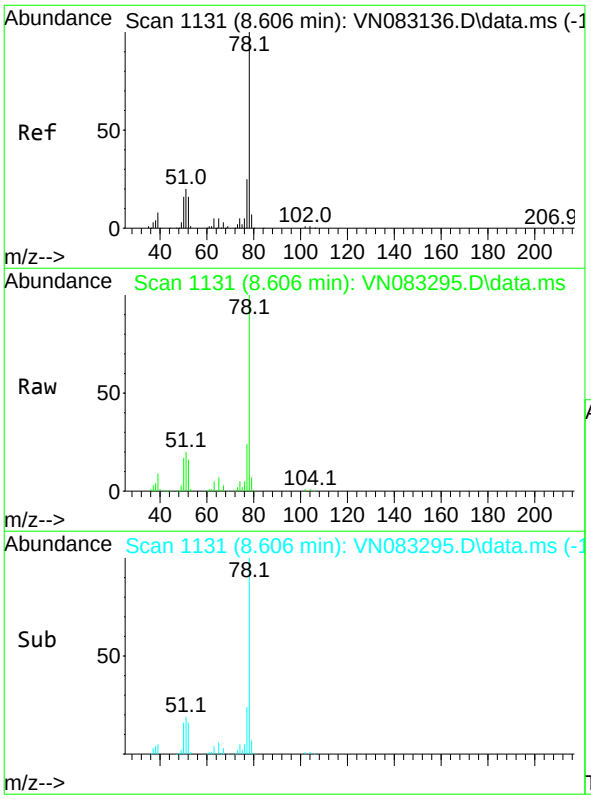
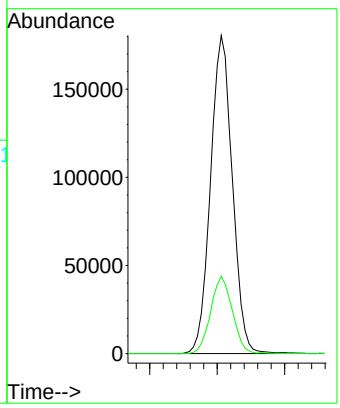


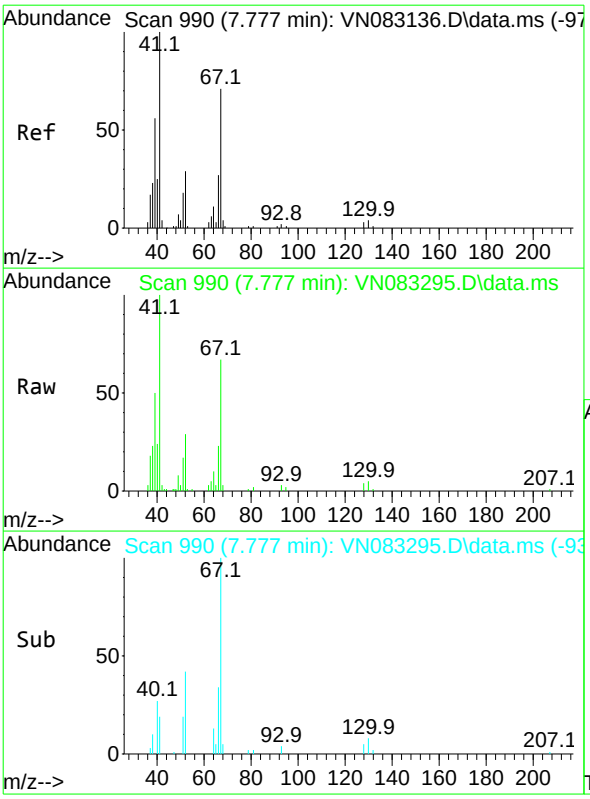




#40
Benzene
Concen: 50.937 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 78 Resp: 404907

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.3 | 19.0 | 28.4 |

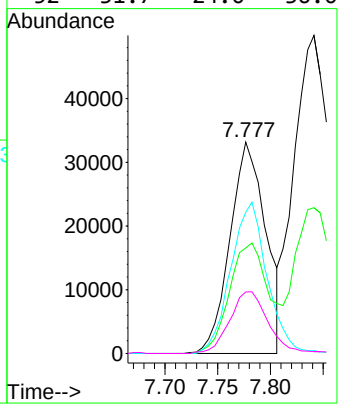





#41
Methacrylonitrile
Concen: 46.068 ug/l
RT: 7.777 min Scan# 99
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 41 Resp: 78258

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 58.8 | 45.5 | 68.3 |
| 67 | 72.8 | 50.5 | 75.7 |
| 52 | 31.7 | 24.0 | 36.0 |




**Instrument :**
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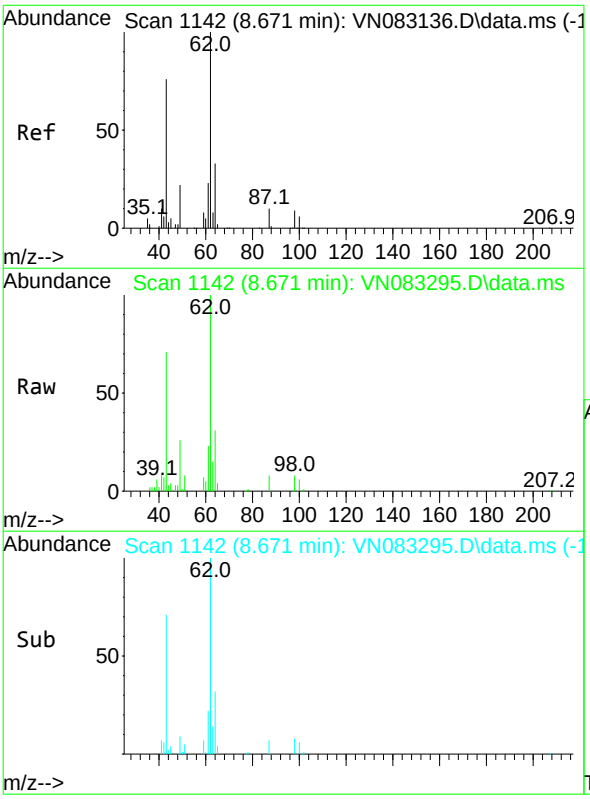
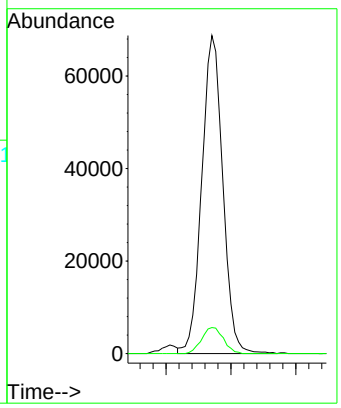
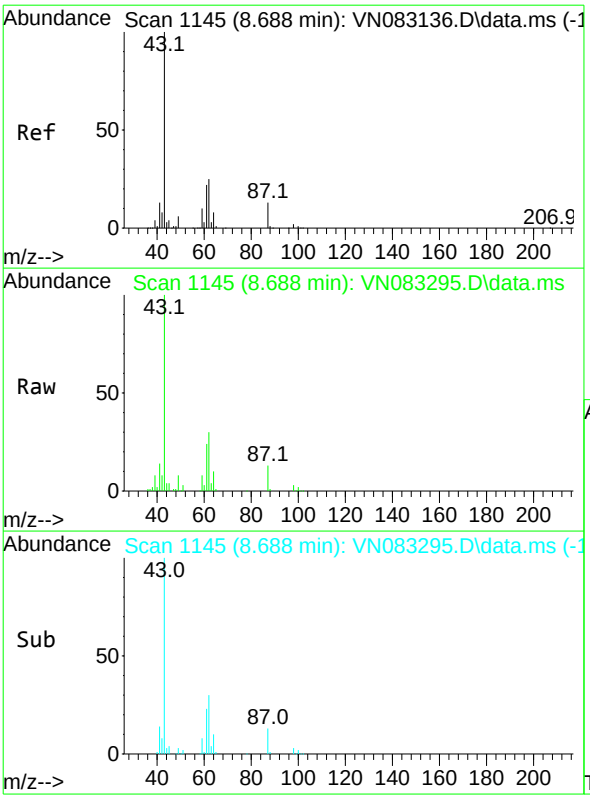



#42
1,2-Dichloroethane
Concen: 53.374 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 62 Resp: 154557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.5 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 48.708 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 252838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 25.1 | 17.8 | 26.6 |
| 87 | 12.5 | 8.2 | 12.2# |

**Instrument :**
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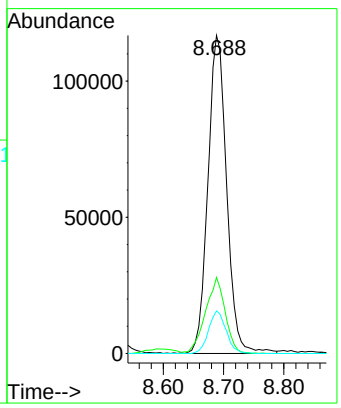
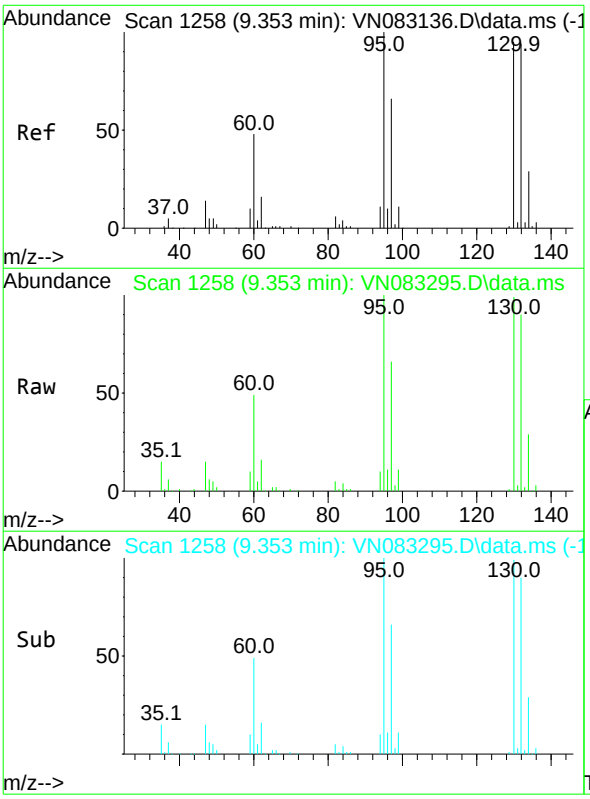
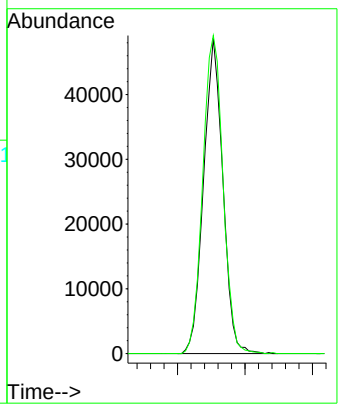


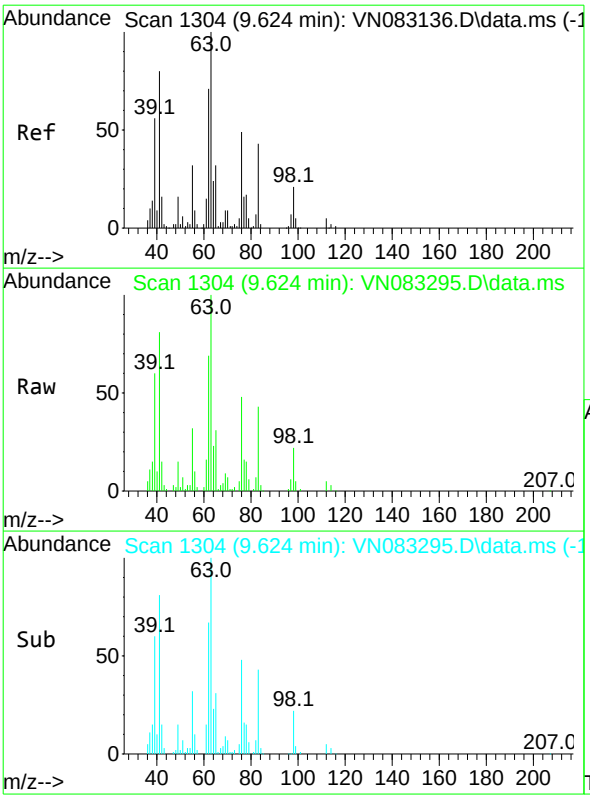




#44
Trichloroethene
Concen: 50.883 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:130 Resp: 96274

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 100.8 | 0.0 | 197.8 |

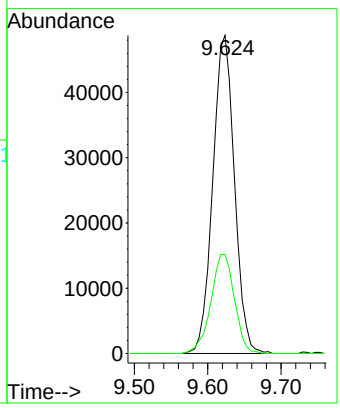





#45
1,2-Dichloropropane
Concen: 53.038 ug/l
RT: 9.624 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 63 Resp: 100079

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.1 | 24.4 | 36.6 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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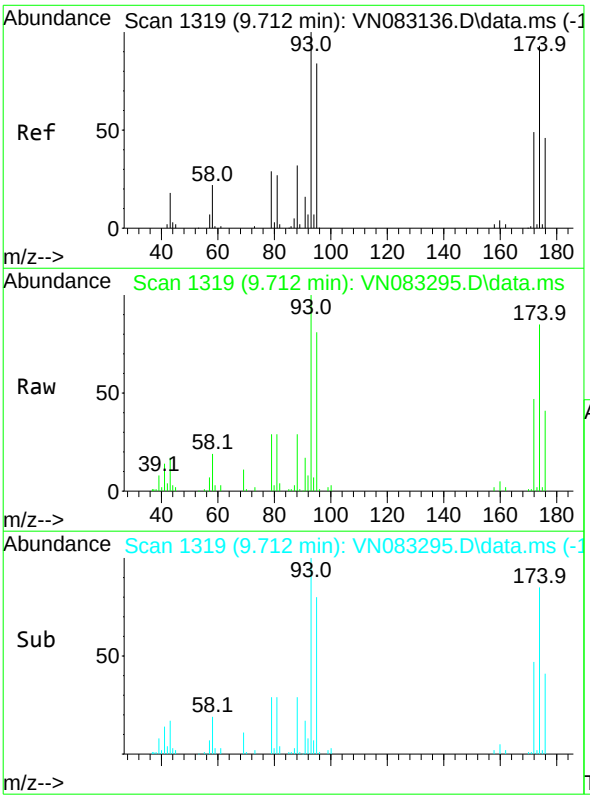
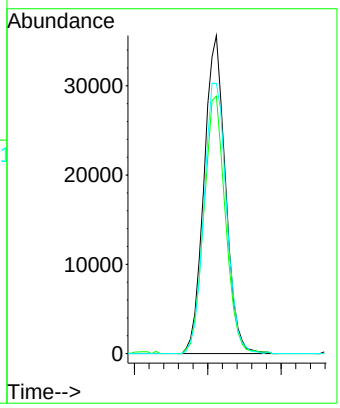
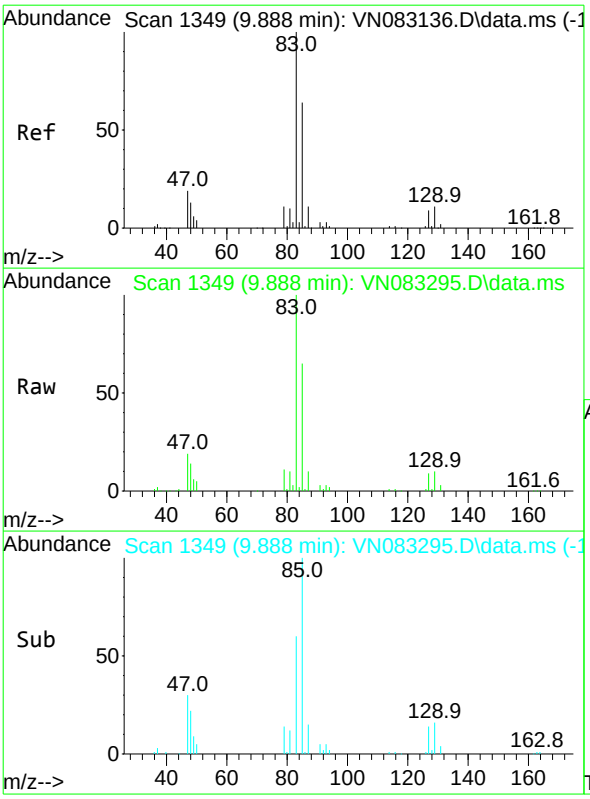



#46
Dibromomethane
Concen: 53.530 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 93 Resp: 72298

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 81.4 | 65.8 | 98.6 |
| 174 | 89.3 | 71.7 | 107.5 |

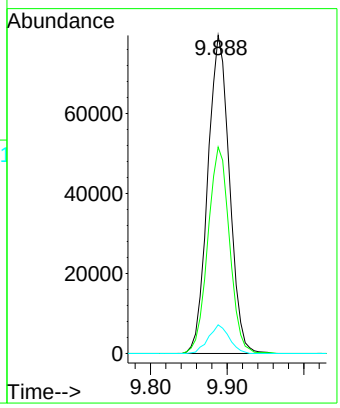





#47
Bromodichloromethane
Concen: 51.369 ug/l
RT: 9.888 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 83 Resp: 155782

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.9 | 51.1 | 76.7 |
| 127 | 9.0 | 7.2 | 10.8 |

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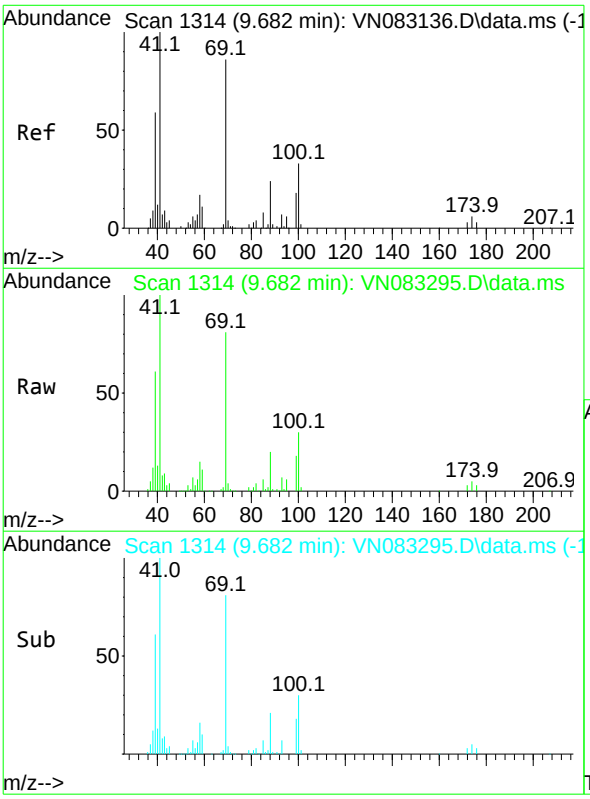
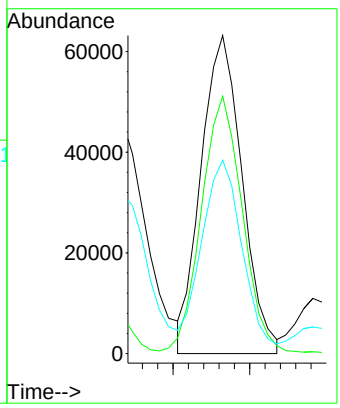
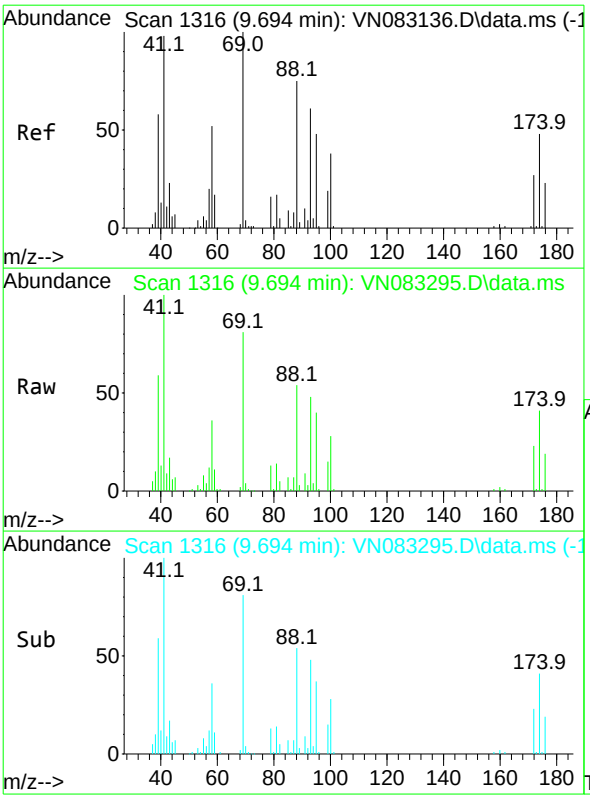



#48
Methyl methacrylate
Concen: 47.618 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 41 Resp: 117620

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 81.3 | 56.3 | 84.5 |
| 39 | 60.6 | 50.3 | 75.5 |

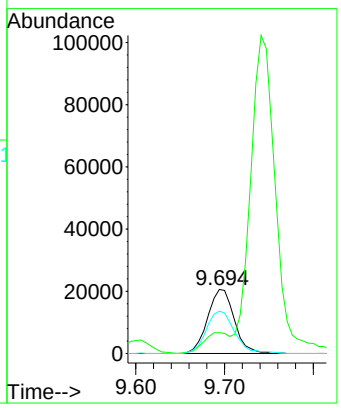





#49
1,4-Dioxane
Concen: 960.872 ug/l
RT: 9.694 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 88 Resp: 42819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 31.5 | 27.8 | 41.8 |
| 58 | 70.6 | 59.4 | 89.0 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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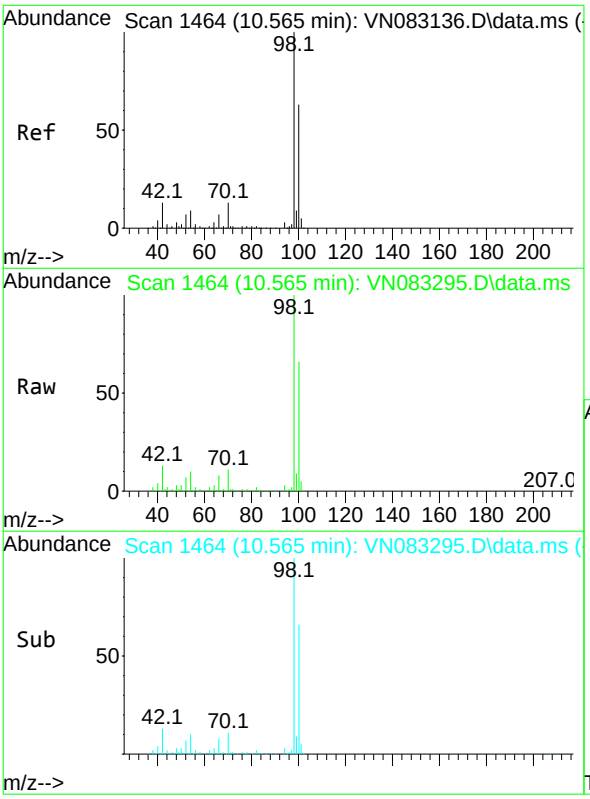
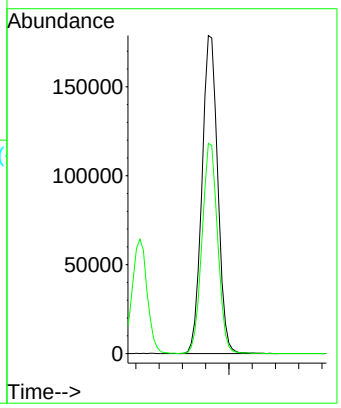
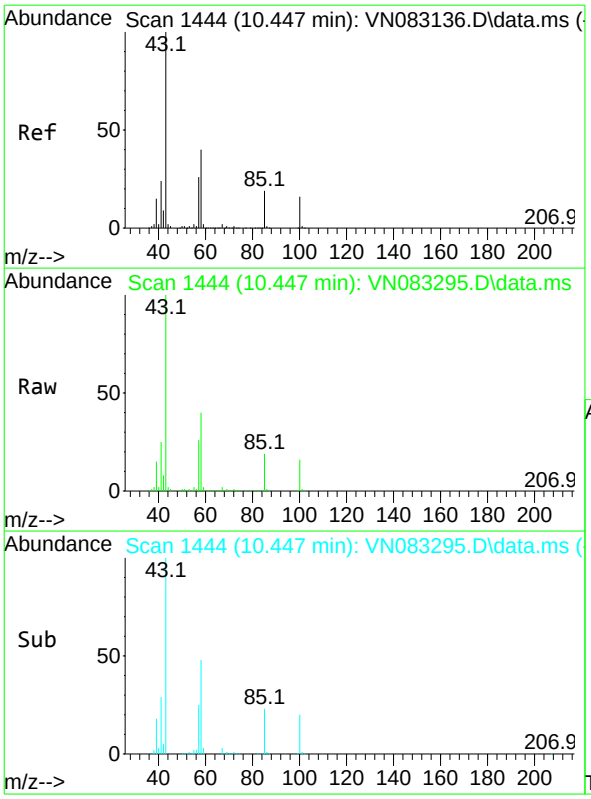



#50
Toluene-d8
Concen: 51.234 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 98 Resp: 337123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.6 | 51.5 | 77.3 |

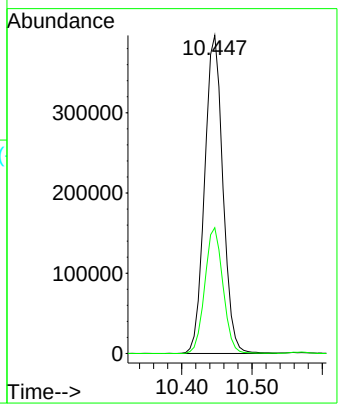





#51
4-Methyl-2-Pentanone
Concen: 253.043 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 714918

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 39.3 | 28.2 | 42.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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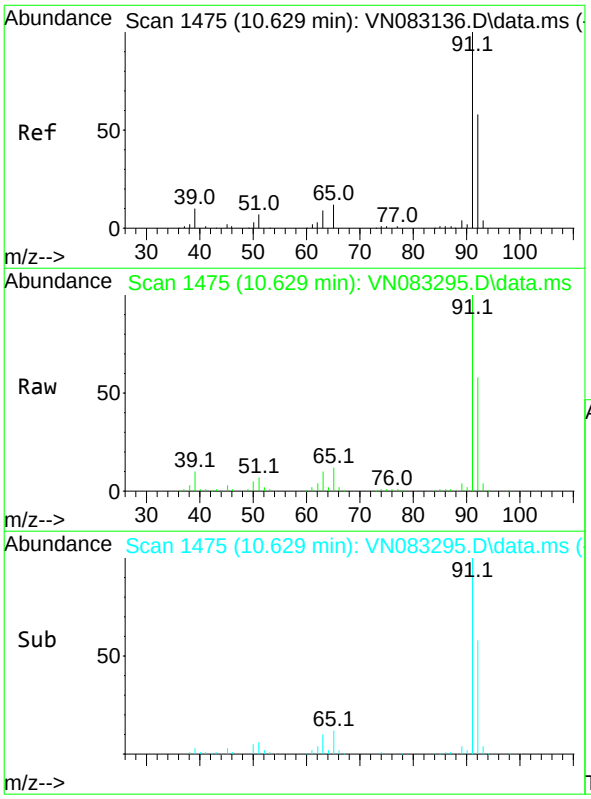
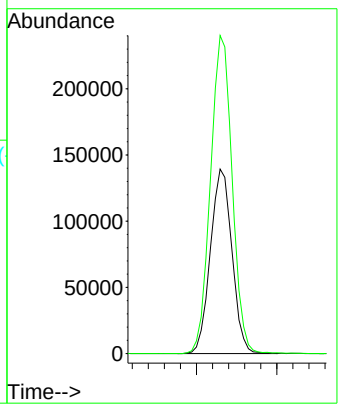
Supervised By :Semsettin Yesilyurt 08/15/2024

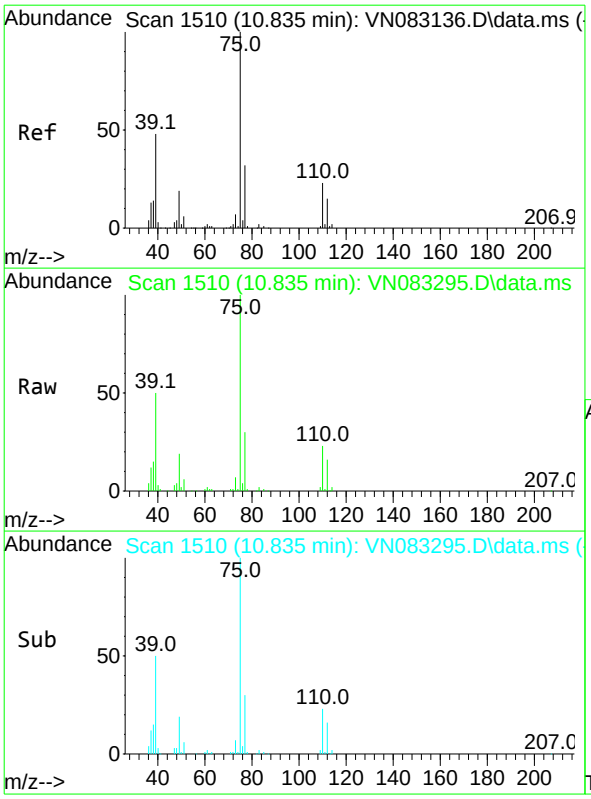



#52
Toluene
Concen: 51.813 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 92 Resp: 260237

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.2 | 139.4 | 209.0 |

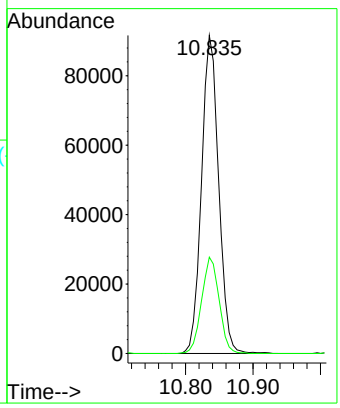





#53
t-1,3-Dichloropropene
Concen: 51.915 ug/l
RT: 10.835 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 161721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.3 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
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**Manual Integrations**
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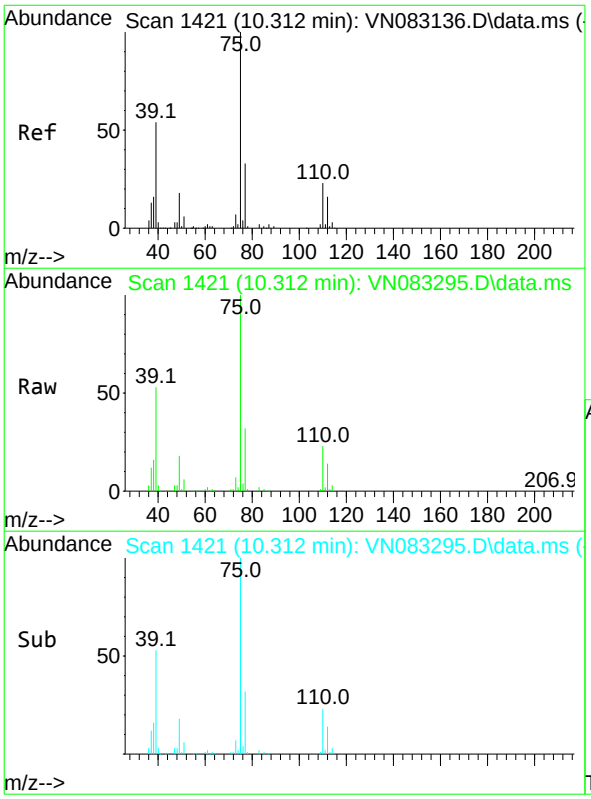
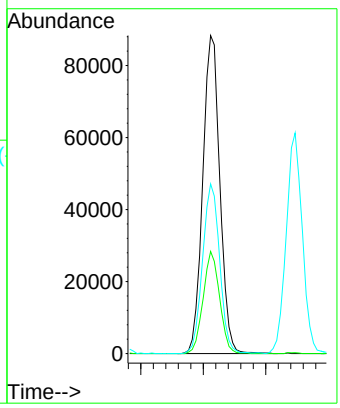
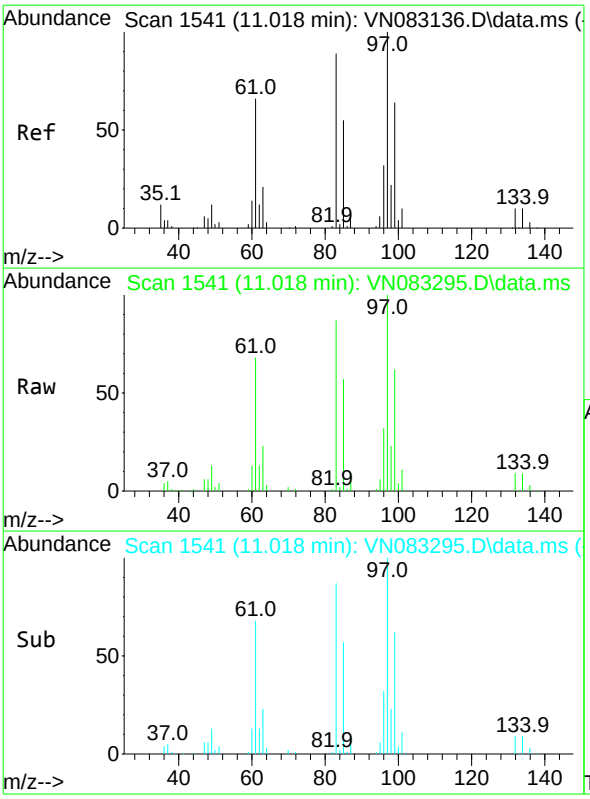



#54
cis-1,3-Dichloropropene
Concen: 50.753 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 168161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.1 | 24.3 | 36.5 |
| 39 | 53.4 | 50.5 | 75.7 |

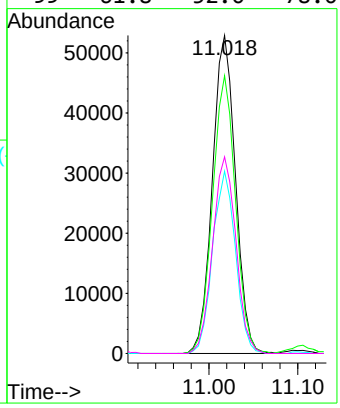





#55
1,1,2-Trichloroethane
Concen: 53.110 ug/l
RT: 11.018 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 97 Resp: 95596

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.3 | 71.4 | 107.0 |
| 85 | 57.3 | 45.8 | 68.6 |
| 99 | 61.8 | 52.0 | 78.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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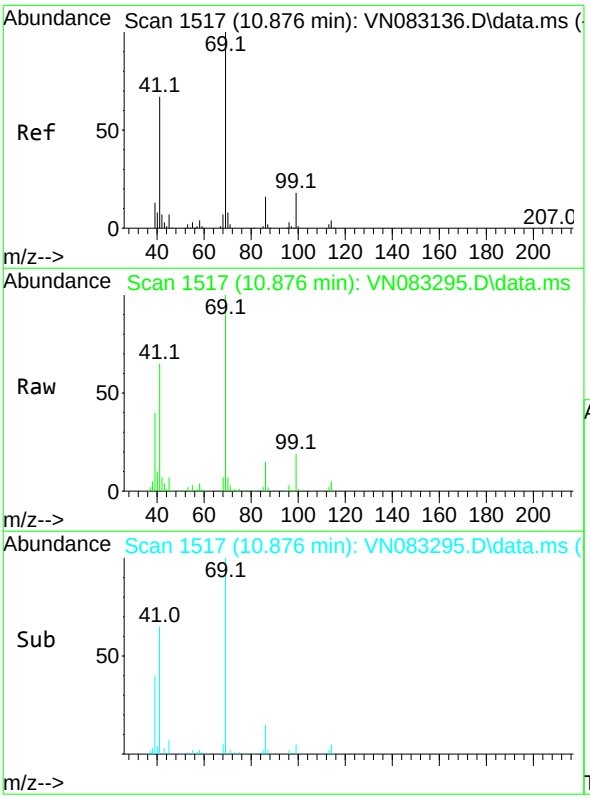
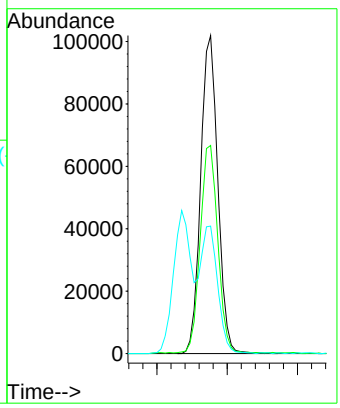
Supervised By :Semsettin Yesilyurt 08/15/2024

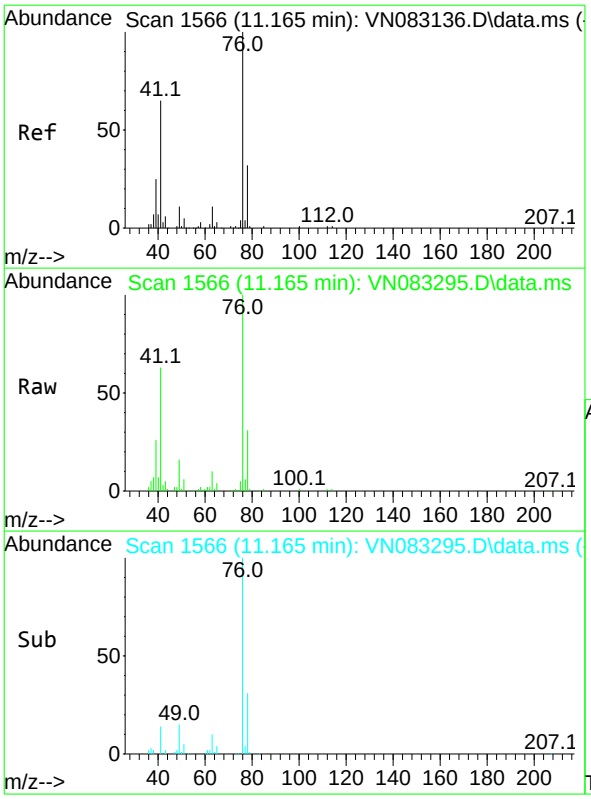



#56
Ethyl methacrylate
Concen: 50.792 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 69 Resp: 172350

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 66.8 | 63.4 | 95.2 |
| 39 | 41.7 | 37.4 | 56.0 |






#57
1,3-Dichloropropane
Concen: 52.864 ug/l
RT: 11.165 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 76 Resp: 169602

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.9 | 25.6 | 38.4 |

**Instrument :**
MSVOA_N
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VSTDCCC050

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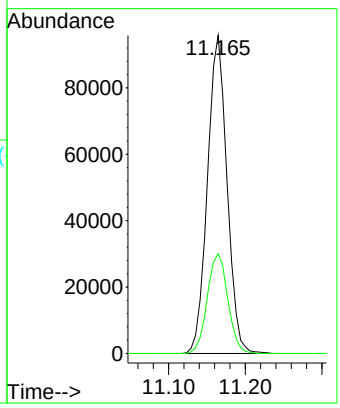
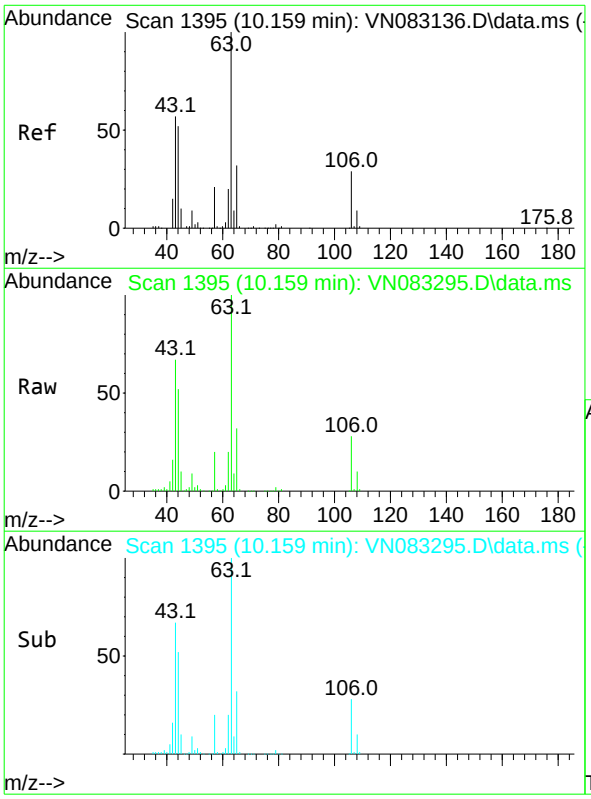
Supervised By :Semsettin Yesilyurt 08/15/2024

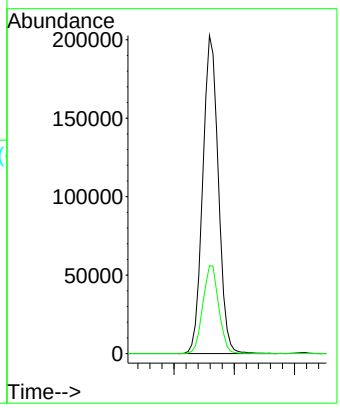


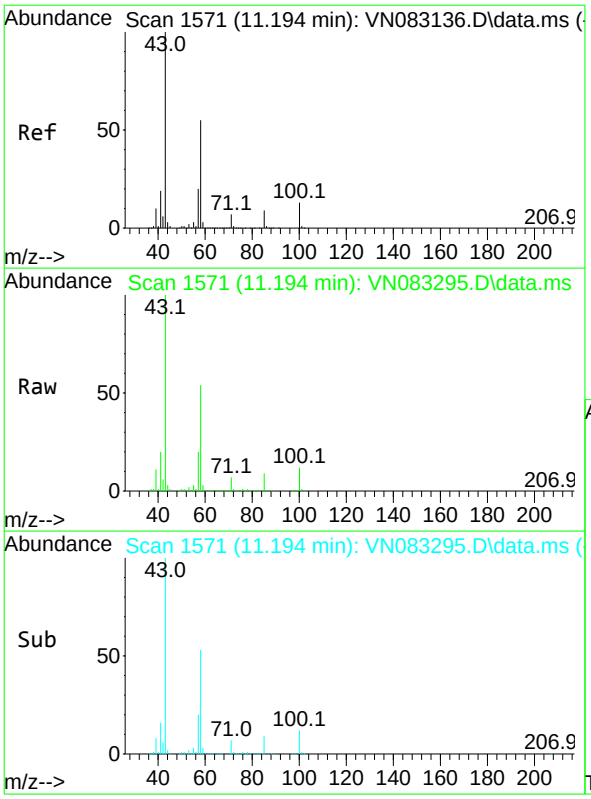




#58
2-Chloroethyl Vinyl ether
Concen: 253.780 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 63 Resp: 364003

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.2 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 243.668 ug/l
RT: 11.194 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 532597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 54.3 | 24.6 | 73.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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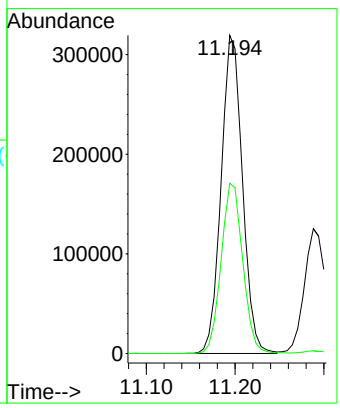
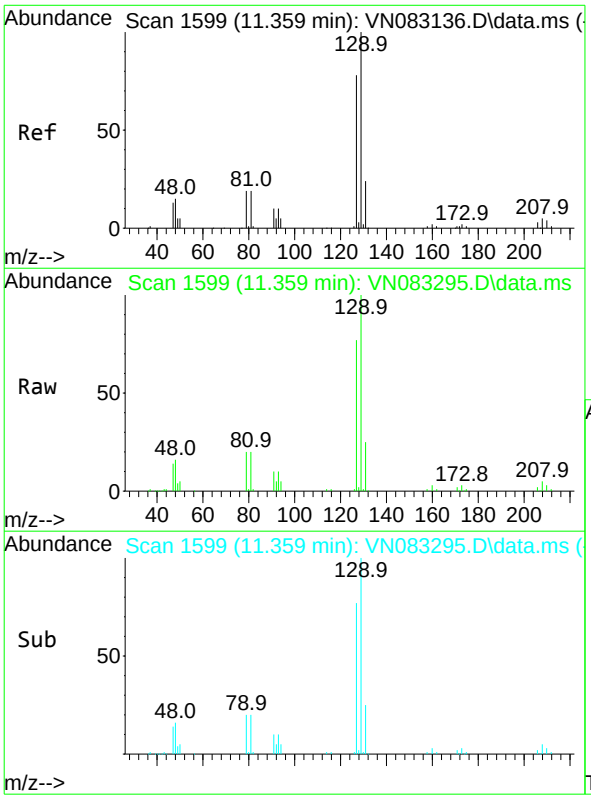
Supervised By :Semsettin Yesilyurt 08/15/2024

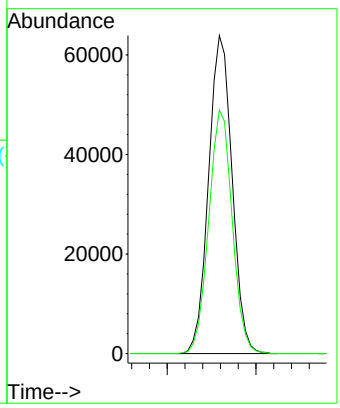


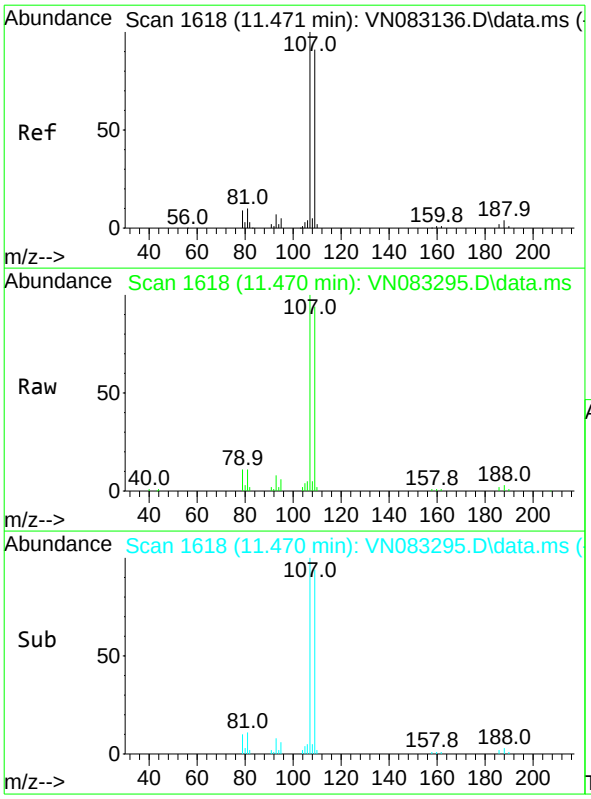




#60
Dibromochloromethane
Concen: 54.062 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:129 Resp: 117651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.5 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 51.595 ug/l
RT: 11.470 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:107 Resp: 97558

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.9 | 73.7 | 110.5 |

**Instrument :**
MSVOA_N
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VSTDCCC050

**Manual Integrations**
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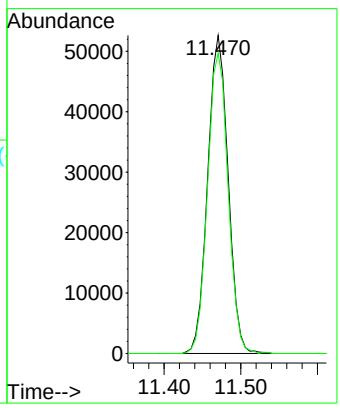
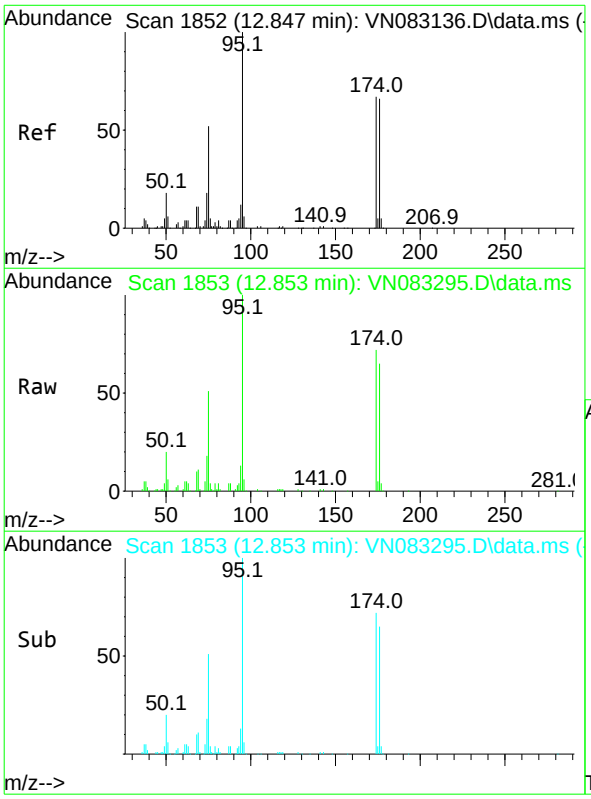
Supervised By :Semsettin Yesilyurt 08/15/2024

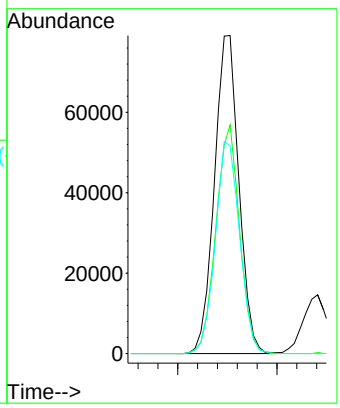


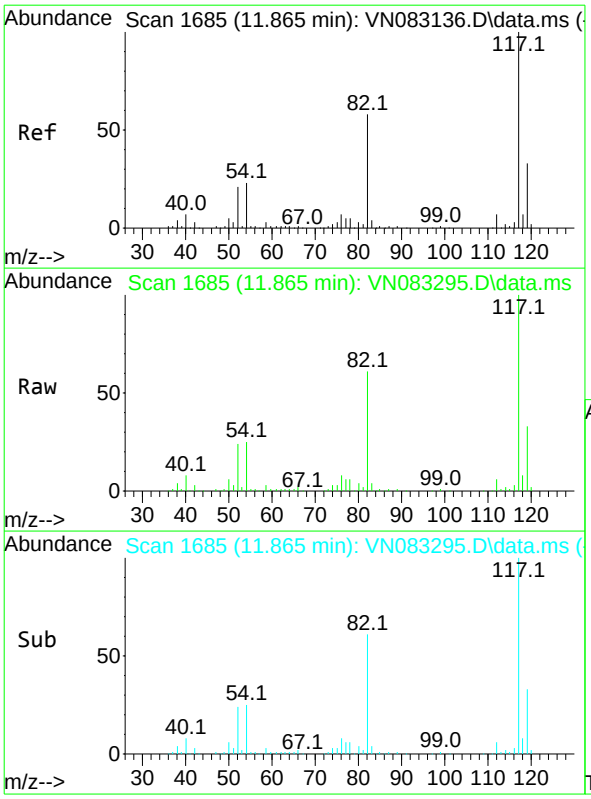




#62
4-Bromofluorobenzene
Concen: 52.757 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 95 Resp: 135336

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.6 | 0.0 | 159.2 |
| 176 | 66.4 | 0.0 | 147.6 |

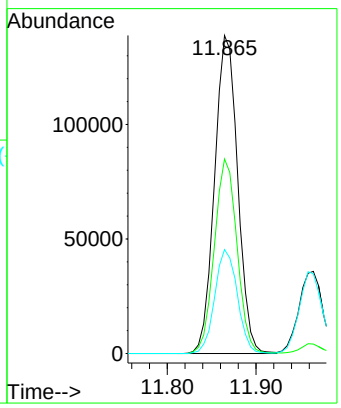





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:117 Resp: 250996

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.1 | 47.5 | 71.3 |
| 119 | 32.7 | 25.6 | 38.4 |




**Instrument :**
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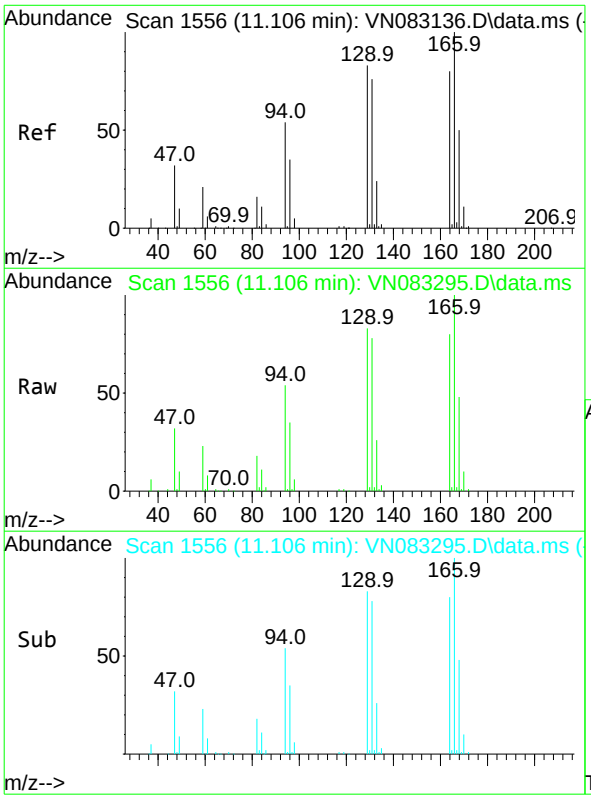
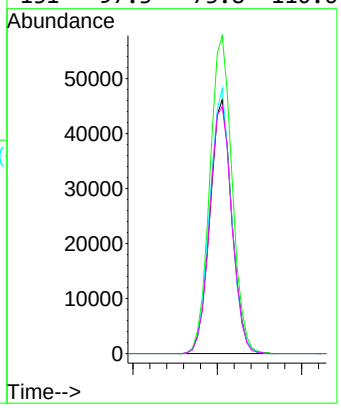
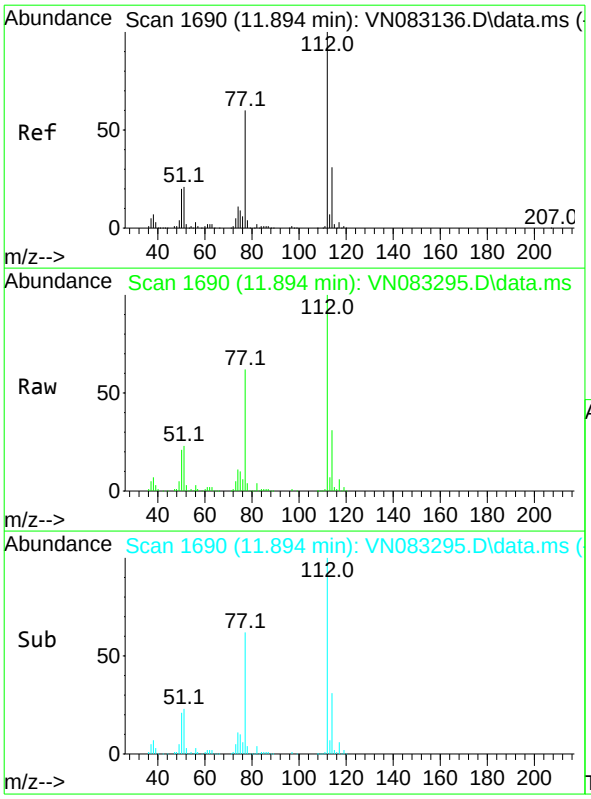



#64
Tetrachloroethene
Concen: 50.230 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:164 Resp: 83497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 125.2 | 101.4 | 152.0 |
| 129 | 104.5 | 75.7 | 113.5 |
| 131 | 97.3 | 73.8 | 110.6 |

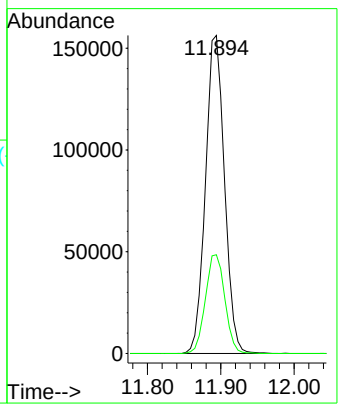





#65
Chlorobenzene
Concen: 50.640 ug/l
RT: 11.894 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:112 Resp: 280885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.1 | 26.2 | 39.2 |




**Instrument :**
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VSTDCCC050

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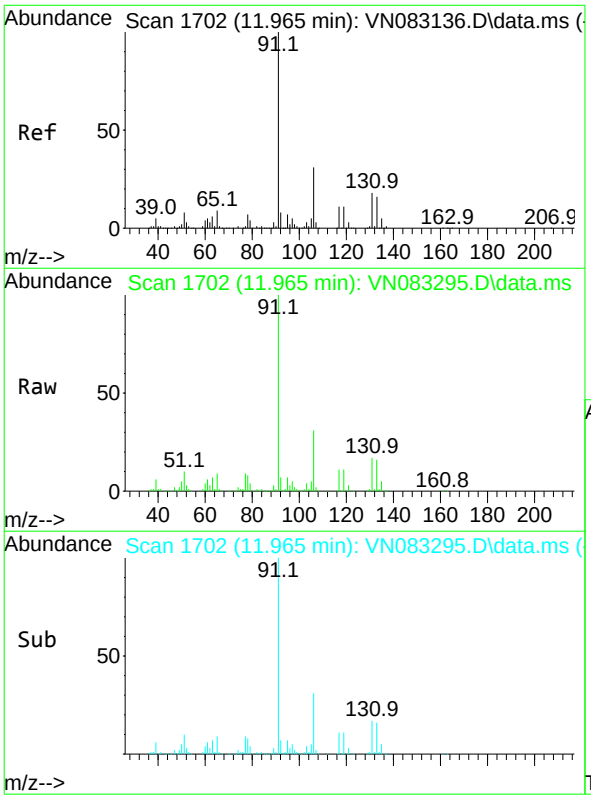
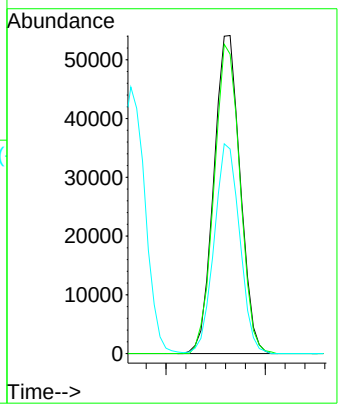
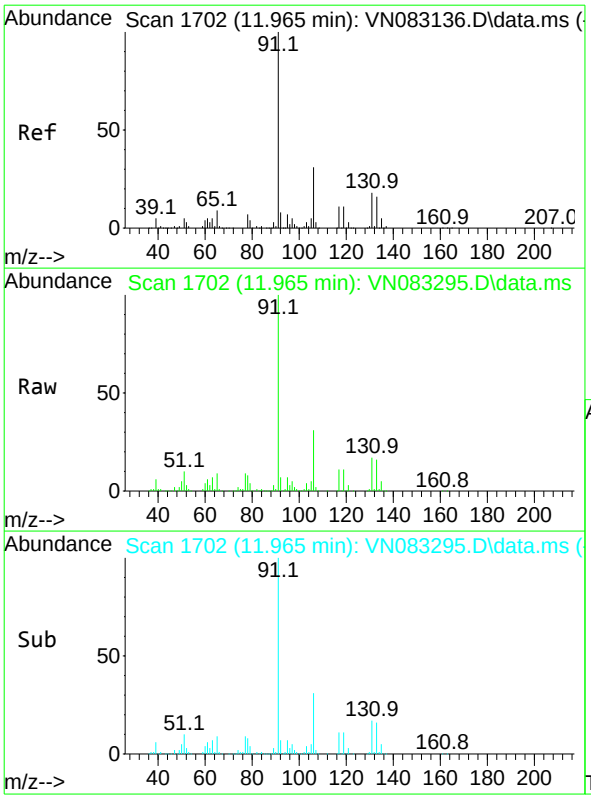



#66
1,1,1,2-Tetrachloroethane
Concen: 50.961 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:131 Resp: 99691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.5 | 47.3 | 142.0 |
| 119 | 64.0 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 51.124 ug/l
RT: 11.965 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 91 Resp: 520196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.5 | 24.0 | 36.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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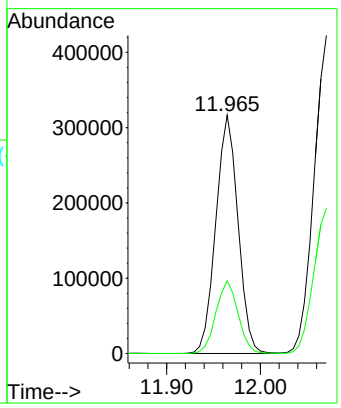
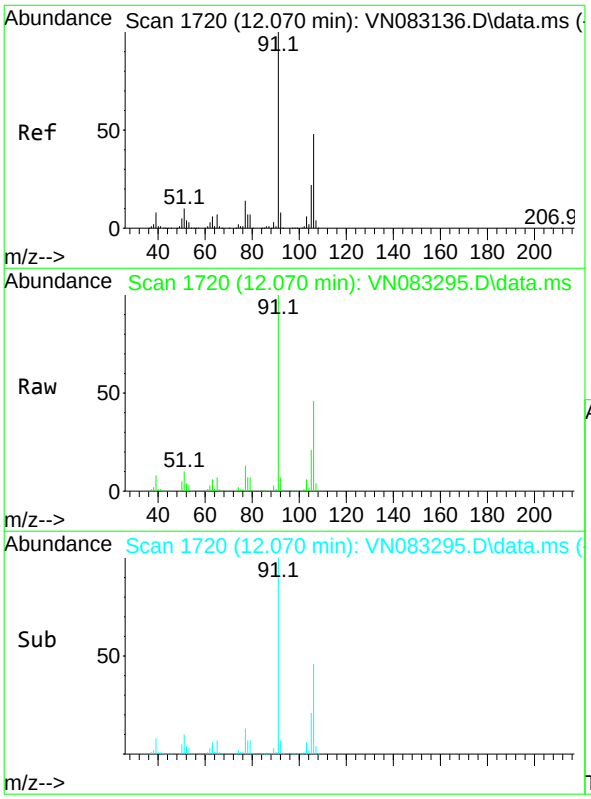
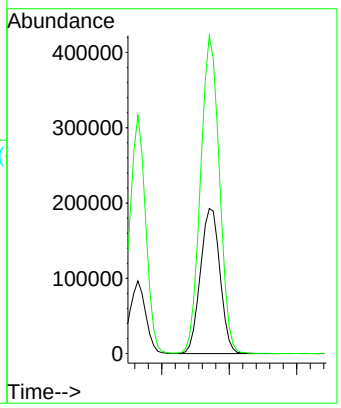


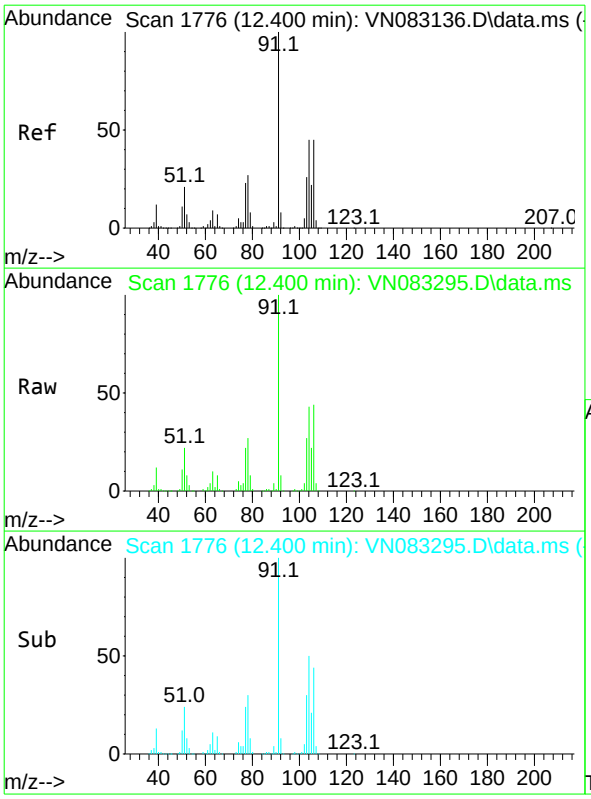




#68
m/p-Xylenes
Concen: 102.048 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:106 Resp: 388963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 211.2 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 50.450 ug/l
RT: 12.400 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:106 Resp: 189655

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 222.9 | 111.3 | 333.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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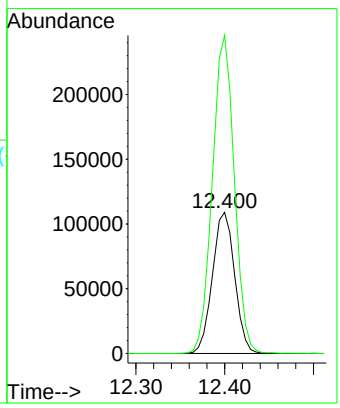
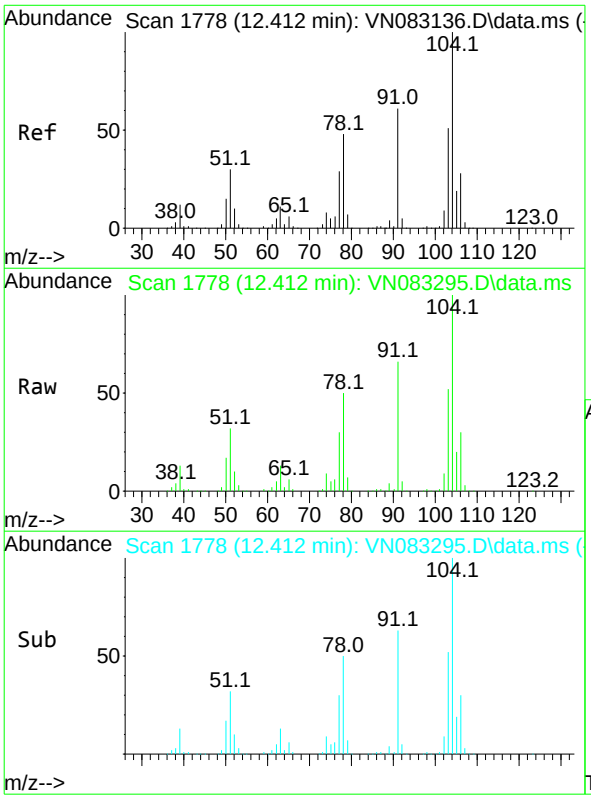
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

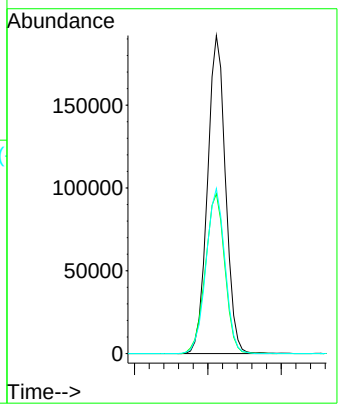


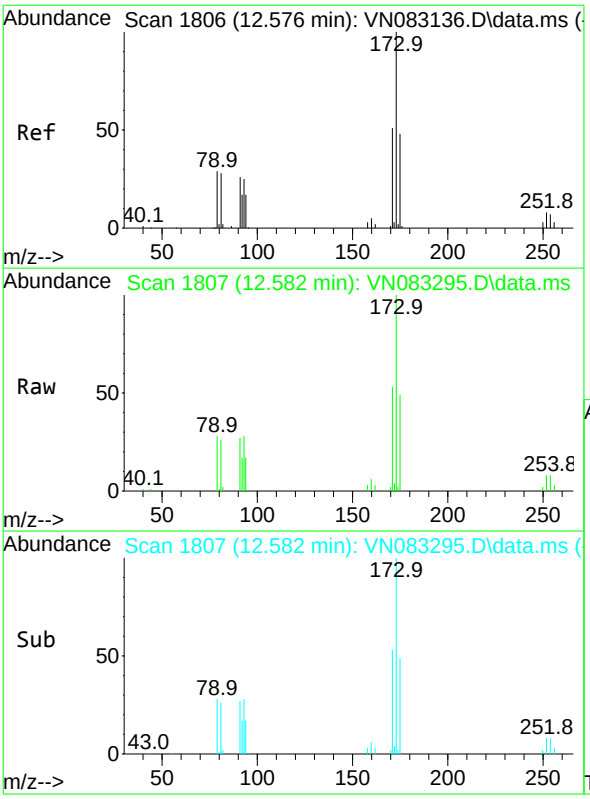




#70
Styrene
Concen: 51.874 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:104 Resp: 327524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 54.0 | 41.6 | 62.4 |
| 103 | 54.5 | 44.0 | 66.0 |






#71
Bromoform
Concen: 50.218 ug/l
RT: 12.582 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

Tgt Ion:173 Resp: 74422

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 50.1 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |

**Manual Integrations**
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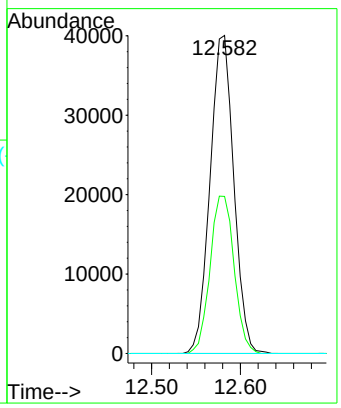
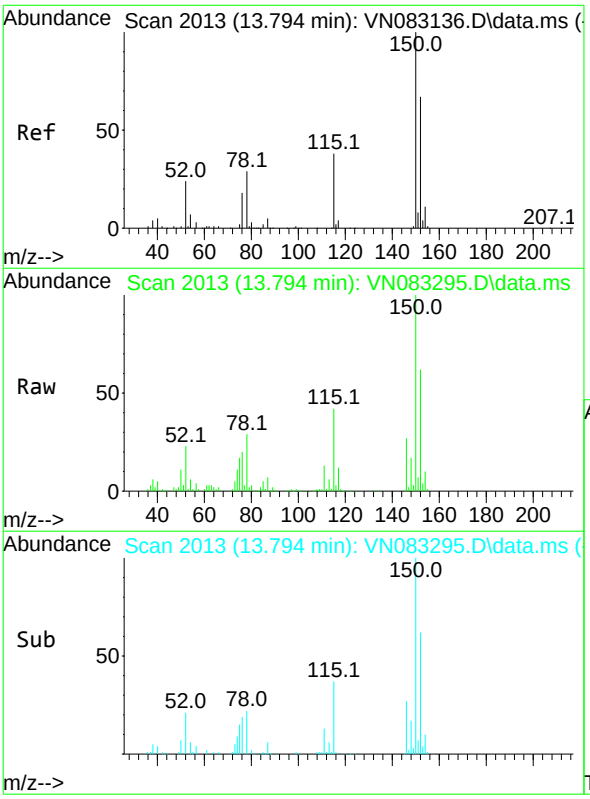
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

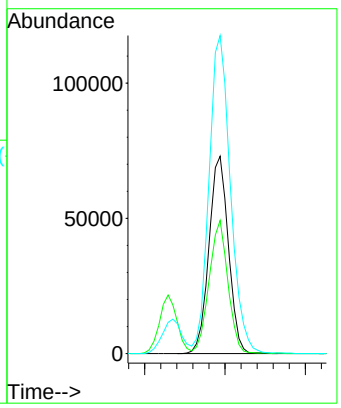


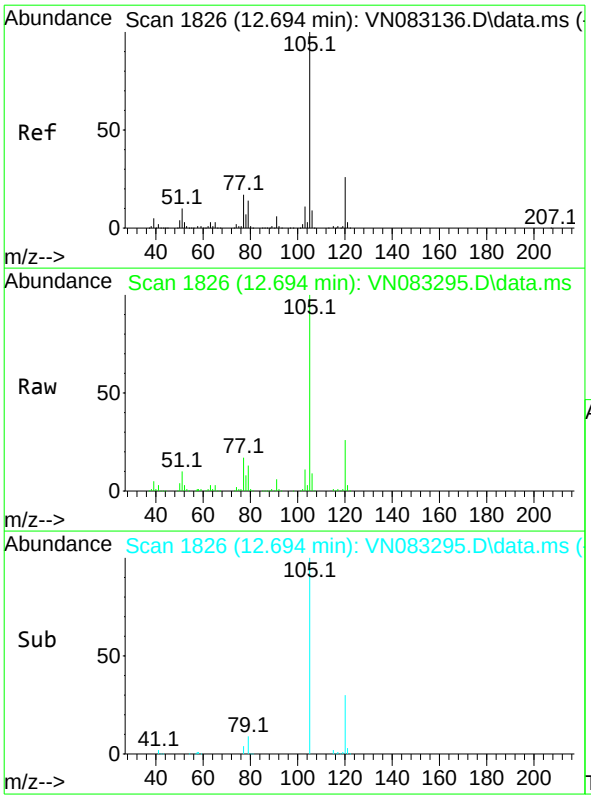




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:152 Resp: 122669

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.3 | 30.6 | 91.6 |
| 150 | 177.2 | 0.0 | 348.6 |

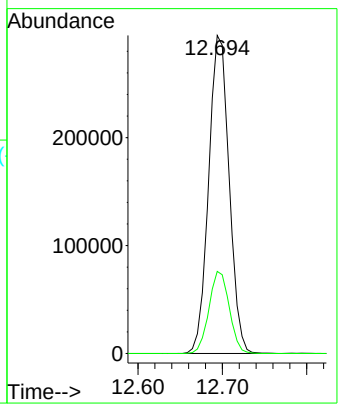





#73
Isopropylbenzene
Concen: 48.403 ug/l
RT: 12.694 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:105 Resp: 496635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.6 | 12.9 | 38.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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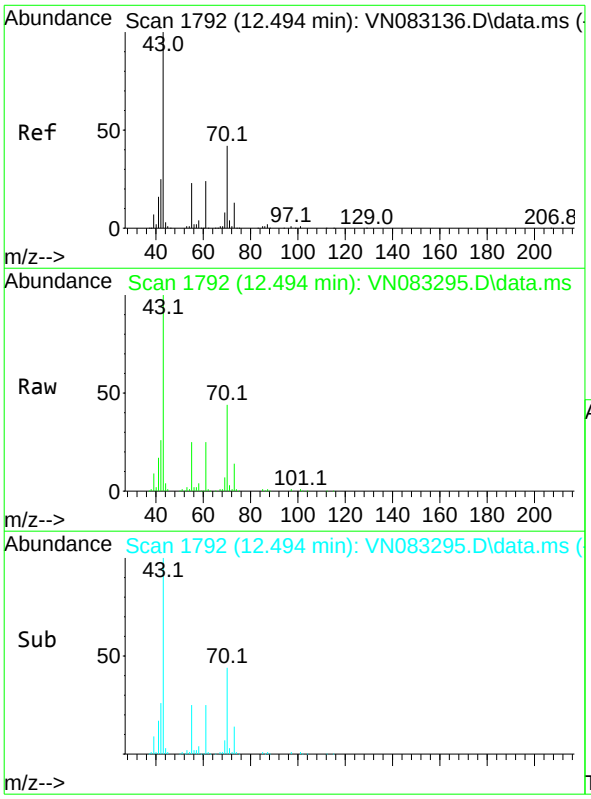
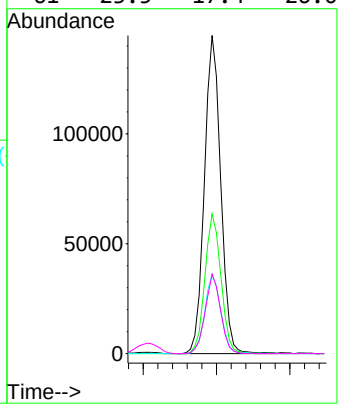
Supervised By :Semsettin Yesilyurt 08/15/2024

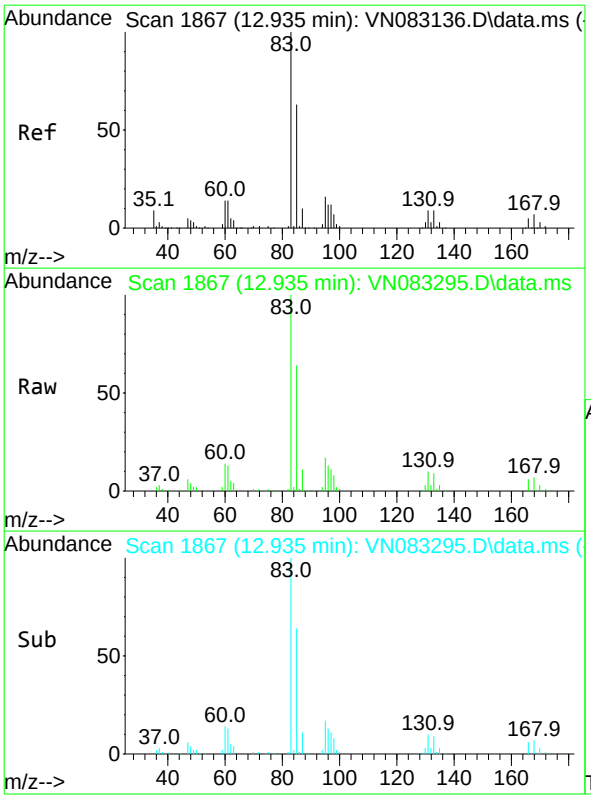



#74
N-amyl acetate
Concen: 44.635 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 43 Resp: 224010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 43.2 | 29.8 | 44.6 |
| 55 | 24.3 | 18.7 | 28.1 |
| 61 | 23.5 | 17.4 | 26.0 |

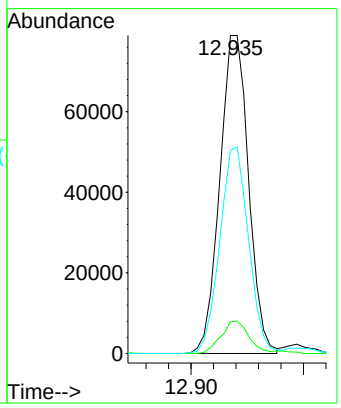





#75
1,1,2,2-Tetrachloroethane
Concen: 48.328 ug/l
RT: 12.935 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 83 Resp: 140246

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.3 | 5.0 | 14.9 |
| 85 | 65.1 | 31.9 | 95.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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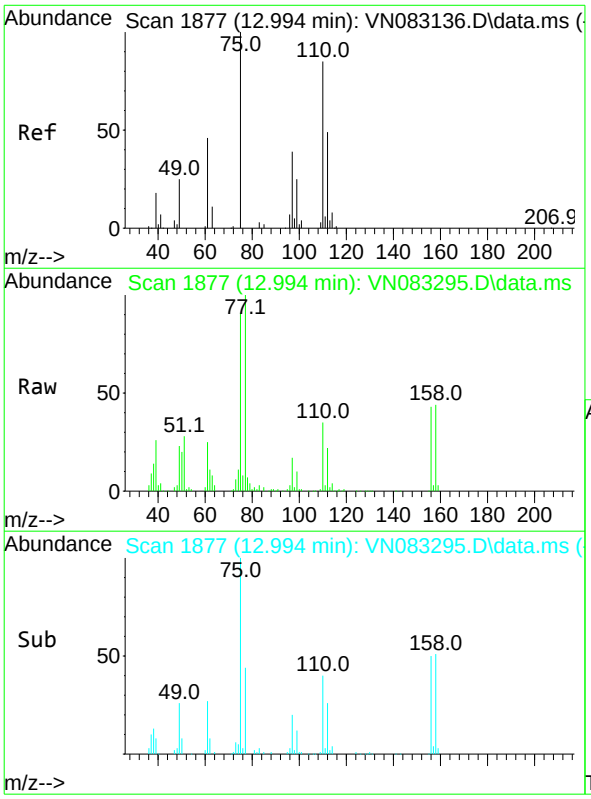
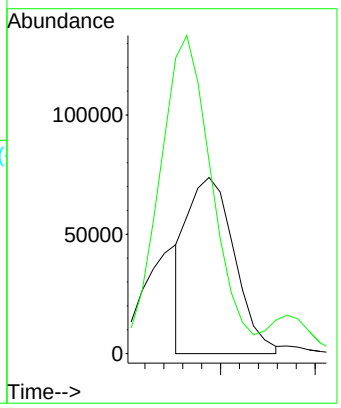
Supervised By :Semsettin Yesilyurt 08/15/2024

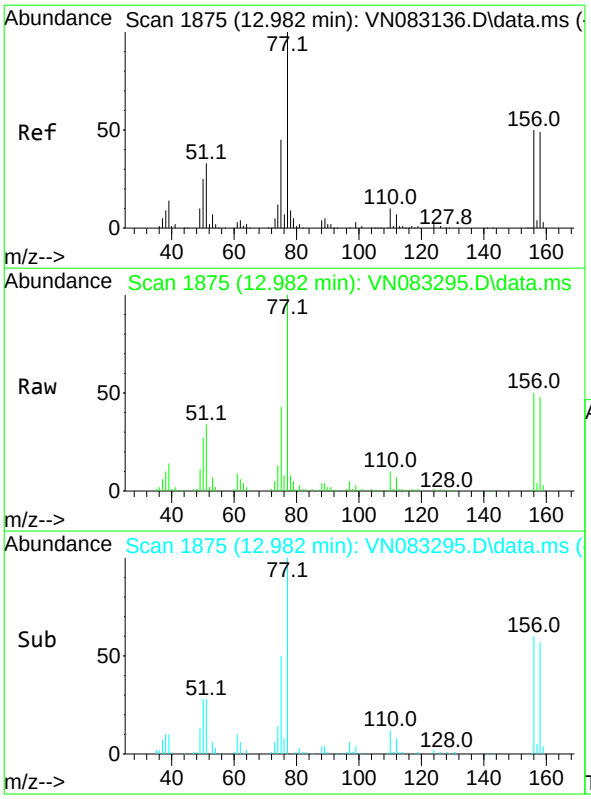



#76
1,2,3-Trichloropropane
Concen: 47.602 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 128158

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 202.2 | 110.9 | 332.6 |

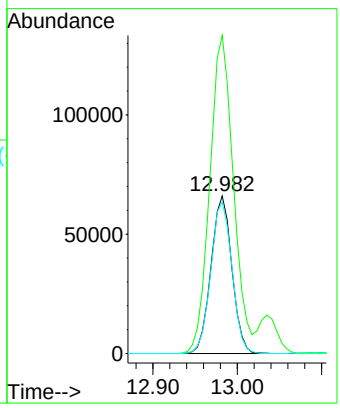





#77
Bromobenzene
Concen: 49.656 ug/l
RT: 12.982 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:156 Resp: 113178

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 228.9 | 111.3 | 333.8 |
| 158 | 97.7 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
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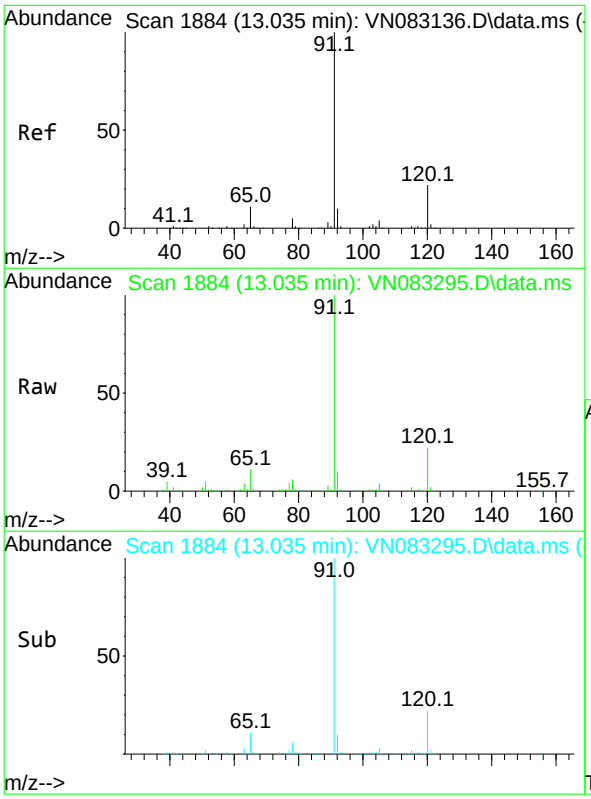
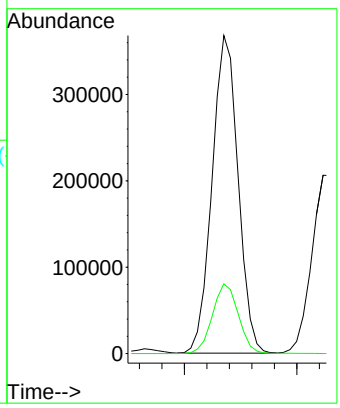
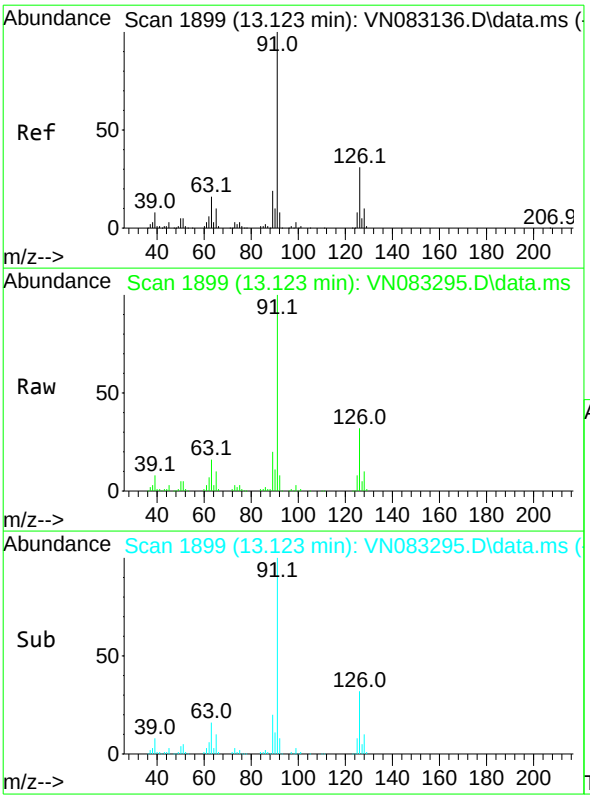



#78
n-propylbenzene
Concen: 49.938 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 91 Resp: 590000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.9 | 10.9 | 32.9 |

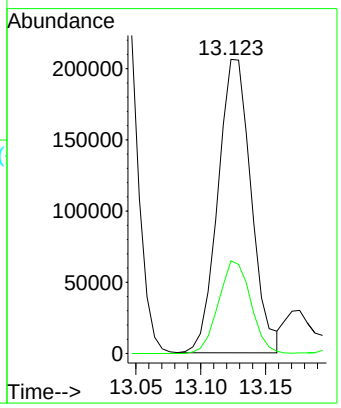





#79
2-Chlorotoluene
Concen: 49.125 ug/l
RT: 13.123 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 91 Resp: 367969

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.5 | 16.2 | 48.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

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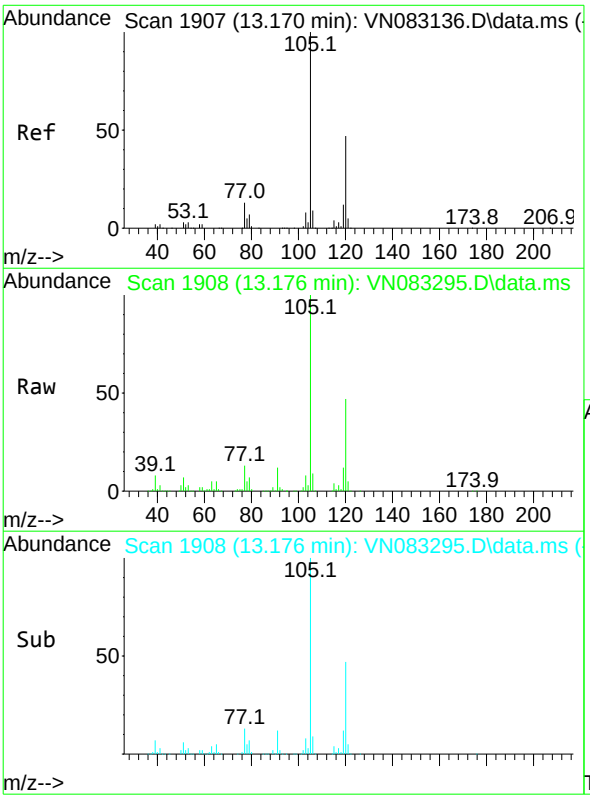
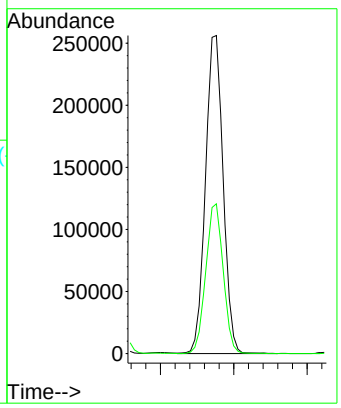
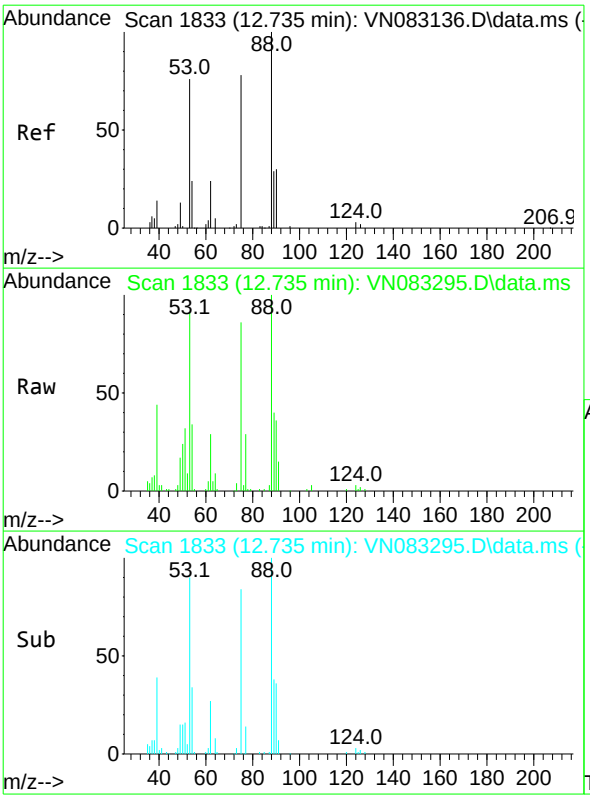



#80
1,3,5-Trimethylbenzene
Concen: 49.829 ug/l
RT: 13.176 min Scan# 1908
Delta R.T. 0.006 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:105 Resp: 428037

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.5 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 45.962 ug/l
RT: 12.735 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 56887

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 94.1 | 88.4 | 132.6 |
| 89 | 39.6 | 36.3 | 54.5 |

**Instrument :**
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VSTDCCC050

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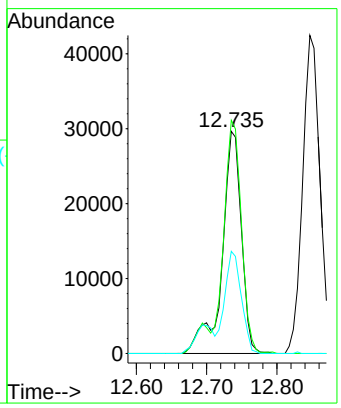
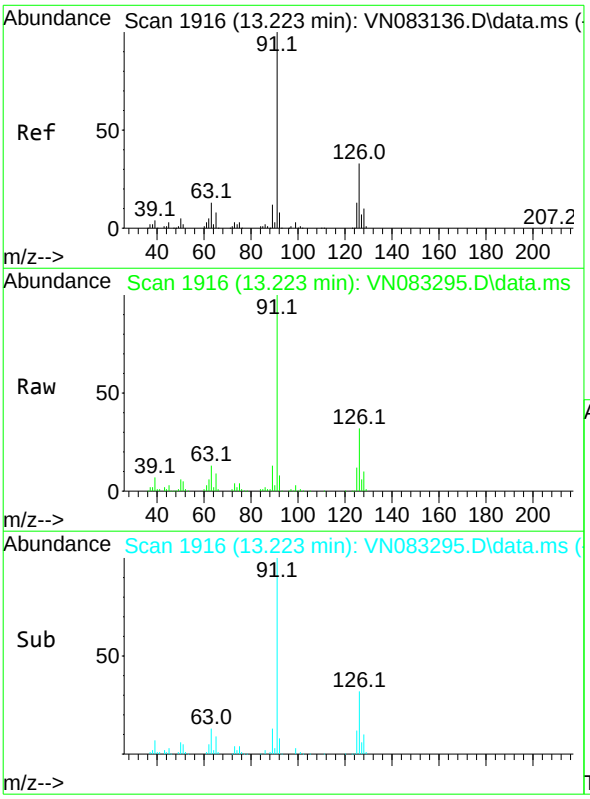
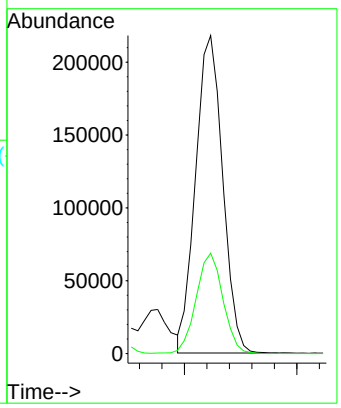


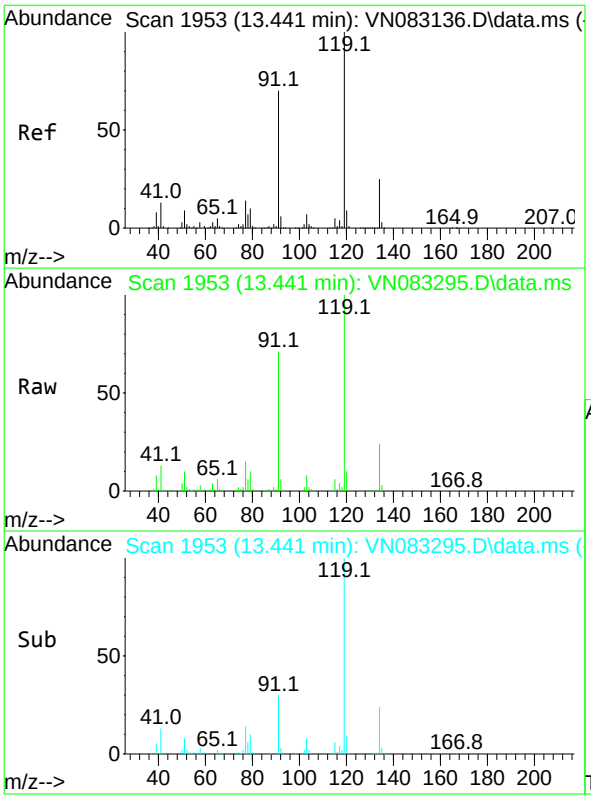




#82
4-Chlorotoluene
Concen: 48.468 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 91 Resp: 364156

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.4 | 16.2 | 48.6 |

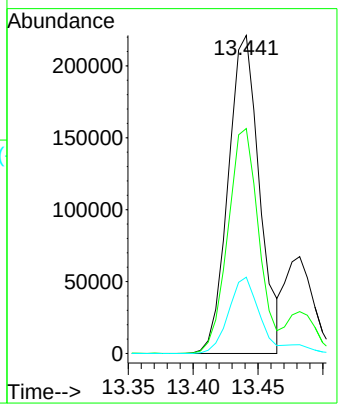





#83
tert-Butylbenzene
Concen: 48.866 ug/l
RT: 13.441 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:119 Resp: 371735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 69.6 | 35.0 | 105.1 |
| 134 | 25.6 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
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VSTDCCC050

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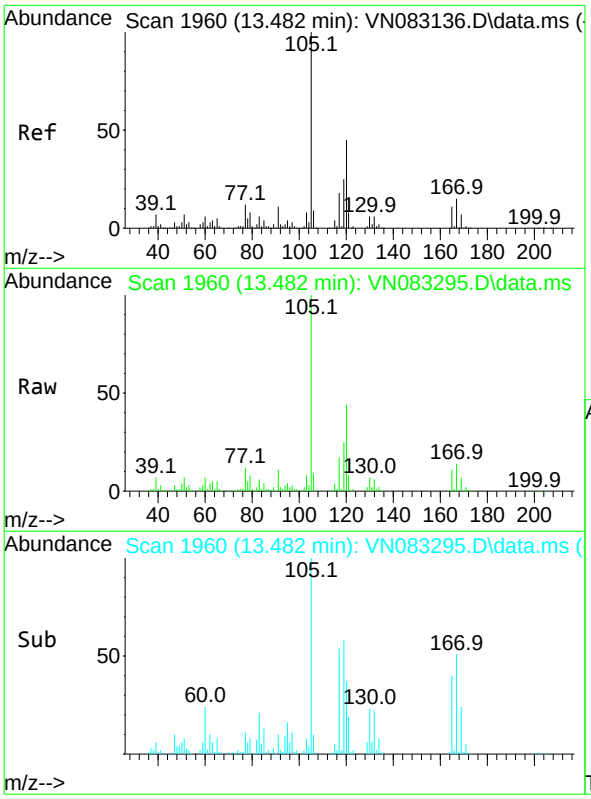
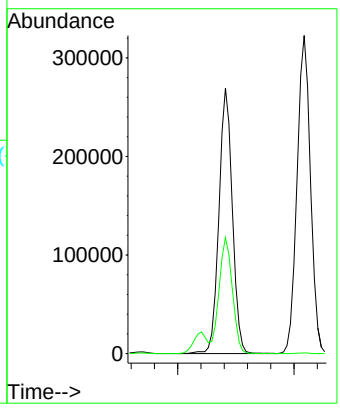
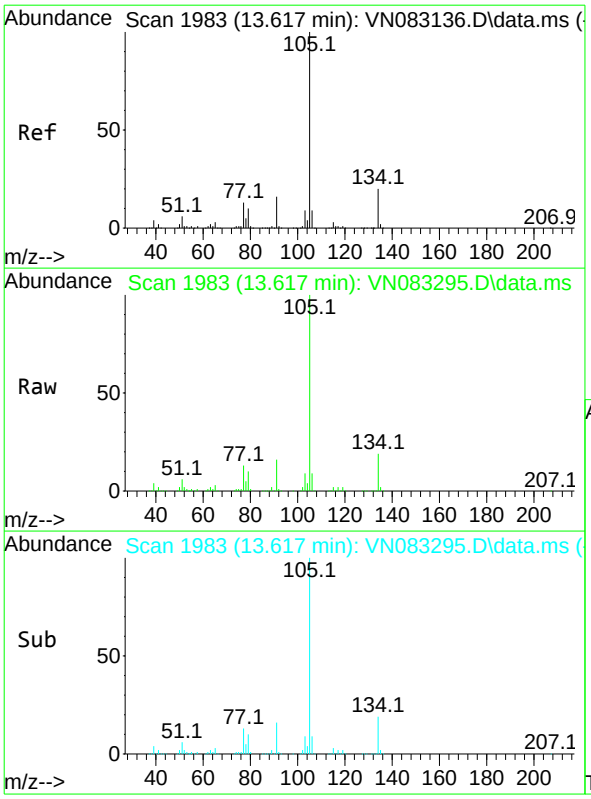



#84
1,2,4-Trimethylbenzene
Concen: 49.723 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:105 Resp: 430444

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.7 | 21.9 | 65.8 |

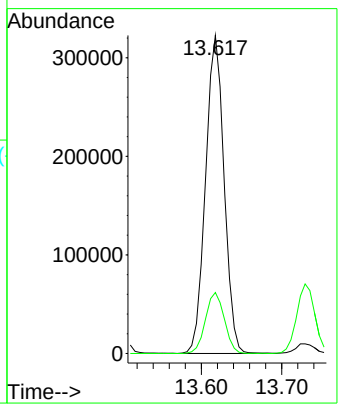





#85
sec-Butylbenzene
Concen: 49.826 ug/l
RT: 13.617 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:105 Resp: 517202

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.5 | 9.8 | 29.3 |




**Instrument :**
MSVOA_N
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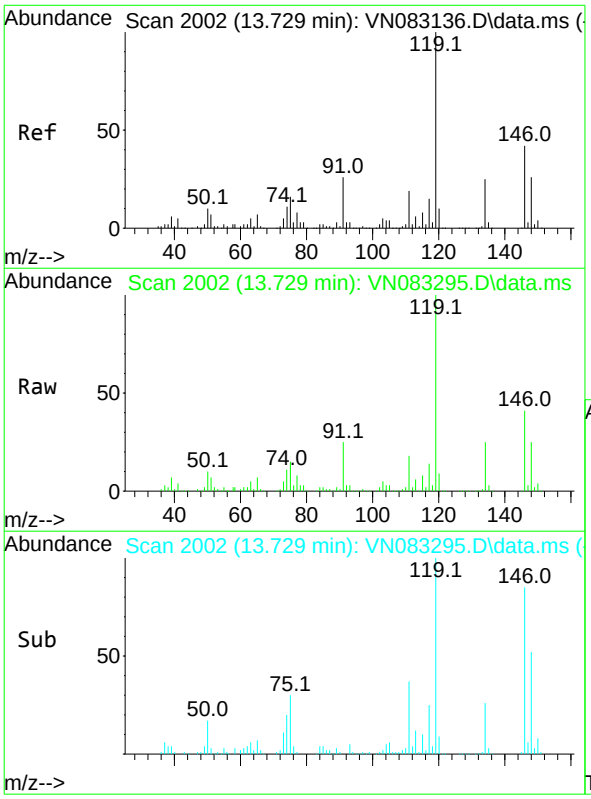
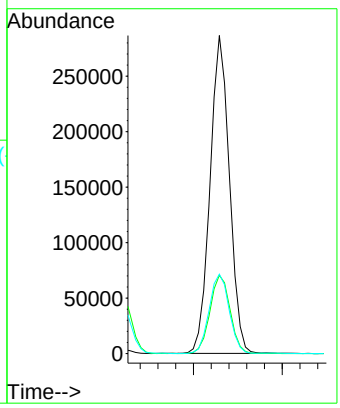
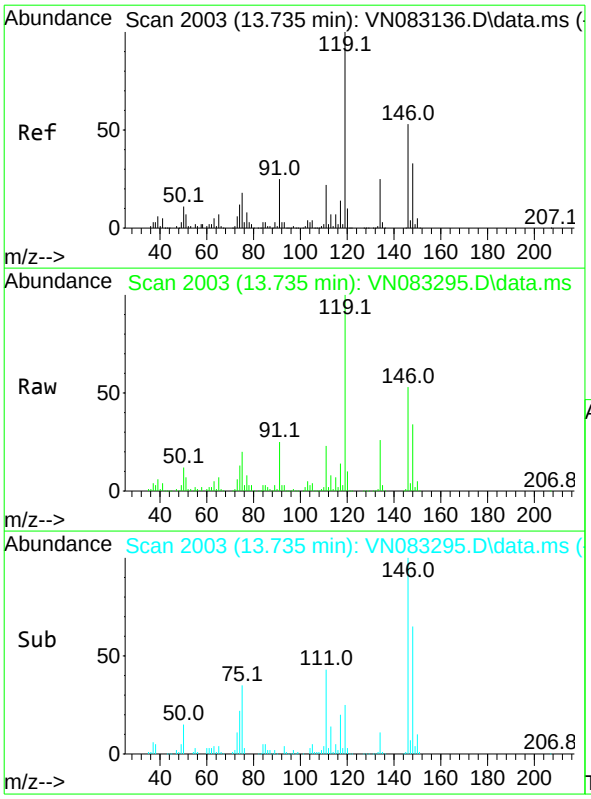



#86
p-Isopropyltoluene
Concen: 50.705 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:119 Resp: 434576

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.5 | 13.0 | 39.0 |
| 91 | 25.9 | 12.3 | 36.9 |

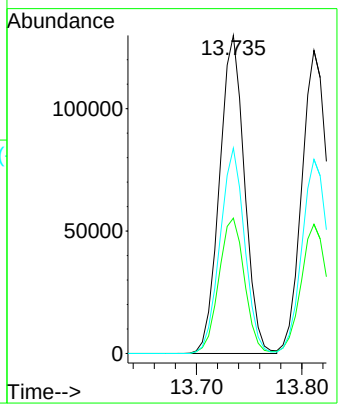





#87
1,3-Dichlorobenzene
Concen: 49.896 ug/l
RT: 13.735 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:146 Resp: 213990

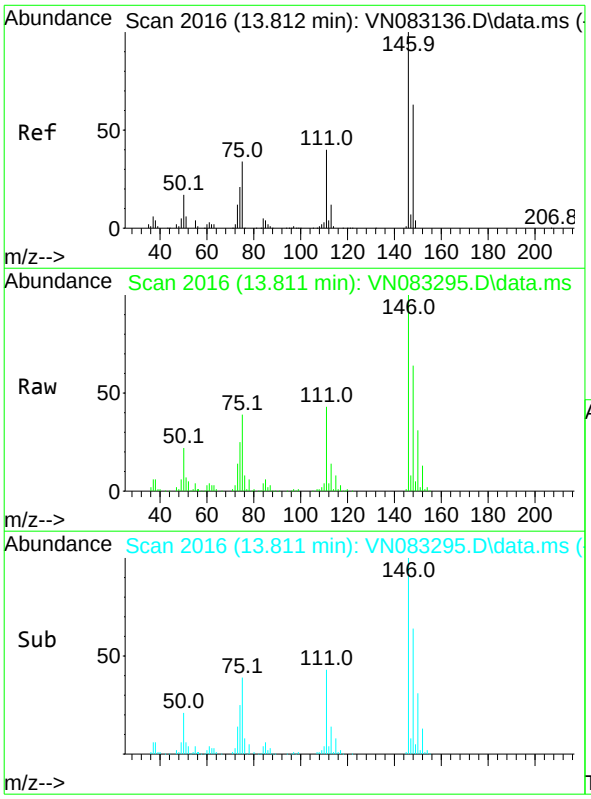
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.6 | 20.6 | 61.9 |
| 148 | 63.7 | 31.8 | 95.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

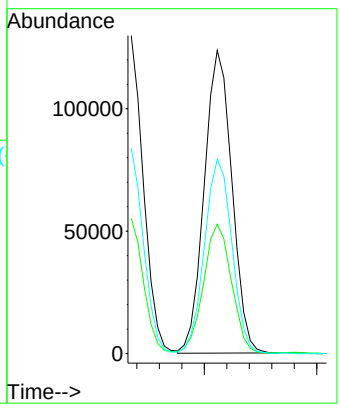
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

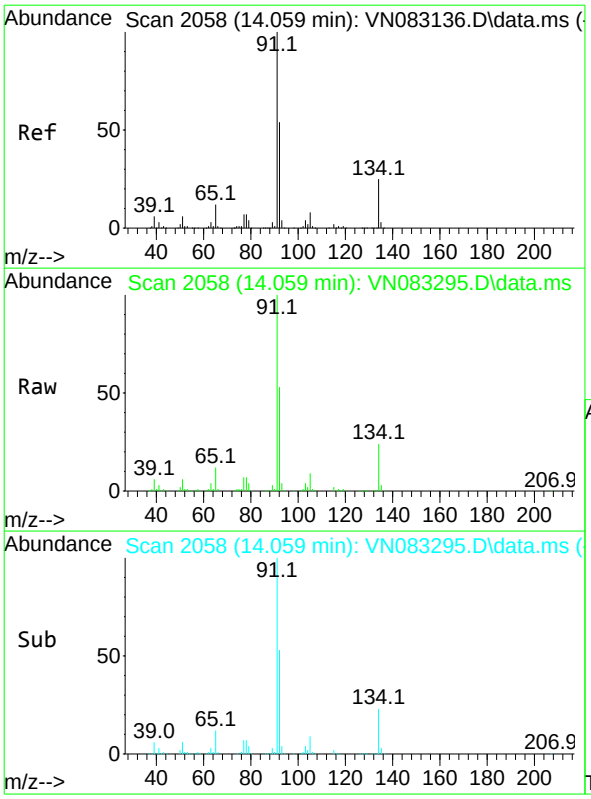



#88
1,4-Dichlorobenzene
Concen: 48.912 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:146 Resp: 211478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.9 | 20.1 | 60.3 |
| 148 | 64.0 | 32.2 | 96.6 |

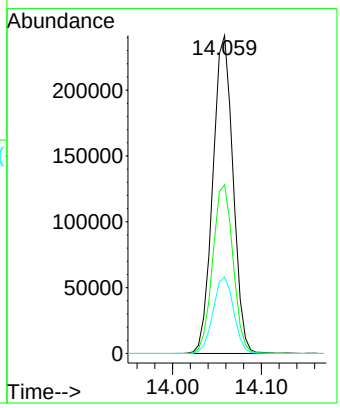





#89
n-Butylbenzene
Concen: 51.464 ug/l
RT: 14.059 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 91 Resp: 382193

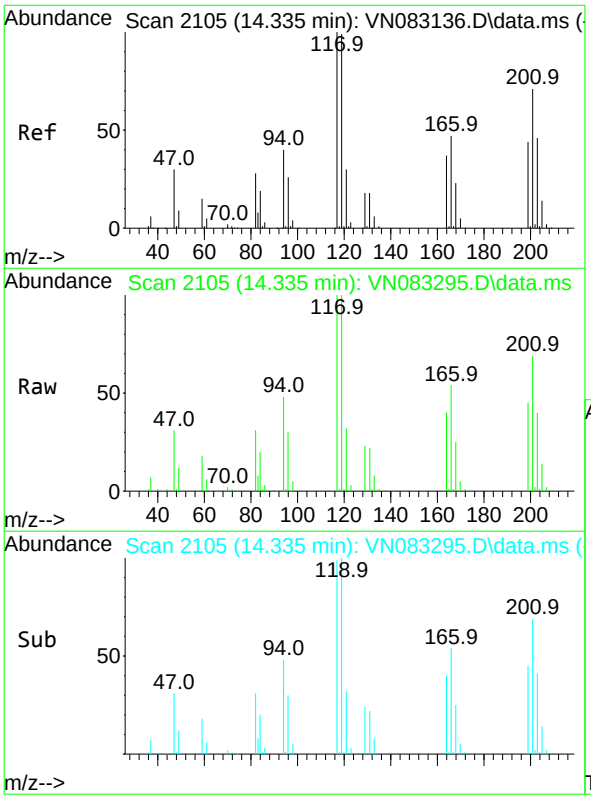
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.6 | 26.1 | 78.3 |
| 134 | 24.5 | 12.1 | 36.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

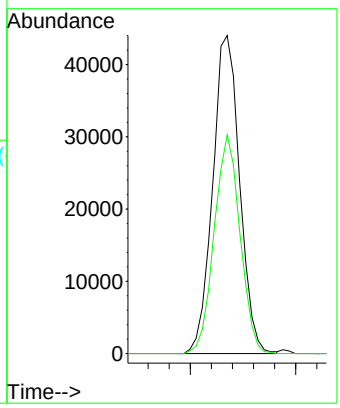
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

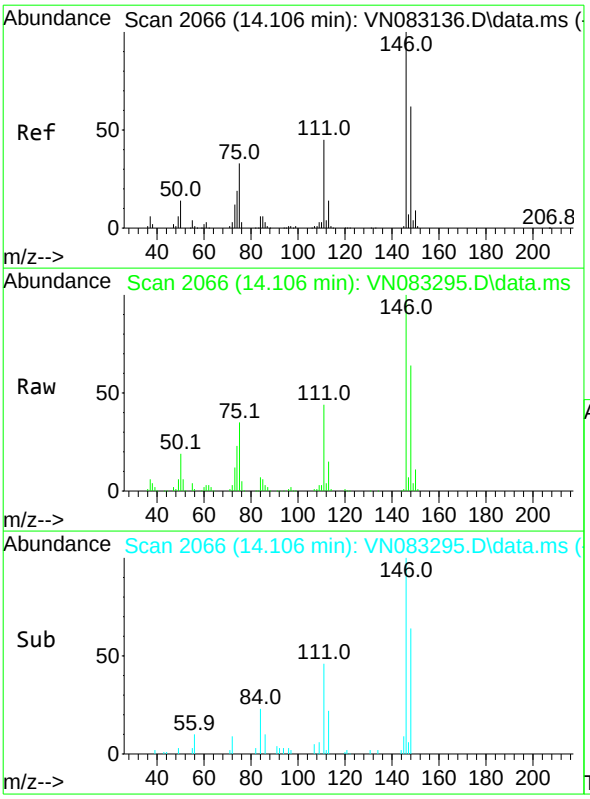



#90
Hexachloroethane
Concen: 47.142 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:117 Resp: 78059

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.9 | 35.8 | 107.3 |

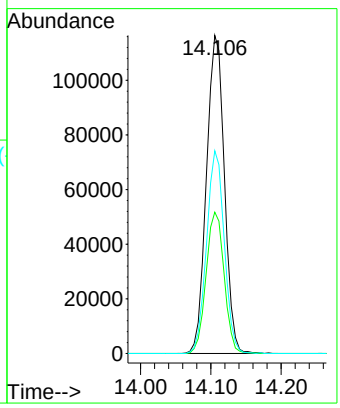





#91
1,2-Dichlorobenzene
Concen: 49.802 ug/l
RT: 14.106 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:146 Resp: 206688

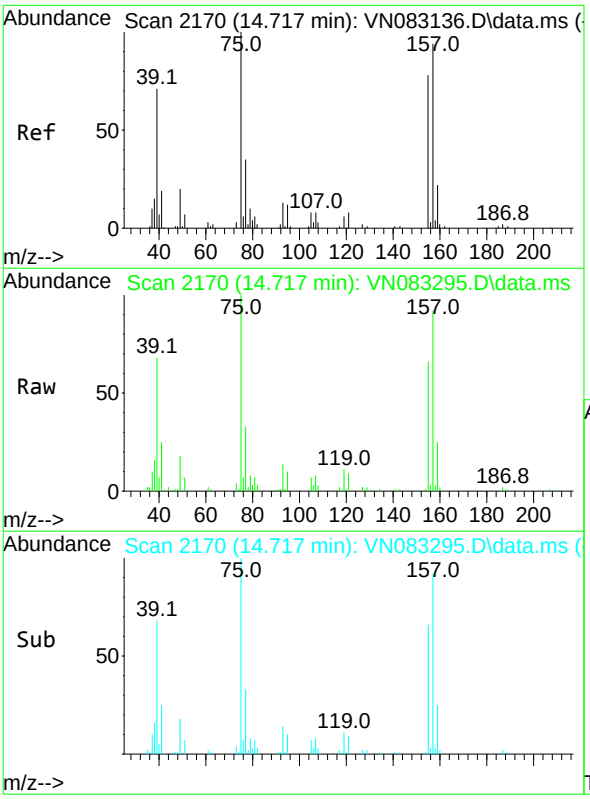
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.6 | 21.4 | 64.2 |
| 148 | 62.8 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

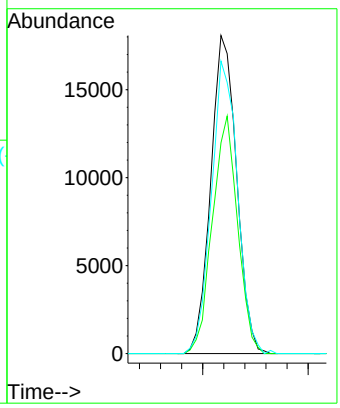
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

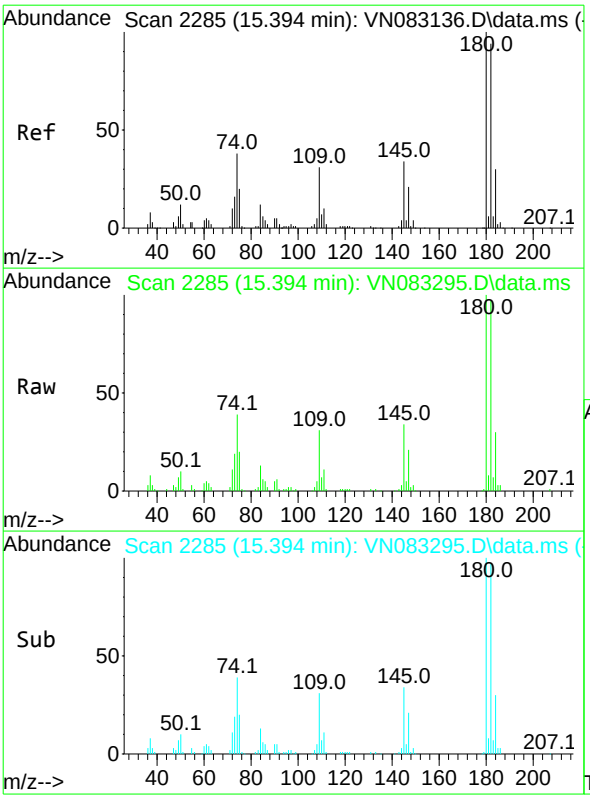



#92
1,2-Dibromo-3-Chloropropane
Concen: 43.813 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion: 75 Resp: 30853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 72.7 | 36.6 | 109.8 |
| 157 | 93.0 | 46.9 | 140.6 |






#93
1,2,4-Trichlorobenzene
Concen: 48.458 ug/l
RT: 15.394 min Scan# 22
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

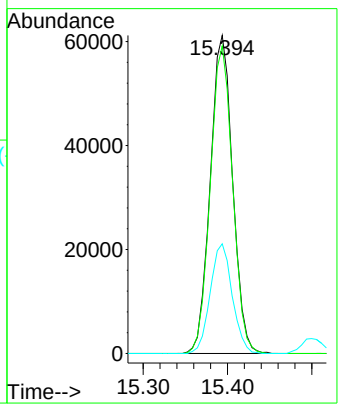
Tgt Ion:180 Resp: 112669

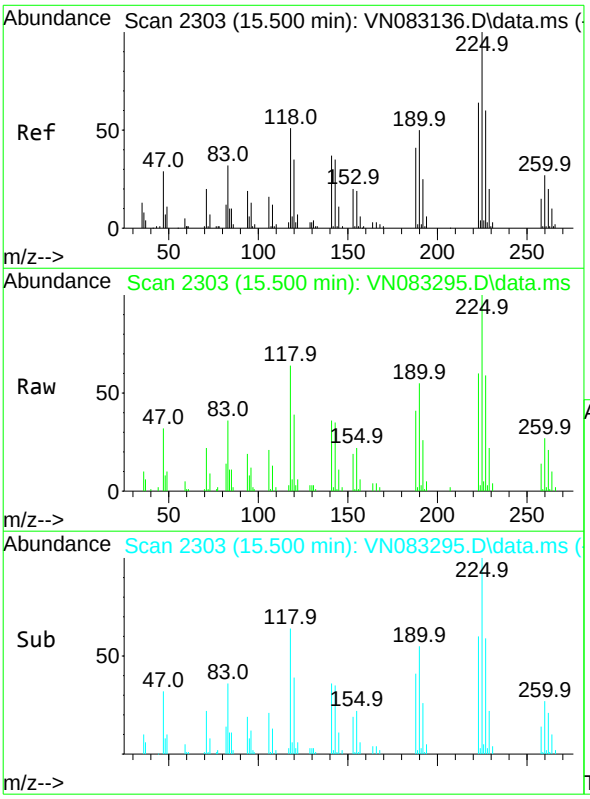
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.4 | 47.3 | 141.8 |
| 145 | 34.0 | 15.7 | 47.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

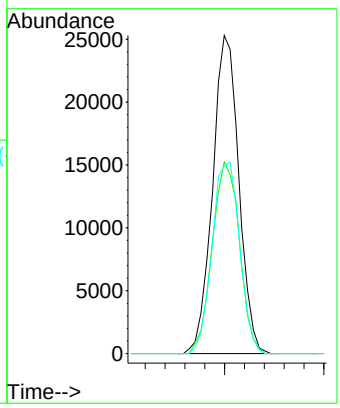


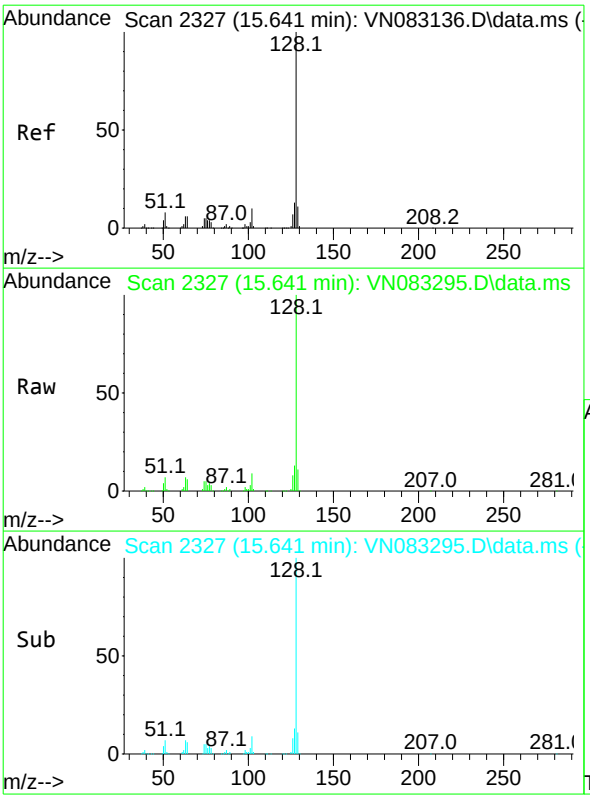




#94
Hexachlorobutadiene
Concen: 44.858 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:225 Resp: 46384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.7 | 31.9 | 95.7 |
| 227 | 63.0 | 32.5 | 97.5 |

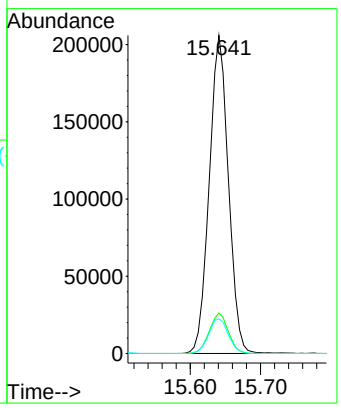





#95
Naphthalene
Concen: 47.278 ug/l
RT: 15.641 min Scan# 23
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:128 Resp: 389373

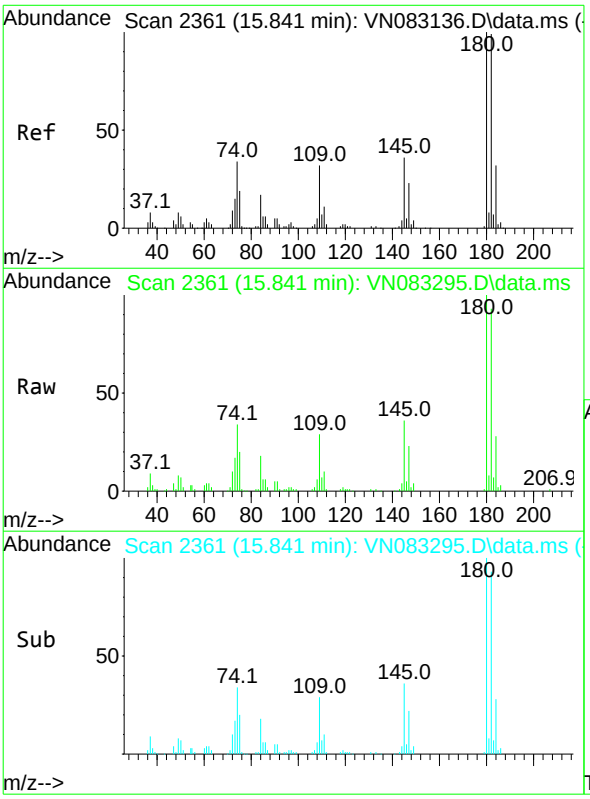
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.6 | 16.0 |
| 129 | 11.3 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VSTDCCC050

**Manual Integrations**
**APPROVED**

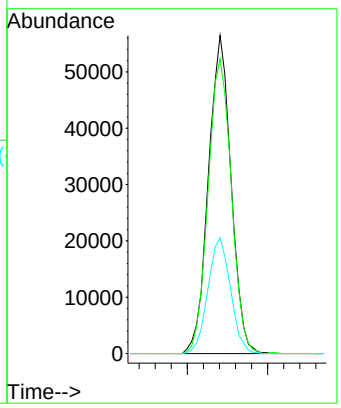
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024




#96
1,2,3-Trichlorobenzene
Concen: 48.043 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083295.D
Acq: 14 Aug 2024 12:41

Tgt Ion:180 Resp: 110529

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.1 | 48.9 | 146.8 |
| 145 | 36.3 | 16.8 | 50.4 |



Evaluate Continuing Calibration Report

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 1.000 | 1.000 | 0.0 | 81 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.567 | 0.535 | 5.6 | 76 | 0.00 |
| 3 | P | Chloromethane | 0.581 | 0.541 | 6.9 | 74 | 0.00 |
| 4 | C | Vinyl Chloride | 0.592 | 0.580 | 2.0# | 78 | 0.00 |
| 5 | T | Bromomethane | 0.368 | 0.326 | 11.4 | 74 | 0.00 |
| 6 | T | Chloroethane | 0.371 | 0.373 | -0.5 | 85 | 0.00 |
| 7 | T | Trichlorofluoromethane | 0.979 | 1.026 | -4.8 | 83 | 0.00 |
| 8 | T | Diethyl Ether | 0.364 | 0.348 | 4.4 | 77 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.539 | 0.554 | -2.8 | 82 | 0.00 |
| 10 | T | Methyl Iodide | 0.710 | 0.585 | 17.6 | 64 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.148 | 0.148 | 0.0 | 82 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 0.554 | 0.521 | 6.0# | 77 | 0.00 |
| 13 | T | Acrolein | 0.096 | 0.092 | 4.2 | 73 | 0.00 |
| 14 | T | Allyl chloride | 1.047 | 0.966 | 7.7 | 84 | 0.00 |
| 15 | T | Acrylonitrile | 0.304 | 0.295 | 3.0 | 78 | 0.00 |
| 16 | T | Acetone | 0.278 | 0.244 | 12.2 | 69 | 0.00 |
| 17 | T | Carbon Disulfide | 1.622 | 1.333 | 17.8 | 69 | 0.00 |
| 18 | T | Methyl Acetate | 0.830 | 0.827 | 0.4 | 86 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 2.001 | 2.005 | -0.2 | 80 | 0.00 |
| 20 | T | Methylene Chloride | 0.641 | 0.596 | 7.0 | 80 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.573 | 0.543 | 5.2 | 76 | -0.01 |
| 22 | T | Diisopropyl ether | 1.969 | 2.006 | -1.9 | 81 | 0.00 |
| 23 | T | Vinyl Acetate | 2.018 | 2.204 | -9.2 | 85 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.073 | 1.095 | -2.1 | 82 | 0.00 |
| 25 | T | 2-Butanone | 0.428 | 0.402 | 6.1 | 76 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.997 | 0.934 | 6.3 | 74 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.691 | 0.680 | 1.6 | 80 | 0.00 |
| 28 | T | Bromochloromethane | 0.439 | 0.439 | 0.0 | 81 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.276 | 0.257 | 6.9 | 74 | 0.00 |
| 30 | C | Chloroform | 1.115 | 1.186 | -6.4# | 84 | 0.00 |
| 31 | T | Cyclohexane | 1.055 | 0.966 | 8.4 | 79 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.055 | 1.088 | -3.1 | 82 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.712 | 0.742 | -4.2 | 80 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 81 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.312 | 0.320 | -2.6 | 78 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.472 | 0.475 | -0.6 | 81 | 0.00 |
| 37 | T | Ethyl Acetate | 0.529 | 0.486 | 8.1 | 79 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.532 | 0.548 | -3.0 | 81 | 0.00 |
| 39 | T | Methylcyclohexane | 0.580 | 0.559 | 3.6 | 76 | 0.00 |
| 40 | TM | Benzene | 1.406 | 1.433 | -1.9 | 80 | 0.00 |
| 41 | T | Methacrylonitrile | 0.301 | 0.277 | 8.0 | 79 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.512 | 0.547 | -6.8 | 85 | 0.00 |
| 43 | T | Isopropyl Acetate | 1.211 | 0.895 | 26.1# | 79 | 0.00 |
| 44 | TM | Trichloroethene | 0.335 | 0.341 | -1.8 | 80 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.334 | 0.354 | -6.0# | 83 | 0.00 |
| 46 | T | Dibromomethane | 0.239 | 0.256 | -7.1 | 83 | 0.00 |
| 47 | T | Bromodichloromethane | 0.537 | 0.551 | -2.6 | 83 | 0.00 |
| 48 | T | Methyl methacrylate | 0.437 | 0.416 | 4.8 | 79 | 0.00 |

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 0.008 | 0.008 | 0.0 | 75 | 0.00 |
| 50 | S | Toluene-d8 | 1.164 | 1.193 | -2.5 | 77 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.500 | 0.506 | -1.2 | 79 | 0.00 |
| 52 | CM | Toluene | 0.889 | 0.921 | -3.6# | 81 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.551 | 0.572 | -3.8 | 78 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.586 | 0.595 | -1.5 | 80 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.318 | 0.338 | -6.3 | 82 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.600 | 0.610 | -1.7 | 79 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.568 | 0.600 | -5.6 | 82 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.254 | 0.258 | -1.6 | 80 | 0.00 |
| 59 | T | 2-Hexanone | 0.387 | 0.377 | 2.6 | 77 | 0.00 |
| 60 | T | Dibromochloromethane | 0.385 | 0.416 | -8.1 | 82 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.335 | 0.345 | -3.0 | 81 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.454 | 0.479 | -5.5 | 79 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 83 | 0.00 |
| 64 | T | Tetrachloroethene | 0.331 | 0.333 | -0.6 | 80 | 0.00 |
| 65 | PM | Chlorobenzene | 1.105 | 1.119 | -1.3 | 81 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.390 | 0.397 | -1.8 | 82 | 0.00 |
| 67 | C | Ethyl Benzene | 2.027 | 2.073 | -2.3# | 83 | 0.00 |
| 68 | T | m/p-Xylenes | 0.759 | 0.775 | -2.1 | 81 | 0.00 |
| 69 | T | o-Xylene | 0.749 | 0.756 | -0.9 | 81 | 0.00 |
| 70 | T | Styrene | 1.258 | 1.305 | -3.7 | 81 | 0.00 |
| 71 | P | Bromoform | 0.295 | 0.297 | -0.7 | 77 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 86 | 0.00 |
| 73 | T | Isopropylbenzene | 4.182 | 4.049 | 3.2 | 81 | 0.00 |
| 74 | T | N-amyl acetate | 2.046 | 1.826 | 10.8 | 78 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.183 | 1.143 | 3.4 | 84 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.097 | 1.045 | 4.7 | 84 | 0.00 |
| 77 | T | Bromobenzene | 0.929 | 0.923 | 0.6 | 82 | 0.00 |
| 78 | T | n-propylbenzene | 4.816 | 4.810 | 0.1 | 83 | 0.00 |
| 79 | T | 2-Chlorotoluene | 3.053 | 3.000 | 1.7 | 83 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.501 | 3.489 | 0.3 | 83 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.504 | 0.464 | 7.9 | 80 | 0.00 |
| 82 | T | 4-Chlorotoluene | 3.062 | 2.969 | 3.0 | 82 | 0.00 |
| 83 | T | tert-Butylbenzene | 3.101 | 3.030 | 2.3 | 82 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.529 | 3.509 | 0.6 | 82 | 0.00 |
| 85 | T | sec-Butylbenzene | 4.231 | 4.216 | 0.4 | 82 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.493 | 3.543 | -1.4 | 82 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.748 | 1.744 | 0.2 | 84 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.762 | 1.724 | 2.2 | 83 | 0.00 |
| 89 | T | n-Butylbenzene | 3.027 | 3.116 | -2.9 | 83 | 0.00 |
| 90 | T | Hexachloroethane | 0.675 | 0.636 | 5.8 | 79 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.692 | 1.685 | 0.4 | 85 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.287 | 0.252 | 12.2 | 76 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.948 | 0.918 | 3.2 | 80 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.421 | 0.378 | 10.2 | 79 | 0.00 |
| 95 | T | Naphthalene | 3.357 | 3.174 | 5.5 | 78 | 0.00 |

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 0.938 | 0.901 | 3.9 | 80 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 1 | I | Pentafluorobenzene | 50.000 | 50.000 | 0.0 | 81 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 47.158 | 5.7 | 76 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 46.562 | 6.9 | 74 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 48.983 | 2.0# | 78 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 44.339 | 11.3 | 74 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 50.266 | -0.5 | 85 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 52.421 | -4.8 | 83 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 47.827 | 4.3 | 77 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 51.366 | -2.7 | 82 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 41.205 | 17.6 | 64 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 250.960 | -0.4 | 82 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 46.996 | 6.0# | 77 | 0.00 |
| 13 | T | Acrolein | 250.000 | 239.443 | 4.2 | 73 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 46.115 | 7.8 | 84 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 242.760 | 2.9 | 78 | 0.00 |
| 16 | T | Acetone | 250.000 | 219.394 | 12.2 | 69 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 41.102 | 17.8 | 69 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 49.826 | 0.3 | 86 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 50.114 | -0.2 | 80 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 46.513 | 7.0 | 80 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 47.417 | 5.2 | 76 | -0.01 |
| 22 | T | Diisopropyl ether | 50.000 | 50.939 | -1.9 | 81 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 273.001 | -9.2 | 85 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 51.002 | -2.0 | 82 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 234.803 | 6.1 | 76 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 46.878 | 6.2 | 74 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 49.219 | 1.6 | 80 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 50.022 | -0.0 | 81 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 232.605 | 7.0 | 74 | 0.00 |
| 30 | C | Chloroform | 50.000 | 53.171 | -6.3# | 84 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 45.816 | 8.4 | 79 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 51.554 | -3.1 | 82 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 52.129 | -4.3 | 80 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 81 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 51.194 | -2.4 | 78 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 50.312 | -0.6 | 81 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 45.975 | 8.0 | 79 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 51.545 | -3.1 | 81 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 48.172 | 3.7 | 76 | 0.00 |
| 40 | TM | Benzene | 50.000 | 50.937 | -1.9 | 80 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 46.068 | 7.9 | 79 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 53.374 | -6.7 | 85 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 48.708 | 2.6 | 79 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 50.883 | -1.8 | 80 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 53.038 | -6.1# | 83 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 53.530 | -7.1 | 83 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 51.369 | -2.7 | 83 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 47.618 | 4.8 | 79 | 0.00 |

Sample Results: **VN083295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|---|
| 49 | T | 1,4-Dioxane | 1000.000 | 960.872 | 3.9 | 75 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 51.234 | -2.5 | 77 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 253.043 | -1.2 | 79 | 0.00 |
| 52 | CM | Toluene | 50.000 | 51.813 | -3.6# | 81 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 51.915 | -3.8 | 78 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 50.753 | -1.5 | 80 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 53.110 | -6.2 | 82 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 50.792 | -1.6 | 79 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 52.864 | -5.7 | 82 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 253.780 | -1.5 | 80 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 243.668 | 2.5 | 77 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 54.062 | -8.1 | 82 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 51.595 | -3.2 | 81 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 52.757 | -5.5 | 79 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 83 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 50.230 | -0.5 | 80 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 50.640 | -1.3 | 81 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 50.961 | -1.9 | 82 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 51.124 | -2.2# | 83 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 102.048 | -2.0 | 81 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 50.450 | -0.9 | 81 | 0.00 |
| 70 | T | Styrene | 50.000 | 51.874 | -3.7 | 81 | 0.00 |
| 71 | P | Bromoform | 50.000 | 50.218 | -0.4 | 77 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 86 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 48.403 | 3.2 | 81 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 44.635 | 10.7 | 78 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 48.328 | 3.3 | 84 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 47.602 | 4.8 | 84 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 49.656 | 0.7 | 82 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 49.938 | 0.1 | 83 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 49.125 | 1.8 | 83 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 49.829 | 0.3 | 83 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 45.962 | 8.1 | 80 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 48.468 | 3.1 | 82 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 48.866 | 2.3 | 82 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 49.723 | 0.6 | 82 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 49.826 | 0.3 | 82 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 50.705 | -1.4 | 82 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 49.896 | 0.2 | 84 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 48.912 | 2.2 | 83 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 51.464 | -2.9 | 83 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 47.142 | 5.7 | 79 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 49.802 | 0.4 | 85 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 43.813 | 12.4 | 76 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 48.458 | 3.1 | 80 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 44.858 | 10.3 | 79 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 47.278 | 5.4 | 78 | 0.00 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083295.D
Acq On : 14 Aug 2024 12:41
Operator : JC\MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**LabSampleId :**
VSTDCCC050

Quant Time: Aug 14 23:14:20 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

| | Compound | Amount | Calc. | %Dev | Area% | Dev(min) |
|---|---|---|---|---|---|---|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 48.043 | 3.9 | 80 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

# QC SAMPLE DATA

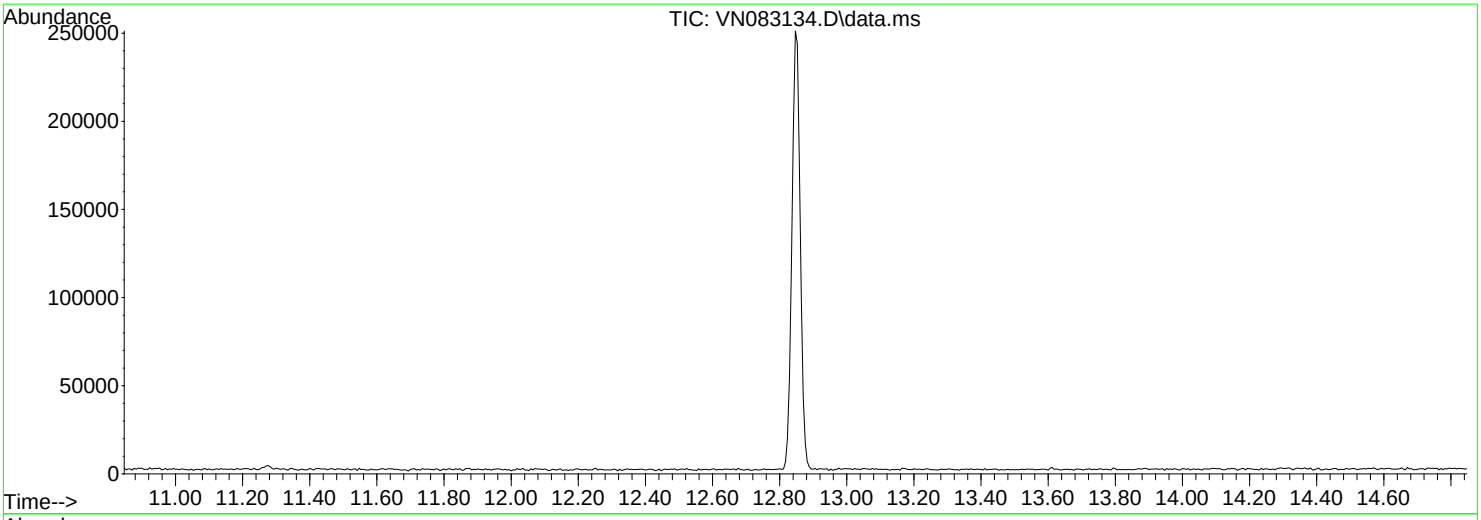
Sample Results: **VN083134.D**

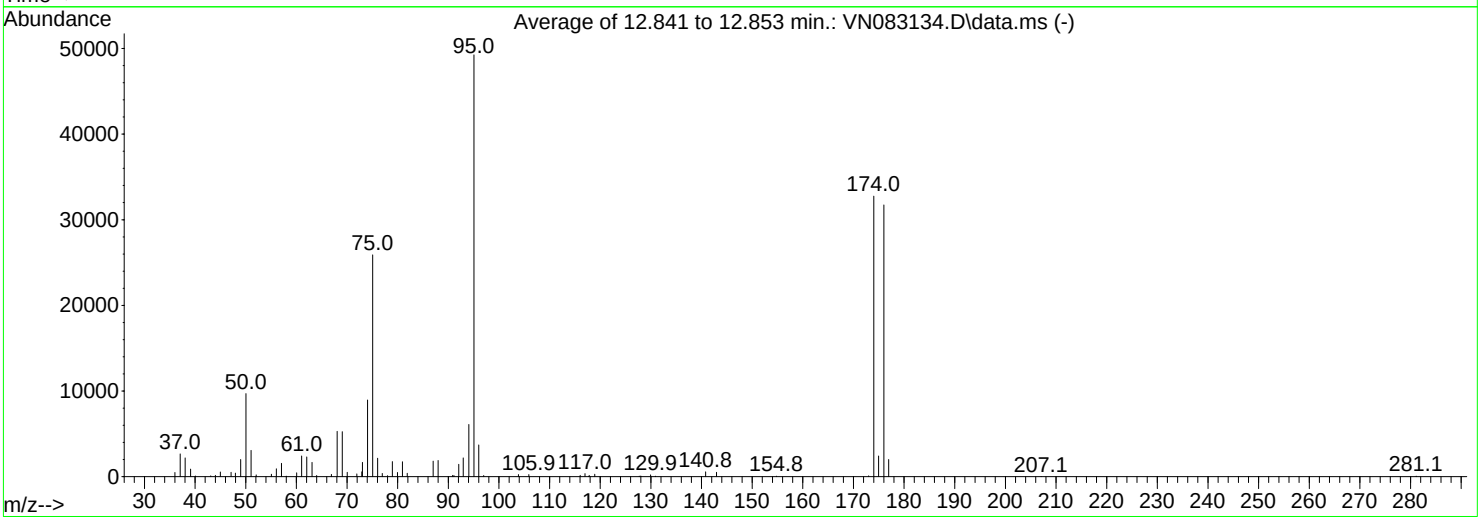
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN080724\
Data File : VN083134.D
Acq On : 07 Aug 2024 10:09
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Title : SW846 8260
Last Update : Thu Aug 08 06:30:41 2024




AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 19.7 | 9690 | PASS |
| 75 | 95 | 30 | 60 | 52.6 | 25907 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 49259 | PASS |
| 96 | 95 | 5 | 9 | 7.5 | 3697 | PASS |
| 173 | 174 | 0.00 | 2 | 0.3 | 99 | PASS |
| 174 | 95 | 50 | 100 | 66.5 | 32749 | PASS |
| 175 | 174 | 5 | 9 | 7.4 | 2414 | PASS |
| 176 | 174 | 95 | 101 | 96.9 | 31720 | PASS |
| 177 | 176 | 5 | 9 | 6.3 | 1999 | PASS |

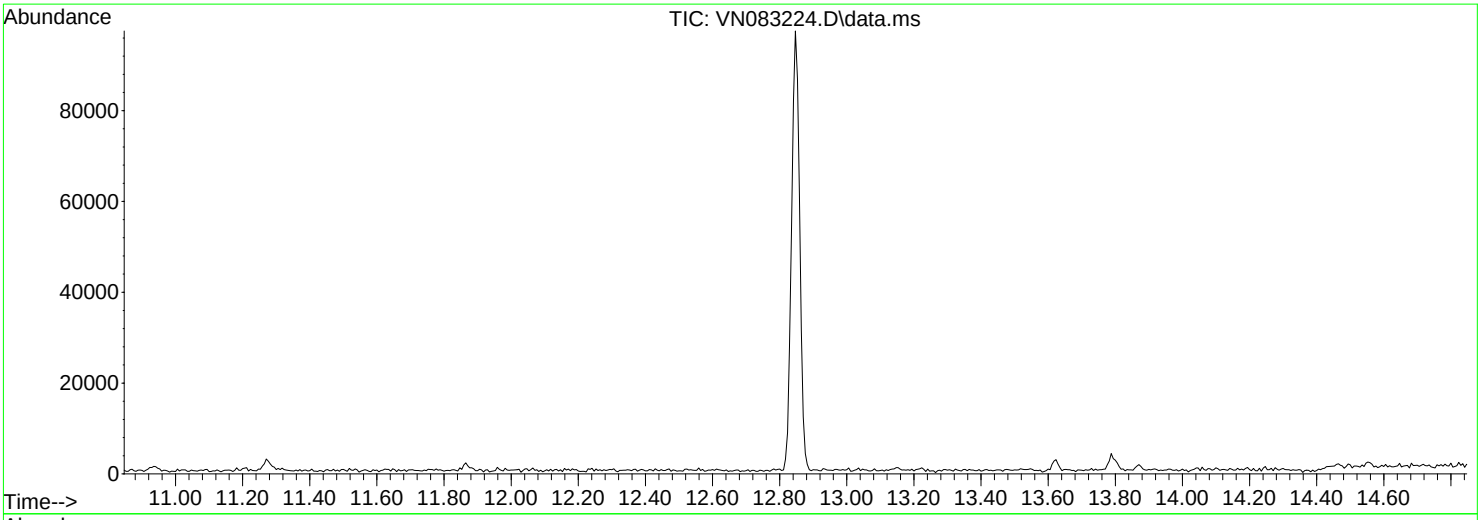
Sample Results: **VN083224.D**

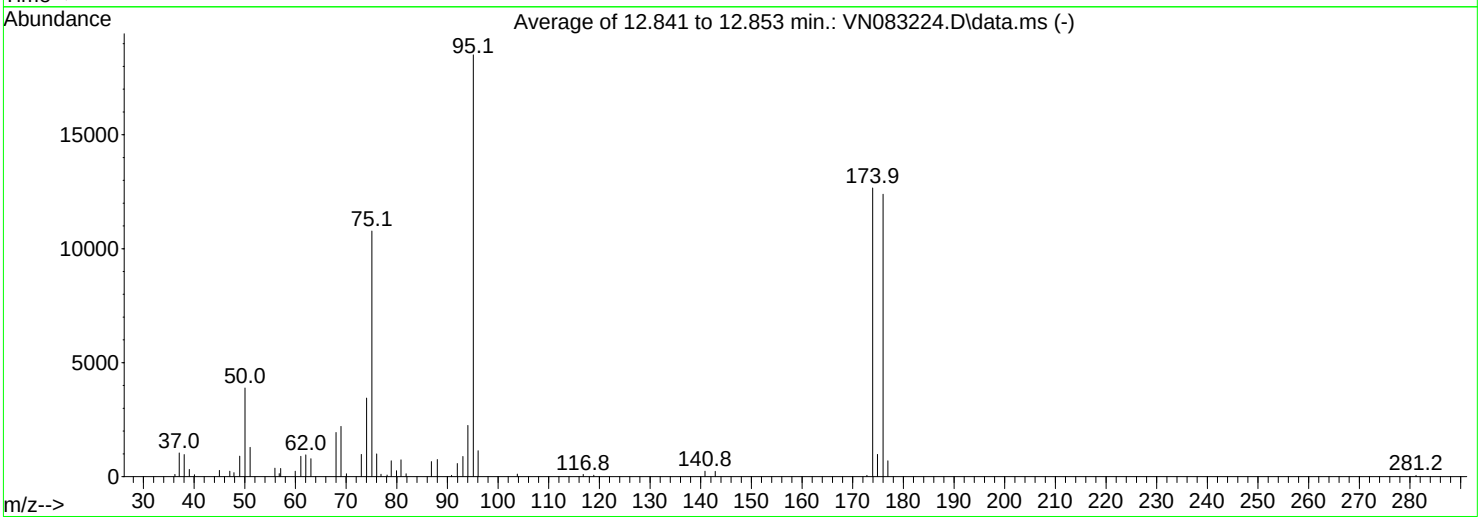
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083224.D
Acq On : 12 Aug 2024 08:44
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Title : SW846 8260
Last Update : Thu Aug 08 06:30:41 2024




AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1844

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 21.0 | 3887 | PASS |
| 75 | 95 | 30 | 60 | 58.2 | 10779 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 18507 | PASS |
| 96 | 95 | 5 | 9 | 6.1 | 1134 | PASS |
| 173 | 174 | 0.00 | 2 | 0.4 | 54 | PASS |
| 174 | 95 | 50 | 100 | 68.4 | 12665 | PASS |
| 175 | 174 | 5 | 9 | 7.7 | 977 | PASS |
| 176 | 174 | 95 | 101 | 97.9 | 12393 | PASS |
| 177 | 176 | 5 | 9 | 5.6 | 697 | PASS |

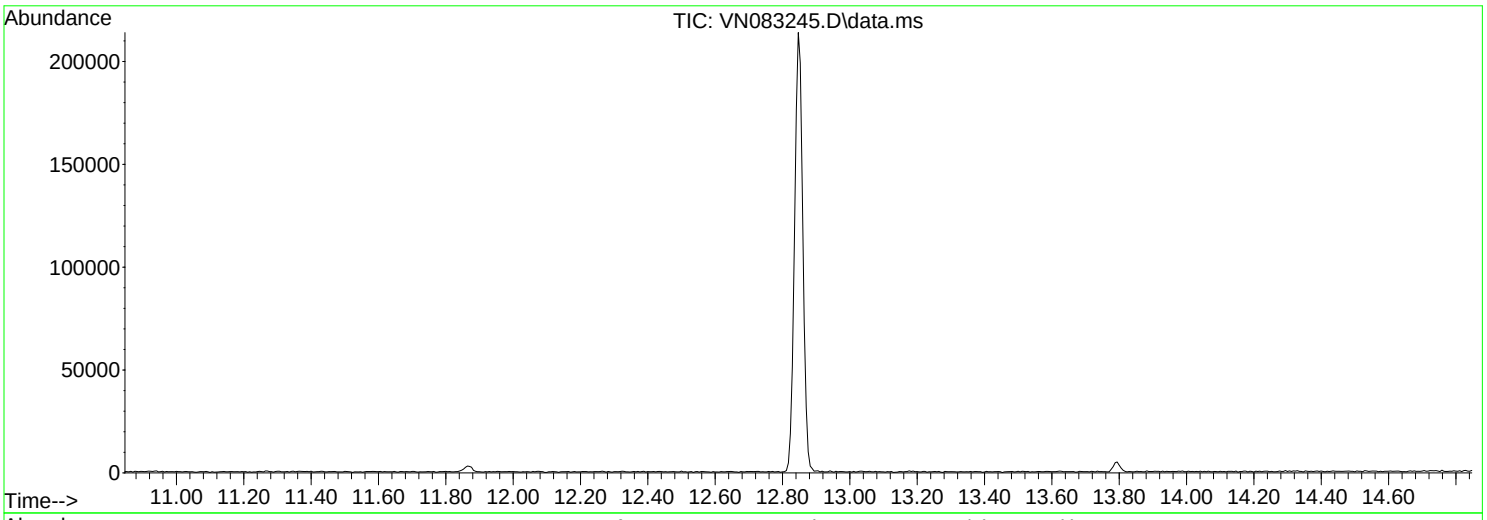
Sample Results: **VN083245.D**

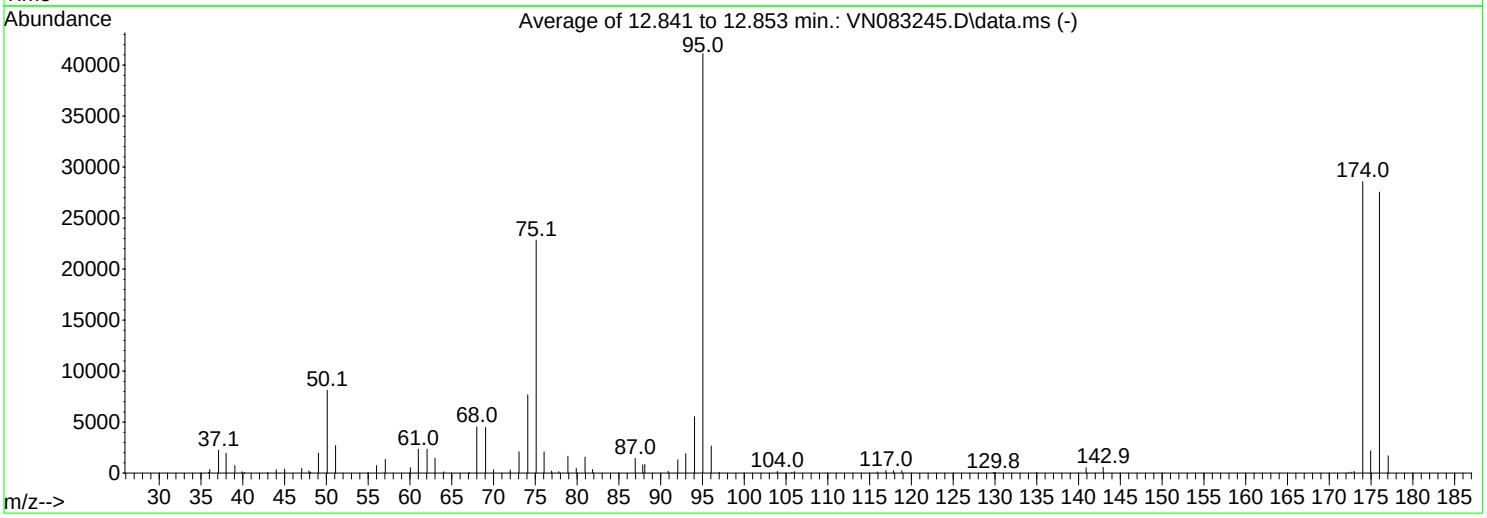
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083245.D
Acq On : 13 Aug 2024 09:54
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Title : SW846 8260
Last Update : Thu Aug 08 06:30:41 2024




AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 19.8 | 8125 | PASS |
| 75 | 95 | 30 | 60 | 55.6 | 22840 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 41112 | PASS |
| 96 | 95 | 5 | 9 | 6.5 | 2659 | PASS |
| 173 | 174 | 0.00 | 2 | 0.6 | 179 | PASS |
| 174 | 95 | 50 | 100 | 69.5 | 28568 | PASS |
| 175 | 174 | 5 | 9 | 7.6 | 2175 | PASS |
| 176 | 174 | 95 | 101 | 96.5 | 27557 | PASS |
| 177 | 176 | 5 | 9 | 6.1 | 1693 | PASS |

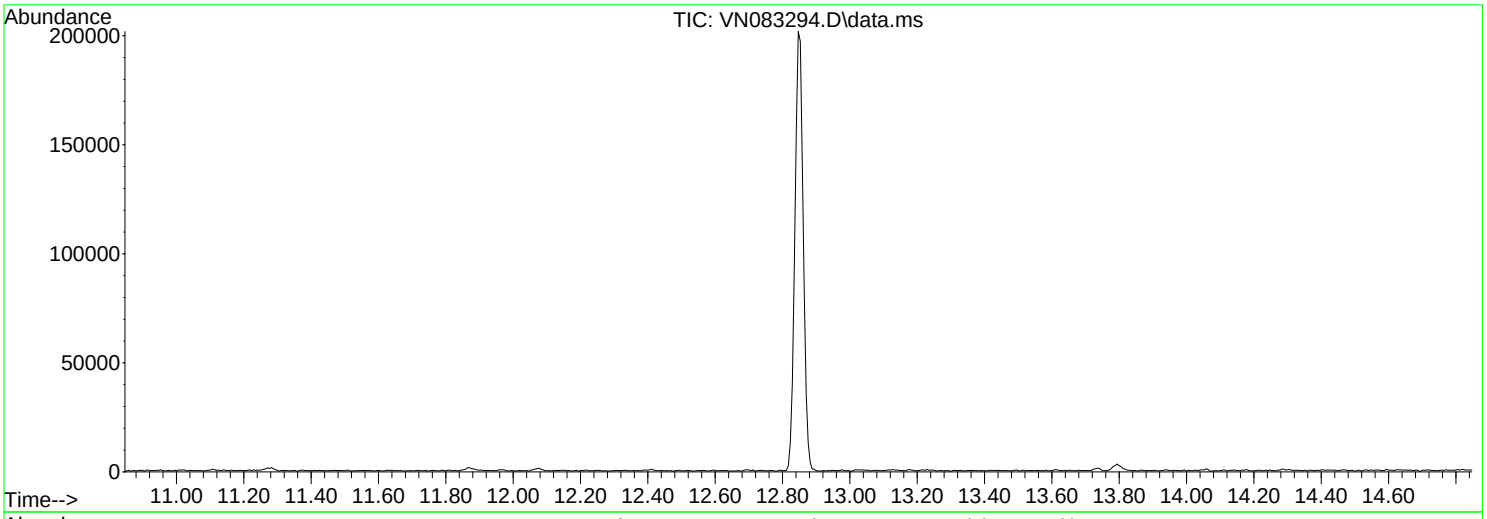
Sample Results: **VN083294.D**

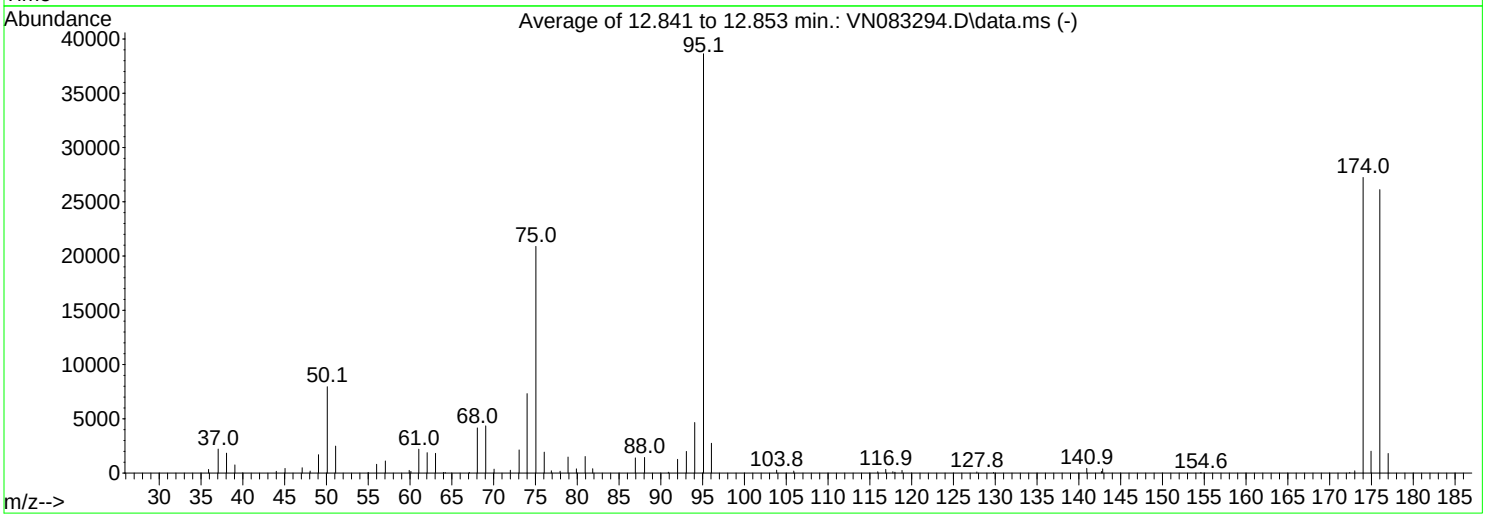
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083294.D
Acq On : 14 Aug 2024 12:07
Operator : JC\MD
Sample : BFB
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Title : SW846 8260
Last Update : Thu Aug 08 06:30:41 2024




AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 20.6 | 7958 | PASS |
| 75 | 95 | 30 | 60 | 54.1 | 20891 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 38643 | PASS |
| 96 | 95 | 5 | 9 | 7.1 | 2747 | PASS |
| 173 | 174 | 0.00 | 2 | 0.8 | 207 | PASS |
| 174 | 95 | 50 | 100 | 70.5 | 27243 | PASS |
| 175 | 174 | 5 | 9 | 7.4 | 2019 | PASS |
| 176 | 174 | 95 | 101 | 95.9 | 26120 | PASS |
| 177 | 176 | 5 | 9 | 6.9 | 1805 | PASS |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0812WBL01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0812WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083227.D | 1 | | 08/12/24 10:46 | VN081224 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 0.35 | U | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 0.34 | U | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 1.40 | U | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 1.40 | U | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.32 | U | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.16 | U | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.32 | U | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.32 | U | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 0.18 | U | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.31 | U | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 0.45 | U | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 0.14 | U | 0.14 | 1.00 | ug/L |

Raw Data: **VN083227.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0812WBL01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0812WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083227.D | 1 | | 08/12/24 10:46 | VN081224 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.19 | U | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 56.6 | | 70 (74) - 130 (125) | 113% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 53.6 | | 70 (75) - 130 (124) | 107% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.9 | | 70 (86) - 130 (113) | 108% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 59.1 | | 70 (77) - 130 (121) | 118% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 155000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 298000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 310000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 137000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083227.D
Acq On : 12 Aug 2024 10:46
Operator : JC\MD
Sample : VN0812WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBL01

Quant Time: Aug 13 04:12:24 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

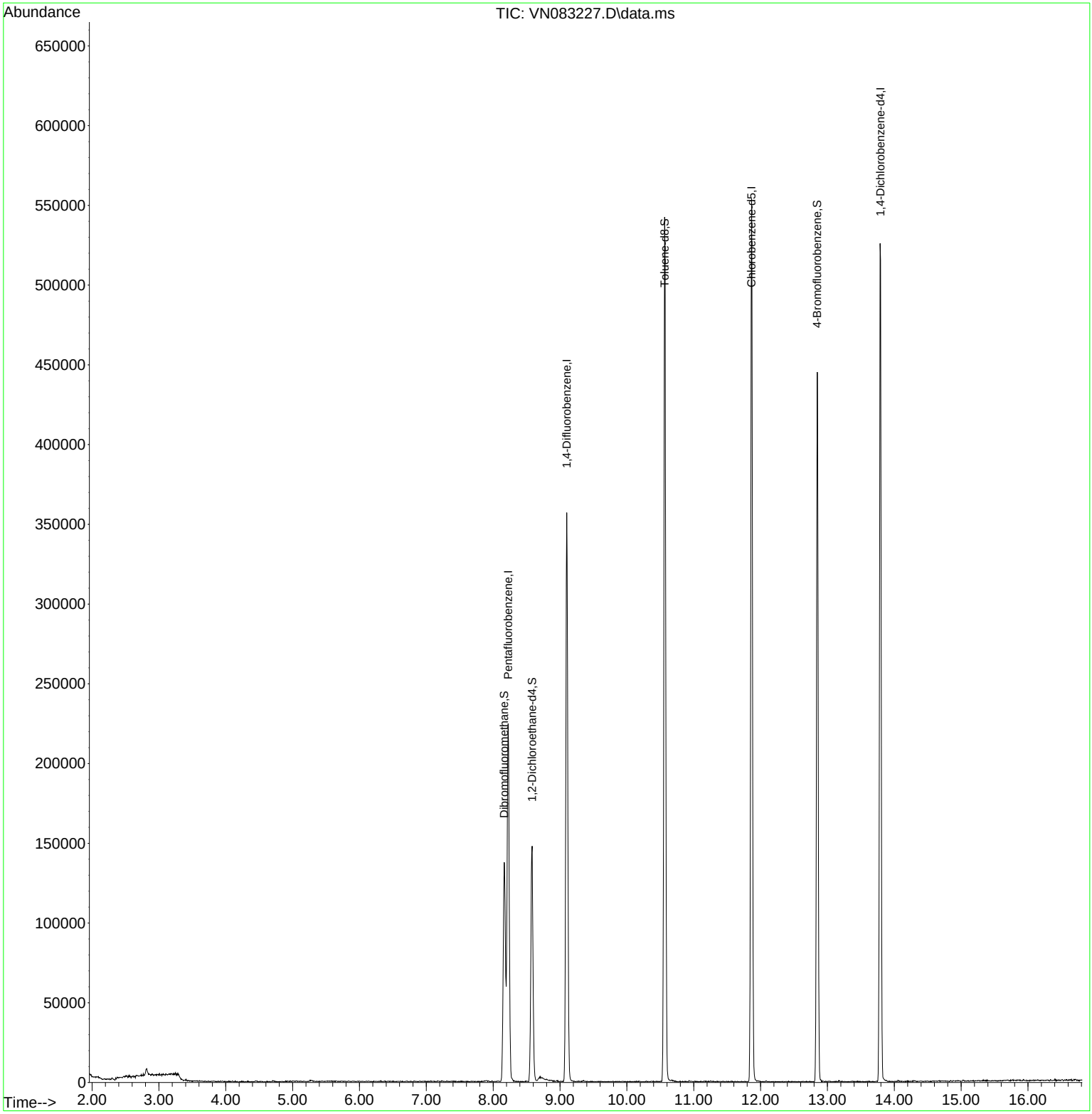
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 155185 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 297997 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 309712 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 137198 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.583 | 65 | 124957 | 56.570 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 113.140% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 99644 | 53.571 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 107.140% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 373919 | 53.891 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 107.780% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 159944 | 59.130 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 118.260% | | | |
| Target Compounds | | | | | | Qvalue |

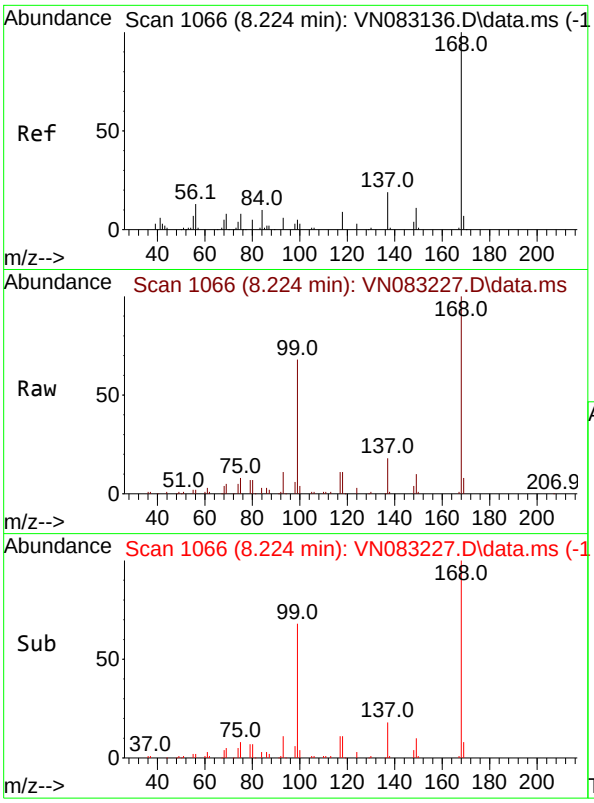
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083227.D
Acq On : 12 Aug 2024 10:46
Operator : JC\MD
Sample : VN0812WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBL01

Quant Time: Aug 13 04:12:24 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



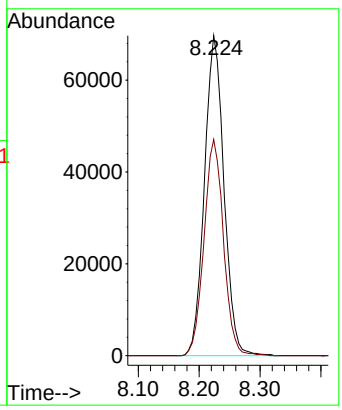


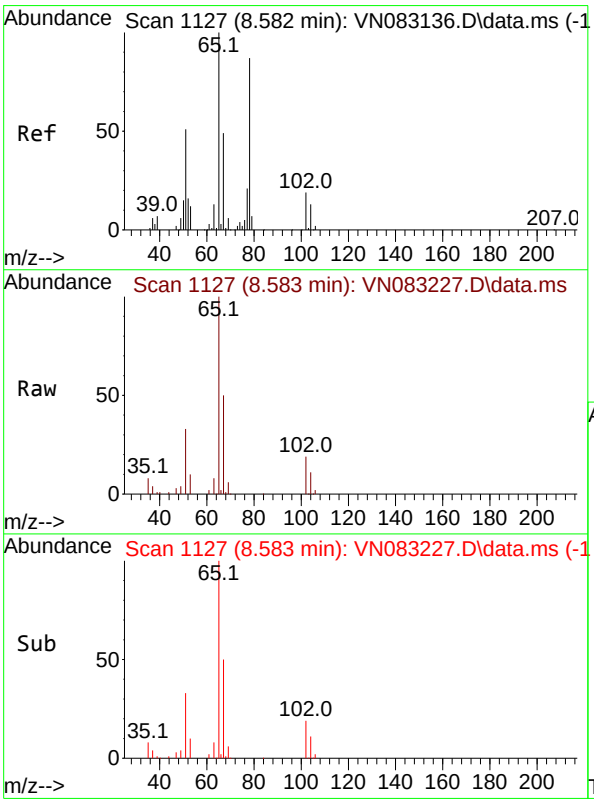

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083227.D
Acq: 12 Aug 2024 10:46

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBL01

Tgt Ion:168 Resp: 155185

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 67.6 | 48.2 | 72.4 |

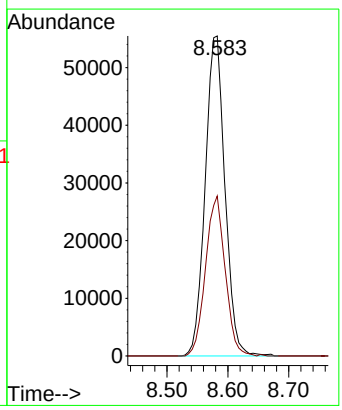


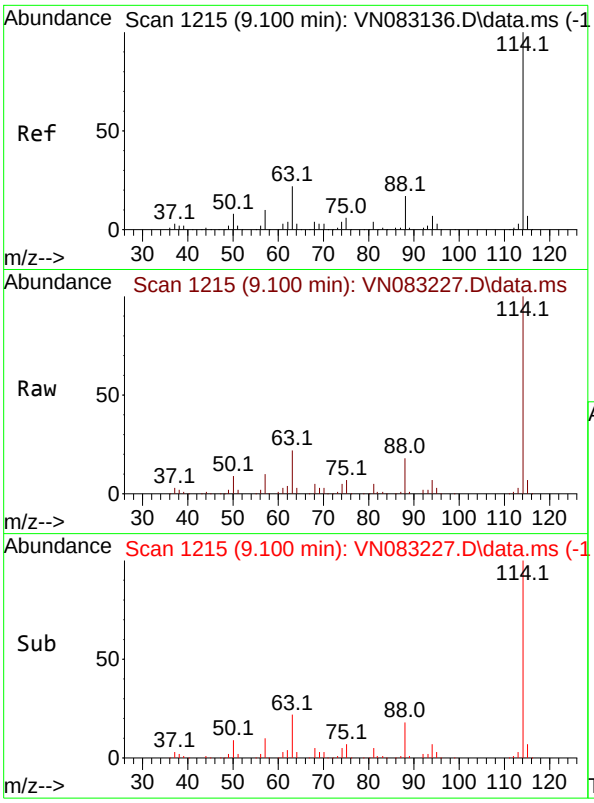




#33
1,2-Dichloroethane-d4
Concen: 56.570 ug/l
RT: 8.583 min Scan# 1127
Delta R.T. 0.000 min
Lab File: VN083227.D
Acq: 12 Aug 2024 10:46

Tgt Ion: 65 Resp: 124957

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.7 | 0.0 | 104.4 |



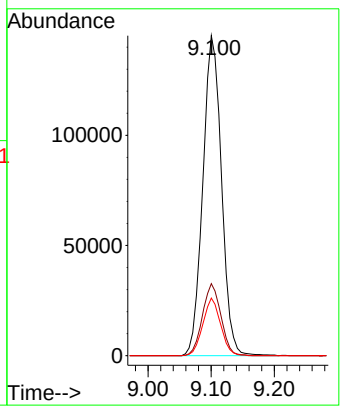


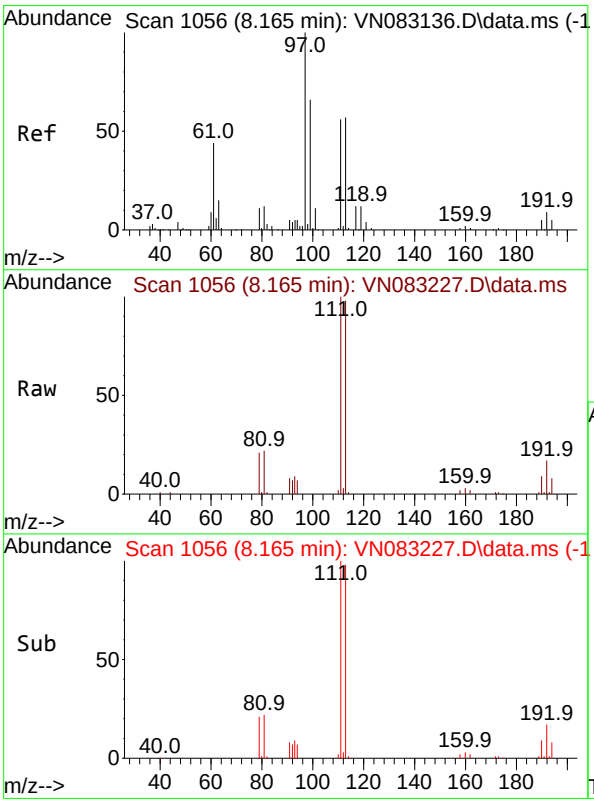

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083227.D
Acq: 12 Aug 2024 10:46

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBL01

Tgt Ion:114 Resp: 297997

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.5 | 0.0 | 44.6 |
| 88 | 18.0 | 0.0 | 31.4 |

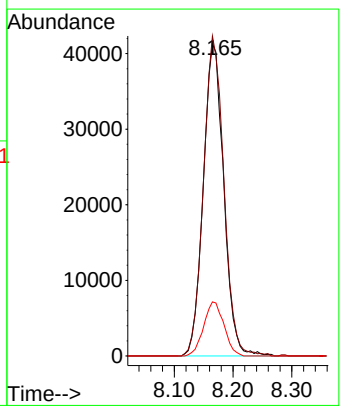


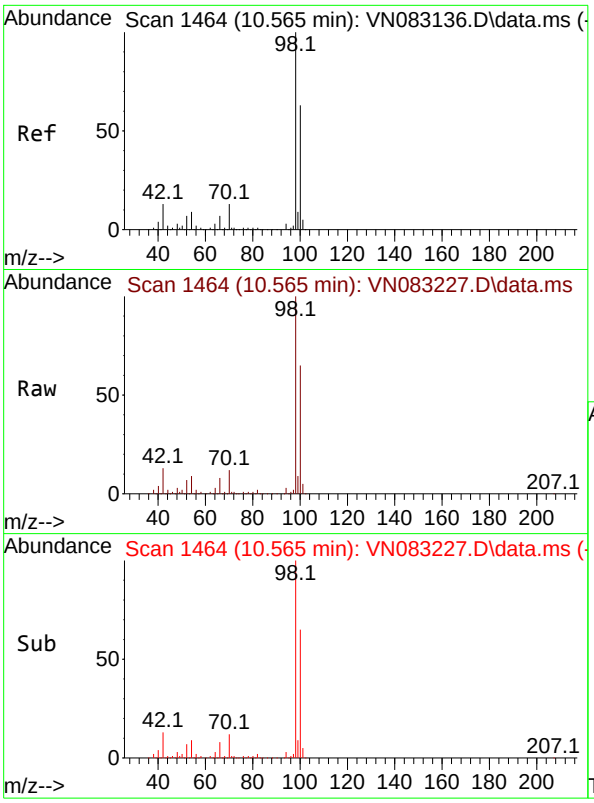




#35
Dibromofluoromethane
Concen: 53.571 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN083227.D
Acq: 12 Aug 2024 10:46

Tgt Ion:113 Resp: 99644

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.3 | 82.4 | 123.6 |
| 192 | 17.2 | 14.9 | 22.3 |



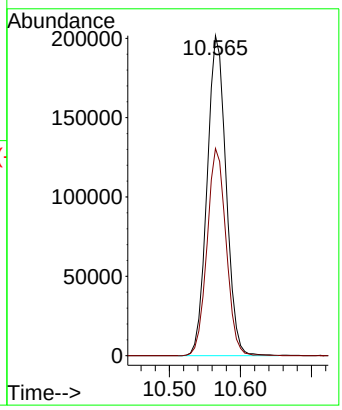


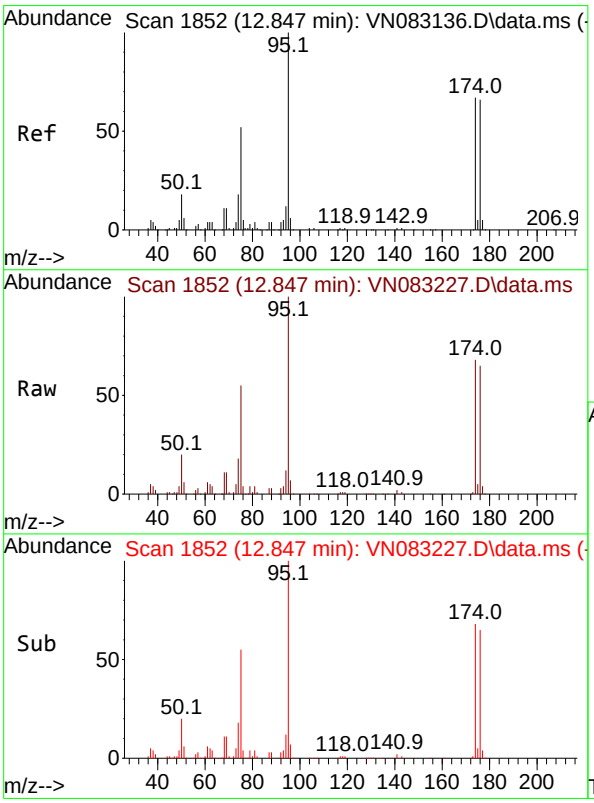

#50
Toluene-d8
Concen: 53.891 ug/l
RT: 10.565 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083227.D
Acq: 12 Aug 2024 10:46

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBL01

Tgt Ion: 98 Resp: 373919

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.9 | 51.5 | 77.3 |

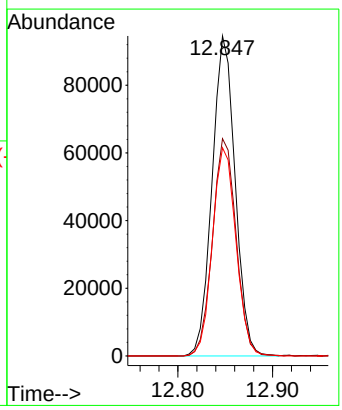


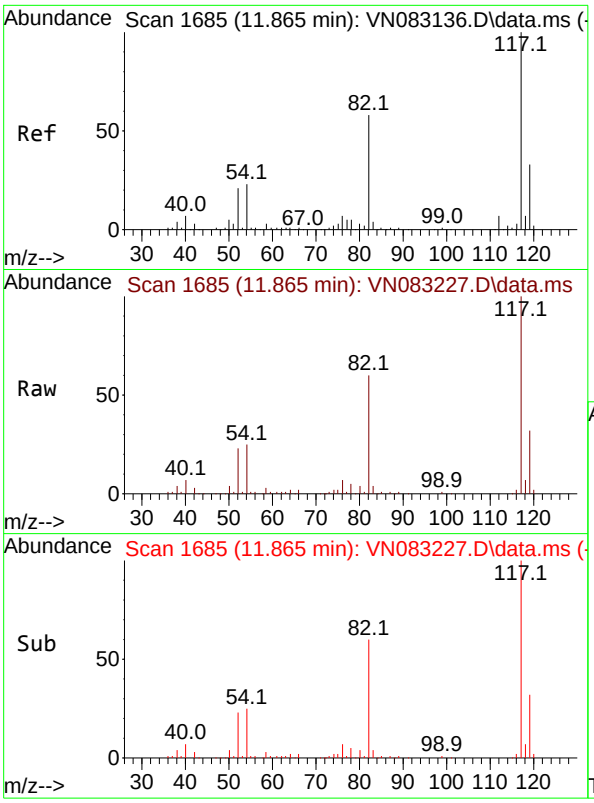




#62
4-Bromofluorobenzene
Concen: 59.130 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083227.D
Acq: 12 Aug 2024 10:46

Tgt Ion: 95 Resp: 159944

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.4 | 0.0 | 159.2 |
| 176 | 66.6 | 0.0 | 147.6 |



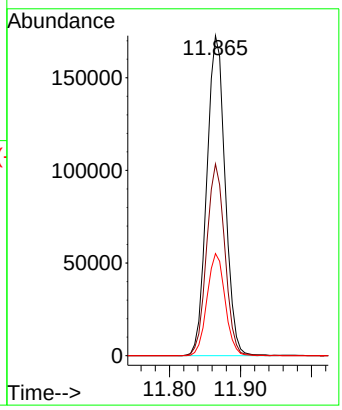


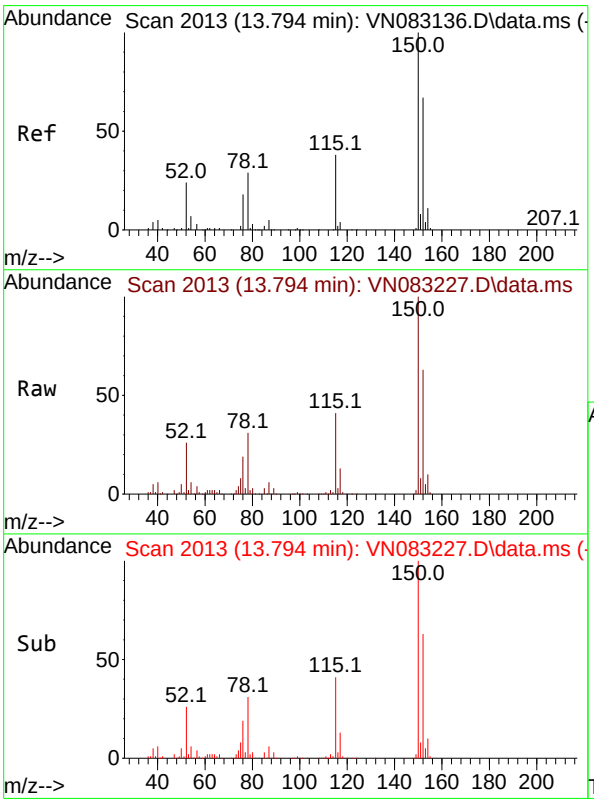

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083227.D
Acq: 12 Aug 2024 10:46

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBL01

Tgt Ion:117 Resp: 309712

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.9 | 47.5 | 71.3 |
| 119 | 31.9 | 25.6 | 38.4 |

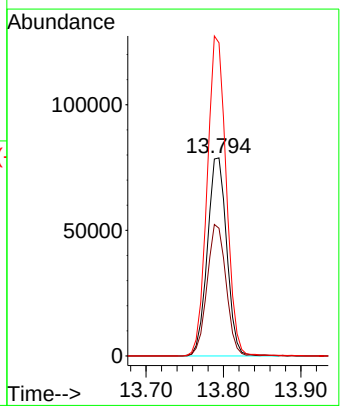



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083227.D
Acq: 12 Aug 2024 10:46

Tgt Ion:152 Resp: 137198

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.2 | 30.6 | 91.6 |
| 150 | 159.2 | 0.0 | 348.6 |



Raw Data: **VN083248.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0813WBL01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0813WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083248.D | 1 | | 08/13/24 11:16 | VN081324 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 0.35 | U | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 0.34 | U | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 1.40 | U | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 1.40 | U | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.32 | U | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.16 | U | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.32 | U | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.32 | U | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 0.18 | U | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.31 | U | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 0.45 | U | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 0.14 | U | 0.14 | 1.00 | ug/L |

Raw Data: **VN083248.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0813WBL01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0813WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083248.D | 1 | | 08/13/24 11:16 | VN081324 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.19 | U | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 56.2 | | 70 (74) - 130 (125) | 112% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 52.6 | | 70 (75) - 130 (124) | 105% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.1 | | 70 (86) - 130 (113) | 106% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 56.5 | | 70 (77) - 130 (121) | 113% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 151000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 289000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 292000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 128000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083248.D
Acq On : 13 Aug 2024 11:16
Operator : JC\MD
Sample : VN0813WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBL01

Quant Time: Aug 14 01:39:13 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 151482 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 289244 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 291555 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 128023 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 121149 | 56.187 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 112.380% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 94883 | 52.555 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 105.120% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 357867 | 53.139 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 106.280% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 148317 | 56.490 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 112.980% | | | |
| Target Compounds | | | | | | Qvalue |

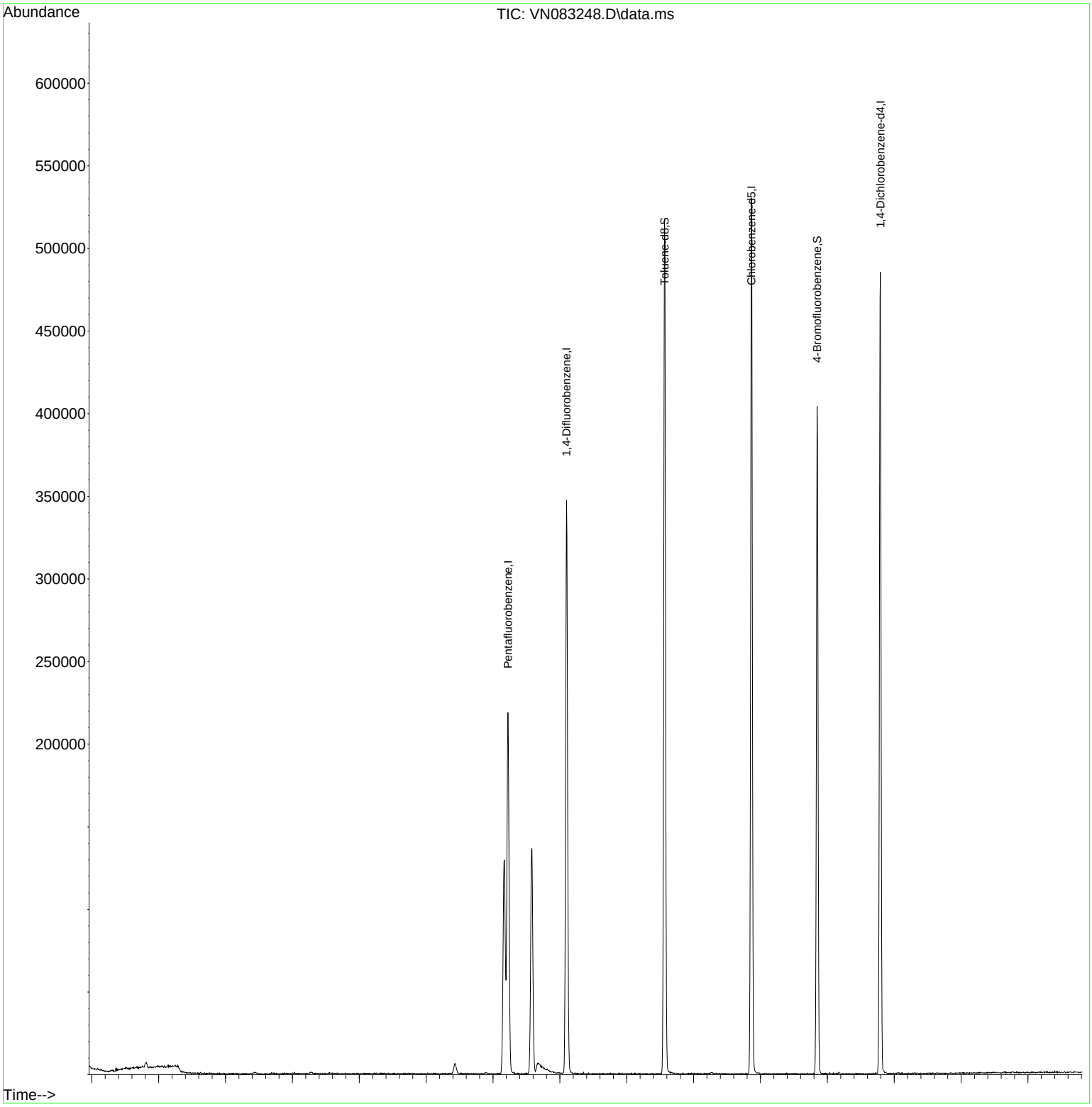
(#) = qualifier out of range (m) = manual integration (+) = signals summed

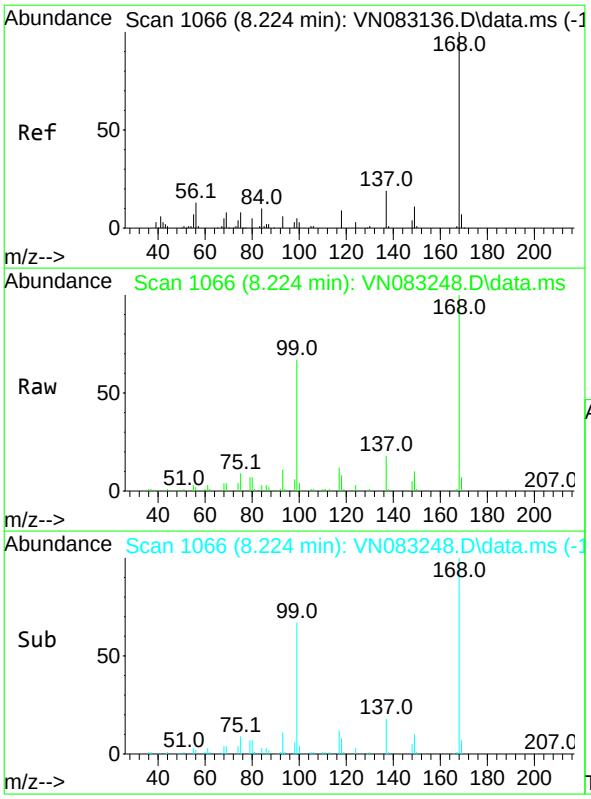
Sample Results: **VN083248.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083248.D
Acq On : 13 Aug 2024 11:16
Operator : JC\MD
Sample : VN0813WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBL01

Quant Time: Aug 14 01:39:13 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



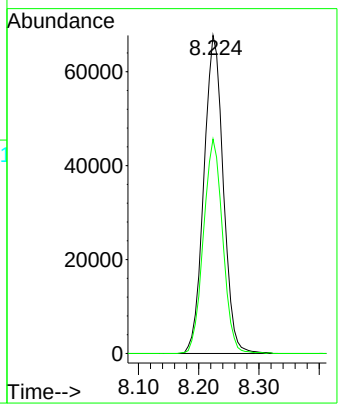


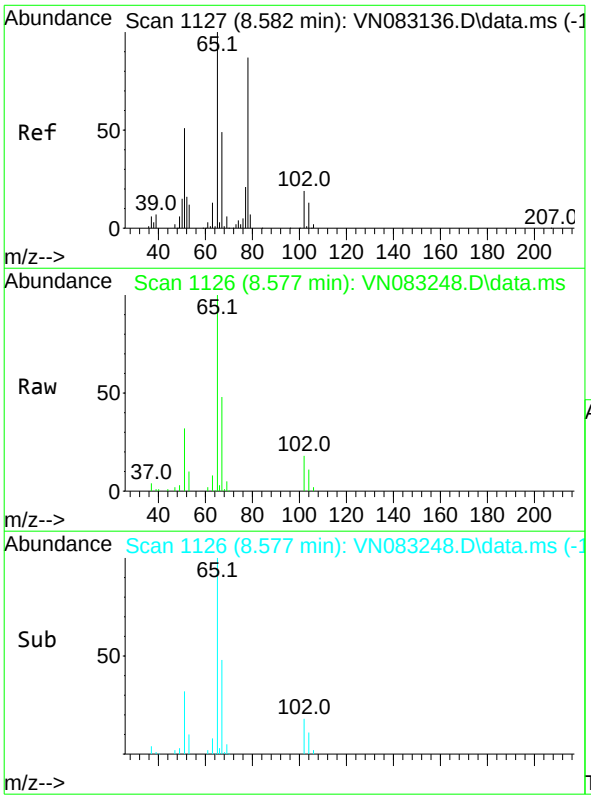

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083248.D
Acq: 13 Aug 2024 11:16

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBL01

Tgt Ion:168 Resp: 151482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 67.4 | 48.2 | 72.4 |

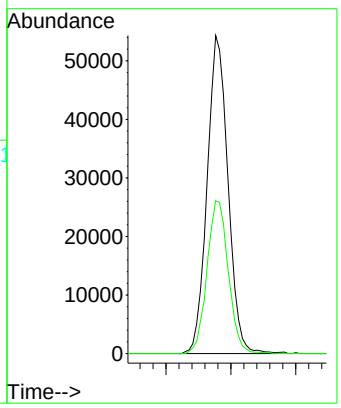


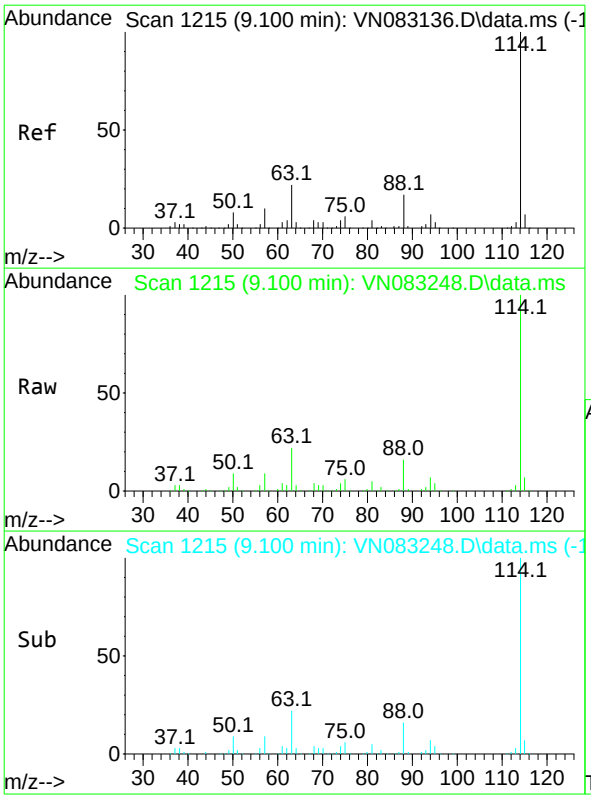




#33
1,2-Dichloroethane-d4
Concen: 56.187 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. -0.006 min
Lab File: VN083248.D
Acq: 13 Aug 2024 11:16

Tgt Ion: 65 Resp: 121149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.2 | 0.0 | 104.4 |



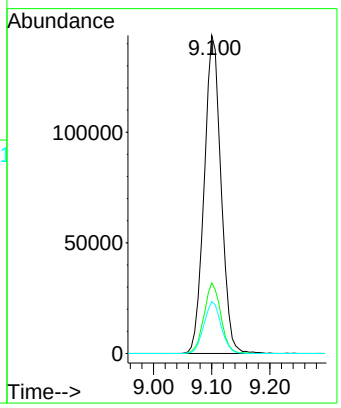


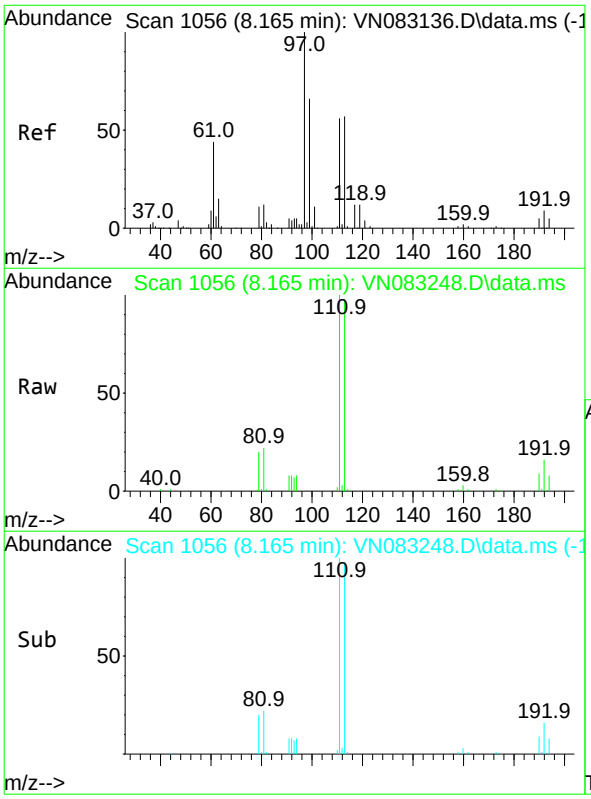

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 12
Delta R.T. 0.000 min
Lab File: VN083248.D
Acq: 13 Aug 2024 11:16

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBL01

Tgt Ion:114 Resp: 289244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.2 | 0.0 | 44.6 |
| 88 | 16.3 | 0.0 | 31.4 |

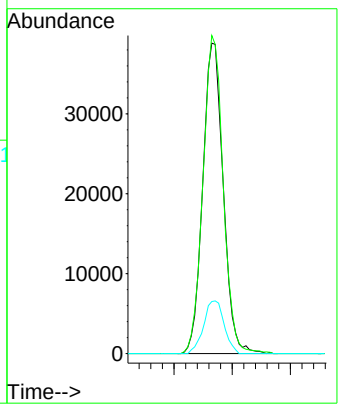


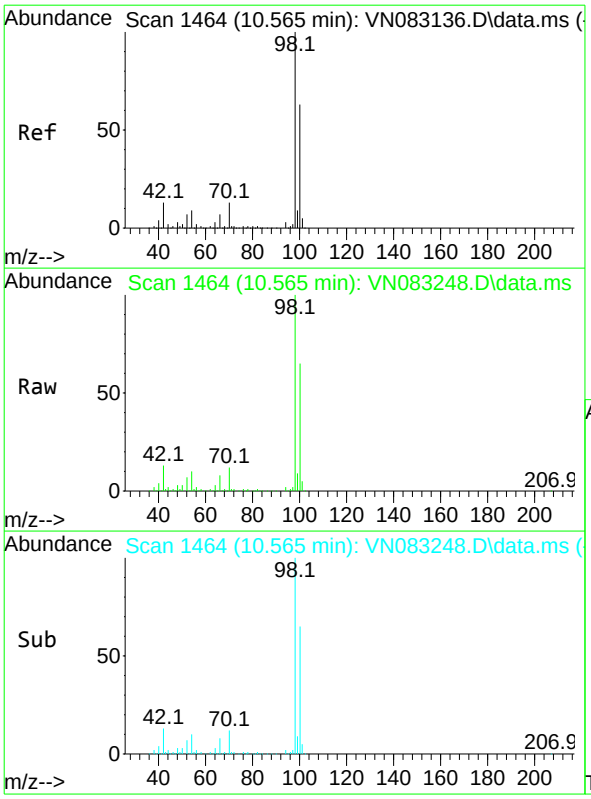




#35
Dibromofluoromethane
Concen: 52.555 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. 0.000 min
Lab File: VN083248.D
Acq: 13 Aug 2024 11:16

Tgt Ion:113 Resp: 94883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.4 | 82.4 | 123.6 |
| 192 | 17.0 | 14.9 | 22.3 |



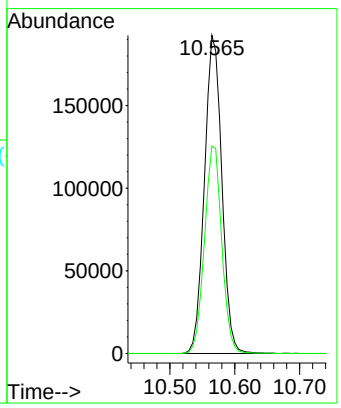


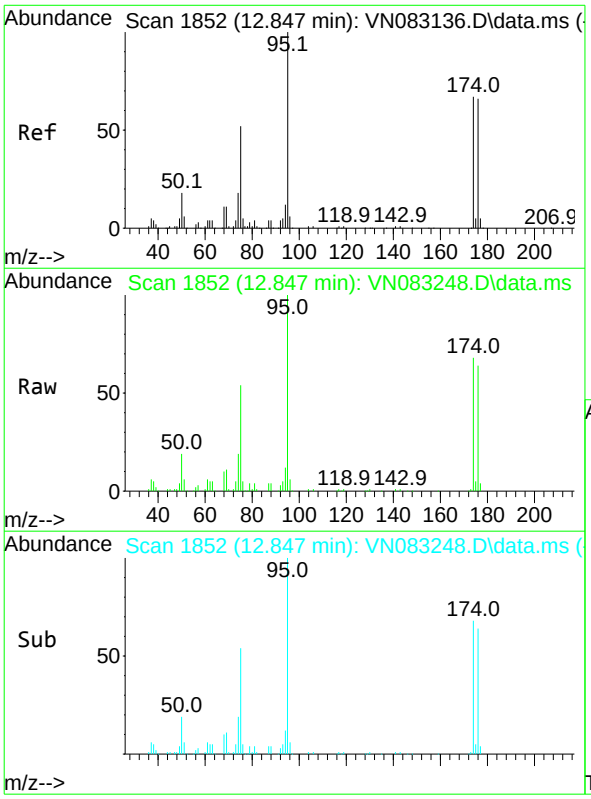

#50
Toluene-d8
Concen: 53.139 ug/l
RT: 10.565 min Scan# 14
Delta R.T. 0.000 min
Lab File: VN083248.D
Acq: 13 Aug 2024 11:16

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBL01

Tgt Ion: 98 Resp: 357867

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.0 | 51.5 | 77.3 |

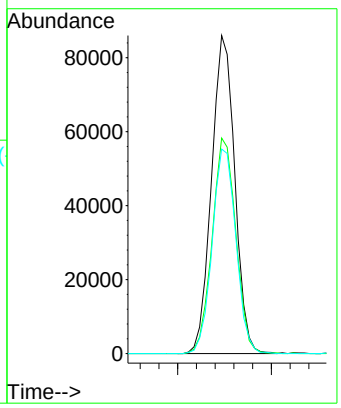


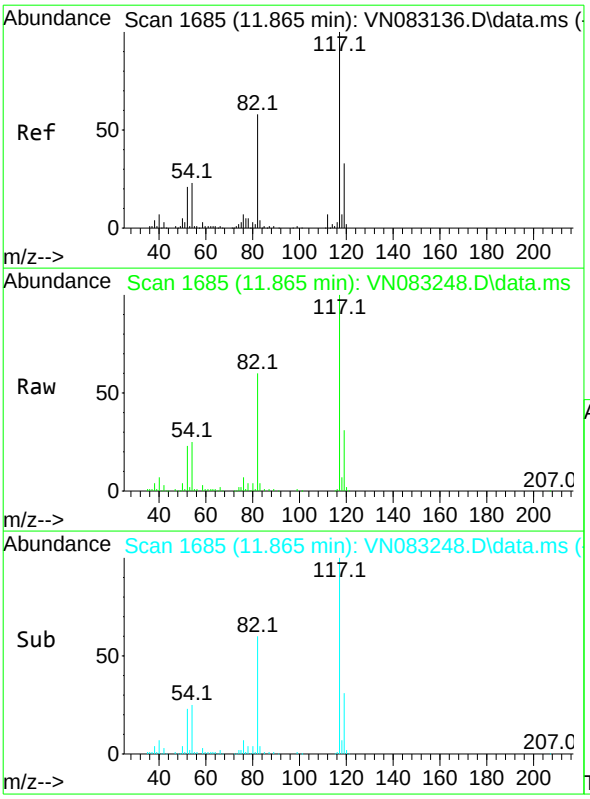




#62
4-Bromofluorobenzene
Concen: 56.490 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.000 min
Lab File: VN083248.D
Acq: 13 Aug 2024 11:16

Tgt Ion: 95 Resp: 148317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.1 | 0.0 | 159.2 |
| 176 | 65.6 | 0.0 | 147.6 |



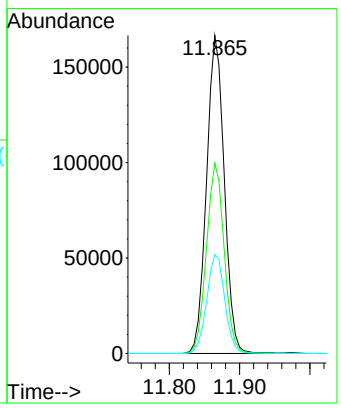


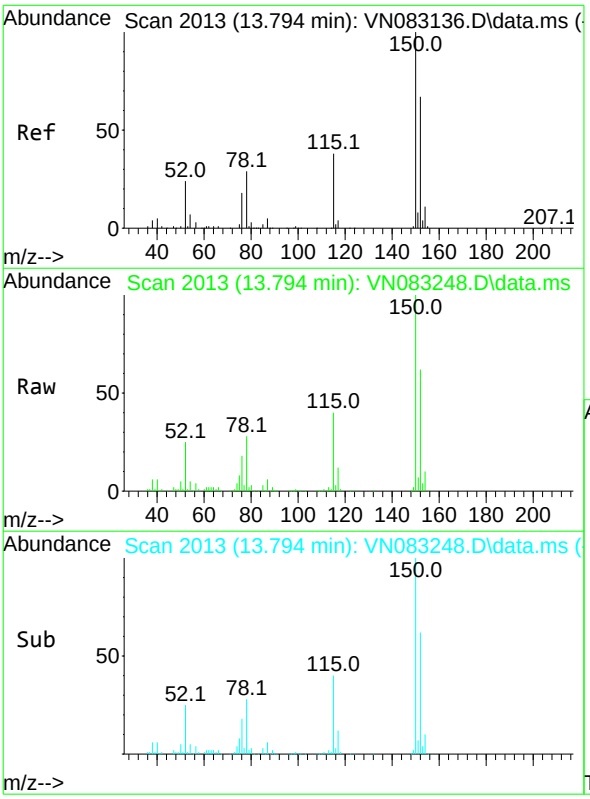

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN083248.D
Acq: 13 Aug 2024 11:16

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBL01

Tgt Ion:117 Resp: 291555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.8 | 47.5 | 71.3 |
| 119 | 31.1 | 25.6 | 38.4 |

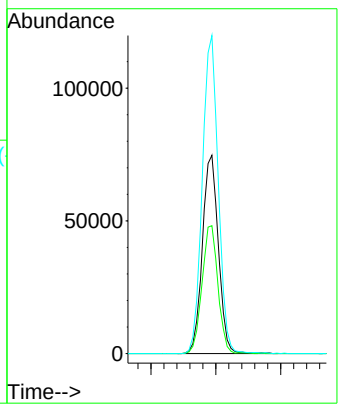



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083248.D
Acq: 13 Aug 2024 11:16

Tgt Ion:152 Resp: 128023

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.9 | 30.6 | 91.6 |
| 150 | 159.3 | 0.0 | 348.6 |



Raw Data: **VN083297.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0814WBL01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0814WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083297.D | 1 | | 08/14/24 13:39 | VN081424 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 0.35 | U | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 0.34 | U | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 1.40 | U | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 1.40 | U | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 0.32 | U | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 0.16 | U | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 0.32 | U | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 1.60 | U | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 1.30 | U | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 0.25 | U | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 0.26 | U | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 0.19 | U | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 0.32 | U | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 0.24 | U | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 0.18 | U | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 0.21 | U | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 0.18 | U | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 0.25 | U | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 0.16 | U | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 0.31 | U | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 0.45 | U | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 0.14 | U | 0.14 | 1.00 | ug/L |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0814WBL01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0814WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083297.D | 1 | | 08/14/24 13:39 | VN081424 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 0.13 | U | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 0.19 | U | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 55.6 | | 70 (74) - 130 (125) | 111% | SPK: 50 |
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| 2037-26-5 | Toluene-d8 | 54.2 | | 70 (86) - 130 (113) | 108% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 56.3 | | 70 (77) - 130 (121) | 113% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 145000 | 8.23 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 277000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 287000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 128000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Sample Results: **VN083297.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083297.D
Acq On : 14 Aug 2024 13:39
Operator : JC\MD
Sample : VN0814WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBL01

Quant Time: Aug 14 23:22:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.230 | 168 | 145129 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 276647 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 286871 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 128230 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.582 | 65 | 114917 | 55.630 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 111.260% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 91714 | 53.113 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 106.220% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 349304 | 54.229 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 108.460% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 141438 | 56.323 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 112.640% | | | |

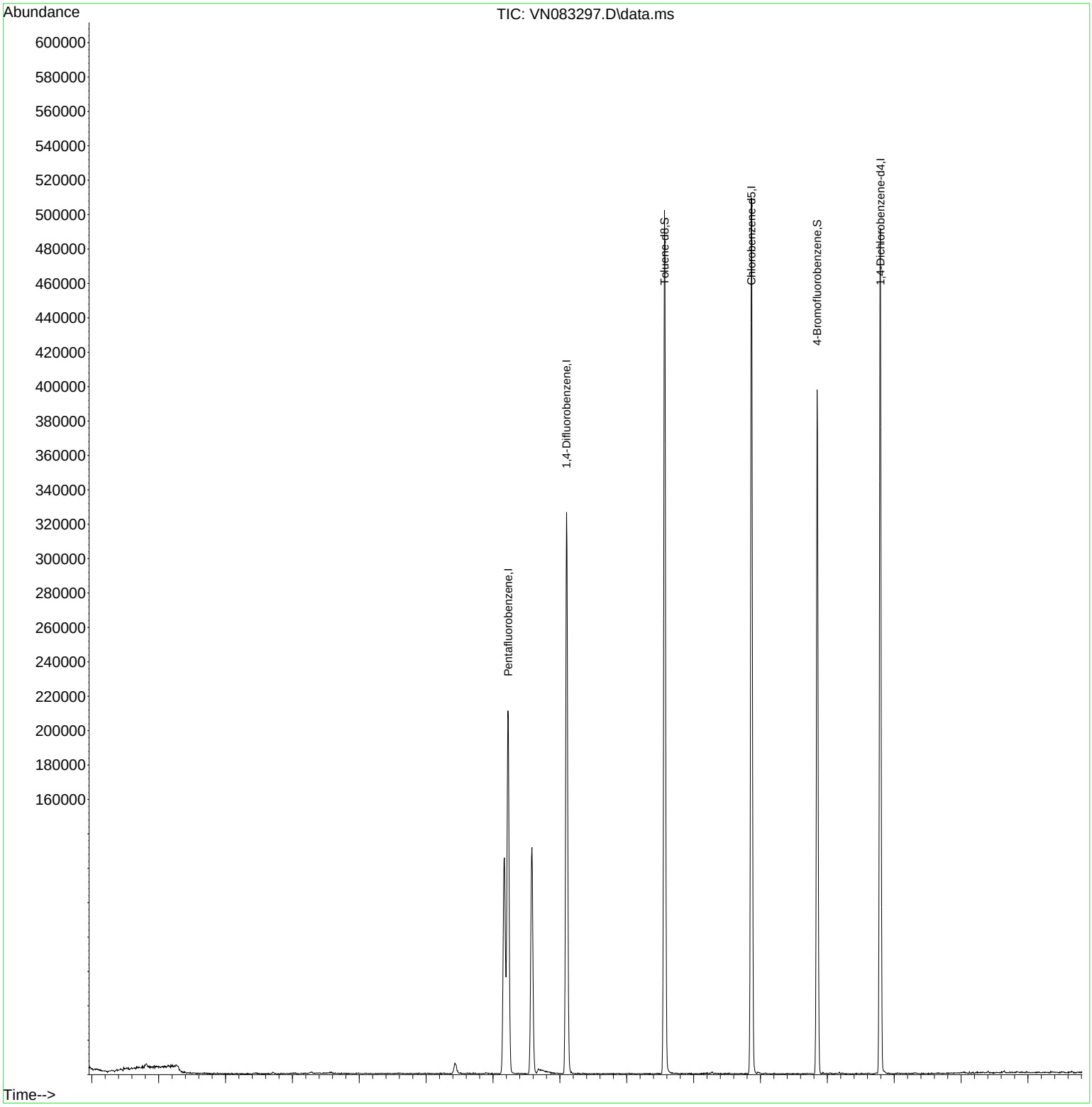
Target Compounds Qvalue

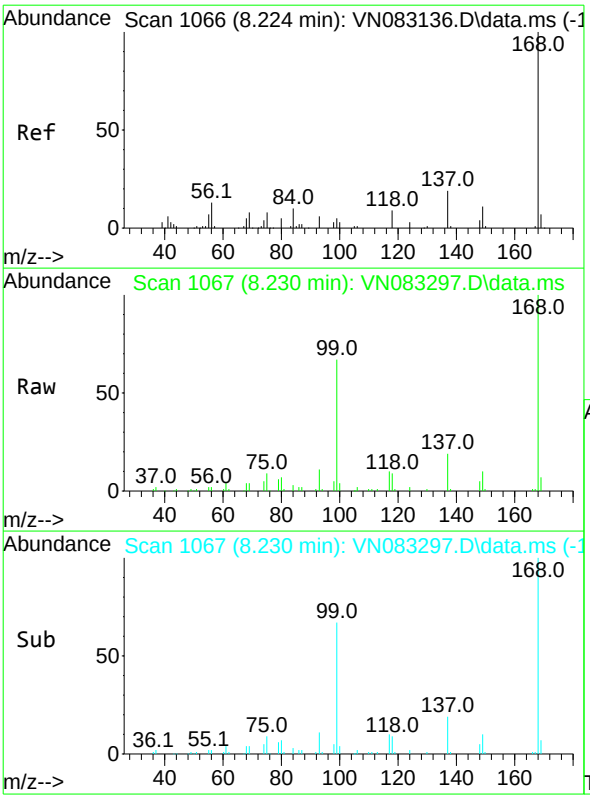
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083297.D
Acq On : 14 Aug 2024 13:39
Operator : JC\MD
Sample : VN0814WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBL01

Quant Time: Aug 14 23:22:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration



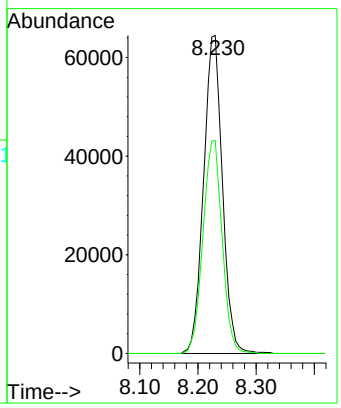


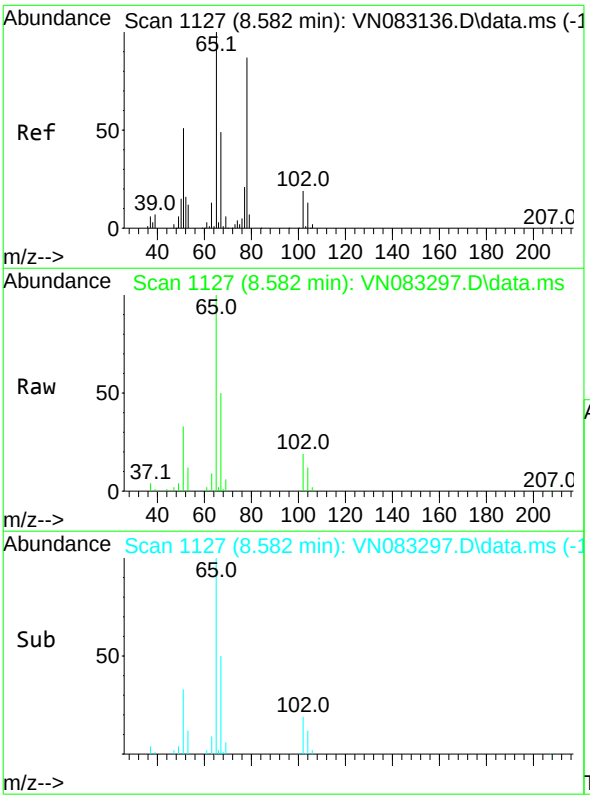

#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.230 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBL01

Tgt Ion:168 Resp: 145129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 67.0 | 48.2 | 72.4 |

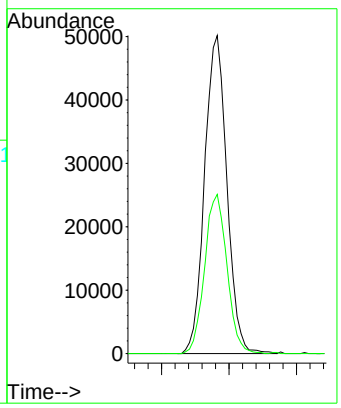


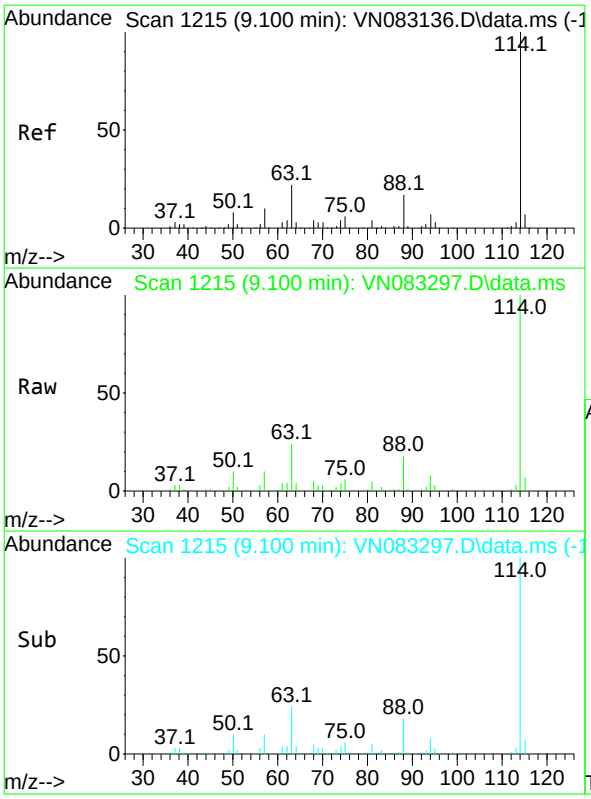




#33
1,2-Dichloroethane-d4
Concen: 55.630 ug/l
RT: 8.582 min Scan# 1127
Delta R.T. 0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Tgt Ion: 65 Resp: 114917

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.2 | 0.0 | 104.4 |



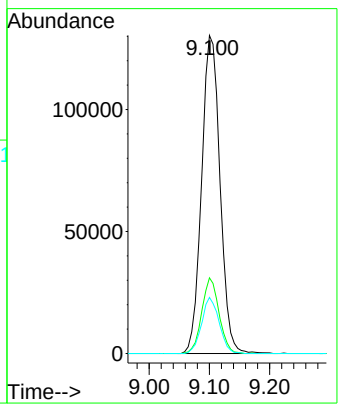


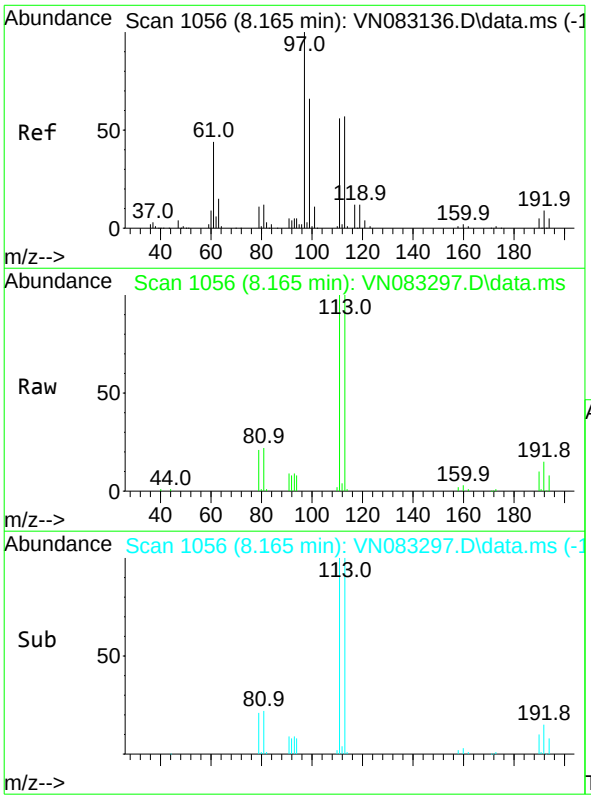

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 12
Delta R.T. 0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBL01

Tgt Ion:114 Resp: 276647

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.8 | 0.0 | 44.6 |
| 88 | 17.6 | 0.0 | 31.4 |

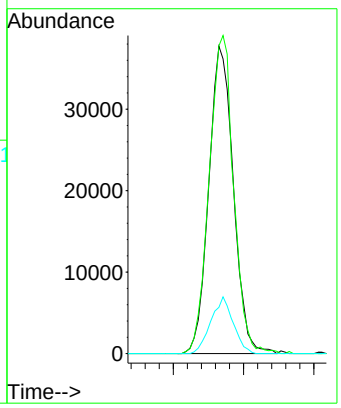


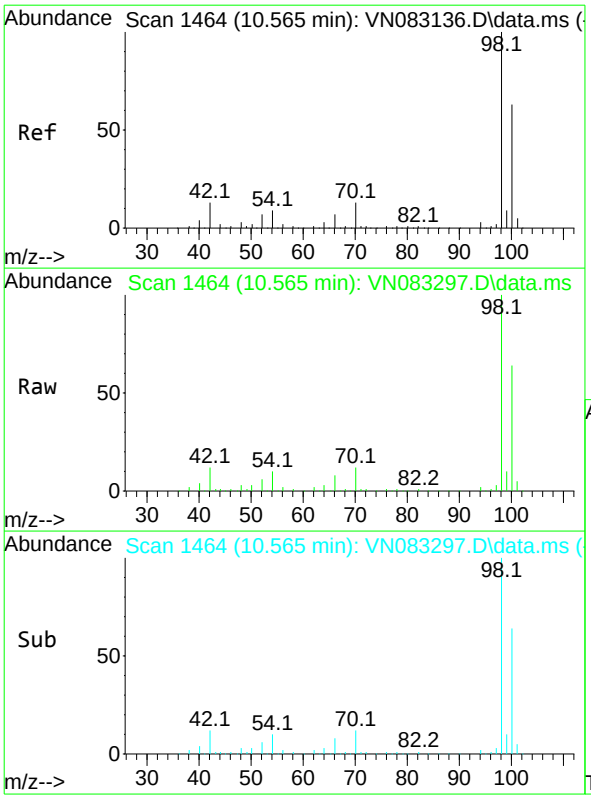




#35
Dibromofluoromethane
Concen: 53.113 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Tgt Ion:113 Resp: 91714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.7 | 82.4 | 123.6 |
| 192 | 16.7 | 14.9 | 22.3 |



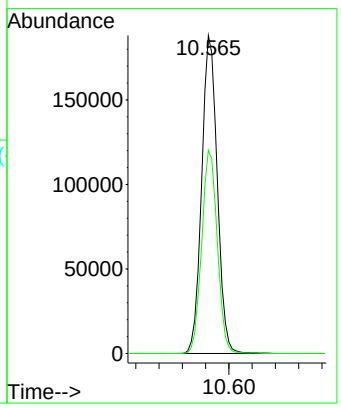


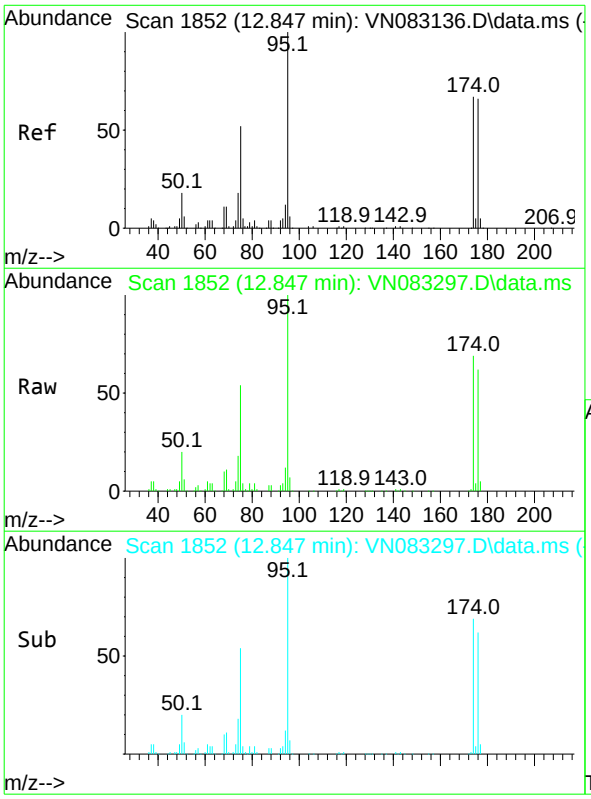

#50
Toluene-d8
Concen: 54.229 ug/l
RT: 10.565 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBL01

Tgt Ion: 98 Resp: 349304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.0 | 51.5 | 77.3 |

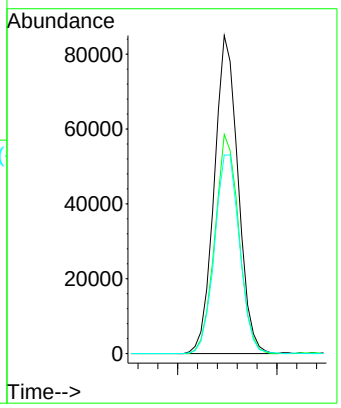


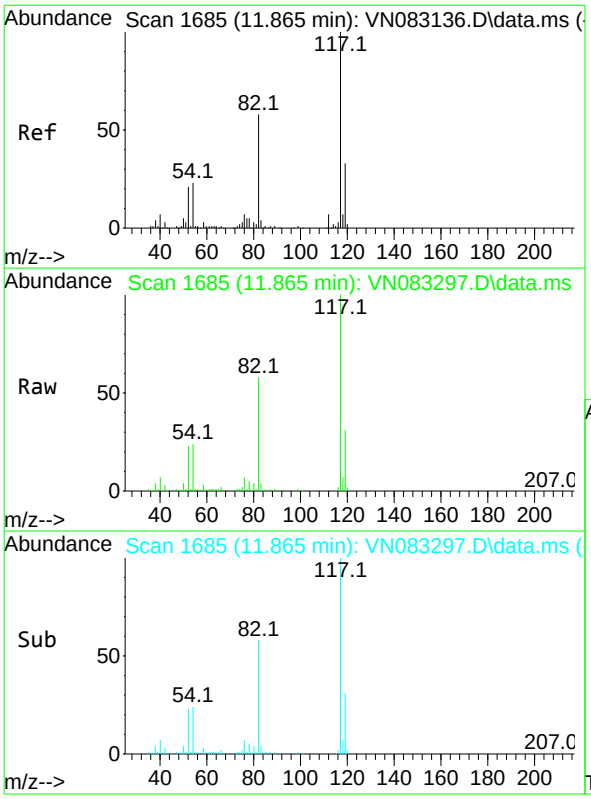




#62
4-Bromofluorobenzene
Concen: 56.323 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Tgt Ion: 95 Resp: 141438

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.3 | 0.0 | 159.2 |
| 176 | 65.8 | 0.0 | 147.6 |



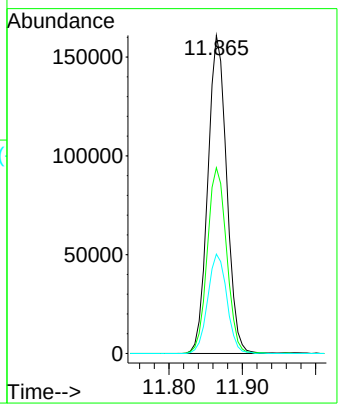


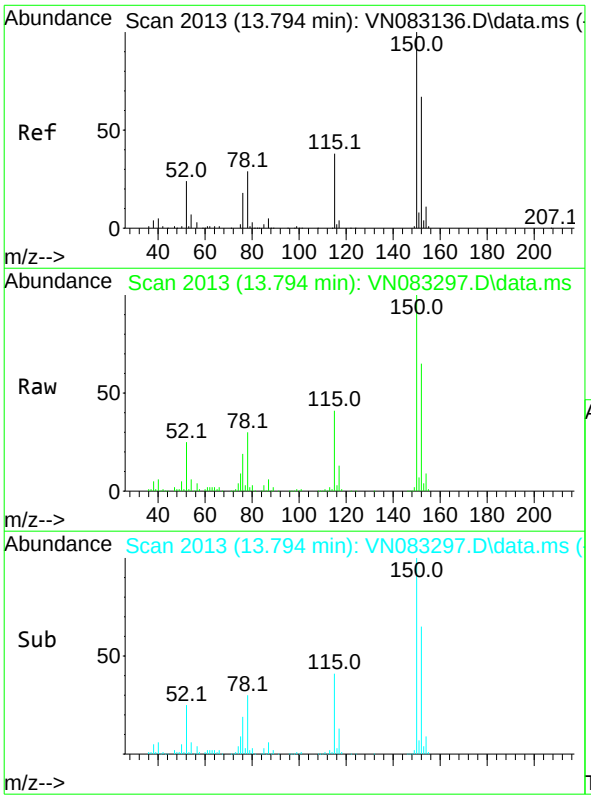

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. 0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBL01

Tgt Ion:117 Resp: 286871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.4 | 47.5 | 71.3 |
| 119 | 31.3 | 25.6 | 38.4 |

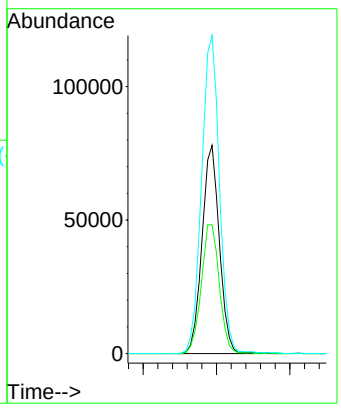



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. 0.000 min
Lab File: VN083297.D
Acq: 14 Aug 2024 13:39

Tgt Ion:152 Resp: 128230

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.2 | 30.6 | 91.6 |
| 150 | 157.1 | 0.0 | 348.6 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0812WBS01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0812WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083228.D | 1 | | 08/12/24 11:10 | VN081224 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 16.4 | | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 16.4 | | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 17.1 | | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 17.4 | | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 16.8 | | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 83.8 | | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 14.5 | | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 16.8 | | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 15.9 | | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 16.5 | | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 16.3 | | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 81.0 | | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 17.2 | | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 16.5 | | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 17.5 | | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 17.3 | | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 16.2 | | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 17.1 | | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 18.3 | | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 17.2 | | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 16.9 | | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 17.2 | | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 17.6 | | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 17.3 | | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 17.3 | | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 17.1 | | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 16.9 | | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 33.9 | | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 50.9 | | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 17.0 | | 0.14 | 1.00 | ug/L |

Raw Data: **VN083228.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0812WBS01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0812WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083228.D | 1 | | 08/12/24 11:10 | VN081224 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 17.2 | | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 16.6 | | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 16.9 | | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 54.1 | | 70 (74) - 130 (125) | 108% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 52.1 | | 70 (75) - 130 (124) | 104% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.9 | | 70 (86) - 130 (113) | 104% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 49.9 | | 70 (77) - 130 (121) | 100% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 193000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 331000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 284000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 131000 | 13.788 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083228.D
Acq On : 12 Aug 2024 11:10
Operator : JC\MD
Sample : VN0812WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 13 04:12:51 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 193104 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 331101 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 283776 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152 | 130523 | 50.000 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 148628 | 54.074 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 108.140% | | | |
| 35) Dibromofluoromethane | 8.171 | 113 | 107607 | 52.068 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 104.140% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 399905 | 51.874 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 103.740% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 150021 | 49.916 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 99.840% | | | |
| Target Compounds | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 35867 | 16.379 | ug/l | 96 |
| 3) Chloromethane | 2.365 | 50 | 36708 | 16.373 | ug/l | 99 |
| 4) Vinyl Chloride | 2.518 | 62 | 39010 | 17.053 | ug/l | 99 |
| 5) Bromomethane | 2.959 | 94 | 24633 | 17.354 | ug/l | 98 |
| 6) Chloroethane | 3.118 | 64 | 24485 | 17.108 | ug/l | 99 |
| 7) Trichlorofluoromethane | 3.500 | 101 | 64424 | 17.047 | ug/l | 98 |
| 8) Diethyl Ether | 3.959 | 74 | 23561 | 16.754 | ug/l | 81 |
| 9) 1,1,2-Trichlorotrifluo... | 4.371 | 101 | 35059 | 16.826 | ug/l | 99 |
| 10) Methyl Iodide | 4.589 | 142 | 43574 | 15.898 | ug/l | 91 |
| 11) Tert butyl alcohol | 5.518 | 59 | 43661 | 76.435 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.341 | 96 | 34992 | 16.347 | ug/l | 90 |
| 13) Acrolein | 4.183 | 56 | 31591 | 84.857 | ug/l | 99 |
| 14) Allyl chloride | 5.024 | 41 | 64414 | 15.924 | ug/l | 89 |
| 15) Acrylonitrile | 5.718 | 53 | 95024 | 80.886 | ug/l | 98 |
| 16) Acetone | 4.424 | 43 | 90085 | 83.759 | ug/l | 94 |
| 17) Carbon Disulfide | 4.712 | 76 | 90613 | 14.467 | ug/l | 100 |
| 18) Methyl Acetate | 5.024 | 43 | 53312 | 16.637 | ug/l | 93 |
| 19) Methyl tert-butyl Ether | 5.800 | 73 | 129511 | 16.762 | ug/l | 99 |
| 20) Methylene Chloride | 5.277 | 84 | 39445 | 15.936 | ug/l # | 80 |
| 21) trans-1,2-Dichloroethene | 5.788 | 96 | 36446 | 16.473 | ug/l | 90 |
| 22) Diisopropyl ether | 6.671 | 45 | 125770 | 16.540 | ug/l | 95 |
| 23) Vinyl Acetate | 6.600 | 43 | 641406m | 82.297 | ug/l | |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 71096 | 17.154 | ug/l | 99 |
| 25) 2-Butanone | 7.482 | 43 | 133769 | 81.002 | ug/l | 91 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 67894 | 17.639 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 43964 | 16.468 | ug/l | 93 |
| 28) Bromochloromethane | 7.812 | 49 | 27049 | 15.970 | ug/l # | 21 |
| 29) Tetrahydrofuran | 7.841 | 42 | 86814 | 81.321 | ug/l | 90 |
| 30) Chloroform | 7.965 | 83 | 75322 | 17.493 | ug/l | 94 |
| 31) Cyclohexane | 8.259 | 56 | 66190 | 16.250 | ug/l | 95 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 70502 | 17.298 | ug/l | 92 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 52212 | 16.701 | ug/l | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 54093 | 15.453 | ug/l # | 93 |
| 38) Carbon Tetrachloride | 8.365 | 117 | 60652 | 17.225 | ug/l | 99 |
| 39) Methylcyclohexane | 9.600 | 83 | 62108 | 16.174 | ug/l | 96 |
| 40) Benzene | 8.606 | 78 | 158813 | 17.052 | ug/l | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083228.D
Acq On : 12 Aug 2024 11:10
Operator : JC\MD
Sample : VN0812WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 13 04:12:51 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.782 | 41 | 29865 | 15.006 | ug/l | | 94 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 62241 | 18.346 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.688 | 43 | 100087 | 14.996 | ug/l | # | 95 |
| 44) Trichloroethene | 9.353 | 130 | 38215 | 17.239 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 9.623 | 63 | 38239 | 17.297 | ug/l | | 97 |
| 46) Dibromomethane | 9.706 | 93 | 28189 | 17.814 | ug/l | | 97 |
| 47) Bromodichloromethane | 9.888 | 83 | 60126 | 16.923 | ug/l | | 99 |
| 48) Methyl methacrylate | 9.682 | 41 | 46342 | 16.014 | ug/l | | 93 |
| 49) 1,4-Dioxane | 9.694 | 88 | 17207 | 329.576 | ug/l | | 97 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 276278 | 83.465 | ug/l | | 94 |
| 52) Toluene | 10.629 | 92 | 100952 | 17.156 | ug/l | | 97 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 62025 | 16.995 | ug/l | | 96 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 65184 | 16.792 | ug/l | | 92 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 37209 | 17.644 | ug/l | | 99 |
| 56) Ethyl methacrylate | 10.870 | 69 | 64678 | 16.269 | ug/l | # | 87 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 65055 | 17.307 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 133461 | 79.420 | ug/l | | 97 |
| 59) 2-Hexanone | 11.194 | 43 | 208298 | 81.340 | ug/l | | 94 |
| 60) Dibromochloromethane | 11.359 | 129 | 44195 | 17.334 | ug/l | | 100 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 37195 | 16.790 | ug/l | | 98 |
| 64) Tetrachloroethene | 11.106 | 164 | 32577 | 17.334 | ug/l | | 96 |
| 65) Chlorobenzene | 11.888 | 112 | 107178 | 17.091 | ug/l | | 96 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 38446 | 17.383 | ug/l | | 98 |
| 67) Ethyl Benzene | 11.965 | 91 | 194629 | 16.918 | ug/l | | 97 |
| 68) m/p-Xylenes | 12.070 | 106 | 146169 | 33.919 | ug/l | | 98 |
| 69) o-Xylene | 12.394 | 106 | 72235 | 16.996 | ug/l | | 99 |
| 70) Styrene | 12.412 | 104 | 119364 | 16.721 | ug/l | | 97 |
| 71) Bromoform | 12.576 | 173 | 27927 | 16.668 | ug/l | # | 98 |
| 73) Isopropylbenzene | 12.694 | 105 | 187304 | 17.157 | ug/l | | 100 |
| 74) N-amyl acetate | 12.494 | 43 | 81860 | 15.329 | ug/l | | 94 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 50723 | 16.427 | ug/l | | 97 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 46083m | 16.087 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 41759 | 17.219 | ug/l | | 94 |
| 78) n-propylbenzene | 13.035 | 91 | 214628 | 17.073 | ug/l | | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 135632 | 17.018 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.176 | 105 | 156743 | 17.149 | ug/l | | 97 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 21268 | 16.150 | ug/l | | 89 |
| 82) 4-Chlorotoluene | 13.217 | 91 | 135189 | 16.910 | ug/l | | 97 |
| 83) tert-Butylbenzene | 13.435 | 119 | 137783 | 17.022 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 154931 | 16.820 | ug/l | | 99 |
| 85) sec-Butylbenzene | 13.617 | 105 | 185318 | 16.779 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 152113 | 16.680 | ug/l | | 97 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 73369 | 16.078 | ug/l | | 96 |
| 88) 1,4-Dichlorobenzene | 13.811 | 146 | 76396 | 16.606 | ug/l | | 97 |
| 89) n-Butylbenzene | 14.059 | 91 | 132718 | 16.796 | ug/l | | 99 |
| 90) Hexachloroethane | 14.335 | 117 | 29007 | 16.464 | ug/l | | 93 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 74542 | 16.880 | ug/l | | 97 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 11355 | 15.155 | ug/l | | 99 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 39450 | 15.946 | ug/l | | 96 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 16495 | 14.992 | ug/l | | 98 |
| 95) Naphthalene | 15.641 | 128 | 136795 | 15.610 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 38717 | 15.816 | ug/l | | 95 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083228.D
Acq On : 12 Aug 2024 11:10
Operator : JC\MD
Sample : VN0812WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 13 04:12:51 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083228.D
Acq On : 12 Aug 2024 11:10
Operator : JC\MD
Sample : VN0812WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 13 04:12:51 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations APPROVED**

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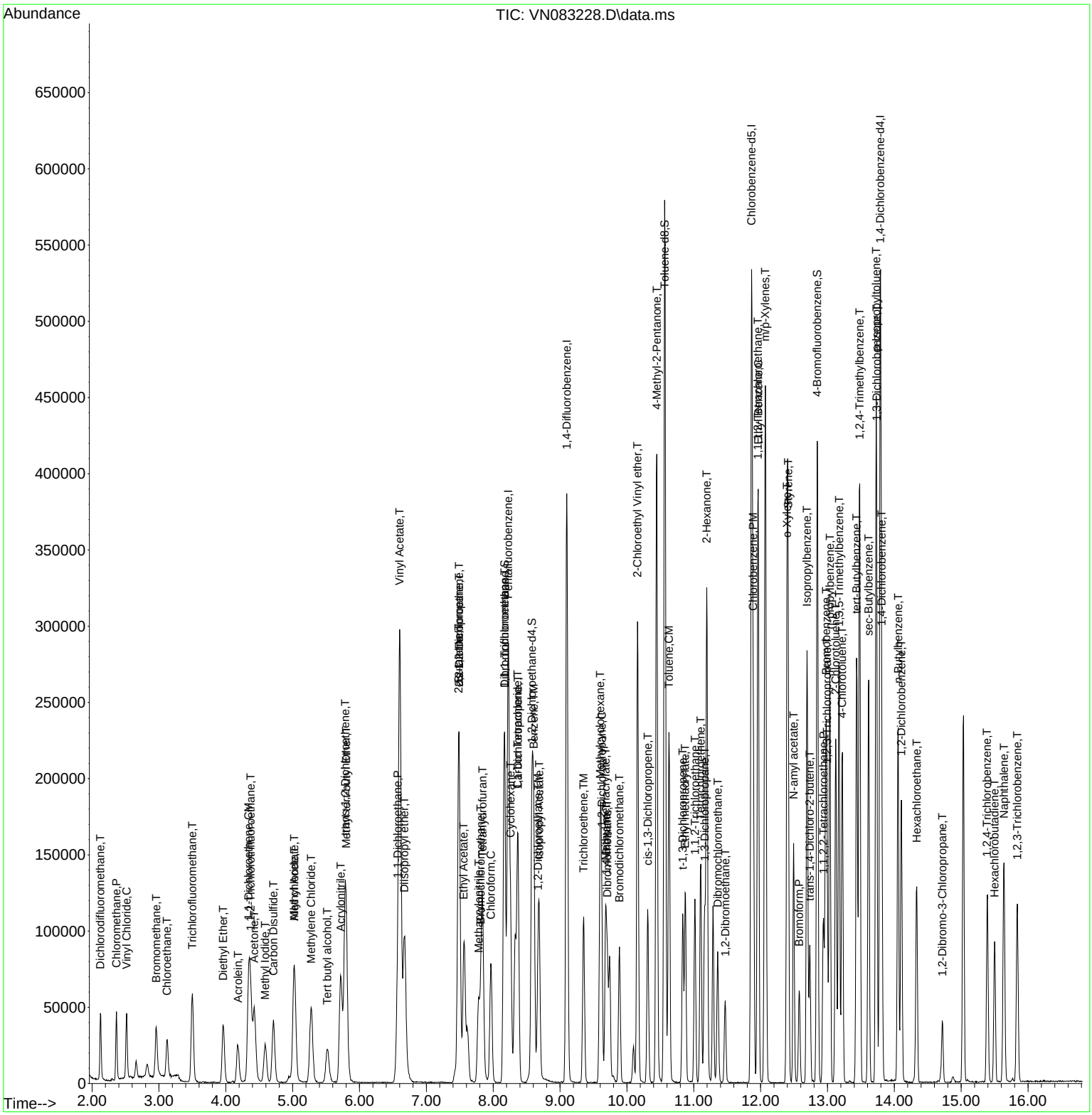
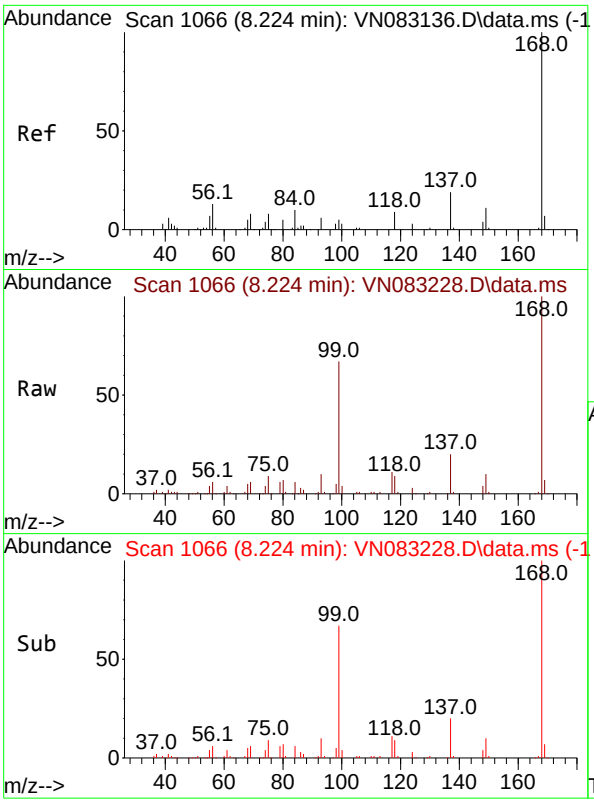
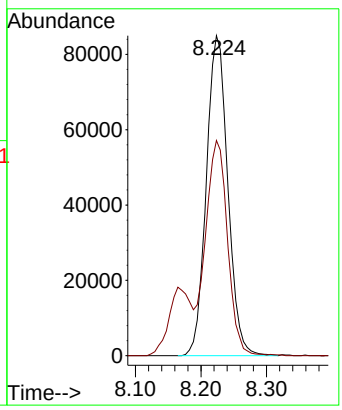





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:168 Resp: 19310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 67.0 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
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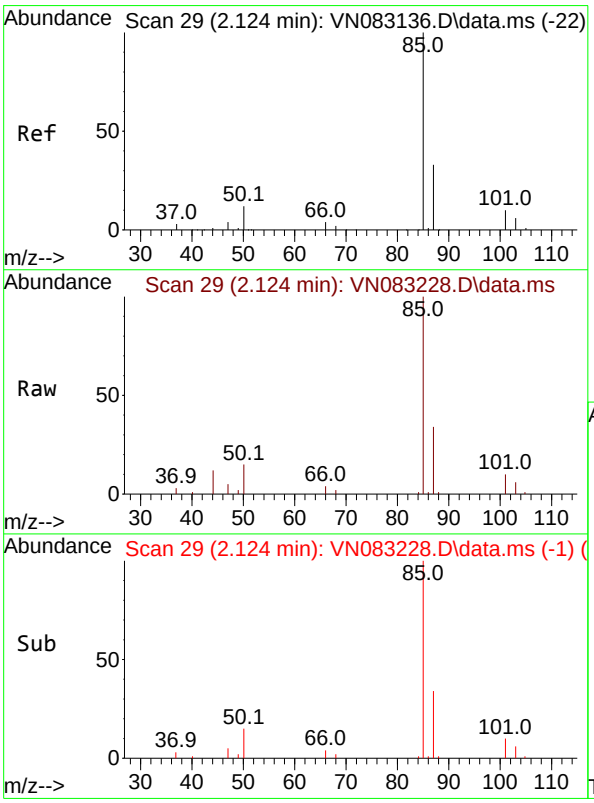
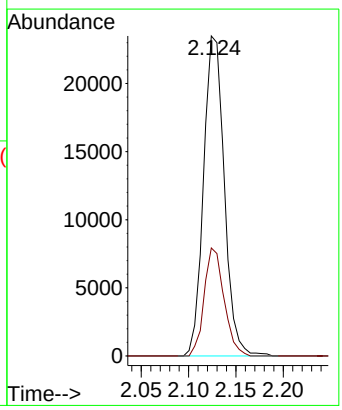
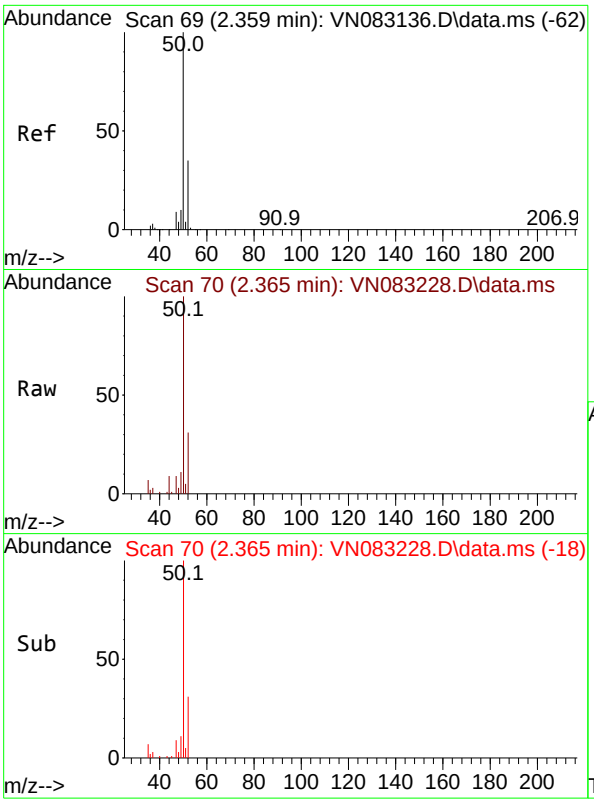



#2
Dichlorodifluoromethane
Concen: 16.379 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 85 Resp: 35867

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.7 | 15.7 | 47.0 |

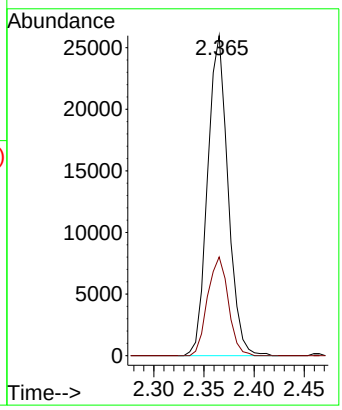





#3
Chloromethane
Concen: 16.373 ug/l
RT: 2.365 min Scan# 7
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 50 Resp: 3670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 30.8 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
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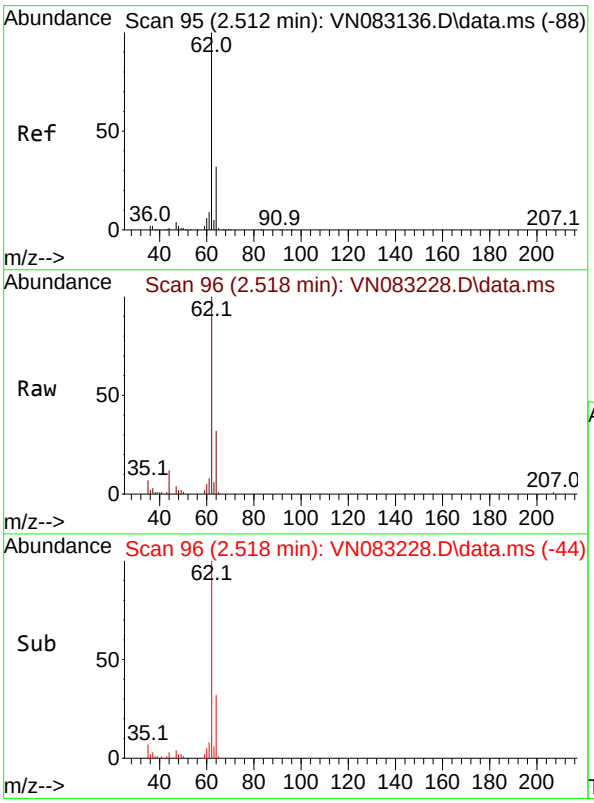
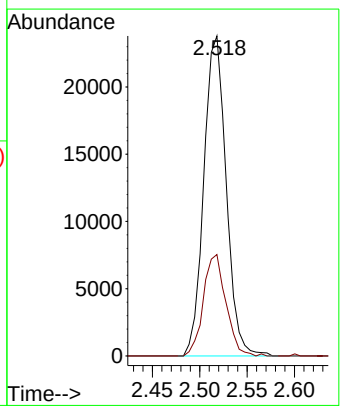
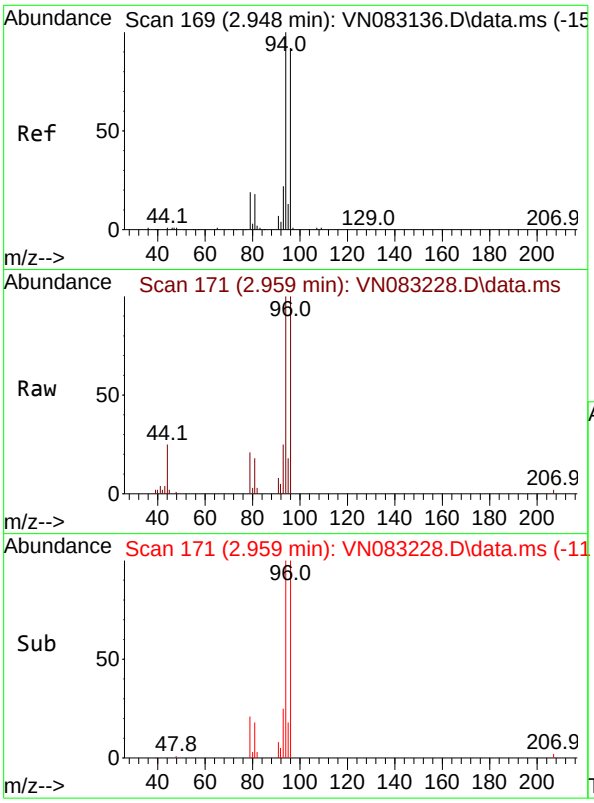



#4
Vinyl Chloride
Concen: 17.053 ug/l
RT: 2.518 min Scan# 96
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 62 Resp: 39010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.7 | 25.0 | 37.6 |

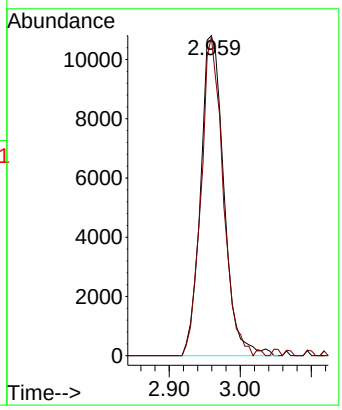





#5
Bromomethane
Concen: 17.354 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 94 Resp: 2463

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 99.6 | 78.0 | 117.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
**APPROVED**

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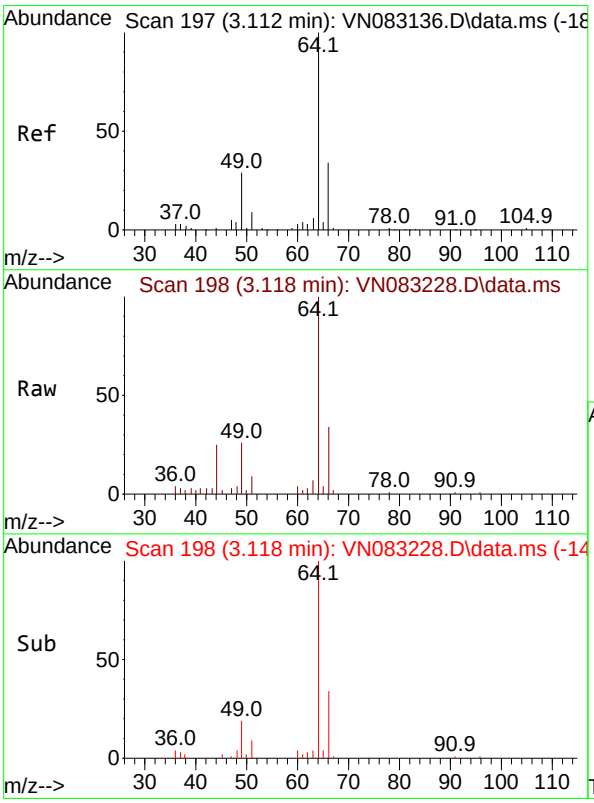
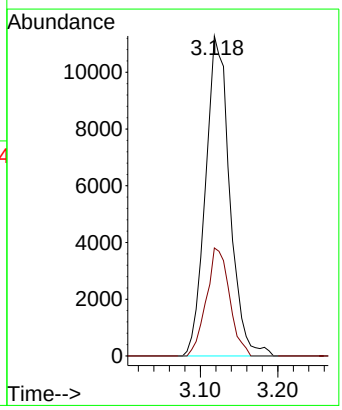
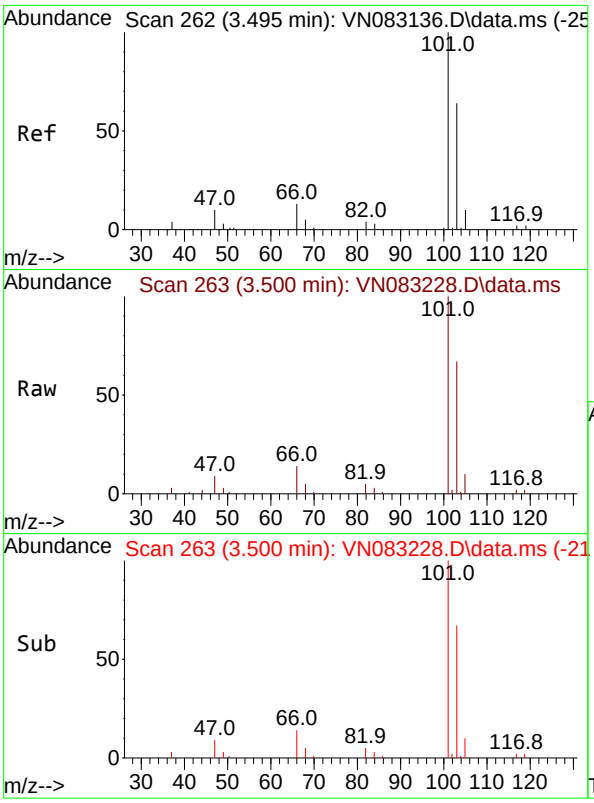



#6
Chloroethane
Concen: 17.108 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 64 Resp: 24485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 33.8 | 26.6 | 40.0 |






#7
Trichlorofluoromethane
Concen: 17.047 ug/l
RT: 3.500 min Scan# 2
Delta R.T. 0.005 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:101 Resp: 6442

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 67.3 | 52.7 | 79.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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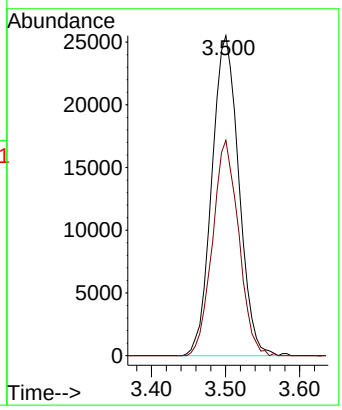
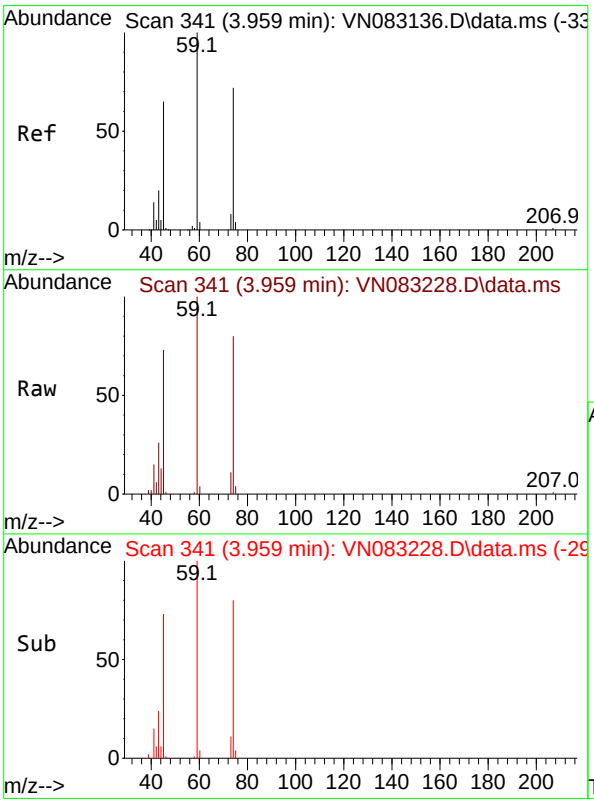
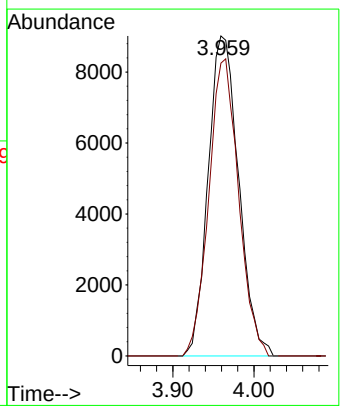


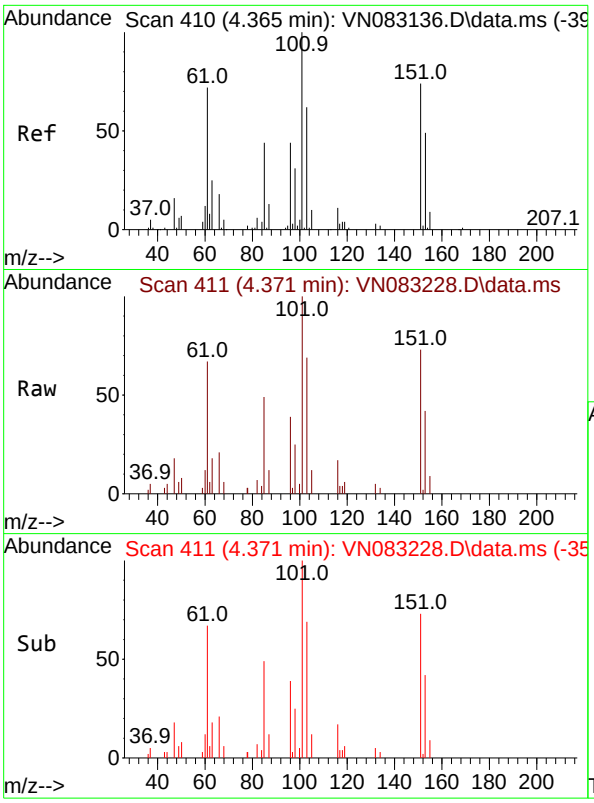




#8
Diethyl Ether
Concen: 16.754 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 74 Resp: 23561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 90.5 | 55.5 | 166.3 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 16.826 ug/l
RT: 4.371 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:101 Resp: 3505

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 49.3 | 38.3 | 57.5 |
| 151 | 73.5 | 59.3 | 88.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
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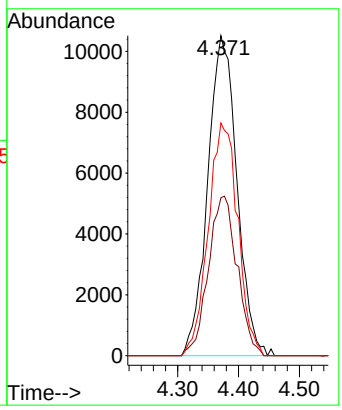
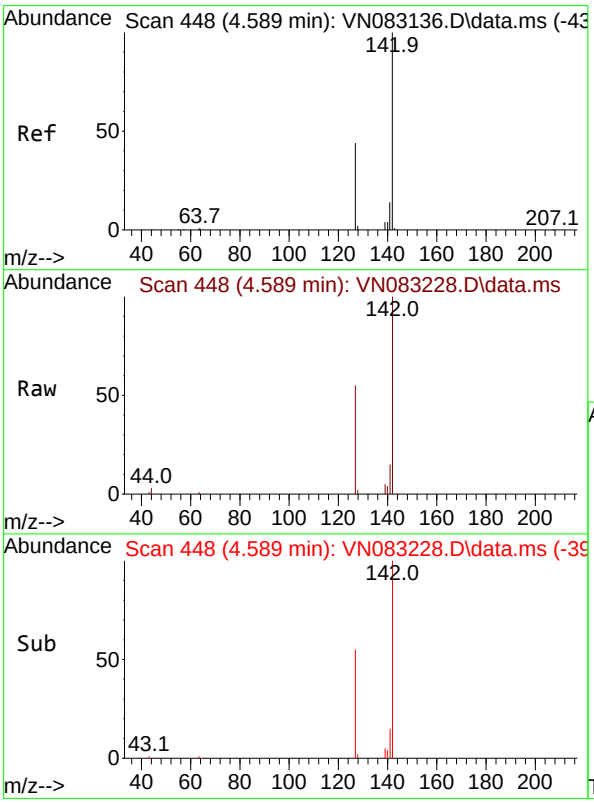
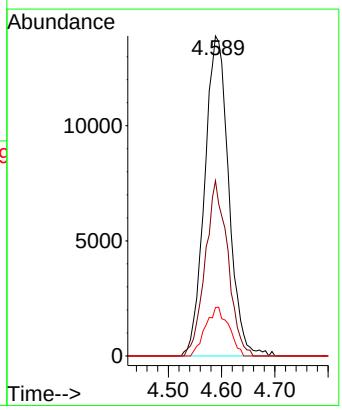


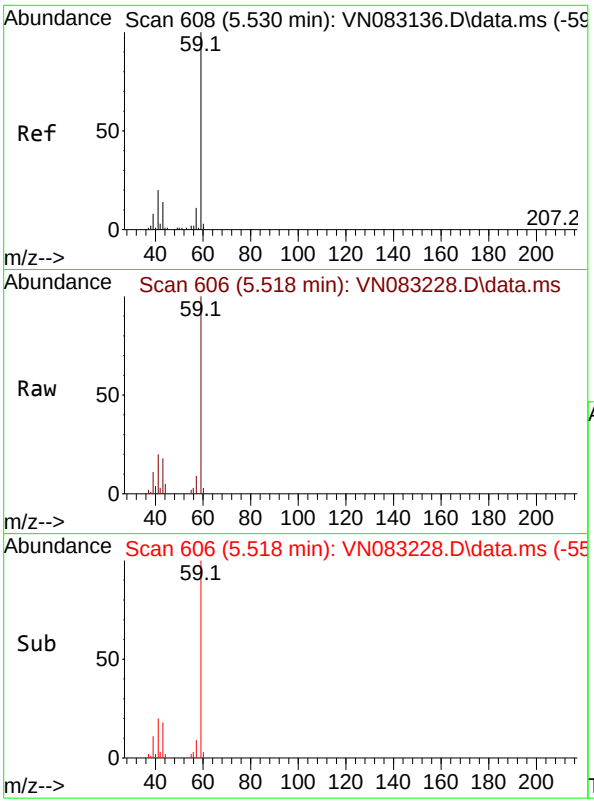




#10
Methyl Iodide
Concen: 15.898 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:142 Resp: 43574

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 54.7 | 37.5 | 56.3 |
| 141 | 15.2 | 13.1 | 19.7 |






#11
Tert butyl alcohol
Concen: 76.435 ug/l
RT: 5.518 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 59 Resp: 4366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.8 | 8.9 | 13.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
**APPROVED**

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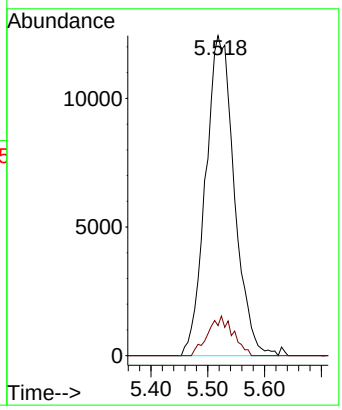
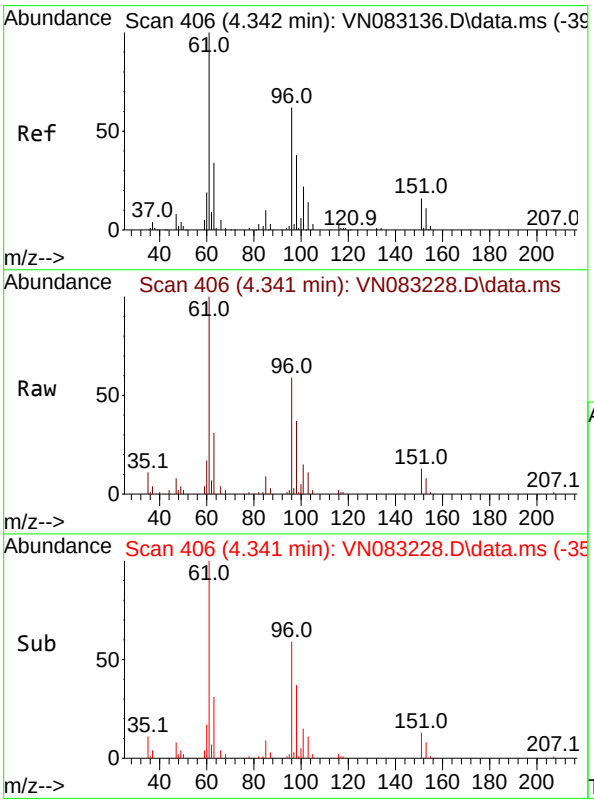
Supervised By :Semsettin Yesilyurt 08/13/2024

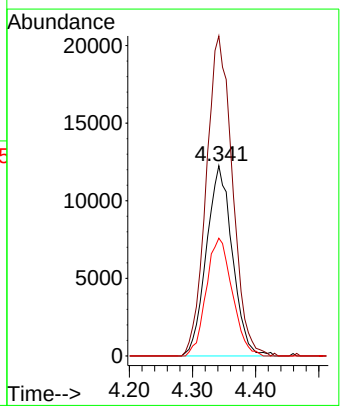


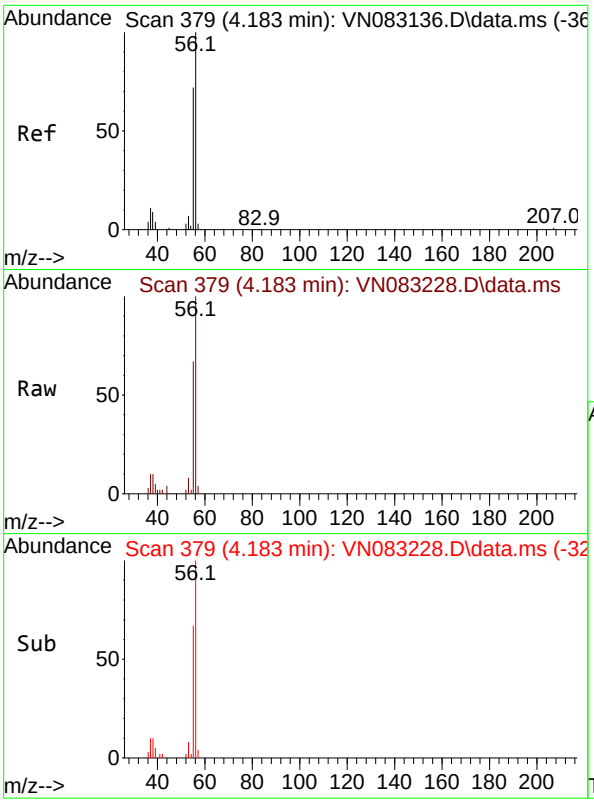




#12
1,1-Dichloroethene
Concen: 16.347 ug/l
RT: 4.341 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 96 Resp: 34992

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 168.2 | 149.7 | 224.5 |
| 98 | 61.9 | 50.1 | 75.1 |

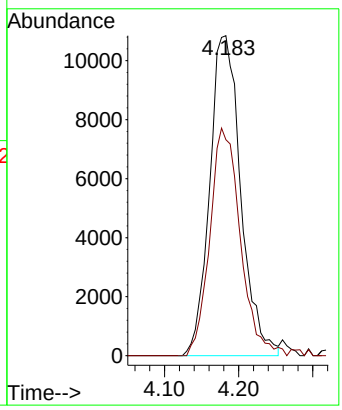





#13
Acrolein
Concen: 84.857 ug/l
RT: 4.183 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 56 Resp: 3159

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 69.7 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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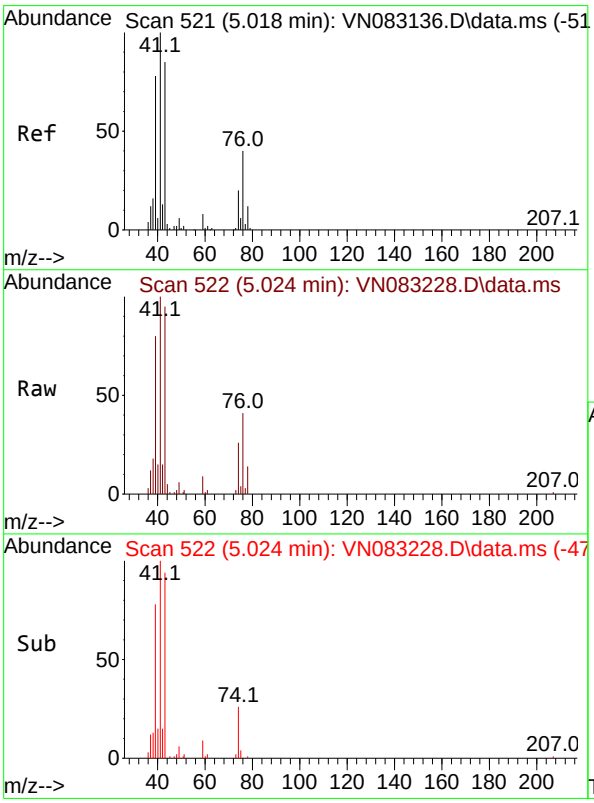
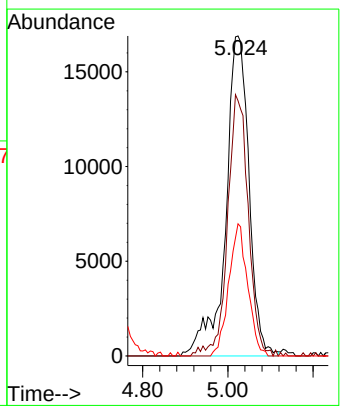
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

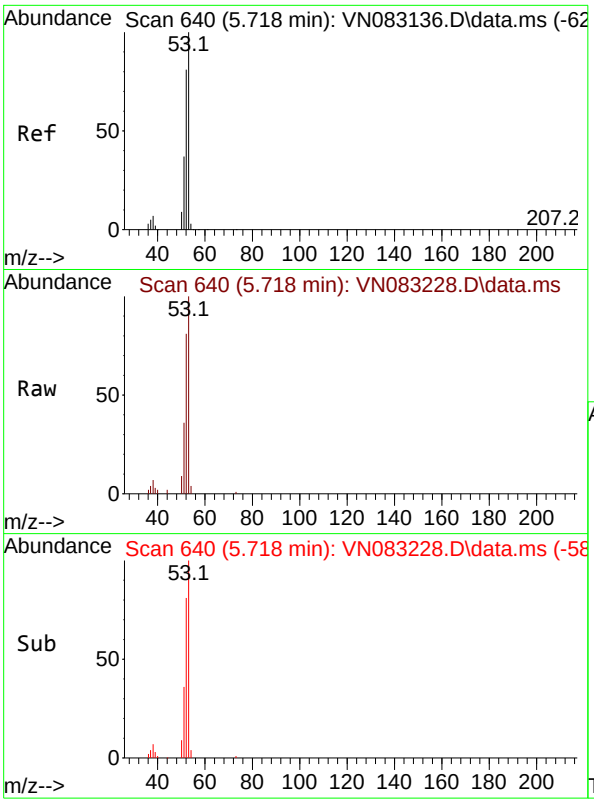



#14
Allyl chloride
Concen: 15.924 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 41 Resp: 64414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 72.1 | 67.8 | 101.6 |
| 76 | 33.4 | 25.8 | 38.8 |

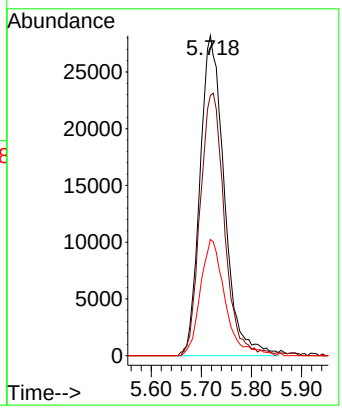





#15
Acrylonitrile
Concen: 80.886 ug/l
RT: 5.718 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 53 Resp: 9502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.2 | 66.6 | 100.0 |
| 51 | 36.9 | 30.1 | 45.1 |




**Instrument :**
MSVOA_N
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VN0812WBS01

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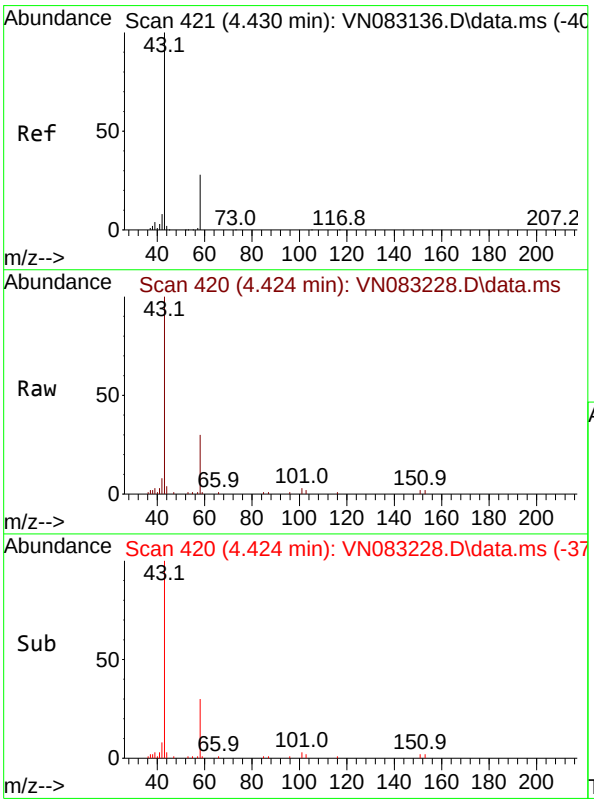
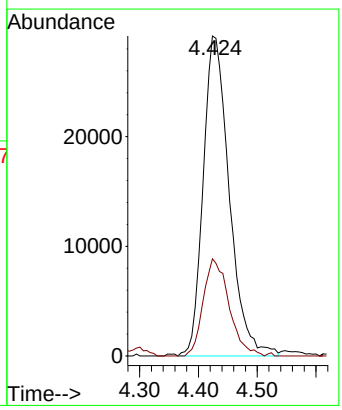
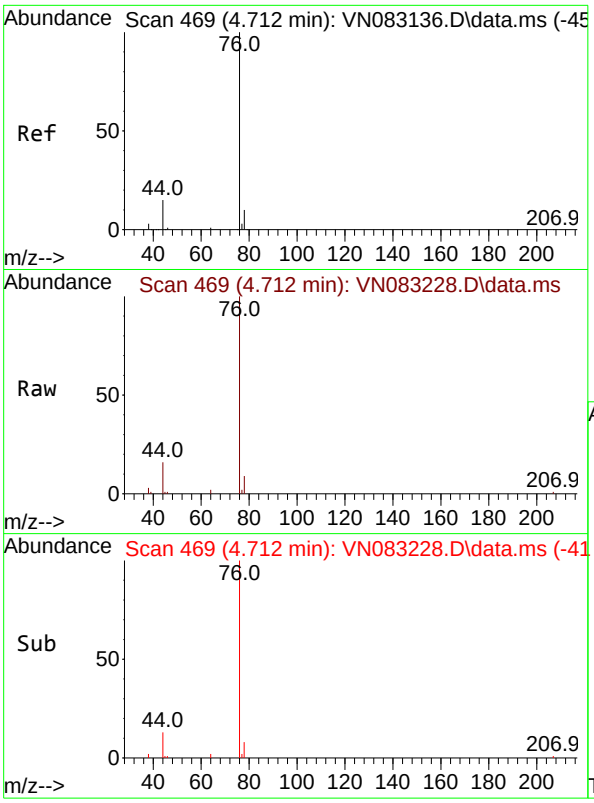



#16
Acetone
Concen: 83.759 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 43 Resp: 90085

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.4 | 21.8 | 32.6 |

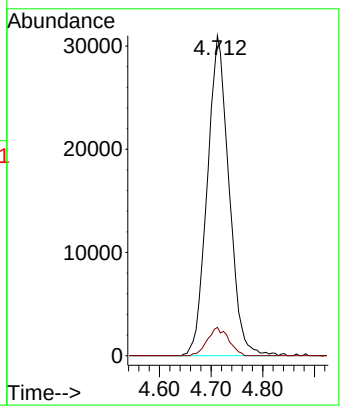





#17
Carbon Disulfide
Concen: 14.467 ug/l
RT: 4.712 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 76 Resp: 9061

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.9 | 7.2 | 10.8 |

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MSVOA_N
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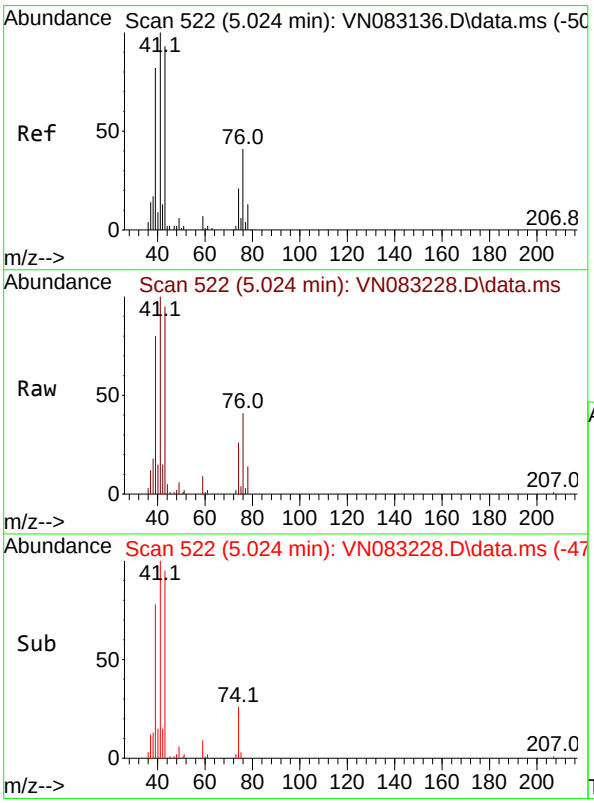
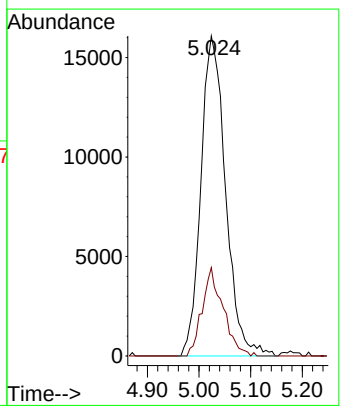
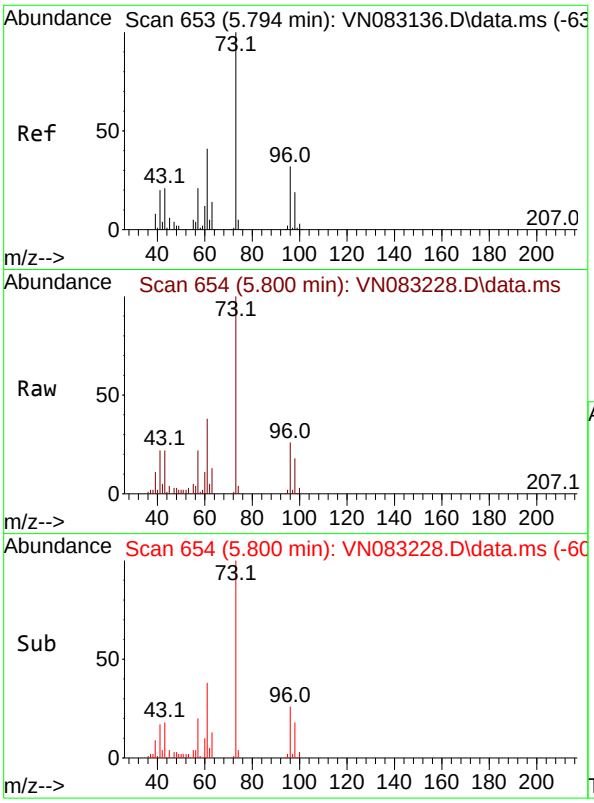



#18
Methyl Acetate
Concen: 16.637 ug/l
RT: 5.024 min Scan# 522
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 43 Resp: 53312

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 23.5 | 16.3 | 24.5 |

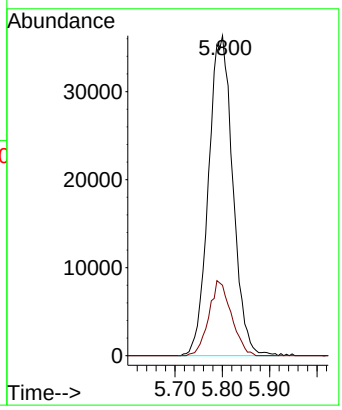





#19
Methyl tert-butyl Ether
Concen: 16.762 ug/l
RT: 5.800 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 73 Resp: 12951

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.0 | 17.9 | 26.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

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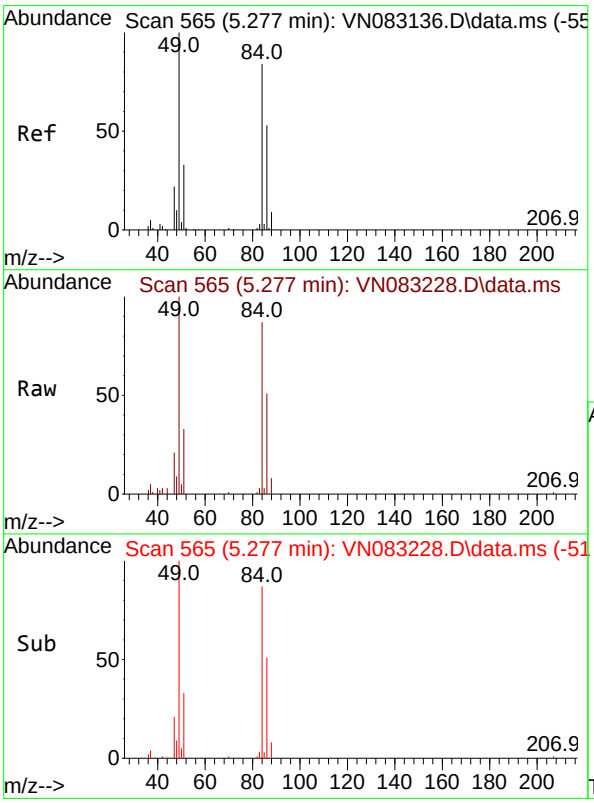
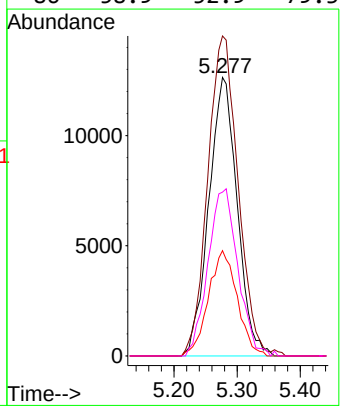
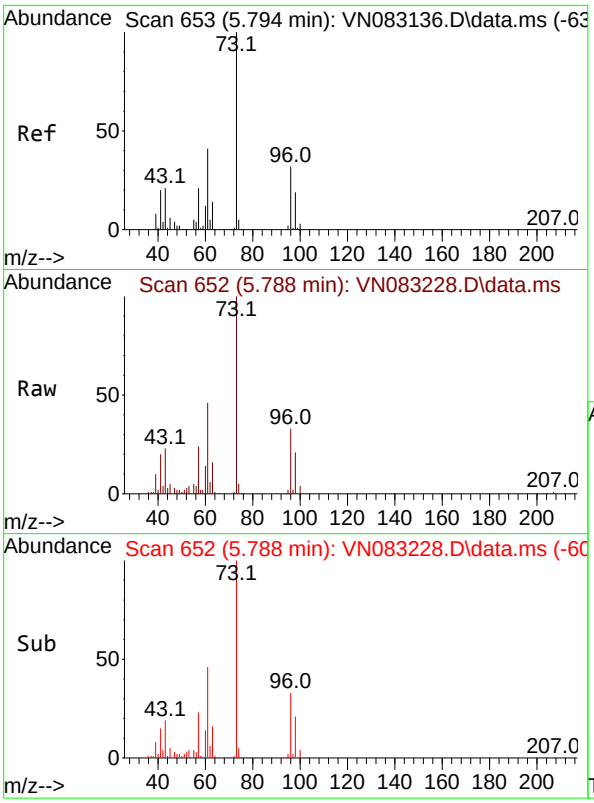



#20
Methylene Chloride
Concen: 15.936 ug/l
RT: 5.277 min Scan# 565
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 84 Resp: 39445

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 114.9 | 119.6 | 179.4# |
| 51 | 37.8 | 34.8 | 52.2 |
| 86 | 58.9 | 52.9 | 79.3 |

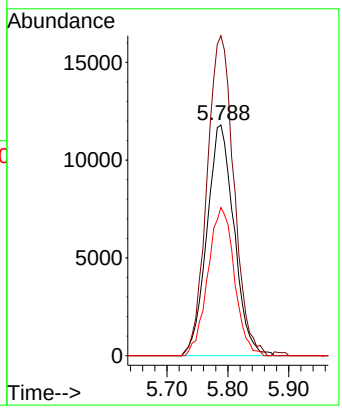





#21
trans-1,2-Dichloroethene
Concen: 16.473 ug/l
RT: 5.788 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 96 Resp: 3644

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 138.7 | 123.4 | 185.2 |
| 98 | 64.2 | 49.3 | 73.9 |




**Instrument :**
MSVOA_N
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VN0812WBS01

**Manual Integrations**
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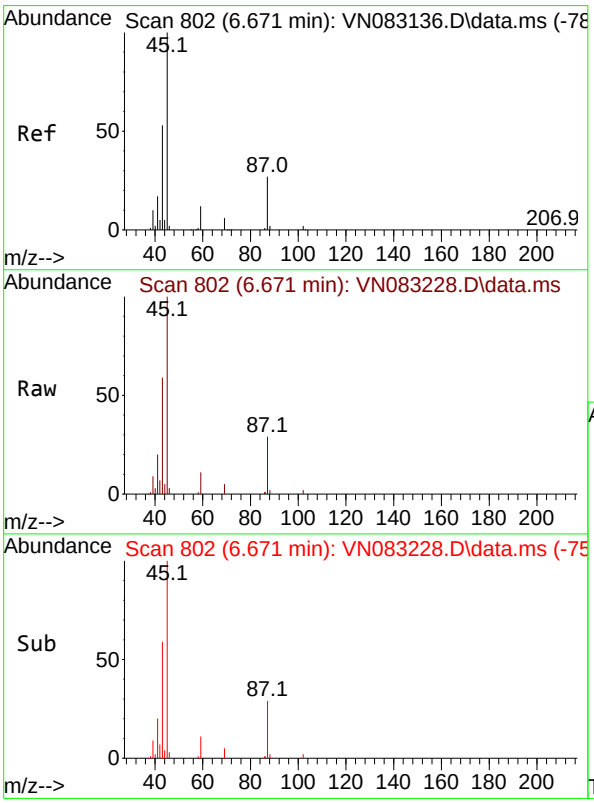
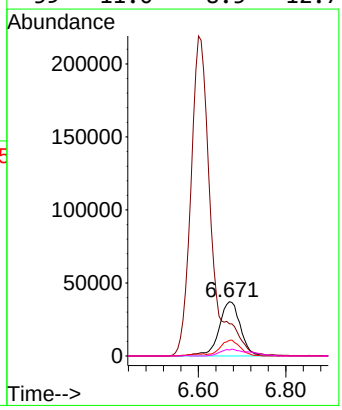
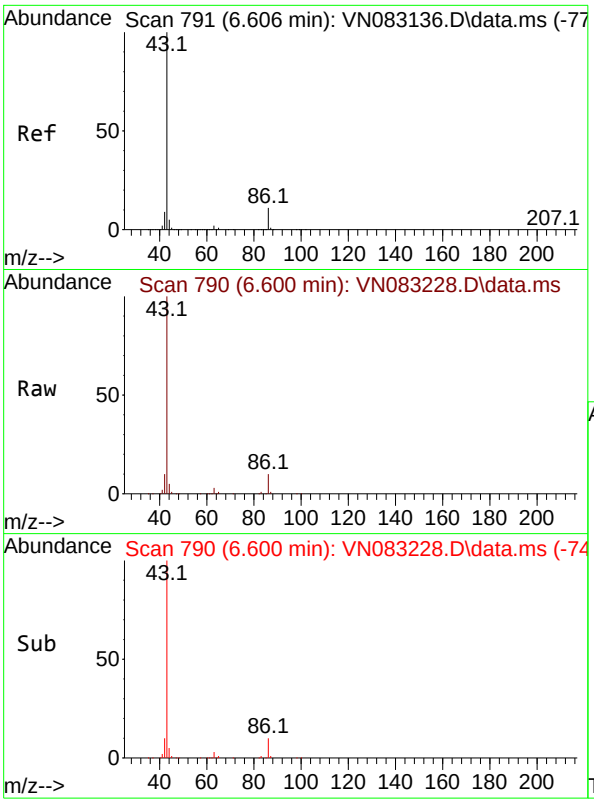



#22
Diisopropyl ether
Concen: 16.540 ug/l
RT: 6.671 min Scan# 802
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 45 Resp: 125770

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 57.8 | 44.0 | 66.0 |
| 87 | 28.9 | 19.7 | 29.5 |
| 59 | 11.0 | 8.5 | 12.7 |

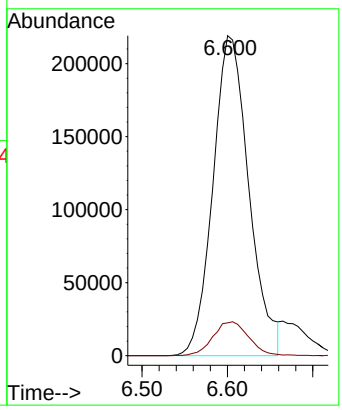





#23
Vinyl Acetate
Concen: 82.297 ug/l m
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 43 Resp: 64140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.3 | 7.3 | 10.9 |

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MSVOA_N
**ClientSampleId :**
VN0812WBS01

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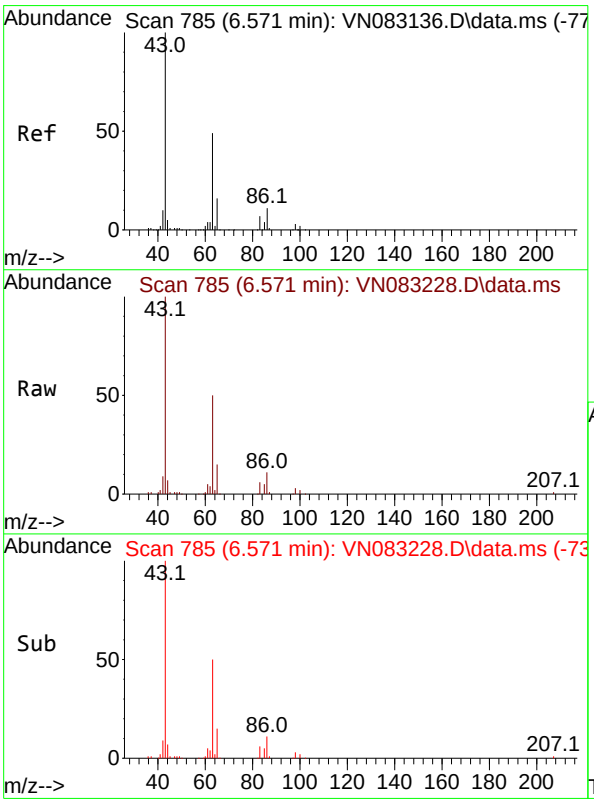
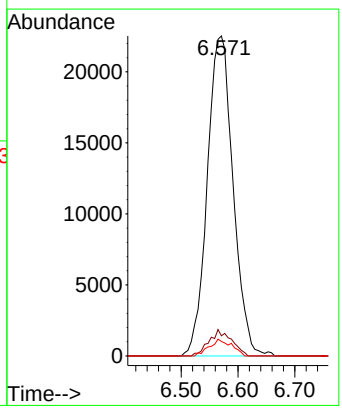
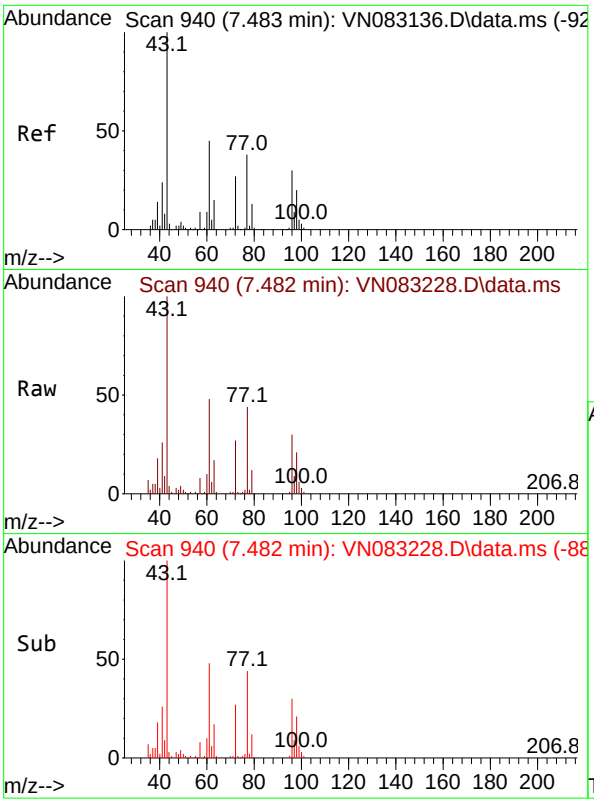



#24
1,1-Dichloroethane
Concen: 17.154 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 63 Resp: 71096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.3 | 3.3 | 9.9 |
| 100 | 4.5 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 81.002 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 43 Resp: 133769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 26.8 | 18.2 | 27.2 |

**Instrument :**
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**ClientSampleId :**
VN0812WBS01

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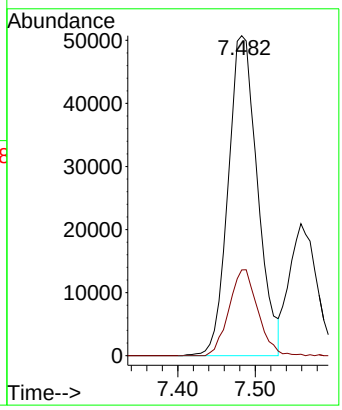
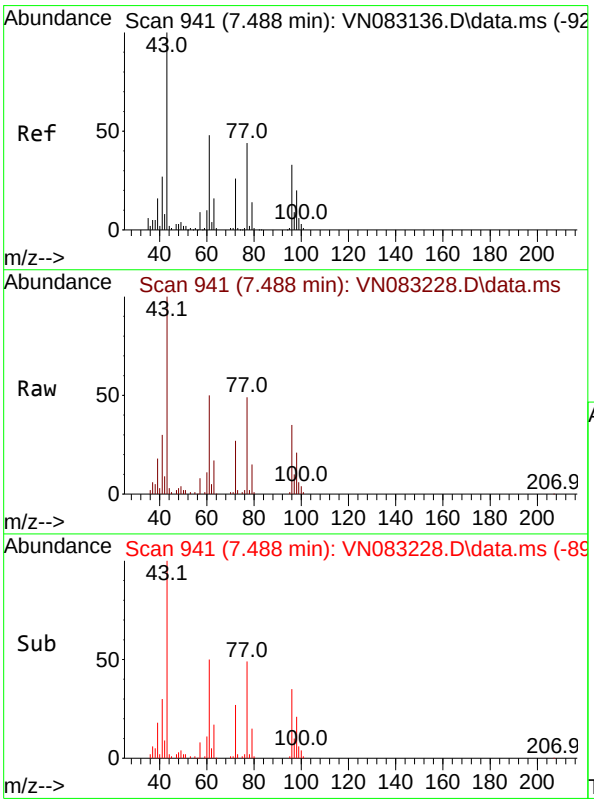
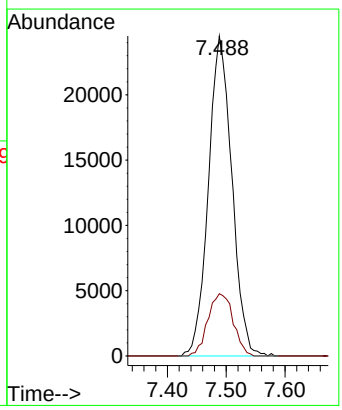


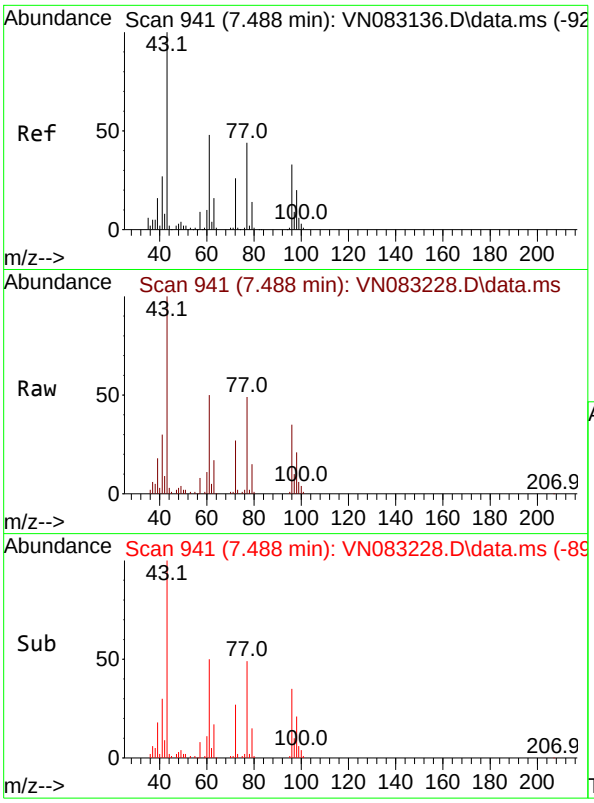




#26
2,2-Dichloropropane
Concen: 17.639 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 77 Resp: 67894

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.0 | 10.3 | 30.9 |






#27
cis-1,2-Dichloroethene
Concen: 16.468 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 96 Resp: 4396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 153.3 | 0.0 | 329.6 |
| 98 | 63.1 | 0.0 | 128.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

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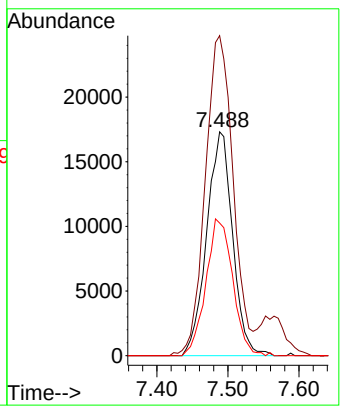
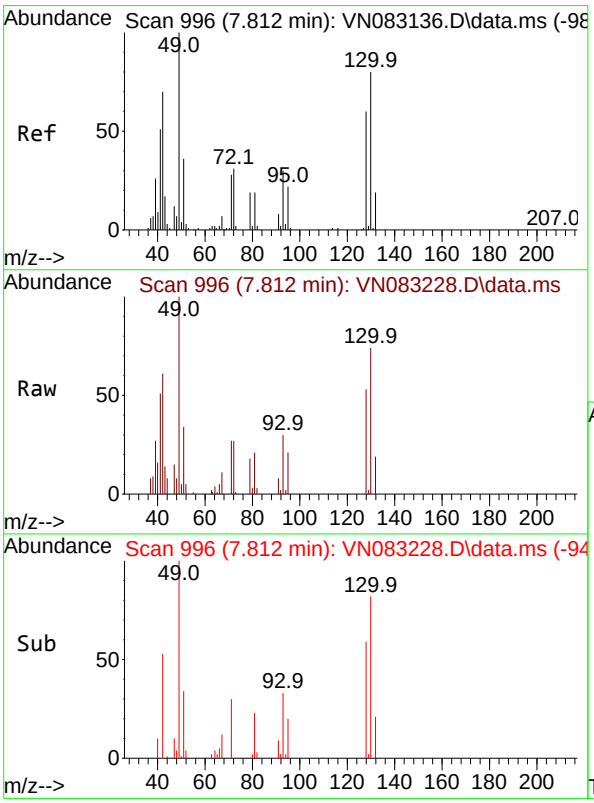
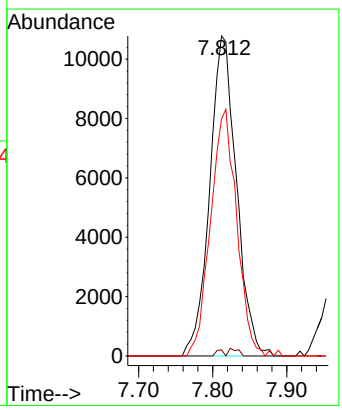


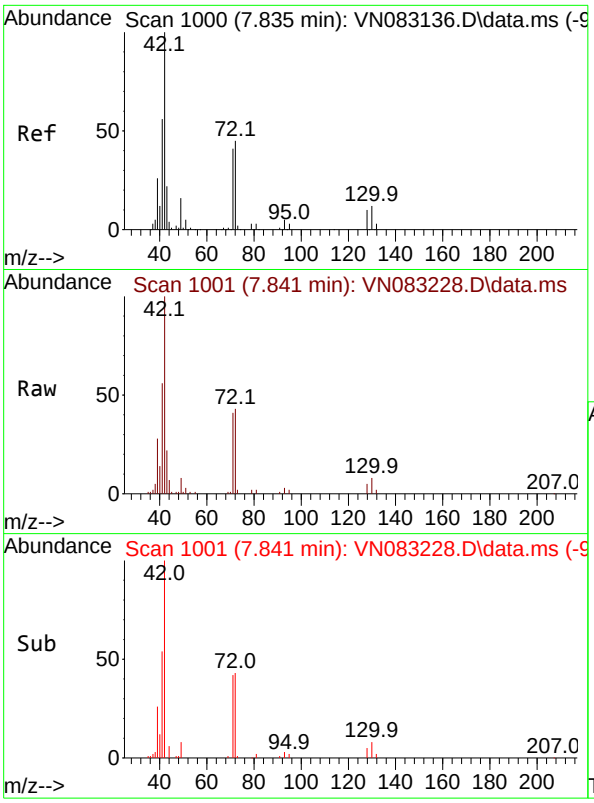




#28
Bromochloromethane
Concen: 15.970 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 49 Resp: 27049

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.5 | 0.0 | 3.8 |
| 130 | 0.0 | 50.5 | 75.7# |

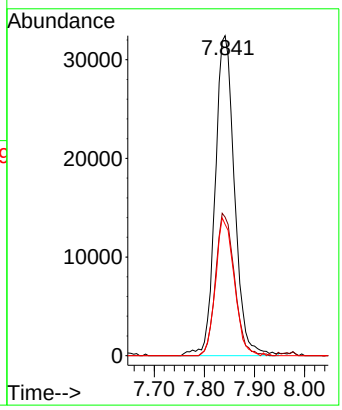





#29
Tetrahydrofuran
Concen: 81.321 ug/l
RT: 7.841 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 42 Resp: 8681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 43.6 | 30.0 | 45.0 |
| 71 | 41.5 | 28.3 | 42.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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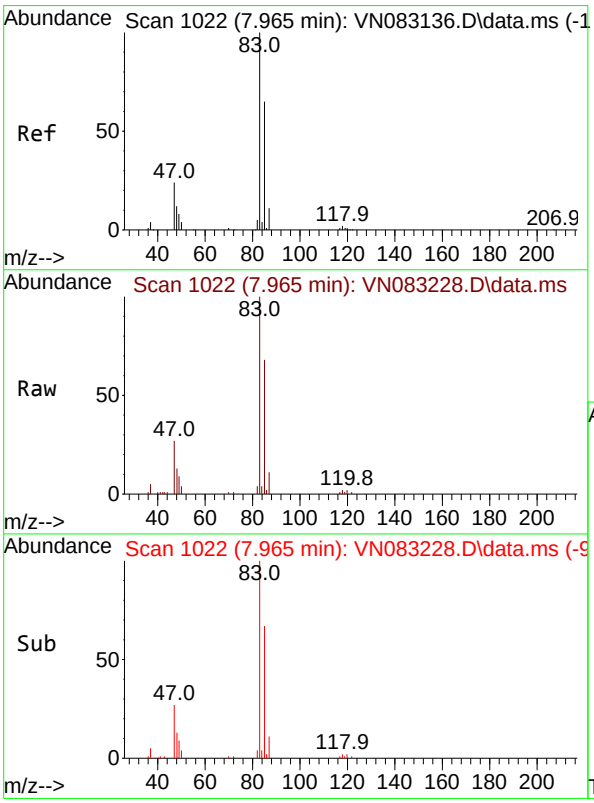
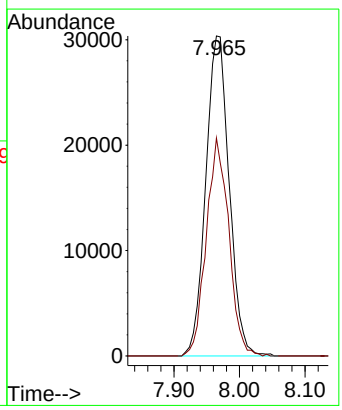
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

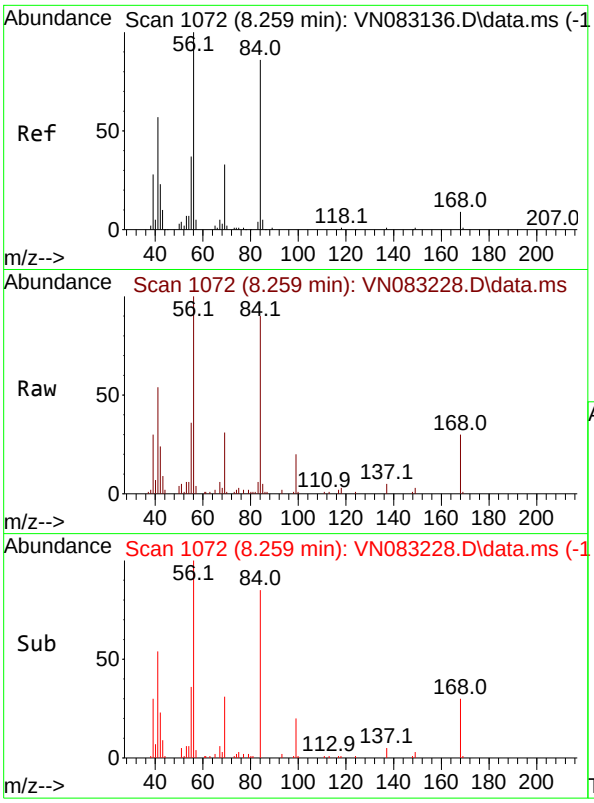



#30
Chloroform
Concen: 17.493 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 83 Resp: 75322

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 68.1 | 50.9 | 76.3 |






#31
Cyclohexane
Concen: 16.250 ug/l
RT: 8.259 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 56 Resp: 6619

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.7 | 24.5 | 36.7 |
| 84 | 88.2 | 66.0 | 99.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

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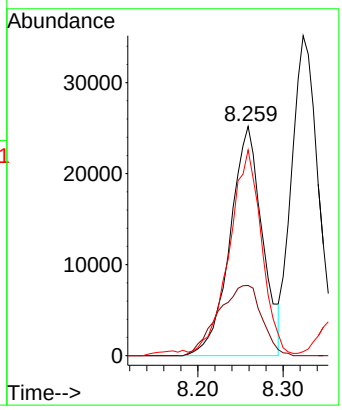
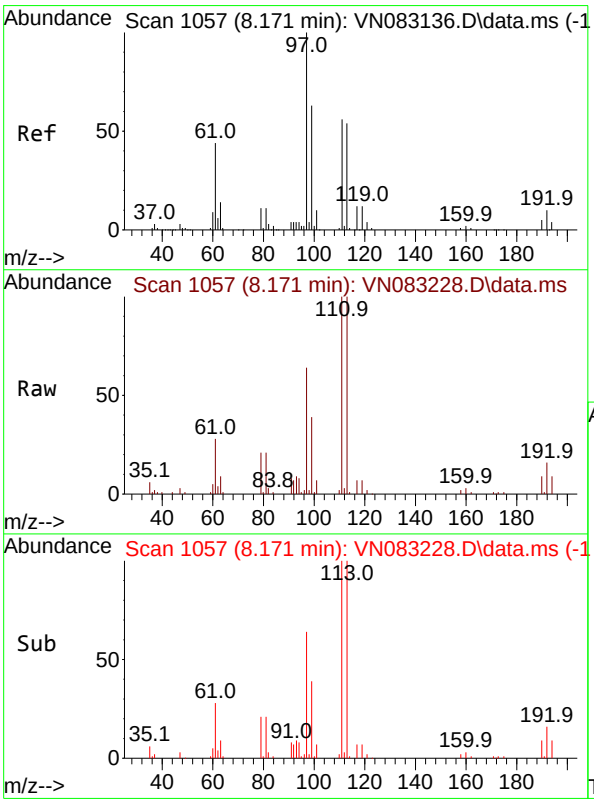
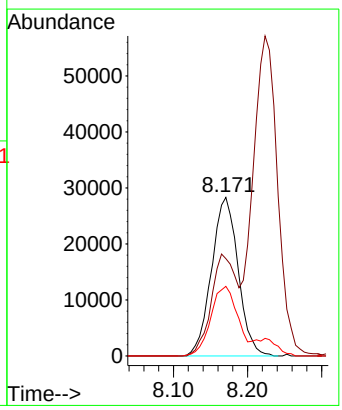


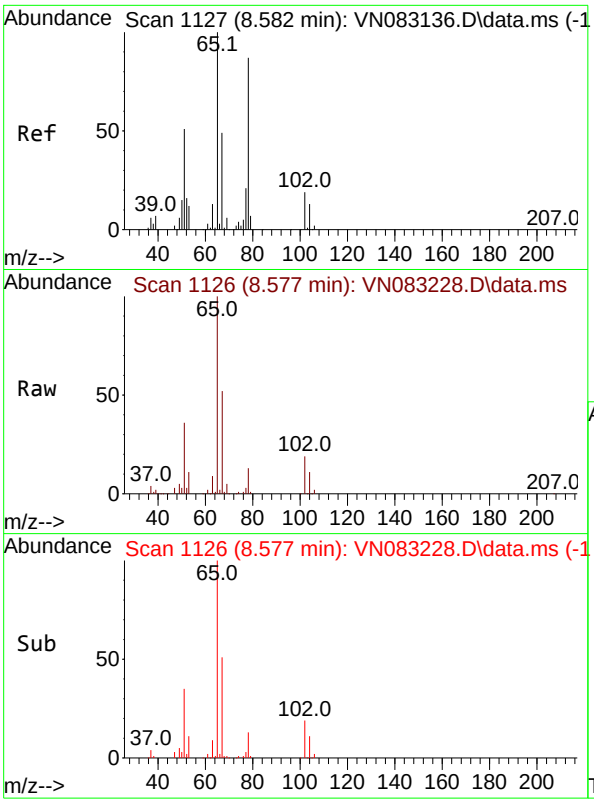




#32
1,1,1-Trichloroethane
Concen: 17.298 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 97 Resp: 70502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 60.3 | 52.0 | 78.0 |
| 61 | 45.4 | 42.1 | 63.1 |

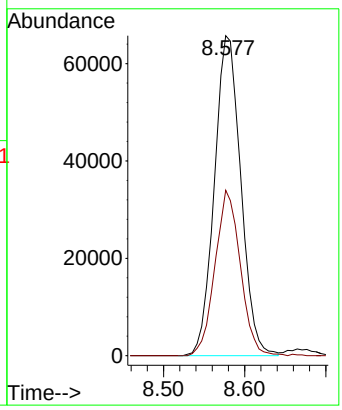





#33
1,2-Dichloroethane-d4
Concen: 54.074 ug/l
RT: 8.577 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 65 Resp: 14862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.6 | 0.0 | 104.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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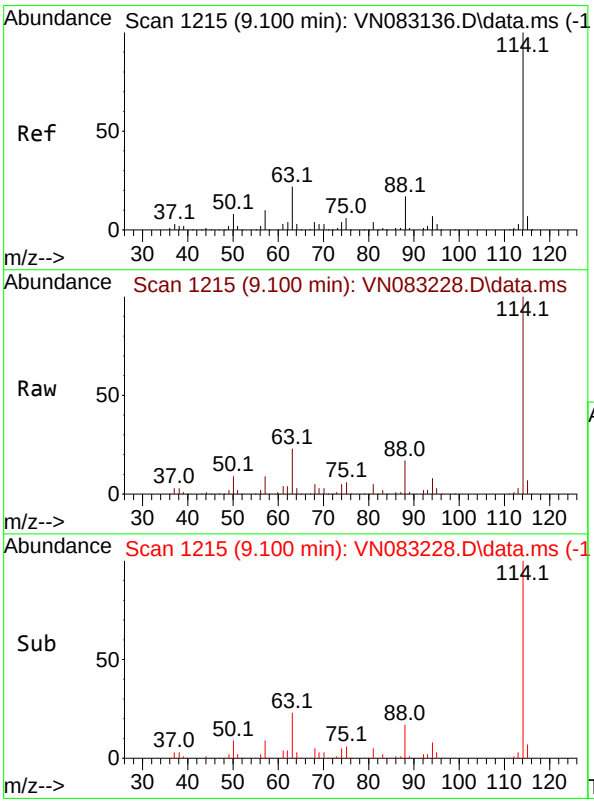
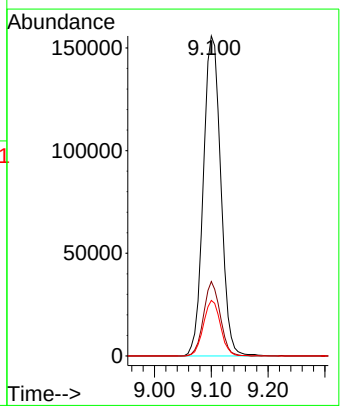
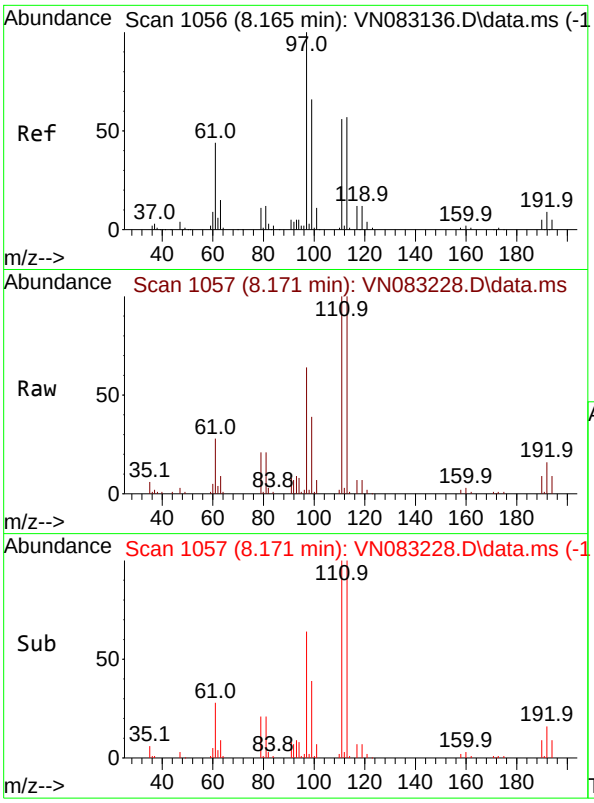



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:114 Resp: 331101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.2 | 0.0 | 44.6 |
| 88 | 17.3 | 0.0 | 31.4 |






#35
Dibromofluoromethane
Concen: 52.068 ug/l
RT: 8.171 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

Tgt Ion:113 Resp: 10760

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.2 | 82.4 | 123.6 |
| 192 | 17.2 | 14.9 | 22.3 |

**Manual Integrations**
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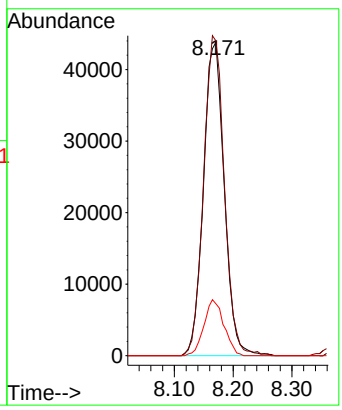
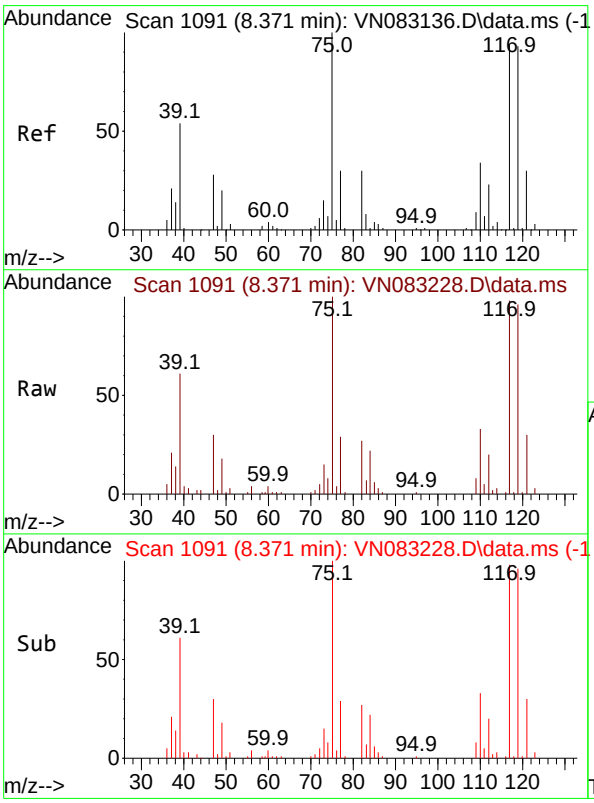
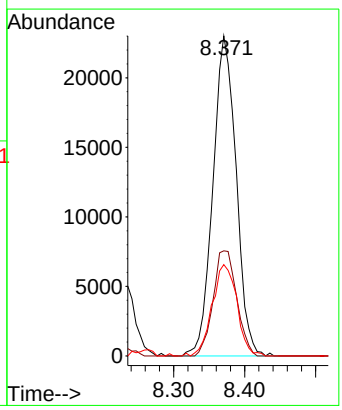


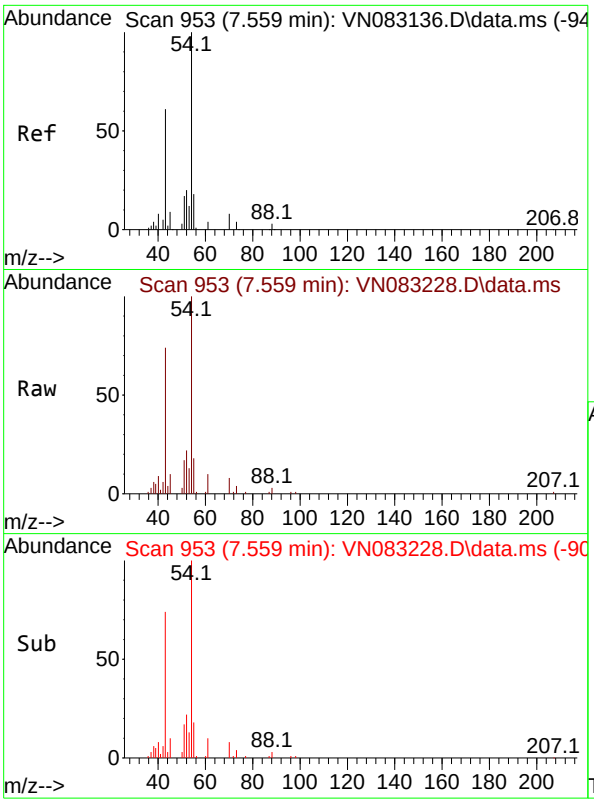




#36
1,1-Dichloropropene
Concen: 16.701 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 75 Resp: 52212

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.3 | 16.3 | 48.9 |
| 77 | 30.4 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 15.453 ug/l
RT: 7.559 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 43 Resp: 5409

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 14.4 | 9.3 | 13.9# |
| 70 | 11.1 | 7.0 | 10.6# |

**Instrument :**
MSVOA_N
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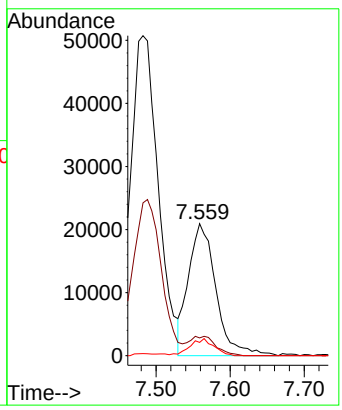
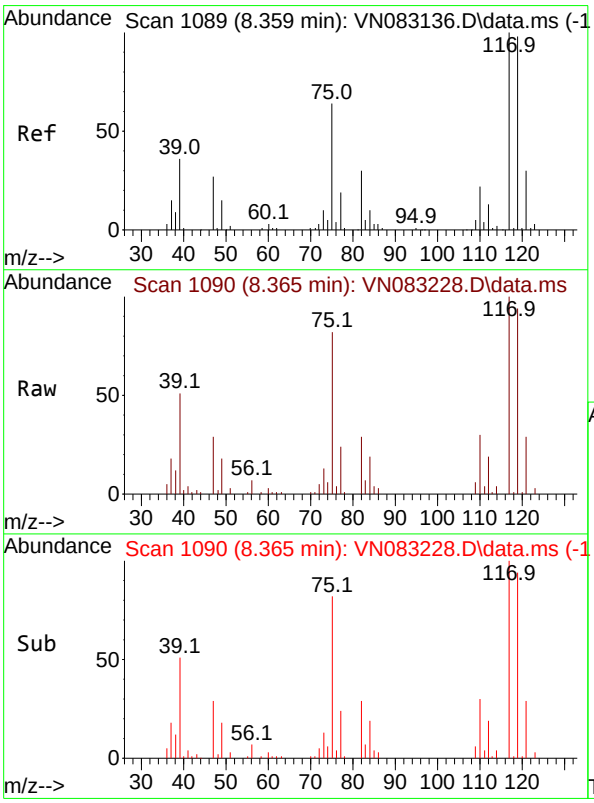
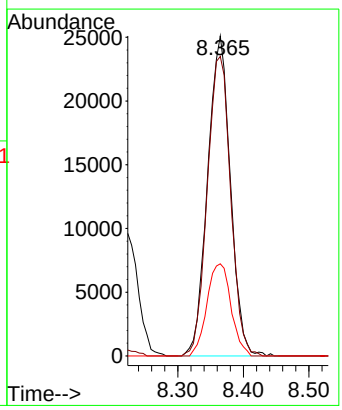


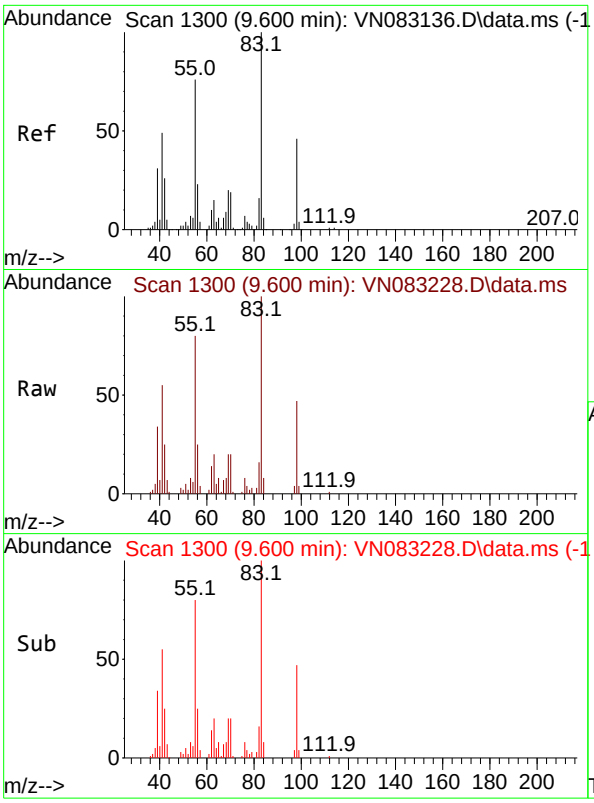




#38
Carbon Tetrachloride
Concen: 17.225 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:117 Resp: 60652

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 93.6 | 74.9 | 112.3 |
| 121 | 28.8 | 24.3 | 36.5 |

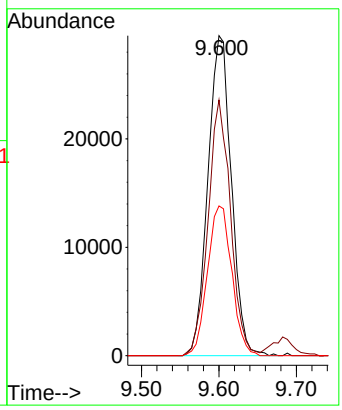





#39
Methylcyclohexane
Concen: 16.174 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 83 Resp: 6210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 79.9 | 66.4 | 99.6 |
| 98 | 46.8 | 40.7 | 61.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

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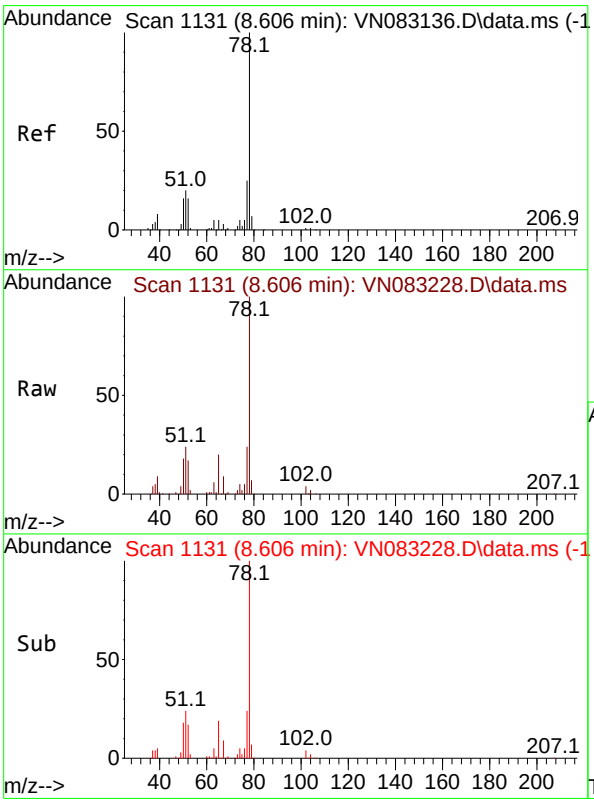
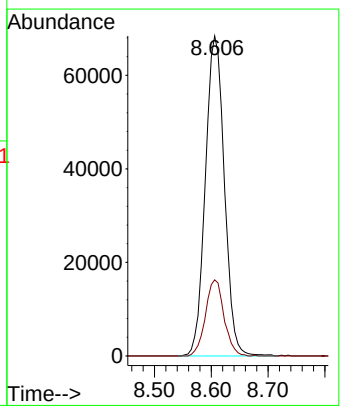
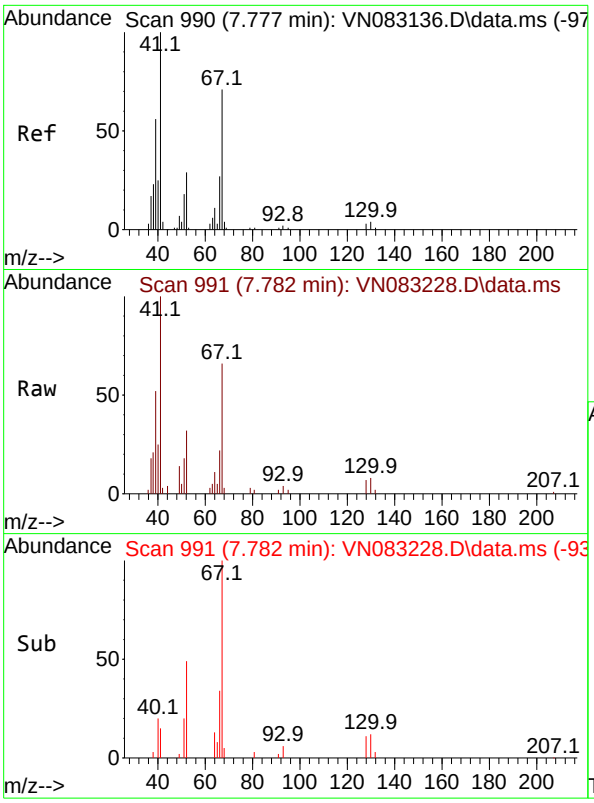



#40
Benzene
Concen: 17.052 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 78 Resp: 158813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.8 | 19.0 | 28.4 |

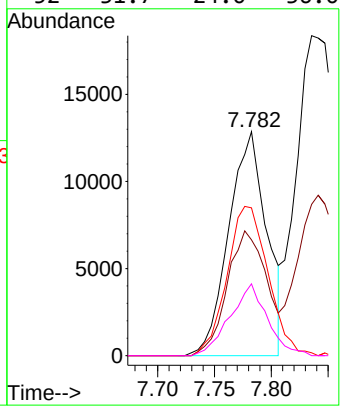





#41
Methacrylonitrile
Concen: 15.006 ug/l
RT: 7.782 min Scan# 9
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 41 Resp: 2986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 57.8 | 45.5 | 68.3 |
| 67 | 72.3 | 50.5 | 75.7 |
| 52 | 31.7 | 24.0 | 36.0 |

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**ClientSampleId :**
VN0812WBS01

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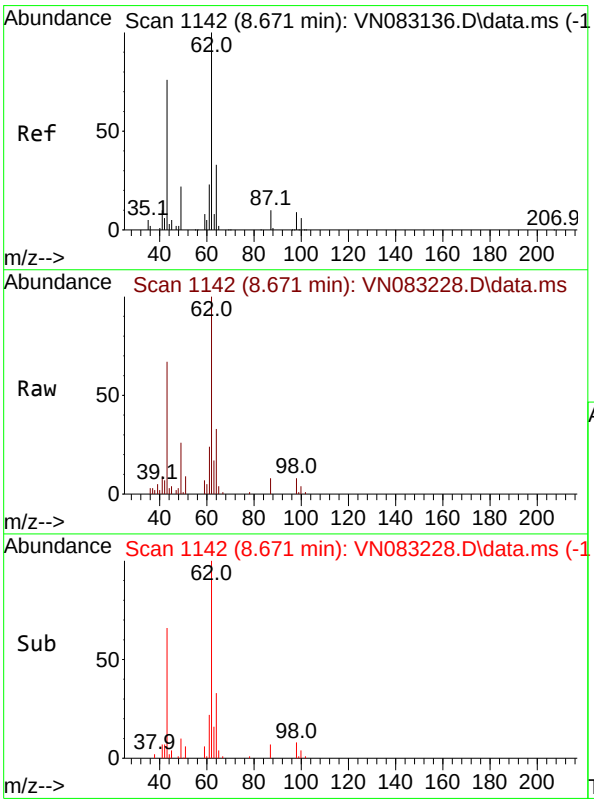
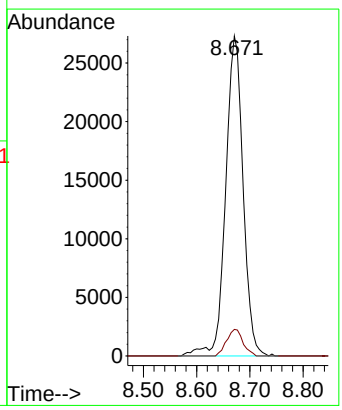
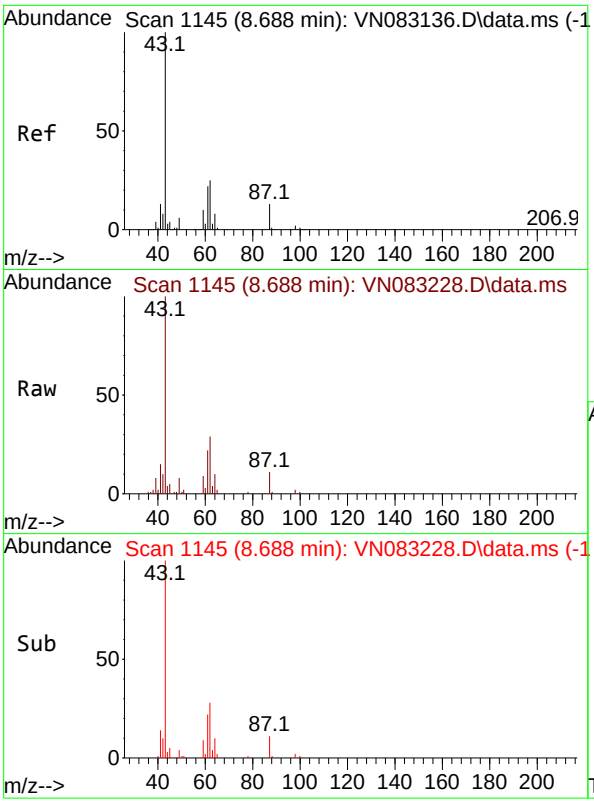



#42
1,2-Dichloroethane
Concen: 18.346 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 62 Resp: 62241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.8 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 14.996 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 43 Resp: 10008

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 24.6 | 17.8 | 26.6 |
| 87 | 12.3 | 8.2 | 12.2 |

**Instrument :**
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VN0812WBS01

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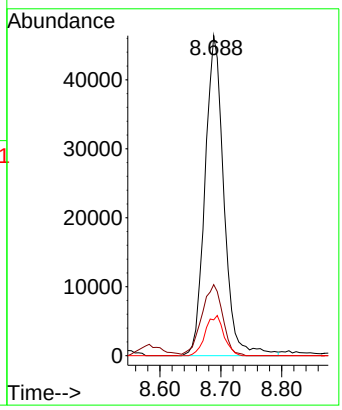
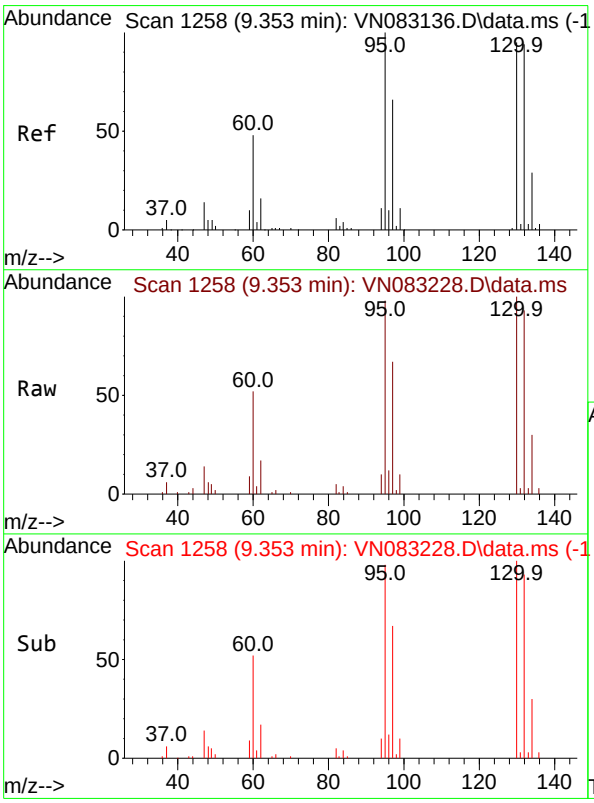
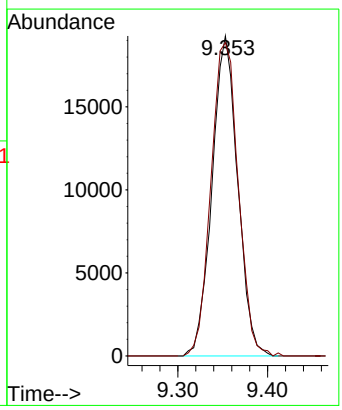


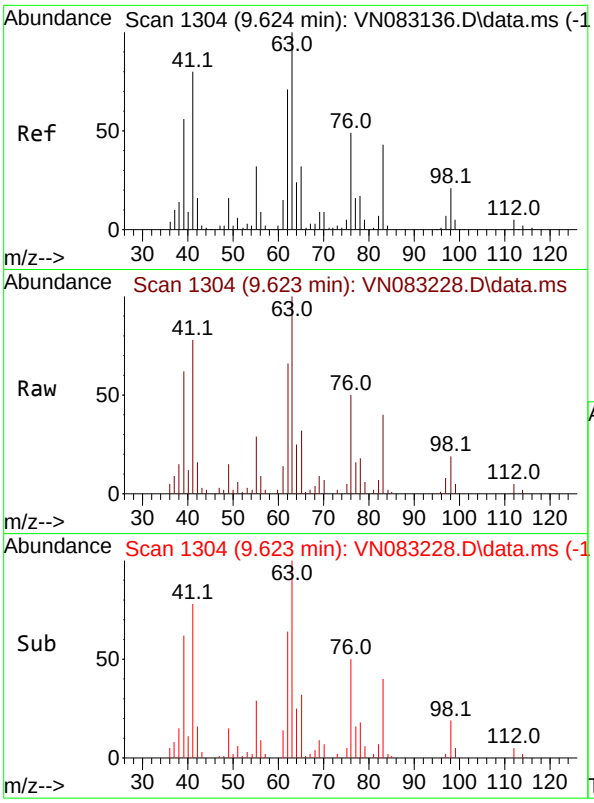




#44
Trichloroethene
Concen: 17.239 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:130 Resp: 38215

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 97.9 | 0.0 | 197.8 |

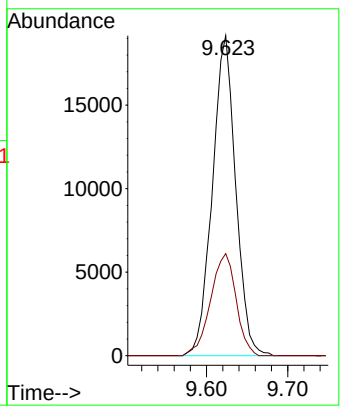





#45
1,2-Dichloropropane
Concen: 17.297 ug/l
RT: 9.623 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 63 Resp: 3823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.9 | 24.4 | 36.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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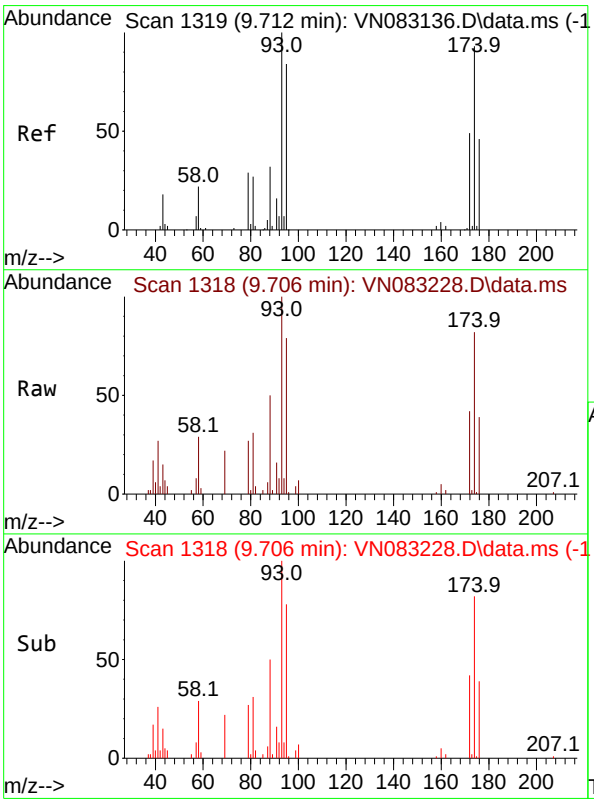
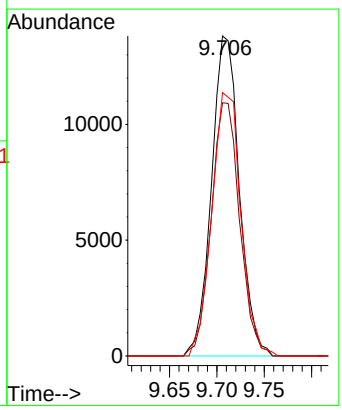
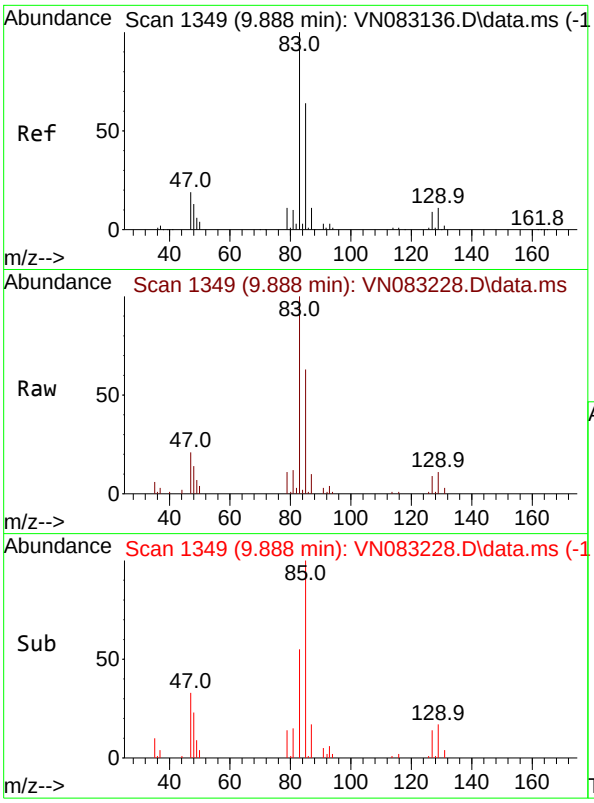



#46
Dibromomethane
Concen: 17.814 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 93 Resp: 28189

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 81.0 | 65.8 | 98.6 |
| 174 | 86.0 | 71.7 | 107.5 |






#47
Bromodichloromethane
Concen: 16.923 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

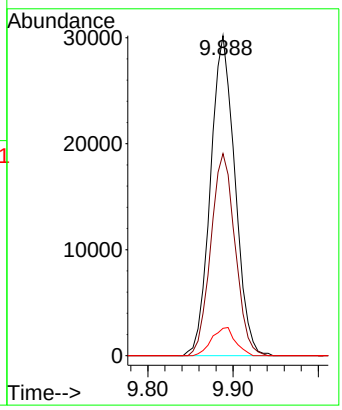
Tgt Ion: 83 Resp: 6012

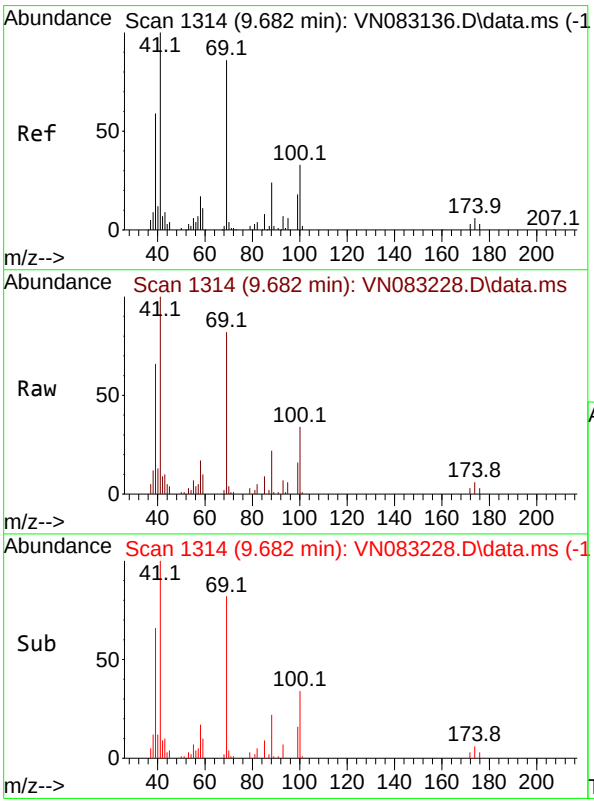
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.2 | 51.1 | 76.7 |
| 127 | 8.6 | 7.2 | 10.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

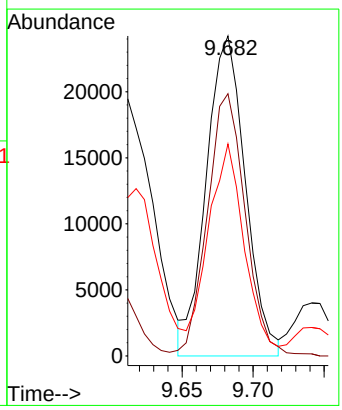


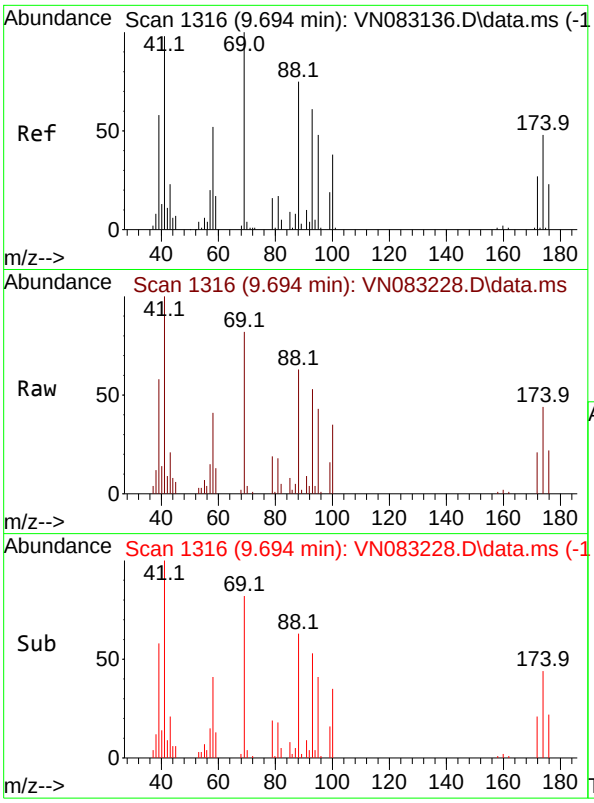




#48
Methyl methacrylate
Concen: 16.014 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 41 Resp: 46342

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 79.9 | 56.3 | 84.5 |
| 39 | 61.5 | 50.3 | 75.5 |






#49
1,4-Dioxane
Concen: 329.576 ug/l
RT: 9.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 88 Resp: 1720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 33.1 | 27.8 | 41.8 |
| 58 | 72.1 | 59.4 | 89.0 |

**Instrument :**
MSVOA_N
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VN0812WBS01

**Manual Integrations**
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Reviewed By :John Carlone 08/13/2024
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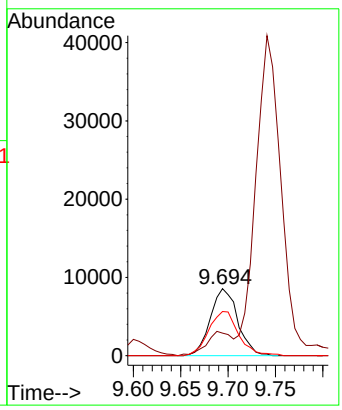
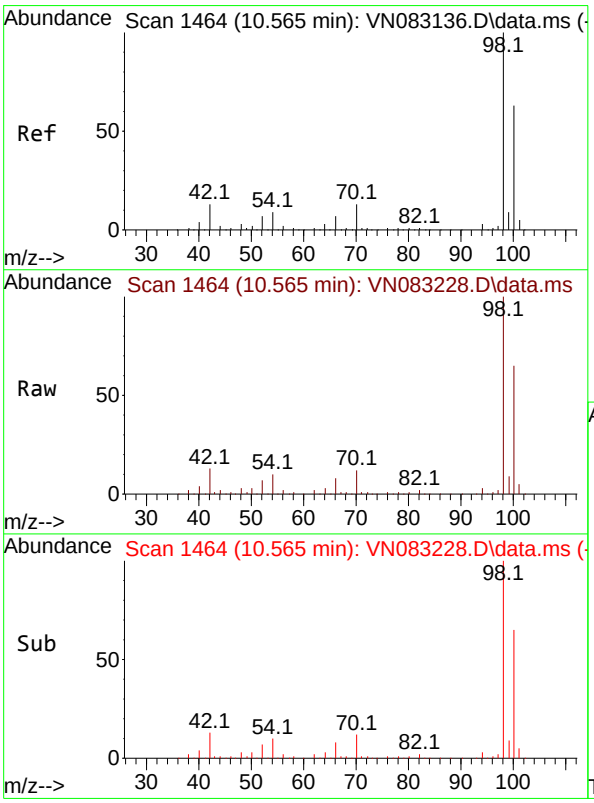
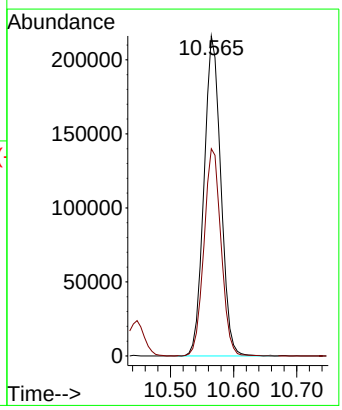


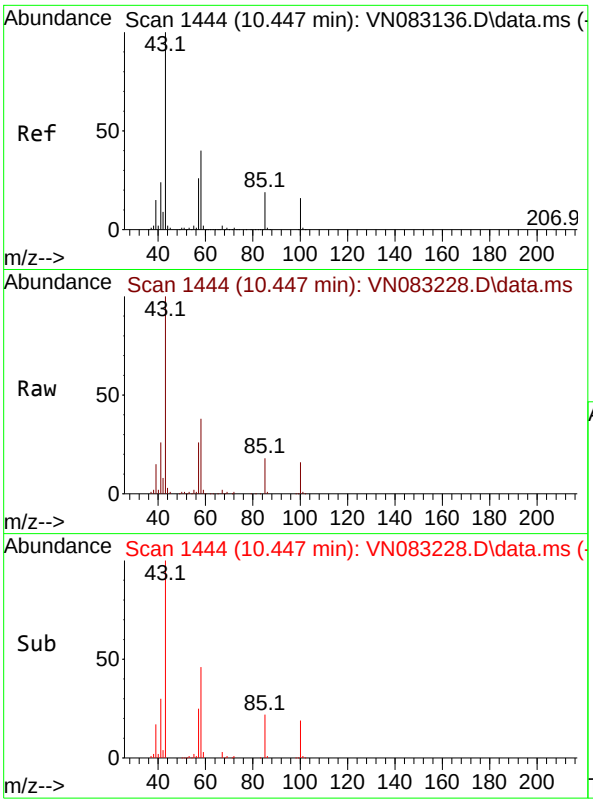




#50
Toluene-d8
Concen: 51.874 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 98 Resp: 399905

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 51.5 | 77.3 |






#51
4-Methyl-2-Pentanone
Concen: 83.465 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 43 Resp: 27627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 38.8 | 28.2 | 42.4 |

**Instrument :**
MSVOA_N
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VN0812WBS01

**Manual Integrations**
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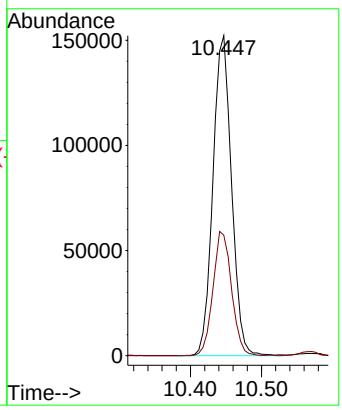
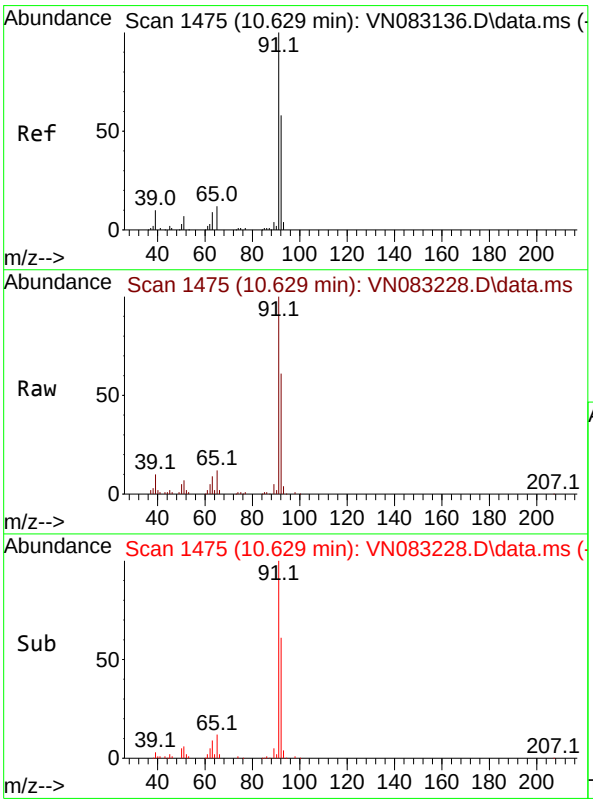
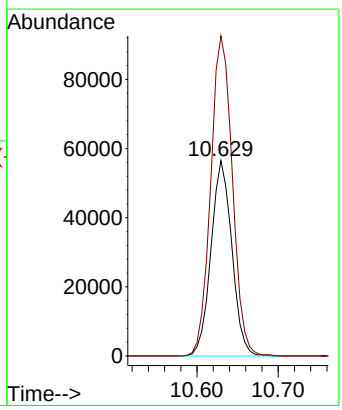


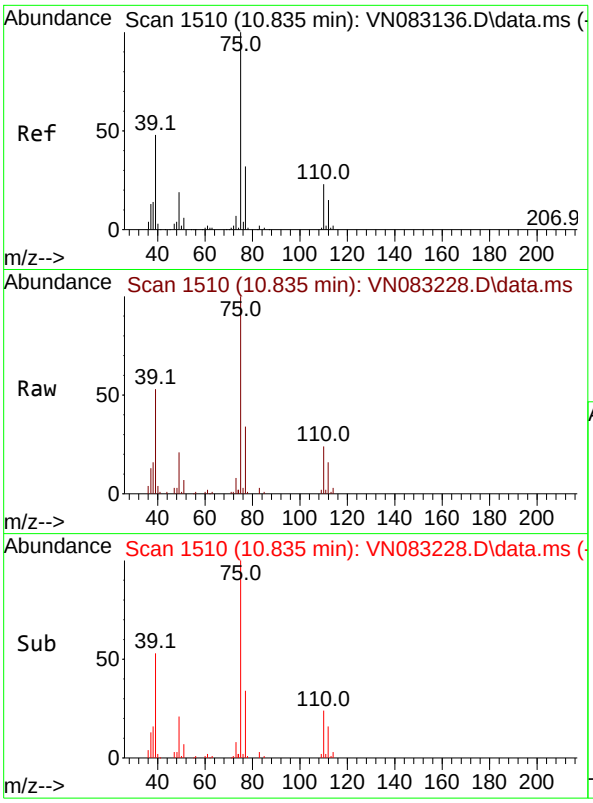




#52
Toluene
Concen: 17.156 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 92 Resp: 100952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 170.4 | 139.4 | 209.0 |

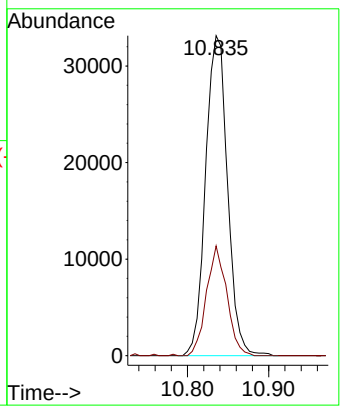





#53
t-1,3-Dichloropropene
Concen: 16.995 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 75 Resp: 6202

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 34.3 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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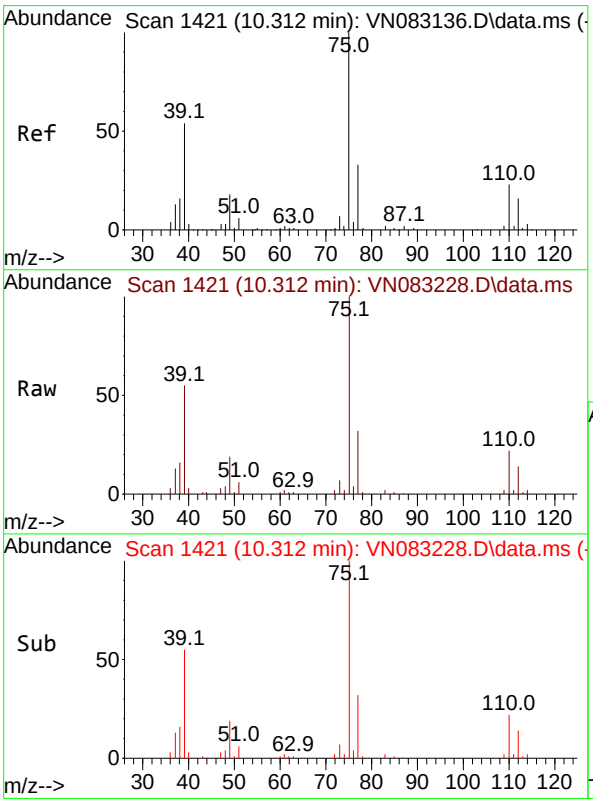
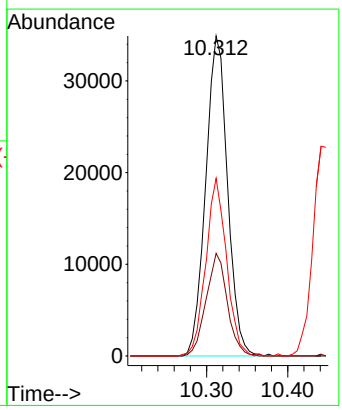
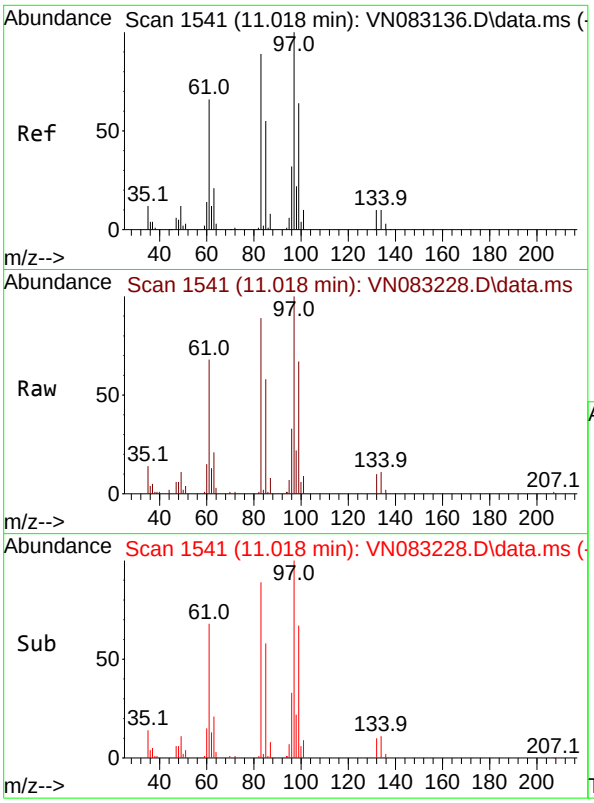



#54
cis-1,3-Dichloropropene
Concen: 16.792 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 75 Resp: 65184

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.1 | 24.3 | 36.5 |
| 39 | 55.5 | 50.5 | 75.7 |

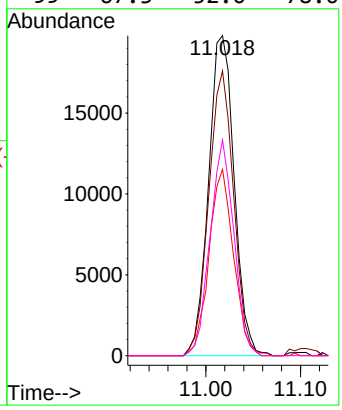





#55
1,1,2-Trichloroethane
Concen: 17.644 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 97 Resp: 3720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 89.0 | 71.4 | 107.0 |
| 85 | 58.3 | 45.8 | 68.6 |
| 99 | 67.3 | 52.0 | 78.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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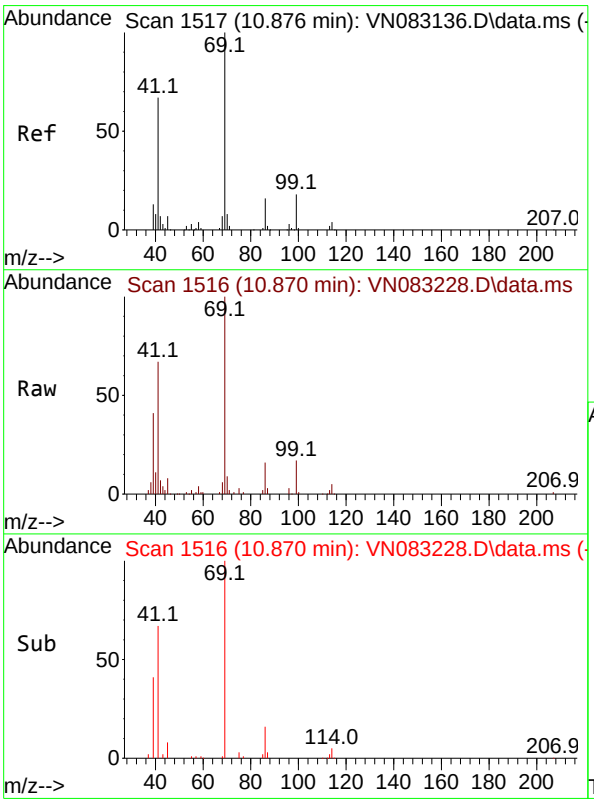
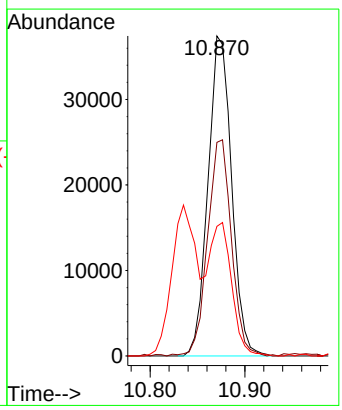
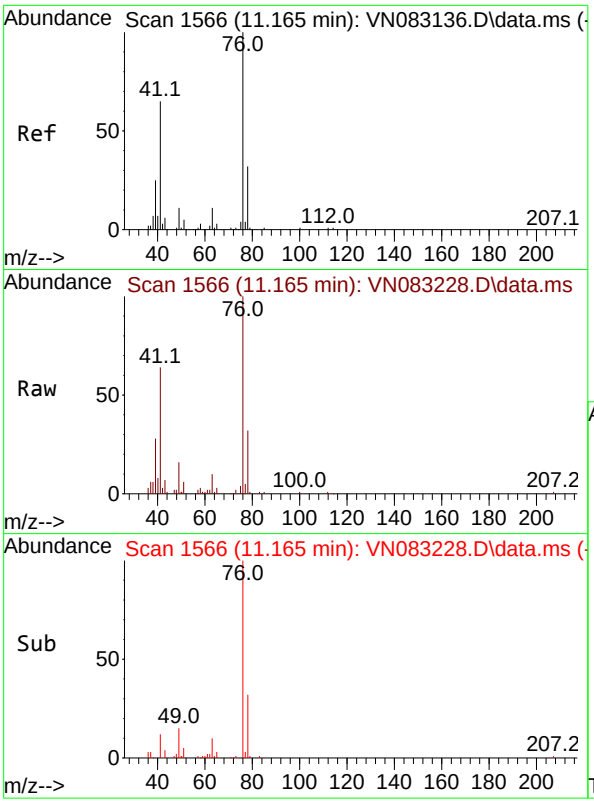



#56
Ethyl methacrylate
Concen: 16.269 ug/l
RT: 10.870 min Scan# 1516
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 69 Resp: 64678

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 68.3 | 63.4 | 95.2 |
| 39 | 36.9 | 37.4 | 56.0# |






#57
1,3-Dichloropropane
Concen: 17.307 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 76 Resp: 6505

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.5 | 25.6 | 38.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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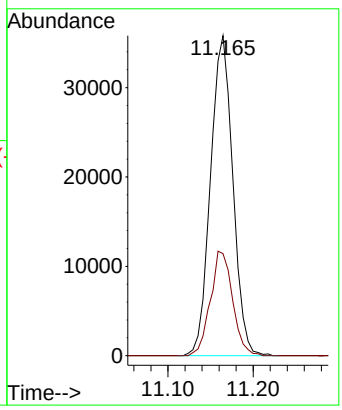
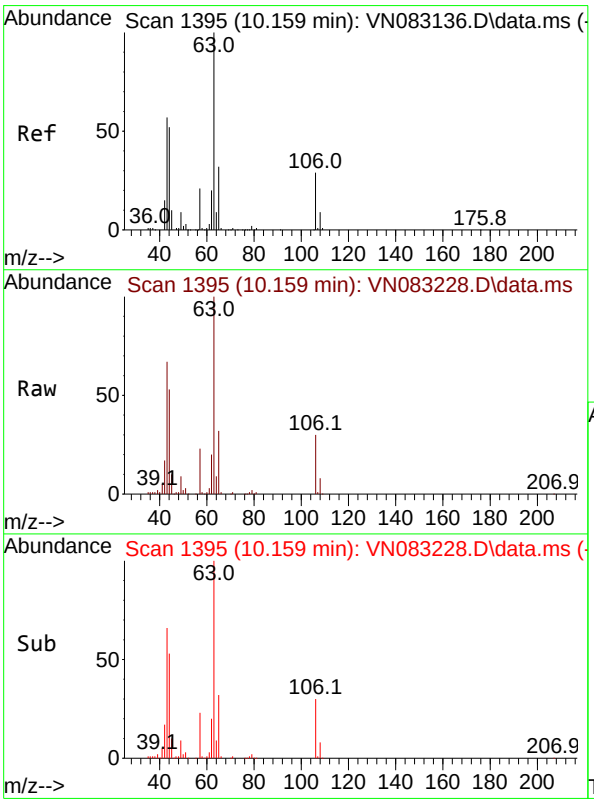
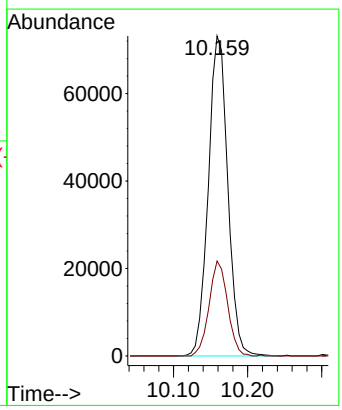


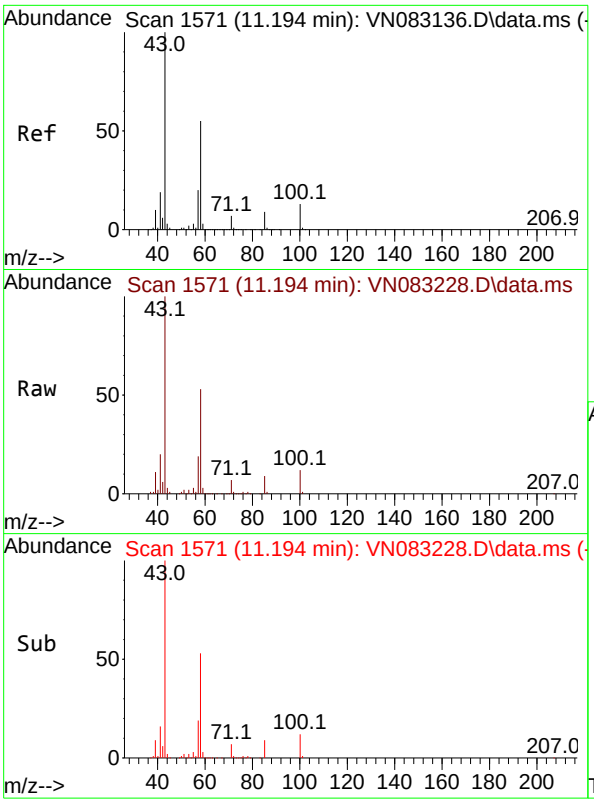




#58
2-Chloroethyl Vinyl ether
Concen: 79.420 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 63 Resp: 133461

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.2 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 81.340 ug/l
RT: 11.194 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 43 Resp: 20829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 53.4 | 24.6 | 73.8 |

**Instrument :**
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VN0812WBS01

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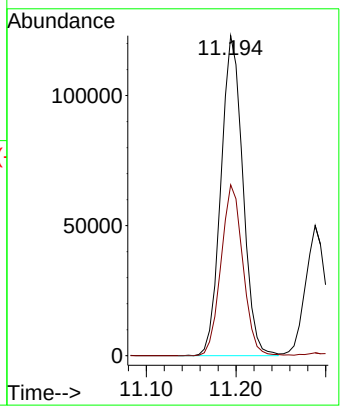
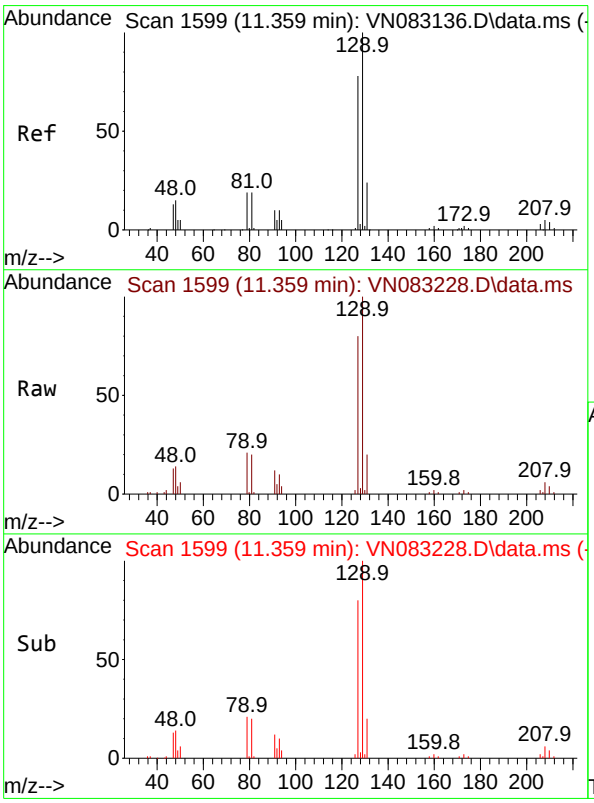
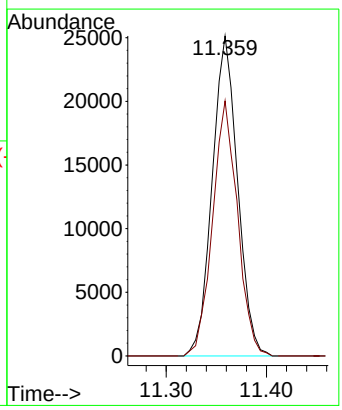


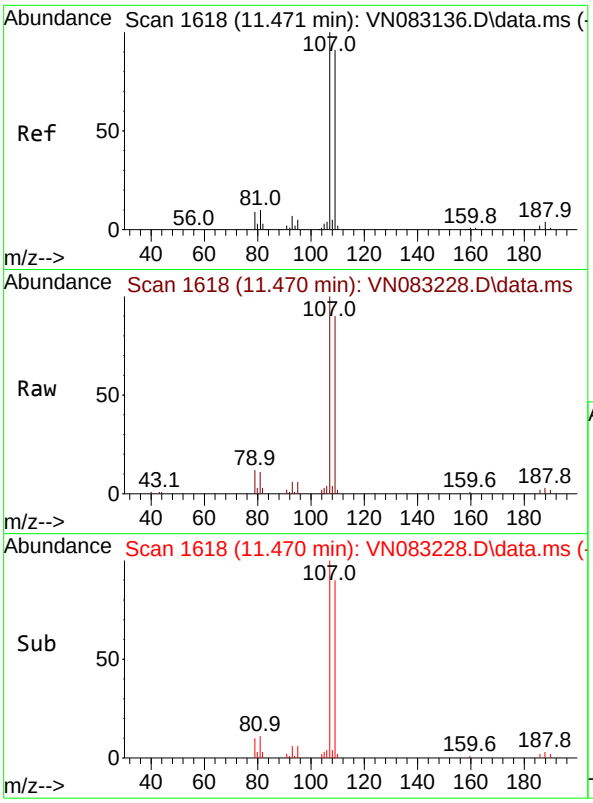




#60
Dibromochloromethane
Concen: 17.334 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:129 Resp: 44195

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.3 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 16.790 ug/l
RT: 11.470 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:107 Resp: 3719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.5 | 73.7 | 110.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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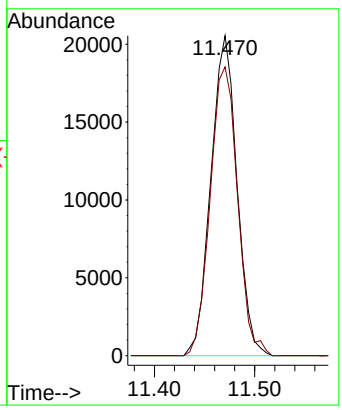
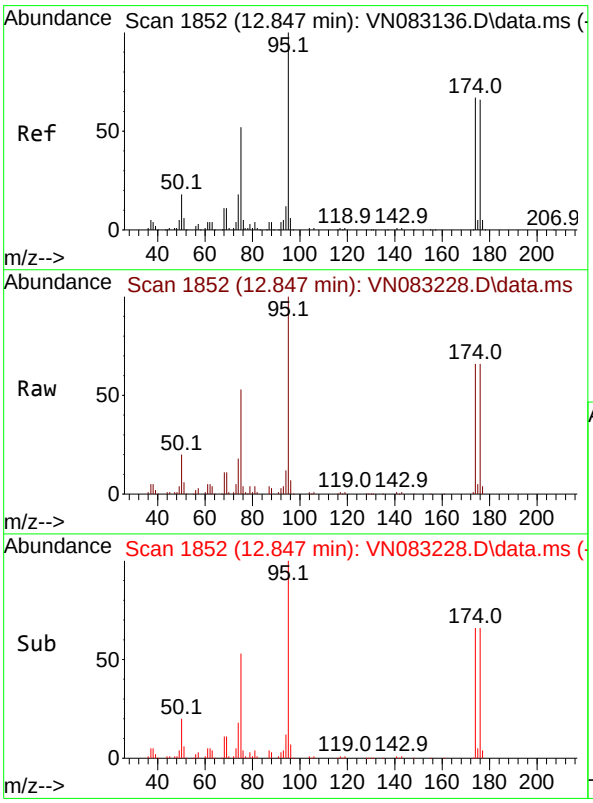
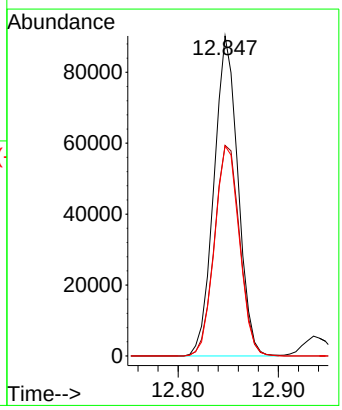


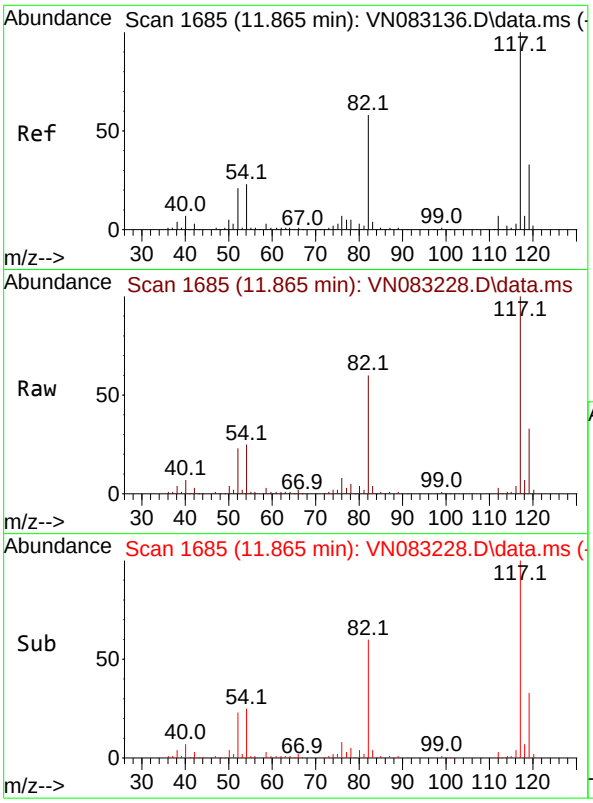




#62
4-Bromofluorobenzene
Concen: 49.916 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 95 Resp: 150021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 69.7 | 0.0 | 159.2 |
| 176 | 67.9 | 0.0 | 147.6 |

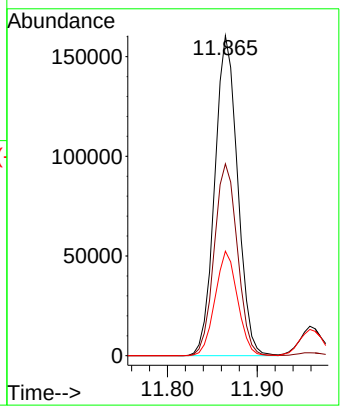





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:117 Resp: 28377

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.9 | 47.5 | 71.3 |
| 119 | 32.7 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

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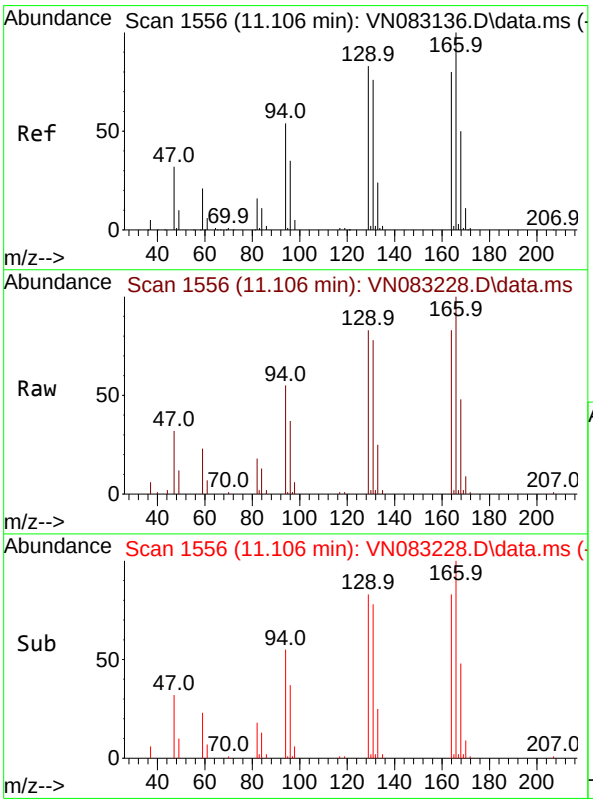
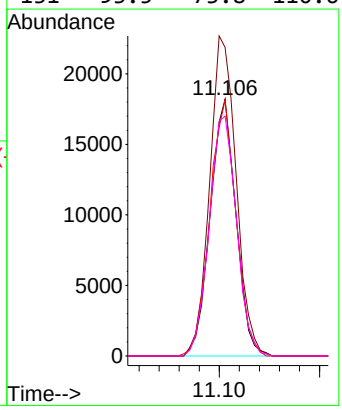
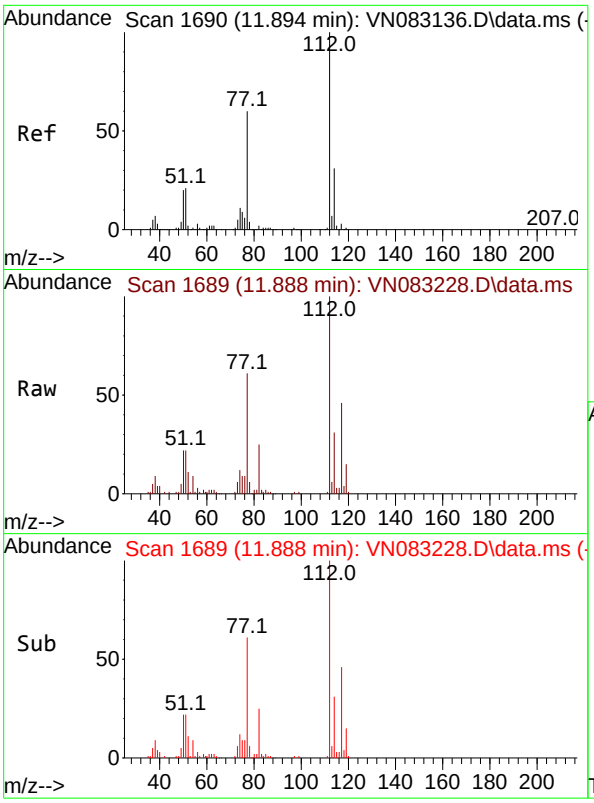



#64
Tetrachloroethene
Concen: 17.334 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:164 Resp: 32577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 120.3 | 101.4 | 152.0 |
| 129 | 99.7 | 75.7 | 113.5 |
| 131 | 93.5 | 73.8 | 110.6 |

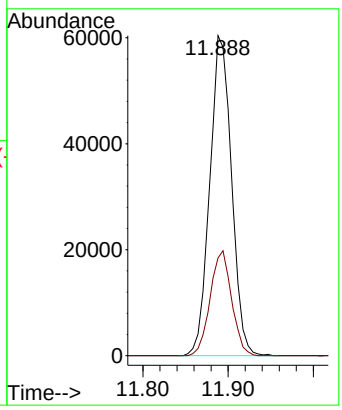





#65
Chlorobenzene
Concen: 17.091 ug/l
RT: 11.888 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:112 Resp: 10717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 30.5 | 26.2 | 39.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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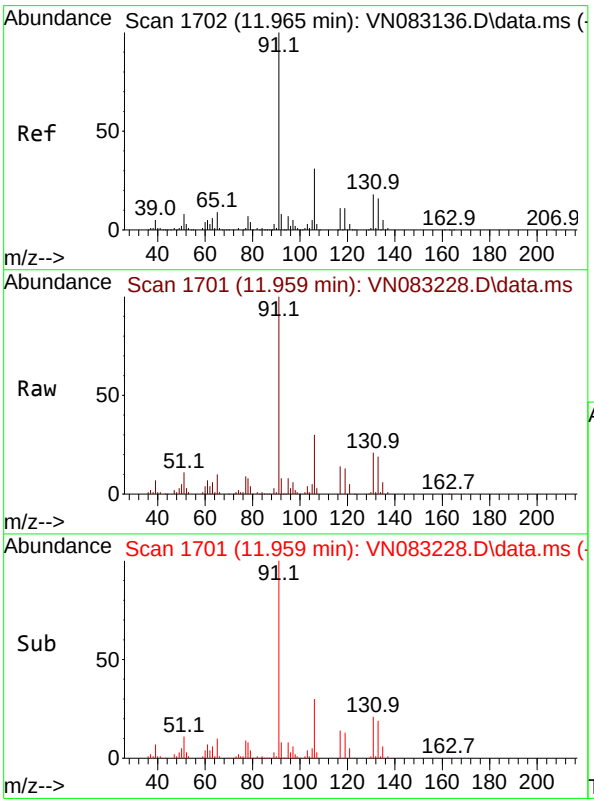
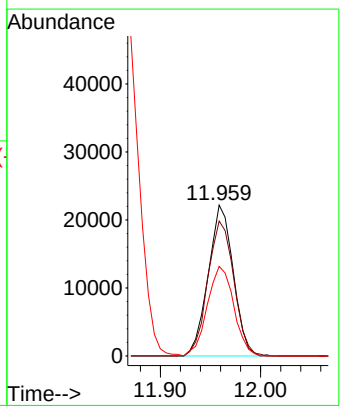
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

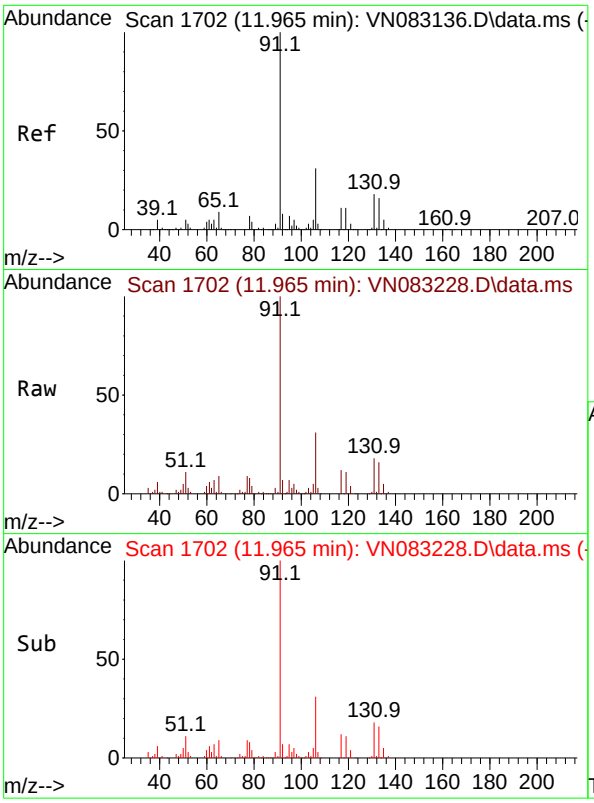



#66
1,1,1,2-Tetrachloroethane
Concen: 17.383 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:131 Resp: 38446

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 93.1 | 47.3 | 142.0 |
| 119 | 62.7 | 32.5 | 97.4 |

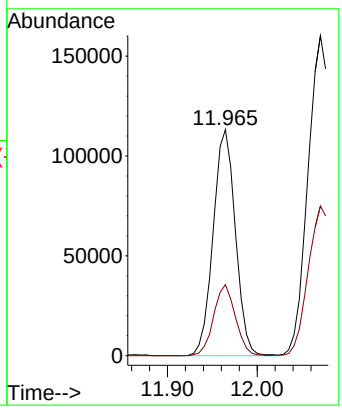





#67
Ethyl Benzene
Concen: 16.918 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 91 Resp: 19462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.4 | 24.0 | 36.0 |

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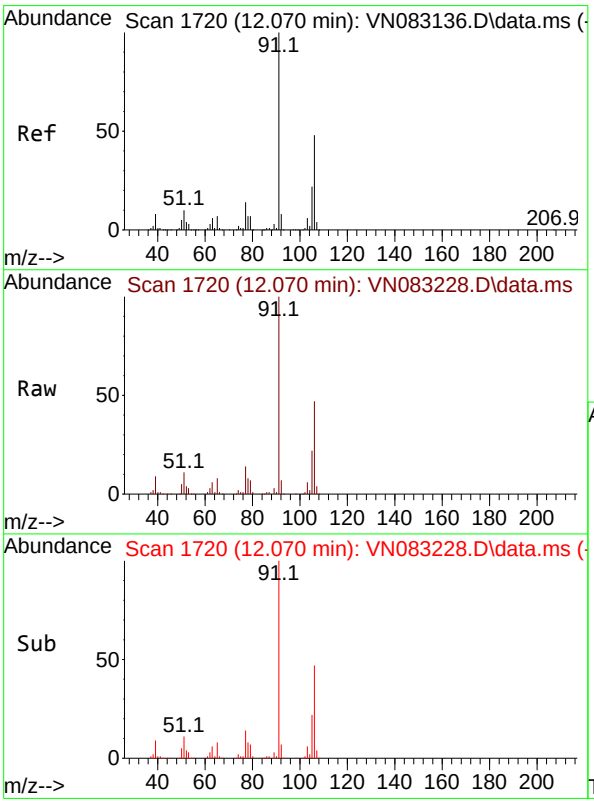
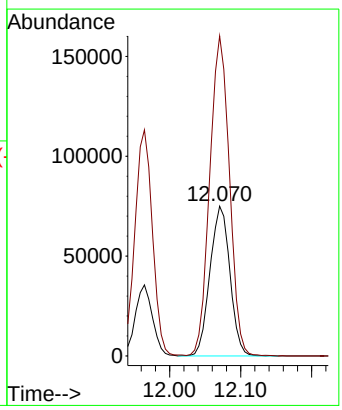
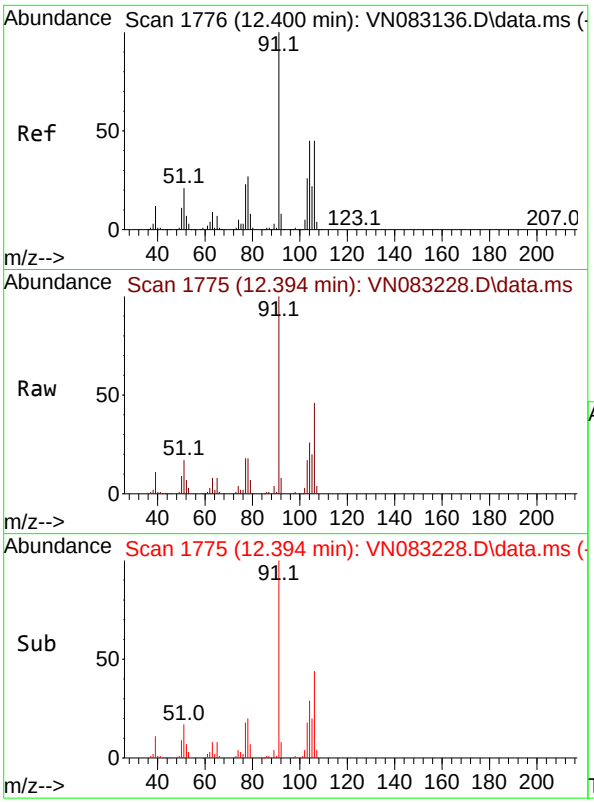



#68
m/p-Xylenes
Concen: 33.919 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:106 Resp: 146169

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 211.4 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 16.996 ug/l
RT: 12.394 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:106 Resp: 7223

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.7 | 111.3 | 333.9 |

**Instrument :**
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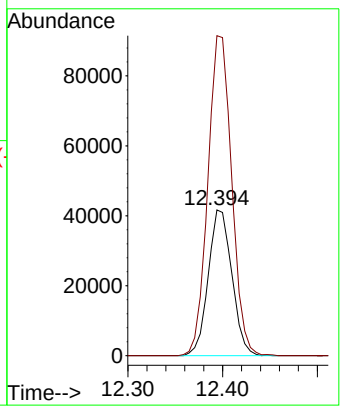
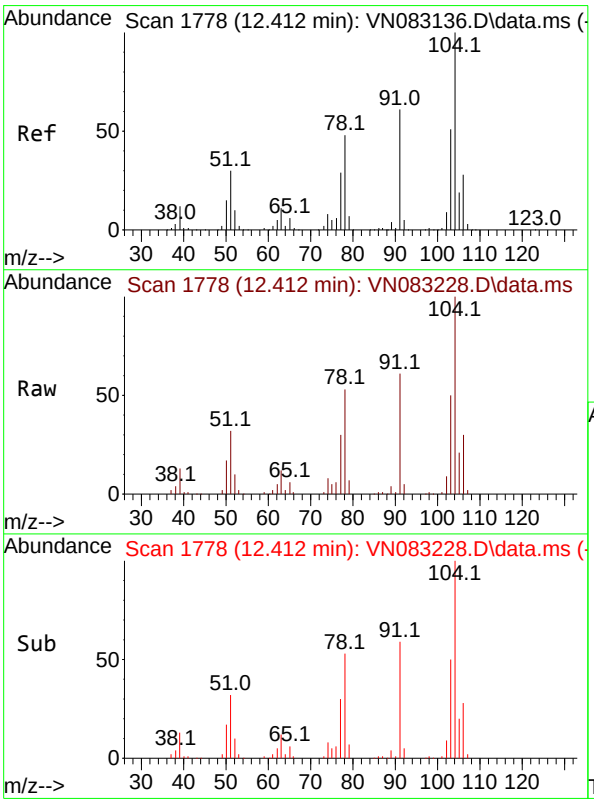
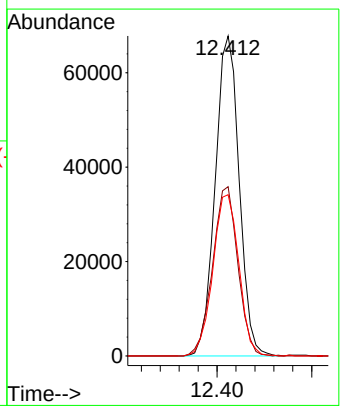


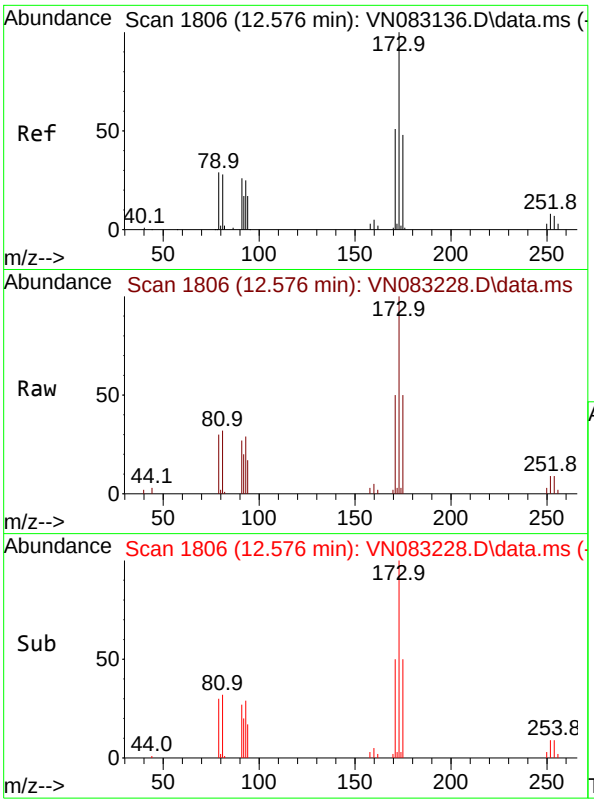




#70
Styrene
Concen: 16.721 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:104 Resp: 119364

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 55.7 | 41.6 | 62.4 |
| 103 | 54.5 | 44.0 | 66.0 |

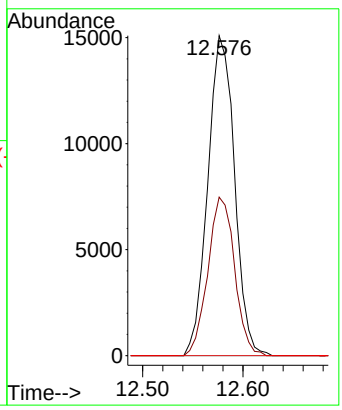





#71
Bromoform
Concen: 16.668 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:173 Resp: 2792

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.6 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
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VN0812WBS01

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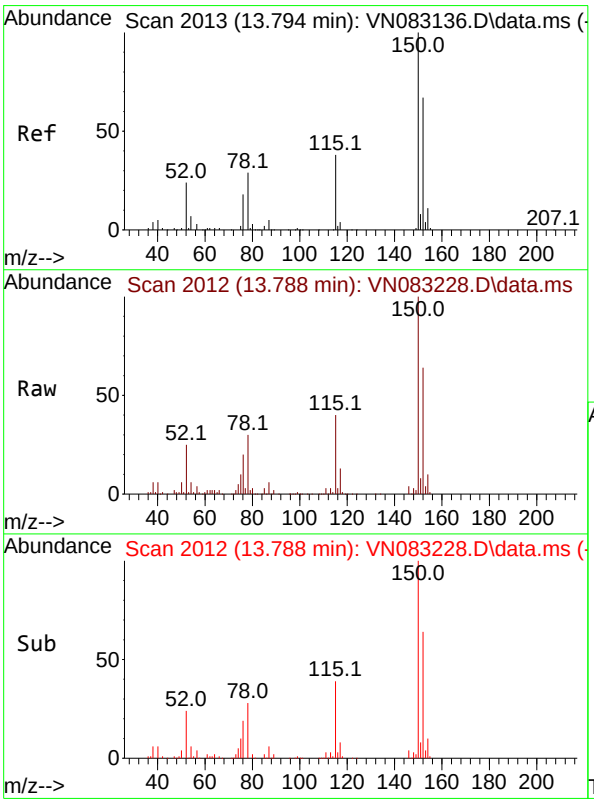
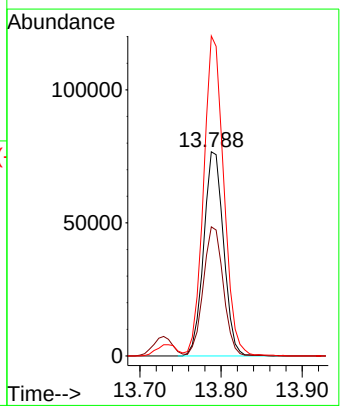
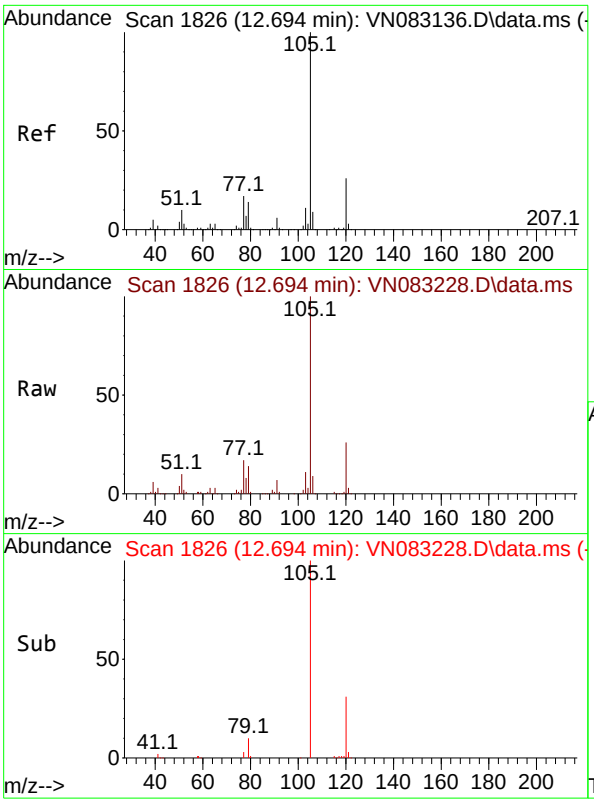



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.788 min Scan# 2012
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:152 Resp: 130523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.6 | 30.6 | 91.6 |
| 150 | 159.1 | 0.0 | 348.6 |






#73
Isopropylbenzene
Concen: 17.157 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:105 Resp: 18730

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.5 | 12.9 | 38.6 |

**Instrument :**
MSVOA_N
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VN0812WBS01

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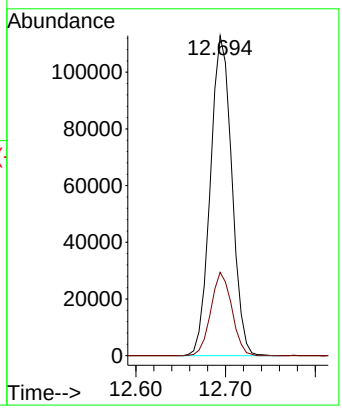
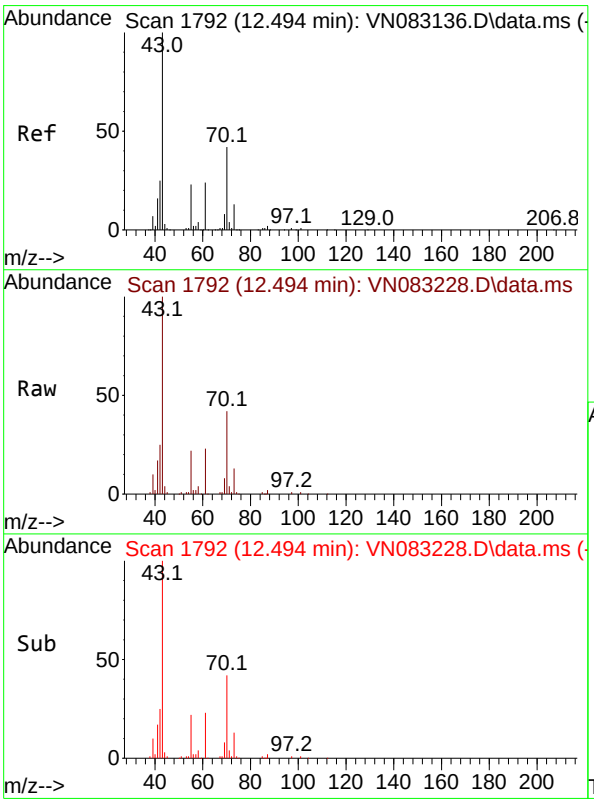
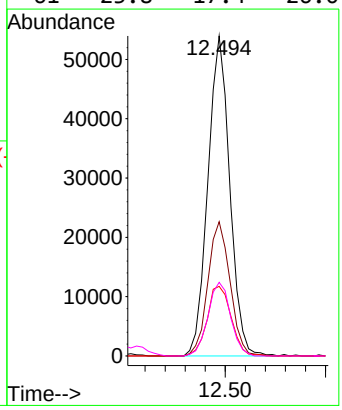


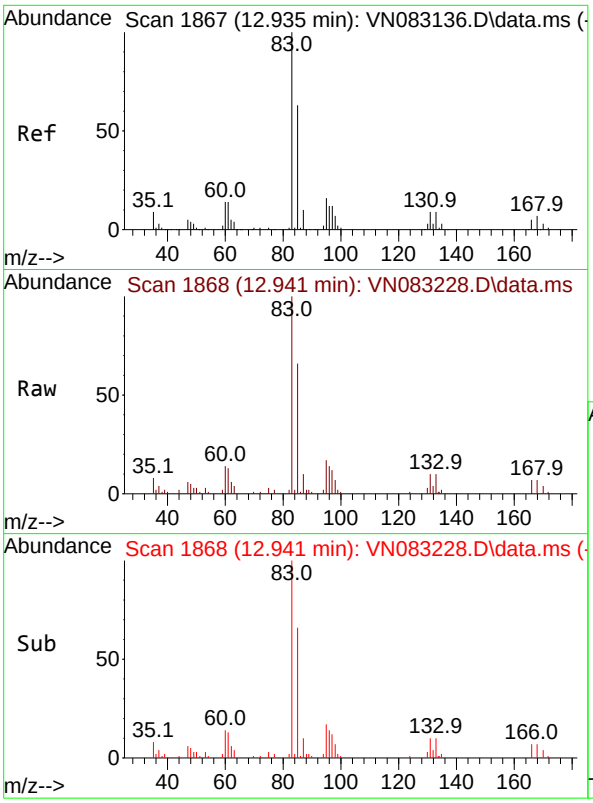




#74
N-amyl acetate
Concen: 15.329 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 43 Resp: 81860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 42.6 | 29.8 | 44.6 |
| 55 | 24.0 | 18.7 | 28.1 |
| 61 | 23.8 | 17.4 | 26.0 |






#75
1,1,2,2-Tetrachloroethane
Concen: 16.427 ug/l
RT: 12.941 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 83 Resp: 5072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.9 | 5.0 | 14.9 |
| 85 | 66.2 | 31.9 | 95.7 |

**Instrument :**
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VN0812WBS01

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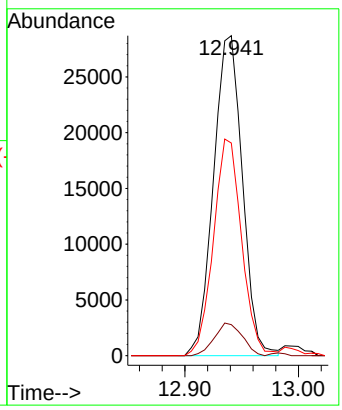
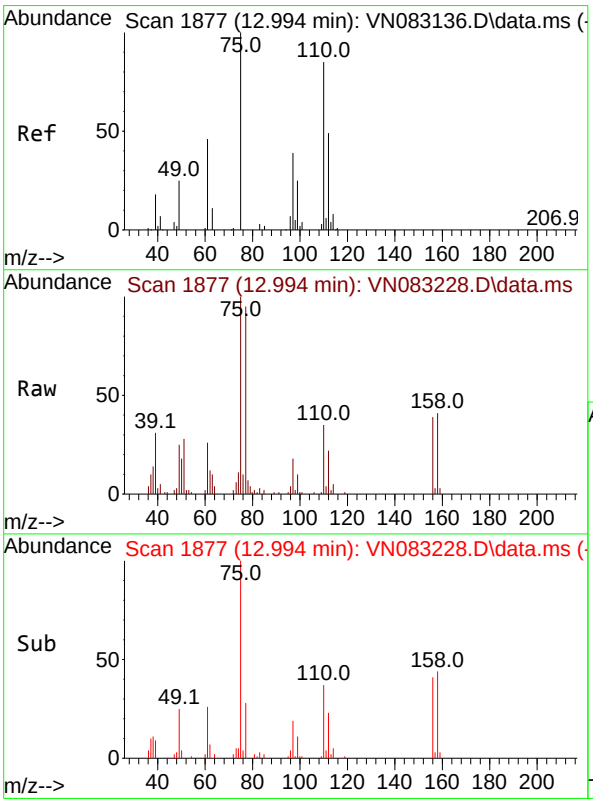
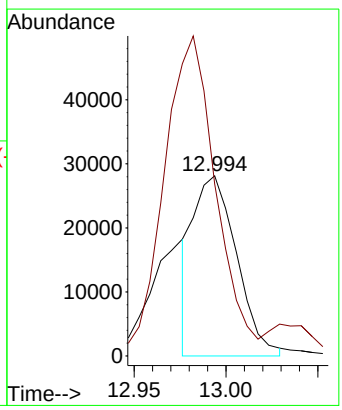


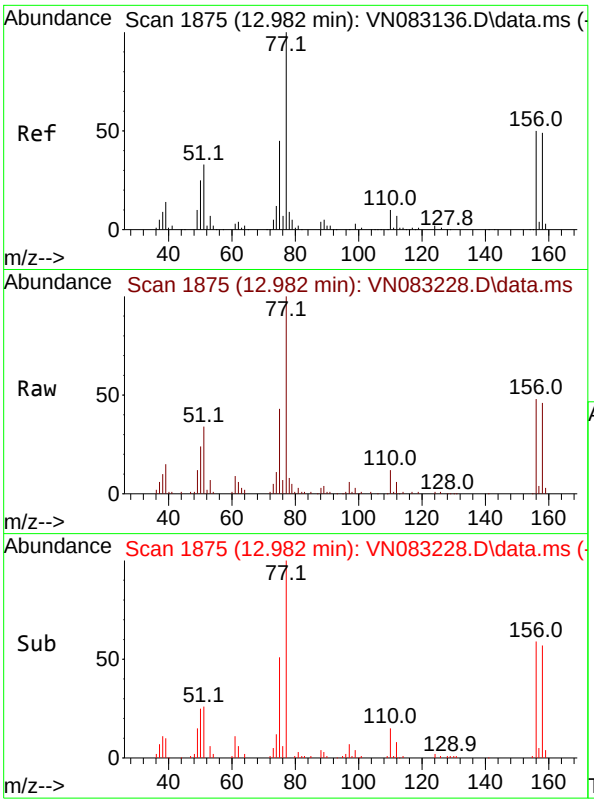




#76
1,2,3-Trichloropropane
Concen: 16.087 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 75 Resp: 46083

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 212.7 | 110.9 | 332.6 |

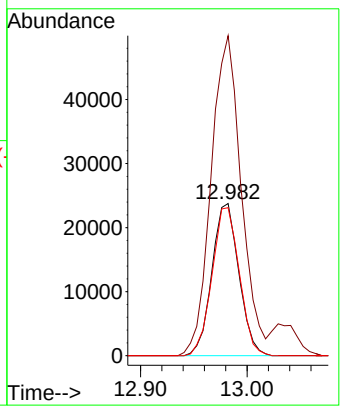





#77
Bromobenzene
Concen: 17.219 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:156 Resp: 4175

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 234.7 | 111.3 | 333.8 |
| 158 | 98.5 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
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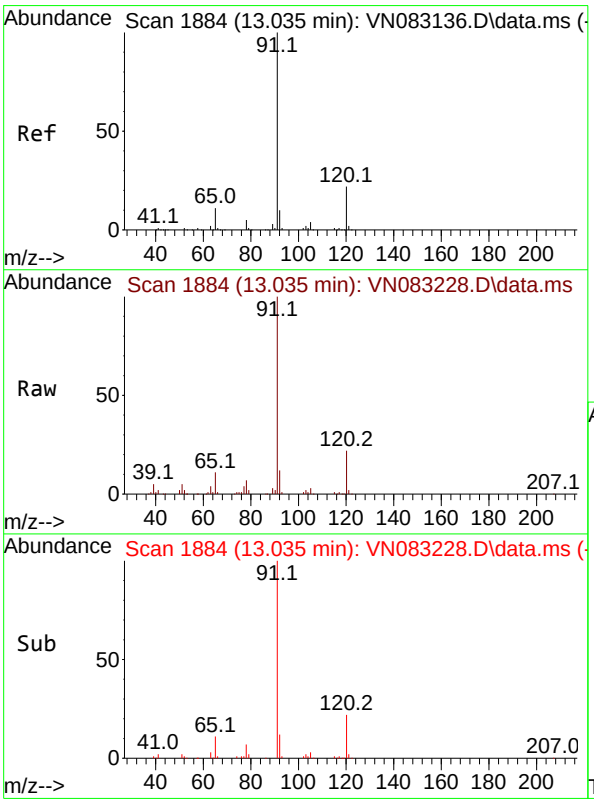
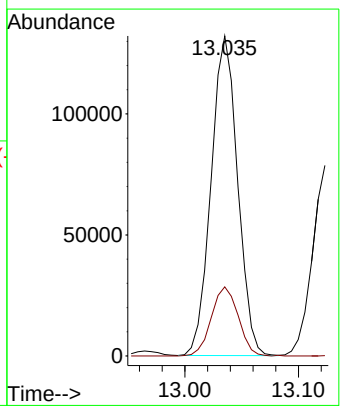
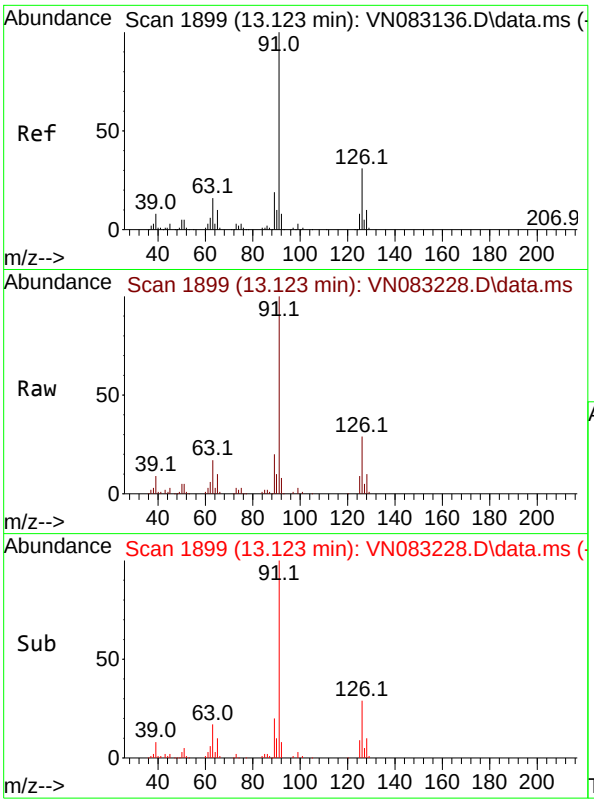



#78
n-propylbenzene
Concen: 17.073 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 91 Resp: 214628

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.9 | 10.9 | 32.9 |

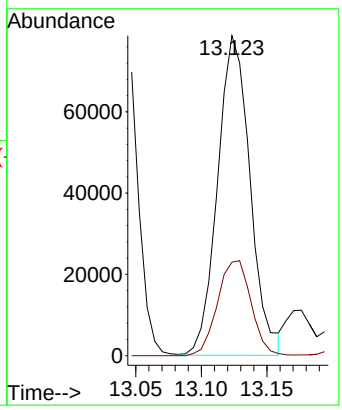





#79
2-Chlorotoluene
Concen: 17.018 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 91 Resp: 13563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.6 | 16.2 | 48.6 |

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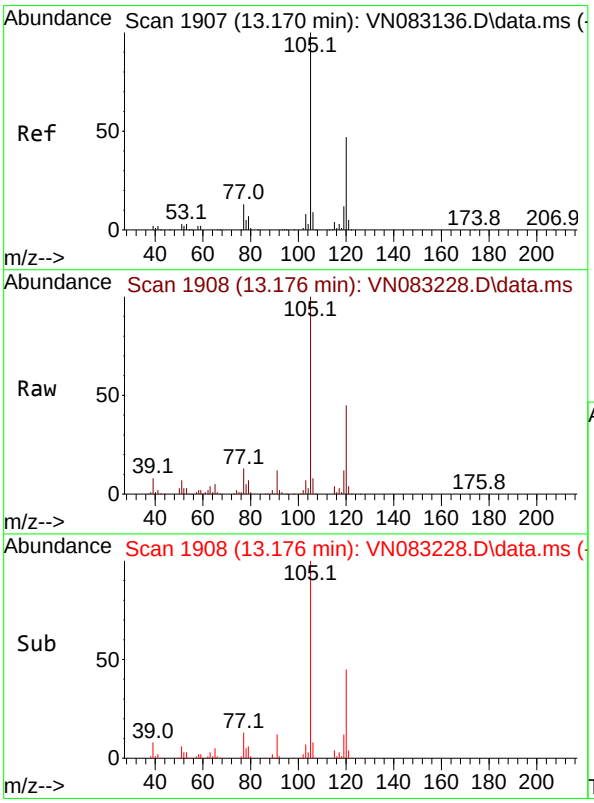
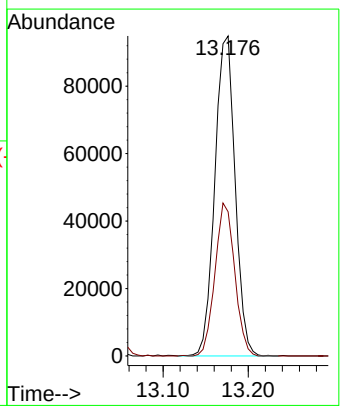
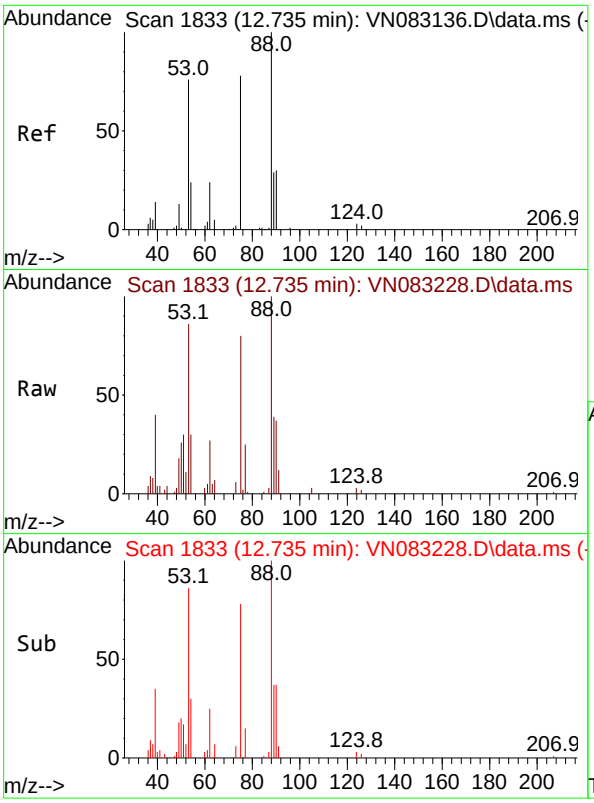



#80
1,3,5-Trimethylbenzene
Concen: 17.149 ug/l
RT: 13.176 min Scan# 1908
Delta R.T. 0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:105 Resp: 156743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.6 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 16.150 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 75 Resp: 2126

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 96.1 | 88.4 | 132.6 |
| 89 | 42.4 | 36.3 | 54.5 |

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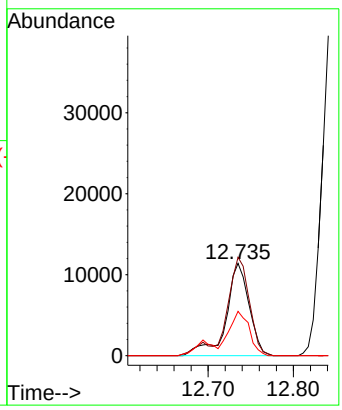
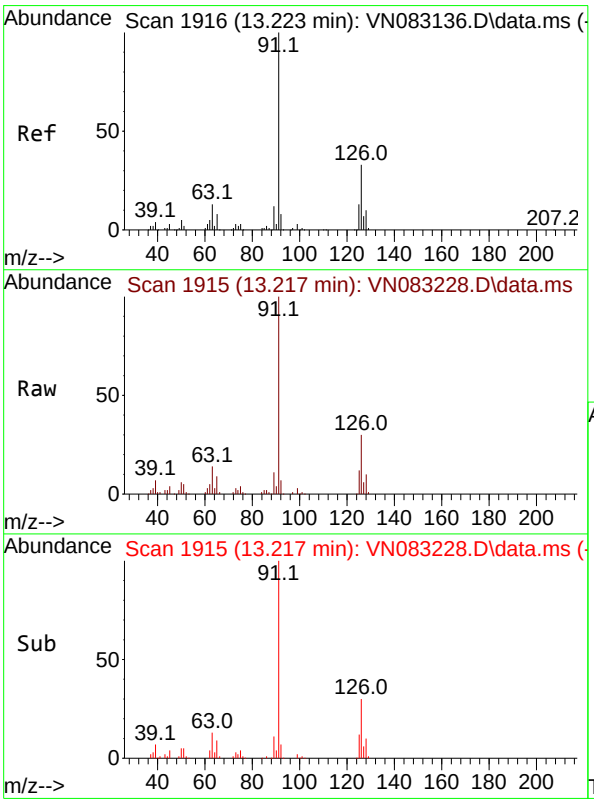
Supervised By :Semsettin Yesilyurt 08/13/2024

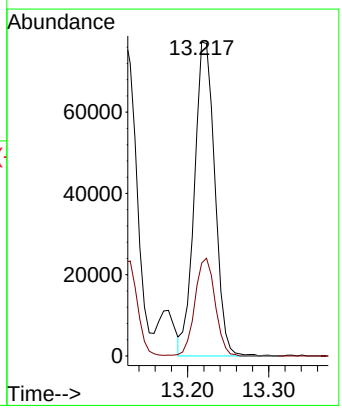


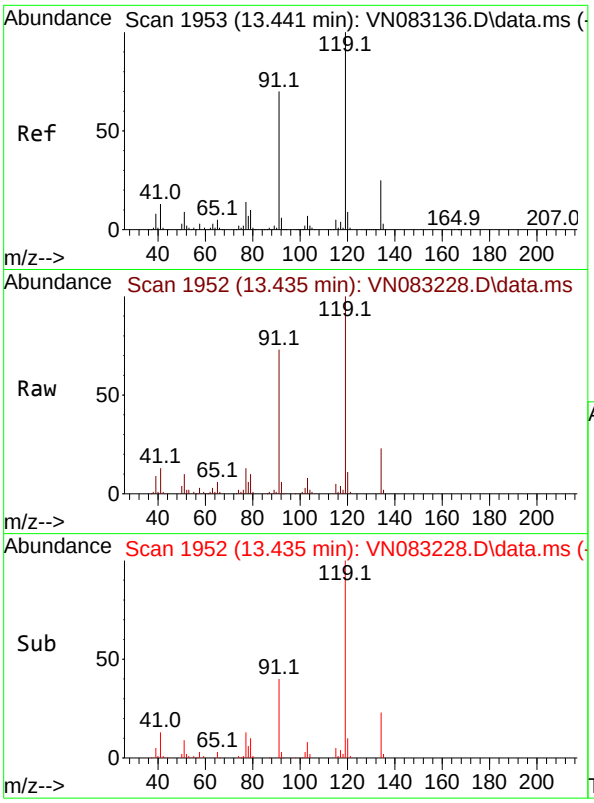




#82
4-Chlorotoluene
Concen: 16.910 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 91 Resp: 135189

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.8 | 16.2 | 48.6 |






#83
tert-Butylbenzene
Concen: 17.022 ug/l
RT: 13.435 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

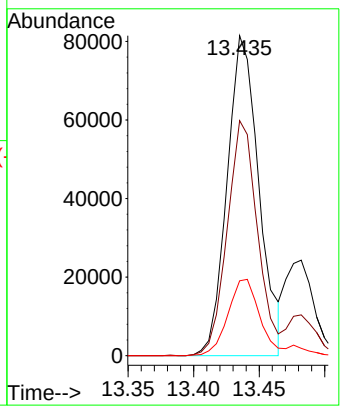
Tgt Ion:119 Resp: 13778

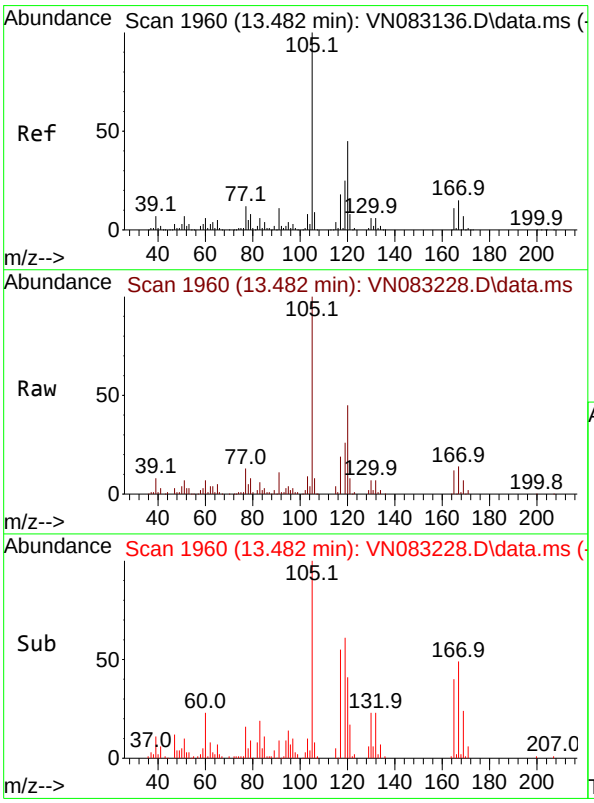
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.0 | 35.0 | 105.1 |
| 134 | 24.0 | 13.3 | 39.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

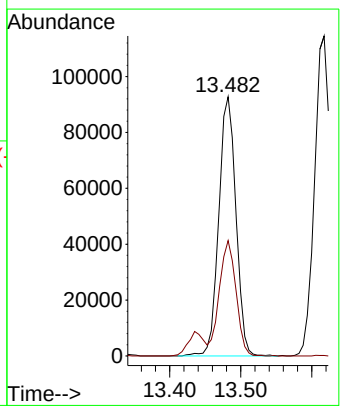


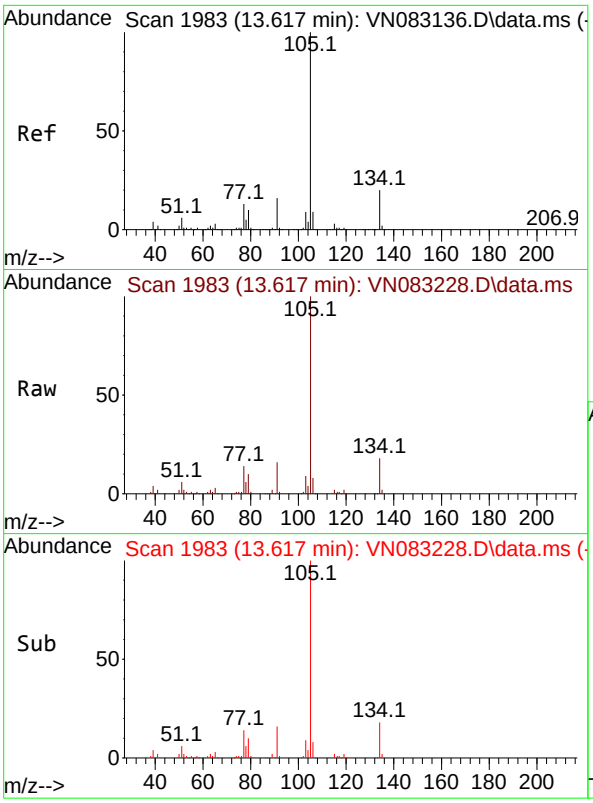




#84
1,2,4-Trimethylbenzene
Concen: 16.820 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:105 Resp: 154931

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.6 | 21.9 | 65.8 |

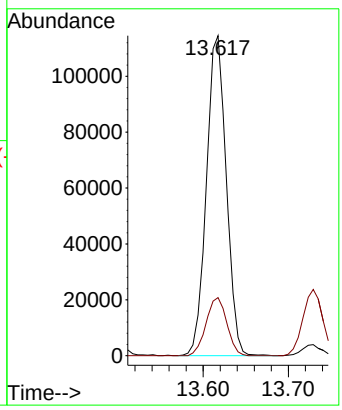





#85
sec-Butylbenzene
Concen: 16.779 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:105 Resp: 18531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 18.9 | 9.8 | 29.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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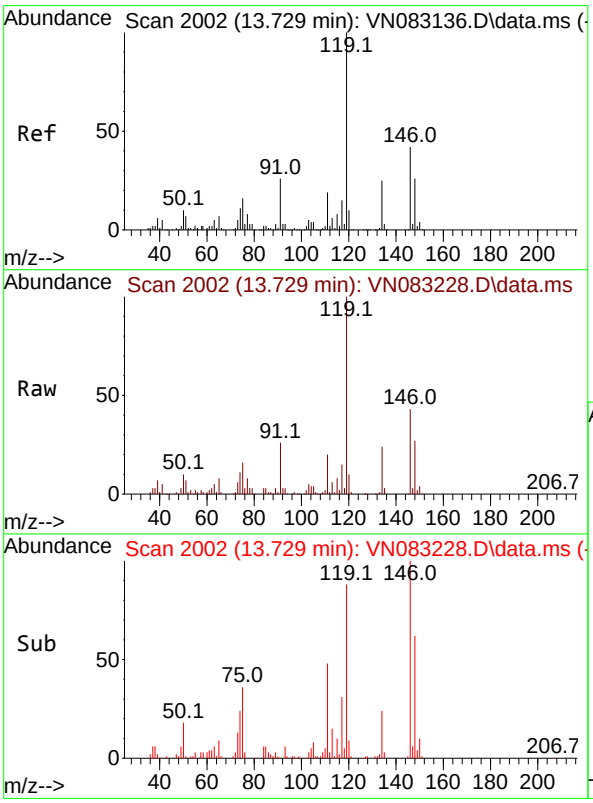
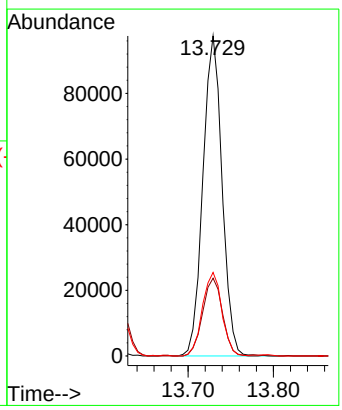
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

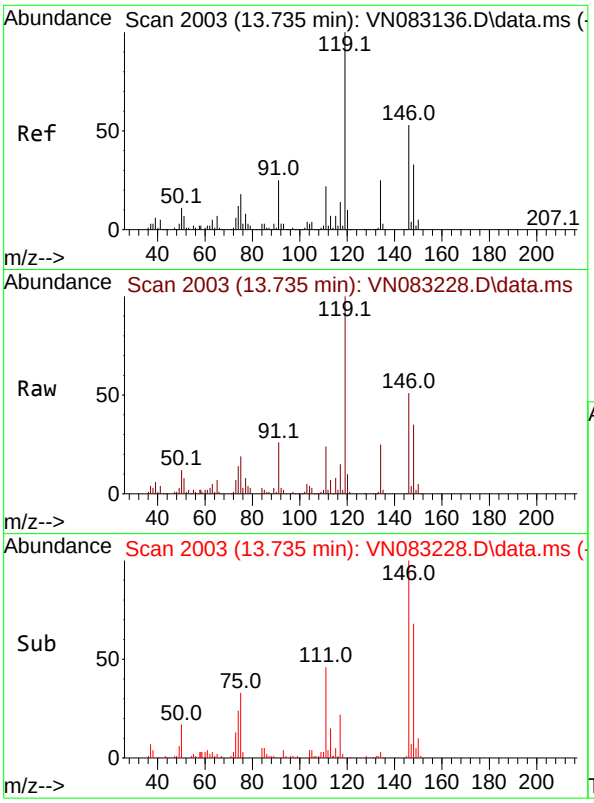



#86
p-Isopropyltoluene
Concen: 16.680 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:119 Resp: 152113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.1 | 13.0 | 39.0 |
| 91 | 26.5 | 12.3 | 36.9 |

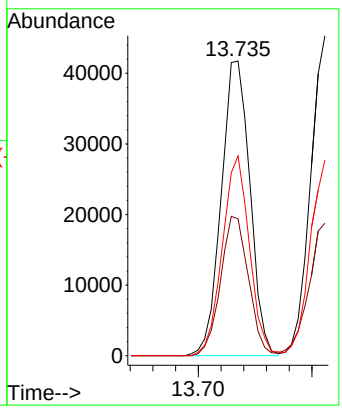





#87
1,3-Dichlorobenzene
Concen: 16.078 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:146 Resp: 7336

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 46.0 | 20.6 | 61.9 |
| 148 | 64.3 | 31.8 | 95.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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Reviewed By :John Carlone 08/13/2024
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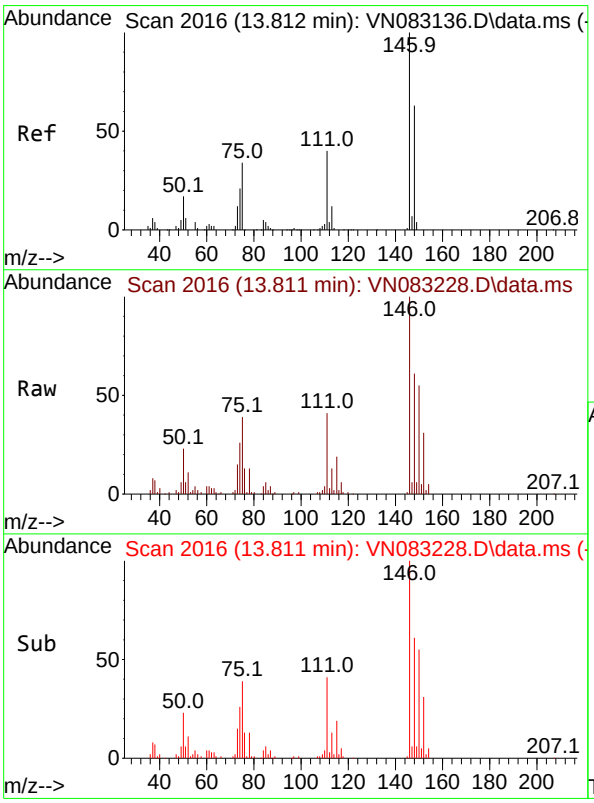
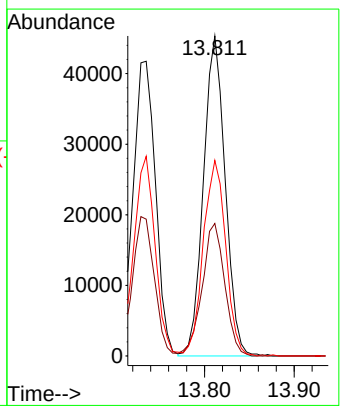
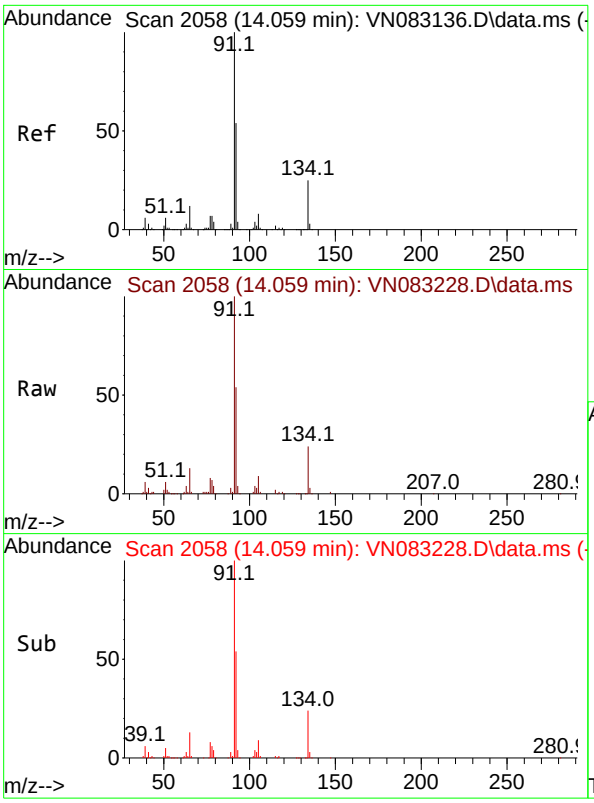



#88
1,4-Dichlorobenzene
Concen: 16.606 ug/l
RT: 13.811 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:146 Resp: 76396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.1 | 20.1 | 60.3 |
| 148 | 63.0 | 32.2 | 96.6 |






#89
n-Butylbenzene
Concen: 16.796 ug/l
RT: 14.059 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 91 Resp: 13271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.3 | 26.1 | 78.3 |
| 134 | 23.6 | 12.1 | 36.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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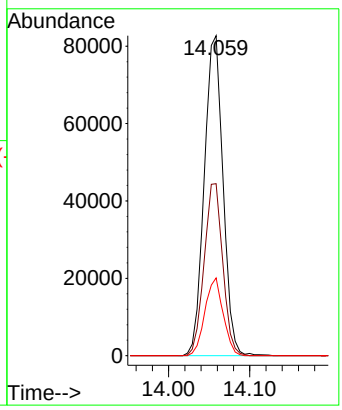
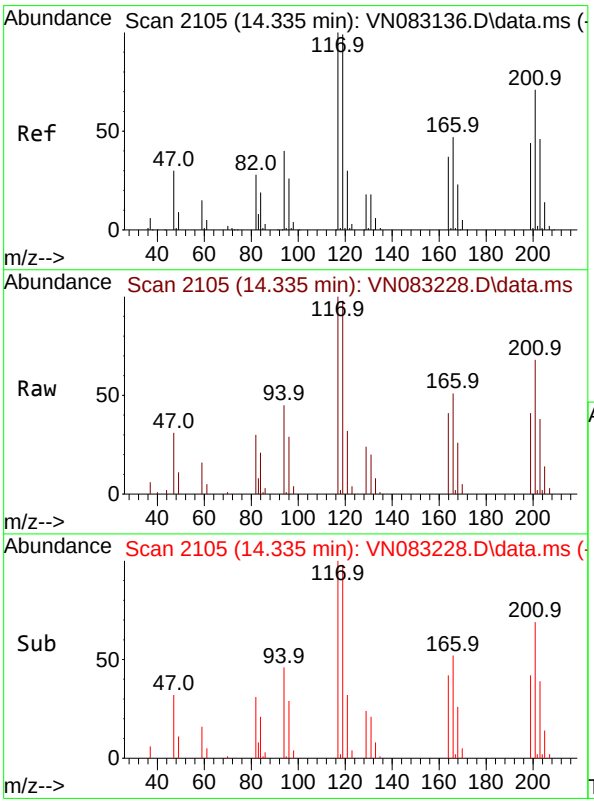
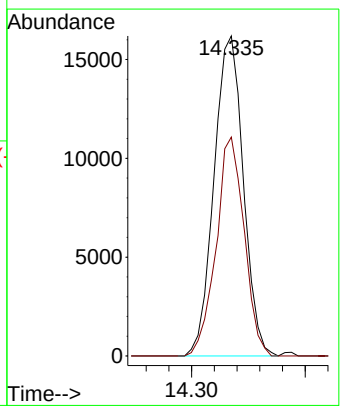


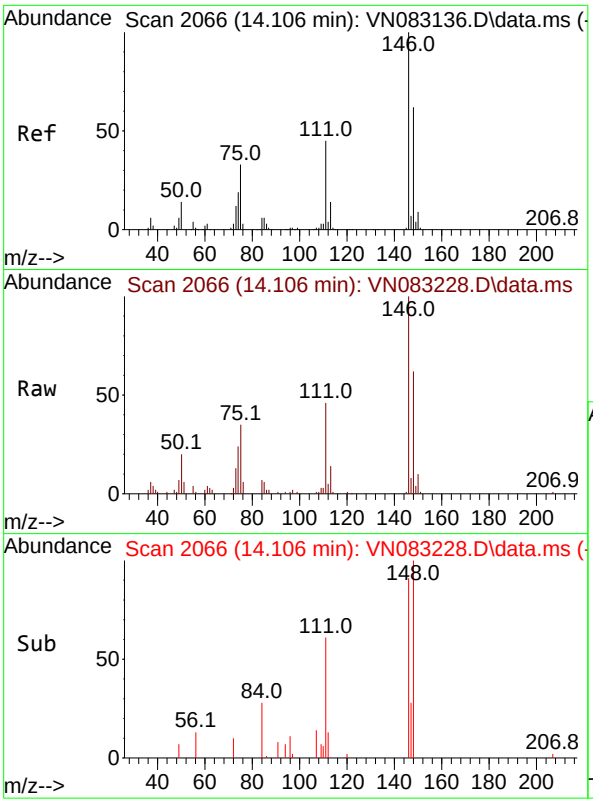




#90
Hexachloroethane
Concen: 16.464 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:117 Resp: 29007

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 65.5 | 35.8 | 107.3 |

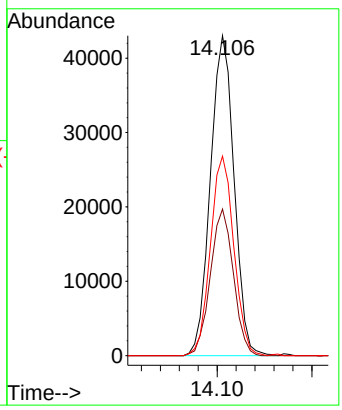





#91
1,2-Dichlorobenzene
Concen: 16.880 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:146 Resp: 7454

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.6 | 21.4 | 64.2 |
| 148 | 61.8 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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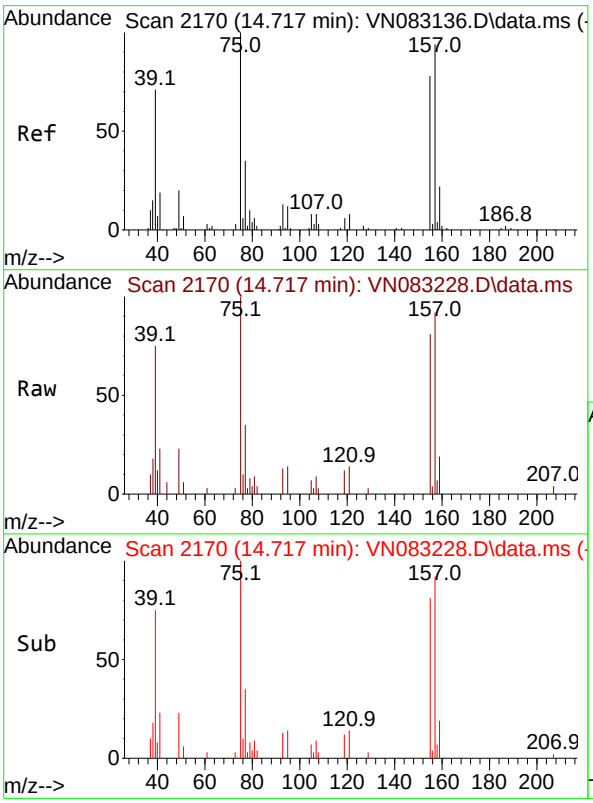
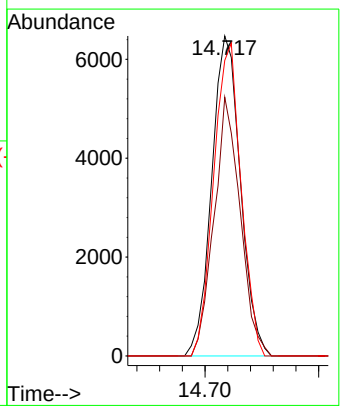
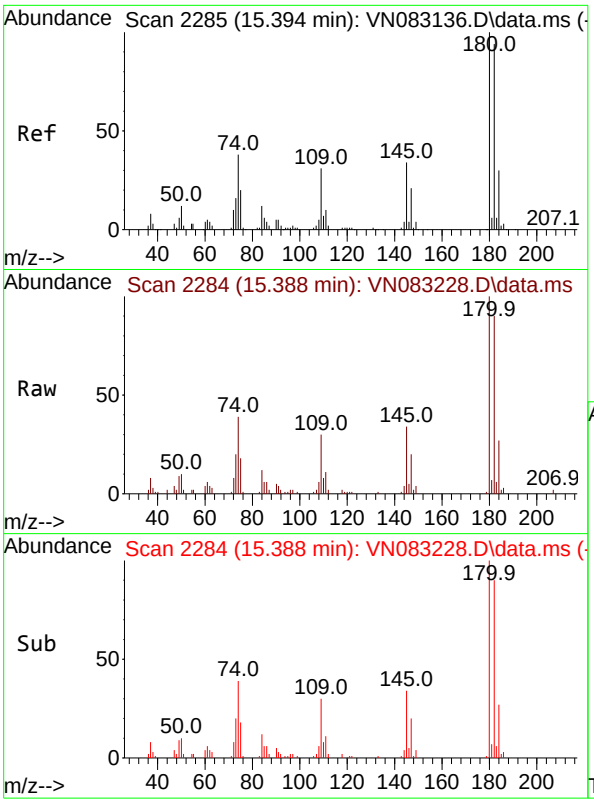



#92
1,2-Dibromo-3-Chloropropane
Concen: 15.155 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion: 75 Resp: 11355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 73.9 | 36.6 | 109.8 |
| 157 | 93.2 | 46.9 | 140.6 |

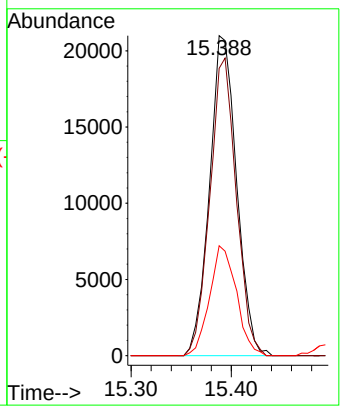





#93
1,2,4-Trichlorobenzene
Concen: 15.946 ug/l
RT: 15.388 min Scan# 2
Delta R.T. -0.006 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:180 Resp: 3945

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 90.4 | 47.3 | 141.8 |
| 145 | 34.0 | 15.7 | 47.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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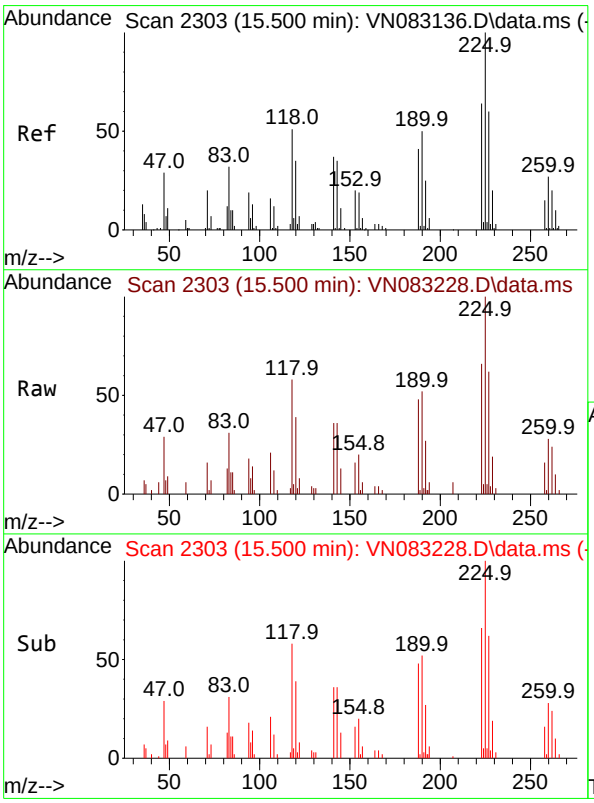
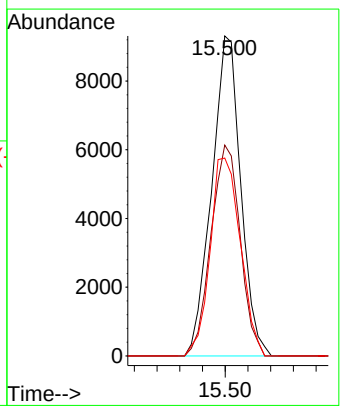
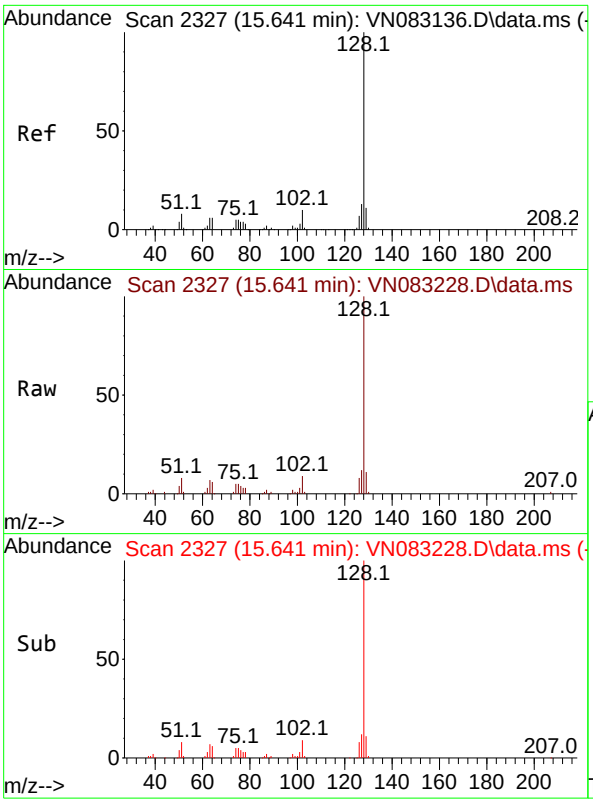



#94
Hexachlorobutadiene
Concen: 14.992 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:225 Resp: 16495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 66.3 | 31.9 | 95.7 |
| 227 | 64.7 | 32.5 | 97.5 |

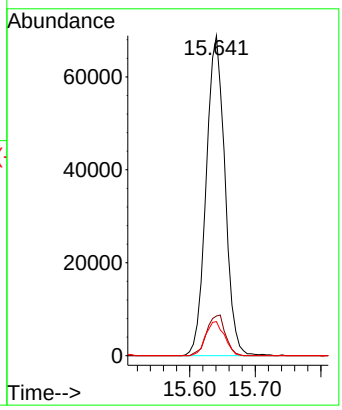





#95
Naphthalene
Concen: 15.610 ug/l
RT: 15.641 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:128 Resp: 13679

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.7 | 10.6 | 16.0 |
| 129 | 10.7 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBS01

**Manual Integrations**
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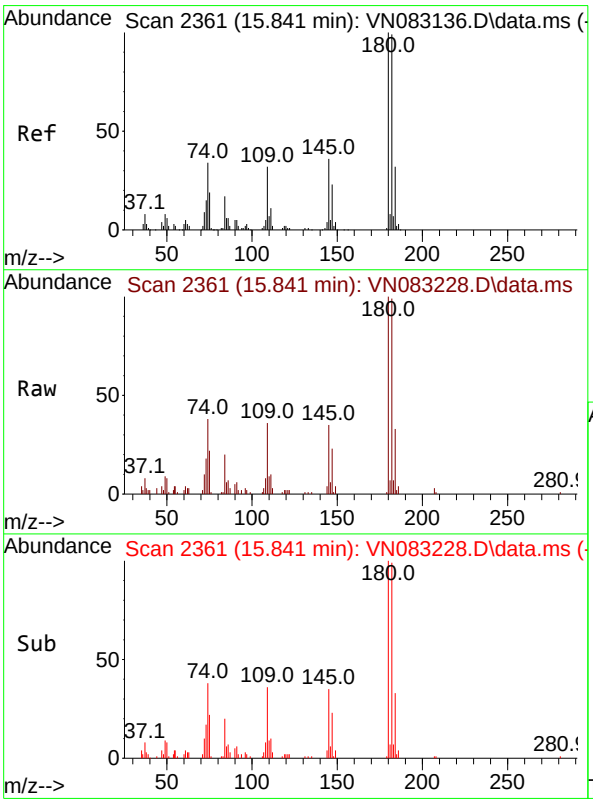
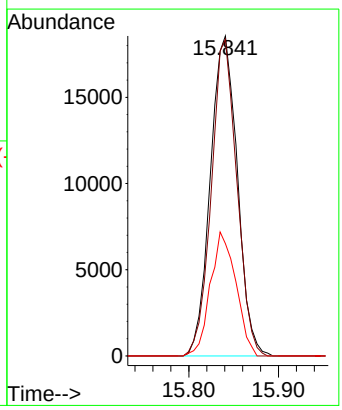



#96
1,2,3-Trichlorobenzene
Concen: 15.816 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083228.D
Acq: 12 Aug 2024 11:10

Tgt Ion:180 Resp: 38717

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.4 | 48.9 | 146.8 |
| 145 | 36.7 | 16.8 | 50.4 |



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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0813WBS01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0813WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083249.D | 1 | | 08/13/24 11:40 | VN081324 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 17.1 | | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 17.1 | | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 18.1 | | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 18.2 | | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 18.5 | | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 90.0 | | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 15.1 | | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 17.4 | | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 16.9 | | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 16.6 | | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 17.0 | | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 85.3 | | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 18.0 | | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 17.3 | | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 18.8 | | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 17.9 | | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 16.9 | | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 17.8 | | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 18.8 | | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 17.6 | | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 18.0 | | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 17.7 | | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 18.8 | | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 18.3 | | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 18.0 | | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 17.8 | | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 17.9 | | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 35.7 | | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 53.5 | | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 17.8 | | 0.14 | 1.00 | ug/L |

Raw Data: **VN083249.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0813WBS01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0813WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083249.D | 1 | | 08/13/24 11:40 | VN081324 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 18.1 | | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 17.8 | | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 17.7 | | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 48.7 | | 70 (74) - 130 (125) | 97% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 47.4 | | 70 (75) - 130 (124) | 95% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 46.7 | | 70 (86) - 130 (113) | 93% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 45.5 | | 70 (77) - 130 (121) | 91% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 178000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 306000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 264000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 120000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083249.D
Acq On : 13 Aug 2024 11:40
Operator : JC\MD
Sample : VN0813WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 01:39:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 178353 | 50.000 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 306441 | 50.000 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 263797 | 50.000 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 120363 | 50.000 | ug/l | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 123513 | 48.653 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 97.300% | | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 90577 | 47.355 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 94.700% | | | | |
| 50) Toluene-d8 | 10.565 | 98 | 333102 | 46.686 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 93.380% | | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 126499 | 45.477 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 90.960% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 34552 | 17.083 | ug/l | | 96 |
| 3) Chloromethane | 2.365 | 50 | 35497 | 17.143 | ug/l | | 99 |
| 4) Vinyl Chloride | 2.518 | 62 | 38233 | 18.095 | ug/l | | 93 |
| 5) Bromomethane | 2.965 | 94 | 23818 | 18.167 | ug/l | | 88 |
| 6) Chloroethane | 3.118 | 64 | 23914 | 18.091 | ug/l | | 97 |
| 7) Trichlorofluoromethane | 3.500 | 101 | 64104 | 18.366 | ug/l | | 94 |
| 8) Diethyl Ether | 3.959 | 74 | 22382 | 17.232 | ug/l | | 85 |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 35670 | 18.536 | ug/l | | 96 |
| 10) Methyl Iodide | 4.589 | 142 | 42091 | 16.627 | ug/l | | 94 |
| 11) Tert butyl alcohol | 5.530 | 59 | 42081 | 79.762 | ug/l | | 98 |
| 12) 1,1-Dichloroethene | 4.347 | 96 | 33641 | 17.015 | ug/l | | 89 |
| 13) Acrolein | 4.177 | 56 | 25085 | 72.954 | ug/l | | 97 |
| 14) Allyl chloride | 5.024 | 41 | 56861 | 15.219 | ug/l | | 94 |
| 15) Acrylonitrile | 5.724 | 53 | 92469 | 85.222 | ug/l | | 99 |
| 16) Acetone | 4.430 | 43 | 89359 | 89.956 | ug/l | | 93 |
| 17) Carbon Disulfide | 4.712 | 76 | 87555 | 15.135 | ug/l | | 98 |
| 18) Methyl Acetate | 5.030 | 43 | 51588 | 17.430 | ug/l | # | 89 |
| 19) Methyl tert-butyl Ether | 5.800 | 73 | 124113 | 17.392 | ug/l | | 100 |
| 20) Methylene Chloride | 5.271 | 84 | 38601 | 16.884 | ug/l | # | 85 |
| 21) trans-1,2-Dichloroethene | 5.789 | 96 | 33823 | 16.552 | ug/l | | 94 |
| 22) Diisopropyl ether | 6.671 | 45 | 125303 | 17.842 | ug/l | # | 97 |
| 23) Vinyl Acetate | 6.606 | 43 | 630546m | 87.595 | ug/l | | |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 69612 | 18.185 | ug/l | | 99 |
| 25) 2-Butanone | 7.482 | 43 | 130080 | 85.282 | ug/l | | 94 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 64854 | 18.243 | ug/l | | 100 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 42656 | 17.299 | ug/l | | 95 |
| 28) Bromochloromethane | 7.818 | 49 | 33565 | 21.456 | ug/l | | 86 |
| 29) Tetrahydrofuran | 7.841 | 42 | 83720 | 84.909 | ug/l | # | 88 |
| 30) Chloroform | 7.965 | 83 | 74889 | 18.831 | ug/l | | 99 |
| 31) Cyclohexane | 8.253 | 56 | 63769 | 16.950 | ug/l | # | 94 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 67426 | 17.911 | ug/l | | 95 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 50157 | 17.335 | ug/l | | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 53843 | 16.620 | ug/l | | 95 |
| 38) Carbon Tetrachloride | 8.365 | 117 | 58607 | 17.983 | ug/l | | 98 |
| 39) Methylcyclohexane | 9.600 | 83 | 60060 | 16.900 | ug/l | | 89 |
| 40) Benzene | 8.612 | 78 | 153249 | 17.779 | ug/l | | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083249.D
Acq On : 13 Aug 2024 11:40
Operator : JC\MD
Sample : VN0813WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 01:39:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.782 | 41 | 29010 | 15.749 ug/l | 93 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 59075 | 18.814 ug/l | 100 |
| 43) Isopropyl Acetate | 8.688 | 43 | 100348 | 16.396 ug/l # | 96 |
| 44) Trichloroethene | 9.353 | 130 | 36205 | 17.647 ug/l | 95 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 36725 | 17.949 ug/l | 93 |
| 46) Dibromomethane | 9.706 | 93 | 27355 | 18.679 ug/l | 98 |
| 47) Bromodichloromethane | 9.888 | 83 | 59270 | 18.024 ug/l # | 95 |
| 48) Methyl methacrylate | 9.682 | 41 | 44491 | 16.611 ug/l | 92 |
| 49) 1,4-Dioxane | 9.694 | 88 | 17077 | 353.407 ug/l | 94 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 273004 | 89.113 ug/l | 94 |
| 52) Toluene | 10.629 | 92 | 96659 | 17.748 ug/l | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 60769 | 17.991 ug/l | 98 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 62857 | 17.495 ug/l | 93 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 36714 | 18.811 ug/l | 95 |
| 56) Ethyl methacrylate | 10.876 | 69 | 63015 | 17.126 ug/l # | 87 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 63233 | 18.176 ug/l | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 137398 | 88.342 ug/l | 96 |
| 59) 2-Hexanone | 11.194 | 43 | 205980 | 86.908 ug/l | 94 |
| 60) Dibromochloromethane | 11.359 | 129 | 43070 | 18.252 ug/l | 98 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 36278 | 17.694 ug/l | 98 |
| 64) Tetrachloroethene | 11.100 | 164 | 31390 | 17.967 ug/l | 93 |
| 65) Chlorobenzene | 11.894 | 112 | 104015 | 17.843 ug/l | 97 |
| 66) 1,1,1,2-Tetrachloroethane | 11.965 | 131 | 38021 | 18.493 ug/l | 97 |
| 67) Ethyl Benzene | 11.965 | 91 | 191707 | 17.926 ug/l | 99 |
| 68) m/p-Xylenes | 12.070 | 106 | 143098 | 35.721 ug/l | 98 |
| 69) o-Xylene | 12.394 | 106 | 70244 | 17.779 ug/l | 99 |
| 70) Styrene | 12.412 | 104 | 119061 | 17.942 ug/l | 99 |
| 71) Bromoform | 12.576 | 173 | 27203 | 17.465 ug/l # | 98 |
| 73) Isopropylbenzene | 12.694 | 105 | 181922 | 18.070 ug/l | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 82687 | 16.791 ug/l | 96 |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83 | 51020 | 17.918 ug/l | 97 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 47260m | 17.890 ug/l | |
| 77) Bromobenzene | 12.982 | 156 | 41629 | 18.614 ug/l | 99 |
| 78) n-propylbenzene | 13.035 | 91 | 208423 | 17.979 ug/l | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 132299 | 18.001 ug/l | 96 |
| 80) 1,3,5-Trimethylbenzene | 13.176 | 105 | 152708 | 18.118 ug/l | 97 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 18538 | 15.265 ug/l | 92 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 131924 | 17.895 ug/l | 98 |
| 83) tert-Butylbenzene | 13.435 | 119 | 133777 | 17.922 ug/l | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 152254 | 17.925 ug/l | 99 |
| 85) sec-Butylbenzene | 13.617 | 105 | 182028 | 17.872 ug/l | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 151886 | 18.061 ug/l | 97 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 72557 | 17.242 ug/l | 97 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 75711 | 17.846 ug/l | 96 |
| 89) n-Butylbenzene | 14.053 | 91 | 127777 | 17.535 ug/l | 98 |
| 90) Hexachloroethane | 14.335 | 117 | 27265 | 16.782 ug/l | 95 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 71959 | 17.671 ug/l | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 11595 | 16.781 ug/l | 98 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 38146 | 16.721 ug/l | 98 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 15988 | 15.758 ug/l | 99 |
| 95) Naphthalene | 15.641 | 128 | 133767 | 16.553 ug/l | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 37313 | 16.529 ug/l | 96 |

Sample Results: **VN083249.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083249.D
Acq On : 13 Aug 2024 11:40
Operator : JC\MD
Sample : VN0813WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 01:39:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

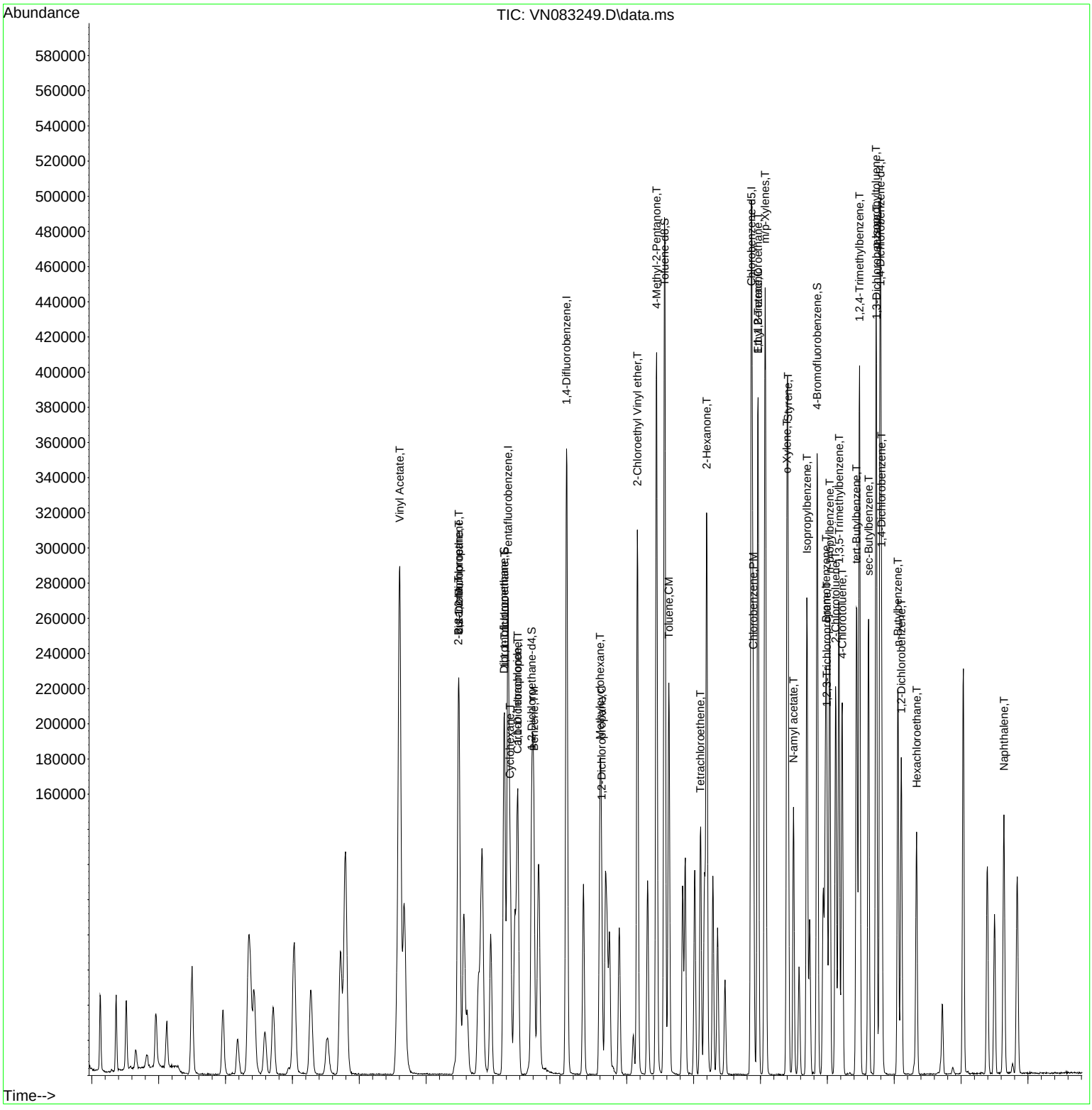
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081324\
Data File : VN083249.D
Acq On : 13 Aug 2024 11:40
Operator : JC\MD
Sample : VN0813WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

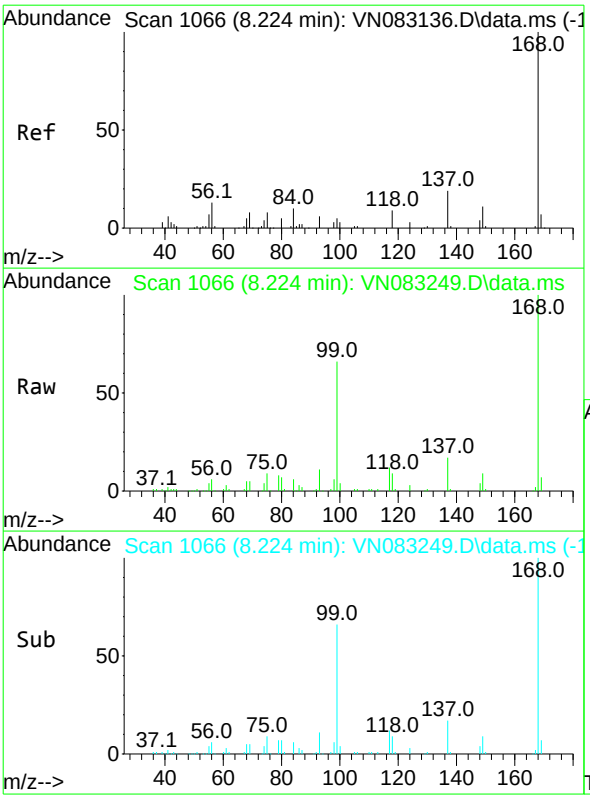
Quant Time: Aug 14 01:39:38 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

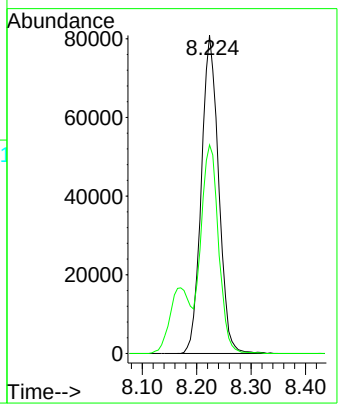





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:168 Resp: 178353

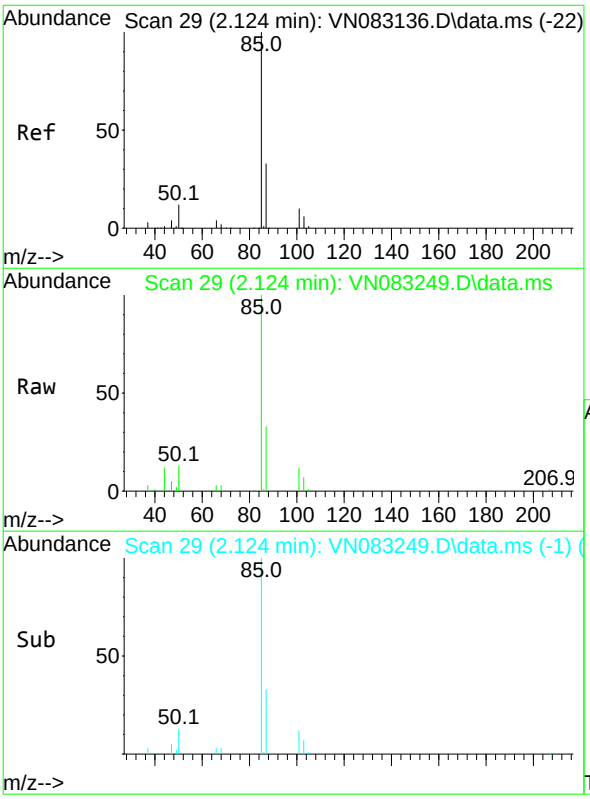
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 65.6 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
**APPROVED**

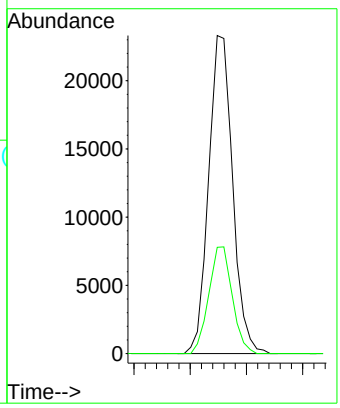
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

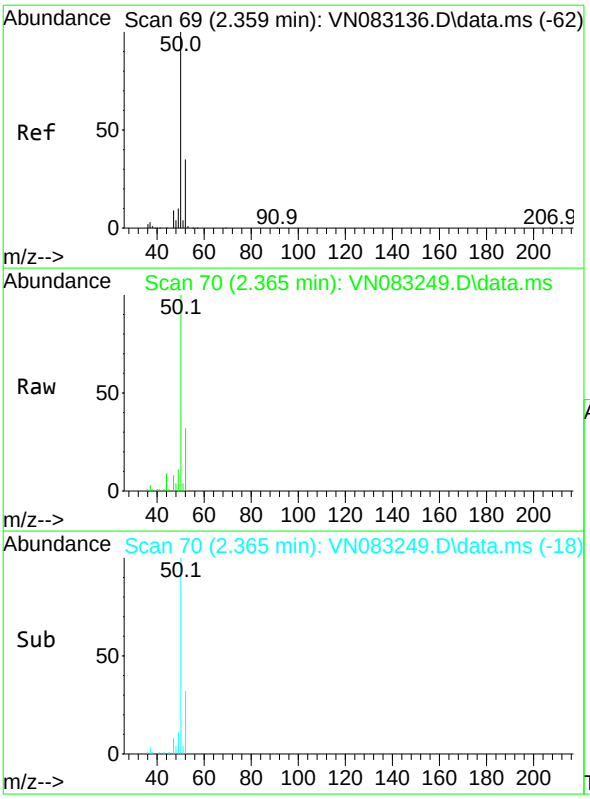



#2
Dichlorodifluoromethane
Concen: 17.083 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 85 Resp: 34552

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.4 | 15.7 | 47.0 |

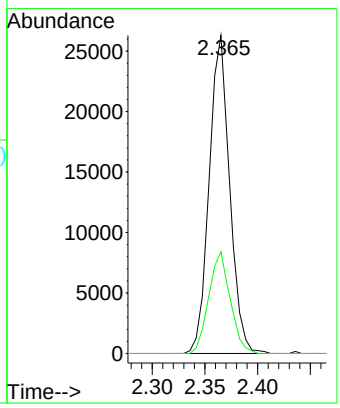





#3
Chloromethane
Concen: 17.143 ug/l
RT: 2.365 min Scan# 70
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 50 Resp: 35497

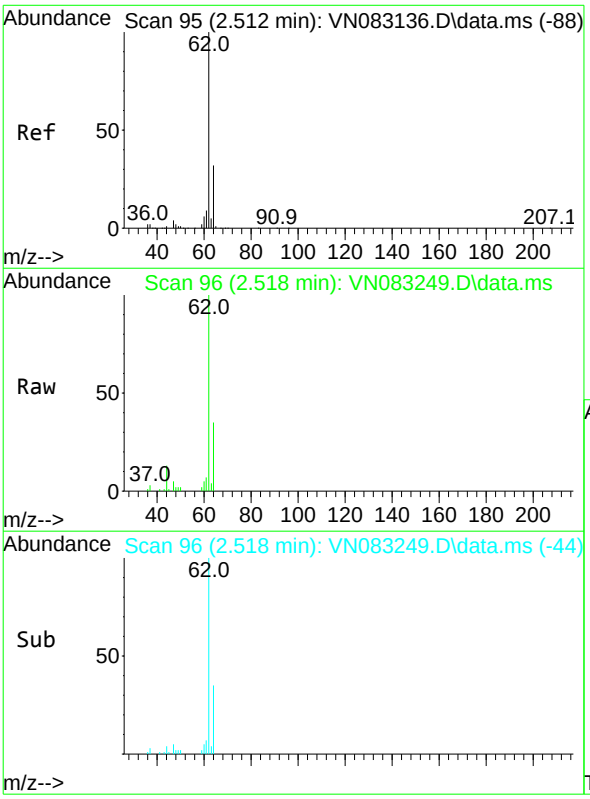
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.0 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
**APPROVED**

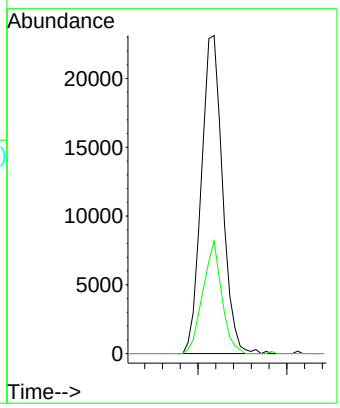
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

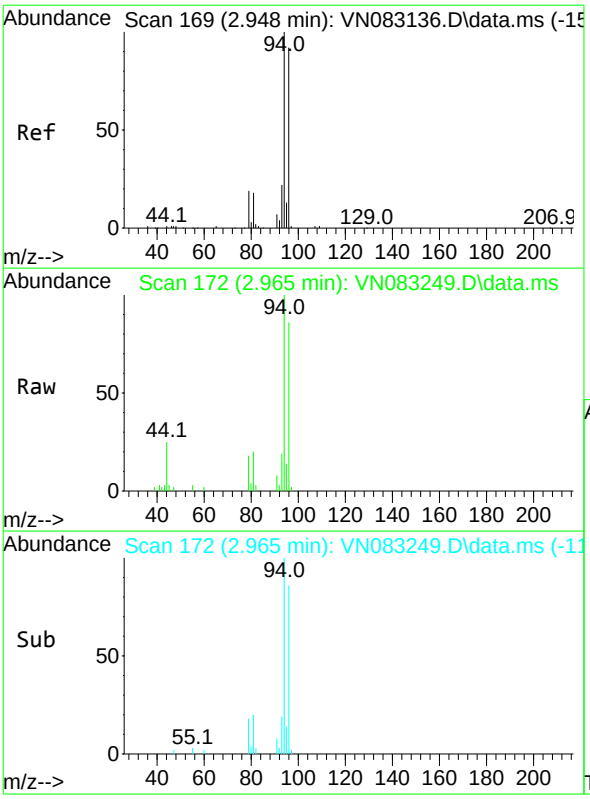



#4
Vinyl Chloride
Concen: 18.095 ug/l
RT: 2.518 min Scan# 96
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 62 Resp: 38233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 35.4 | 25.0 | 37.6 |

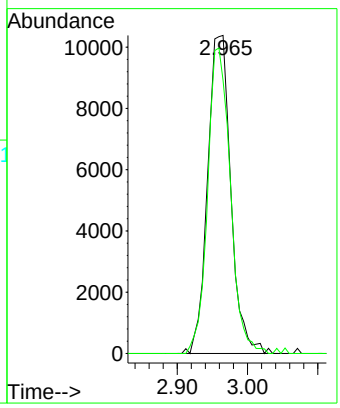





#5
Bromomethane
Concen: 18.167 ug/l
RT: 2.965 min Scan# 17
Delta R.T. 0.018 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 94 Resp: 23818

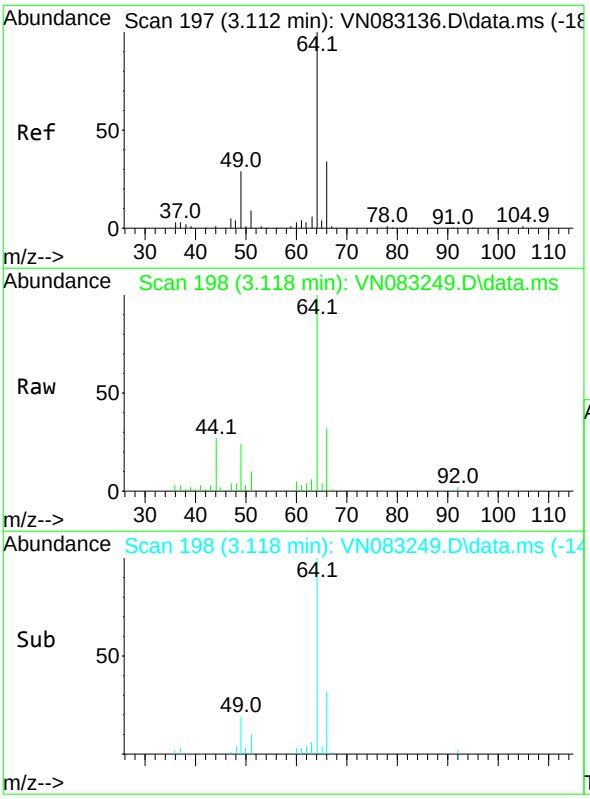
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 85.9 | 78.0 | 117.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
**APPROVED**

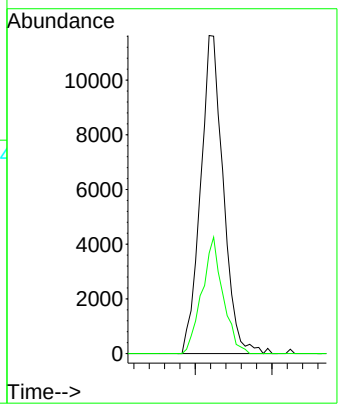
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

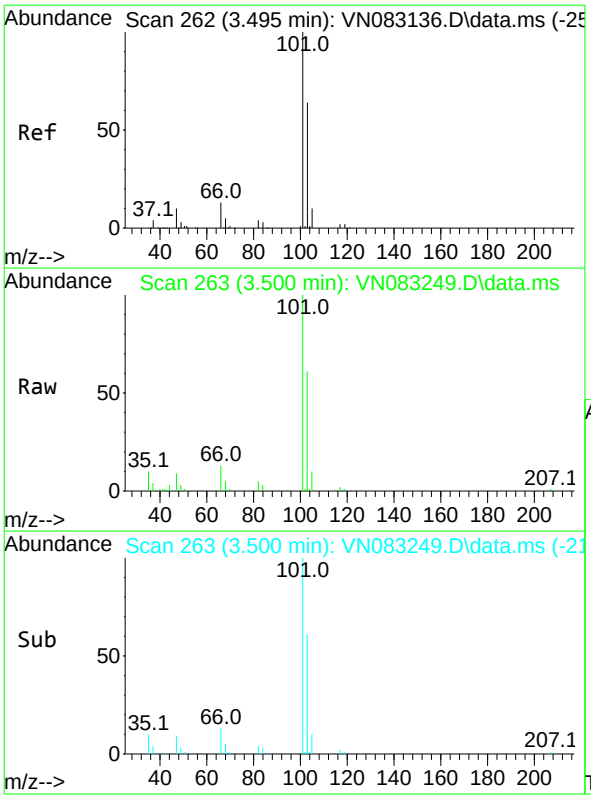



#6
Chloroethane
Concen: 18.091 ug/l
RT: 3.118 min Scan# 198
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 64 Resp: 23914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.5 | 26.6 | 40.0 |






#7
Trichlorofluoromethane
Concen: 18.366 ug/l
RT: 3.500 min Scan# 26
Delta R.T. 0.005 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:101 Resp: 64104

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 61.5 | 52.7 | 79.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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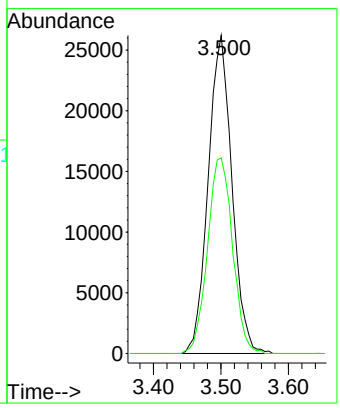
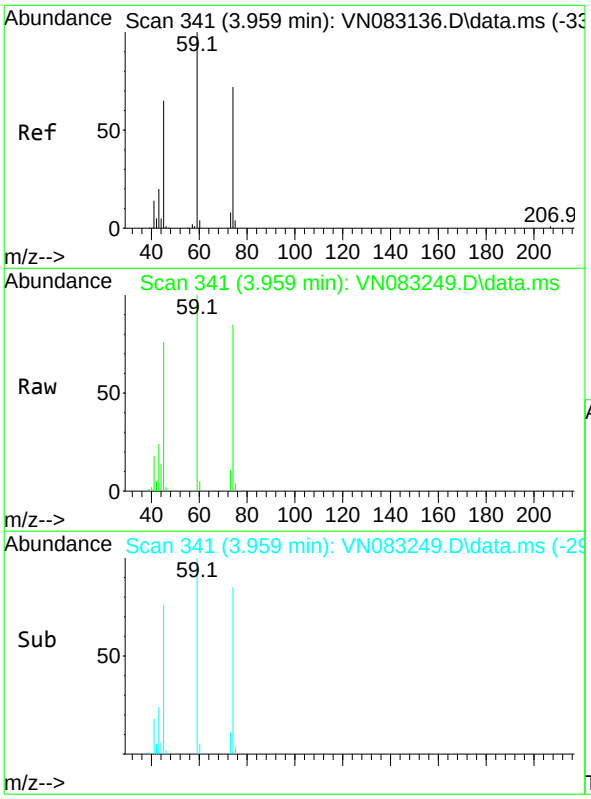
Supervised By :Semsettin Yesilyurt 08/14/2024

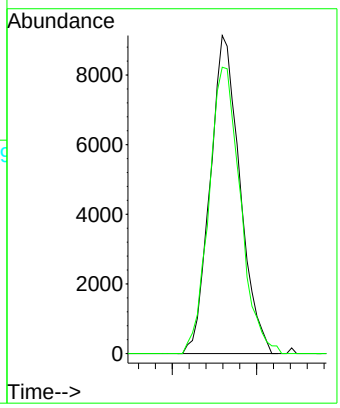


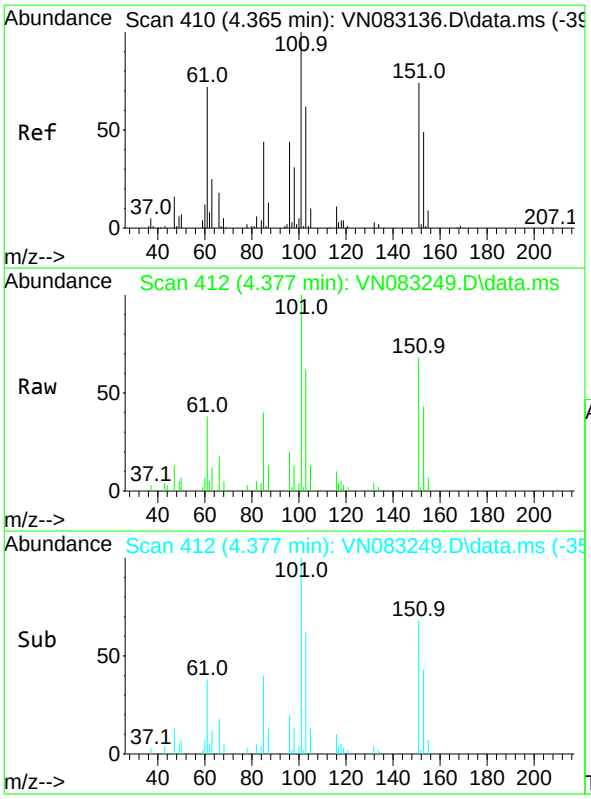




#8
Diethyl Ether
Concen: 17.232 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 74 Resp: 22382

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 95.1 | 55.5 | 166.3 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 18.536 ug/l
RT: 4.377 min Scan# 41
Delta R.T. 0.012 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

Tgt Ion:101 Resp: 35670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 44.5 | 38.3 | 57.5 |
| 151 | 71.7 | 59.3 | 88.9 |

**Manual Integrations**
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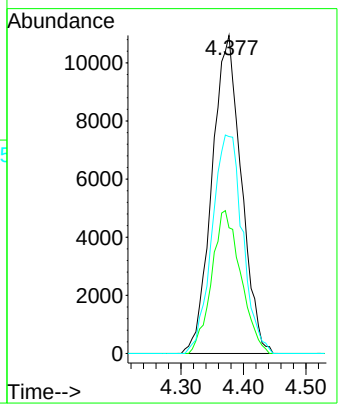
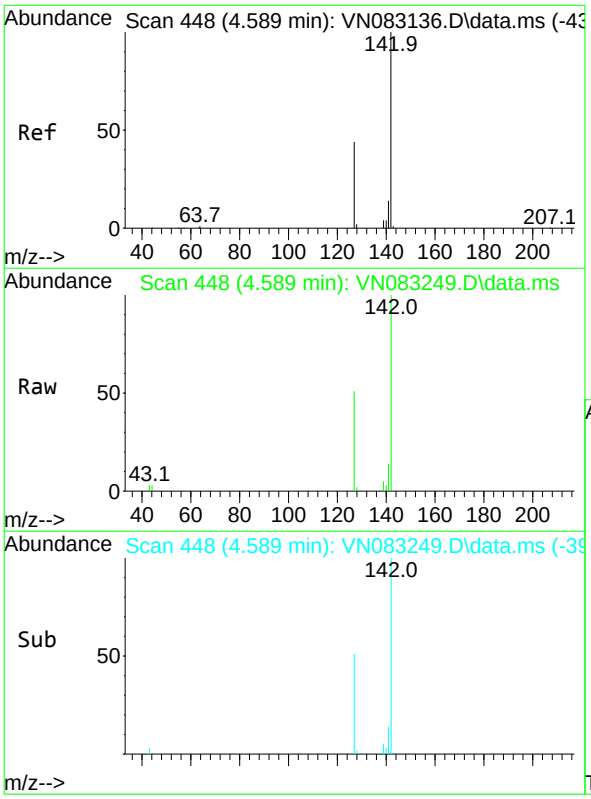
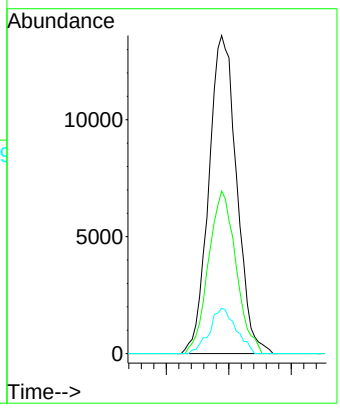


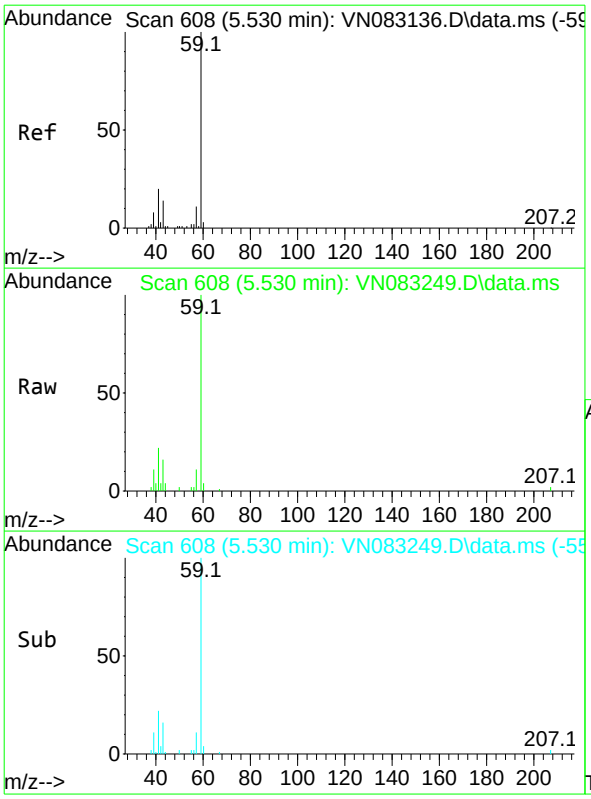




#10
Methyl Iodide
Concen: 16.627 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:142 Resp: 42091

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 51.1 | 37.5 | 56.3 |
| 141 | 14.3 | 13.1 | 19.7 |

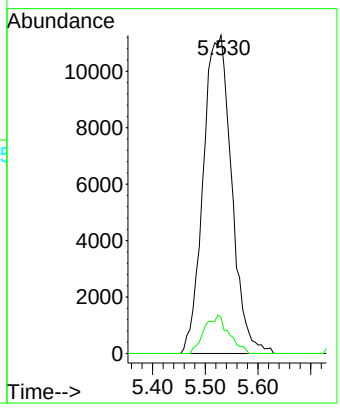





#11
Tert butyl alcohol
Concen: 79.762 ug/l
RT: 5.530 min Scan# 60
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 59 Resp: 42081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.4 | 8.9 | 13.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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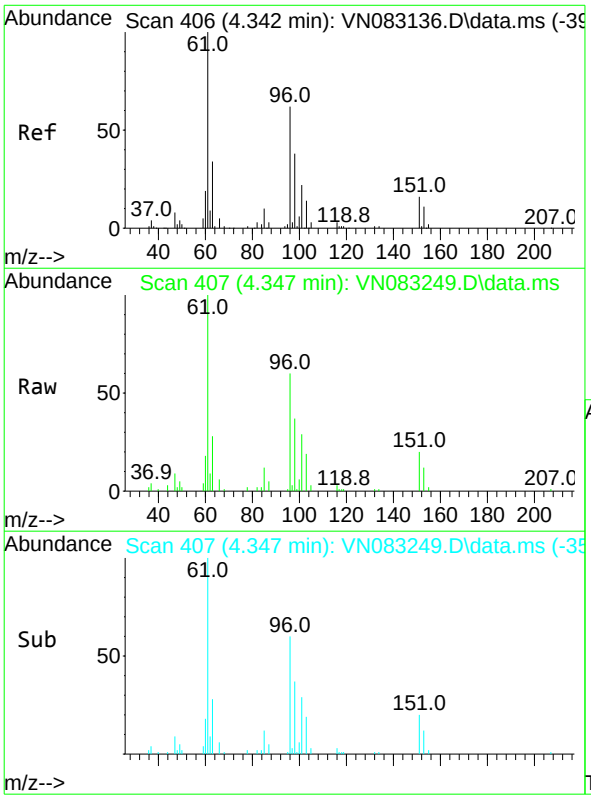
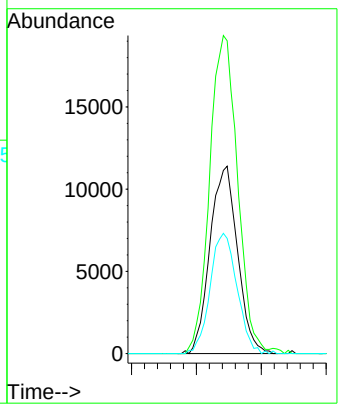
Supervised By :Semsettin Yesilyurt 08/14/2024

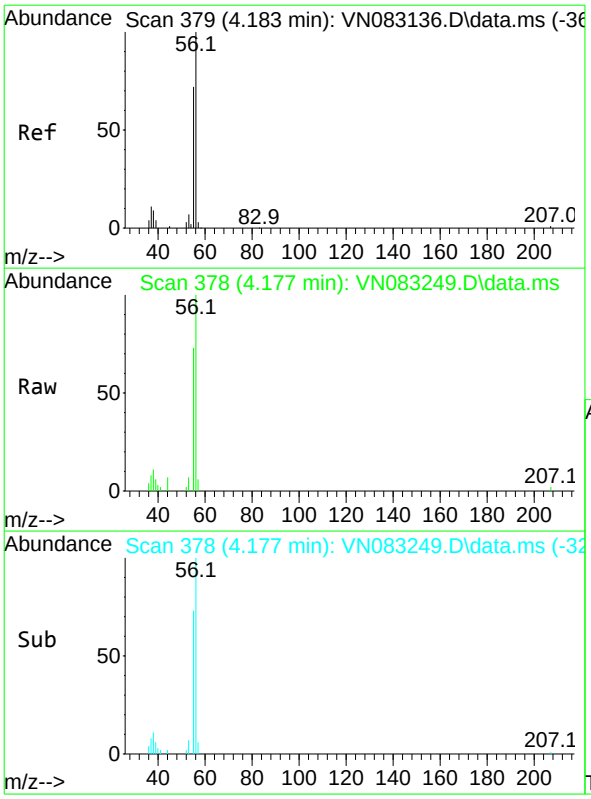



#12
1,1-Dichloroethene
Concen: 17.015 ug/l
RT: 4.347 min Scan# 407
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 96 Resp: 33641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 166.9 | 149.7 | 224.5 |
| 98 | 61.4 | 50.1 | 75.1 |

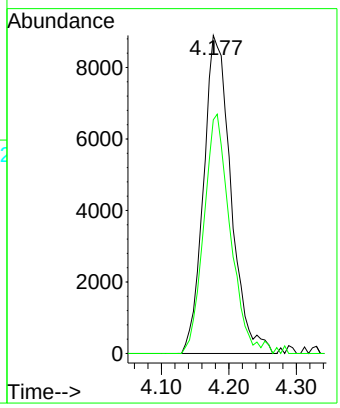





#13
Acrolein
Concen: 72.954 ug/l
RT: 4.177 min Scan# 37
Delta R.T. -0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 56 Resp: 25085

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 72.9 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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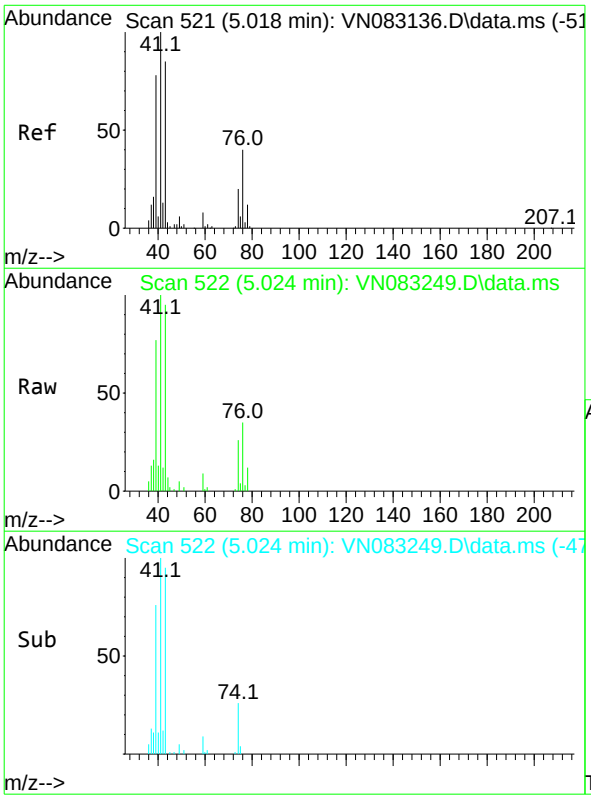
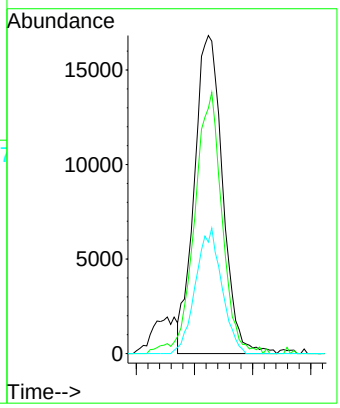
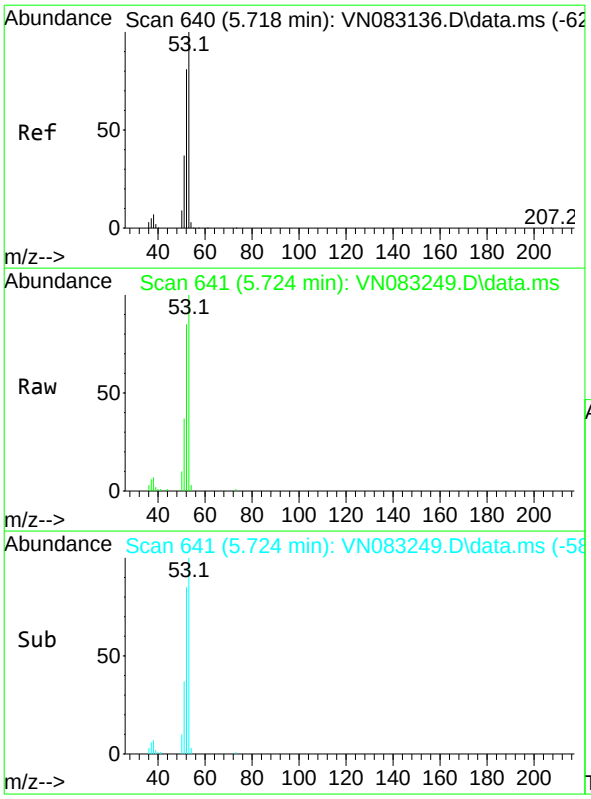



#14
Allyl chloride
Concen: 15.219 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 41 Resp: 56861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 79.8 | 67.8 | 101.6 |
| 76 | 36.4 | 25.8 | 38.8 |

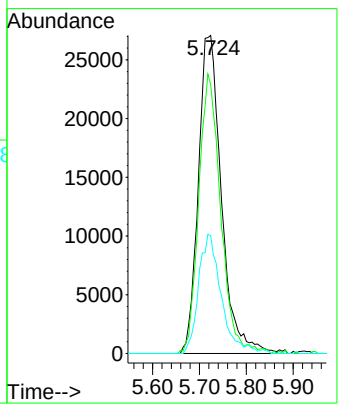





#15
Acrylonitrile
Concen: 85.222 ug/l
RT: 5.724 min Scan# 64
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 53 Resp: 92469

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.6 | 66.6 | 100.0 |
| 51 | 36.6 | 30.1 | 45.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

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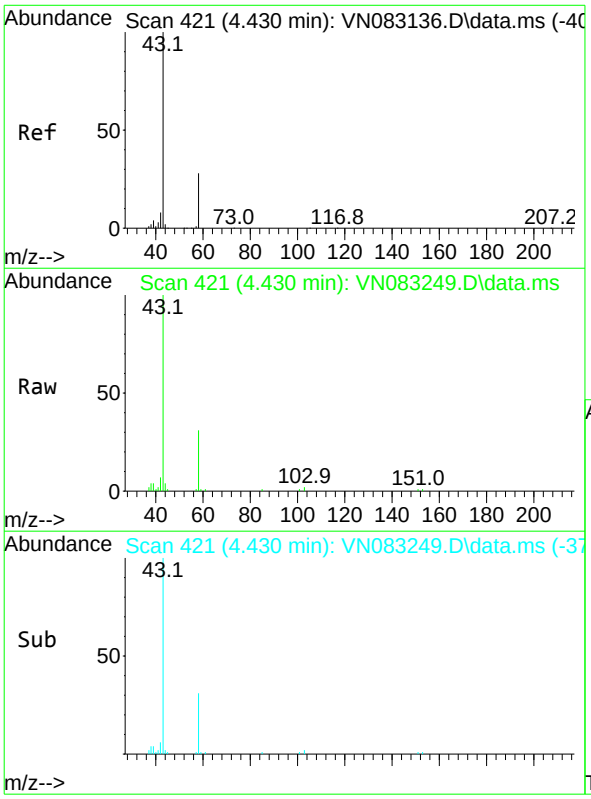
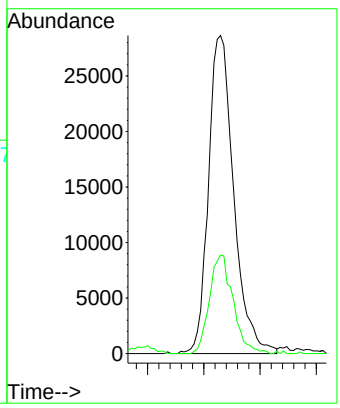
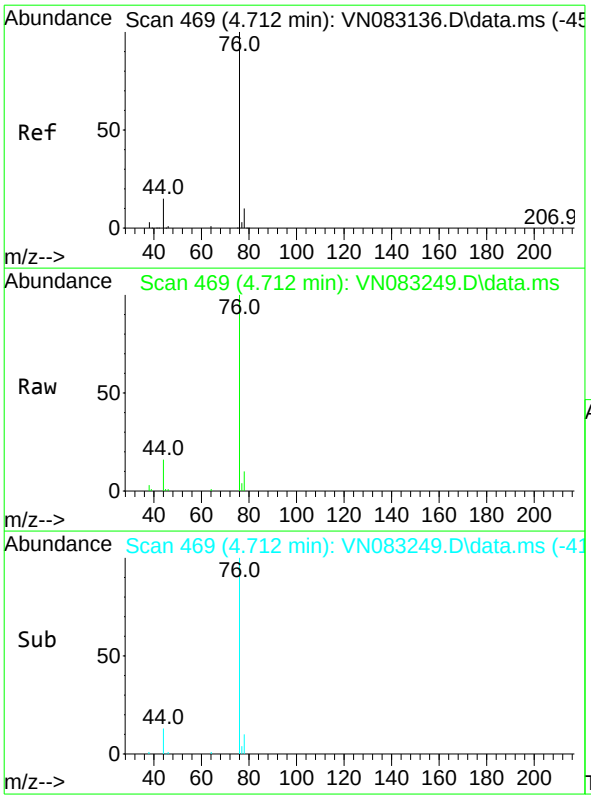



#16
Acetone
Concen: 89.956 ug/l
RT: 4.430 min Scan# 421
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 43 Resp: 89359

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 31.0 | 21.8 | 32.6 |

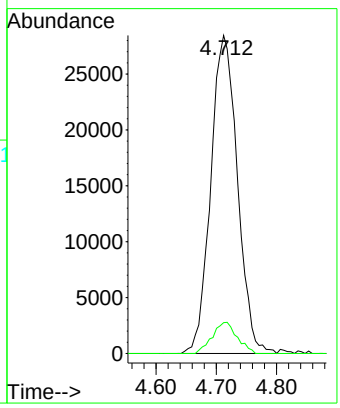





#17
Carbon Disulfide
Concen: 15.135 ug/l
RT: 4.712 min Scan# 46
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 76 Resp: 87555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.7 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

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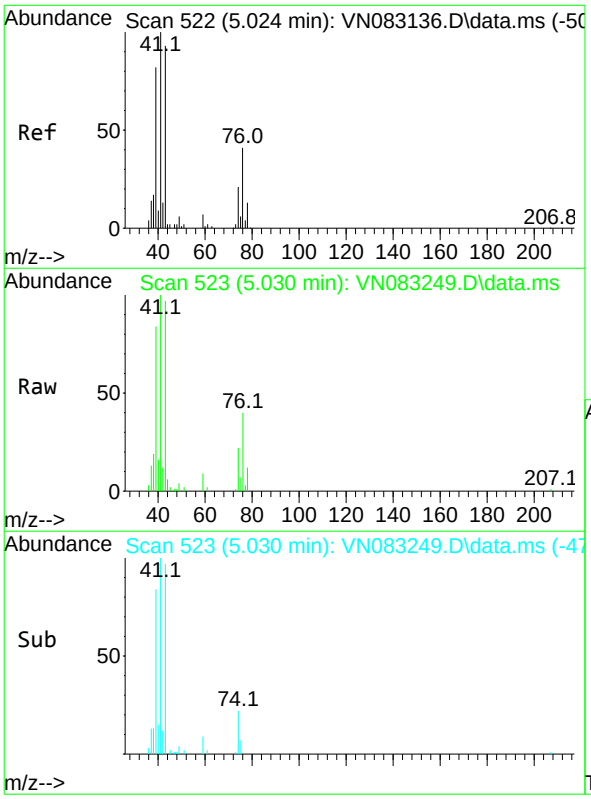
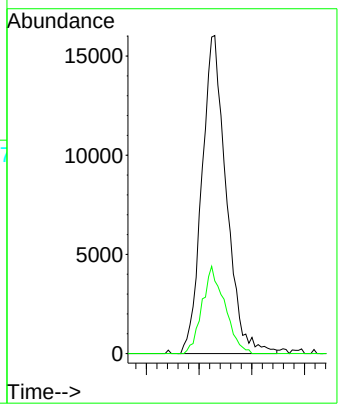
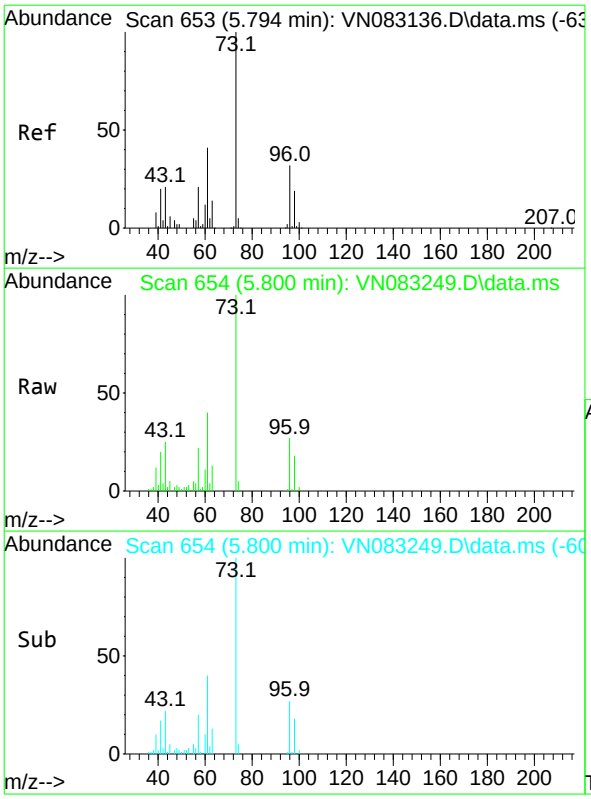



#18
Methyl Acetate
Concen: 17.430 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 43 Resp: 51588

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 25.5 | 16.3 | 24.5# |

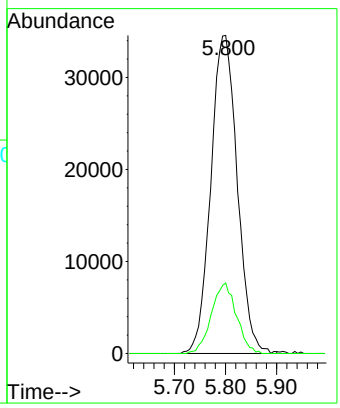





#19
Methyl tert-butyl Ether
Concen: 17.392 ug/l
RT: 5.800 min Scan# 65
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 73 Resp: 124113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.2 | 17.9 | 26.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

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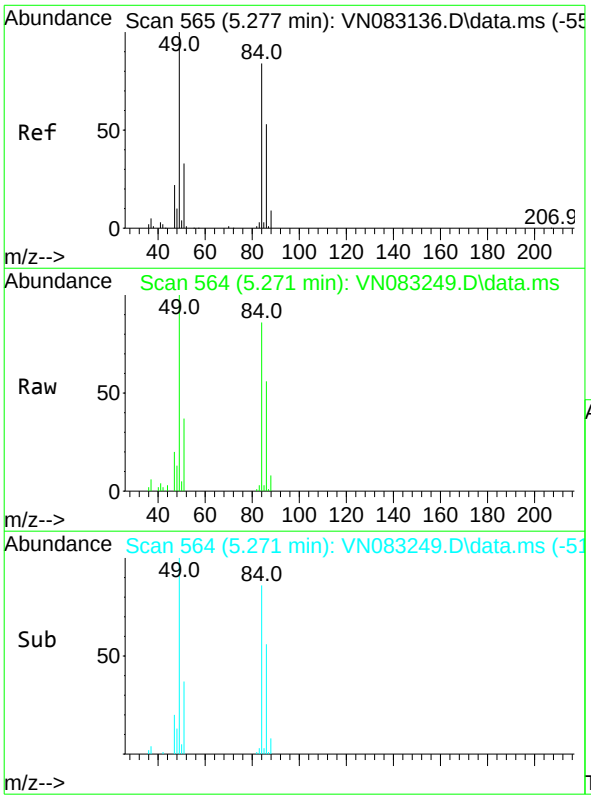
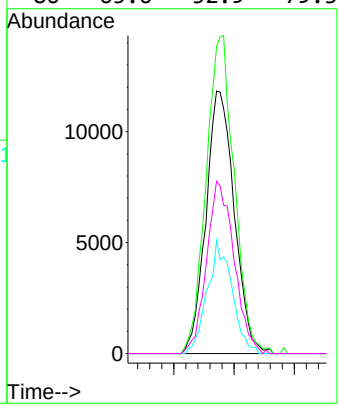
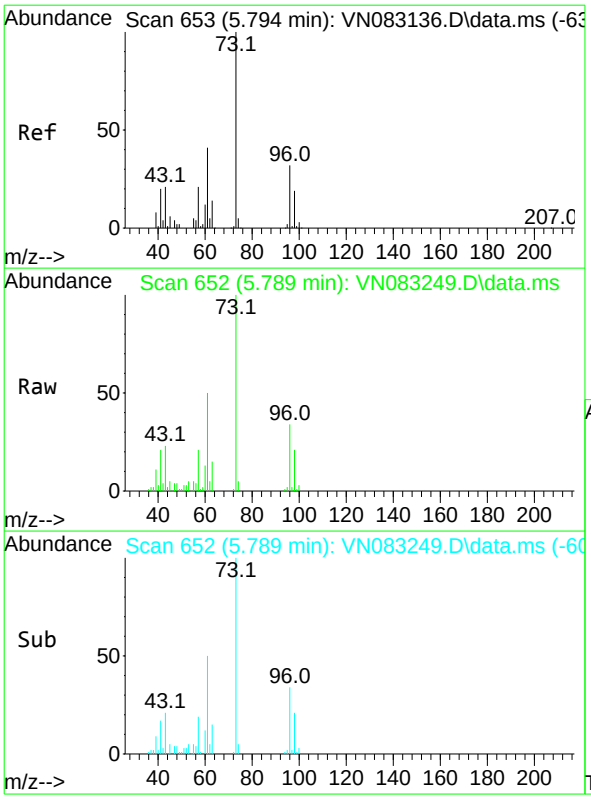



#20
Methylene Chloride
Concen: 16.884 ug/l
RT: 5.271 min Scan# 564
Delta R.T. -0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 84 Resp: 38601

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 117.0 | 119.6 | 179.4# |
| 51 | 43.0 | 34.8 | 52.2 |
| 86 | 65.6 | 52.9 | 79.3 |

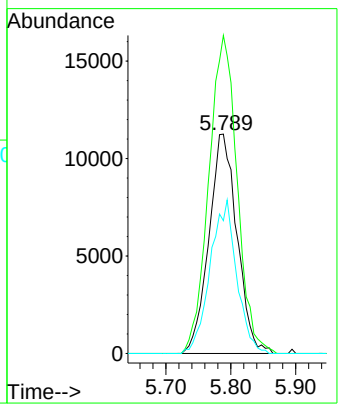





#21
trans-1,2-Dichloroethene
Concen: 16.552 ug/l
RT: 5.789 min Scan# 65
Delta R.T. -0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 96 Resp: 33823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 145.0 | 123.4 | 185.2 |
| 98 | 60.5 | 49.3 | 73.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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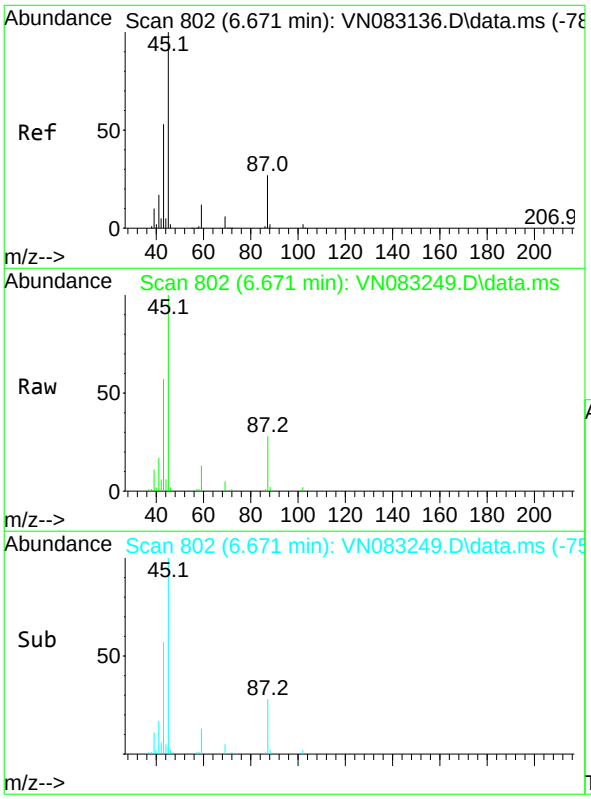
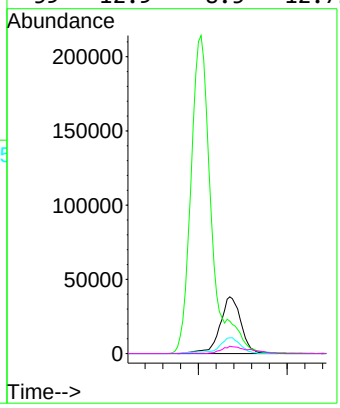
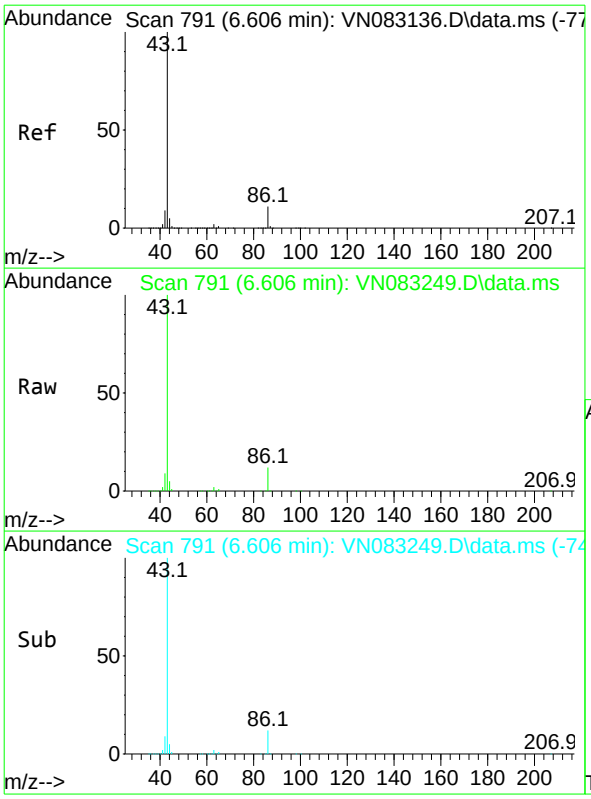



#22
Diisopropyl ether
Concen: 17.842 ug/l
RT: 6.671 min Scan# 802
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 45 Resp: 125303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 55.4 | 44.0 | 66.0 |
| 87 | 27.8 | 19.7 | 29.5 |
| 59 | 12.9 | 8.5 | 12.7# |

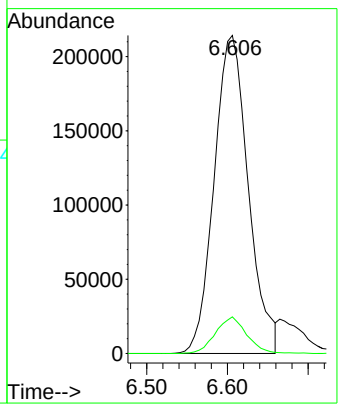





#23
Vinyl Acetate
Concen: 87.595 ug/l m
RT: 6.606 min Scan# 79
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 43 Resp: 630546

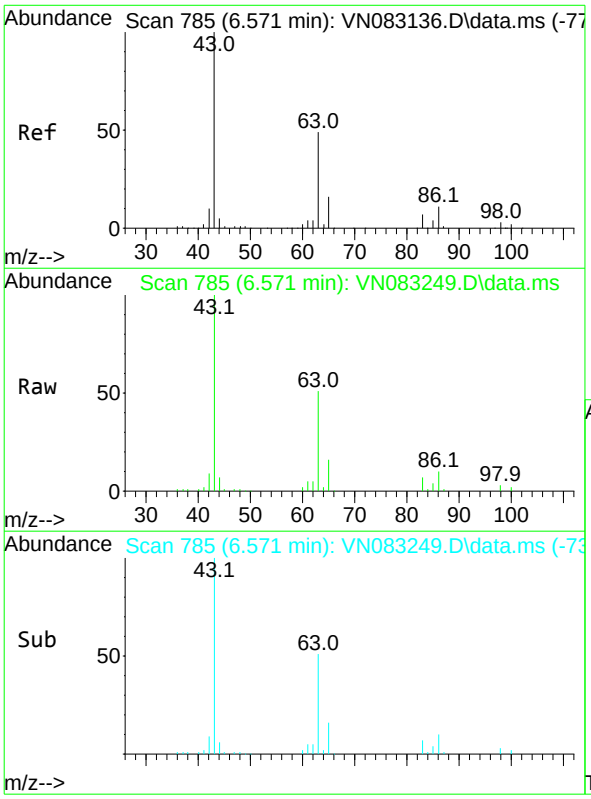
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 11.5 | 7.3 | 10.9# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
**APPROVED**

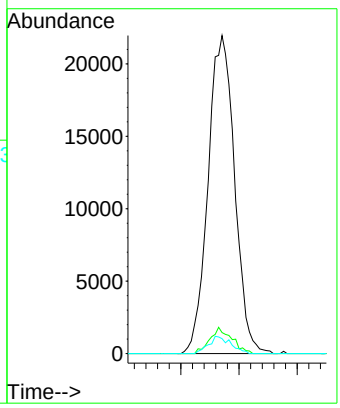
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

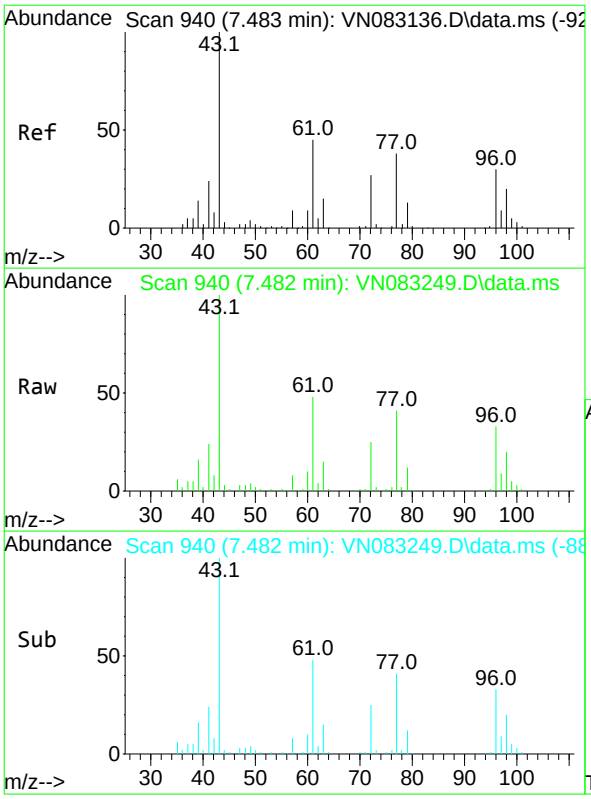



#24
1,1-Dichloroethane
Concen: 18.185 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 63 Resp: 69612

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.6 | 3.3 | 9.9 |
| 100 | 4.7 | 2.0 | 6.0 |

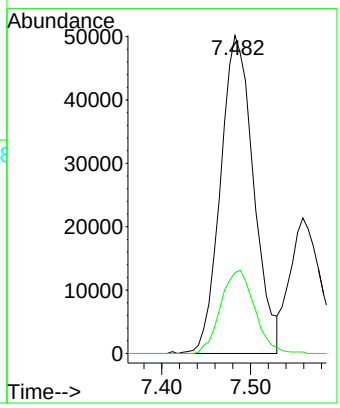





#25
2-Butanone
Concen: 85.282 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 43 Resp: 130080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 25.4 | 18.2 | 27.2 |




**Instrument :**
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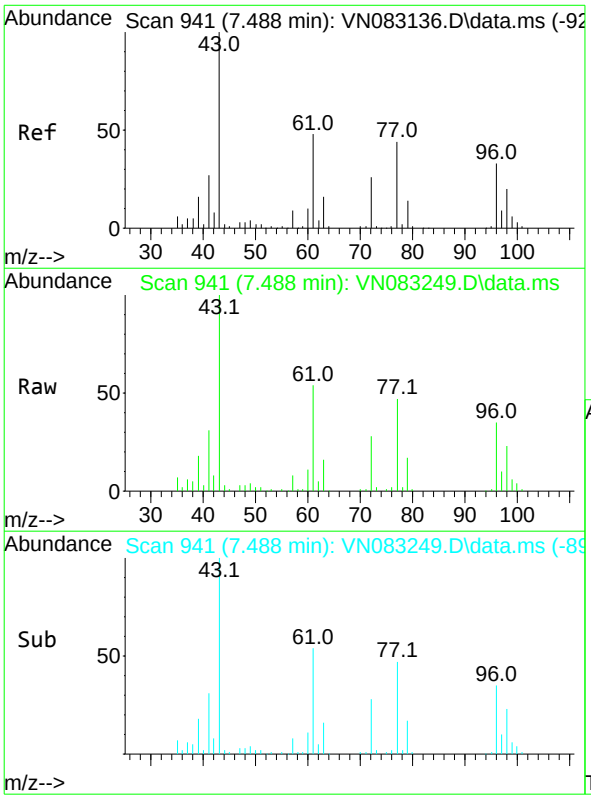
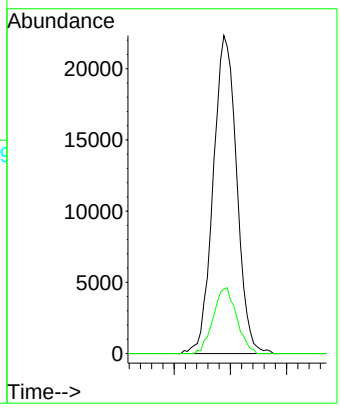
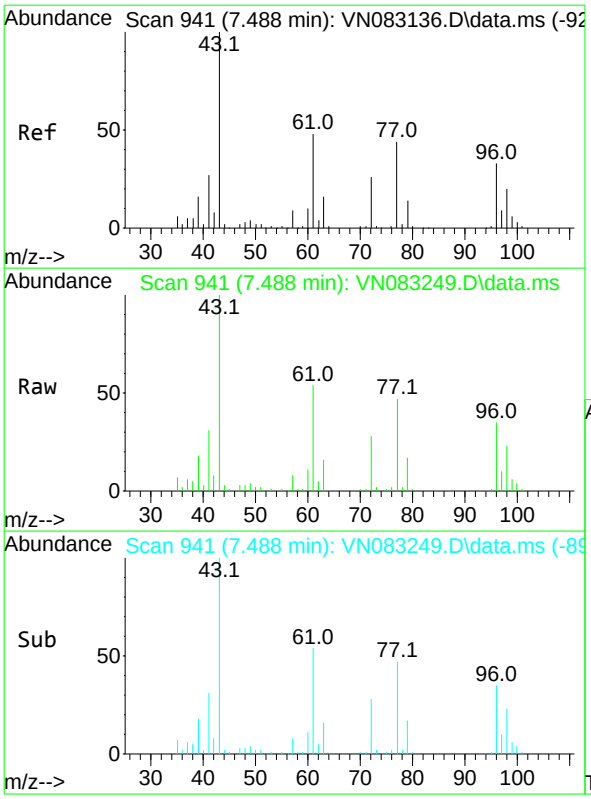



#26
2,2-Dichloropropane
Concen: 18.243 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 77 Resp: 64854

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 20.6 | 10.3 | 30.9 |






#27
cis-1,2-Dichloroethene
Concen: 17.299 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 96 Resp: 42656

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 155.7 | 0.0 | 329.6 |
| 98 | 64.8 | 0.0 | 128.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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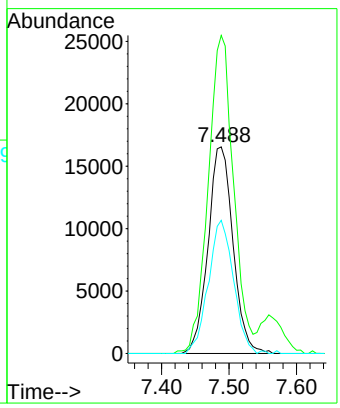
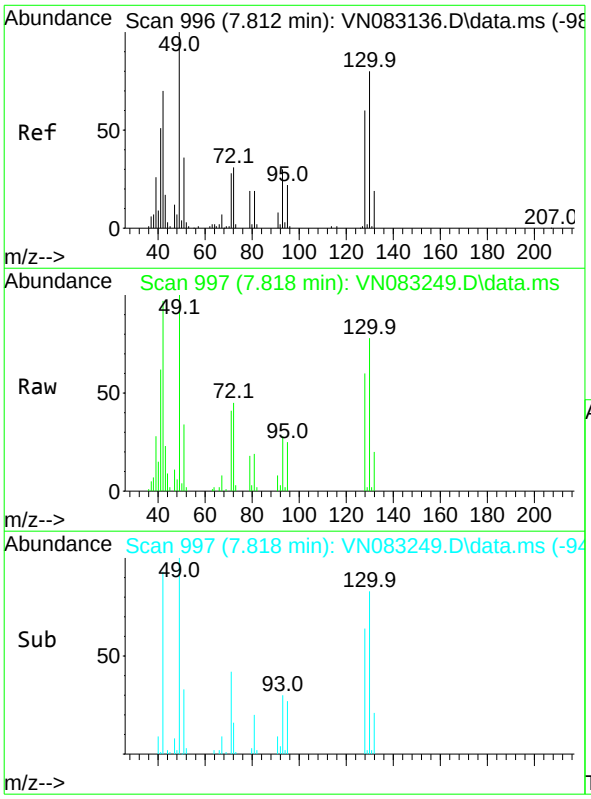
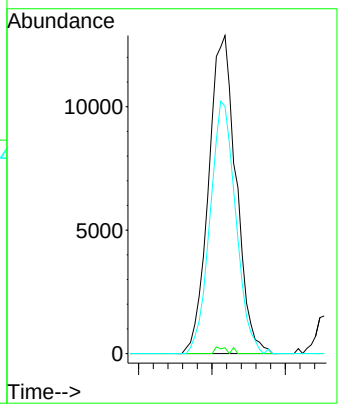


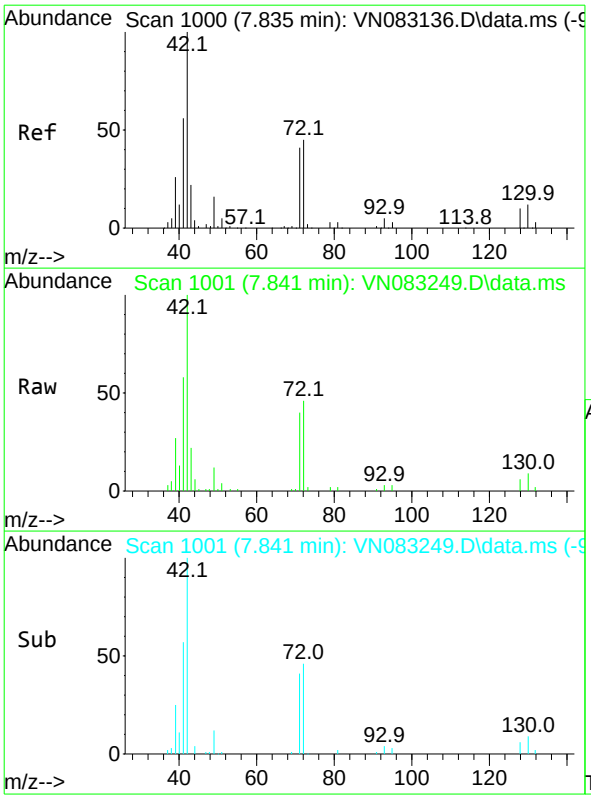




#28
Bromochloromethane
Concen: 21.456 ug/l
RT: 7.818 min Scan# 997
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 49 Resp: 33565

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.0 | 0.0 | 3.8 |
| 130 | 74.1 | 50.5 | 75.7 |

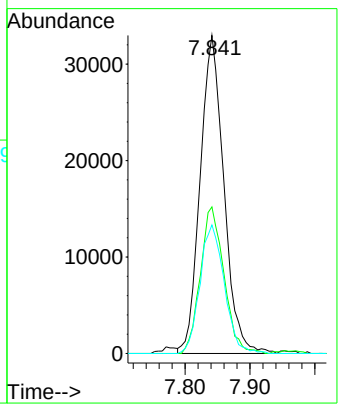





#29
Tetrahydrofuran
Concen: 84.909 ug/l
RT: 7.841 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 42 Resp: 83720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 45.9 | 30.0 | 45.0# |
| 71 | 41.5 | 28.3 | 42.5 |




**Instrument :**
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**ClientSampleId :**
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**Manual Integrations**
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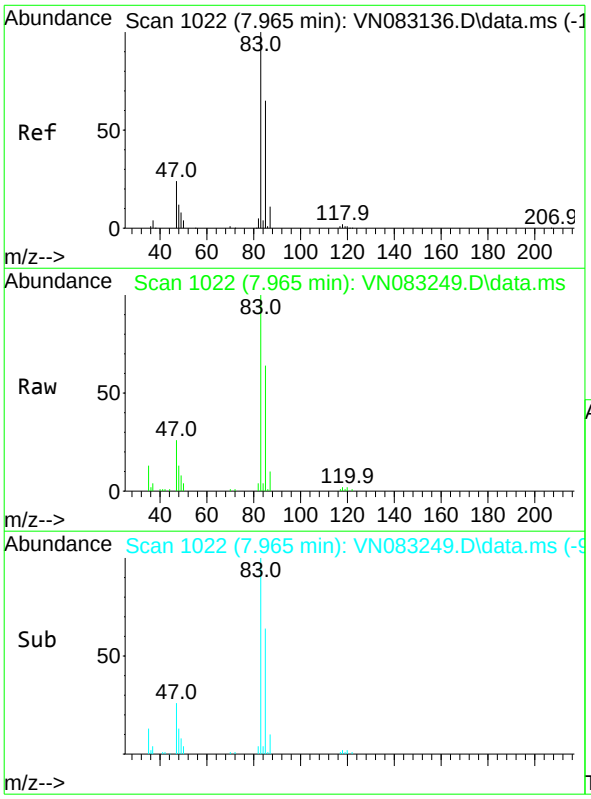
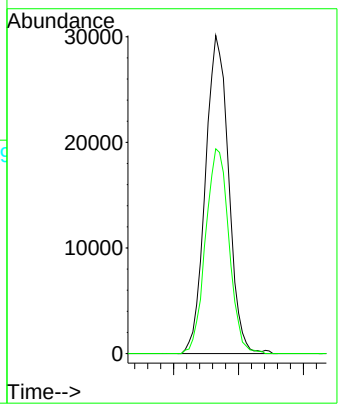
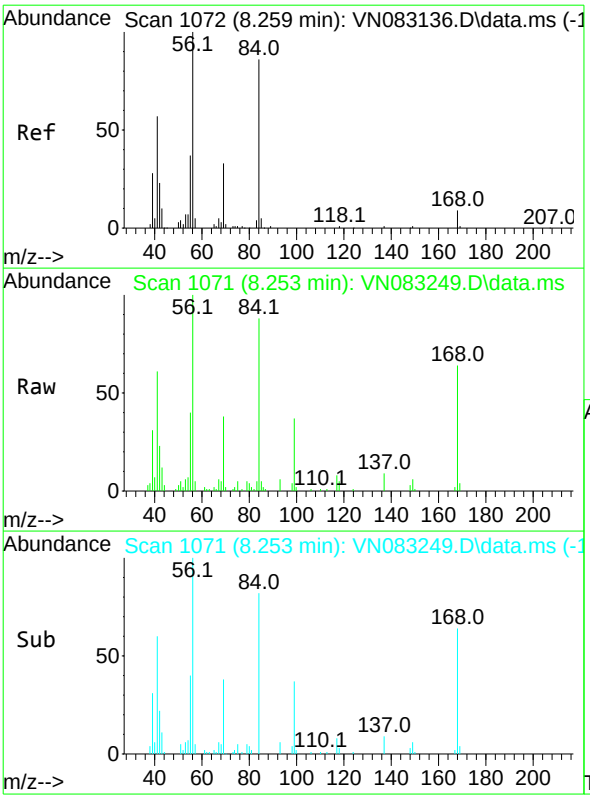



#30
Chloroform
Concen: 18.831 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 83 Resp: 74889

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.4 | 50.9 | 76.3 |






#31
Cyclohexane
Concen: 16.950 ug/l
RT: 8.253 min Scan# 10
Delta R.T. -0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 56 Resp: 63769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 38.1 | 24.5 | 36.7# |
| 84 | 85.8 | 66.0 | 99.0 |

**Instrument :**
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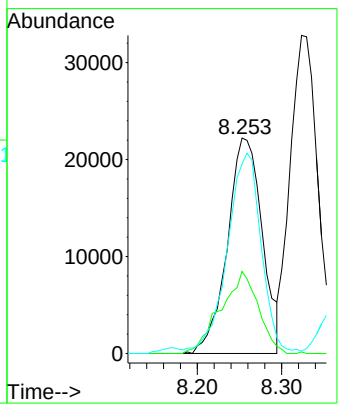
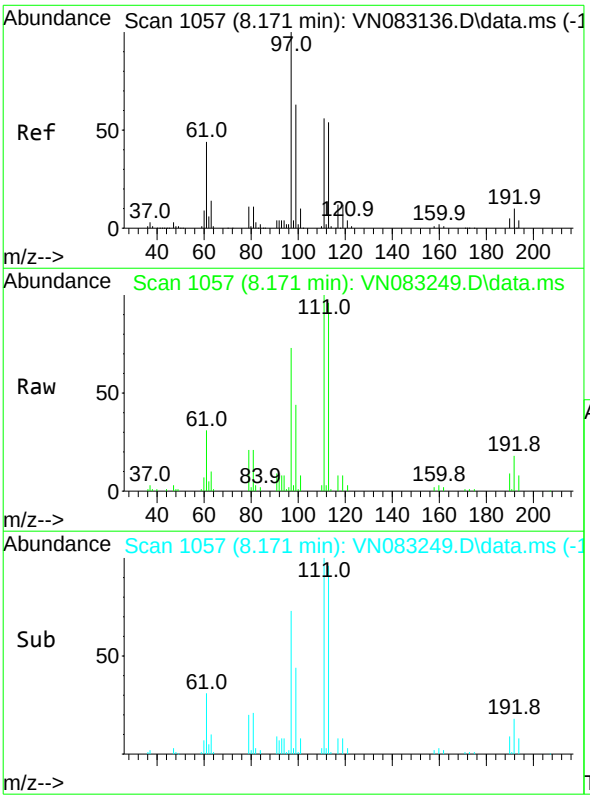
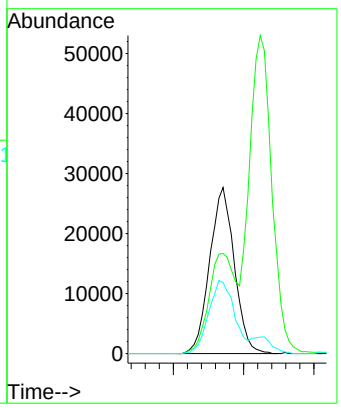


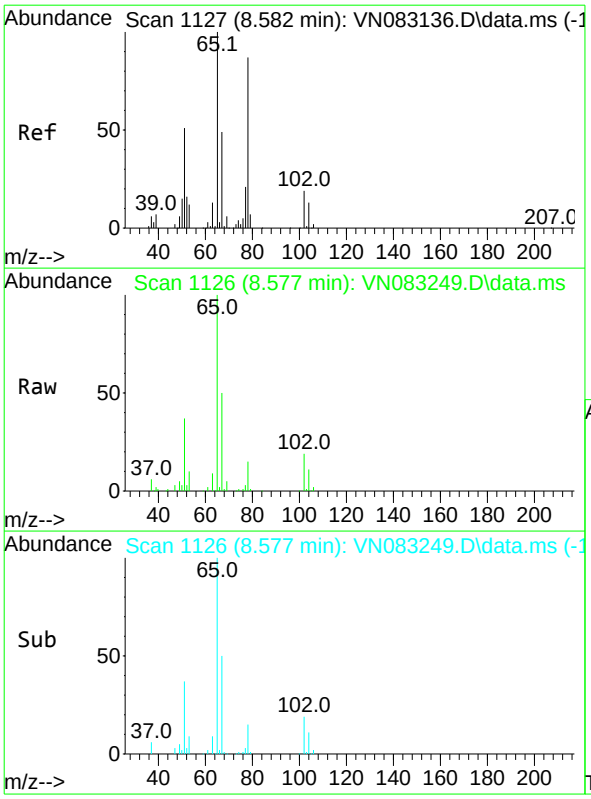




#32
1,1,1-Trichloroethane
Concen: 17.911 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 97 Resp: 67426

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 66.7 | 52.0 | 78.0 |
| 61 | 46.0 | 42.1 | 63.1 |

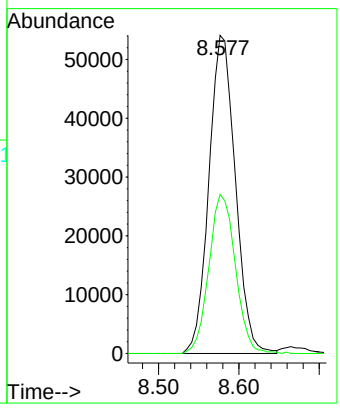





#33
1,2-Dichloroethane-d4
Concen: 48.653 ug/l
RT: 8.577 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 65 Resp: 123513

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.2 | 0.0 | 104.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

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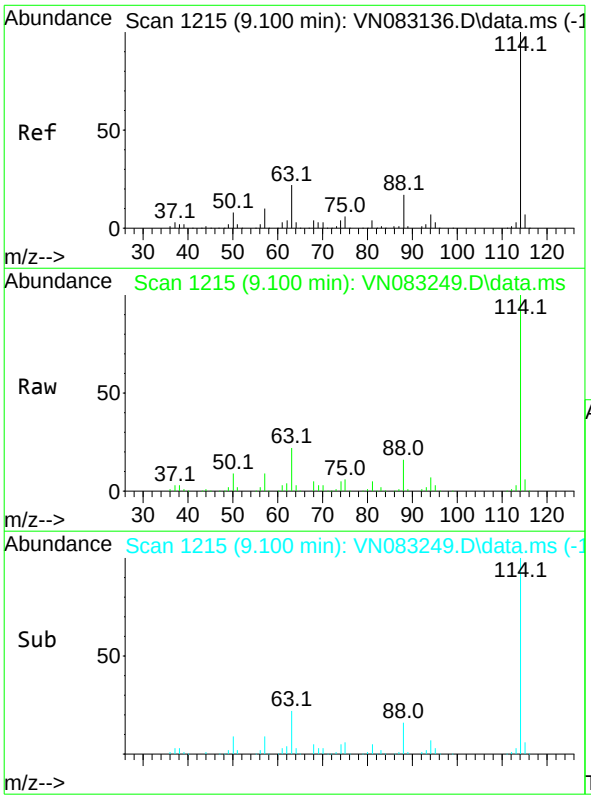
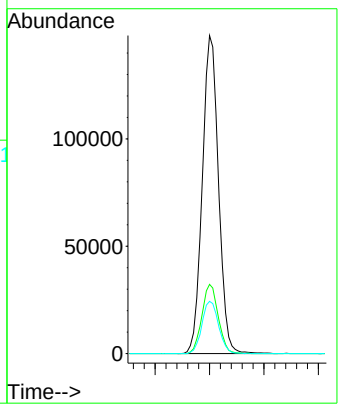
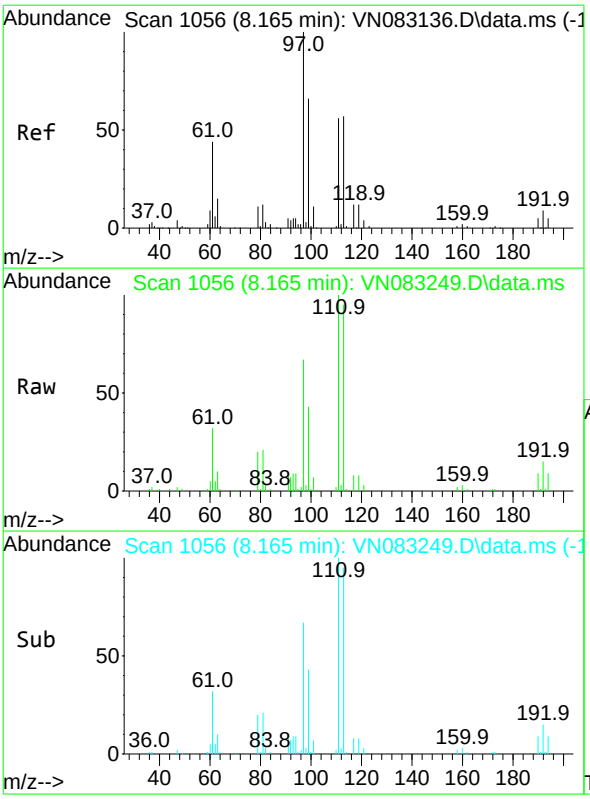



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:114 Resp: 306441

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.8 | 0.0 | 44.6 |
| 88 | 16.4 | 0.0 | 31.4 |

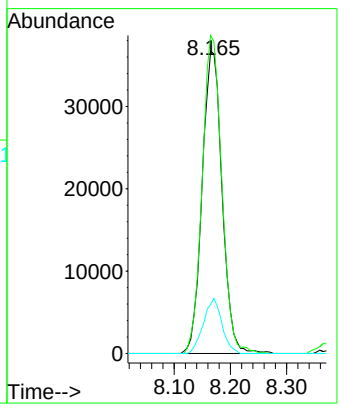





#35
Dibromofluoromethane
Concen: 47.355 ug/l
RT: 8.165 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:113 Resp: 90577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.3 | 82.4 | 123.6 |
| 192 | 16.9 | 14.9 | 22.3 |

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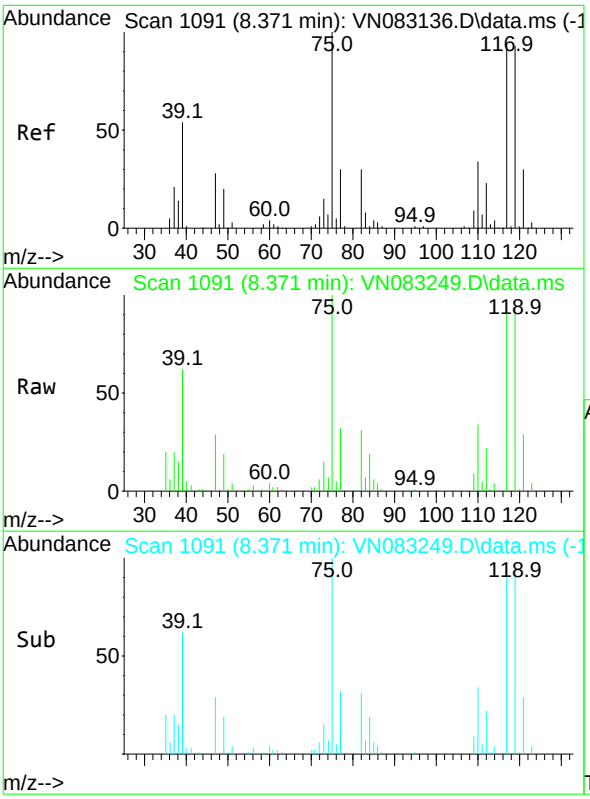
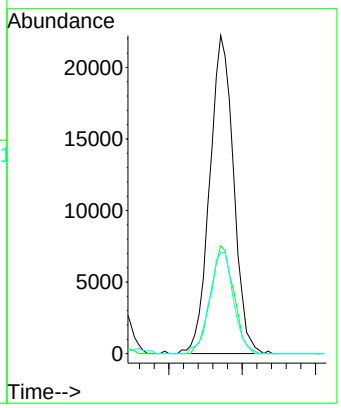
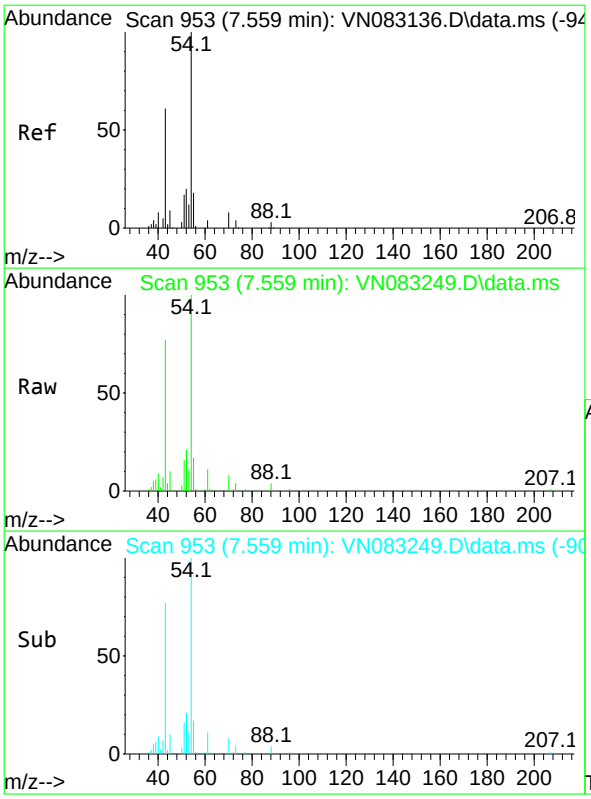



#36
1,1-Dichloropropene
Concen: 17.335 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 75 Resp: 50157

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 32.9 | 16.3 | 48.9 |
| 77 | 31.7 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 16.620 ug/l
RT: 7.559 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

Tgt Ion: 43 Resp: 53843

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.7 | 9.3 | 13.9 |
| 70 | 10.4 | 7.0 | 10.6 |

**Manual Integrations**
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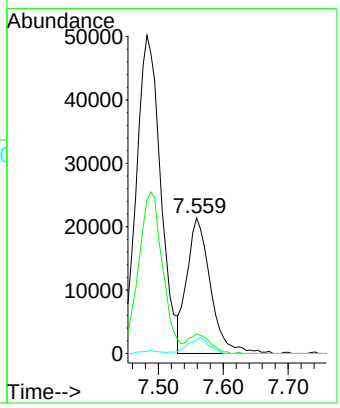
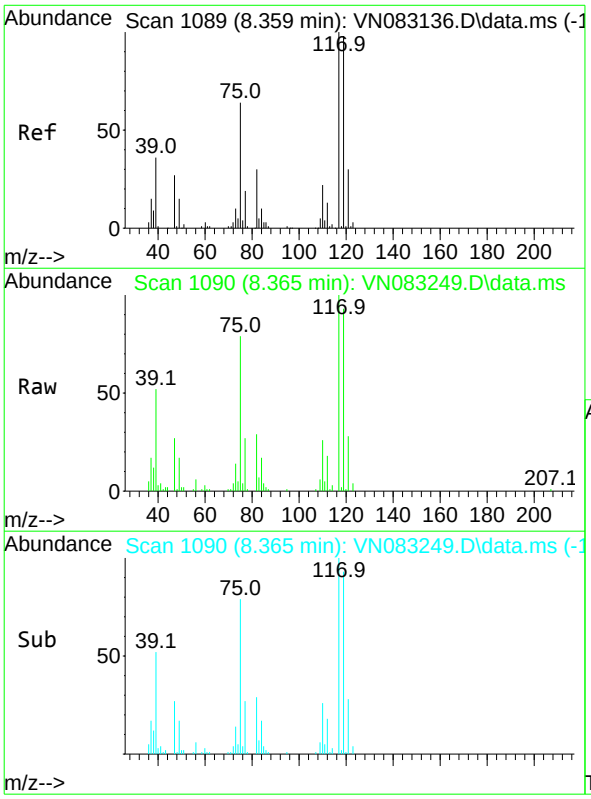
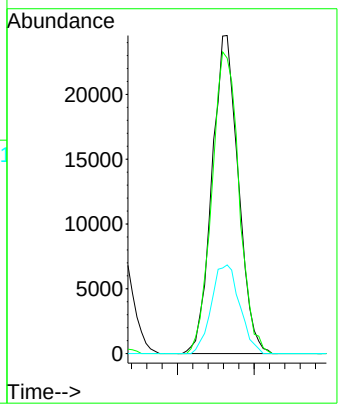


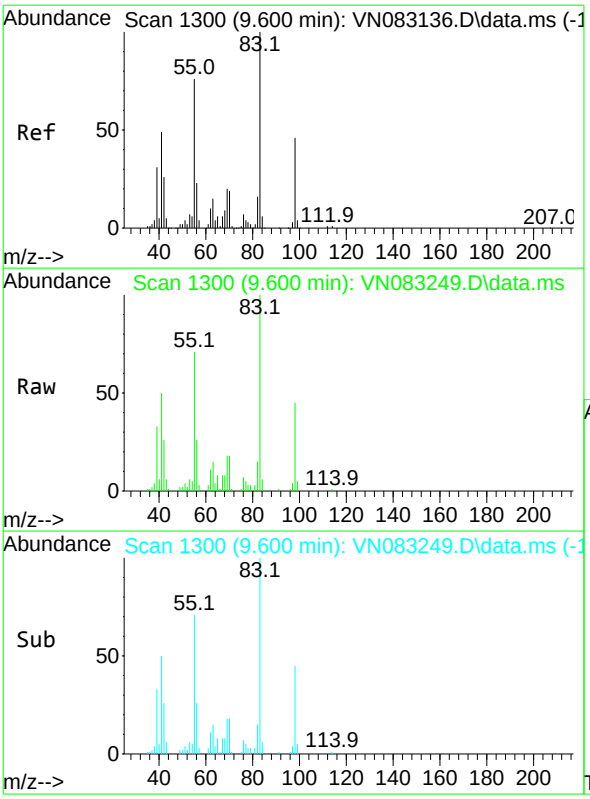




#38
Carbon Tetrachloride
Concen: 17.983 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:117 Resp: 58607

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 92.9 | 74.9 | 112.3 |
| 121 | 27.9 | 24.3 | 36.5 |






#39
Methylcyclohexane
Concen: 16.900 ug/l
RT: 9.600 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 83 Resp: 60060

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 70.7 | 66.4 | 99.6 |
| 98 | 45.4 | 40.7 | 61.1 |

**Instrument :**
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**ClientSampleId :**
VN0813WBS01

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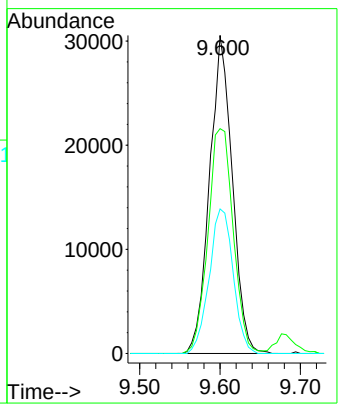
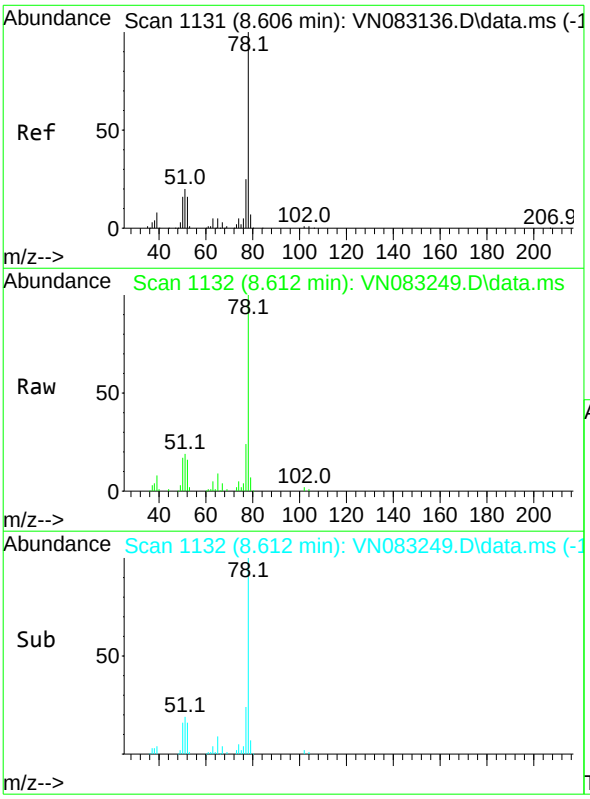
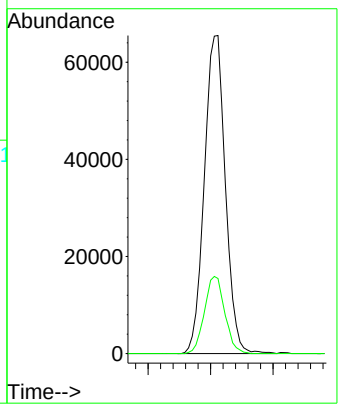


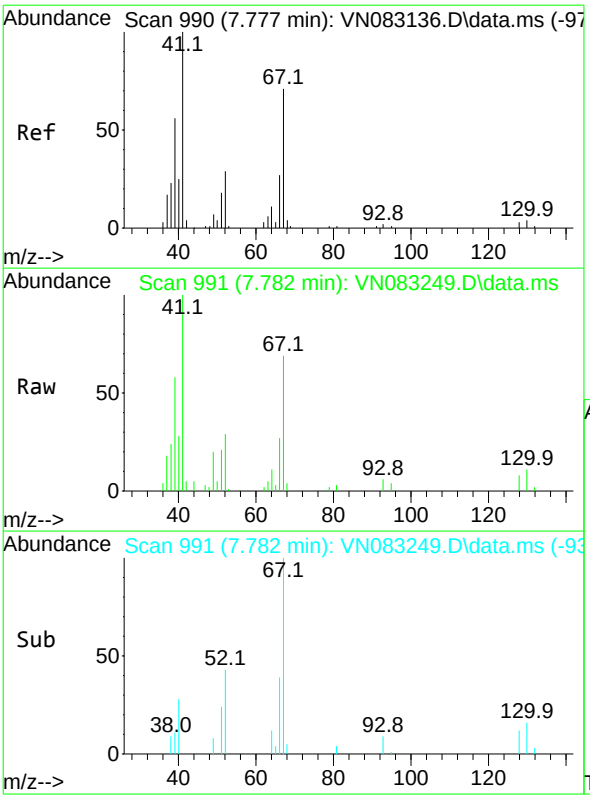




#40
Benzene
Concen: 17.779 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 78 Resp: 153249

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.6 | 19.0 | 28.4 |

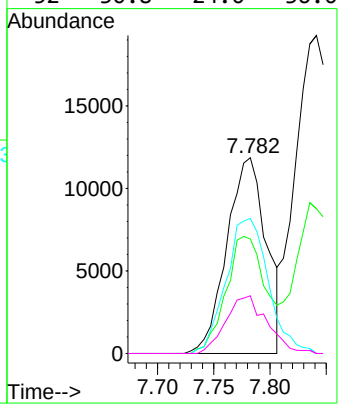





#41
Methacrylonitrile
Concen: 15.749 ug/l
RT: 7.782 min Scan# 99
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 41 Resp: 29010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 59.7 | 45.5 | 68.3 |
| 67 | 73.7 | 50.5 | 75.7 |
| 52 | 30.8 | 24.0 | 36.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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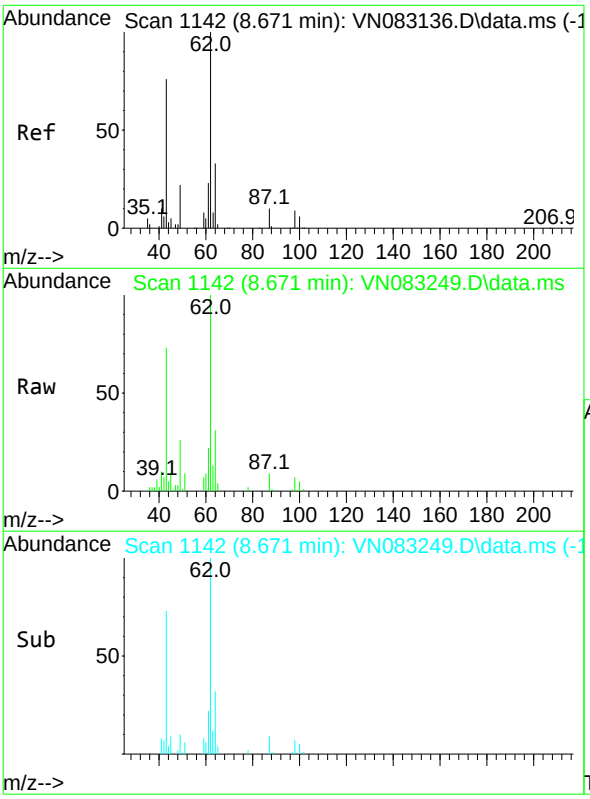
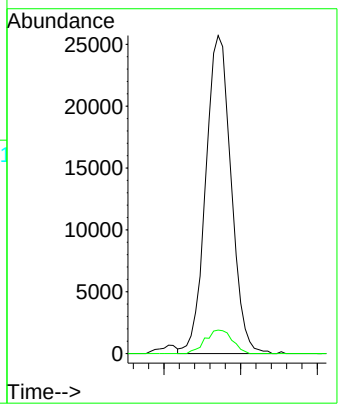
Supervised By :Semsettin Yesilyurt 08/14/2024

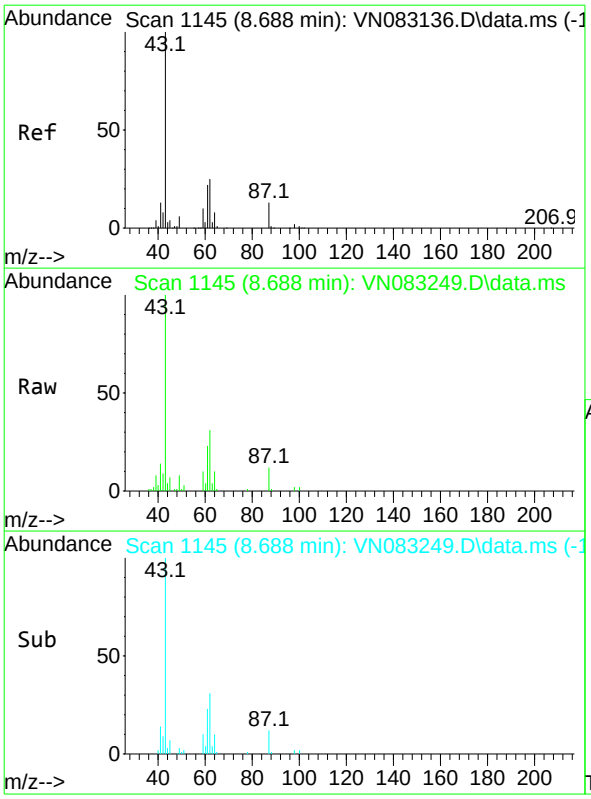



#42
1,2-Dichloroethane
Concen: 18.814 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 62 Resp: 59075

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.9 | 0.0 | 15.8 |

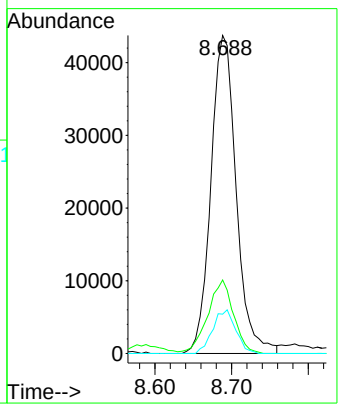





#43
Isopropyl Acetate
Concen: 16.396 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 43 Resp: 100348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 23.6 | 17.8 | 26.6 |
| 87 | 12.4 | 8.2 | 12.2# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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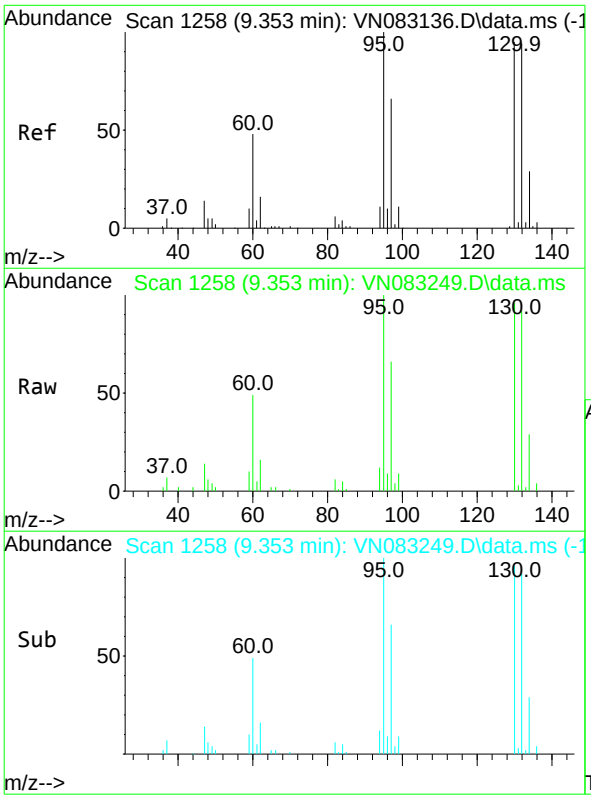
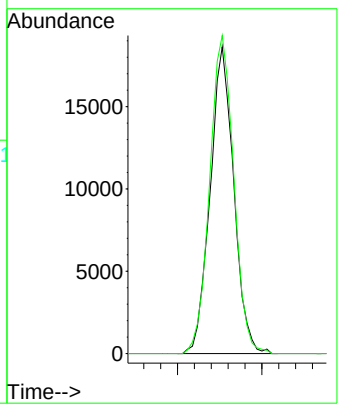
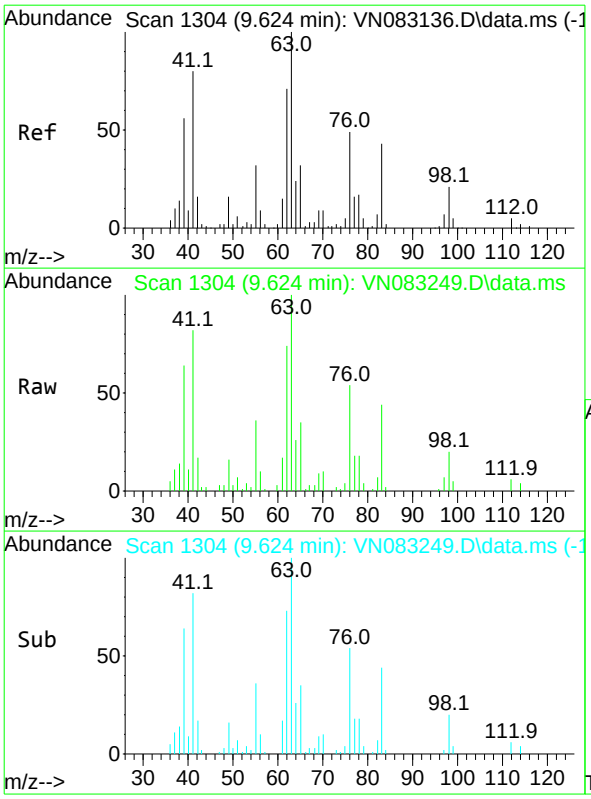



#44
Trichloroethene
Concen: 17.647 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:130 Resp: 36205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 103.7 | 0.0 | 197.8 |

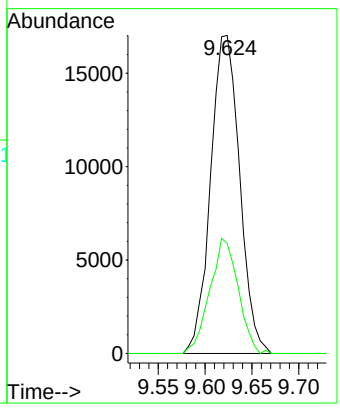





#45
1,2-Dichloropropane
Concen: 17.949 ug/l
RT: 9.624 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 63 Resp: 36725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 34.6 | 24.4 | 36.6 |




**Instrument :**
MSVOA_N
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VN0813WBS01

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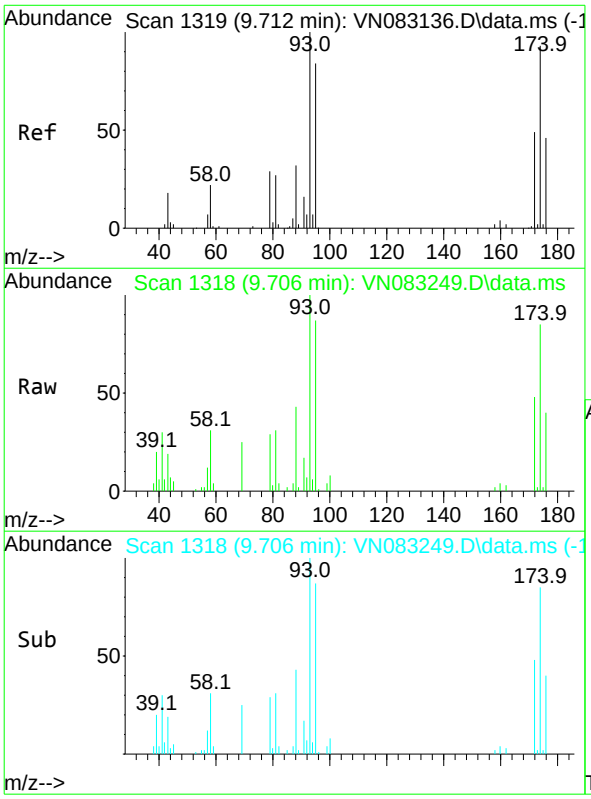
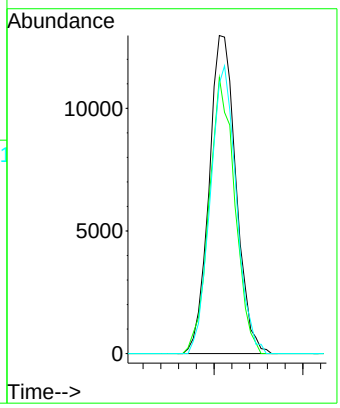
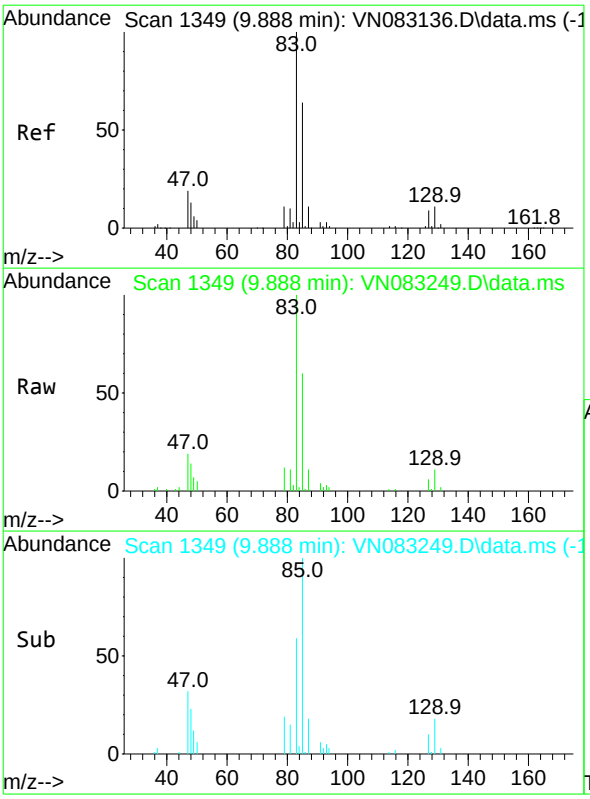



#46
Dibromomethane
Concen: 18.679 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 93 Resp: 27355

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.7 | 65.8 | 98.6 |
| 174 | 87.1 | 71.7 | 107.5 |

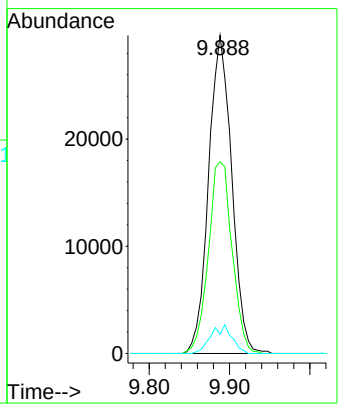





#47
Bromodichloromethane
Concen: 18.024 ug/l
RT: 9.888 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 83 Resp: 59270

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 60.3 | 51.1 | 76.7 |
| 127 | 6.1 | 7.2 | 10.8# |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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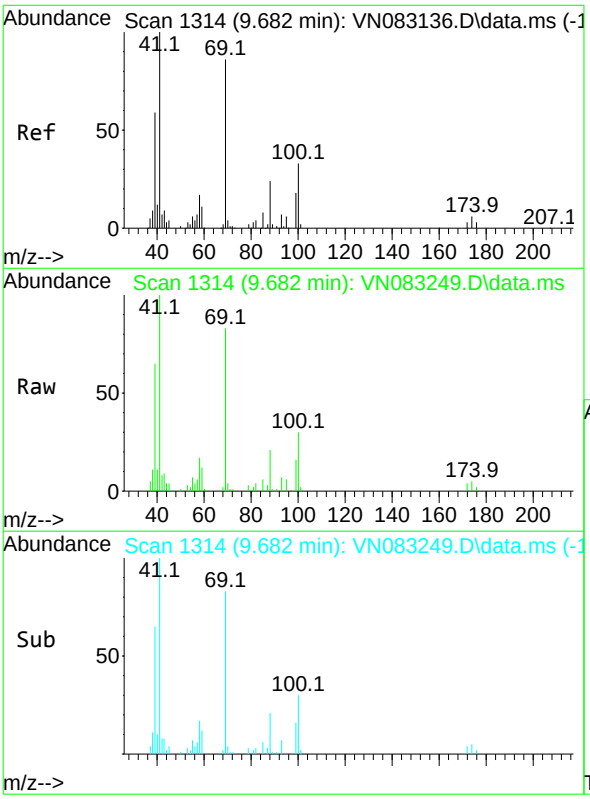
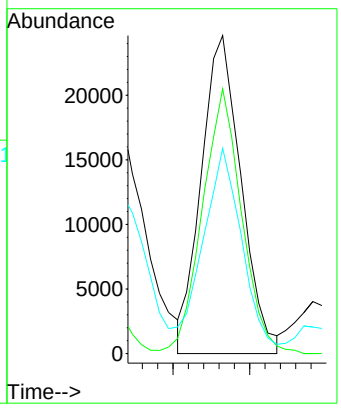
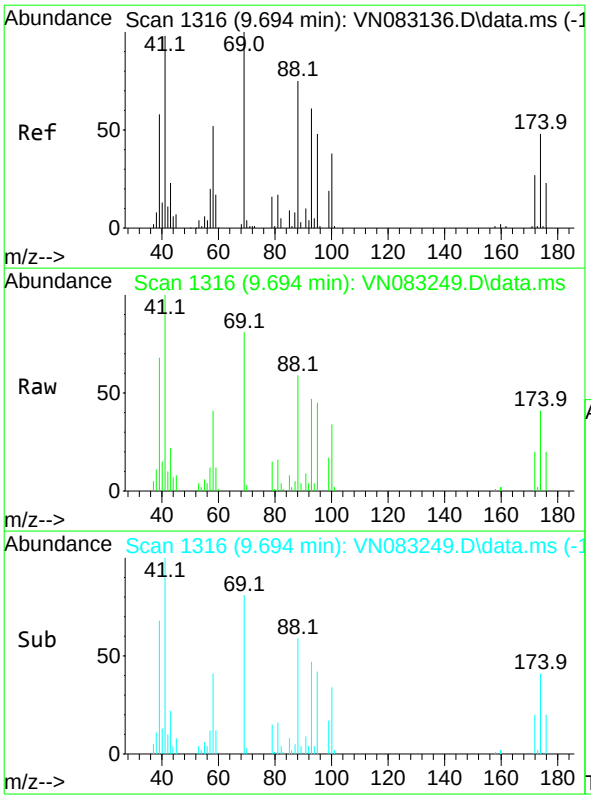



#48
Methyl methacrylate
Concen: 16.611 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 41 Resp: 44491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 81.8 | 56.3 | 84.5 |
| 39 | 64.2 | 50.3 | 75.5 |






#49
1,4-Dioxane
Concen: 353.407 ug/l
RT: 9.694 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 88 Resp: 17077

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 27.9 | 27.8 | 41.8 |
| 58 | 71.4 | 59.4 | 89.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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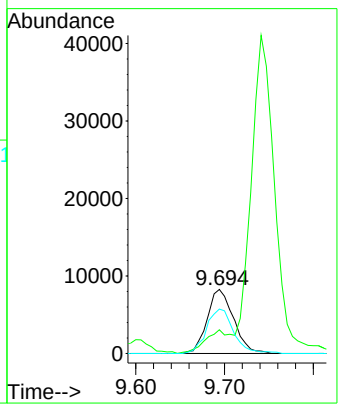
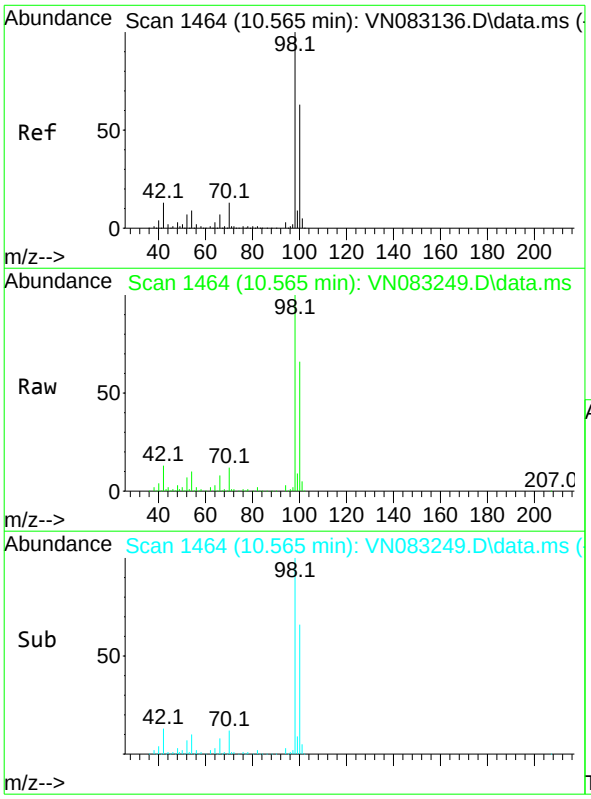
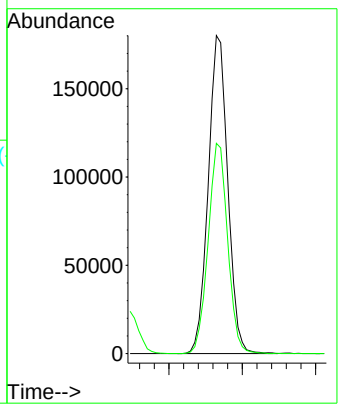


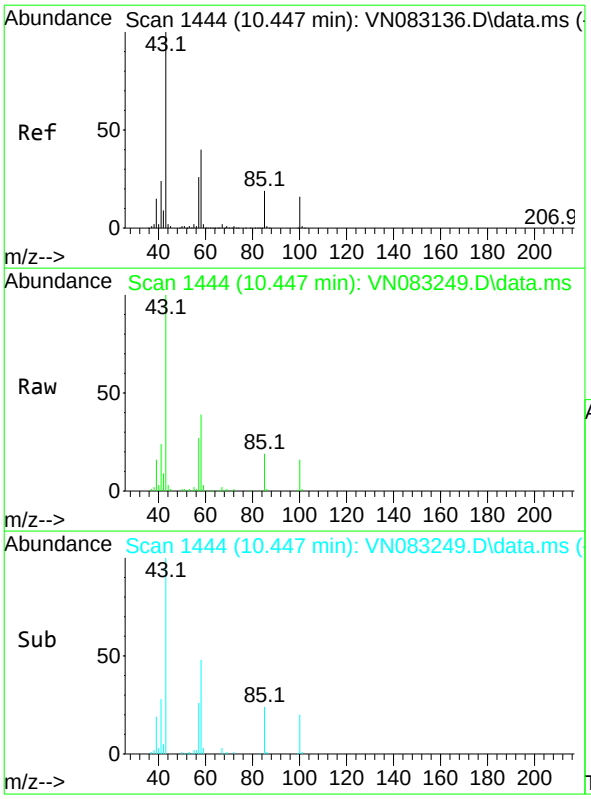




#50
Toluene-d8
Concen: 46.686 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 98 Resp: 333102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 66.0 | 51.5 | 77.3 |

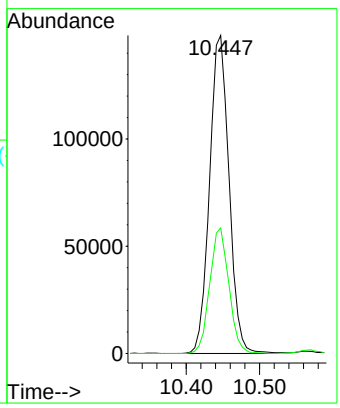





#51
4-Methyl-2-Pentanone
Concen: 89.113 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 43 Resp: 273004

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 38.8 | 28.2 | 42.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
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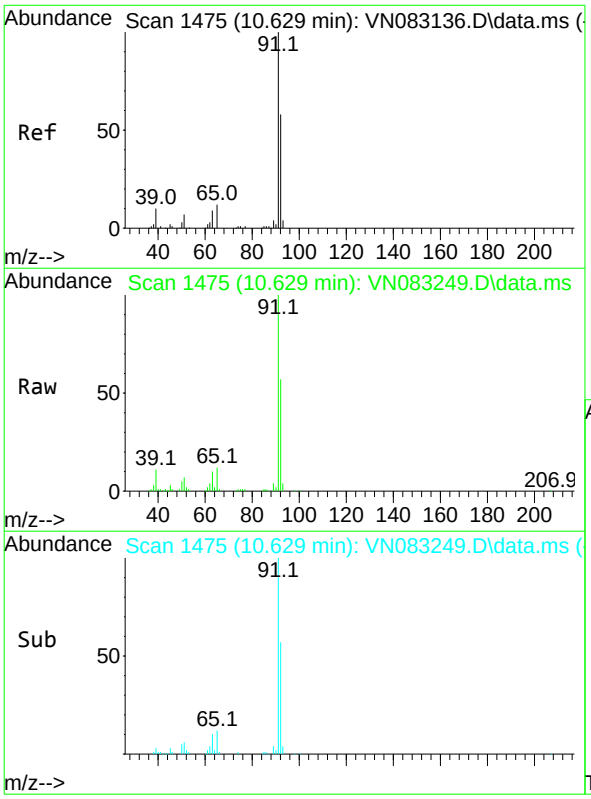
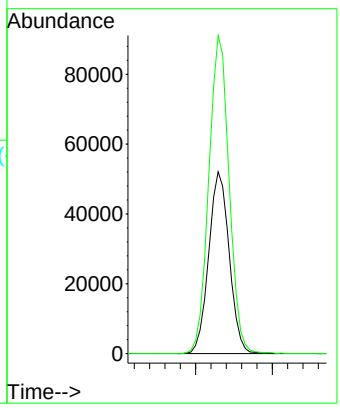
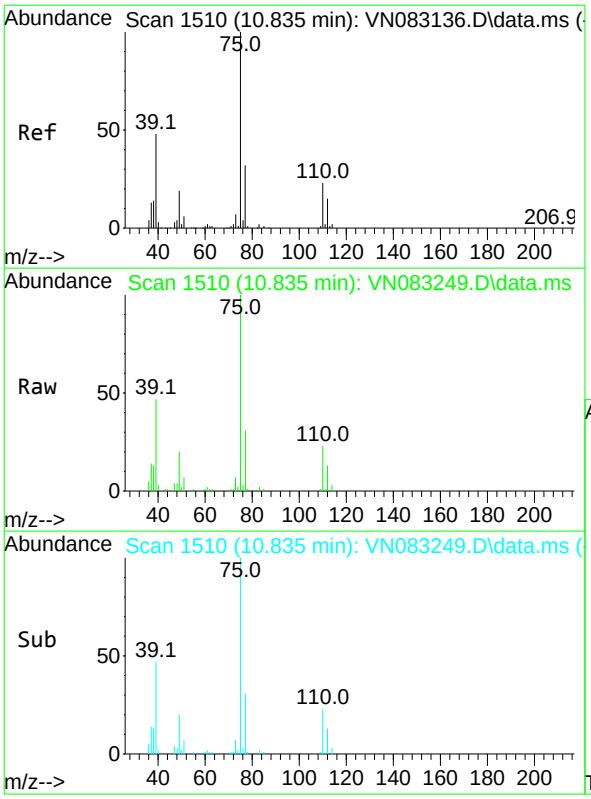



#52
Toluene
Concen: 17.748 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 92 Resp: 96659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.4 | 139.4 | 209.0 |

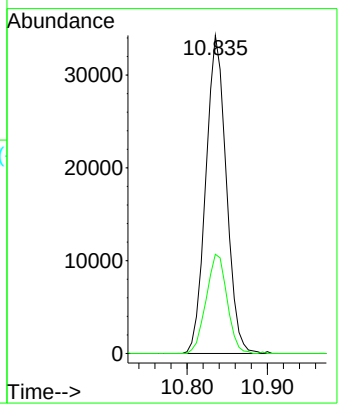





#53
t-1,3-Dichloropropene
Concen: 17.991 ug/l
RT: 10.835 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 75 Resp: 60769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.2 | 25.7 | 38.5 |

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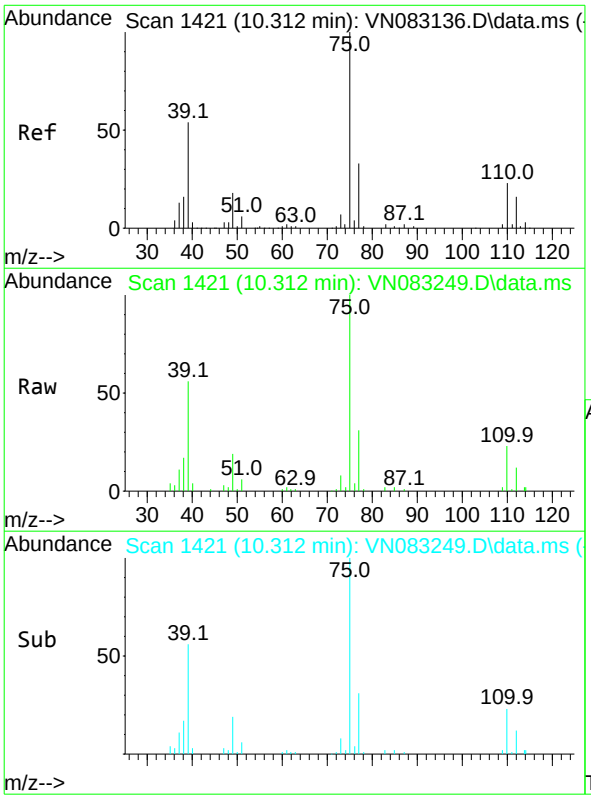
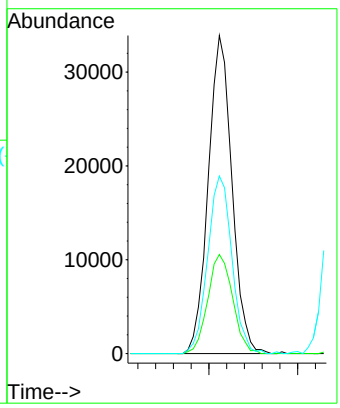
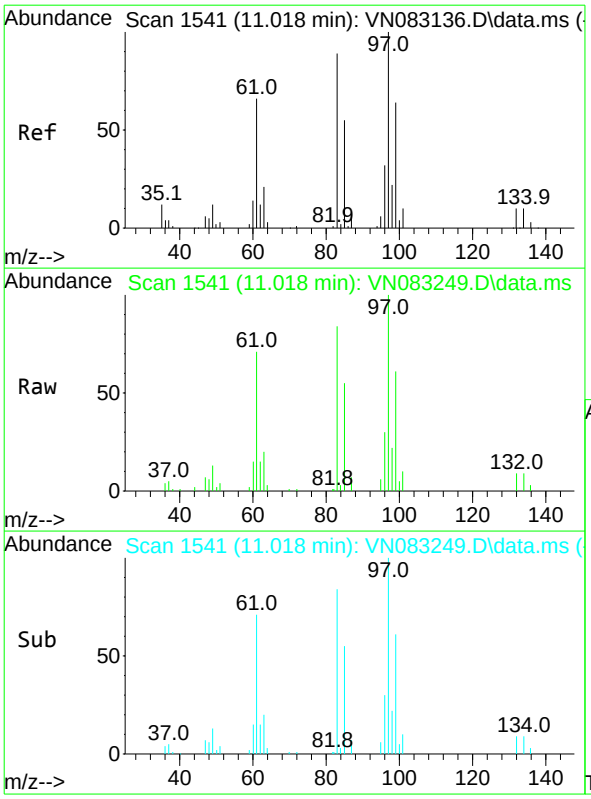



#54
cis-1,3-Dichloropropene
Concen: 17.495 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 75 Resp: 62857

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.1 | 24.3 | 36.5 |
| 39 | 55.8 | 50.5 | 75.7 |






#55
1,1,2-Trichloroethane
Concen: 18.811 ug/l
RT: 11.018 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

Tgt Ion: 97 Resp: 36714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 83.6 | 71.4 | 107.0 |
| 85 | 54.5 | 45.8 | 68.6 |
| 99 | 60.9 | 52.0 | 78.0 |

**Manual Integrations**
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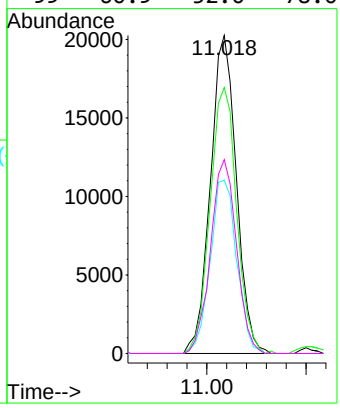
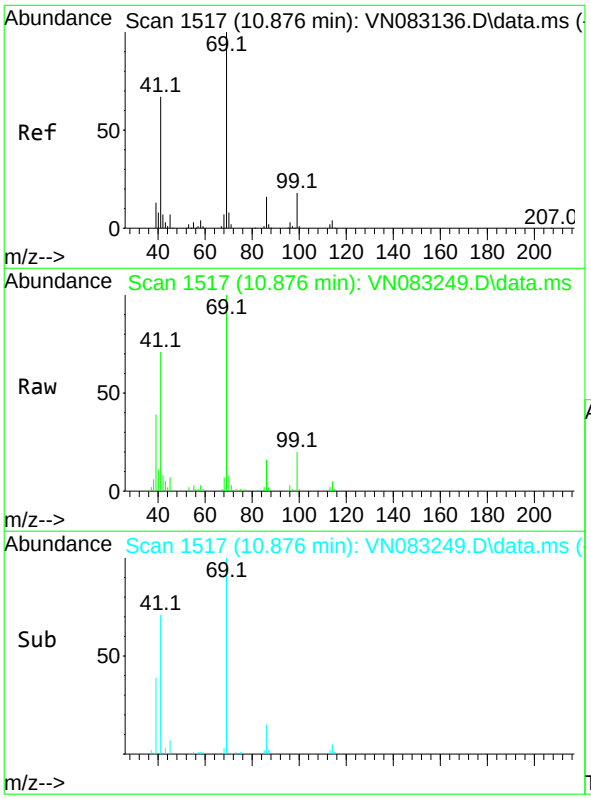
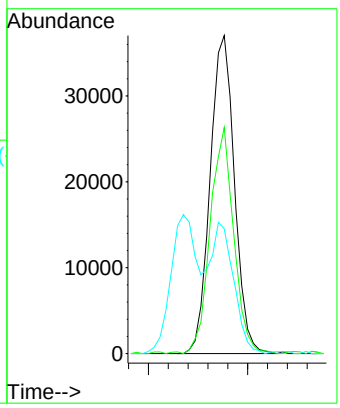


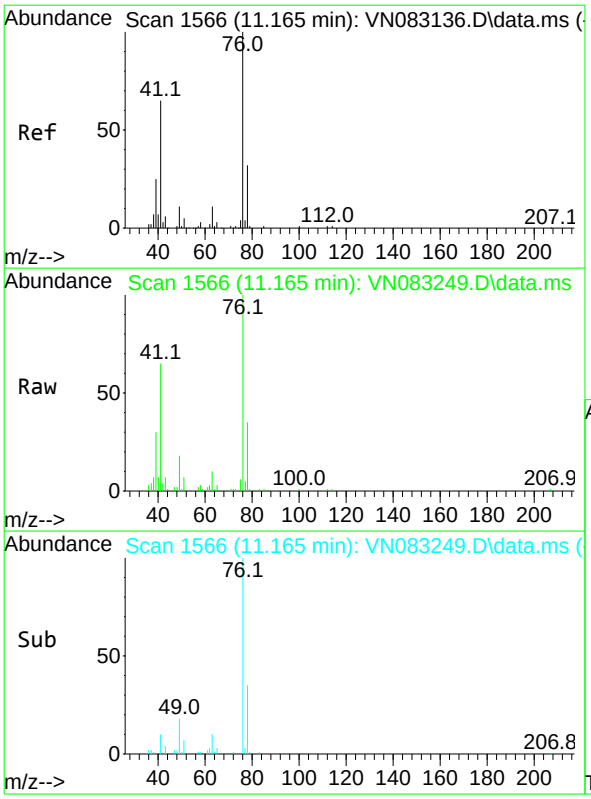




#56
Ethyl methacrylate
Concen: 17.126 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 69 Resp: 63015

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 69.1 | 63.4 | 95.2 |
| 39 | 36.4 | 37.4 | 56.0# |






#57
1,3-Dichloropropane
Concen: 18.176 ug/l
RT: 11.165 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 76 Resp: 63233

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 33.0 | 25.6 | 38.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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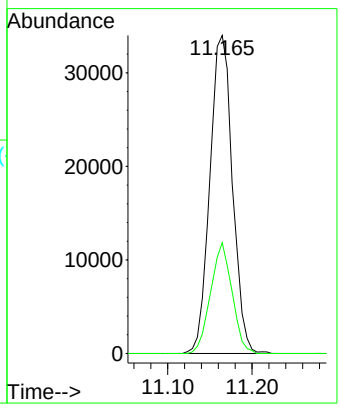
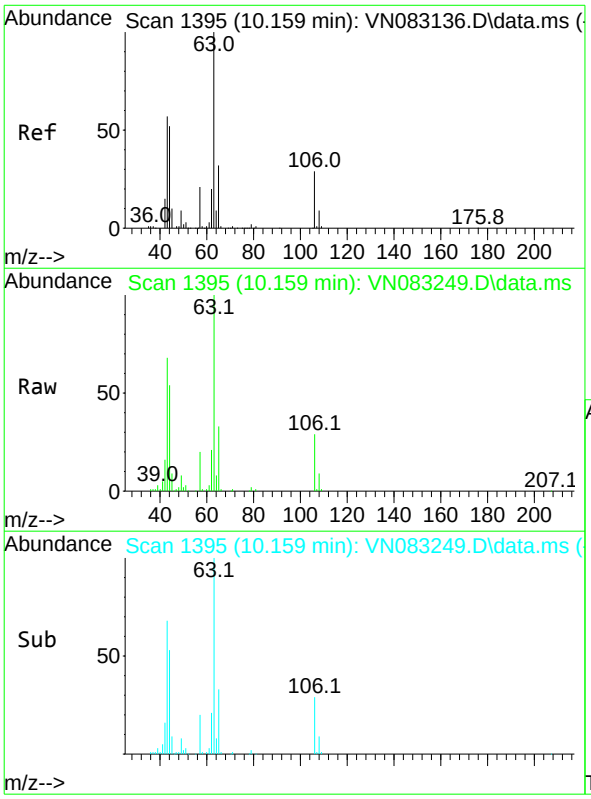
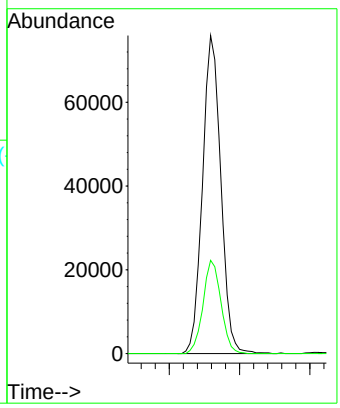


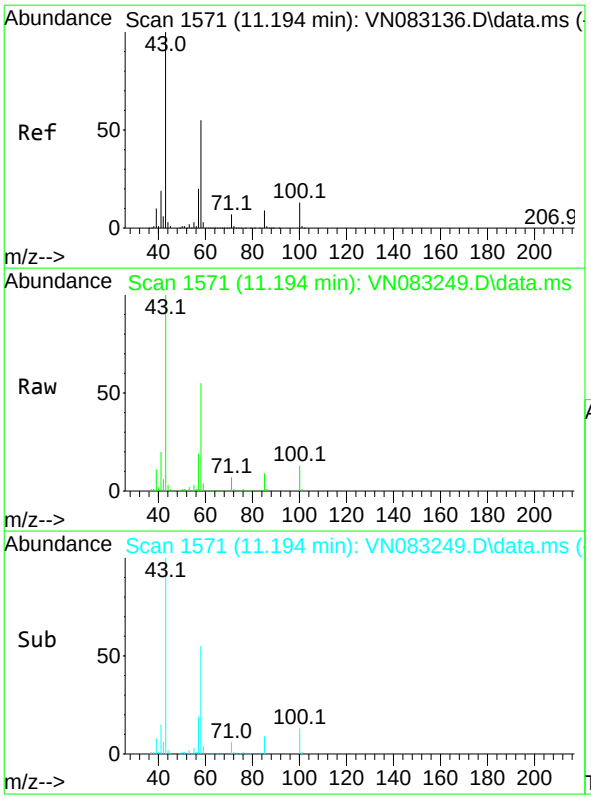




#58
2-Chloroethyl Vinyl ether
Concen: 88.342 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 63 Resp: 137398

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.7 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 86.908 ug/l
RT: 11.194 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

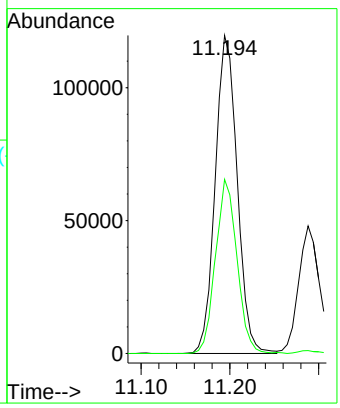
Tgt Ion: 43 Resp: 205980

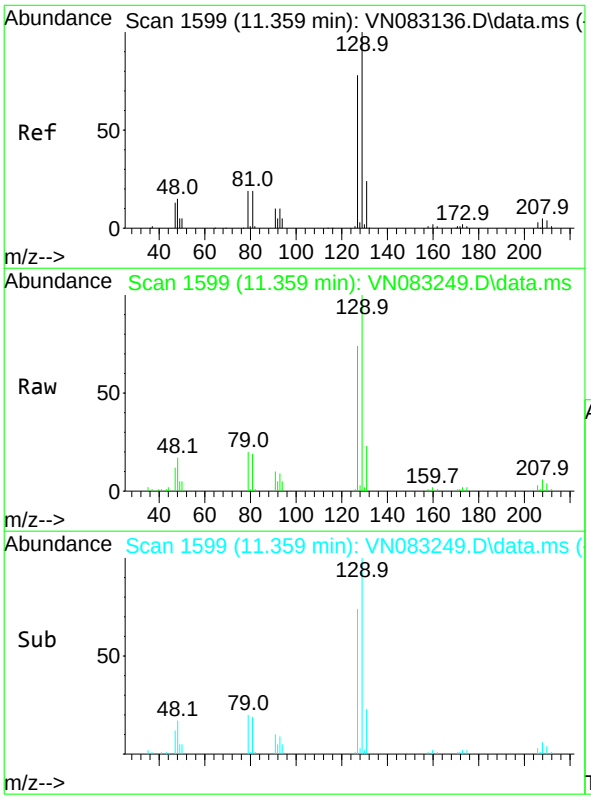
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 53.5 | 24.6 | 73.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

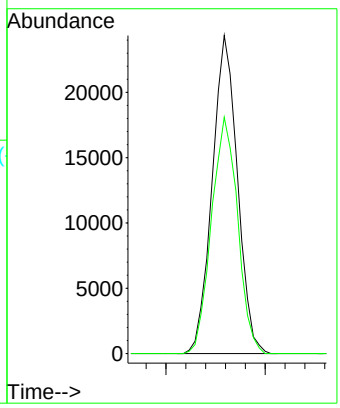


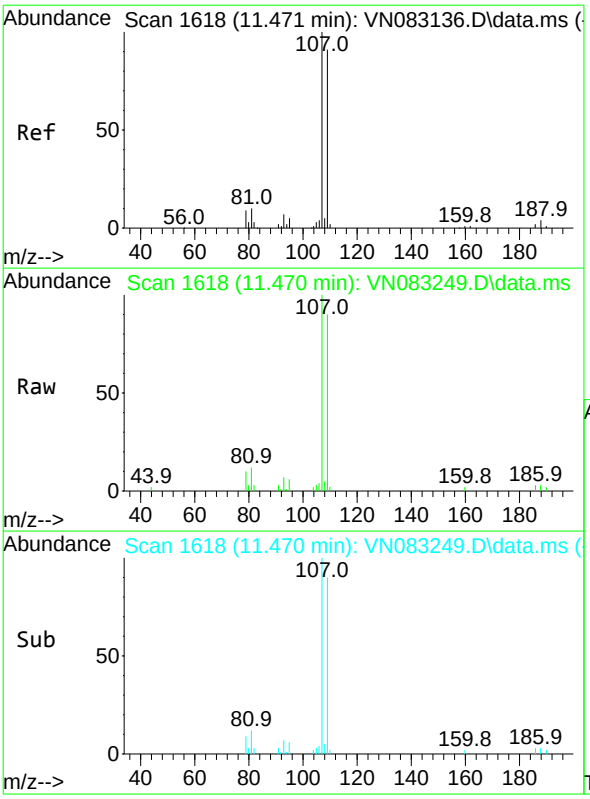




#60
Dibromochloromethane
Concen: 18.252 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:129 Resp: 43070

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.9 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 17.694 ug/l
RT: 11.470 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:107 Resp: 36278

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.0 | 73.7 | 110.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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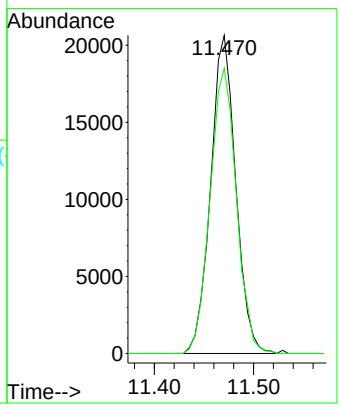
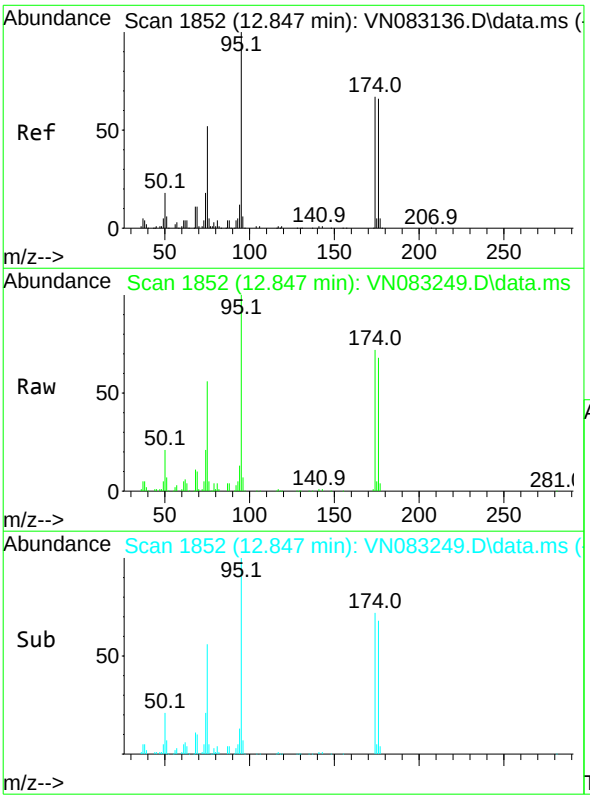
Supervised By :Semsettin Yesilyurt 08/14/2024

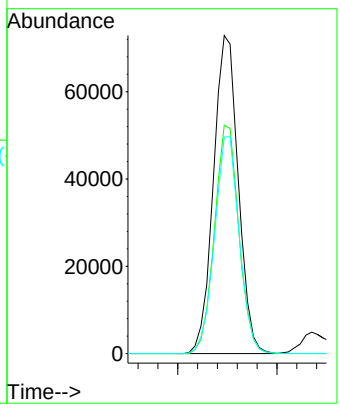


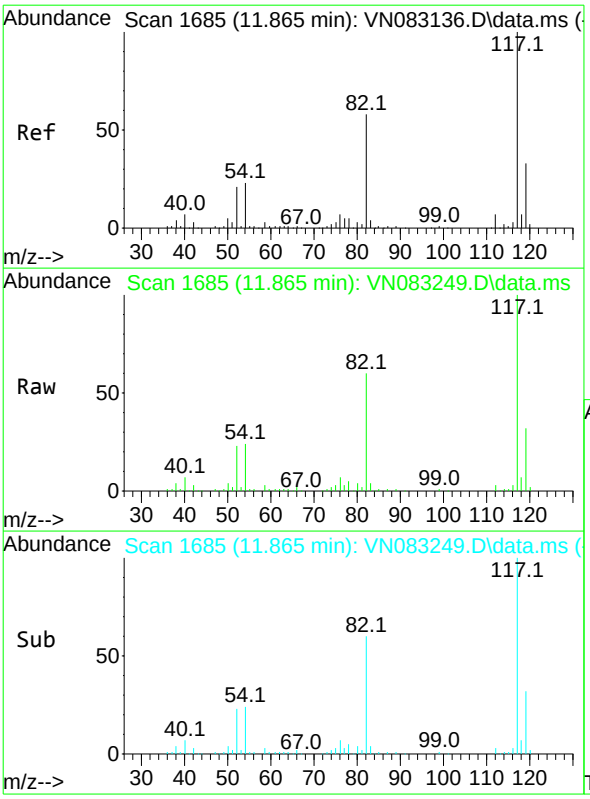




#62
4-Bromofluorobenzene
Concen: 45.477 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 95 Resp: 126499

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.5 | 0.0 | 159.2 |
| 176 | 68.1 | 0.0 | 147.6 |






#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

Tgt Ion:117 Resp: 263797

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.1 | 47.5 | 71.3 |
| 119 | 31.7 | 25.6 | 38.4 |

**Manual Integrations**
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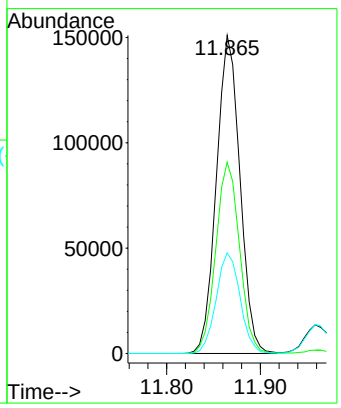
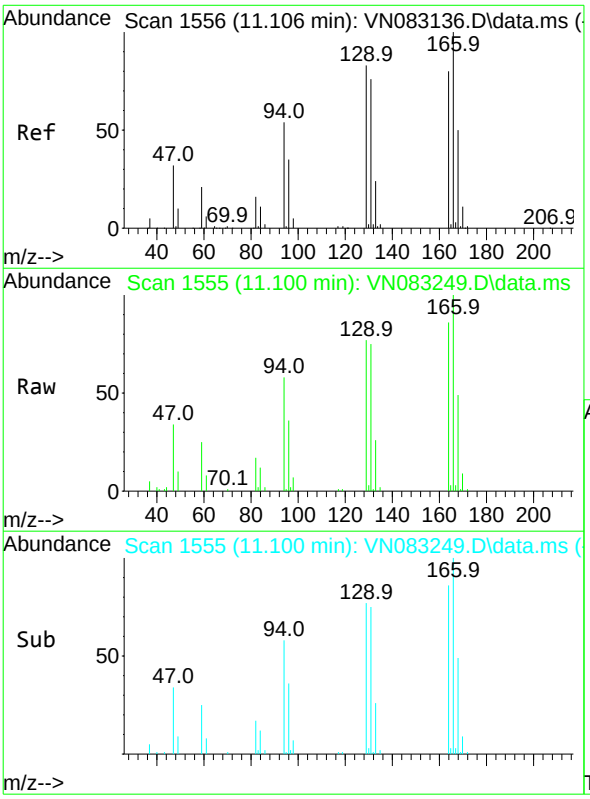
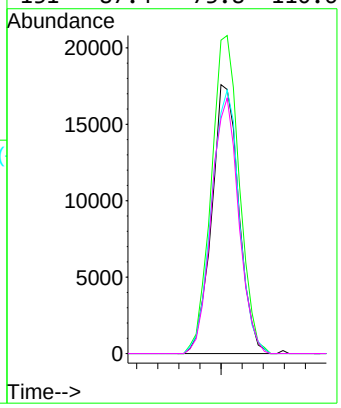


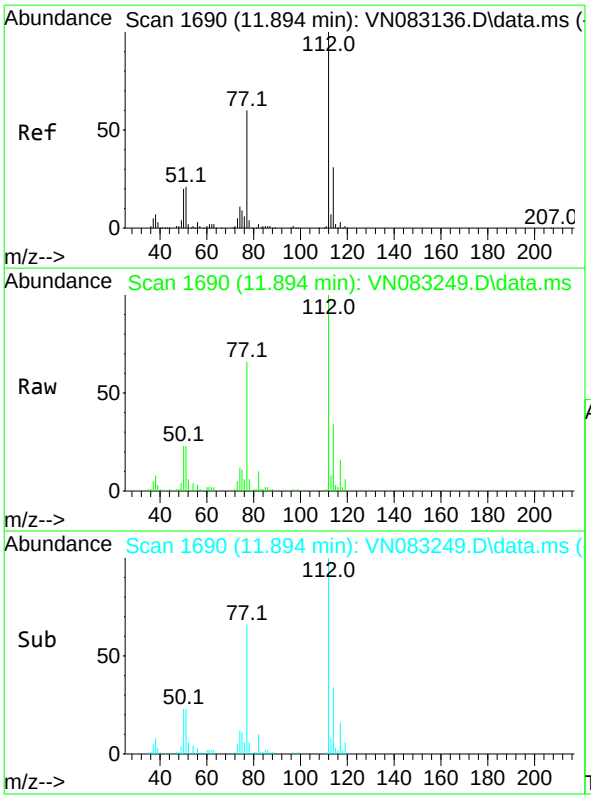




#64
Tetrachloroethene
Concen: 17.967 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:164 Resp: 31390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 116.6 | 101.4 | 152.0 |
| 129 | 89.5 | 75.7 | 113.5 |
| 131 | 87.4 | 73.8 | 110.6 |






#65
Chlorobenzene
Concen: 17.843 ug/l
RT: 11.894 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:112 Resp: 104015

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 34.3 | 26.2 | 39.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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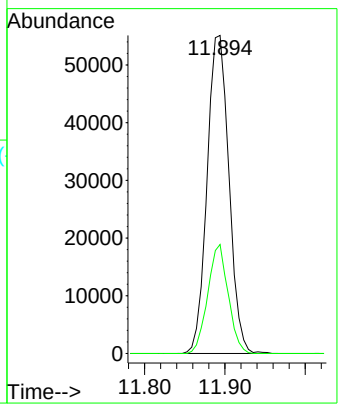
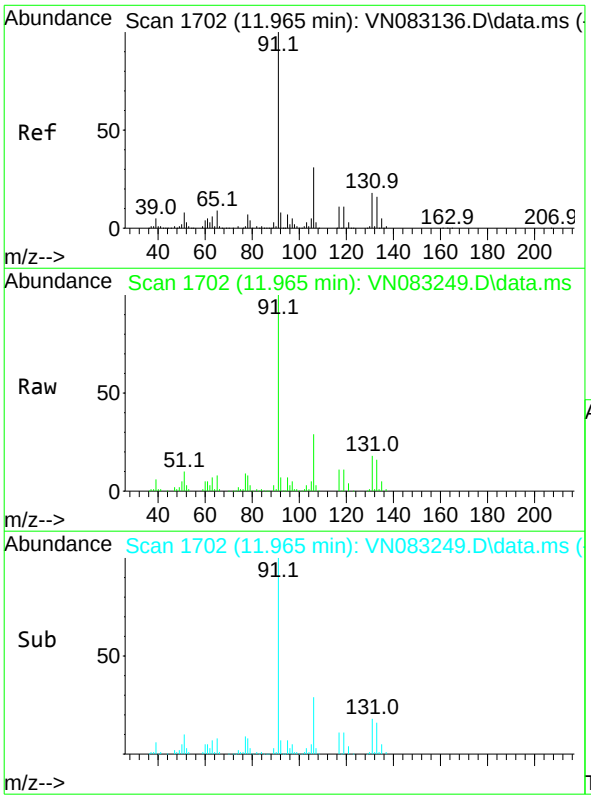
Supervised By :Semsettin Yesilyurt 08/14/2024

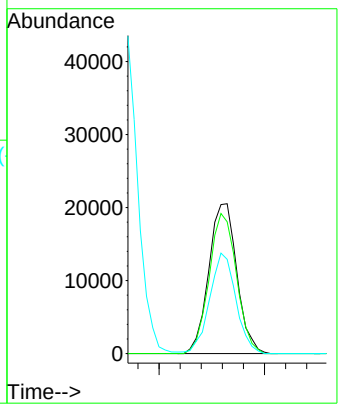


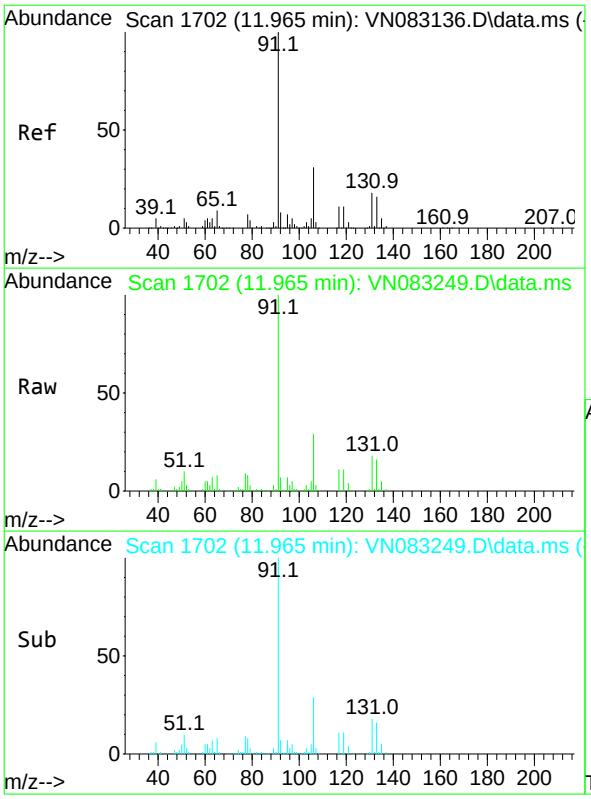




#66
1,1,1,2-Tetrachloroethane
Concen: 18.493 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:131 Resp: 38021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 90.9 | 47.3 | 142.0 |
| 119 | 62.6 | 32.5 | 97.4 |

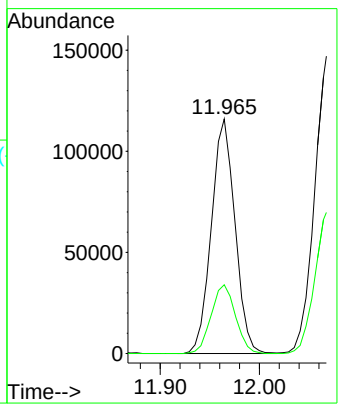





#67
Ethyl Benzene
Concen: 17.926 ug/l
RT: 11.965 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 91 Resp: 191707

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.3 | 24.0 | 36.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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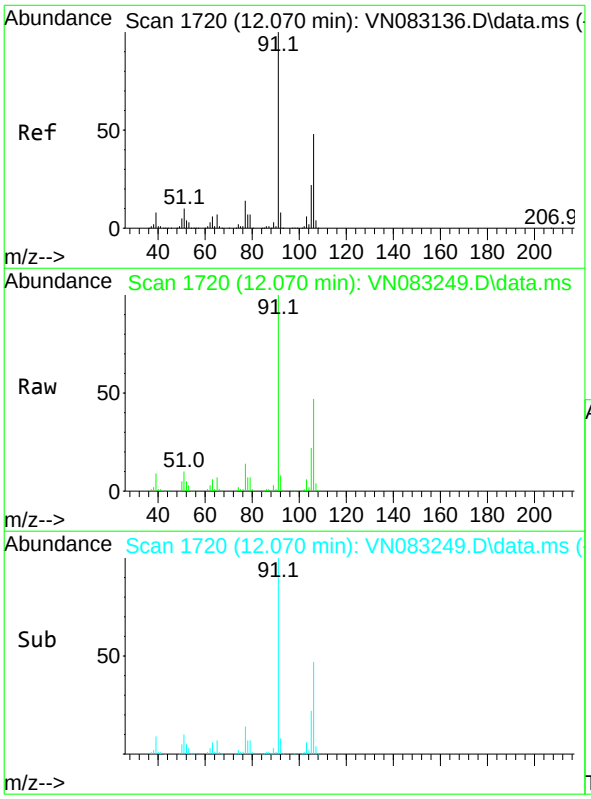
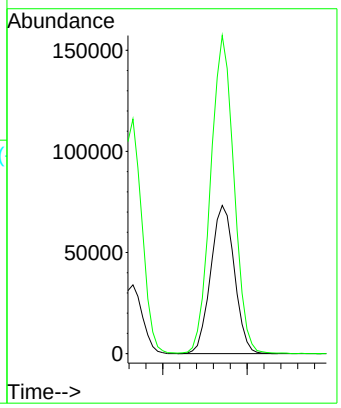
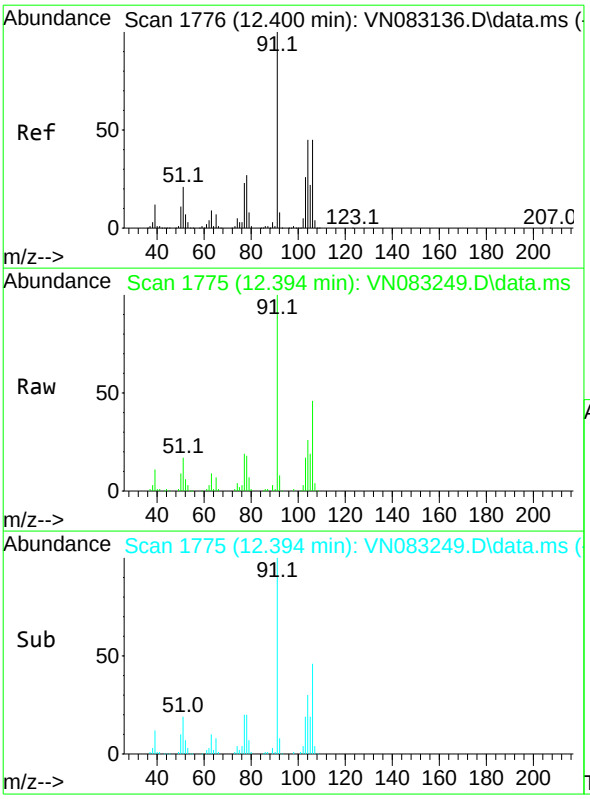



#68
m/p-Xylenes
Concen: 35.721 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:106 Resp: 143098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.6 | 166.1 | 249.1 |

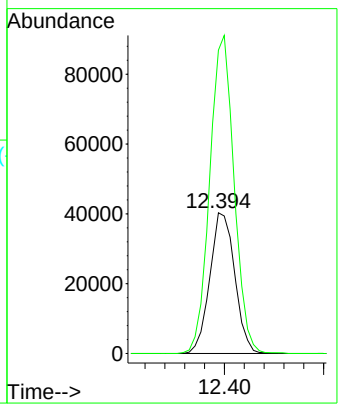





#69
o-Xylene
Concen: 17.779 ug/l
RT: 12.394 min Scan# 17
Delta R.T. -0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:106 Resp: 70244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 220.8 | 111.3 | 333.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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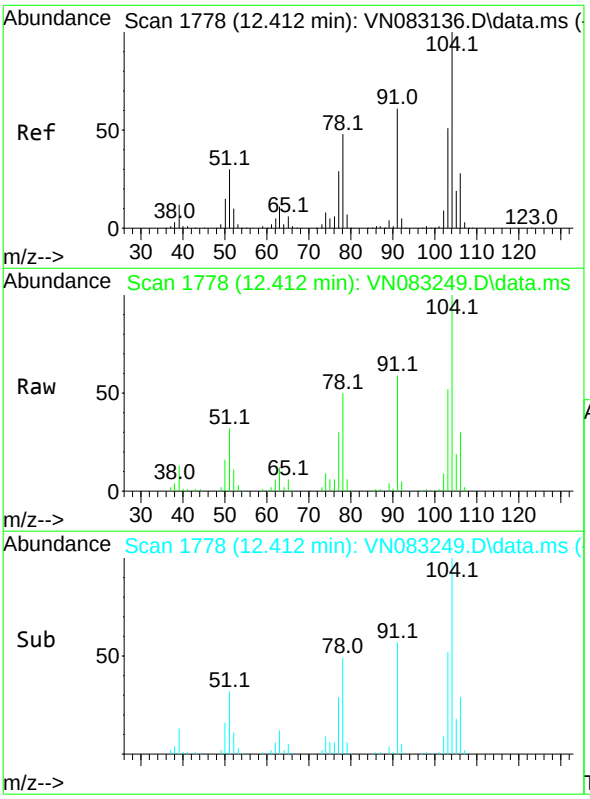
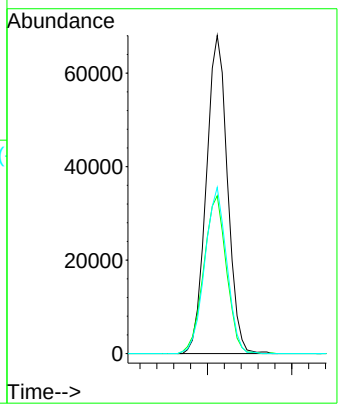
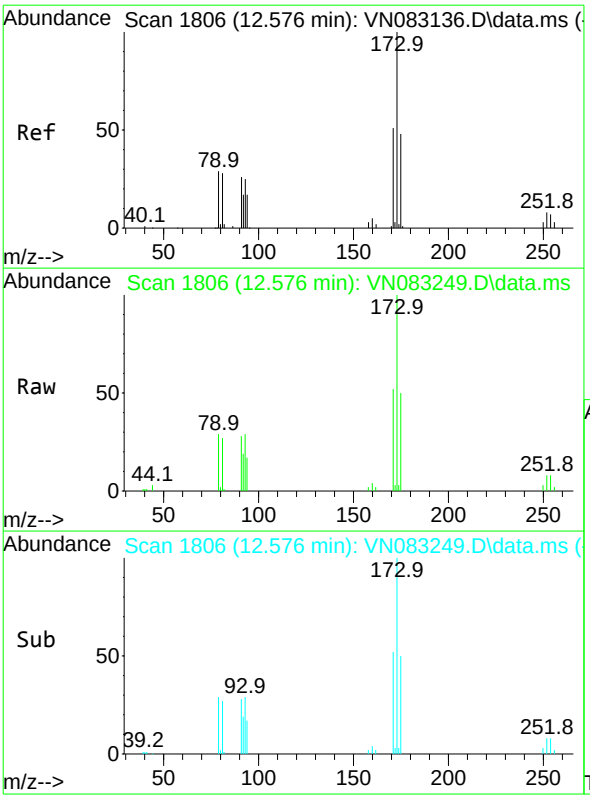



#70
Styrene
Concen: 17.942 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:104 Resp: 119061

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 52.9 | 41.6 | 62.4 |
| 103 | 54.0 | 44.0 | 66.0 |






#71
Bromoform
Concen: 17.465 ug/l
RT: 12.576 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:173 Resp: 27203

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.6 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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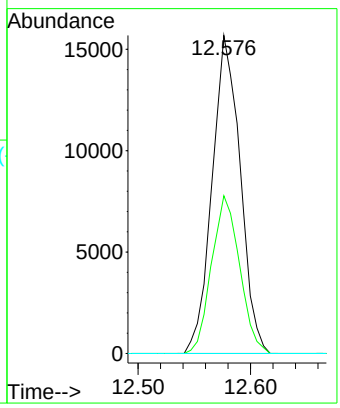
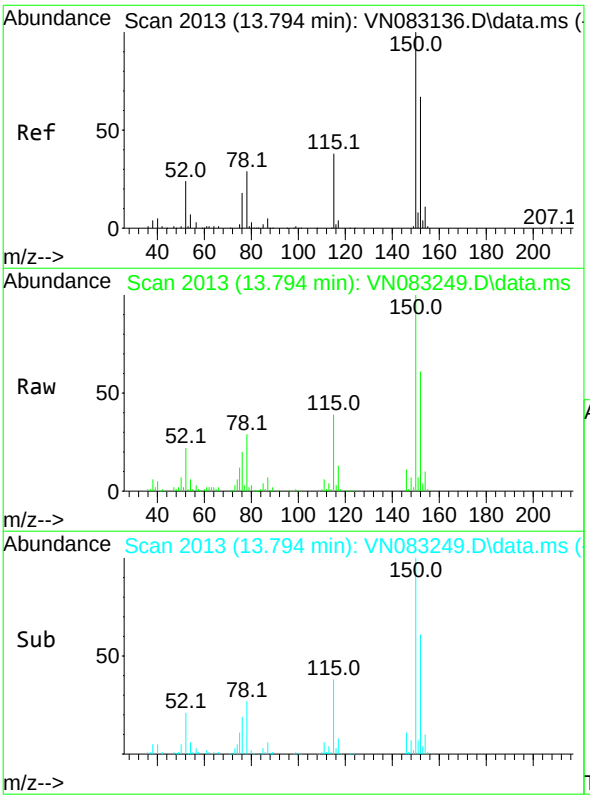
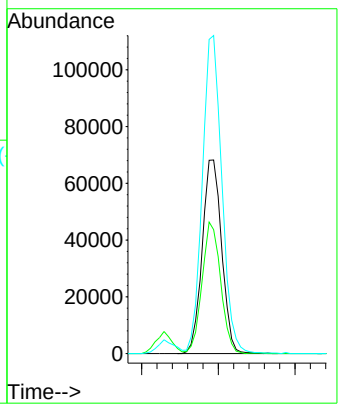


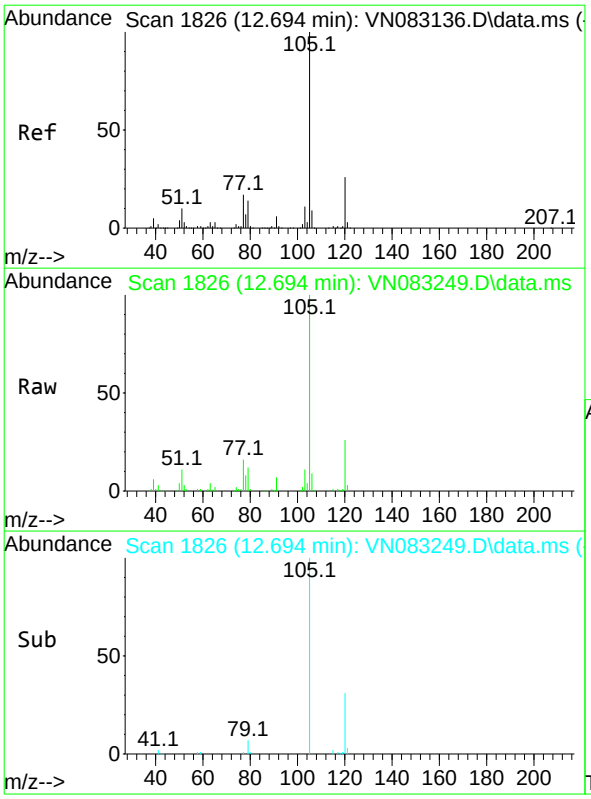




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:152 Resp: 120363

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.4 | 30.6 | 91.6 |
| 150 | 165.0 | 0.0 | 348.6 |

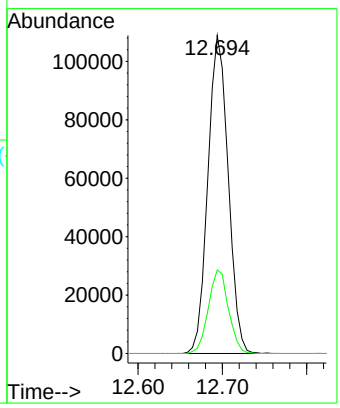





#73
Isopropylbenzene
Concen: 18.070 ug/l
RT: 12.694 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:105 Resp: 181922

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.0 | 12.9 | 38.6 |




**Instrument :**
MSVOA_N
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VN0813WBS01

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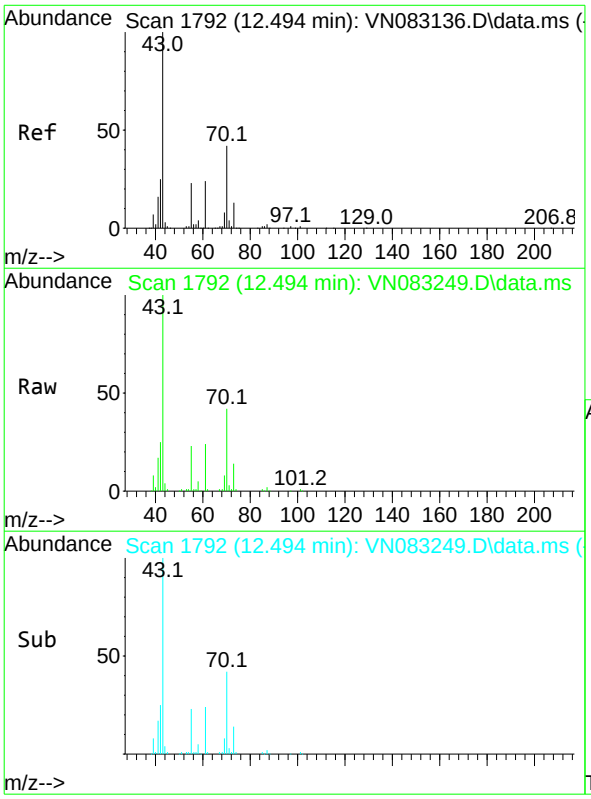
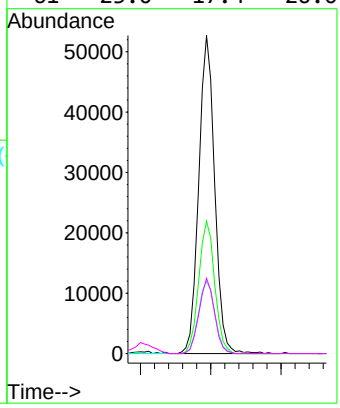
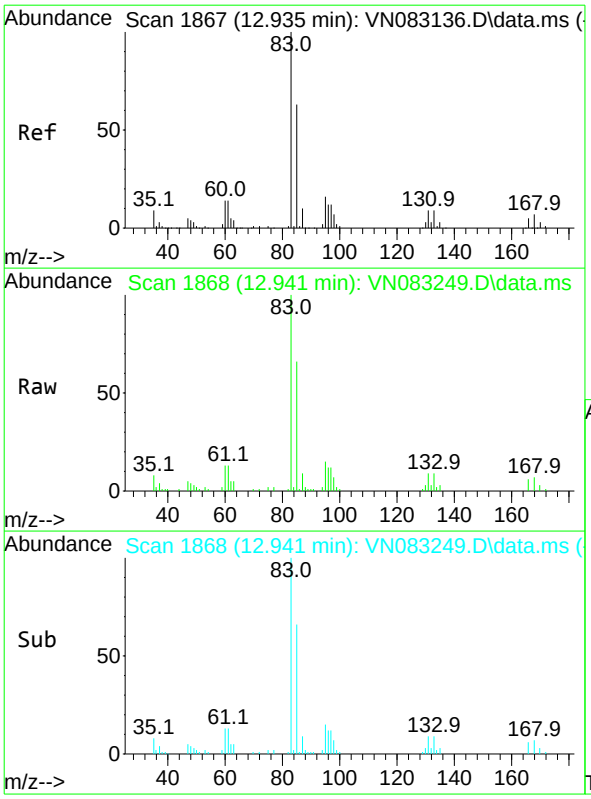



#74
N-amyl acetate
Concen: 16.791 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 43 Resp: 82687

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 41.8 | 29.8 | 44.6 |
| 55 | 23.4 | 18.7 | 28.1 |
| 61 | 23.0 | 17.4 | 26.0 |

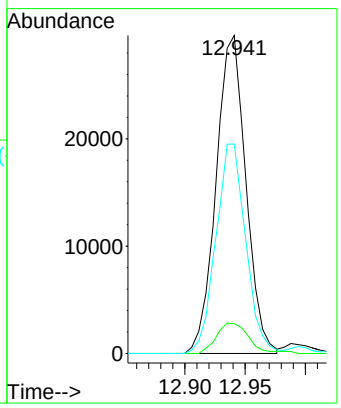





#75
1,1,2,2-Tetrachloroethane
Concen: 17.918 ug/l
RT: 12.941 min Scan# 18
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 83 Resp: 51020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.5 | 5.0 | 14.9 |
| 85 | 66.1 | 31.9 | 95.7 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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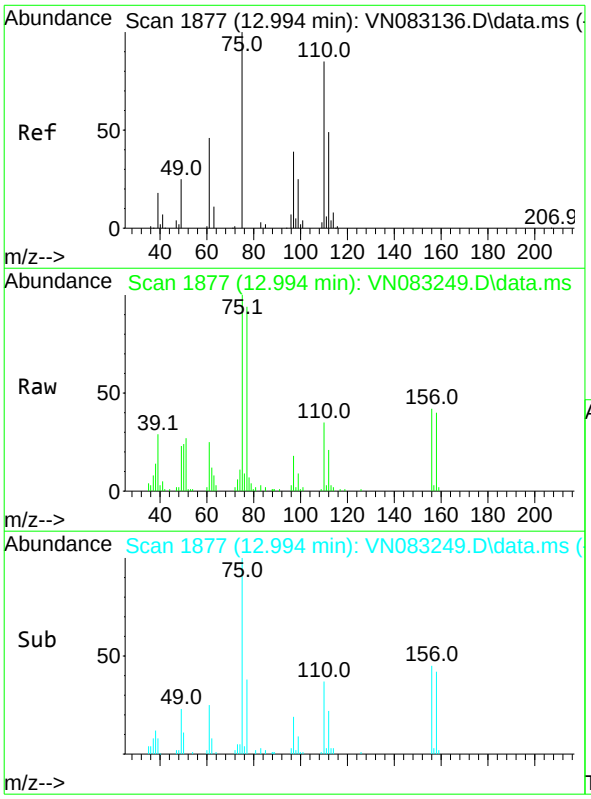
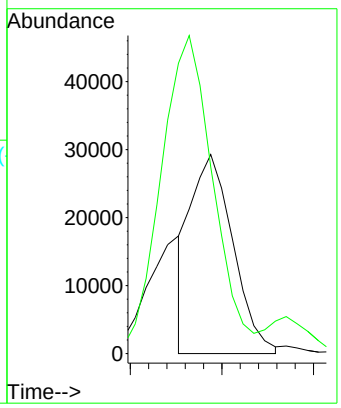
Supervised By :Semsettin Yesilyurt 08/14/2024

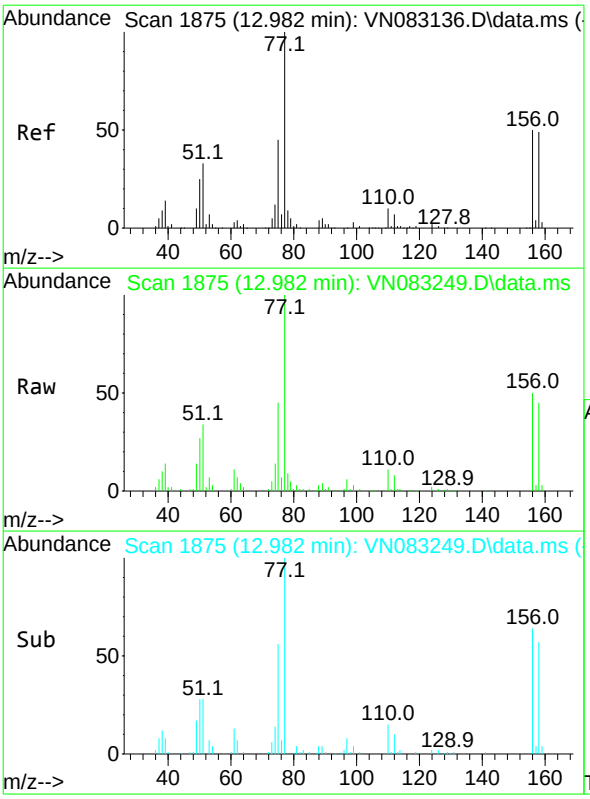



#76
1,2,3-Trichloropropane
Concen: 17.890 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 75 Resp: 47260

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 196.6 | 110.9 | 332.6 |

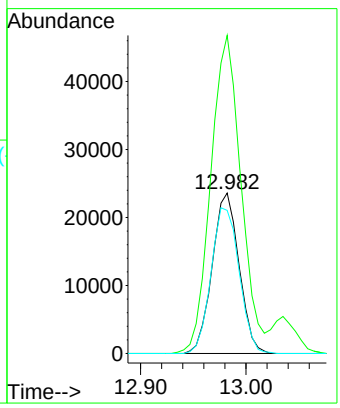





#77
Bromobenzene
Concen: 18.614 ug/l
RT: 12.982 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:156 Resp: 41629

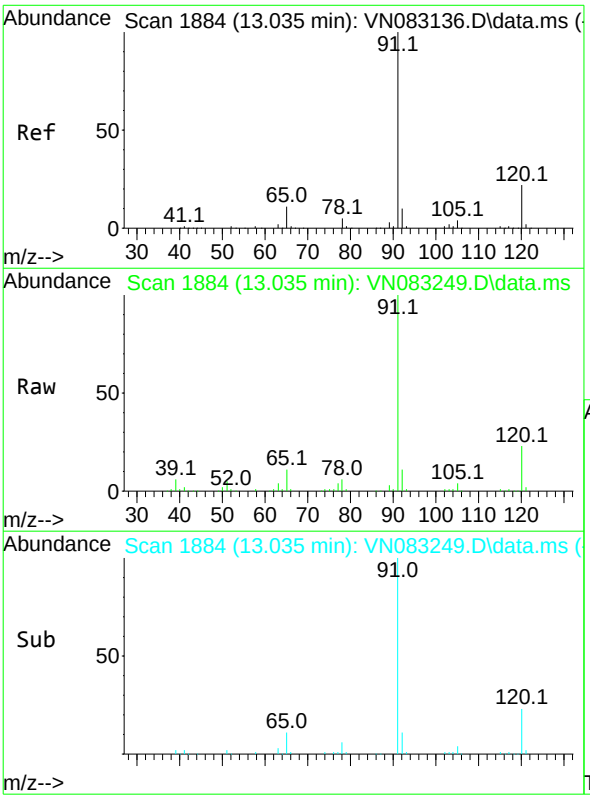
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 223.2 | 111.3 | 333.8 |
| 158 | 95.2 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
**APPROVED**

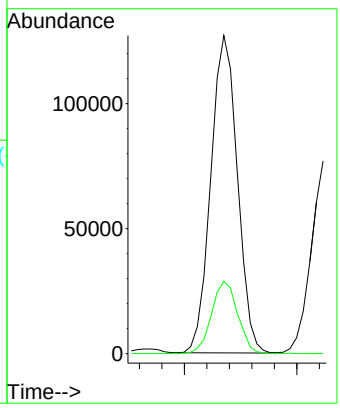
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024

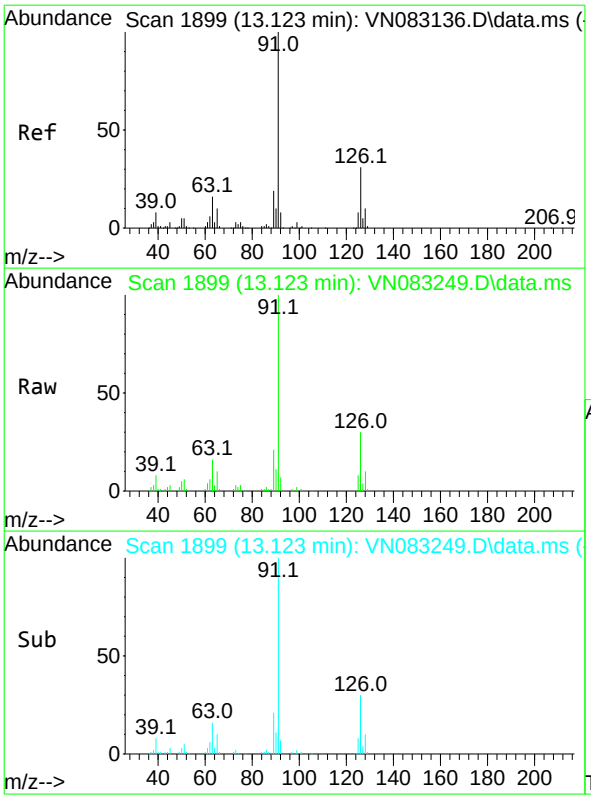



#78
n-propylbenzene
Concen: 17.979 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 91 Resp: 208423

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.3 | 10.9 | 32.9 |

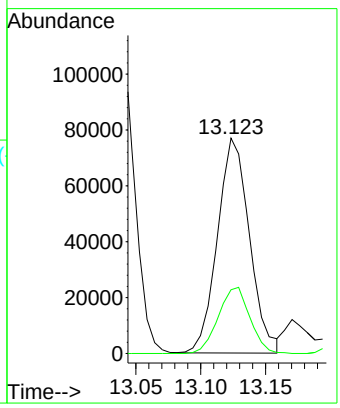





#79
2-Chlorotoluene
Concen: 18.001 ug/l
RT: 13.123 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 91 Resp: 132299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.3 | 16.2 | 48.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
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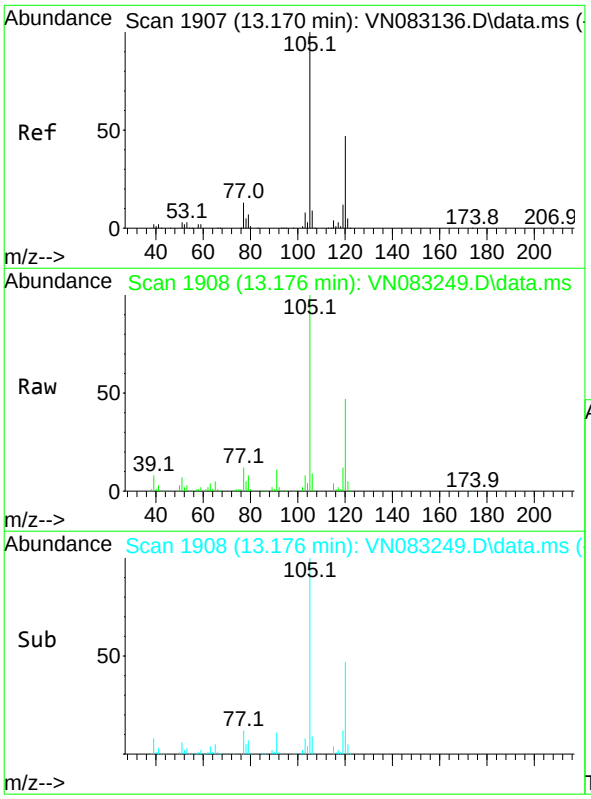
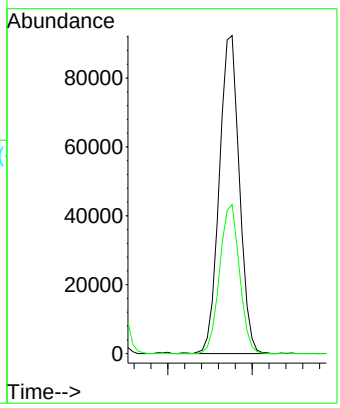
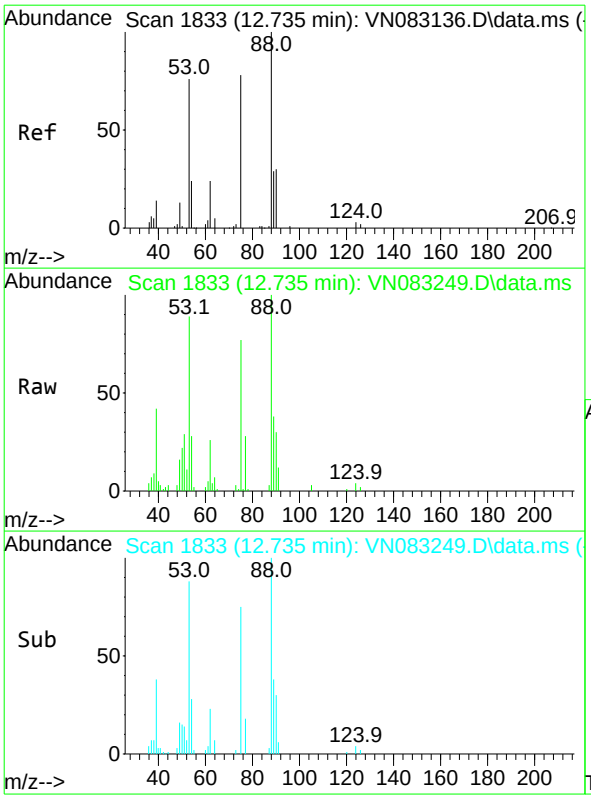



#80
1,3,5-Trimethylbenzene
Concen: 18.118 ug/l
RT: 13.176 min Scan# 1908
Delta R.T. 0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:105 Resp: 152708

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.3 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 15.265 ug/l
RT: 12.735 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 75 Resp: 18538

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 120.3 | 88.4 | 132.6 |
| 89 | 47.8 | 36.3 | 54.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

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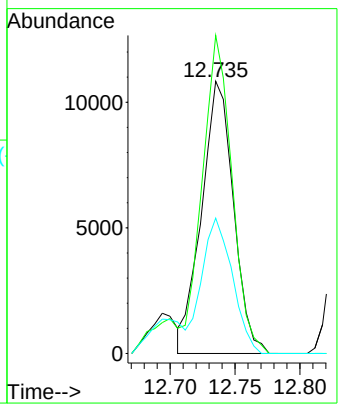
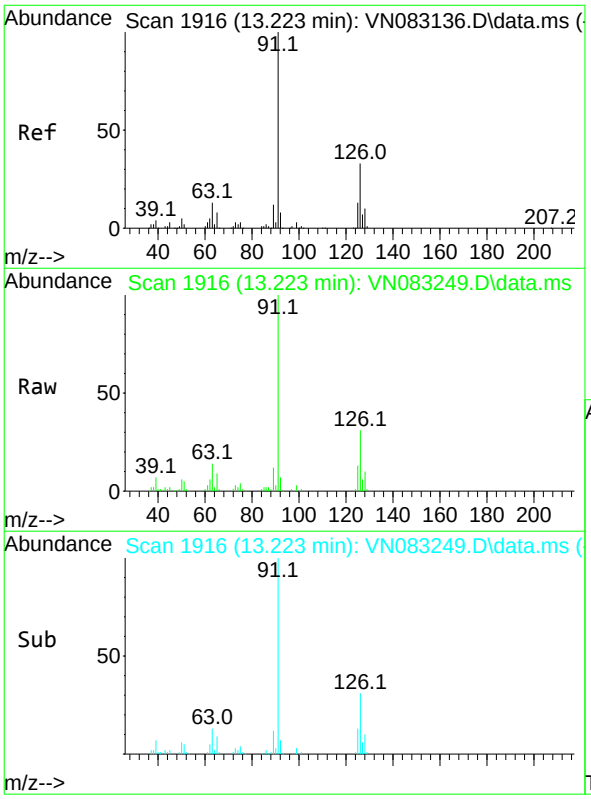
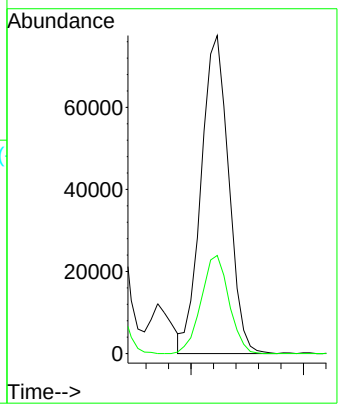


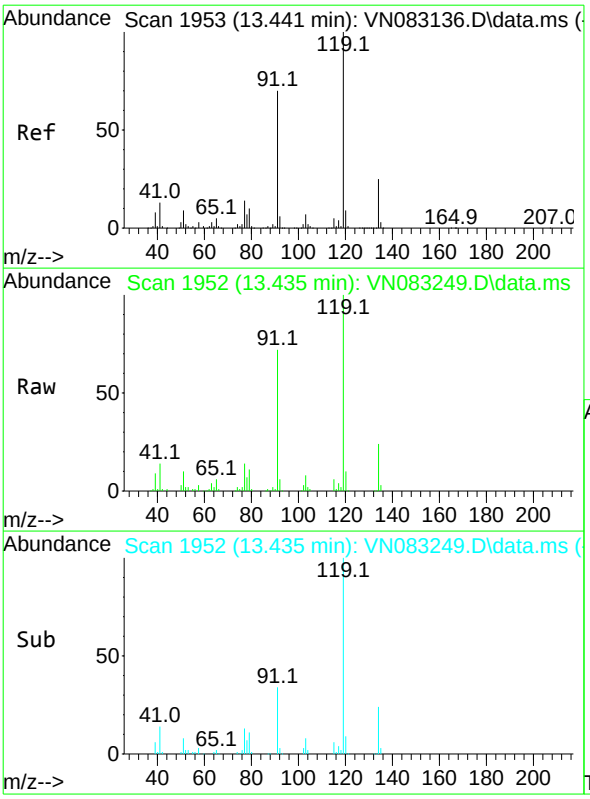




#82
4-Chlorotoluene
Concen: 17.895 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 91 Resp: 131924

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.2 | 16.2 | 48.6 |






#83
tert-Butylbenzene
Concen: 17.922 ug/l
RT: 13.435 min Scan# 19
Delta R.T. -0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:119 Resp: 133777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 71.4 | 35.0 | 105.1 |
| 134 | 26.2 | 13.3 | 39.8 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
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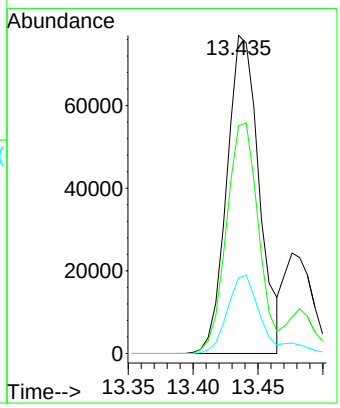
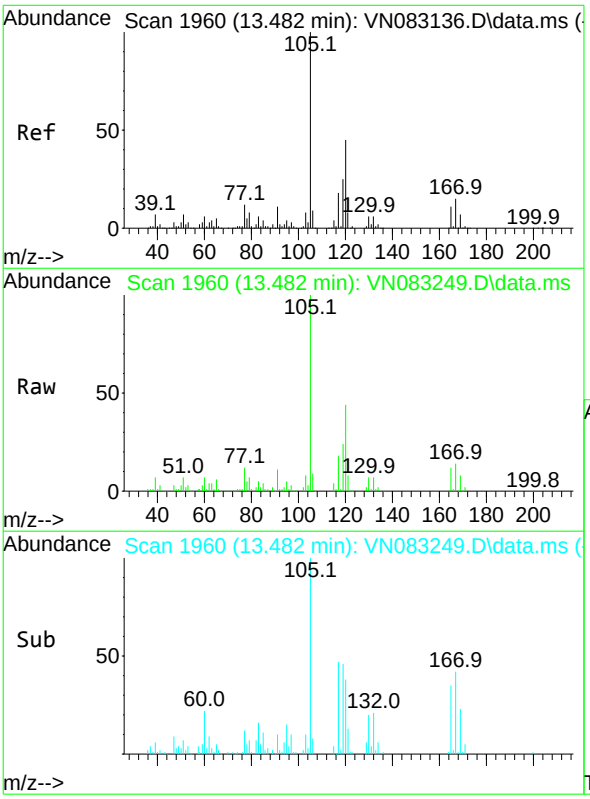
Supervised By :Semsettin Yesilyurt 08/14/2024

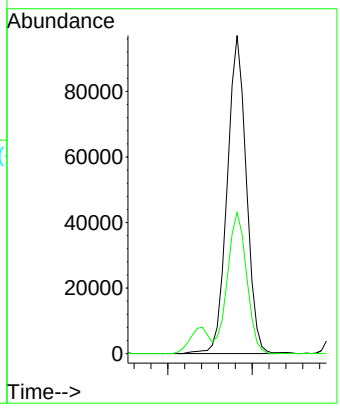


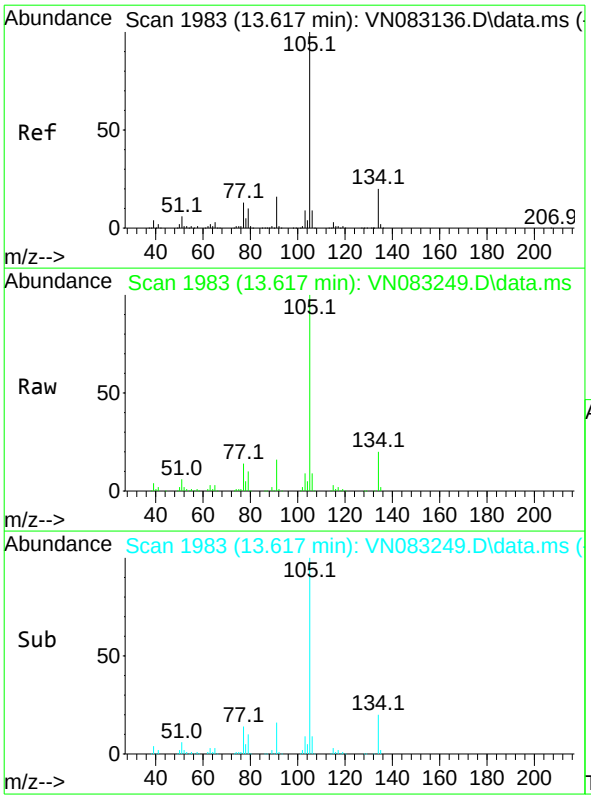




#84
1,2,4-Trimethylbenzene
Concen: 17.925 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:105 Resp: 152254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.7 | 21.9 | 65.8 |

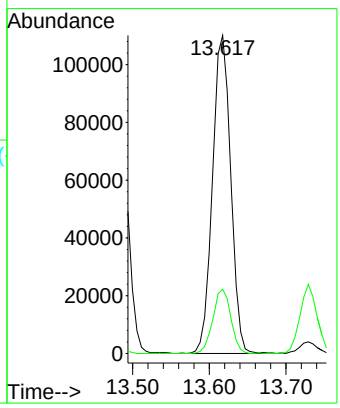





#85
sec-Butylbenzene
Concen: 17.872 ug/l
RT: 13.617 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:105 Resp: 182028

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.9 | 9.8 | 29.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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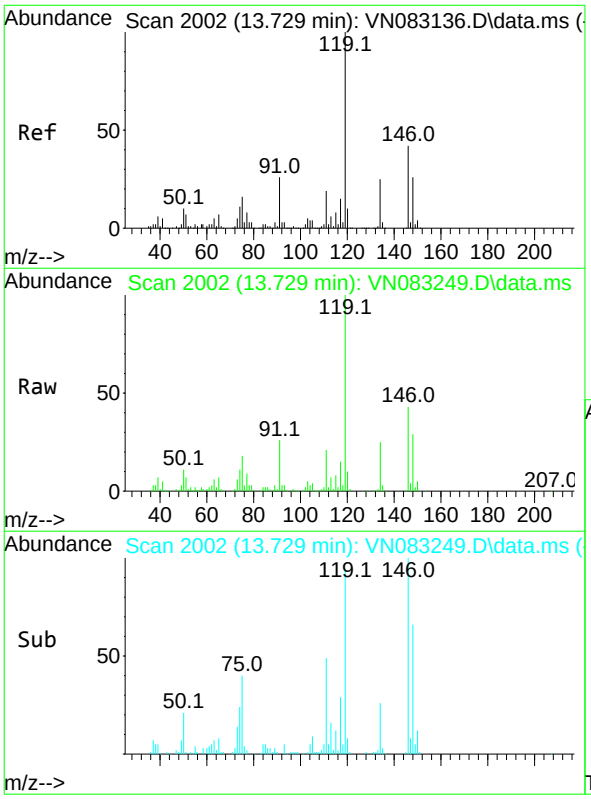
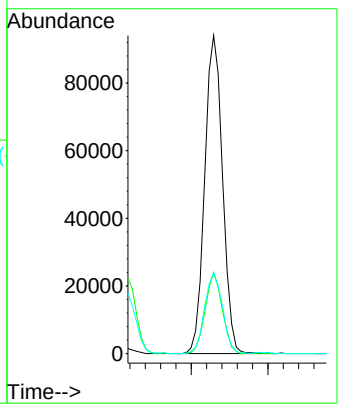
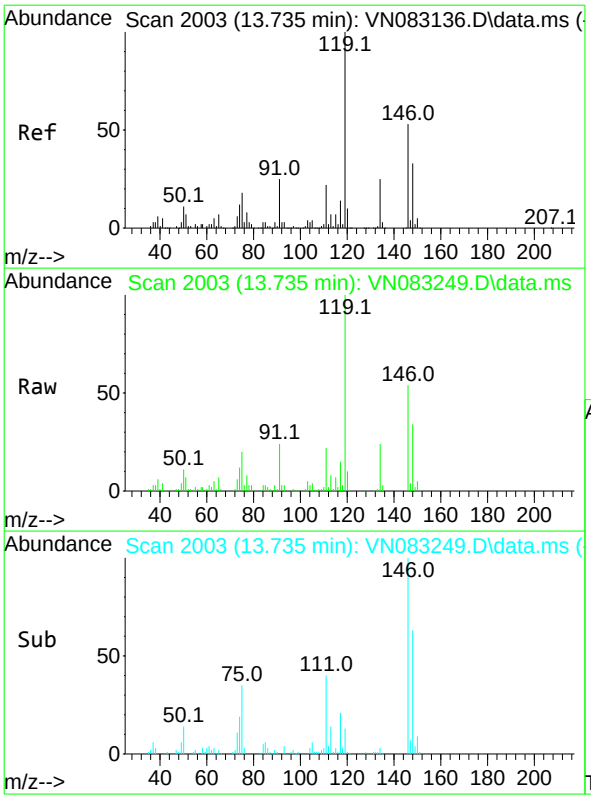



#86
p-Isopropyltoluene
Concen: 18.061 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:119 Resp: 151886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 24.2 | 13.0 | 39.0 |
| 91 | 25.6 | 12.3 | 36.9 |

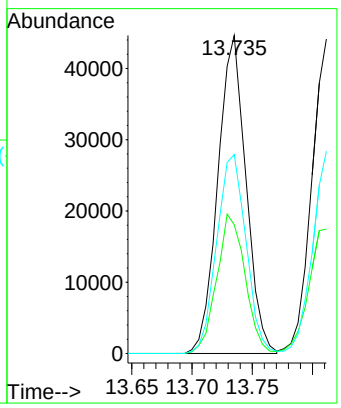





#87
1,3-Dichlorobenzene
Concen: 17.242 ug/l
RT: 13.735 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:146 Resp: 72557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.1 | 20.6 | 61.9 |
| 148 | 65.2 | 31.8 | 95.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
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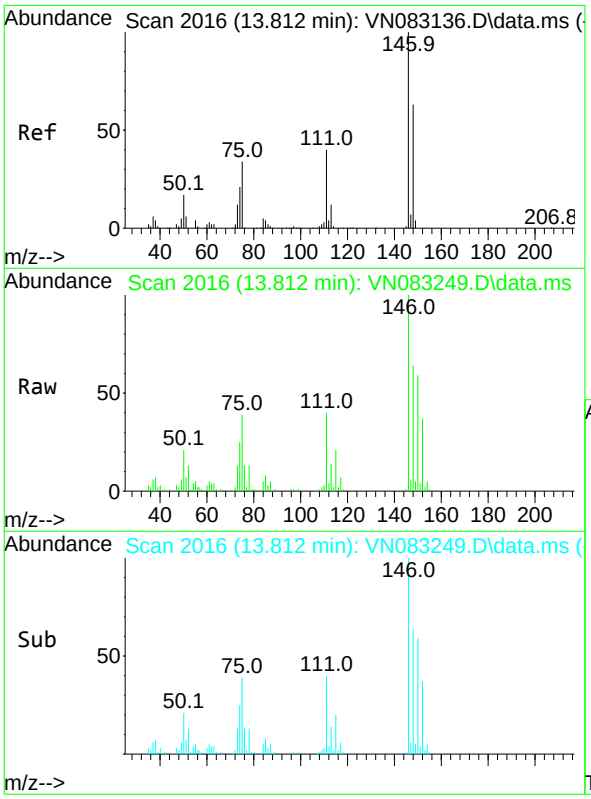
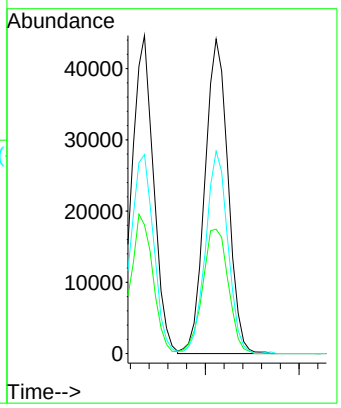
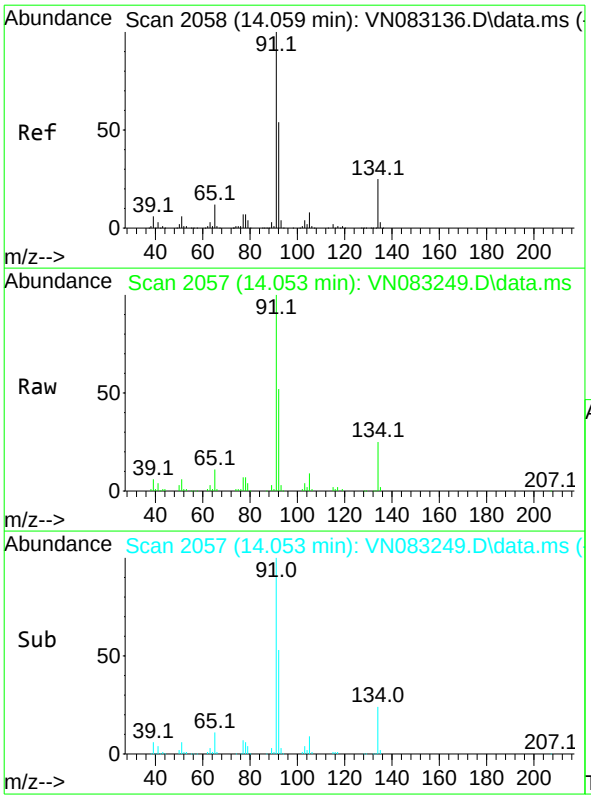



#88
1,4-Dichlorobenzene
Concen: 17.846 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:146 Resp: 75711

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.9 | 20.1 | 60.3 |
| 148 | 61.9 | 32.2 | 96.6 |

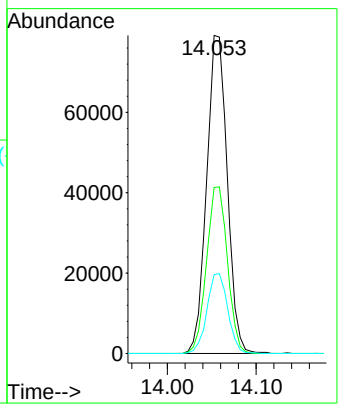





#89
n-Butylbenzene
Concen: 17.535 ug/l
RT: 14.053 min Scan# 20
Delta R.T. -0.006 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 91 Resp: 127777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.1 | 26.1 | 78.3 |
| 134 | 25.4 | 12.1 | 36.3 |




**Instrument :**
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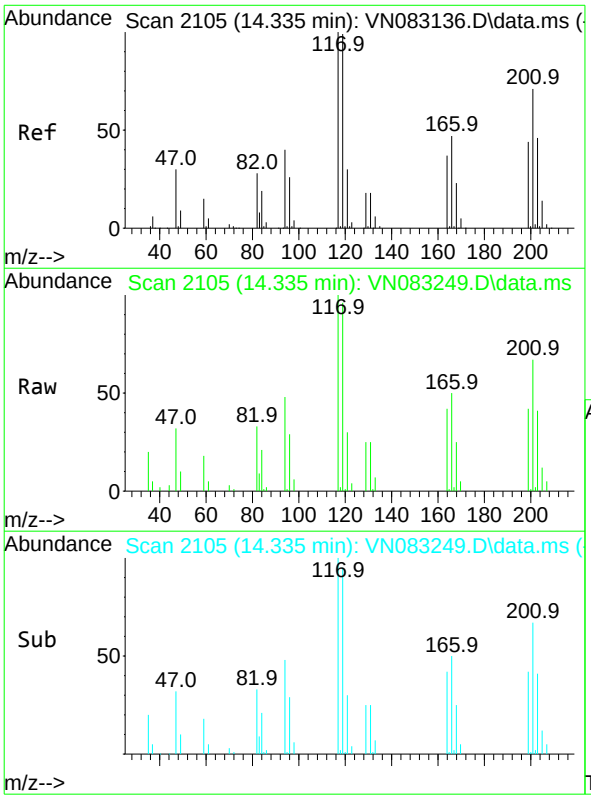
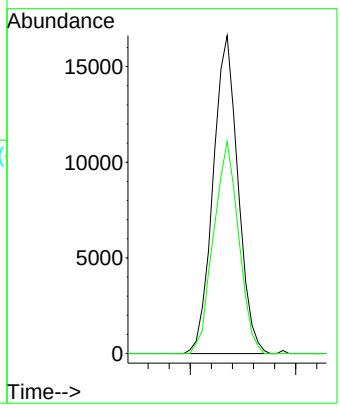
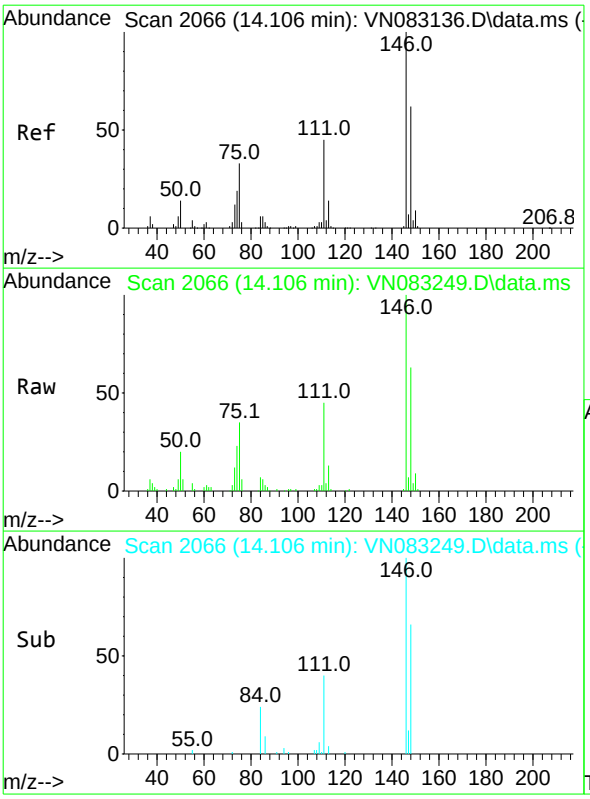



#90
Hexachloroethane
Concen: 16.782 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:117 Resp: 27265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.3 | 35.8 | 107.3 |

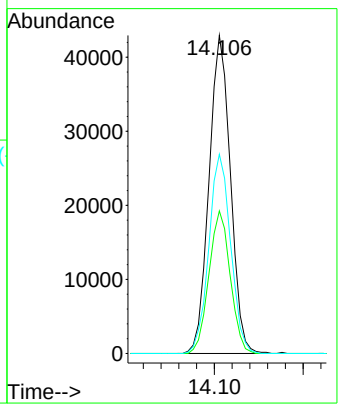





#91
1,2-Dichlorobenzene
Concen: 17.671 ug/l
RT: 14.106 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:146 Resp: 71959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.5 | 21.4 | 64.2 |
| 148 | 63.7 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
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VN0813WBS01

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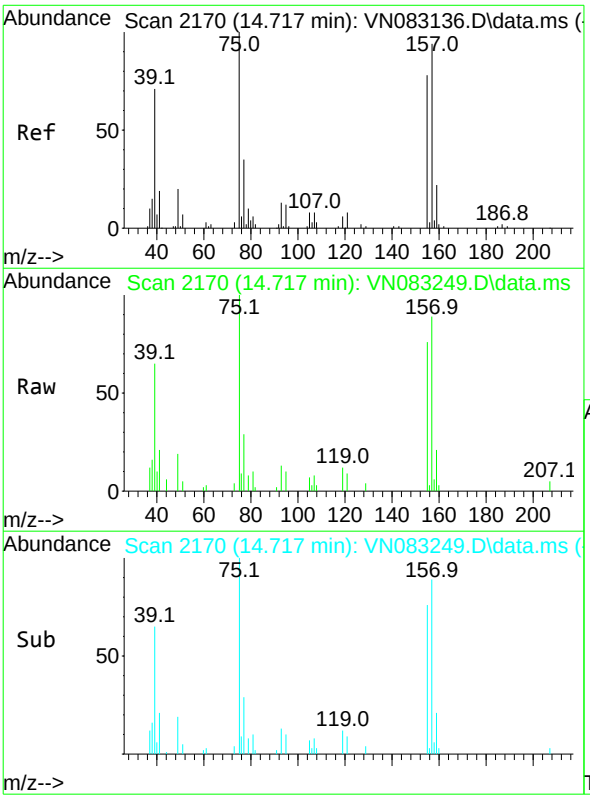
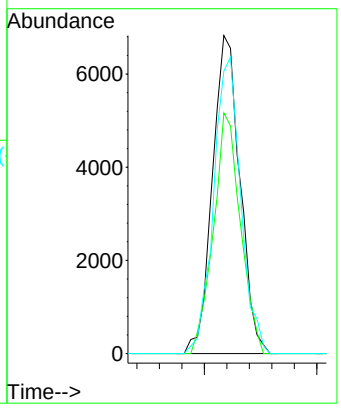
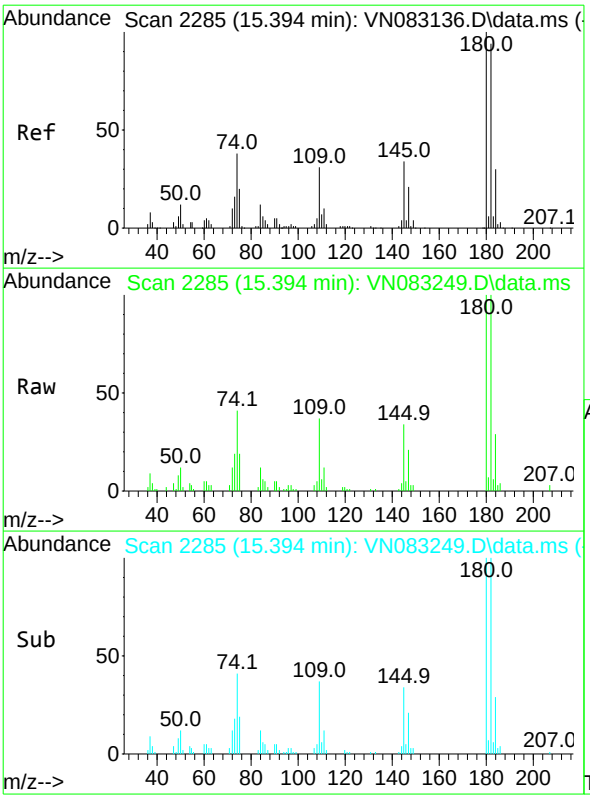



#92
1,2-Dibromo-3-Chloropropane
Concen: 16.781 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion: 75 Resp: 11595

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 74.2 | 36.6 | 109.8 |
| 157 | 91.8 | 46.9 | 140.6 |






#93
1,2,4-Trichlorobenzene
Concen: 16.721 ug/l
RT: 15.394 min Scan# 22
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

Tgt Ion:180 Resp: 38146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.8 | 47.3 | 141.8 |
| 145 | 33.9 | 15.7 | 47.1 |

**Manual Integrations**
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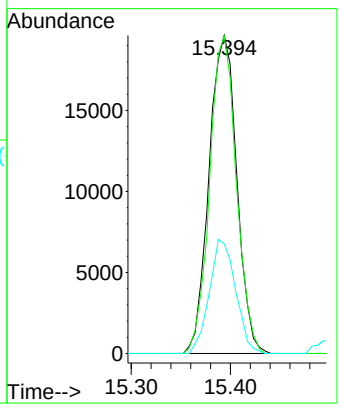
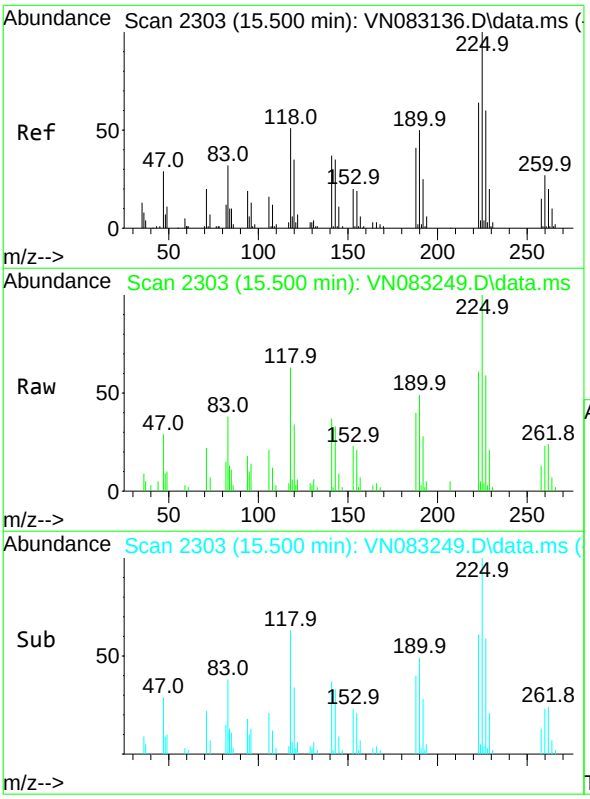
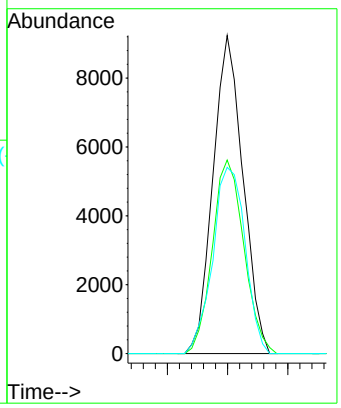


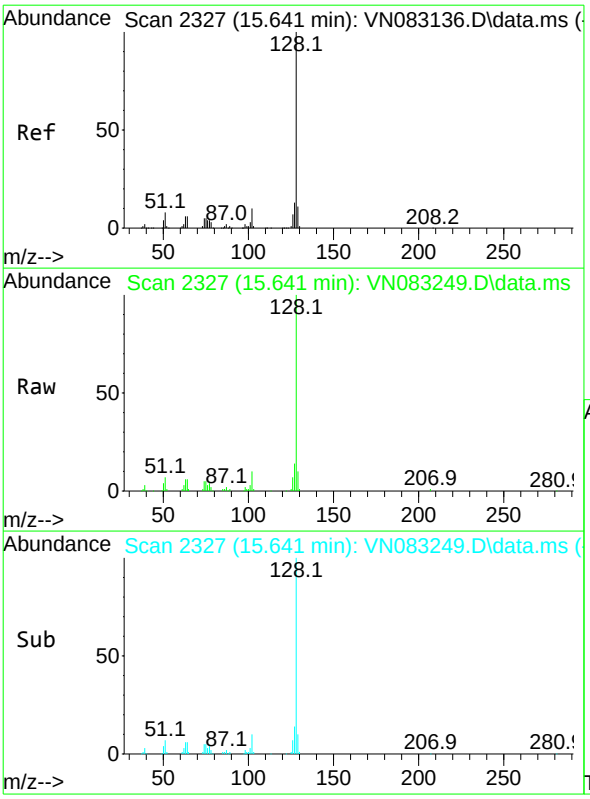




#94
Hexachlorobutadiene
Concen: 15.758 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:225 Resp: 15988

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.0 | 31.9 | 95.7 |
| 227 | 63.3 | 32.5 | 97.5 |

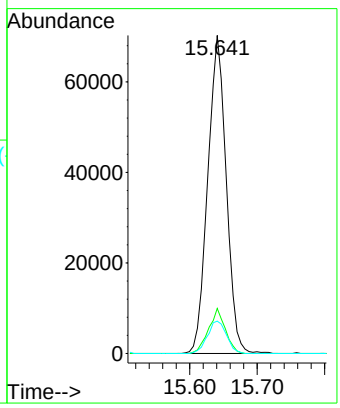





#95
Naphthalene
Concen: 16.553 ug/l
RT: 15.641 min Scan# 23
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:128 Resp: 133767

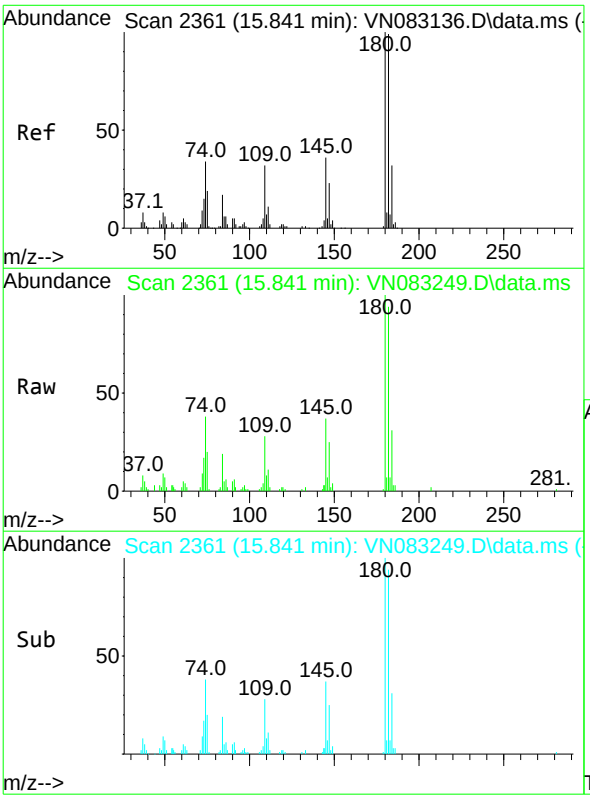
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.9 | 10.6 | 16.0 |
| 129 | 10.5 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0813WBS01

**Manual Integrations**
**APPROVED**

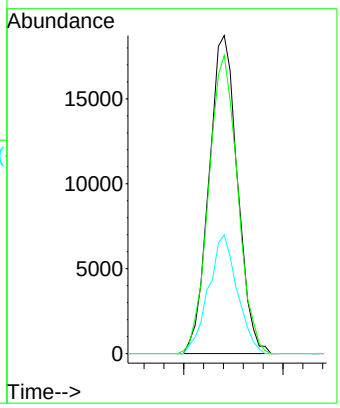
Reviewed By :Mahesh Dadoda 08/14/2024
Supervised By :Semsettin Yesilyurt 08/14/2024




#96
1,2,3-Trichlorobenzene
Concen: 16.529 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083249.D
Acq: 13 Aug 2024 11:40

Tgt Ion:180 Resp: 37313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.3 | 48.9 | 146.8 |
| 145 | 37.6 | 16.8 | 50.4 |



Raw Data: **VN083298.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0814WBS01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0814WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083298.D | 1 | | 08/14/24 14:03 | VN081424 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 18.6 | | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 19.1 | | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 20.2 | | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 18.6 | | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 20.8 | | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 100 | | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 16.3 | | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 20.0 | | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 19.0 | | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 18.7 | | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 18.5 | | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 100 | | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 20.1 | | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 19.6 | | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 21.3 | | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 20.7 | | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 18.2 | | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 20.4 | | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 21.5 | | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 20.1 | | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 20.7 | | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 20.3 | | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 21.5 | | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 20.6 | | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 19.6 | | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 19.8 | | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 19.6 | | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 38.6 | | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 58.1 | | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 19.5 | | 0.14 | 1.00 | ug/L |

Raw Data: **VN083298.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0814WBS01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0814WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083298.D | 1 | | 08/14/24 14:03 | VN081424 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 19.3 | | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 19.1 | | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 19.1 | | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 56.3 | | 70 (74) - 130 (125) | 113% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 54.0 | | 70 (75) - 130 (124) | 108% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.1 | | 70 (86) - 130 (113) | 106% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 52.3 | | 70 (77) - 130 (121) | 105% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 165000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 284000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 251000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 118000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083298.D
Acq On : 14 Aug 2024 14:03
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 23:22:35 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 164632 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 284346 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 250581 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 117869 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.577 | 65 | 131834 | 56.259 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 112.520% | | | |
| 35) Dibromofluoromethane | 8.171 | 113 | 95892 | 54.029 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 108.060% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 351385 | 53.075 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 106.160% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 134979 | 52.296 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 77 - 121 | | Recovery = 104.600% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 34716 | 18.595 | ug/l | 97 |
| 3) Chloromethane | 2.365 | 50 | 36577 | 19.136 | ug/l | 95 |
| 4) Vinyl Chloride | 2.512 | 62 | 39346 | 20.174 | ug/l | 99 |
| 5) Bromomethane | 2.959 | 94 | 22519 | 18.608 | ug/l | 90 |
| 6) Chloroethane | 3.112 | 64 | 24904 | 20.410 | ug/l | 100 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 66745 | 20.716 | ug/l | 93 |
| 8) Diethyl Ether | 3.959 | 74 | 23647 | 19.724 | ug/l | 85 |
| 9) 1,1,2-Trichlorotrifluo... | 4.377 | 101 | 36883 | 20.763 | ug/l | 98 |
| 10) Methyl Iodide | 4.583 | 142 | 36262 | 15.519 | ug/l | 98 |
| 11) Tert butyl alcohol | 5.524 | 59 | 47088 | 96.692 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.347 | 96 | 34241 | 18.762 | ug/l | 92 |
| 13) Acrolein | 4.183 | 56 | 23357 | 73.590 | ug/l | 96 |
| 14) Allyl chloride | 5.018 | 41 | 63728m | 18.479 | ug/l | |
| 15) Acrylonitrile | 5.718 | 53 | 103317 | 103.155 | ug/l | 98 |
| 16) Acetone | 4.436 | 43 | 94520 | 103.081 | ug/l | 98 |
| 17) Carbon Disulfide | 4.712 | 76 | 87175 | 16.325 | ug/l | 97 |
| 18) Methyl Acetate | 5.030 | 43 | 57100 | 20.901 | ug/l # | 88 |
| 19) Methyl tert-butyl Ether | 5.794 | 73 | 131685 | 19.991 | ug/l | 99 |
| 20) Methylene Chloride | 5.283 | 84 | 40039 | 18.973 | ug/l | 85 |
| 21) trans-1,2-Dichloroethene | 5.789 | 96 | 35228 | 18.677 | ug/l | 92 |
| 22) Diisopropyl ether | 6.677 | 45 | 130740 | 20.168 | ug/l | 98 |
| 23) Vinyl Acetate | 6.606 | 43 | 720397 | 108.418 | ug/l | 97 |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 72312 | 20.465 | ug/l | 96 |
| 25) 2-Butanone | 7.483 | 43 | 145625 | 103.431 | ug/l | 95 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 67033 | 20.428 | ug/l | 100 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 44697 | 19.638 | ug/l | 94 |
| 28) Bromochloromethane | 7.812 | 49 | 31073 | 21.518 | ug/l | 85 |
| 29) Tetrahydrofuran | 7.841 | 42 | 94074 | 103.362 | ug/l # | 89 |
| 30) Chloroform | 7.971 | 83 | 78159 | 21.291 | ug/l | 100 |
| 31) Cyclohexane | 8.259 | 56 | 64241 | 18.499 | ug/l | 95 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 71974 | 20.713 | ug/l | 92 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 51536 | 19.195 | ug/l | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 58610 | 19.497 | ug/l # | 96 |
| 38) Carbon Tetrachloride | 8.359 | 117 | 60835 | 20.118 | ug/l | 99 |
| 39) Methylcyclohexane | 9.600 | 83 | 60089 | 18.222 | ug/l | 97 |
| 40) Benzene | 8.612 | 78 | 163247 | 20.411 | ug/l | 97 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083298.D
Acq On : 14 Aug 2024 14:03
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 23:22:35 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

| Compound | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 33603 | 19.660 ug/l | 97 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 62700 | 21.520 ug/l | 100 |
| 43) Isopropyl Acetate | 8.688 | 43 | 103775 | 18.485 ug/l | 94 |
| 44) Trichloroethene | 9.353 | 130 | 38223 | 20.078 ug/l | 99 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 40150 | 21.148 ug/l | 98 |
| 46) Dibromomethane | 9.712 | 93 | 29327 | 21.581 ug/l | 96 |
| 47) Bromodichloromethane | 9.888 | 83 | 63079 | 20.673 ug/l | 100 |
| 48) Methyl methacrylate | 9.682 | 41 | 46397 | 18.669 ug/l # | 90 |
| 49) 1,4-Dioxane | 9.694 | 88 | 18902 | 421.571 ug/l # | 93 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 299875 | 105.490 ug/l | 93 |
| 52) Toluene | 10.629 | 92 | 102822 | 20.347 ug/l | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 61891 | 19.747 ug/l | 98 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 64711 | 19.411 ug/l | 92 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 38882 | 21.469 ug/l | 97 |
| 56) Ethyl methacrylate | 10.876 | 69 | 66534 | 19.488 ug/l # | 88 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 67303 | 20.850 ug/l | 97 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 133714 | 92.654 ug/l | 96 |
| 59) 2-Hexanone | 11.194 | 43 | 226634 | 103.052 ug/l | 93 |
| 60) Dibromochloromethane | 11.359 | 129 | 45197 | 20.642 ug/l | 99 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 39209 | 20.609 ug/l | 99 |
| 64) Tetrachloroethene | 11.100 | 164 | 32564 | 19.622 ug/l | 96 |
| 65) Chlorobenzene | 11.894 | 112 | 109477 | 19.770 ug/l | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 38818 | 19.876 ug/l | 98 |
| 67) Ethyl Benzene | 11.965 | 91 | 199315 | 19.621 ug/l | 100 |
| 68) m/p-Xylenes | 12.070 | 106 | 146923 | 38.610 ug/l | 96 |
| 69) o-Xylene | 12.400 | 106 | 73227 | 19.511 ug/l | 100 |
| 70) Styrene | 12.412 | 104 | 123747 | 19.632 ug/l | 98 |
| 71) Bromoform | 12.576 | 173 | 28667 | 19.376 ug/l # | 99 |
| 73) Isopropylbenzene | 12.694 | 105 | 189904 | 19.262 ug/l | 99 |
| 74) N-amyl acetate | 12.494 | 43 | 87695 | 18.185 ug/l | 95 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 55881 | 20.040 ug/l | 100 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 51046m | 19.732 ug/l | |
| 77) Bromobenzene | 12.982 | 156 | 44274 | 20.216 ug/l | 99 |
| 78) n-propylbenzene | 13.035 | 91 | 221023 | 19.470 ug/l | 100 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 139743 | 19.416 ug/l | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 162894 | 19.735 ug/l | 96 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 21751 | 18.289 ug/l | 95 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 138990 | 19.252 ug/l | 97 |
| 83) tert-Butylbenzene | 13.441 | 119 | 140176 | 19.177 ug/l | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 162074 | 19.484 ug/l | 100 |
| 85) sec-Butylbenzene | 13.617 | 105 | 191578 | 19.208 ug/l | 98 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 158838 | 19.287 ug/l | 97 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 79688 | 19.337 ug/l | 98 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 79466 | 19.128 ug/l | 95 |
| 89) n-Butylbenzene | 14.059 | 91 | 134766 | 18.886 ug/l | 98 |
| 90) Hexachloroethane | 14.335 | 117 | 28843 | 18.128 ug/l | 94 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 76195 | 19.107 ug/l | 97 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 12319 | 18.206 ug/l | 97 |
| 93) 1,2,4-Trichlorobenzene | 15.388 | 180 | 41092 | 18.393 ug/l | 98 |
| 94) Hexachlorobutadiene | 15.506 | 225 | 17266 | 17.378 ug/l | 99 |
| 95) Naphthalene | 15.641 | 128 | 145278 | 18.358 ug/l | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 40786 | 18.450 ug/l | 95 |

Sample Results: **VN083298.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083298.D
Acq On : 14 Aug 2024 14:03
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 23:22:35 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

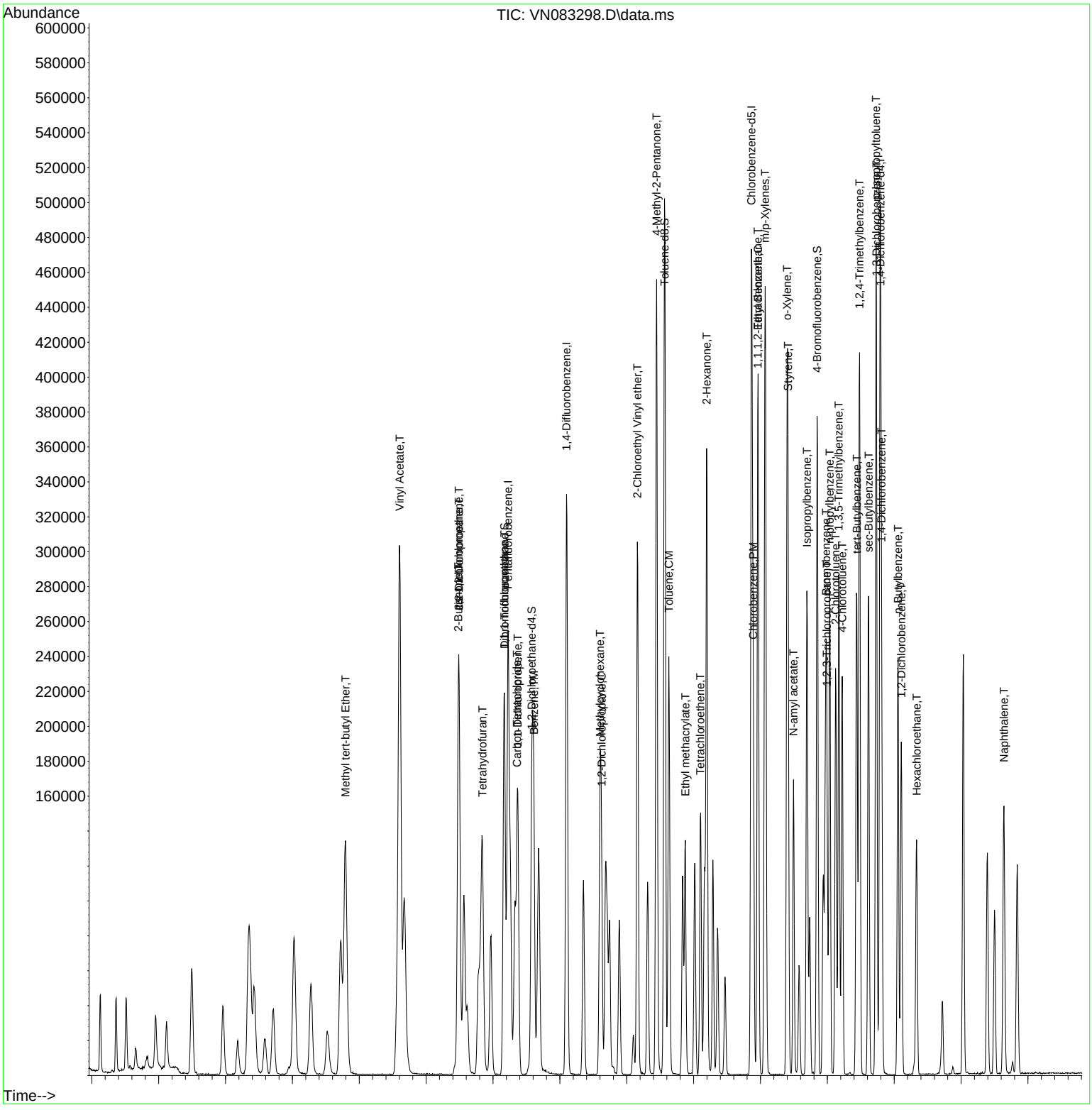
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081424\
Data File : VN083298.D
Acq On : 14 Aug 2024 14:03
Operator : JC\MD
Sample : VN0814WBS01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 6 Sample Multiplier: 1

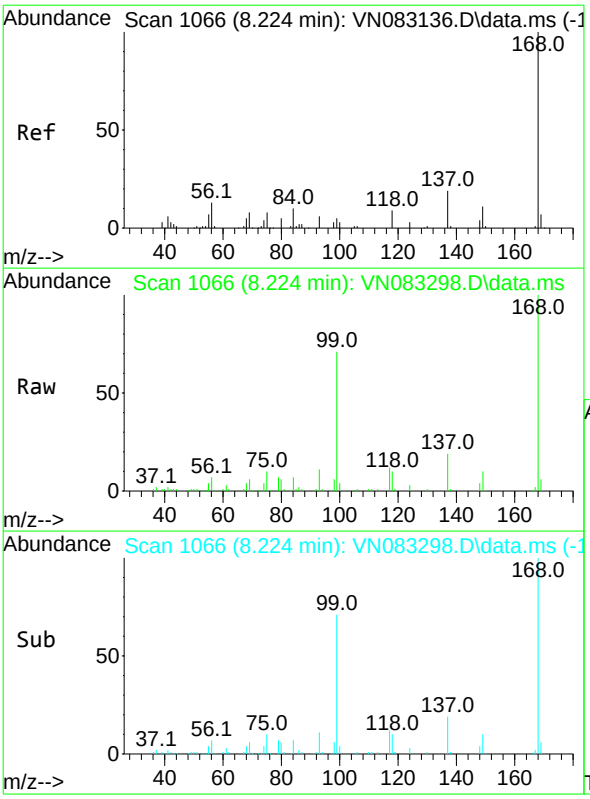
Quant Time: Aug 14 23:22:35 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations APPROVED**

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

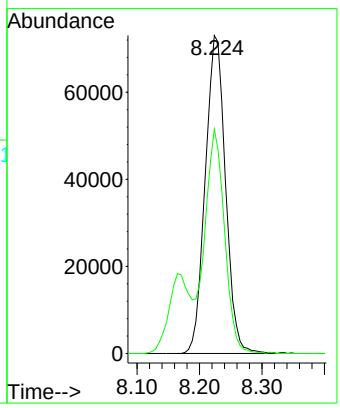





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:168 Resp: 164632

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 70.5 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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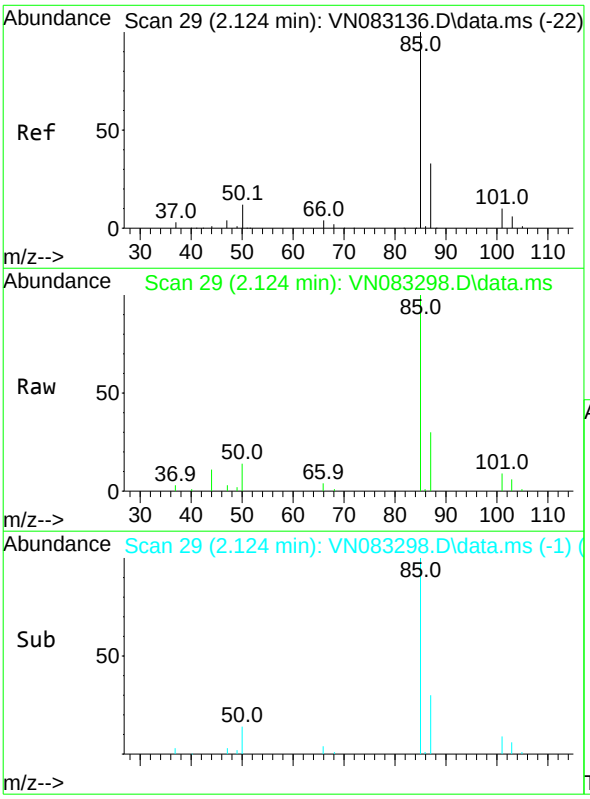
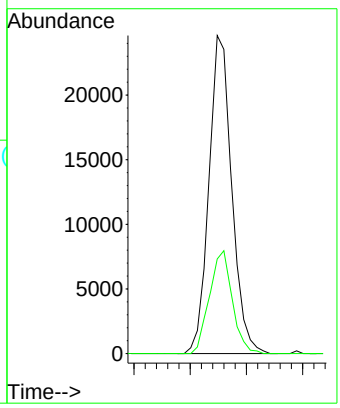
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

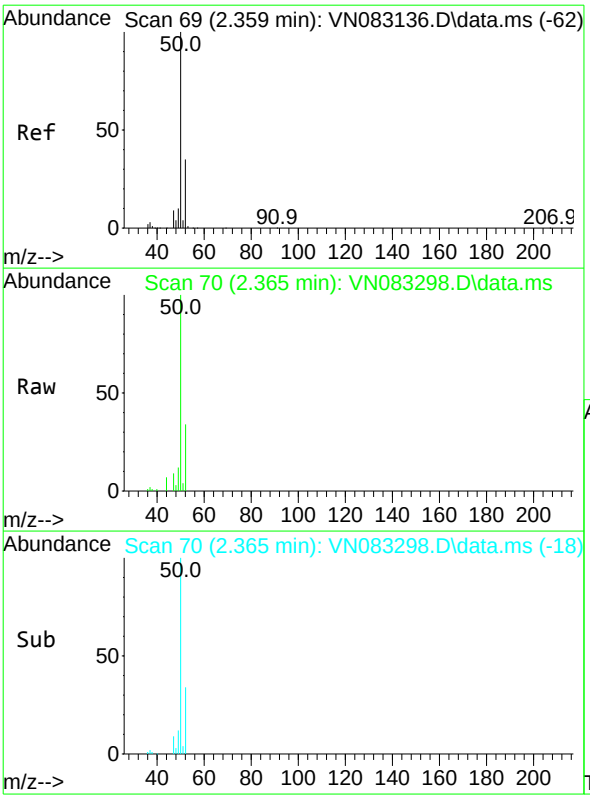



#2
Dichlorodifluoromethane
Concen: 18.595 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 85 Resp: 34716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 29.7 | 15.7 | 47.0 |

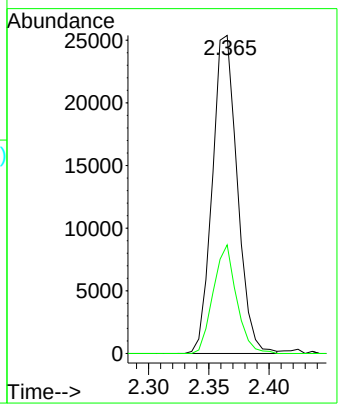





#3
Chloromethane
Concen: 19.136 ug/l
RT: 2.365 min Scan# 70
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 50 Resp: 36577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 34.2 | 25.0 | 37.4 |




**Instrument :**
MSVOA_N
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VN0814WBS01

**Manual Integrations**
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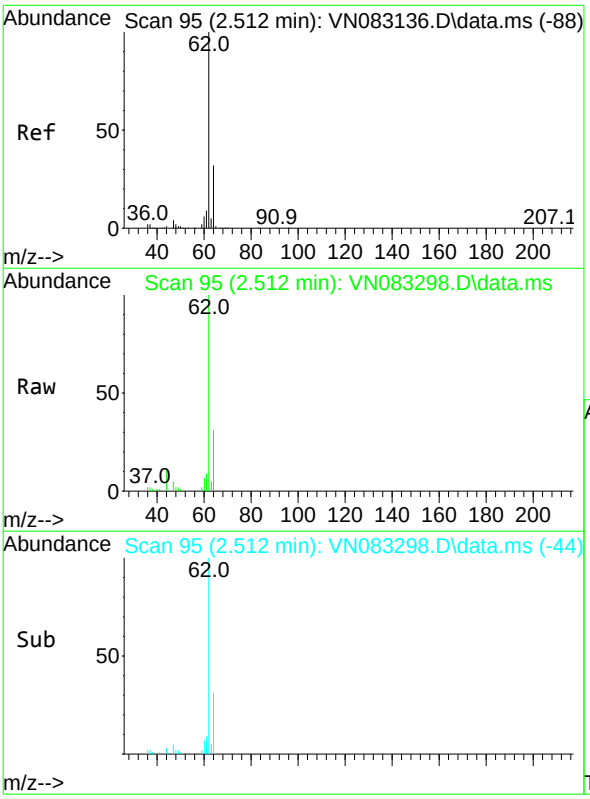
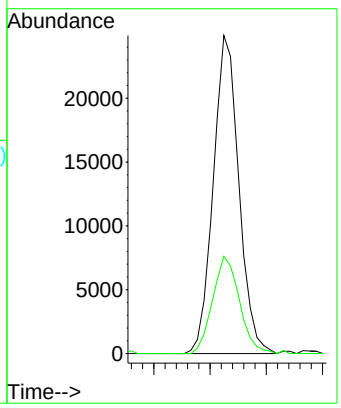
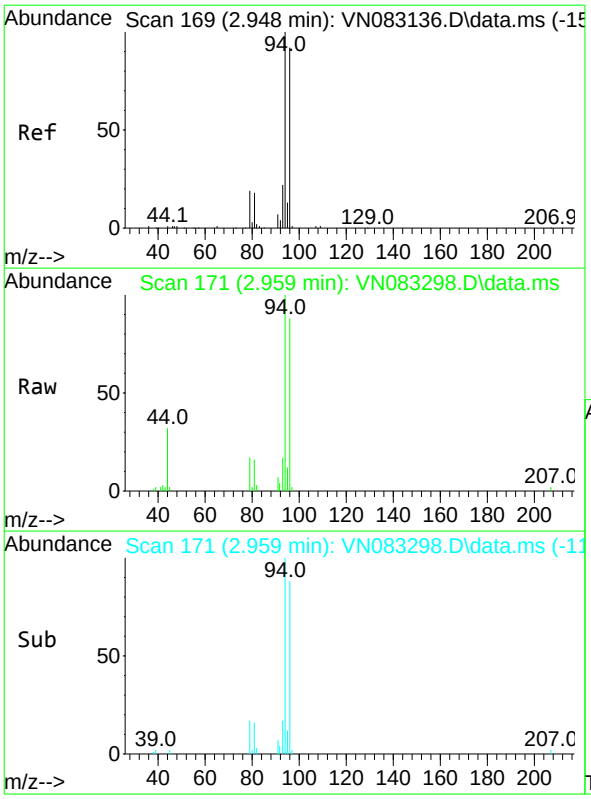



#4
Vinyl Chloride
Concen: 20.174 ug/l
RT: 2.512 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 62 Resp: 39346

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 30.5 | 25.0 | 37.6 |

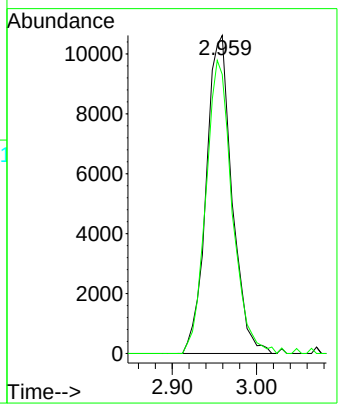





#5
Bromomethane
Concen: 18.608 ug/l
RT: 2.959 min Scan# 17
Delta R.T. 0.012 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 94 Resp: 22519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 87.7 | 78.0 | 117.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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Reviewed By :Mahesh Dadoda 08/15/2024
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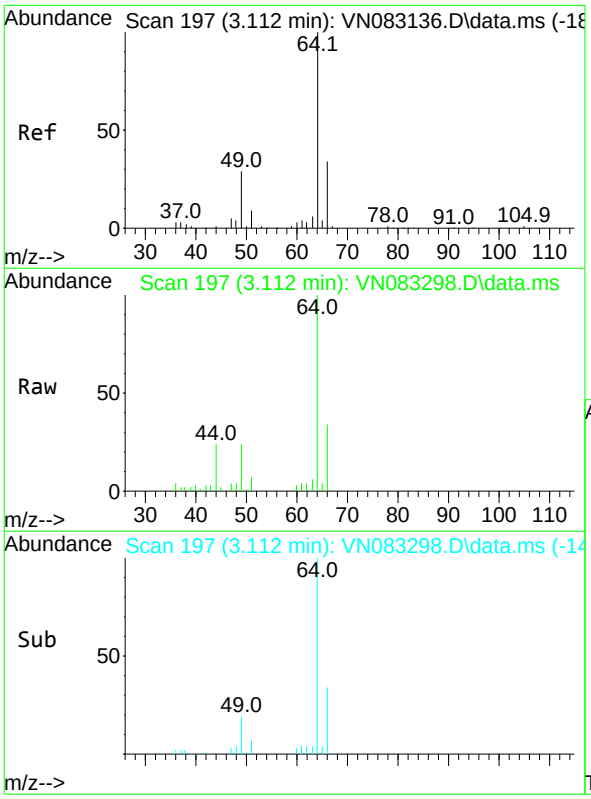
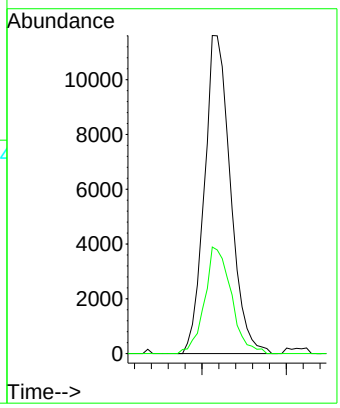
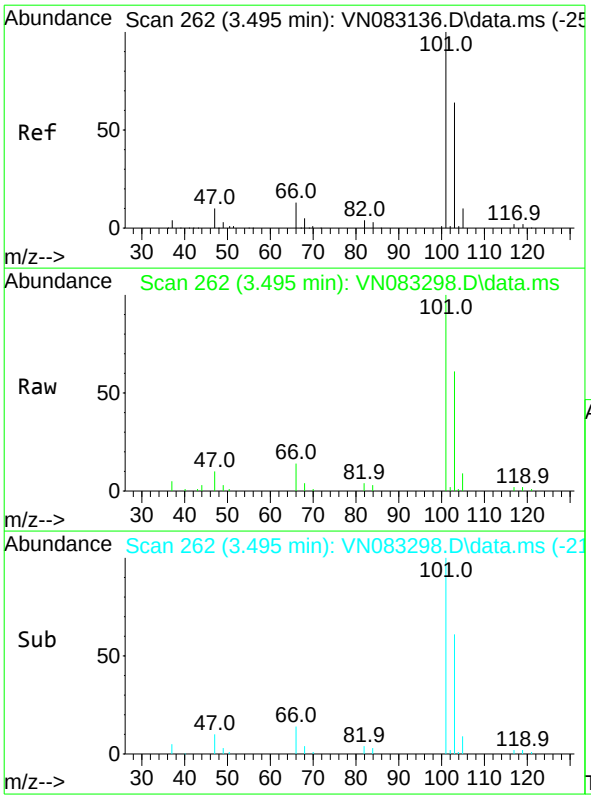



#6
Chloroethane
Concen: 20.410 ug/l
RT: 3.112 min Scan# 197
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 64 Resp: 24904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 33.5 | 26.6 | 40.0 |

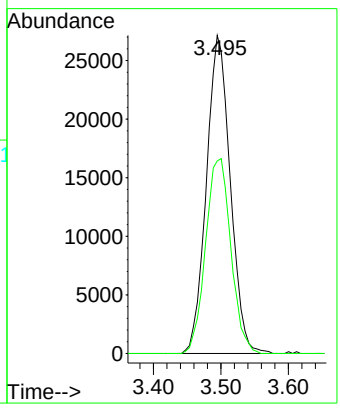





#7
Trichlorofluoromethane
Concen: 20.716 ug/l
RT: 3.495 min Scan# 26
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:101 Resp: 66745

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 60.5 | 52.7 | 79.1 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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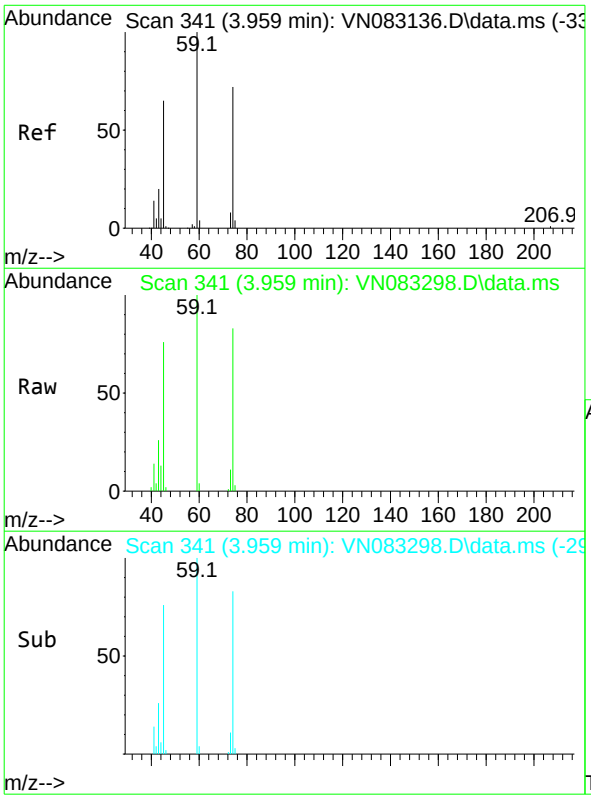
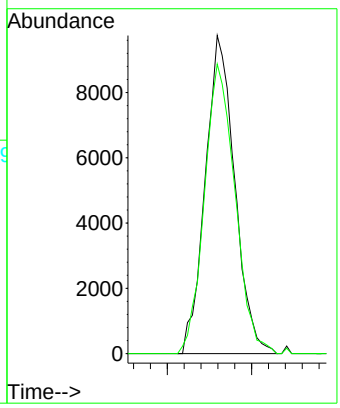
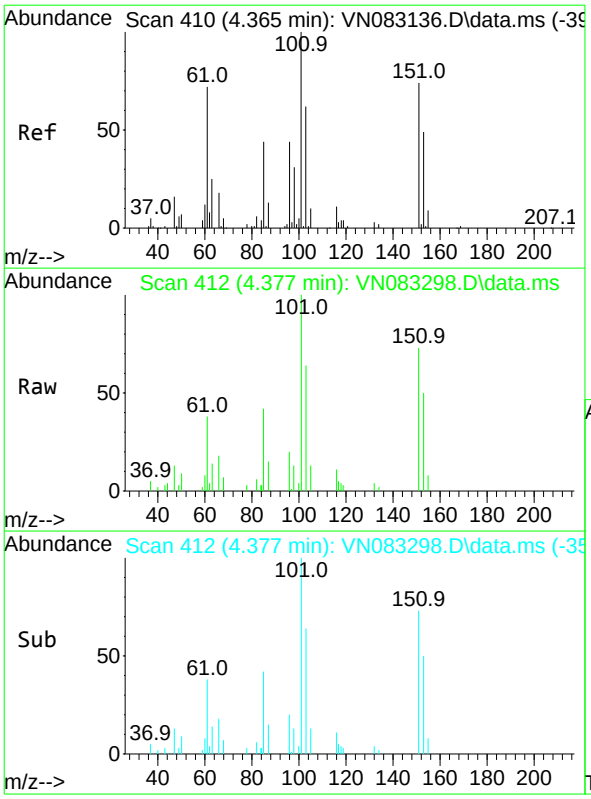



#8
Diethyl Ether
Concen: 19.724 ug/l
RT: 3.959 min Scan# 341
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 74 Resp: 23647

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 94.5 | 55.5 | 166.3 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 20.763 ug/l
RT: 4.377 min Scan# 41
Delta R.T. 0.012 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

Tgt Ion:101 Resp: 36883

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 44.9 | 38.3 | 57.5 |
| 151 | 73.2 | 59.3 | 88.9 |

**Manual Integrations**
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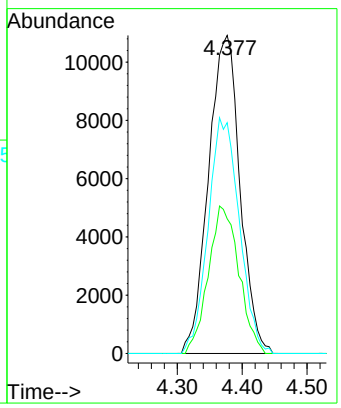
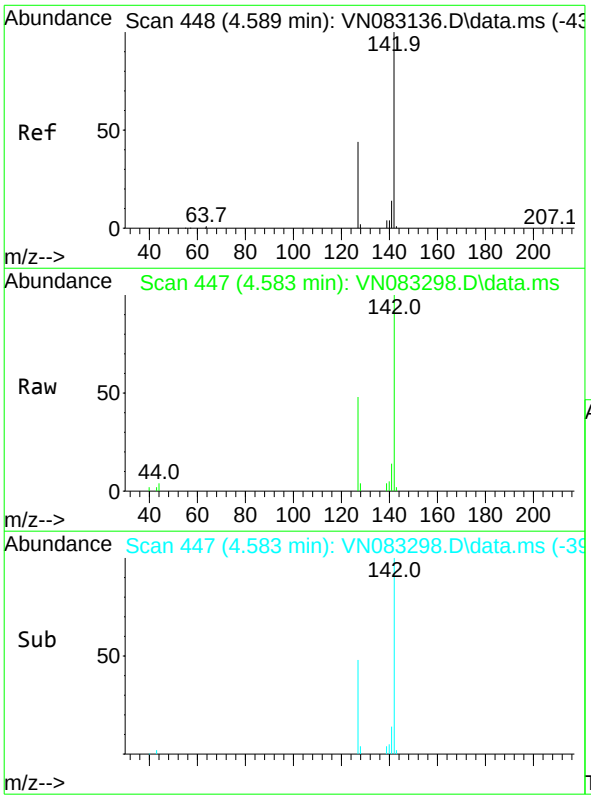
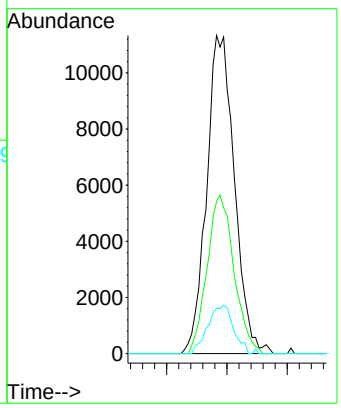


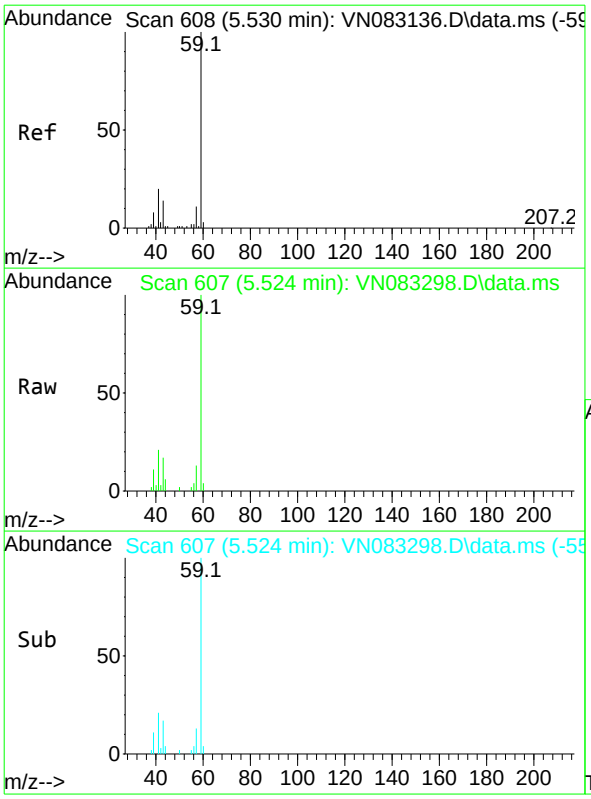




#10
Methyl Iodide
Concen: 15.519 ug/l
RT: 4.583 min Scan# 447
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:142 Resp: 36262

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 47.9 | 37.5 | 56.3 |
| 141 | 14.2 | 13.1 | 19.7 |

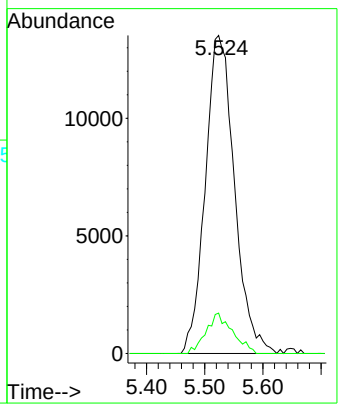





#11
Tert butyl alcohol
Concen: 96.692 ug/l
RT: 5.524 min Scan# 60
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 59 Resp: 47088

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.5 | 8.9 | 13.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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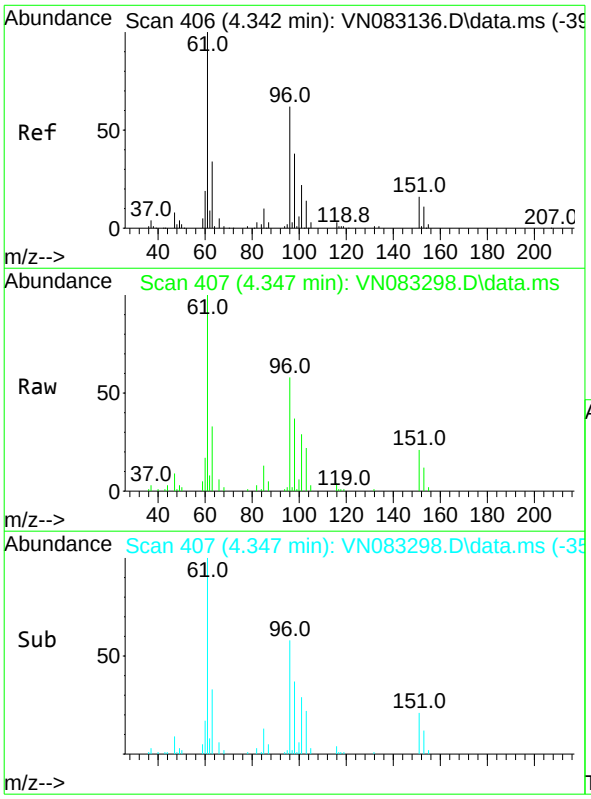
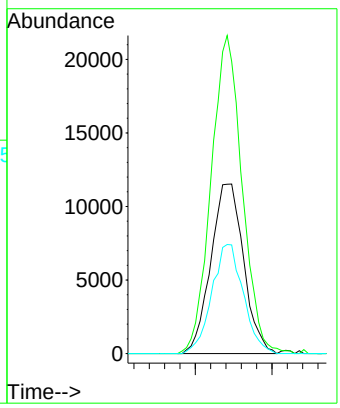
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

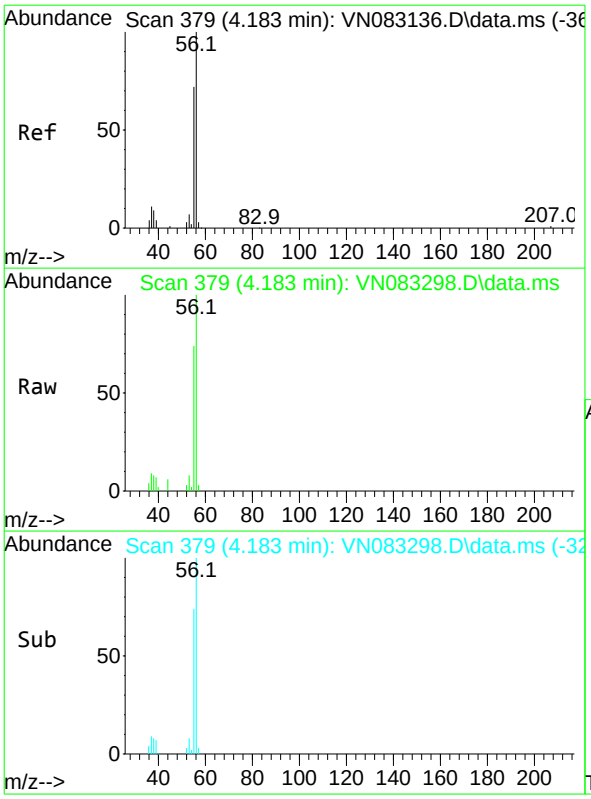



#12
1,1-Dichloroethene
Concen: 18.762 ug/l
RT: 4.347 min Scan# 407
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 96 Resp: 34241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 172.3 | 149.7 | 224.5 |
| 98 | 64.1 | 50.1 | 75.1 |

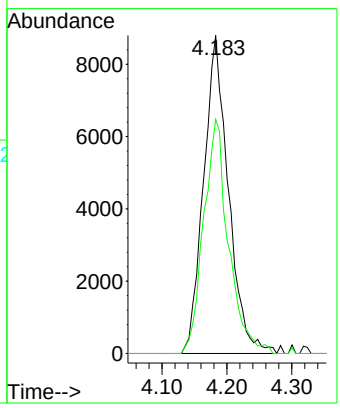





#13
Acrolein
Concen: 73.590 ug/l
RT: 4.183 min Scan# 37
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 56 Resp: 23357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 73.8 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

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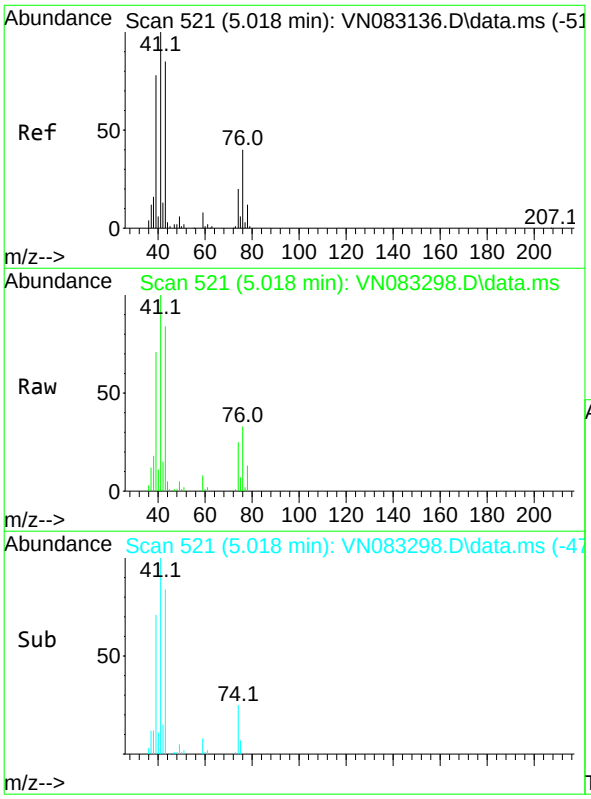
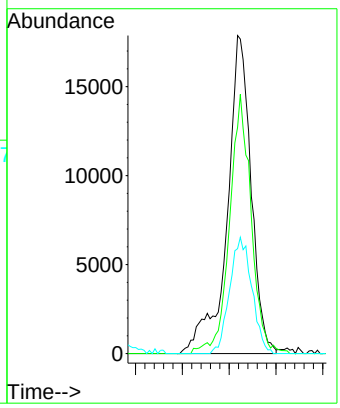
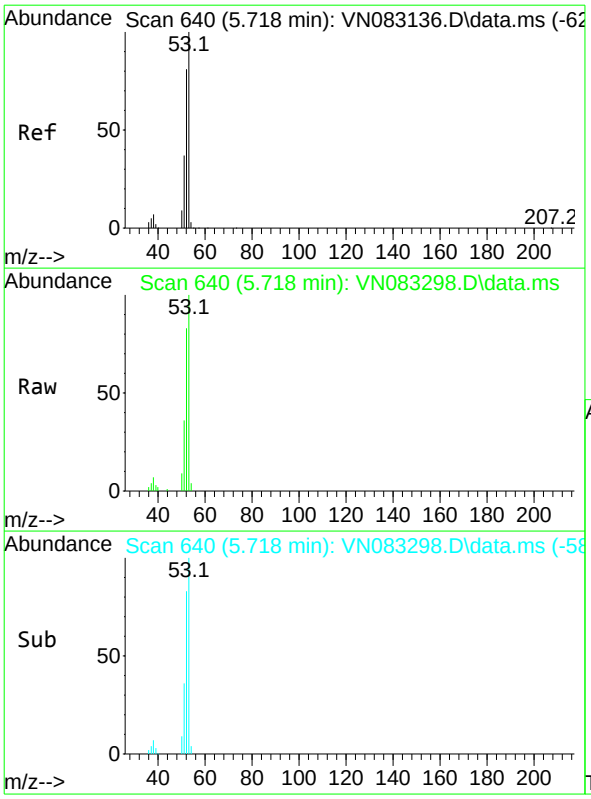



#14
Allyl chloride
Concen: 18.479 ug/l m
RT: 5.018 min Scan# 521
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 41 Resp: 63728

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 72.9 | 67.8 | 101.6 |
| 76 | 33.7 | 25.8 | 38.8 |






#15
Acrylonitrile
Concen: 103.155 ug/l
RT: 5.718 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 53 Resp: 103317

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 81.2 | 66.6 | 100.0 |
| 51 | 37.3 | 30.1 | 45.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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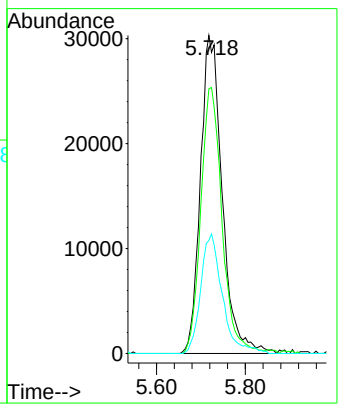
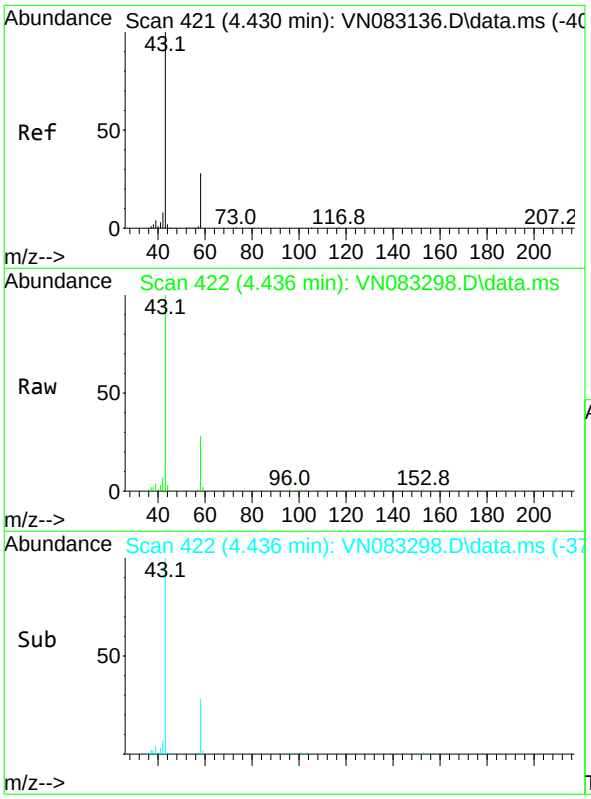
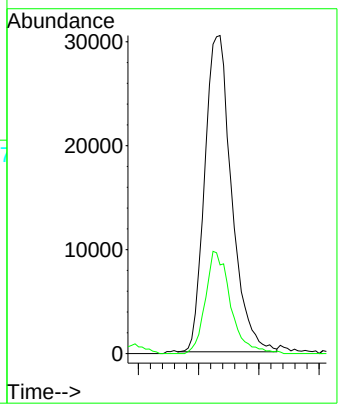


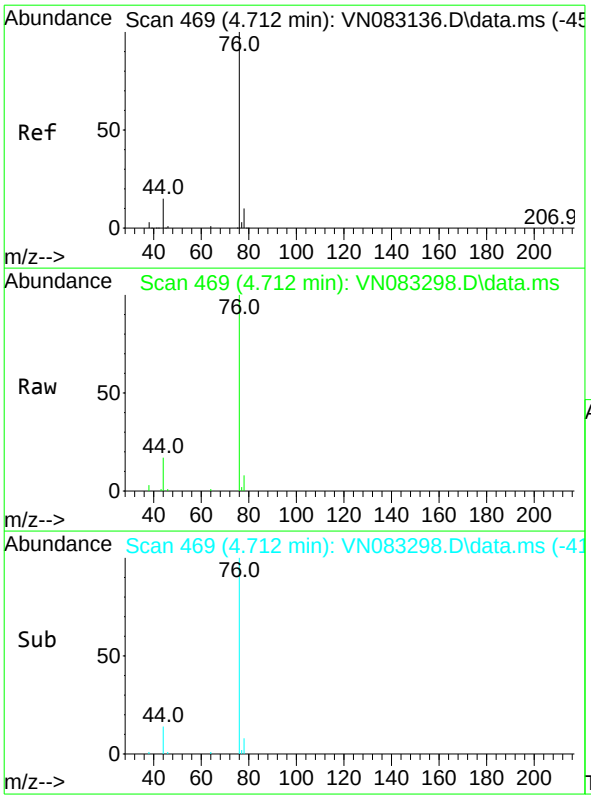




#16
Acetone
Concen: 103.081 ug/l
RT: 4.436 min Scan# 422
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 94520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.0 | 21.8 | 32.6 |

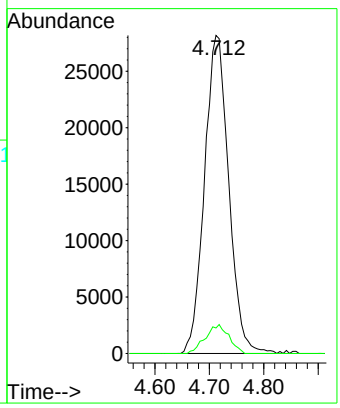





#17
Carbon Disulfide
Concen: 16.325 ug/l
RT: 4.712 min Scan# 46
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 76 Resp: 87175

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.0 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

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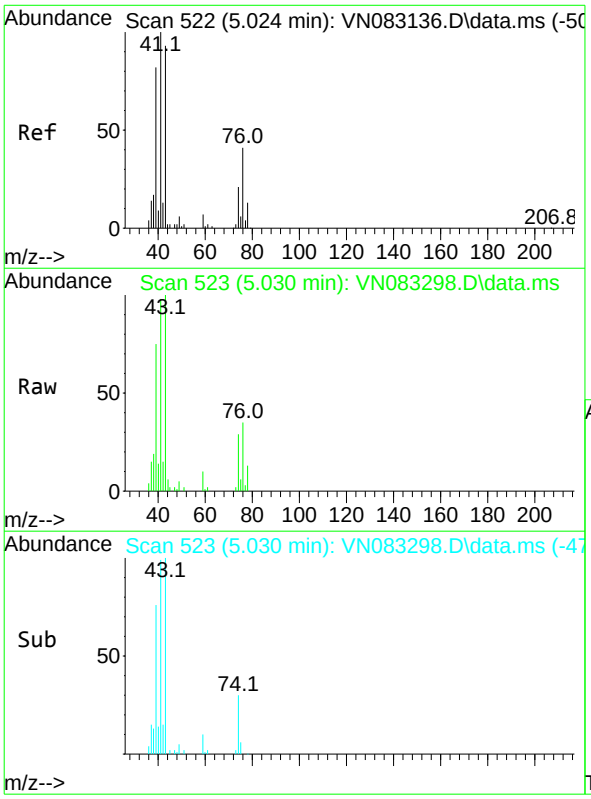
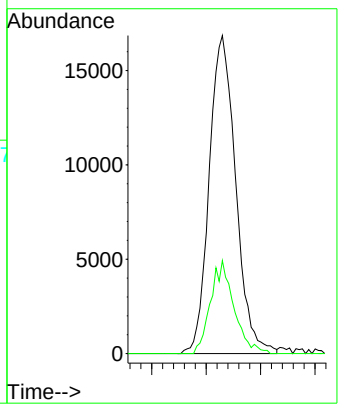
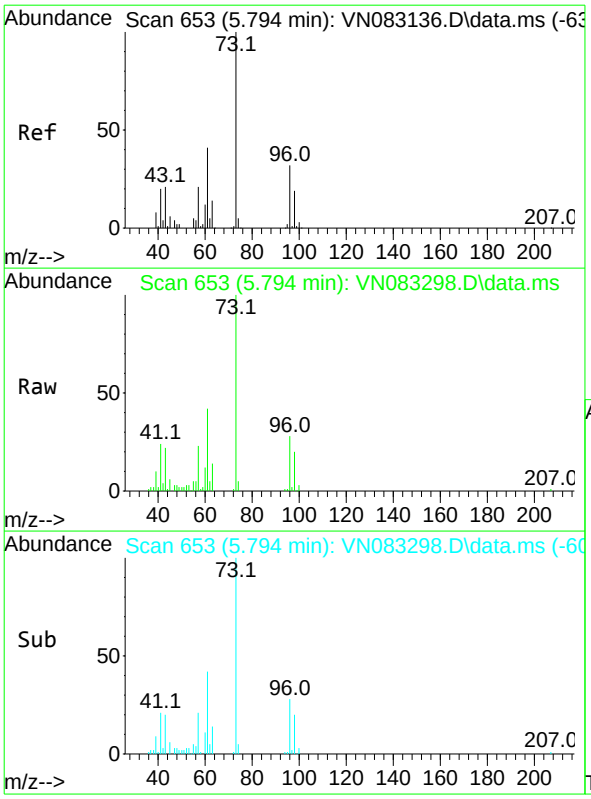



#18
Methyl Acetate
Concen: 20.901 ug/l
RT: 5.030 min Scan# 523
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 57100

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 25.8 | 16.3 | 24.5# |

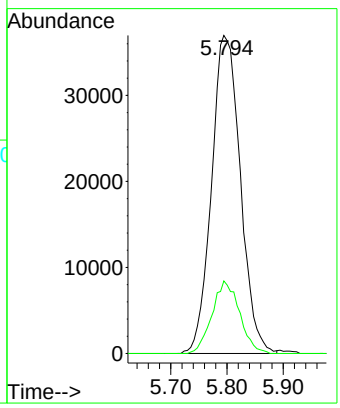





#19
Methyl tert-butyl Ether
Concen: 19.991 ug/l
RT: 5.794 min Scan# 65
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 73 Resp: 131685

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.8 | 17.9 | 26.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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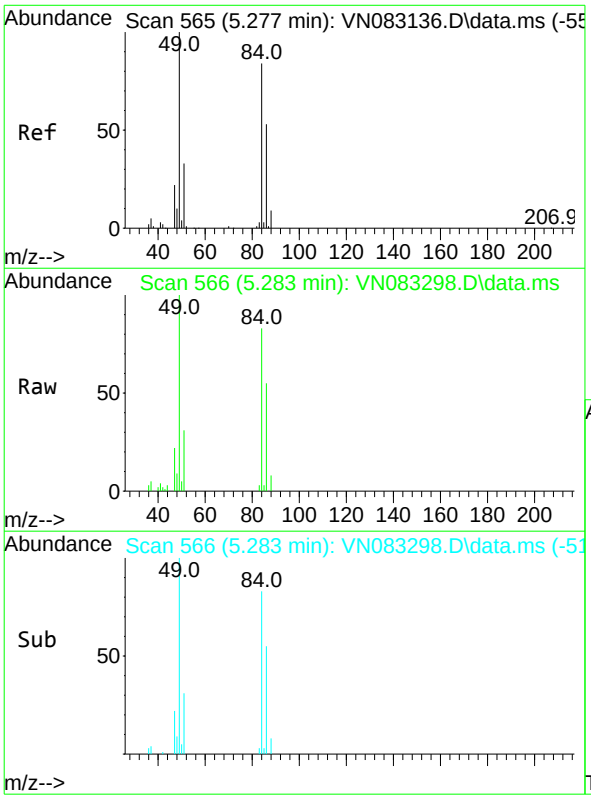
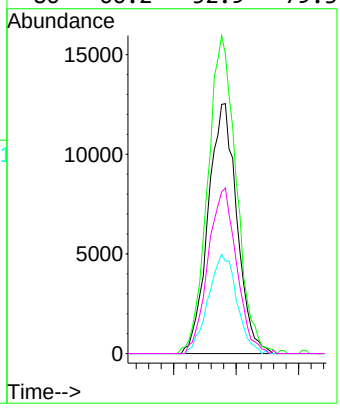
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

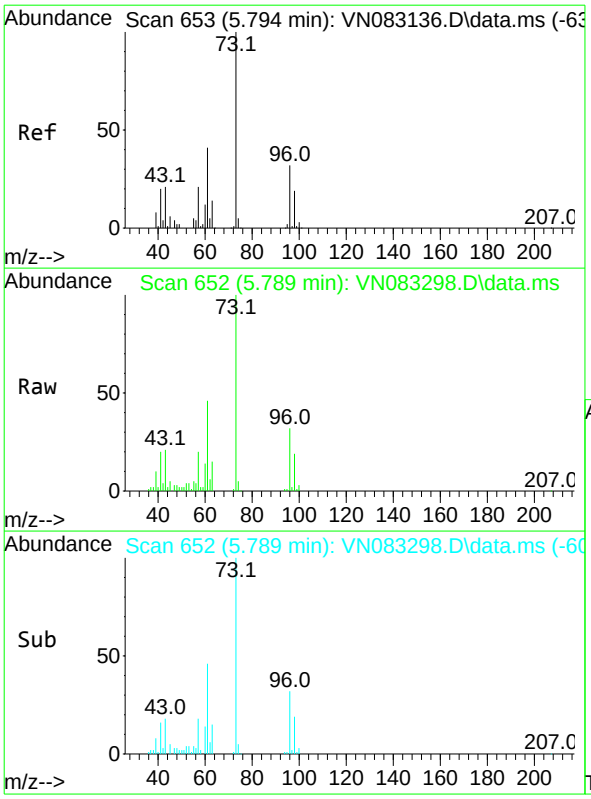



#20
Methylene Chloride
Concen: 18.973 ug/l
RT: 5.283 min Scan# 566
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 84 Resp: 40039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 119.8 | 119.6 | 179.4 |
| 51 | 36.9 | 34.8 | 52.2 |
| 86 | 66.2 | 52.9 | 79.3 |






#21
trans-1,2-Dichloroethene
Concen: 18.677 ug/l
RT: 5.789 min Scan# 65
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 96 Resp: 35228

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 142.3 | 123.4 | 185.2 |
| 98 | 58.3 | 49.3 | 73.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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Reviewed By :Mahesh Dadoda 08/15/2024
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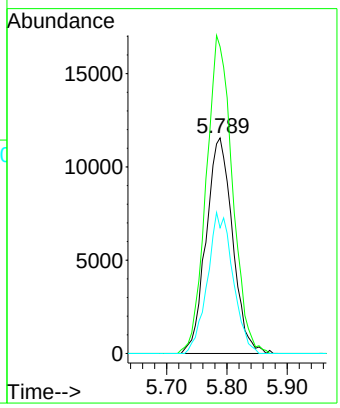
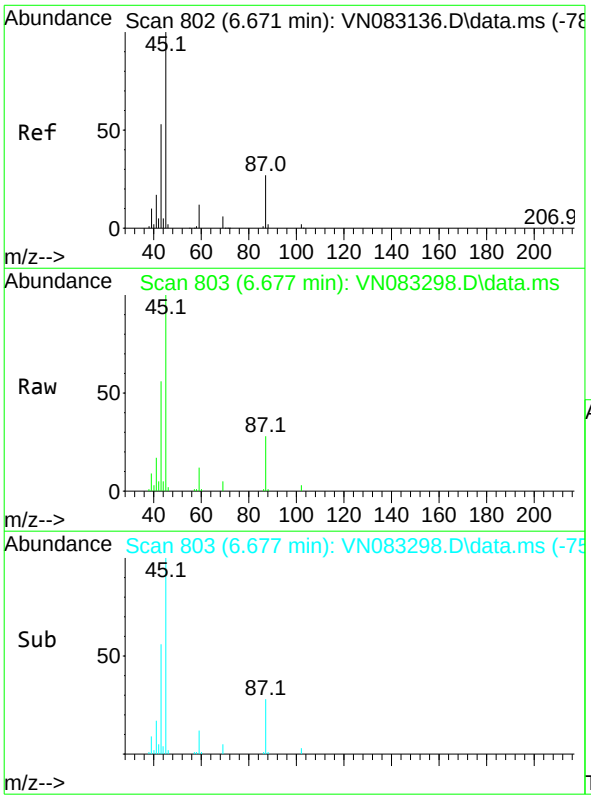
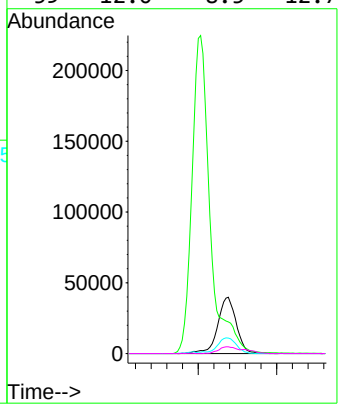


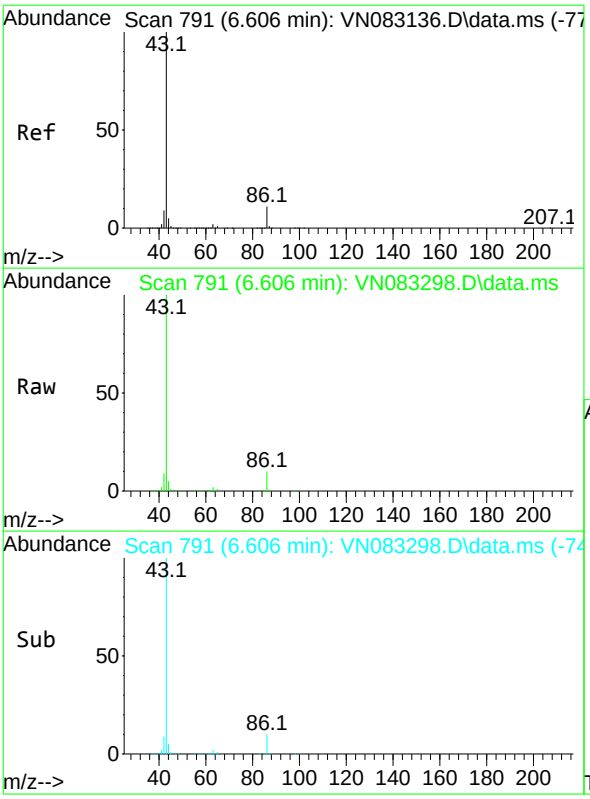




#22
Diisopropyl ether
Concen: 20.168 ug/l
RT: 6.677 min Scan# 803
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 45 Resp: 130740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 54.8 | 44.0 | 66.0 |
| 87 | 27.6 | 19.7 | 29.5 |
| 59 | 12.0 | 8.5 | 12.7 |

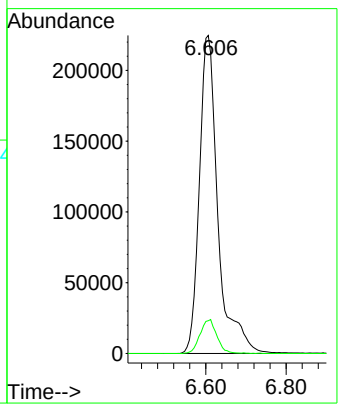





#23
Vinyl Acetate
Concen: 108.418 ug/l
RT: 6.606 min Scan# 79
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 720397

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.3 | 7.3 | 10.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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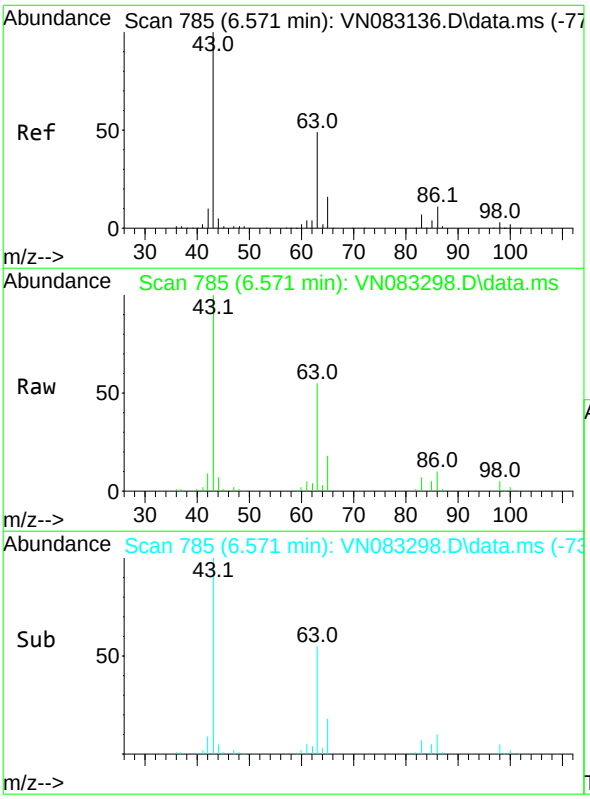
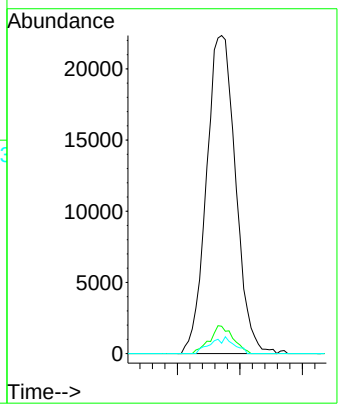
Supervised By :Semsettin Yesilyurt 08/15/2024

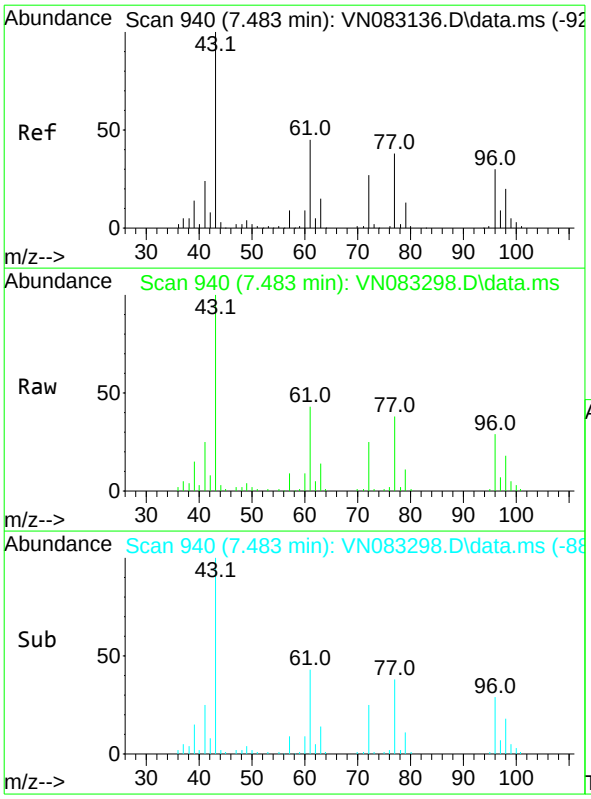



#24
1,1-Dichloroethane
Concen: 20.465 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 63 Resp: 72312

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 8.6 | 3.3 | 9.9 |
| 100 | 3.2 | 2.0 | 6.0 |

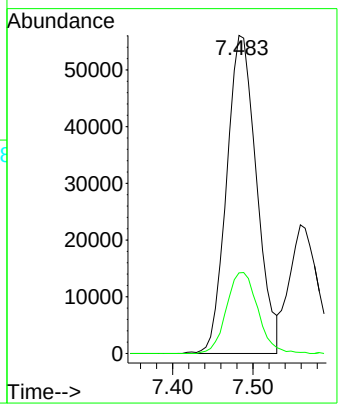





#25
2-Butanone
Concen: 103.431 ug/l
RT: 7.483 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 145625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 25.3 | 18.2 | 27.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

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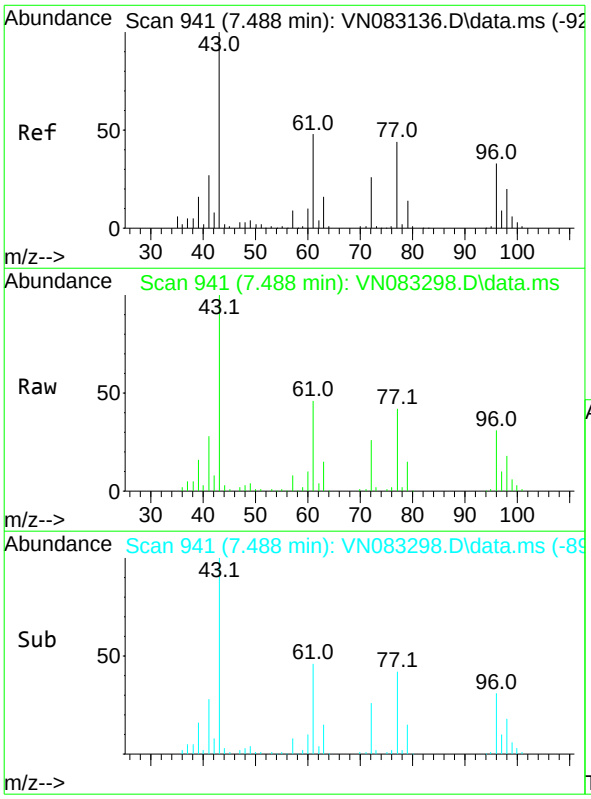
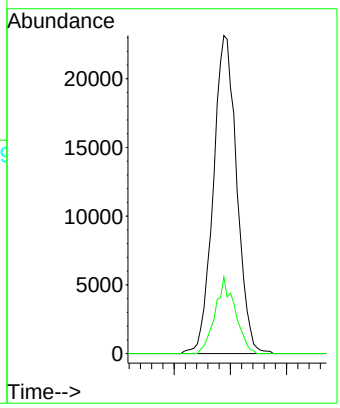
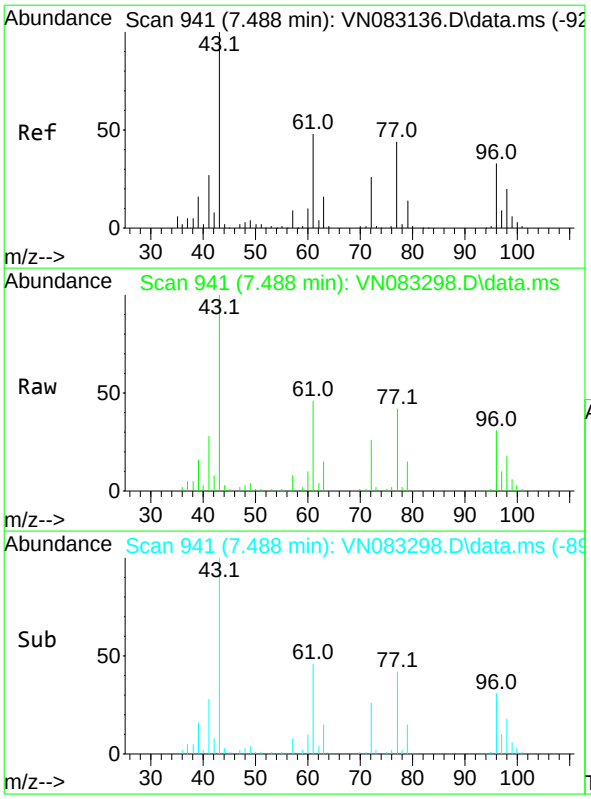



#26
2,2-Dichloropropane
Concen: 20.428 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 77 Resp: 67033

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 20.5 | 10.3 | 30.9 |






#27
cis-1,2-Dichloroethene
Concen: 19.638 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 96 Resp: 44697

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 154.6 | 0.0 | 329.6 |
| 98 | 63.5 | 0.0 | 128.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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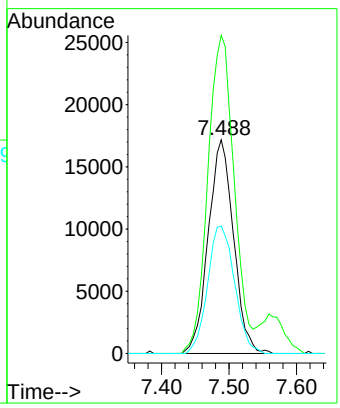
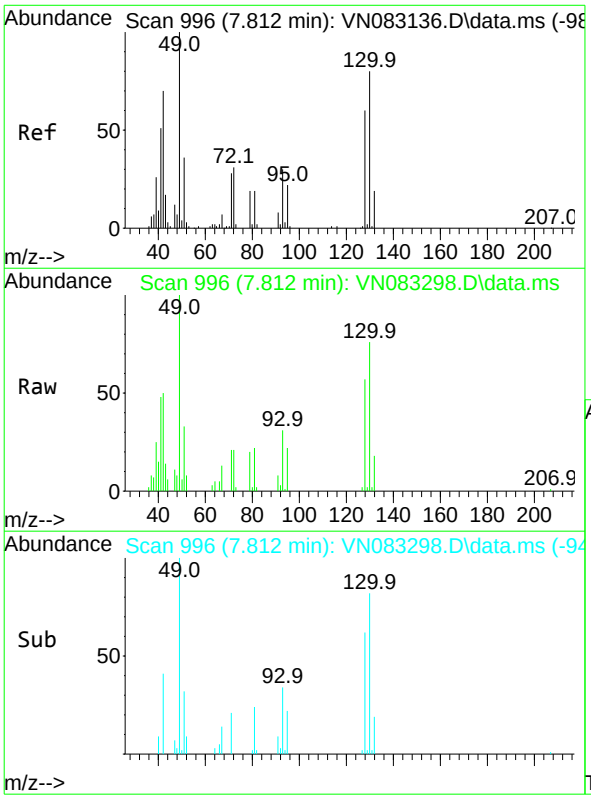
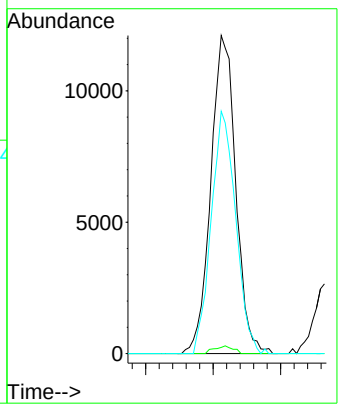


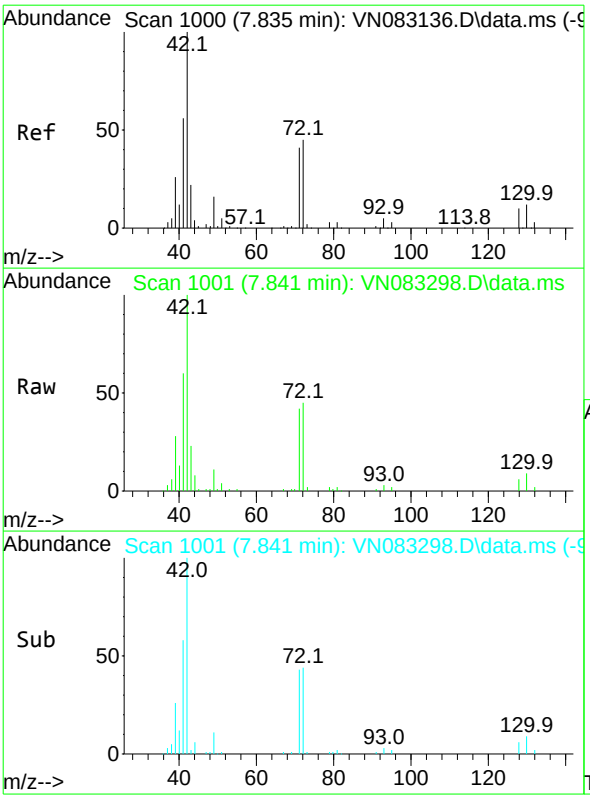




#28
Bromochloromethane
Concen: 21.518 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 49 Resp: 31073

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.8 | 0.0 | 3.8 |
| 130 | 74.9 | 50.5 | 75.7 |

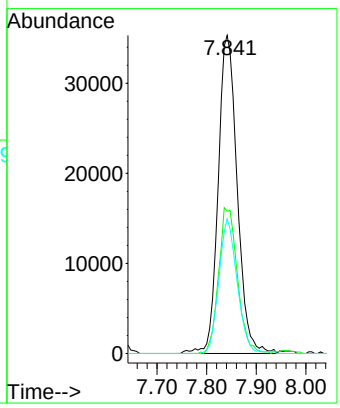





#29
Tetrahydrofuran
Concen: 103.362 ug/l
RT: 7.841 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 42 Resp: 94074

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 45.4 | 30.0 | 45.0# |
| 71 | 40.6 | 28.3 | 42.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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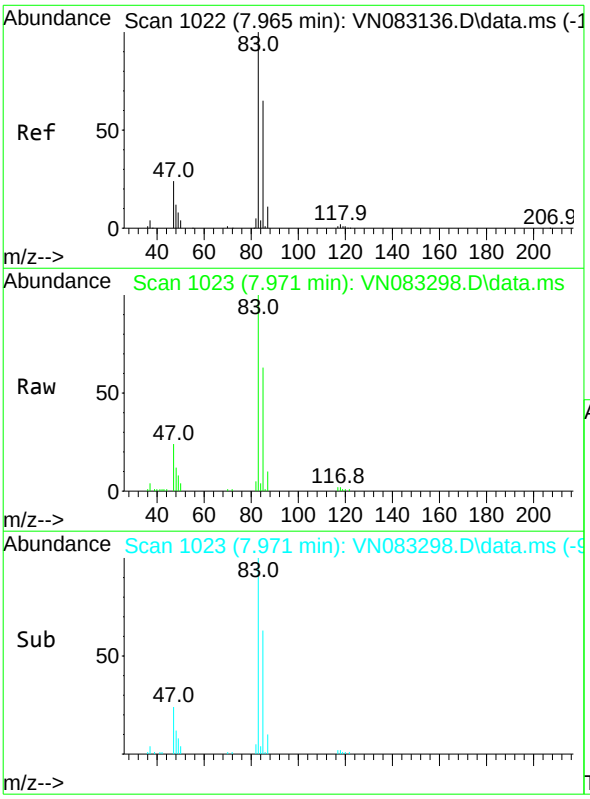
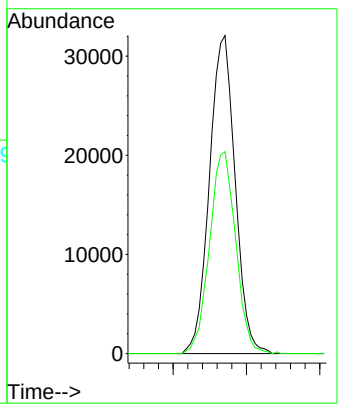
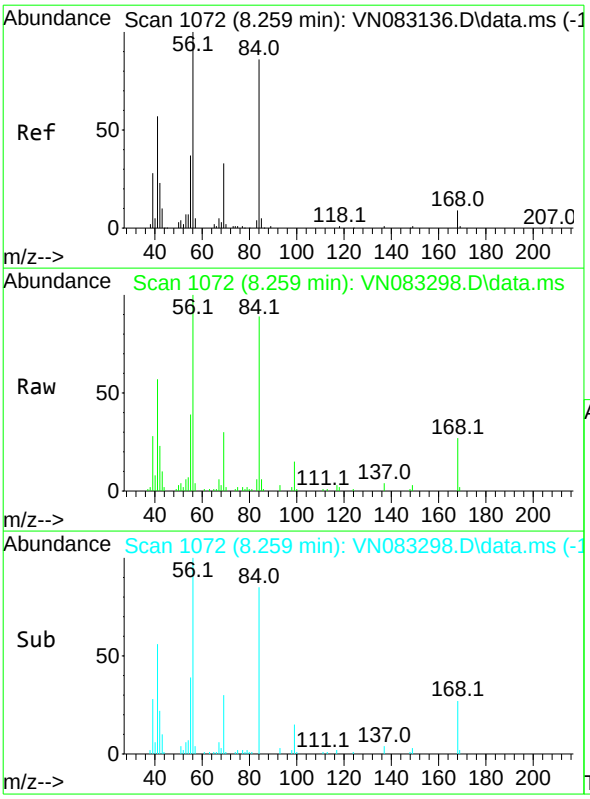



#30
Chloroform
Concen: 21.291 ug/l
RT: 7.971 min Scan# 1023
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 83 Resp: 78159

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.5 | 50.9 | 76.3 |






#31
Cyclohexane
Concen: 18.499 ug/l
RT: 8.259 min Scan# 10
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

Tgt Ion: 56 Resp: 64241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 29.5 | 24.5 | 36.7 |
| 84 | 87.9 | 66.0 | 99.0 |

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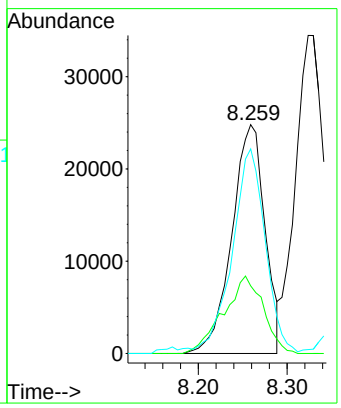
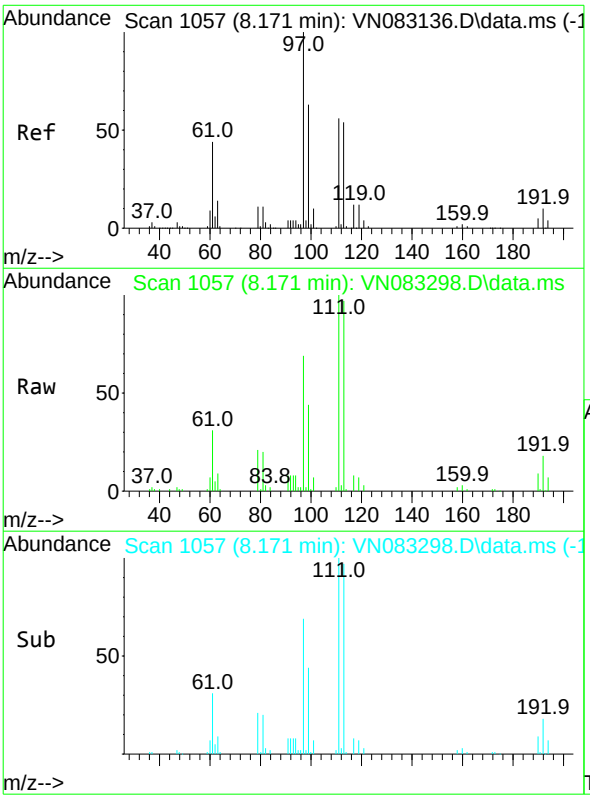
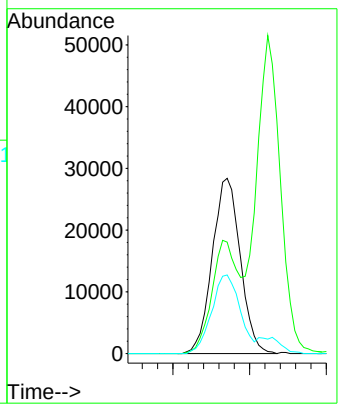


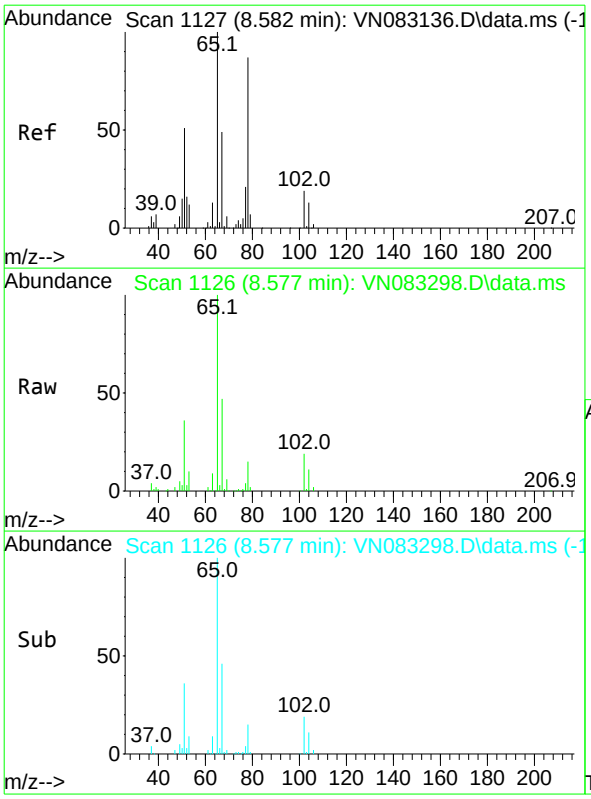




#32
1,1,1-Trichloroethane
Concen: 20.713 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 97 Resp: 71974

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 59.3 | 52.0 | 78.0 |
| 61 | 45.5 | 42.1 | 63.1 |






#33
1,2-Dichloroethane-d4
Concen: 56.259 ug/l
RT: 8.577 min Scan# 11
Delta R.T. -0.005 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 65 Resp: 131834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.4 | 0.0 | 104.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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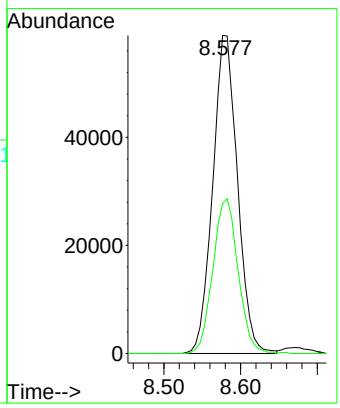
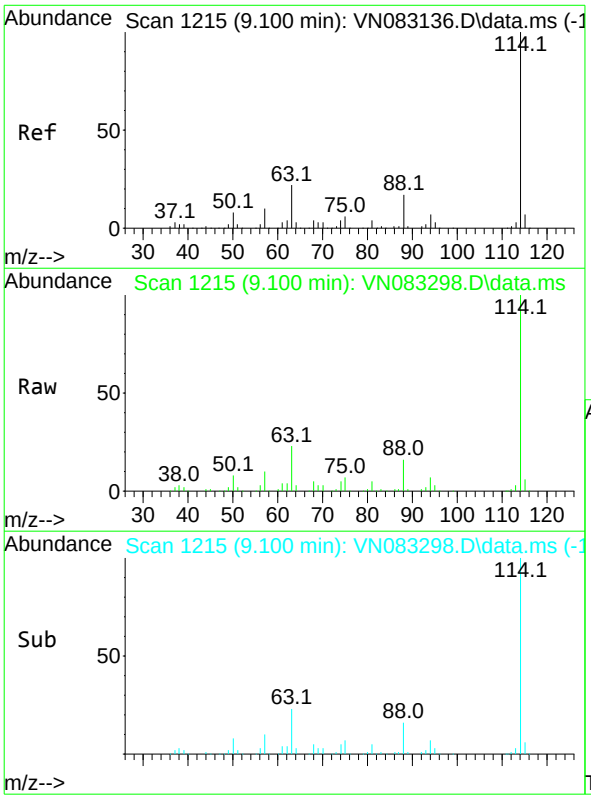
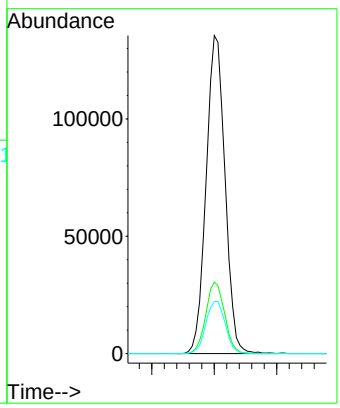


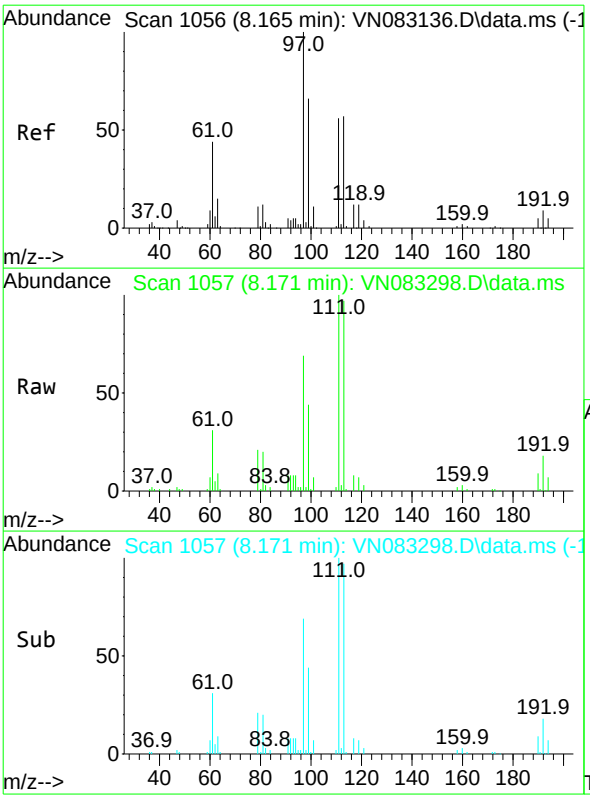




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:114 Resp: 284346

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.5 | 0.0 | 44.6 |
| 88 | 16.4 | 0.0 | 31.4 |






#35
Dibromofluoromethane
Concen: 54.029 ug/l
RT: 8.171 min Scan# 10
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

Tgt Ion:113 Resp: 95892

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.4 | 82.4 | 123.6 |
| 192 | 17.2 | 14.9 | 22.3 |

**Manual Integrations**
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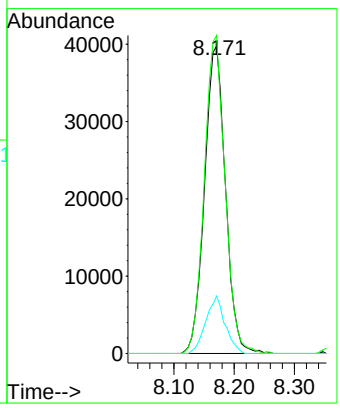
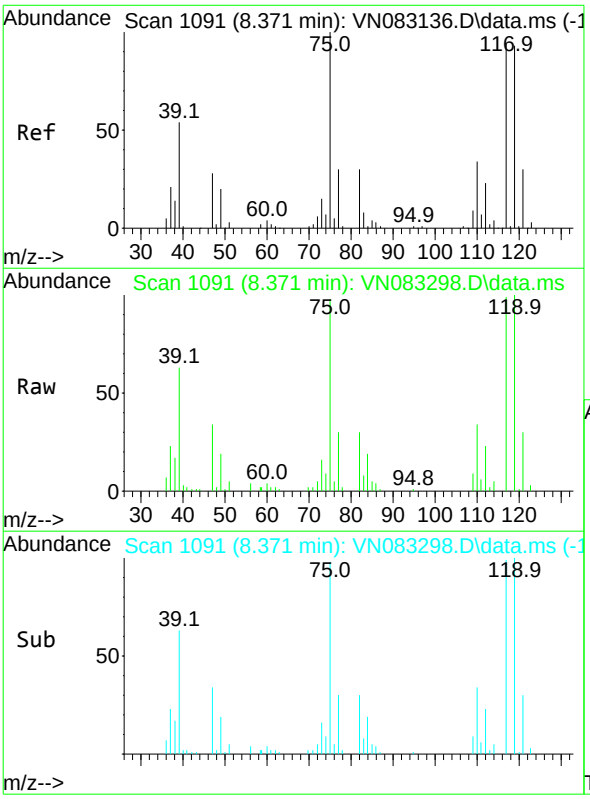
Supervised By :Semsettin Yesilyurt 08/15/2024

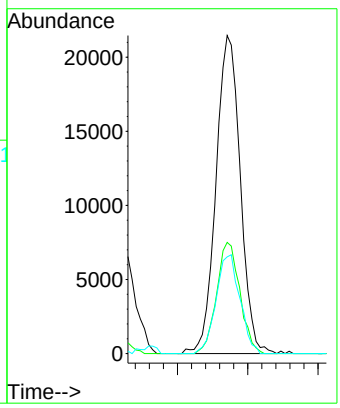


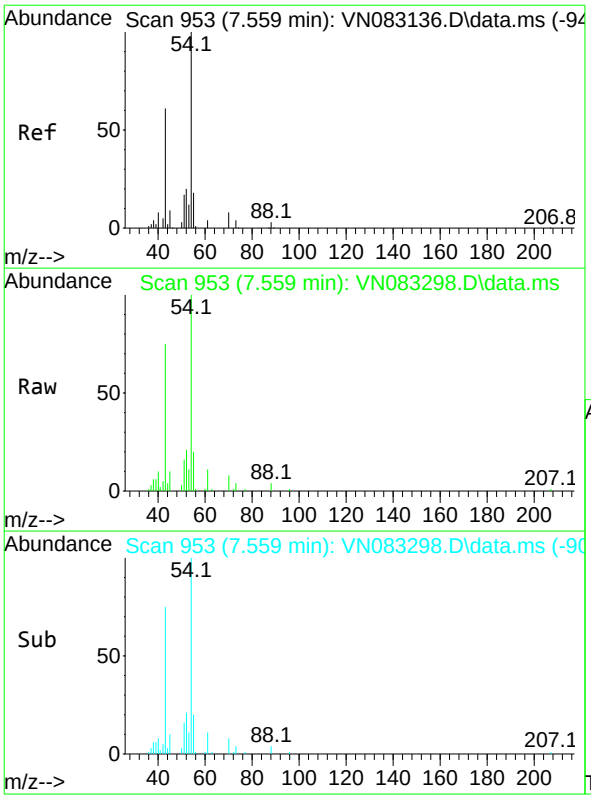




#36
1,1-Dichloropropene
Concen: 19.195 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 75 Resp: 51536

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.5 | 16.3 | 48.9 |
| 77 | 30.5 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 19.497 ug/l
RT: 7.559 min Scan# 95
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

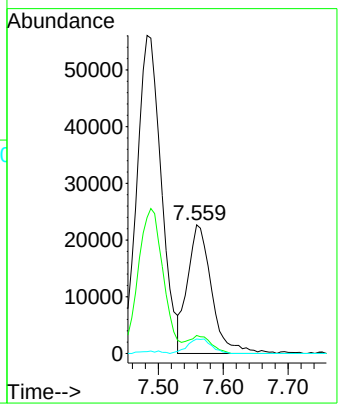
Tgt Ion: 43 Resp: 58610

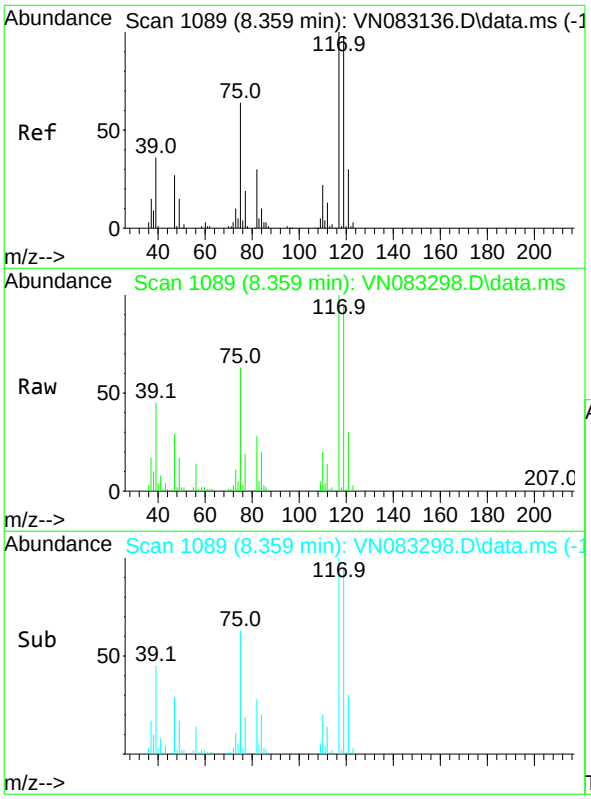
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 12.3 | 9.3 | 13.9 |
| 70 | 11.2 | 7.0 | 10.6# |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

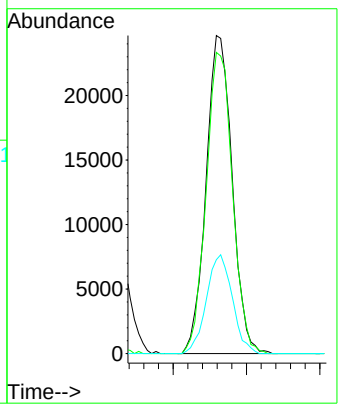


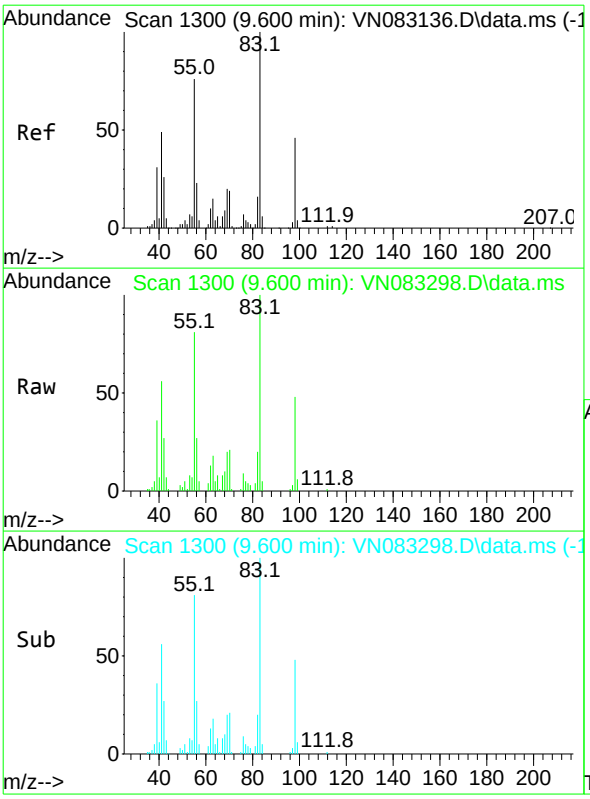




#38
Carbon Tetrachloride
Concen: 20.118 ug/l
RT: 8.359 min Scan# 1089
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:117 Resp: 60835

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.7 | 74.9 | 112.3 |
| 121 | 29.5 | 24.3 | 36.5 |






#39
Methylcyclohexane
Concen: 18.222 ug/l
RT: 9.600 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 83 Resp: 60089

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 80.6 | 66.4 | 99.6 |
| 98 | 47.8 | 40.7 | 61.1 |

**Instrument :**
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VN0814WBS01

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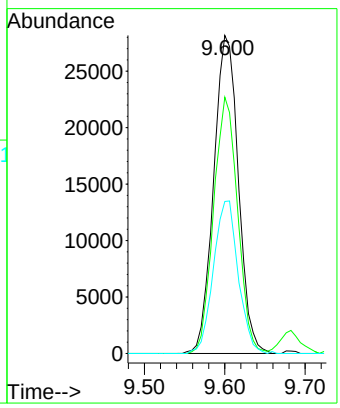
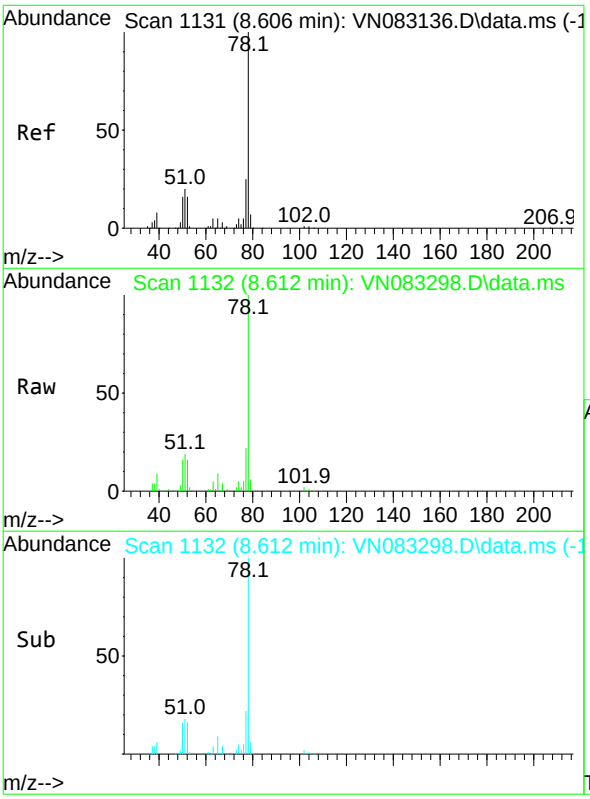
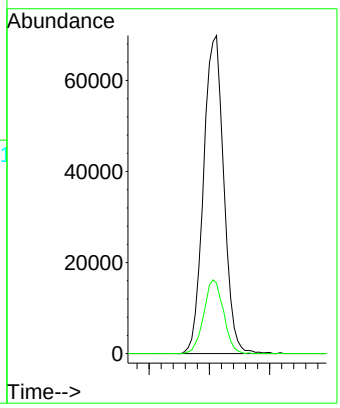


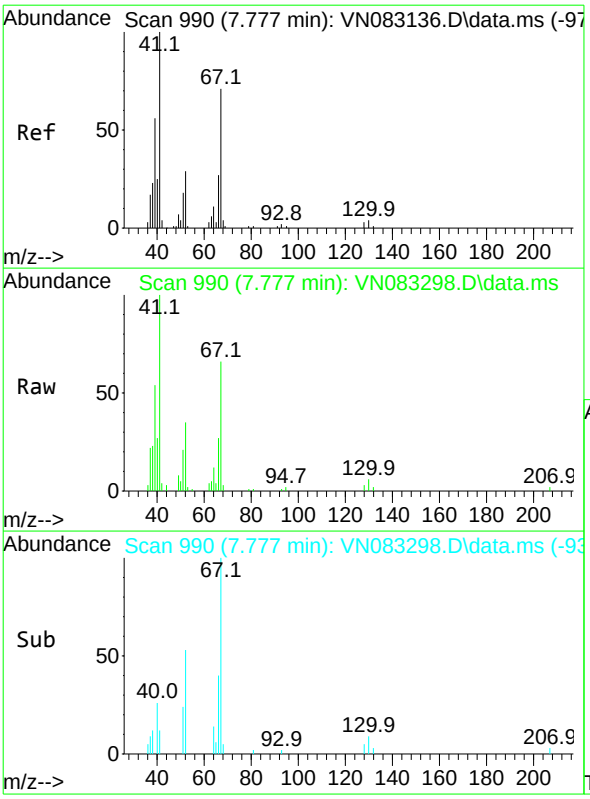




#40
Benzene
Concen: 20.411 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 78 Resp: 163247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 22.2 | 19.0 | 28.4 |

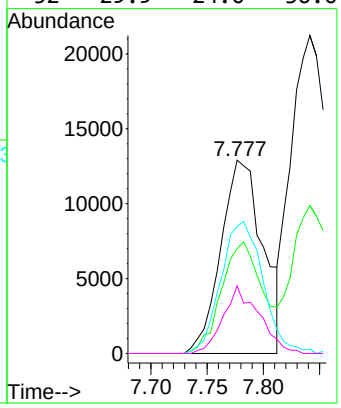





#41
Methacrylonitrile
Concen: 19.660 ug/l
RT: 7.777 min Scan# 99
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 41 Resp: 33603

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 56.9 | 45.5 | 68.3 |
| 67 | 68.3 | 50.5 | 75.7 |
| 52 | 29.9 | 24.0 | 36.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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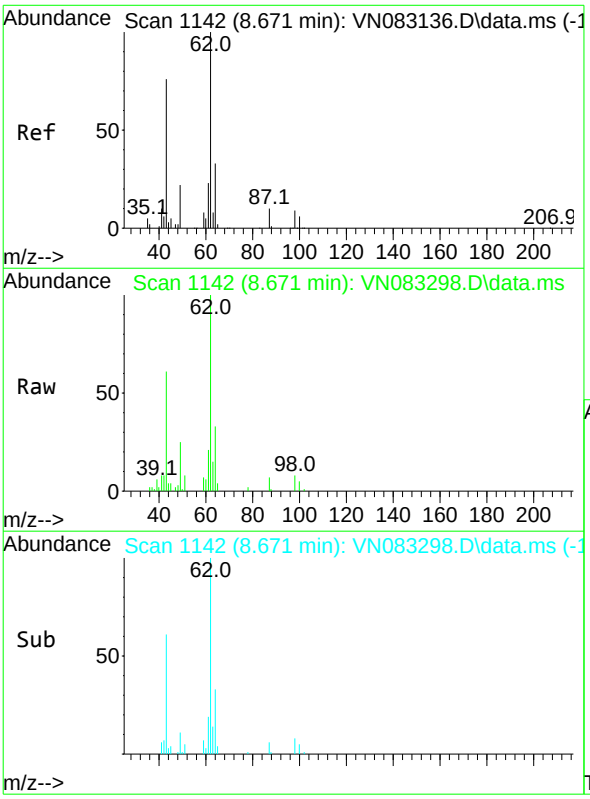
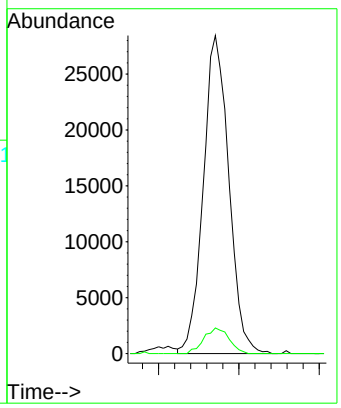
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

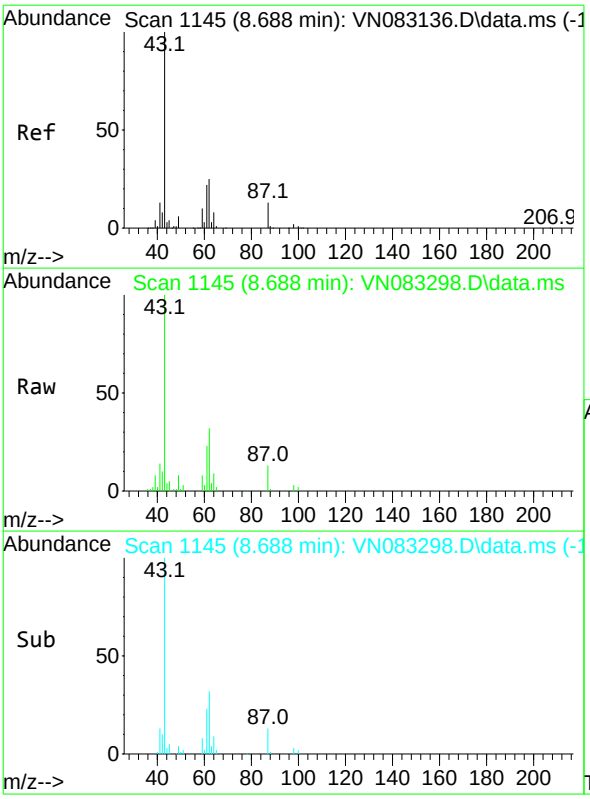



#42
1,2-Dichloroethane
Concen: 21.520 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 62 Resp: 62700

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 8.0 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 18.485 ug/l
RT: 8.688 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 103775

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 25.3 | 17.8 | 26.6 |
| 87 | 12.2 | 8.2 | 12.2 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

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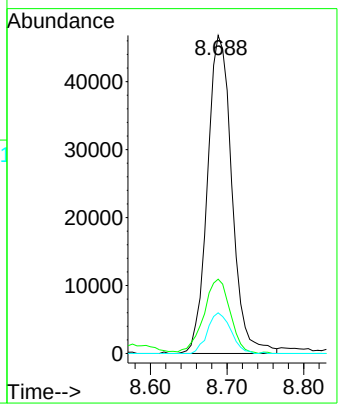
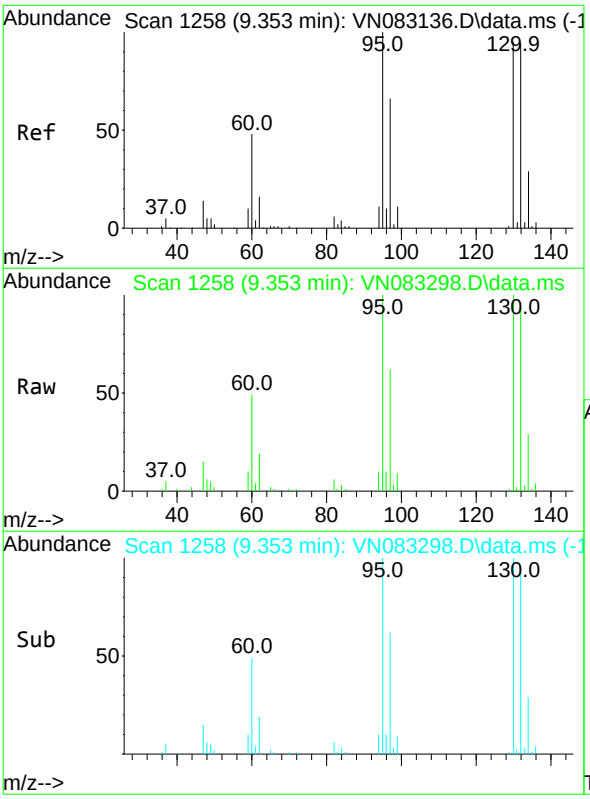
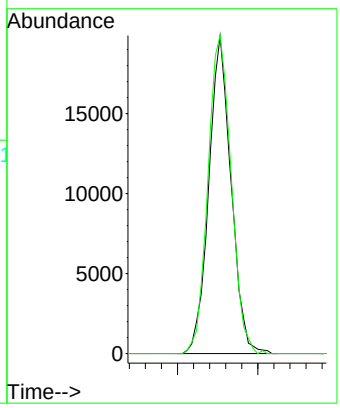


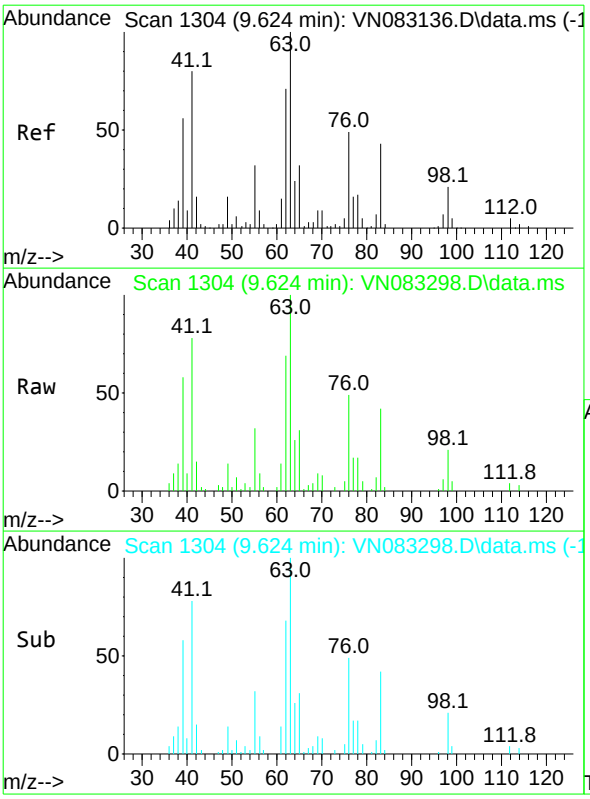




#44
Trichloroethene
Concen: 20.078 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. 0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:130 Resp: 38223

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 100.2 | 0.0 | 197.8 |

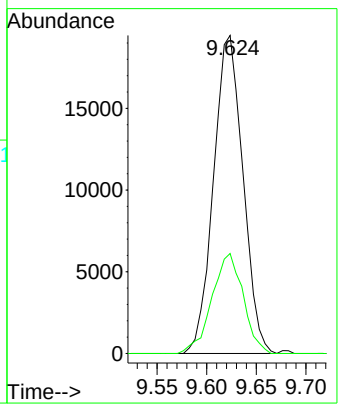





#45
1,2-Dichloropropane
Concen: 21.148 ug/l
RT: 9.624 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 63 Resp: 40150

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.4 | 24.4 | 36.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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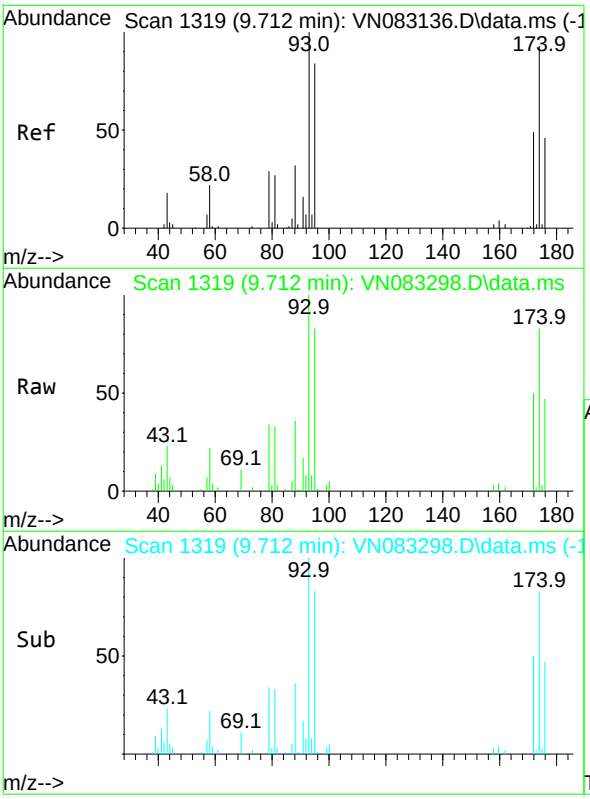
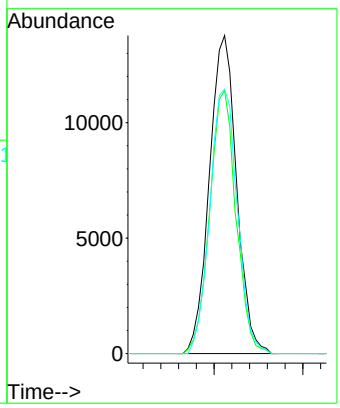
Supervised By :Semsettin Yesilyurt 08/15/2024

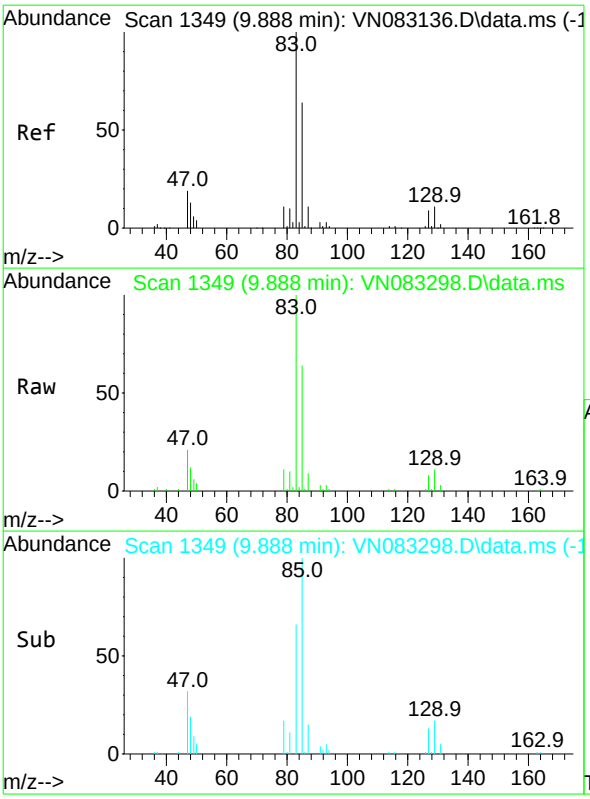



#46
Dibromomethane
Concen: 21.581 ug/l
RT: 9.712 min Scan# 1319
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 93 Resp: 29327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 79.9 | 65.8 | 98.6 |
| 174 | 84.0 | 71.7 | 107.5 |

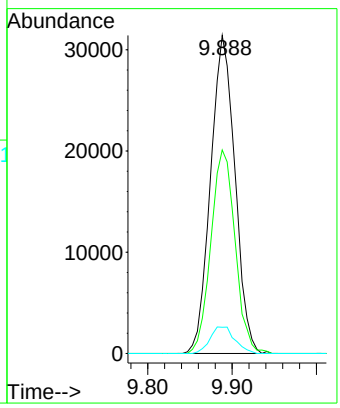





#47
Bromodichloromethane
Concen: 20.673 ug/l
RT: 9.888 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 83 Resp: 63079

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.0 | 51.1 | 76.7 |
| 127 | 8.3 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

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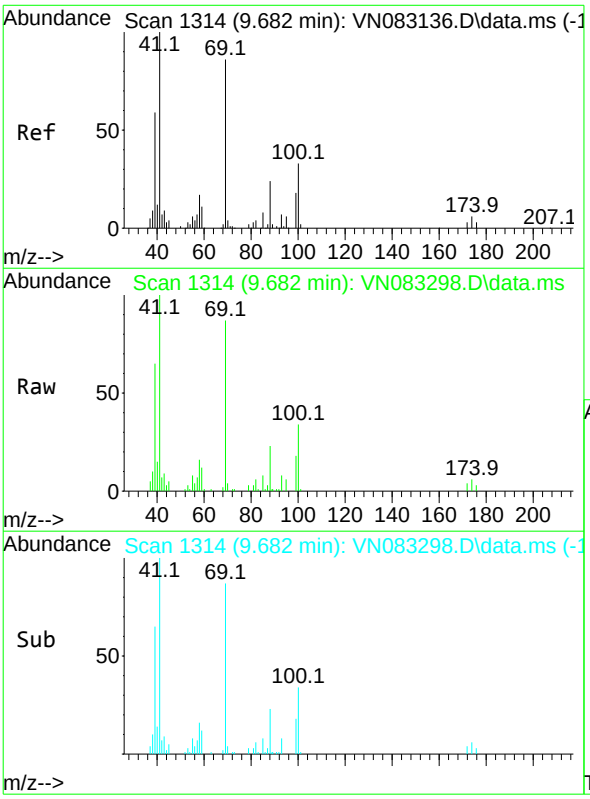
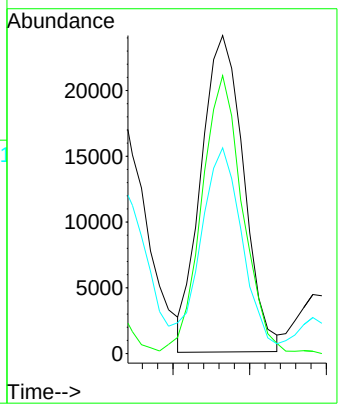
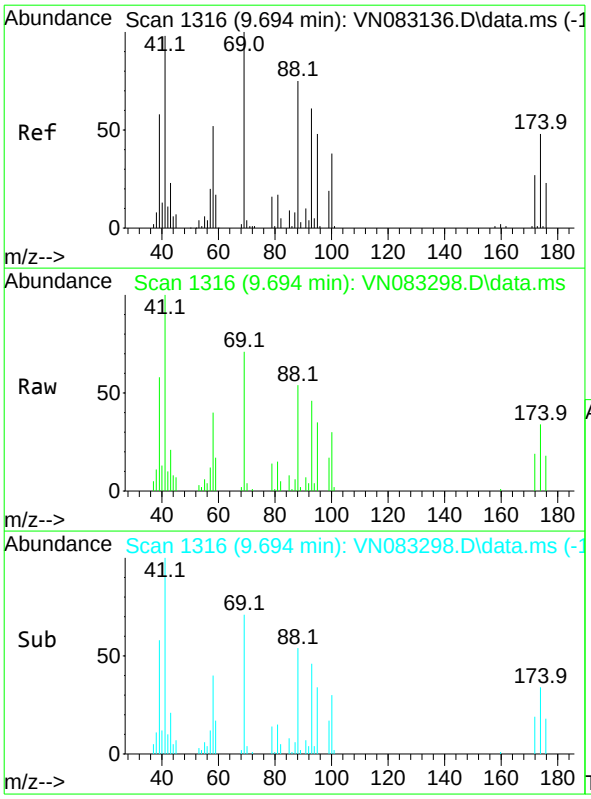



#48
Methyl methacrylate
Concen: 18.669 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 41 Resp: 46397

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 84.6 | 56.3 | 84.5# |
| 39 | 64.7 | 50.3 | 75.5 |






#49
1,4-Dioxane
Concen: 421.571 ug/l
RT: 9.694 min Scan# 13
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 88 Resp: 18902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 26.9 | 27.8 | 41.8# |
| 58 | 71.3 | 59.4 | 89.0 |

**Instrument :**
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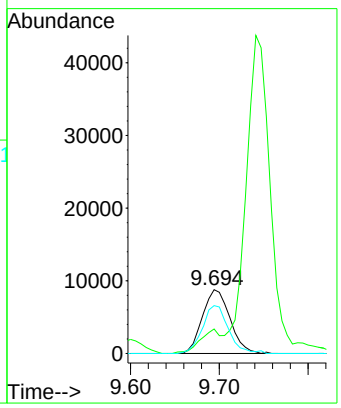
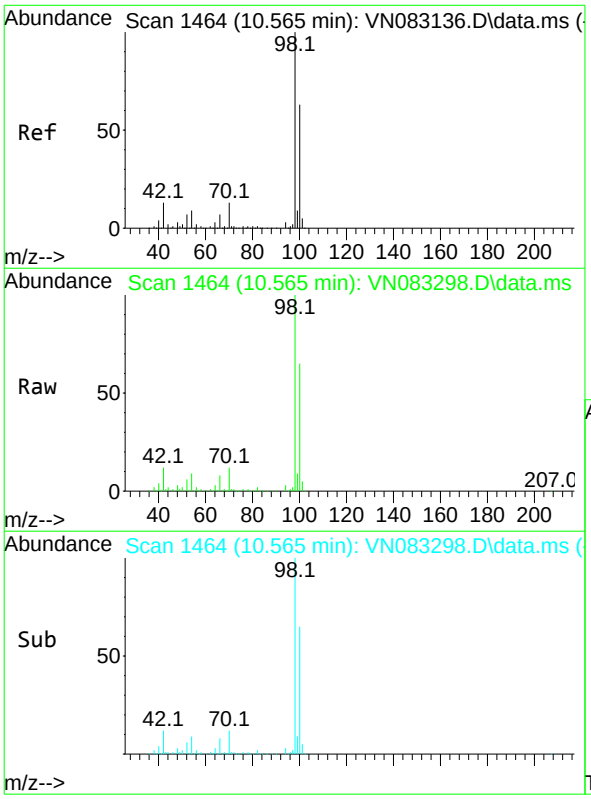
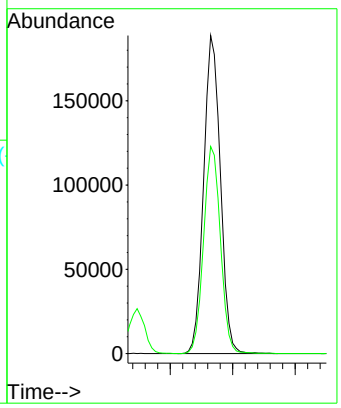


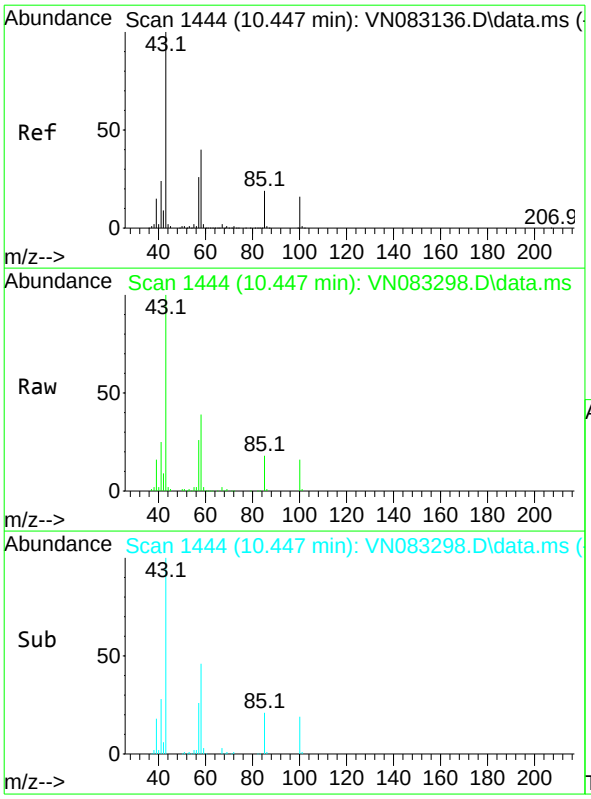




#50
Toluene-d8
Concen: 53.075 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 98 Resp: 351385

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 51.5 | 77.3 |

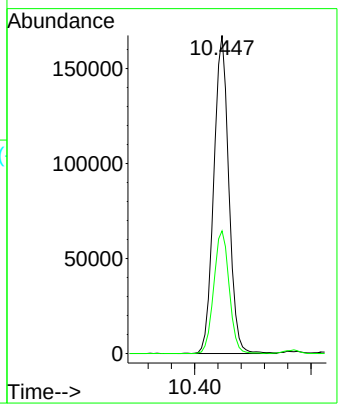





#51
4-Methyl-2-Pentanone
Concen: 105.490 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 299875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 39.5 | 28.2 | 42.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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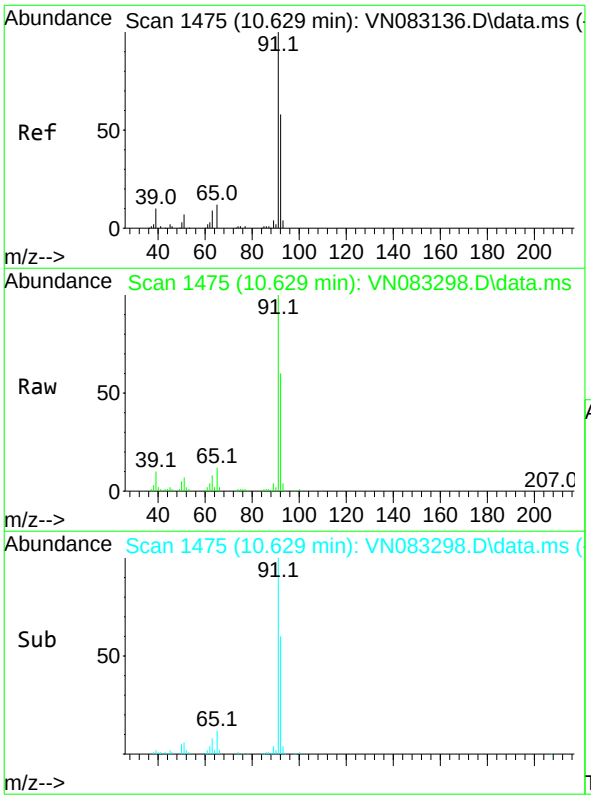
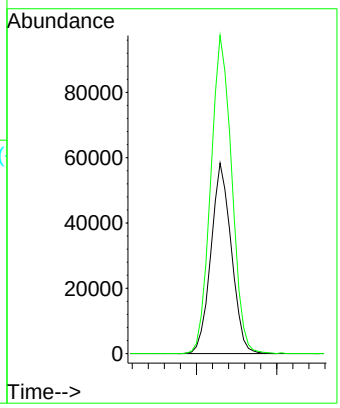
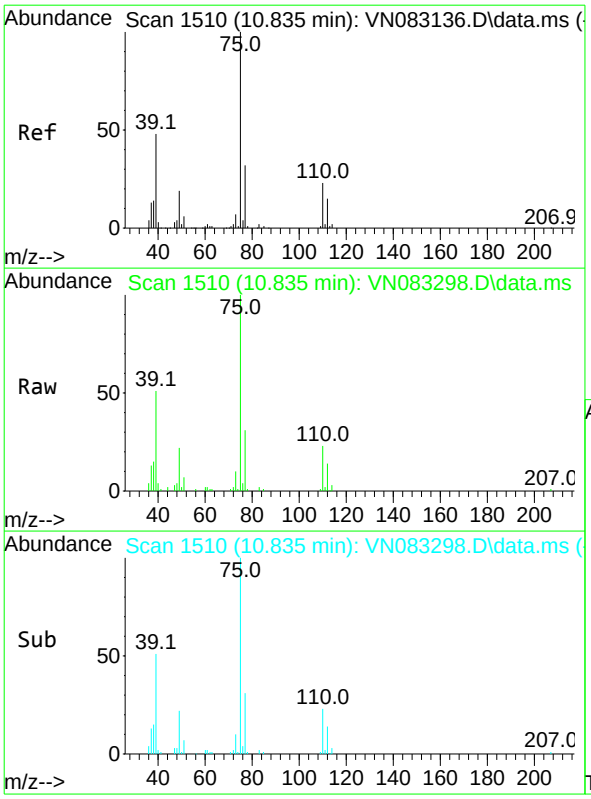



#52
Toluene
Concen: 20.347 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 92 Resp: 102822

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.4 | 139.4 | 209.0 |

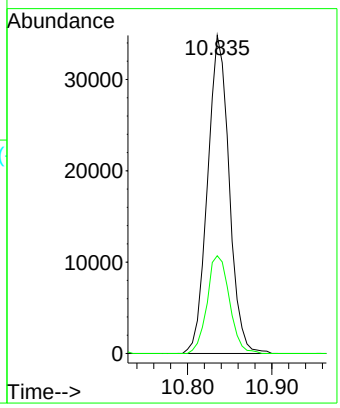





#53
t-1,3-Dichloropropene
Concen: 19.747 ug/l
RT: 10.835 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 75 Resp: 61891

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.7 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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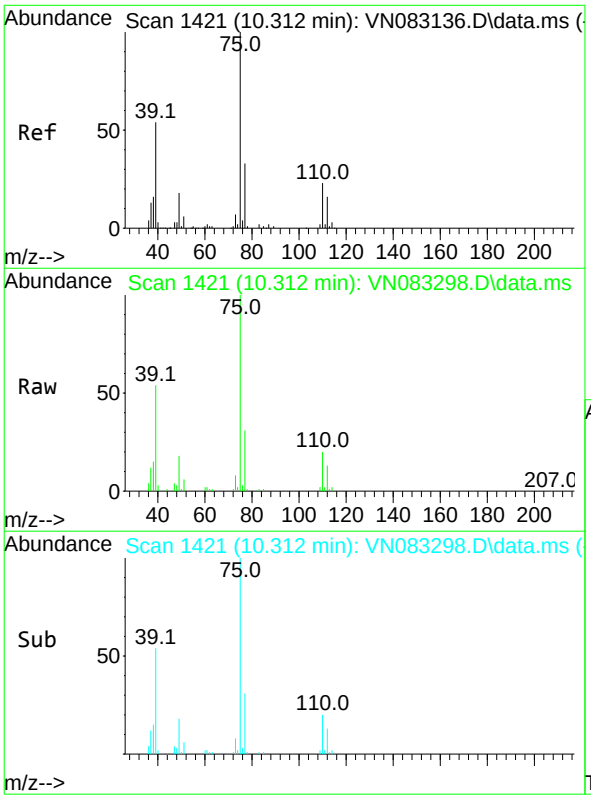
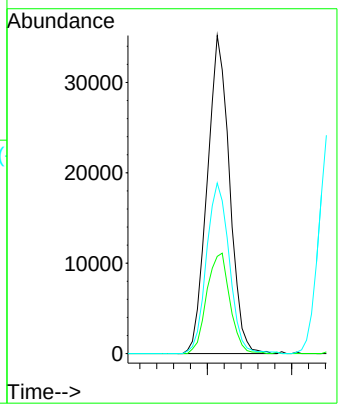
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

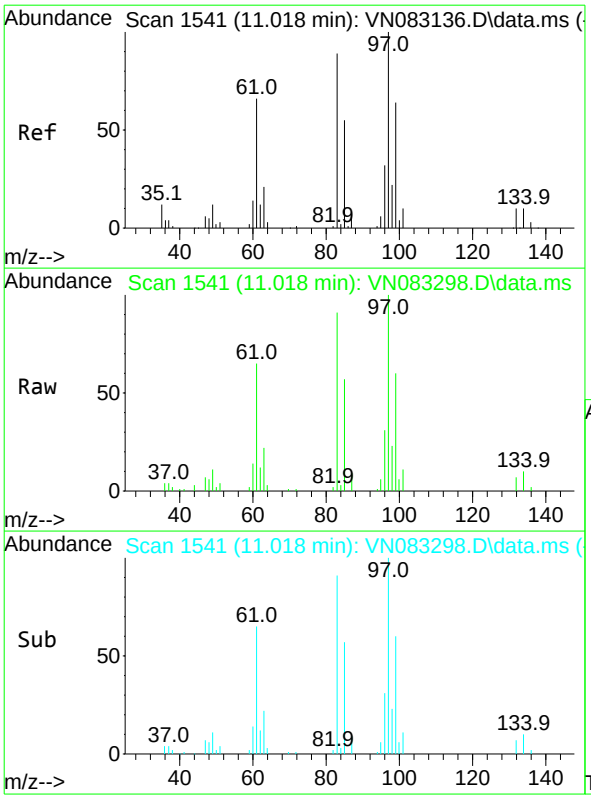



#54
cis-1,3-Dichloropropene
Concen: 19.411 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 75 Resp: 64711

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.6 | 24.3 | 36.5 |
| 39 | 53.6 | 50.5 | 75.7 |

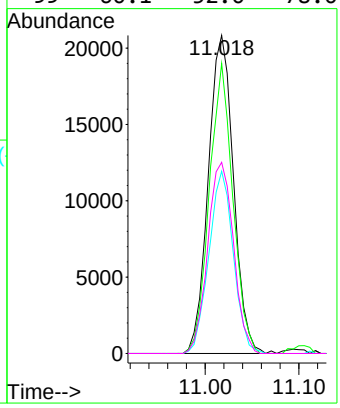





#55
1,1,2-Trichloroethane
Concen: 21.469 ug/l
RT: 11.018 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 97 Resp: 38882

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 91.2 | 71.4 | 107.0 |
| 85 | 57.3 | 45.8 | 68.6 |
| 99 | 60.1 | 52.0 | 78.0 |




**Instrument :**
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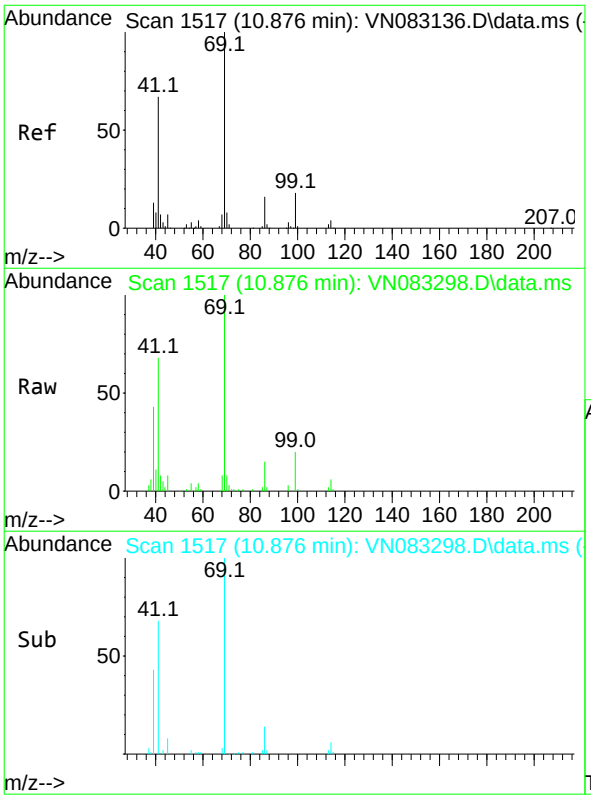
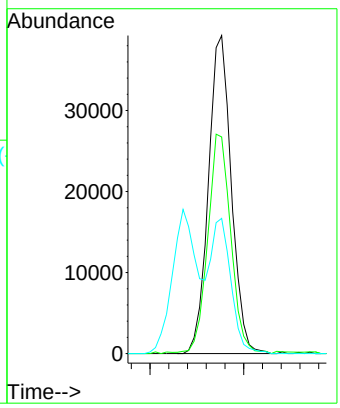
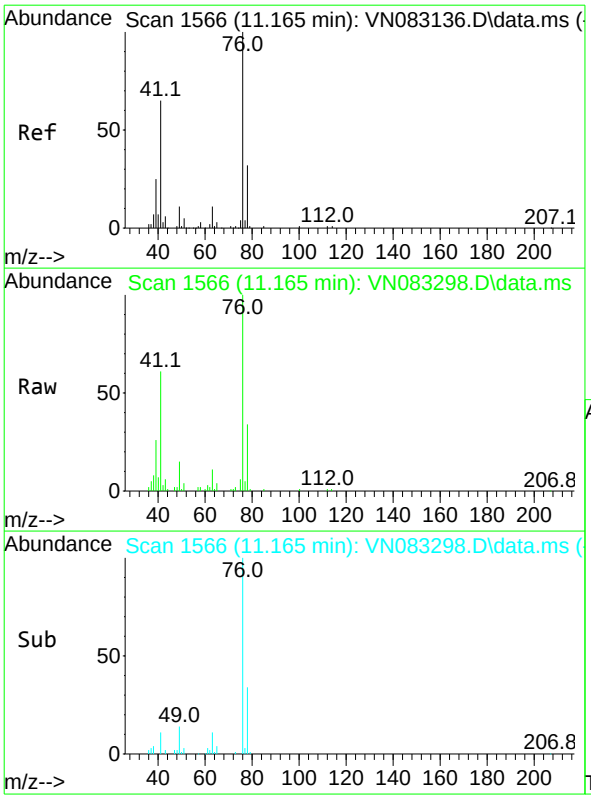



#56
Ethyl methacrylate
Concen: 19.488 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 69 Resp: 66534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 69.7 | 63.4 | 95.2 |
| 39 | 37.3 | 37.4 | 56.0# |

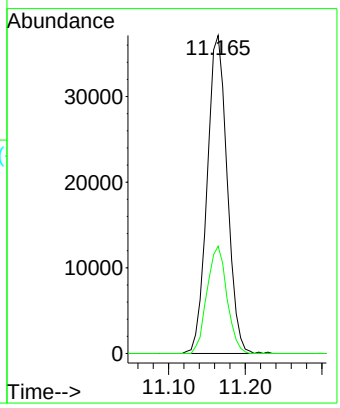





#57
1,3-Dichloropropane
Concen: 20.850 ug/l
RT: 11.165 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 76 Resp: 67303

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 33.6 | 25.6 | 38.4 |




**Instrument :**
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**Manual Integrations**
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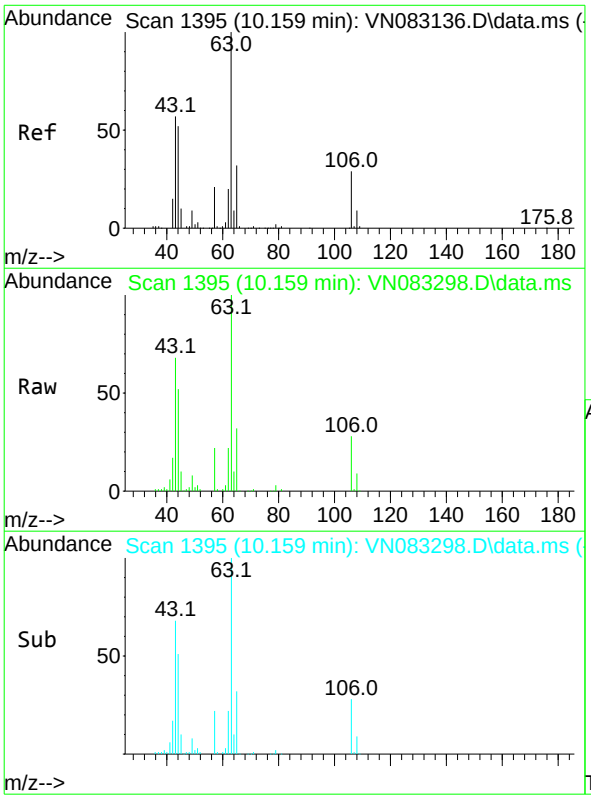
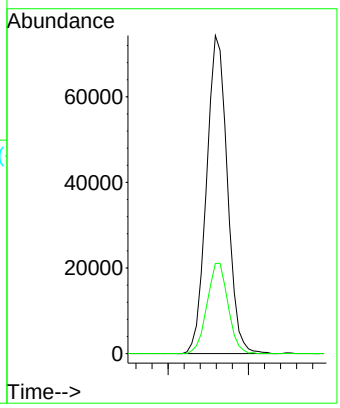
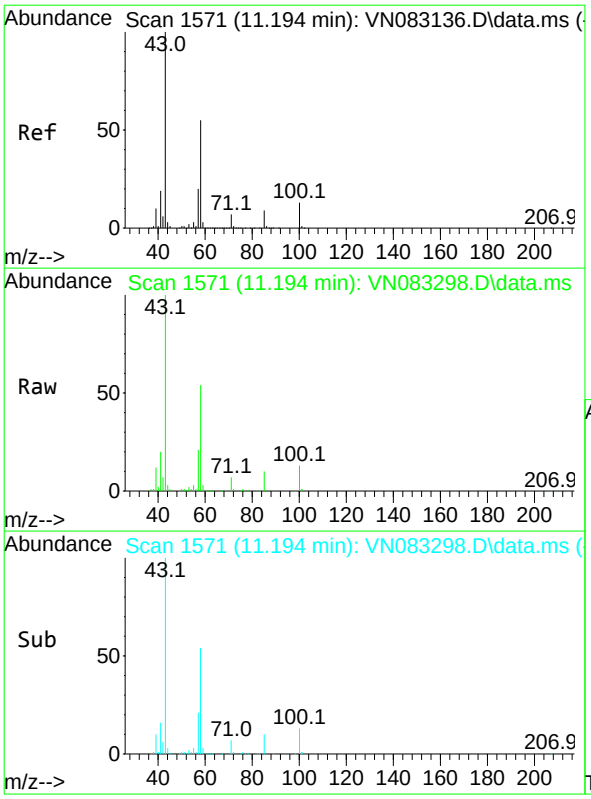



#58
2-Chloroethyl Vinyl ether
Concen: 92.654 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 63 Resp: 133714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.6 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 103.052 ug/l
RT: 11.194 min Scan# 15
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 226634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 53.8 | 24.6 | 73.8 |

**Instrument :**
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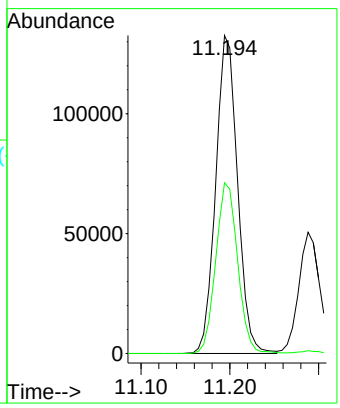
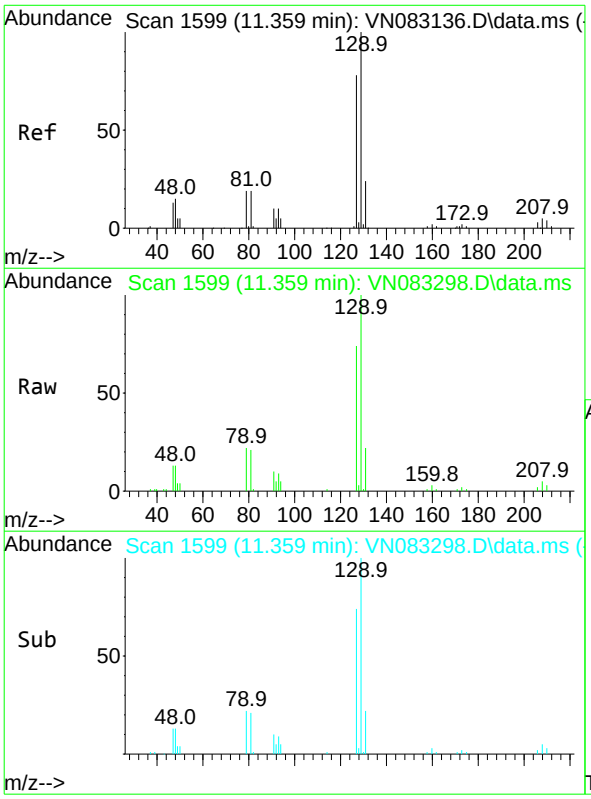
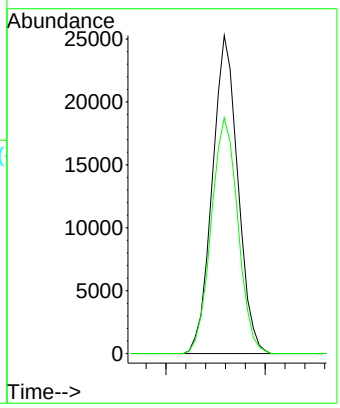


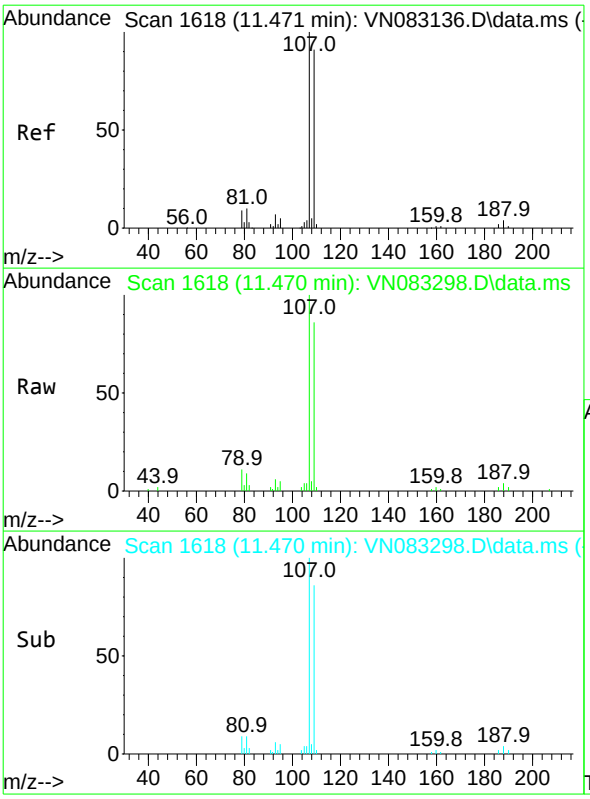




#60
Dibromochloromethane
Concen: 20.642 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:129 Resp: 45197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.3 | 39.2 | 117.6 |

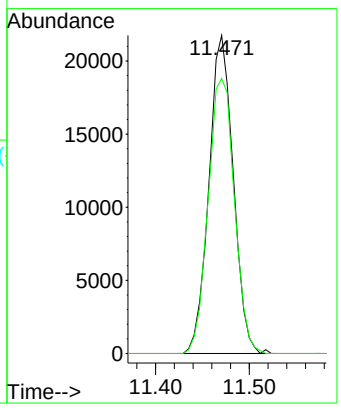





#61
1,2-Dibromoethane
Concen: 20.609 ug/l
RT: 11.470 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:107 Resp: 39209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.4 | 73.7 | 110.5 |

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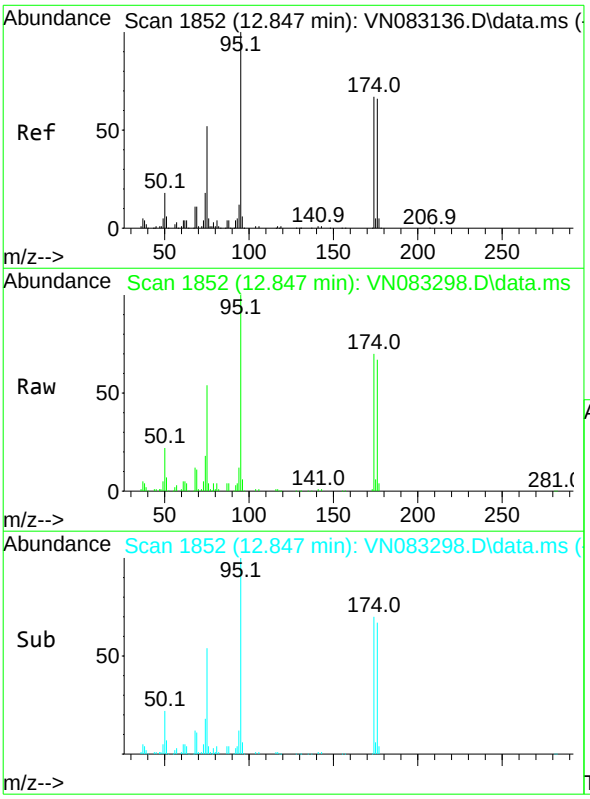
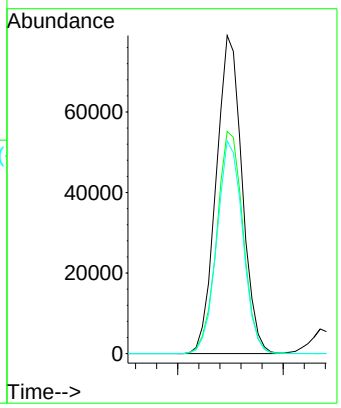
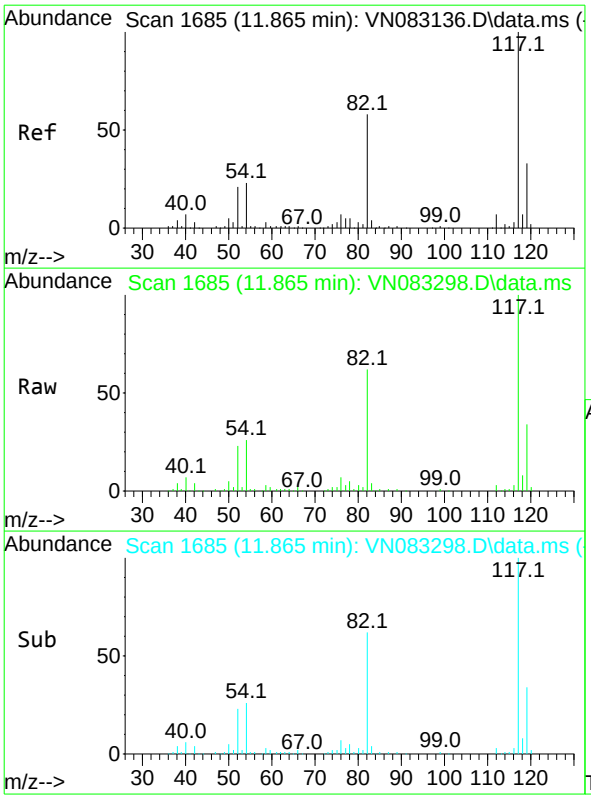



#62
4-Bromofluorobenzene
Concen: 52.296 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 95 Resp: 134979

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.7 | 0.0 | 159.2 |
| 176 | 66.8 | 0.0 | 147.6 |

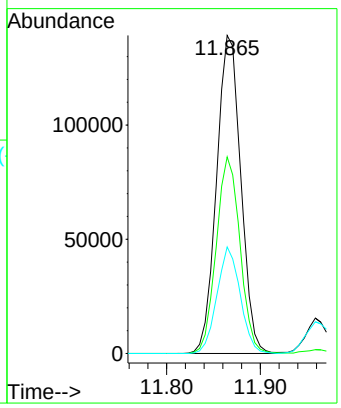





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:117 Resp: 250581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.8 | 47.5 | 71.3 |
| 119 | 33.5 | 25.6 | 38.4 |

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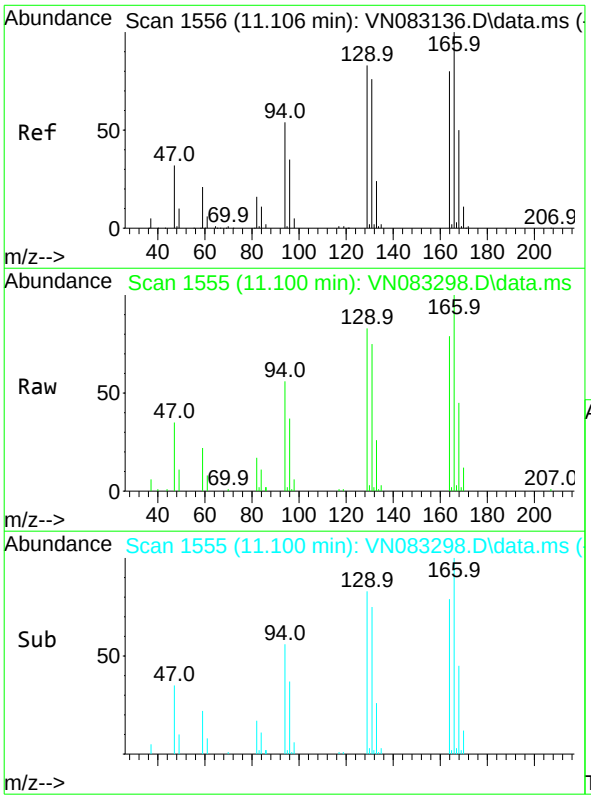
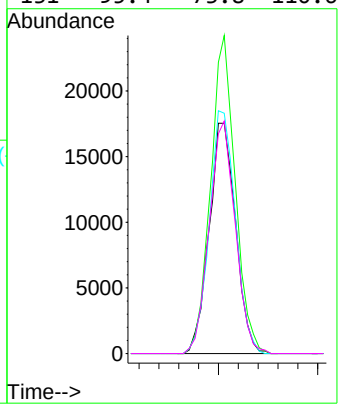
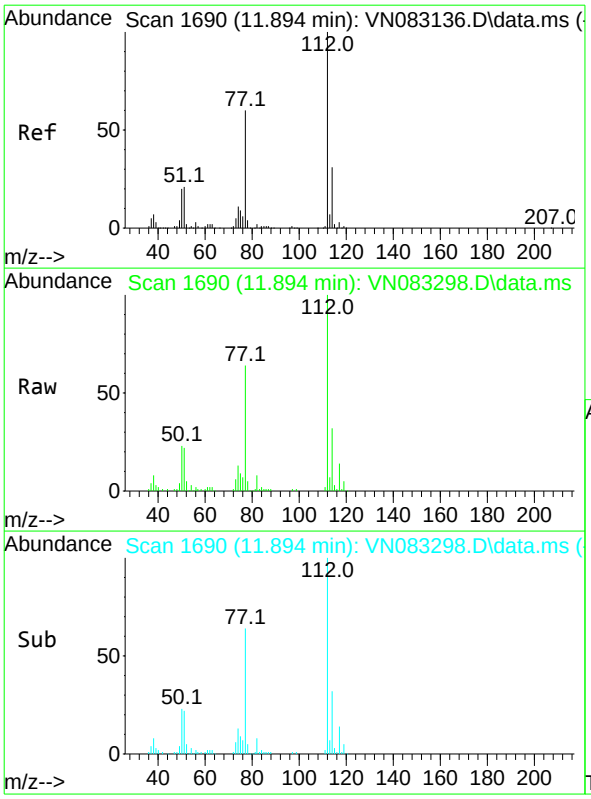



#64
Tetrachloroethene
Concen: 19.622 ug/l
RT: 11.100 min Scan# 1555
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:164 Resp: 32564

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 126.4 | 101.4 | 152.0 |
| 129 | 105.4 | 75.7 | 113.5 |
| 131 | 95.4 | 73.8 | 110.6 |

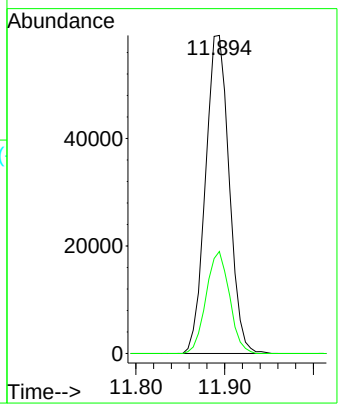





#65
Chlorobenzene
Concen: 19.770 ug/l
RT: 11.894 min Scan# 16
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:112 Resp: 109477

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.1 | 26.2 | 39.2 |

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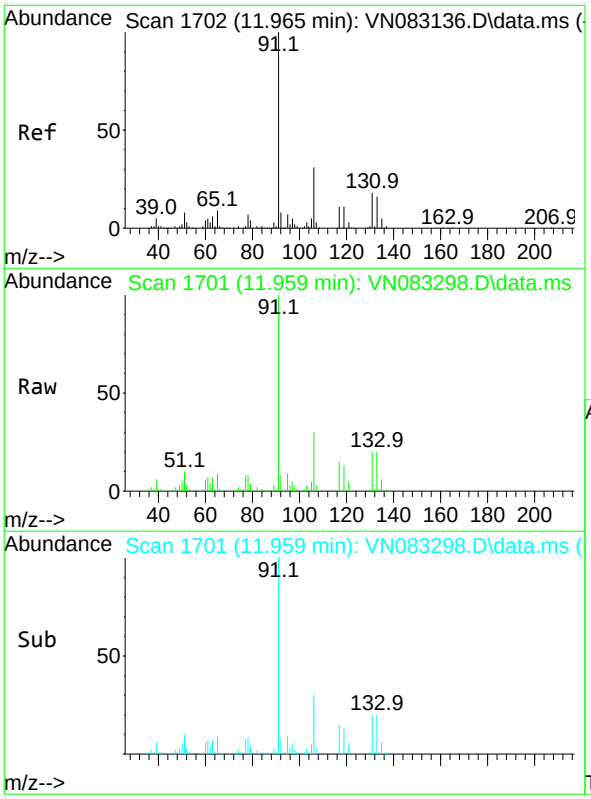
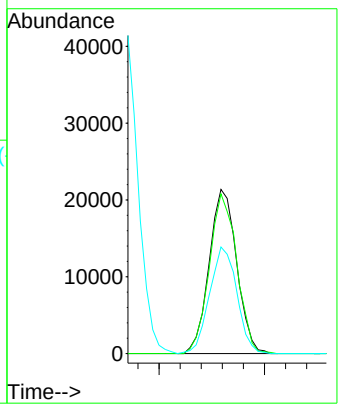
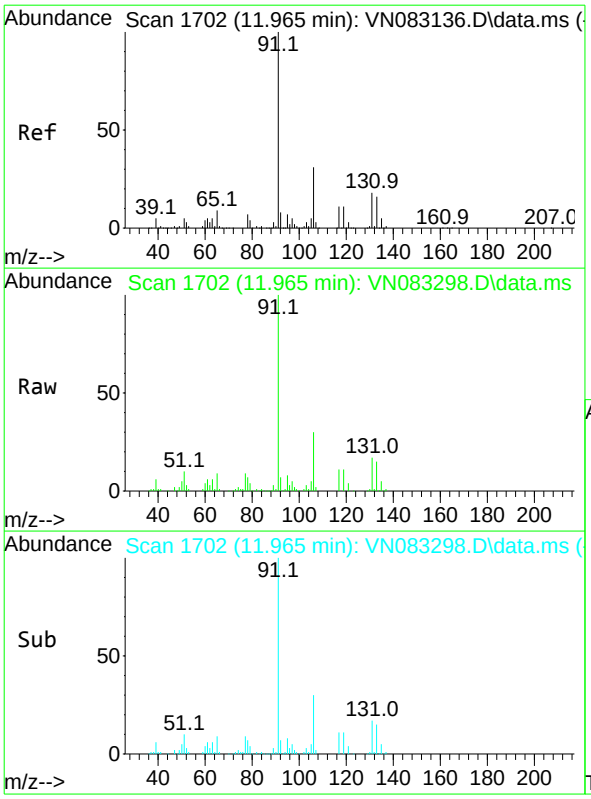



#66
1,1,1,2-Tetrachloroethane
Concen: 19.876 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:131 Resp: 38818

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 96.8 | 47.3 | 142.0 |
| 119 | 64.3 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 19.621 ug/l
RT: 11.965 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 91 Resp: 199315

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.1 | 24.0 | 36.0 |

**Instrument :**
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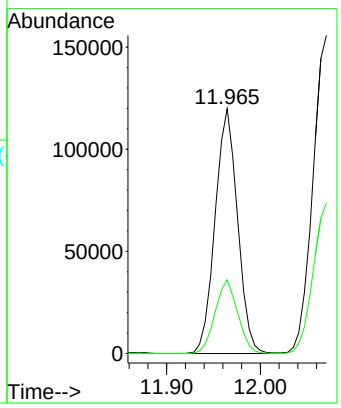
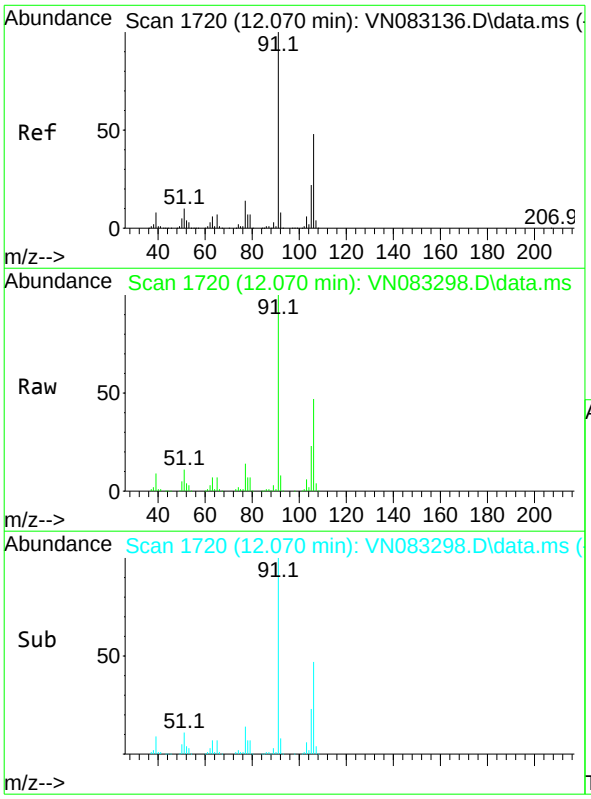
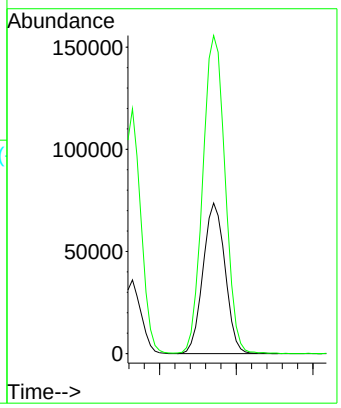


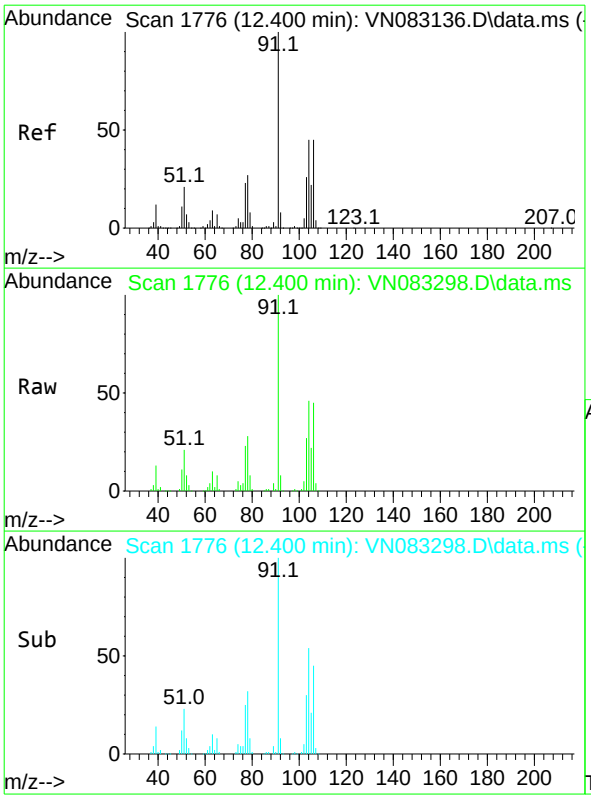




#68
m/p-Xylenes
Concen: 38.610 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:106 Resp: 146923

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 214.5 | 166.1 | 249.1 |

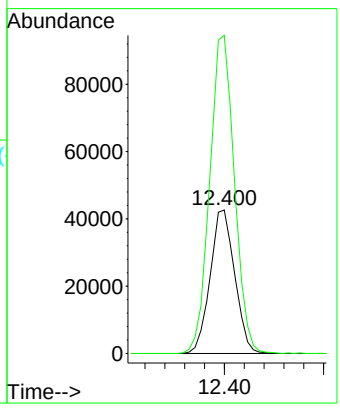





#69
o-Xylene
Concen: 19.511 ug/l
RT: 12.400 min Scan# 17
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:106 Resp: 73227

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 223.1 | 111.3 | 333.9 |

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MSVOA_N
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VN0814WBS01

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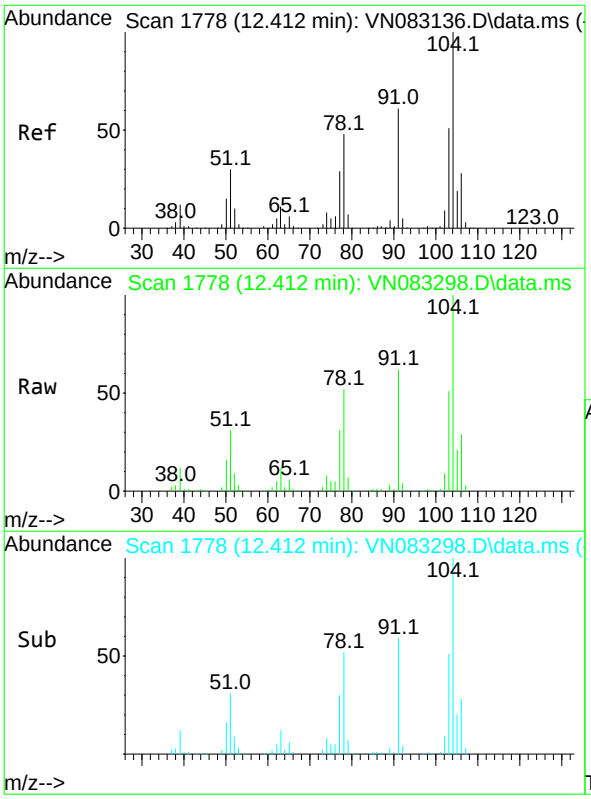
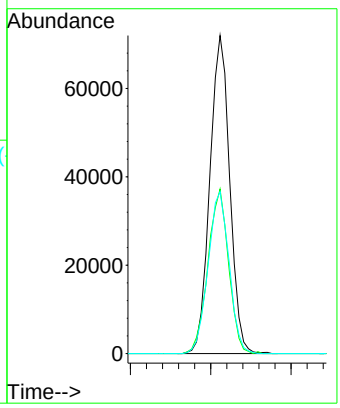
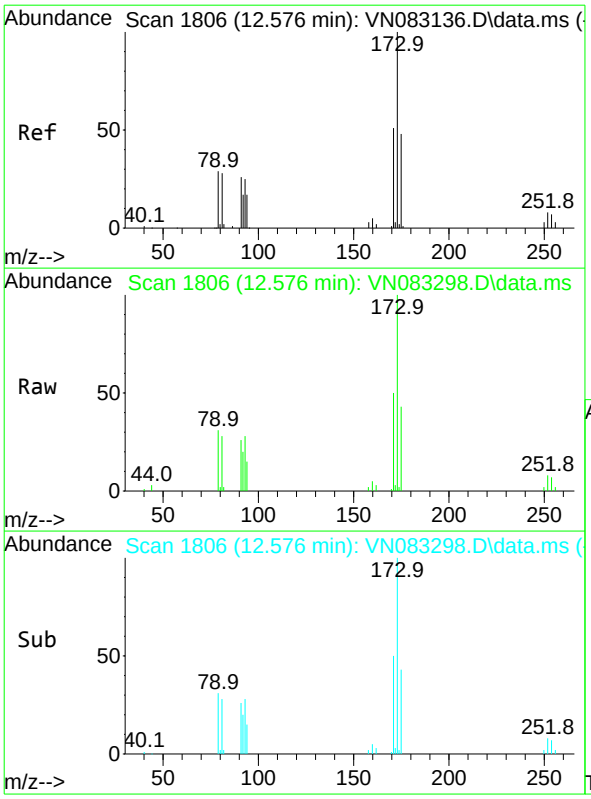



#70
Styrene
Concen: 19.632 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:104 Resp: 123747

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.6 | 41.6 | 62.4 |
| 103 | 53.7 | 44.0 | 66.0 |






#71
Bromoform
Concen: 19.376 ug/l
RT: 12.576 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

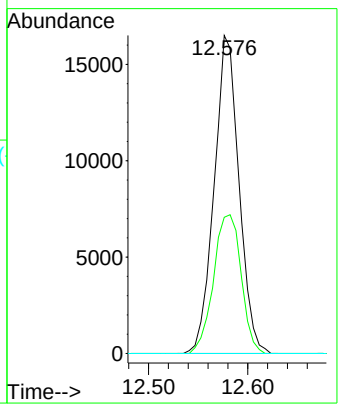
Tgt Ion:173 Resp: 28667

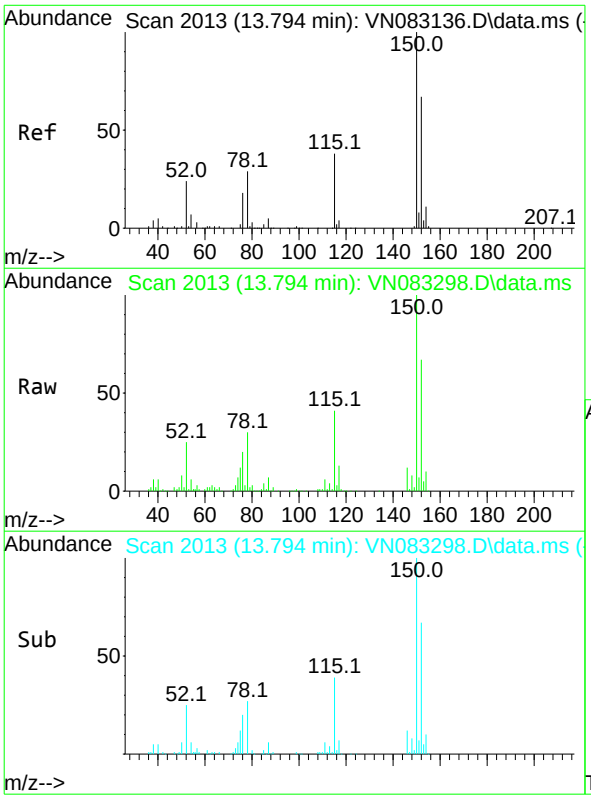
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.5 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

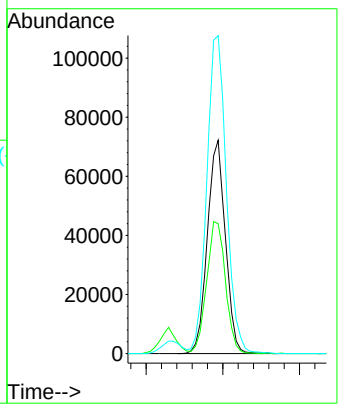


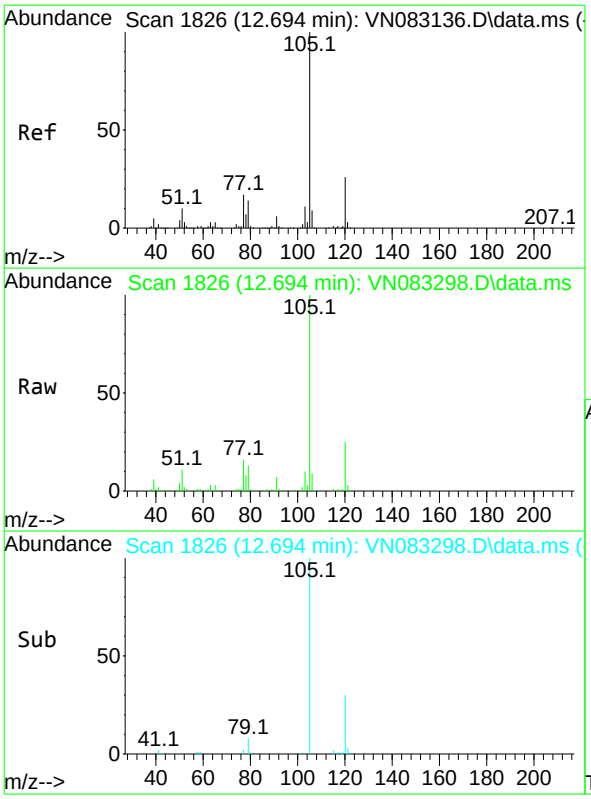




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:152 Resp: 117869

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.4 | 30.6 | 91.6 |
| 150 | 161.8 | 0.0 | 348.6 |

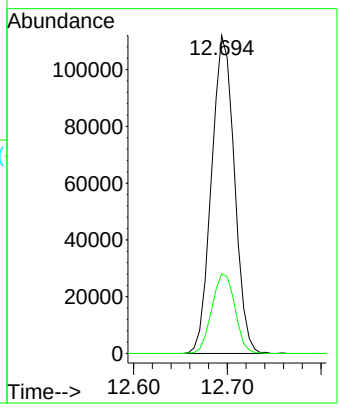





#73
Isopropylbenzene
Concen: 19.262 ug/l
RT: 12.694 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:105 Resp: 189904

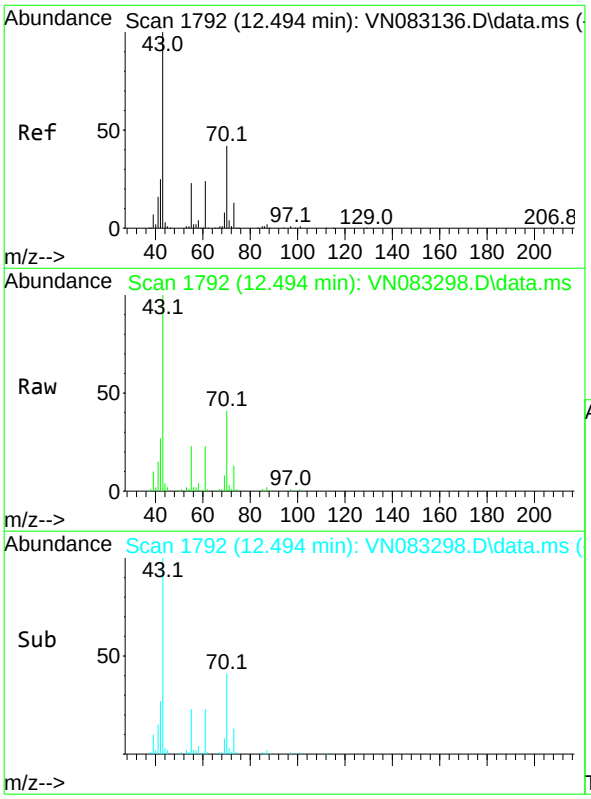
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.2 | 12.9 | 38.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
**APPROVED**

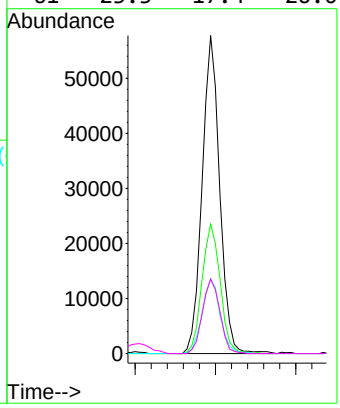
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

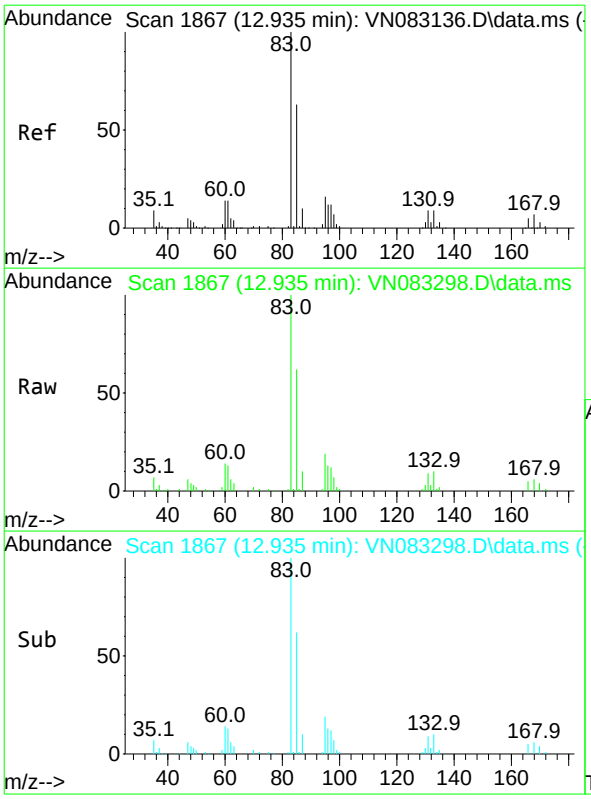



#74
N-amyl acetate
Concen: 18.185 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 43 Resp: 87695

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 42.1 | 29.8 | 44.6 |
| 55 | 24.0 | 18.7 | 28.1 |
| 61 | 23.3 | 17.4 | 26.0 |






#75
1,1,2,2-Tetrachloroethane
Concen: 20.040 ug/l
RT: 12.935 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

Tgt Ion: 83 Resp: 55881

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.8 | 5.0 | 14.9 |
| 85 | 63.8 | 31.9 | 95.7 |

**Manual Integrations**
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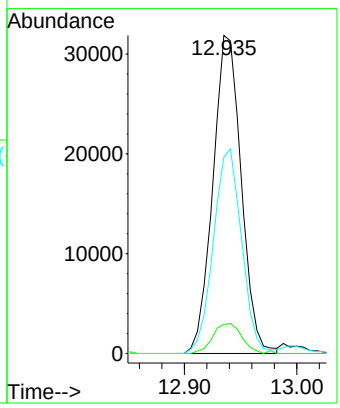
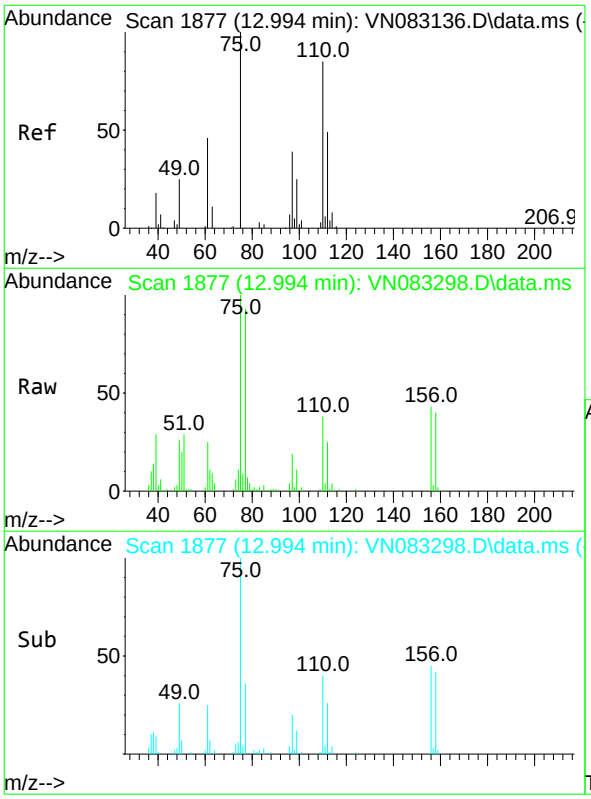
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

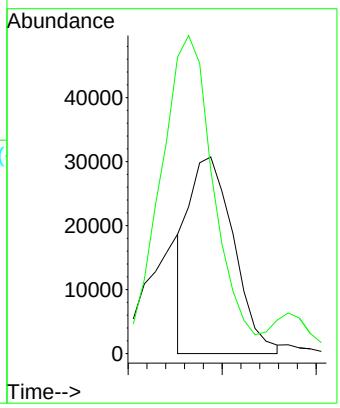


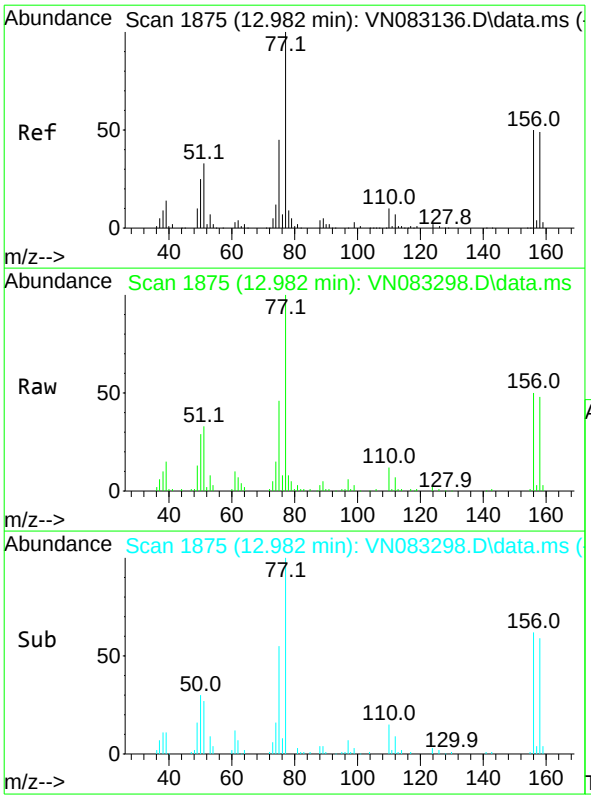




#76
1,2,3-Trichloropropane
Concen: 19.732 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 75 Resp: 51046

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 193.3 | 110.9 | 332.6 |

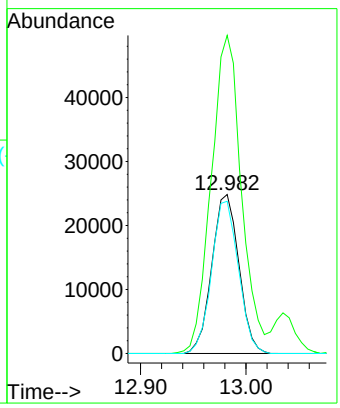





#77
Bromobenzene
Concen: 20.216 ug/l
RT: 12.982 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:156 Resp: 44274

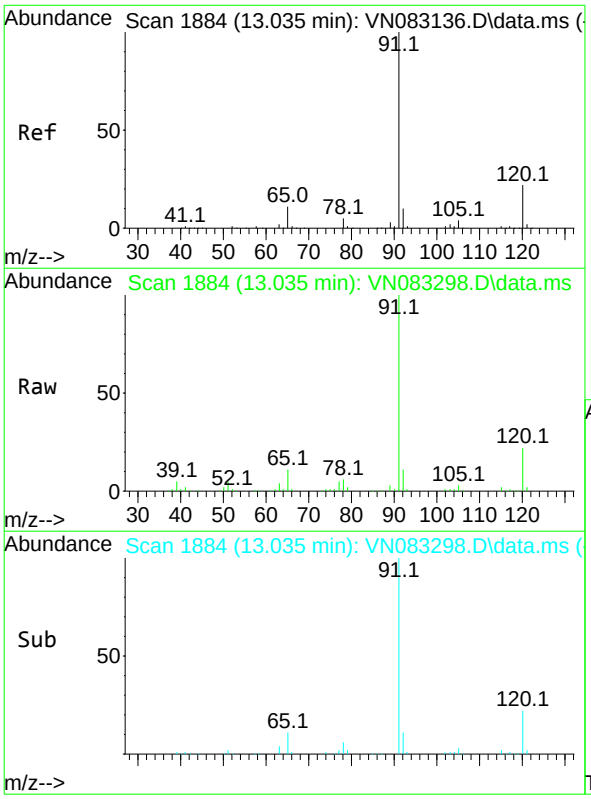
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 222.9 | 111.3 | 333.8 |
| 158 | 95.4 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
**APPROVED**

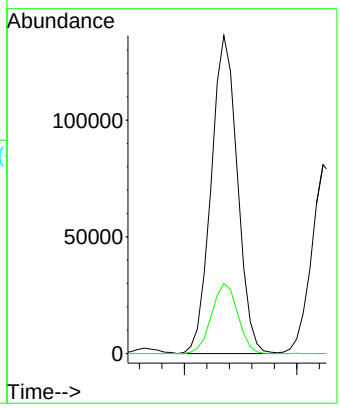
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

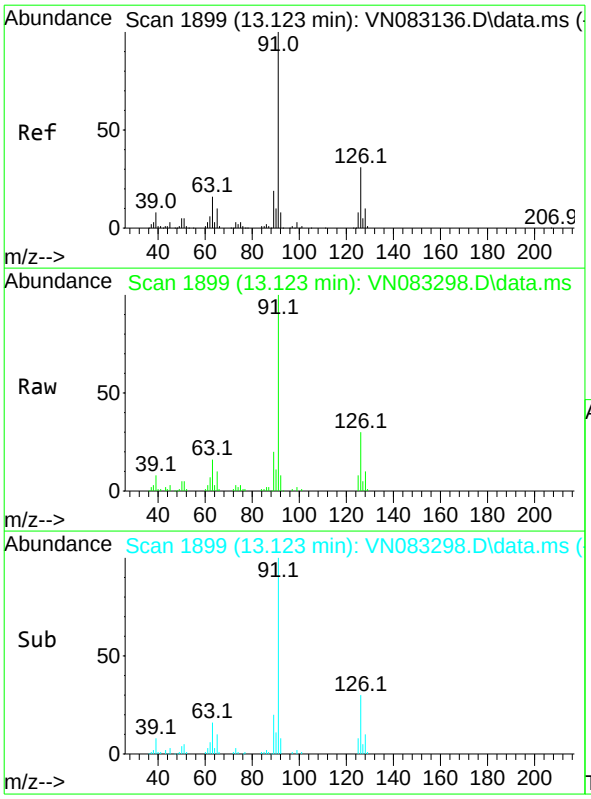



#78
n-propylbenzene
Concen: 19.470 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 91 Resp: 221023

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.9 | 10.9 | 32.9 |

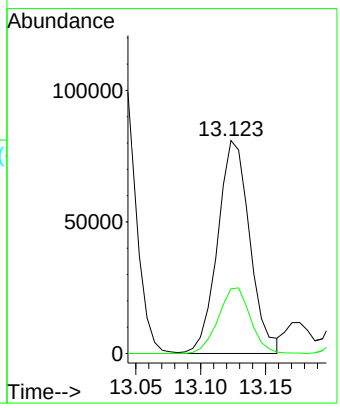





#79
2-Chlorotoluene
Concen: 19.416 ug/l
RT: 13.123 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 91 Resp: 139743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.7 | 16.2 | 48.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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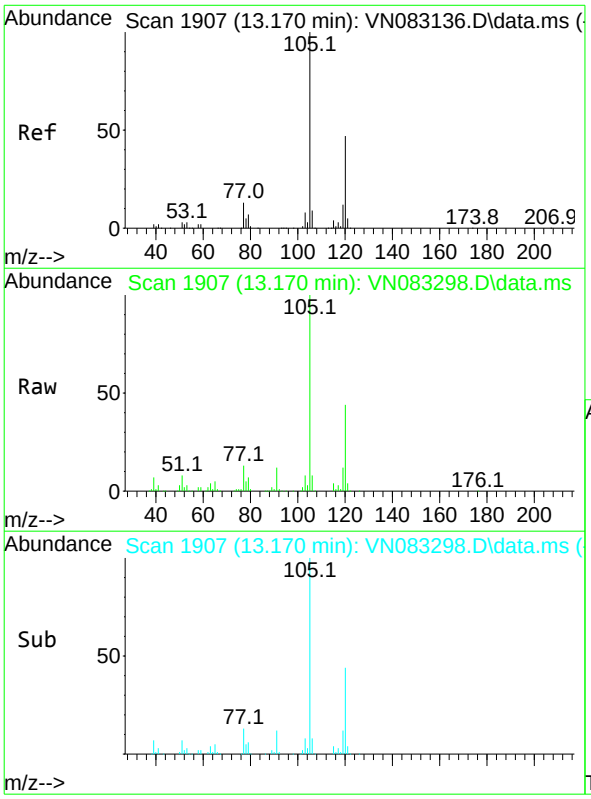
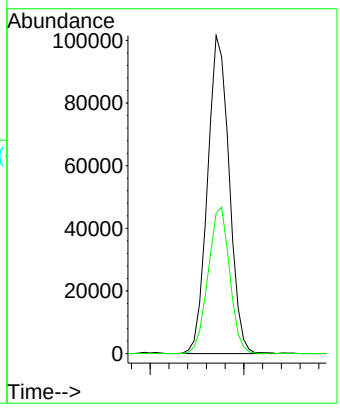
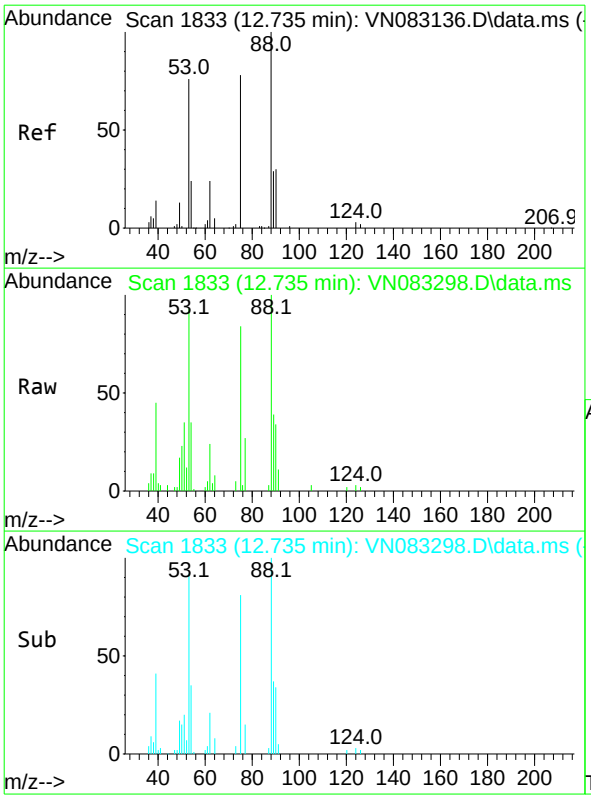



#80
1,3,5-Trimethylbenzene
Concen: 19.735 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:105 Resp: 162894

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 45.9 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 18.289 ug/l
RT: 12.735 min Scan# 18
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

Tgt Ion: 75 Resp: 21751

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 104.9 | 88.4 | 132.6 |
| 89 | 42.2 | 36.3 | 54.5 |

**Manual Integrations**
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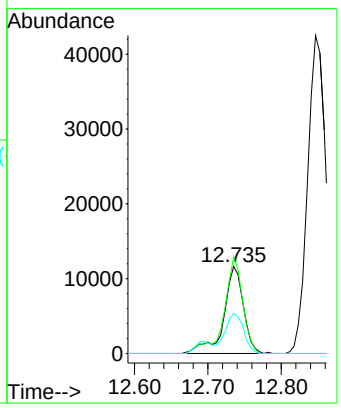
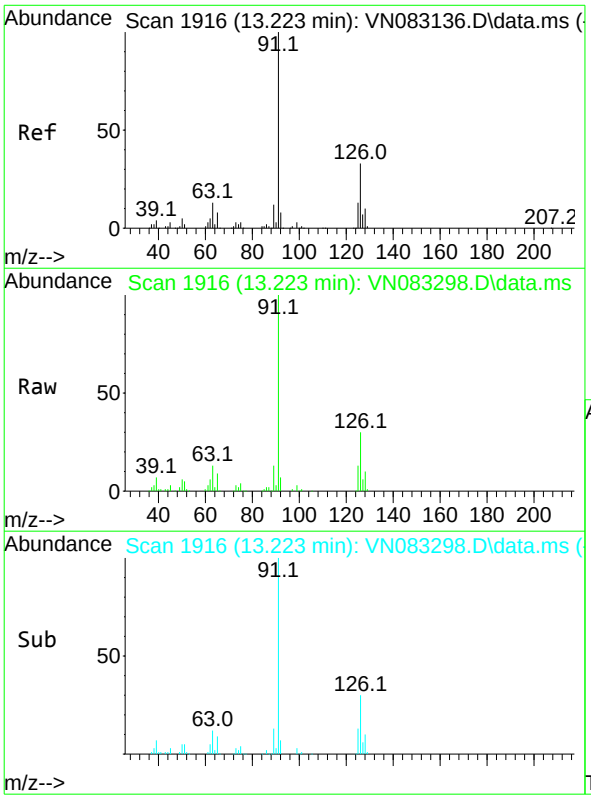
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

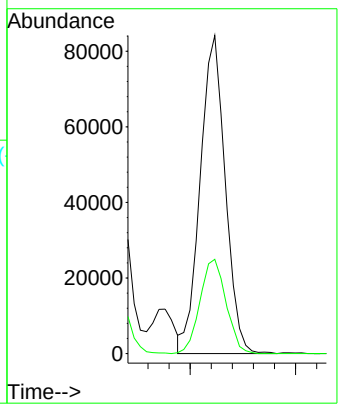


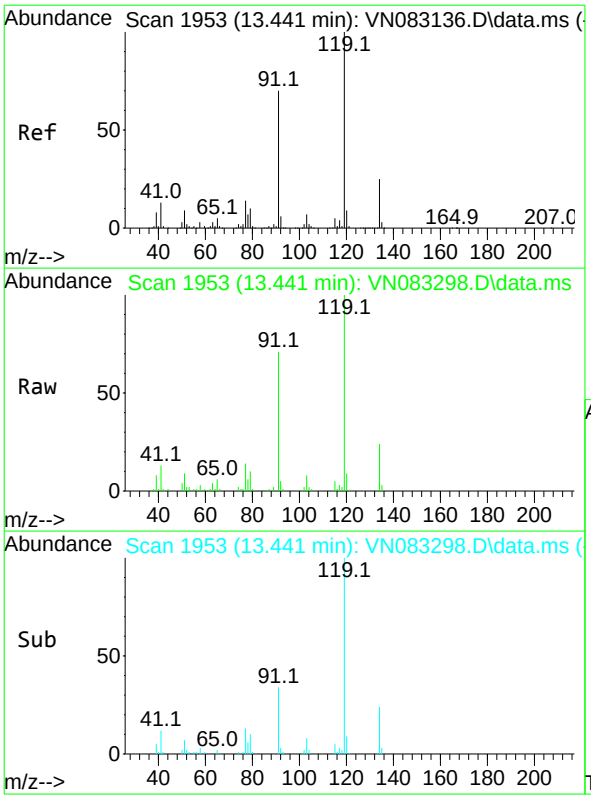




#82
4-Chlorotoluene
Concen: 19.252 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 91 Resp: 138990

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.8 | 16.2 | 48.6 |

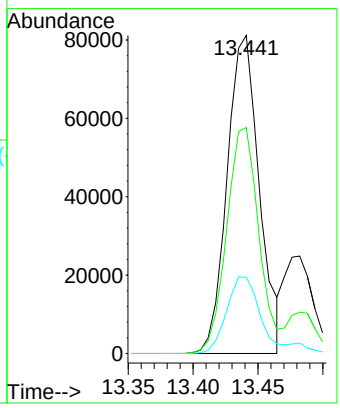





#83
tert-Butylbenzene
Concen: 19.177 ug/l
RT: 13.441 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:119 Resp: 140176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.7 | 35.0 | 105.1 |
| 134 | 26.9 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
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VN0814WBS01

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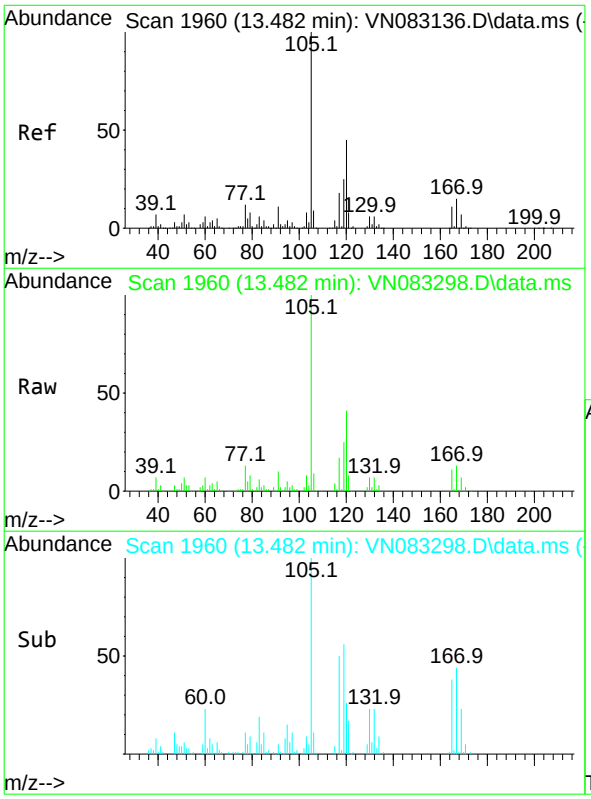
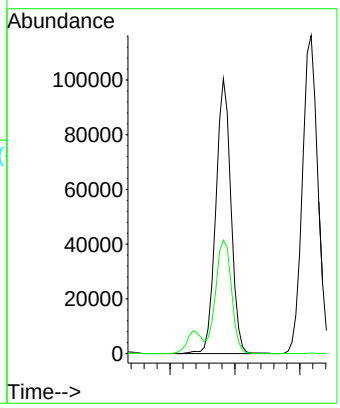
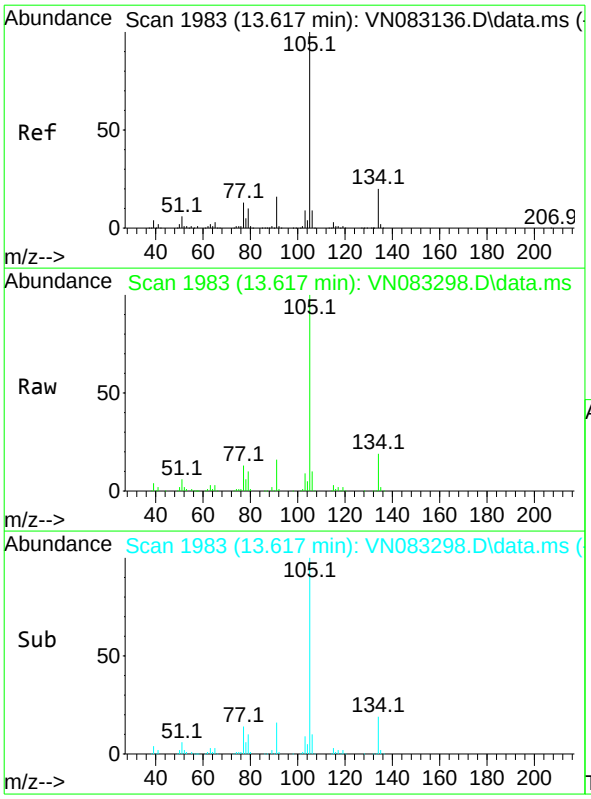



#84
1,2,4-Trimethylbenzene
Concen: 19.484 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:105 Resp: 162074

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.7 | 21.9 | 65.8 |

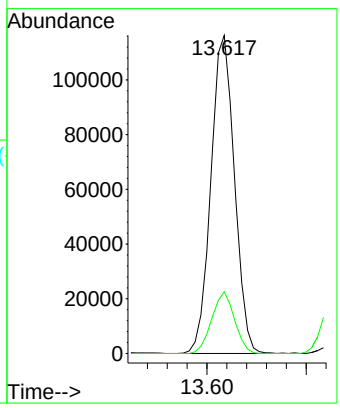





#85
sec-Butylbenzene
Concen: 19.208 ug/l
RT: 13.617 min Scan# 19
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:105 Resp: 191578

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 18.7 | 9.8 | 29.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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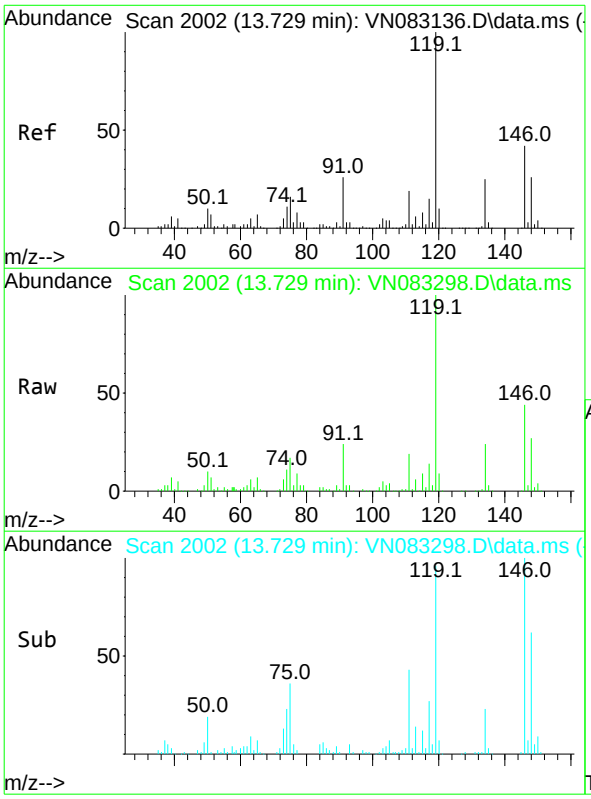
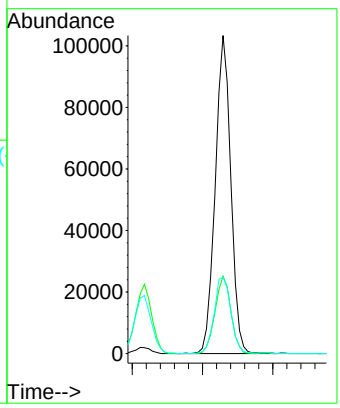
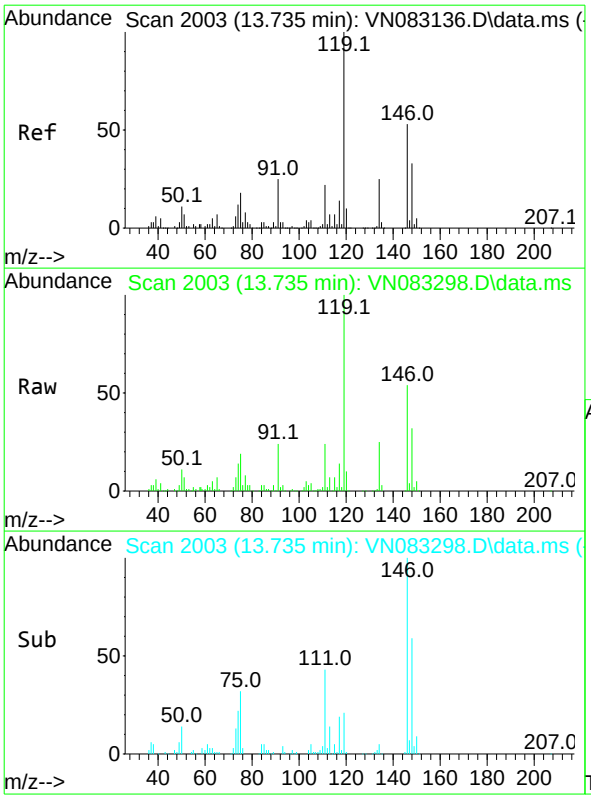



#86
p-Isopropyltoluene
Concen: 19.287 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:119 Resp: 158838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 24.7 | 13.0 | 39.0 |
| 91 | 25.9 | 12.3 | 36.9 |

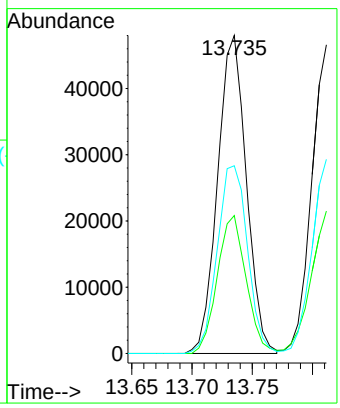





#87
1,3-Dichlorobenzene
Concen: 19.337 ug/l
RT: 13.735 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:146 Resp: 79688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.6 | 20.6 | 61.9 |
| 148 | 62.3 | 31.8 | 95.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
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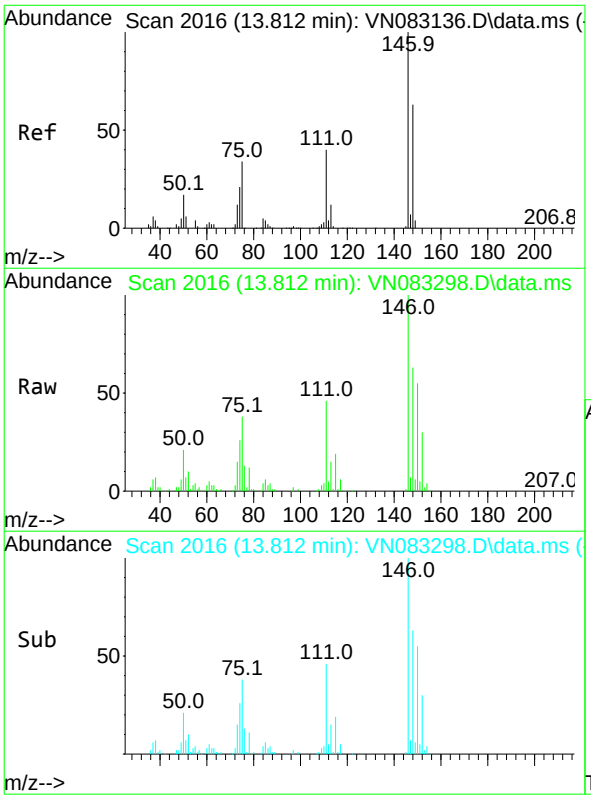
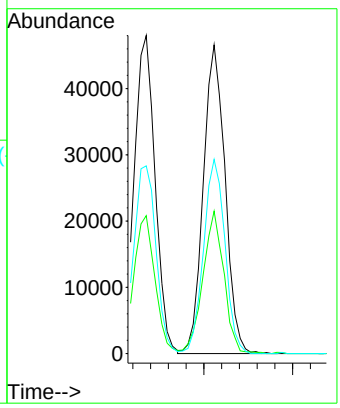
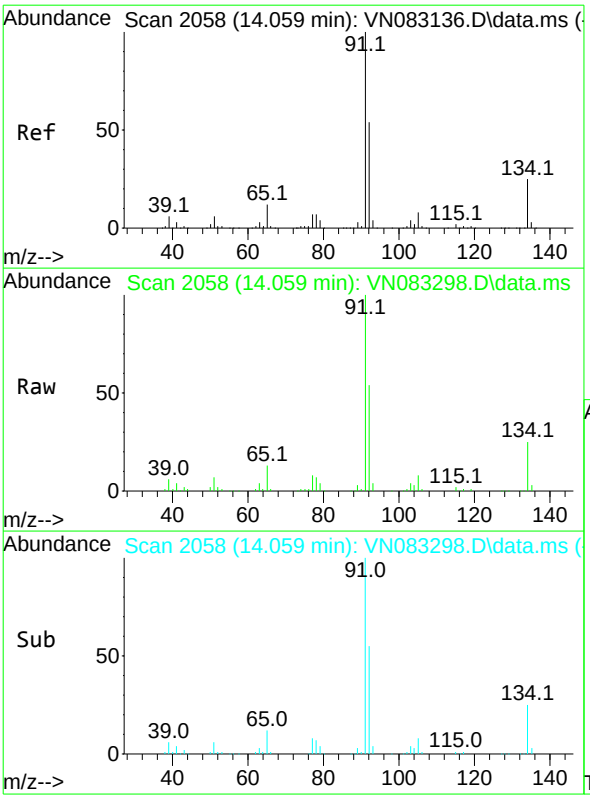



#88
1,4-Dichlorobenzene
Concen: 19.128 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:146 Resp: 79466

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.7 | 20.1 | 60.3 |
| 148 | 62.0 | 32.2 | 96.6 |

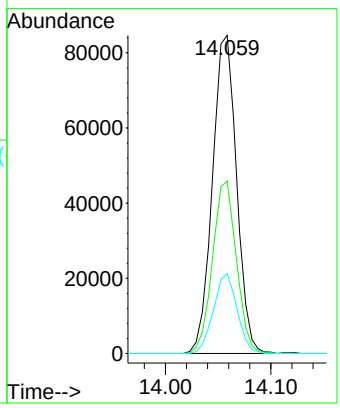





#89
n-Butylbenzene
Concen: 18.886 ug/l
RT: 14.059 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 91 Resp: 134766

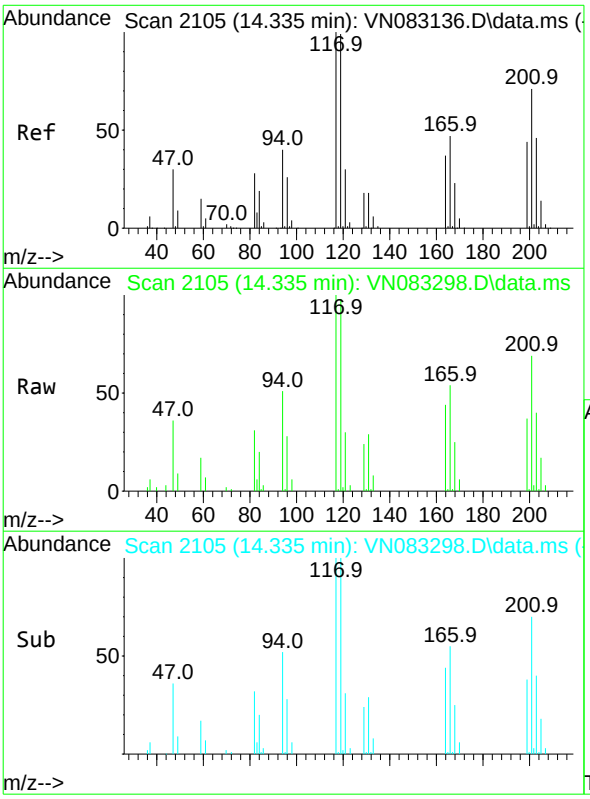
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 53.6 | 26.1 | 78.3 |
| 134 | 24.6 | 12.1 | 36.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
**APPROVED**

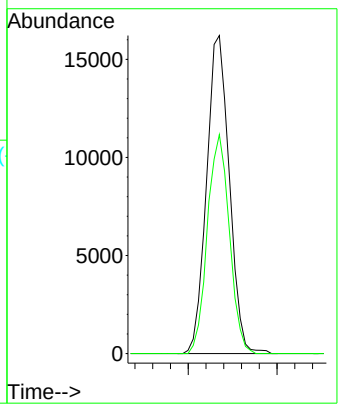
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

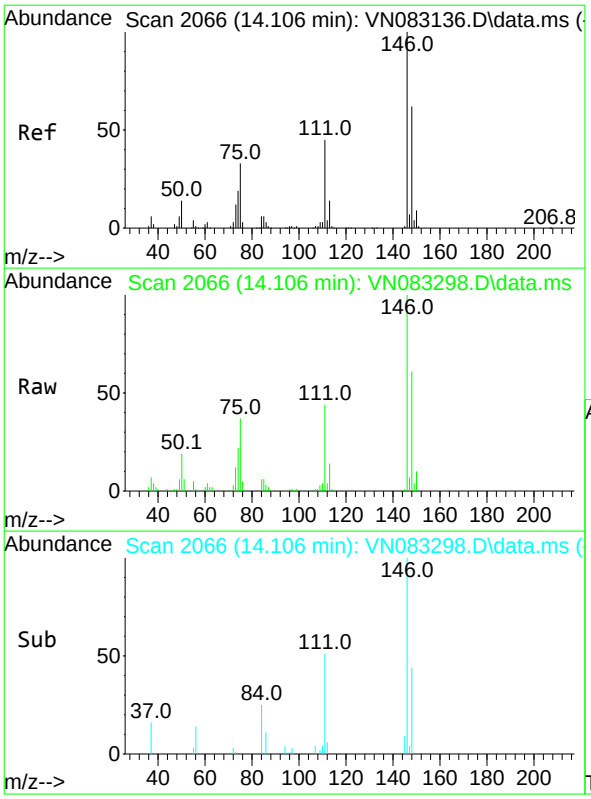



#90
Hexachloroethane
Concen: 18.128 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:117 Resp: 28843

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 66.4 | 35.8 | 107.3 |

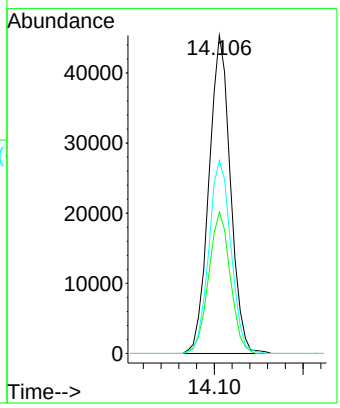





#91
1,2-Dichlorobenzene
Concen: 19.107 ug/l
RT: 14.106 min Scan# 20
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:146 Resp: 76195

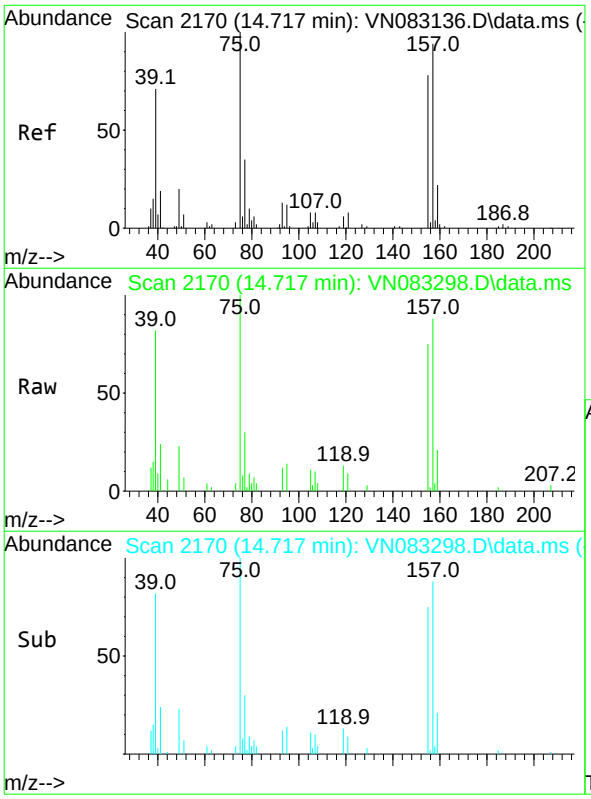
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.0 | 21.4 | 64.2 |
| 148 | 62.6 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
**APPROVED**

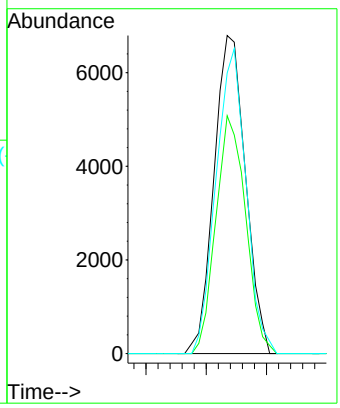
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

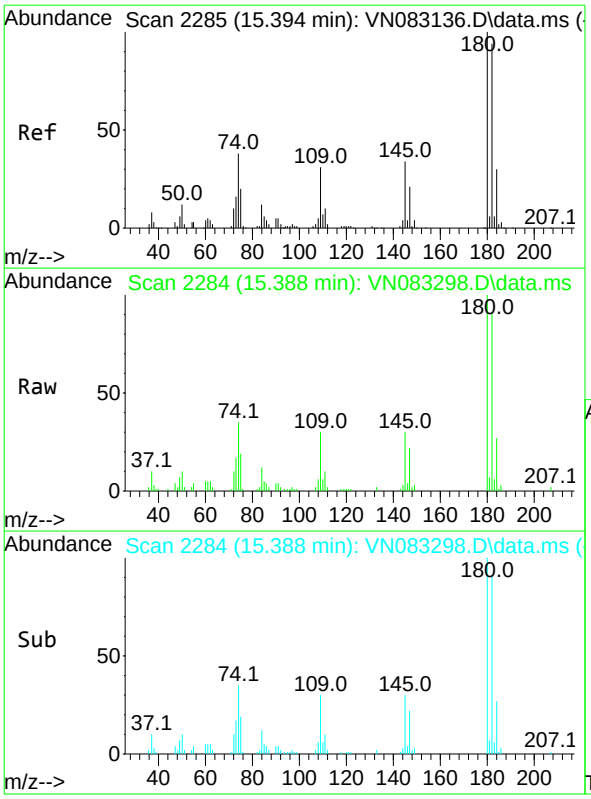



#92
1,2-Dibromo-3-Chloropropane
Concen: 18.206 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion: 75 Resp: 12319

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 70.8 | 36.6 | 109.8 |
| 157 | 91.2 | 46.9 | 140.6 |






#93
1,2,4-Trichlorobenzene
Concen: 18.393 ug/l
RT: 15.388 min Scan# 22
Delta R.T. -0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

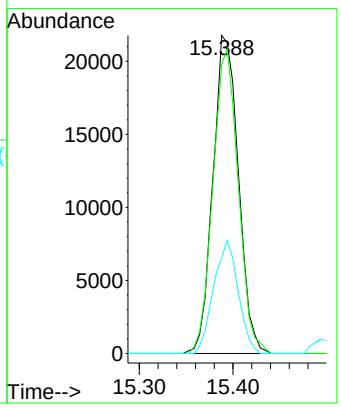
Tgt Ion:180 Resp: 41092

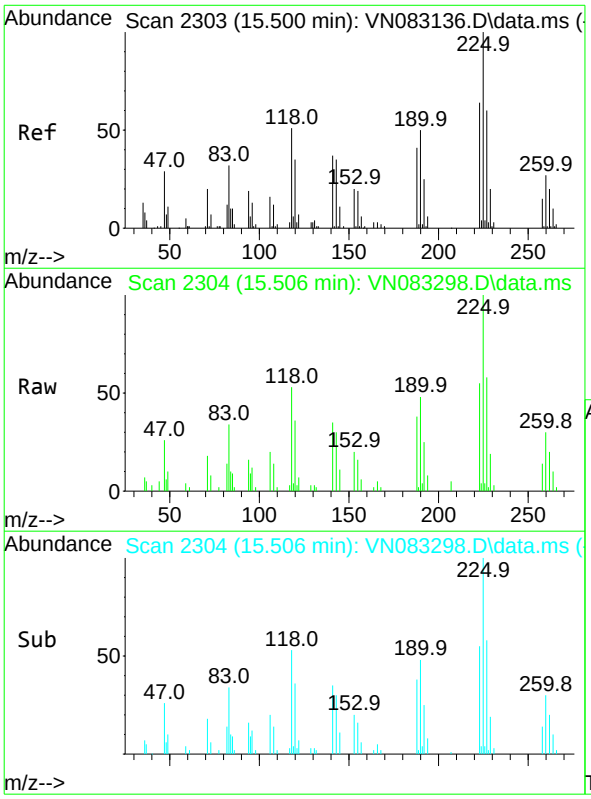
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.3 | 47.3 | 141.8 |
| 145 | 34.2 | 15.7 | 47.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
**APPROVED**

Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024

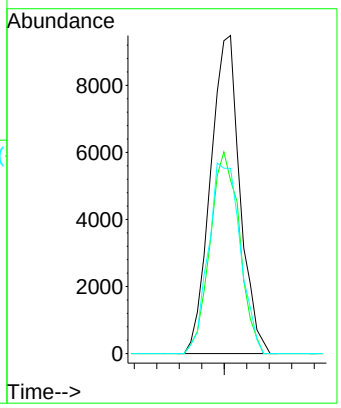


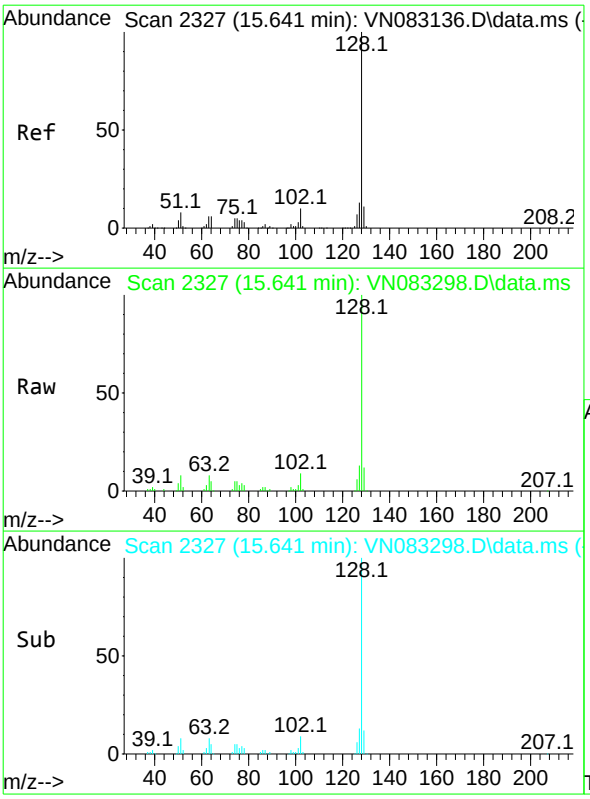




#94
Hexachlorobutadiene
Concen: 17.378 ug/l
RT: 15.506 min Scan# 2304
Delta R.T. 0.006 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:225 Resp: 17266

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 63.2 | 31.9 | 95.7 |
| 227 | 64.5 | 32.5 | 97.5 |

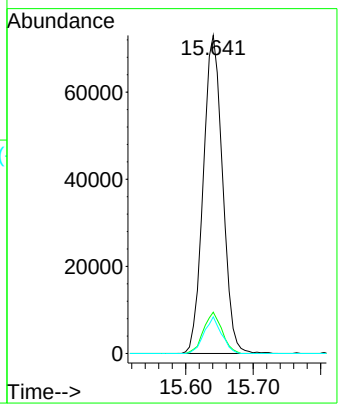





#95
Naphthalene
Concen: 18.358 ug/l
RT: 15.641 min Scan# 23
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:128 Resp: 145278

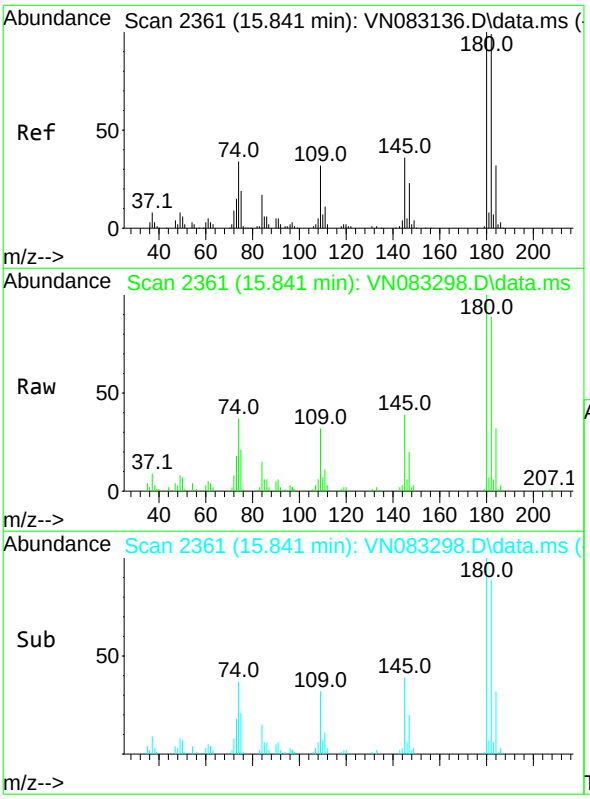
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.5 | 10.6 | 16.0 |
| 129 | 10.4 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0814WBS01

**Manual Integrations**
**APPROVED**

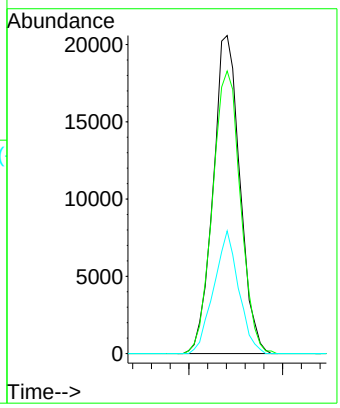
Reviewed By :Mahesh Dadoda 08/15/2024
Supervised By :Semsettin Yesilyurt 08/15/2024




#96
1,2,3-Trichlorobenzene
Concen: 18.450 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083298.D
Acq: 14 Aug 2024 14:03

Tgt Ion:180 Resp: 40786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.6 | 48.9 | 146.8 |
| 145 | 36.0 | 16.8 | 50.4 |



Raw Data: **VN083229.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0812WBSD01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0812WBSD01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083229.D | 1 | | 08/12/24 11:46 | VN081224 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 18.7 | | 0.21 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 18.0 | | 0.35 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 18.6 | | 0.34 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 19.2 | | 1.40 | 5.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 19.3 | | 0.25 | 1.00 | ug/L |
| 67-64-1 | Acetone | 97.8 | | 1.40 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 16.5 | | 0.32 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 18.5 | | 0.16 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 17.3 | | 0.32 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 17.4 | | 0.25 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 17.1 | | 1.60 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 91.7 | | 1.30 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 19.0 | | 0.25 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 18.4 | | 0.25 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 19.3 | | 0.26 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 19.2 | | 0.19 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 18.1 | | 0.19 | 1.00 | ug/L |
| 71-43-2 | Benzene | 18.7 | | 0.16 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 19.7 | | 0.24 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 19.2 | | 0.32 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 18.3 | | 0.24 | 1.00 | ug/L |
| 108-88-3 | Toluene | 18.8 | | 0.18 | 1.00 | ug/L |
| 79-00-5 | 1,1,2-Trichloroethane | 19.4 | | 0.21 | 1.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 18.8 | | 0.18 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 18.7 | | 0.25 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 18.6 | | 0.13 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 18.6 | | 0.16 | 1.00 | ug/L |
| 179601-23-1 | m/p-Xylenes | 37.3 | | 0.31 | 2.00 | ug/L |
| 1330-20-7 | Total Xylenes | 56.0 | | 0.45 | 3.00 | ug/L |
| 95-47-6 | o-Xylene | 18.7 | | 0.14 | 1.00 | ug/L |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | JACOBS Engineering Group, Inc. | Date Collected: | |
| Project: | Former Schlumberger Site Princeton NJ | Date Received: | |
| Client Sample ID: | VN0812WBSD01 | SDG No.: | P3429 |
| Lab Sample ID: | VN0812WBSD01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Solid: | 0 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group6 |
| GC Column: | RXI-624 ID : 0.25 | Level : | LOW |
| Prep Method : | | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VN083229.D | 1 | | 08/12/24 11:46 | VN081224 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | 18.4 | | 0.13 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 18.2 | | 0.27 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 18.2 | | 0.19 | 1.00 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 48.8 | | 70 (74) - 130 (125) | 98% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 46.0 | | 70 (75) - 130 (124) | 92% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 46.4 | | 70 (86) - 130 (113) | 93% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 45.3 | | 70 (77) - 130 (121) | 91% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 187000 | 8.224 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 320000 | 9.1 | | | |
| 3114-55-4 | Chlorobenzene-d5 | 276000 | 11.865 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 130000 | 13.794 | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083229.D
Acq On : 12 Aug 2024 11:46
Operator : JC\MD
Sample : VN0812WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 13 04:14:06 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 8.224 | 168 | 186747 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 9.100 | 114 | 319813 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.865 | 117 | 275661 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152 | 129761 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 8.582 | 65 | 129589 | 48.752 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 74 - 125 | | Recovery = 97.500% | | | |
| 35) Dibromofluoromethane | 8.165 | 113 | 91733 | 45.954 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 91.900% | | | |
| 50) Toluene-d8 | 10.565 | 98 | 345314 | 46.374 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 86 - 113 | | Recovery = 92.740% | | | |
| 62) 4-Bromofluorobenzene | 12.847 | 95 | 131576 | 45.324 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 64 - 133 | | Recovery = 90.640% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 2.124 | 85 | 39688 | 18.741 | ug/l | 97 |
| 3) Chloromethane | 2.359 | 50 | 38942 | 17.961 | ug/l | 97 |
| 4) Vinyl Chloride | 2.518 | 62 | 41139 | 18.595 | ug/l | 97 |
| 5) Bromomethane | 2.959 | 94 | 26406 | 19.236 | ug/l | 97 |
| 6) Chloroethane | 3.124 | 64 | 26311 | 19.009 | ug/l | 95 |
| 7) Trichlorofluoromethane | 3.495 | 101 | 69420 | 18.995 | ug/l | 100 |
| 8) Diethyl Ether | 3.965 | 74 | 24585 | 18.078 | ug/l | 87 |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 38977 | 19.344 | ug/l | 99 |
| 10) Methyl Iodide | 4.589 | 142 | 47501 | 17.921 | ug/l | 98 |
| 11) Tert butyl alcohol | 5.524 | 59 | 43653 | 79.023 | ug/l | 99 |
| 12) 1,1-Dichloroethene | 4.342 | 96 | 36631 | 17.695 | ug/l | 91 |
| 13) Acrolein | 4.183 | 56 | 23588 | 65.517 | ug/l | 99 |
| 14) Allyl chloride | 5.024 | 41 | 68407 | 17.486 | ug/l | 91 |
| 15) Acrylonitrile | 5.718 | 53 | 99513 | 87.591 | ug/l | 100 |
| 16) Acetone | 4.424 | 43 | 101736 | 97.812 | ug/l | 97 |
| 17) Carbon Disulfide | 4.712 | 76 | 99714 | 16.462 | ug/l | 100 |
| 18) Methyl Acetate | 5.024 | 43 | 55591 | 17.939 | ug/l | 91 |
| 19) Methyl tert-butyl Ether | 5.800 | 73 | 138237 | 18.501 | ug/l | 93 |
| 20) Methylene Chloride | 5.277 | 84 | 41310 | 17.257 | ug/l | 85 |
| 21) trans-1,2-Dichloroethene | 5.783 | 96 | 37251 | 17.410 | ug/l | 96 |
| 22) Diisopropyl ether | 6.671 | 45 | 135241 | 18.391 | ug/l # | 93 |
| 23) Vinyl Acetate | 6.600 | 43 | 712516m | 94.533 | ug/l | |
| 24) 1,1-Dichloroethane | 6.571 | 63 | 76297 | 19.035 | ug/l | 98 |
| 25) 2-Butanone | 7.482 | 43 | 146409 | 91.673 | ug/l | 91 |
| 26) 2,2-Dichloropropane | 7.488 | 77 | 73580 | 19.767 | ug/l | 99 |
| 27) cis-1,2-Dichloroethene | 7.488 | 96 | 47418 | 18.366 | ug/l | 94 |
| 28) Bromochloromethane | 7.818 | 49 | 31274 | 19.093 | ug/l | 88 |
| 29) Tetrahydrofuran | 7.835 | 42 | 91342 | 88.475 | ug/l | 90 |
| 30) Chloroform | 7.971 | 83 | 80486 | 19.328 | ug/l | 98 |
| 31) Cyclohexane | 8.253 | 56 | 67167 | 17.051 | ug/l | 95 |
| 32) 1,1,1-Trichloroethane | 8.171 | 97 | 75701 | 19.206 | ug/l | 92 |
| 36) 1,1-Dichloropropene | 8.371 | 75 | 56568 | 18.733 | ug/l | 99 |
| 37) Ethyl Acetate | 7.559 | 43 | 57344 | 16.960 | ug/l # | 97 |
| 38) Carbon Tetrachloride | 8.365 | 117 | 64763 | 19.042 | ug/l | 98 |
| 39) Methylcyclohexane | 9.600 | 83 | 67050 | 18.078 | ug/l | 94 |
| 40) Benzene | 8.606 | 78 | 168282 | 18.707 | ug/l | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083229.D
Acq On : 12 Aug 2024 11:46
Operator : JC\MD
Sample : VN0812WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 13 04:14:06 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 7.777 | 41 | 32902 | 17.115 | ug/l | | 96 |
| 42) 1,2-Dichloroethane | 8.671 | 62 | 64593 | 19.711 | ug/l | | 100 |
| 43) Isopropyl Acetate | 8.688 | 43 | 111521 | 17.579 | ug/l | | 97 |
| 44) Trichloroethene | 9.353 | 130 | 41028 | 19.161 | ug/l | | 92 |
| 45) 1,2-Dichloropropane | 9.624 | 63 | 41393 | 19.385 | ug/l | | 90 |
| 46) Dibromomethane | 9.706 | 93 | 29632 | 19.387 | ug/l | | 99 |
| 47) Bromodichloromethane | 9.888 | 83 | 62802 | 18.300 | ug/l | | 96 |
| 48) Methyl methacrylate | 9.682 | 41 | 49729 | 17.790 | ug/l | | 95 |
| 49) 1,4-Dioxane | 9.700 | 88 | 16982 | 336.746 | ug/l | | 97 |
| 51) 4-Methyl-2-Pentanone | 10.447 | 43 | 292541 | 91.498 | ug/l | | 93 |
| 52) Toluene | 10.629 | 92 | 106758 | 18.783 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 10.835 | 75 | 66033 | 18.732 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 10.312 | 75 | 70422 | 18.781 | ug/l | | 92 |
| 55) 1,1,2-Trichloroethane | 11.018 | 97 | 39592 | 19.437 | ug/l | | 98 |
| 56) Ethyl methacrylate | 10.876 | 69 | 68248 | 17.773 | ug/l | | 87 |
| 57) 1,3-Dichloropropane | 11.165 | 76 | 67855 | 18.689 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63 | 139581 | 85.993 | ug/l | | 97 |
| 59) 2-Hexanone | 11.194 | 43 | 225064 | 90.989 | ug/l | | 94 |
| 60) Dibromochloromethane | 11.359 | 129 | 46323 | 18.810 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 11.470 | 107 | 39185 | 18.313 | ug/l | | 99 |
| 64) Tetrachloroethene | 11.106 | 164 | 34197 | 18.732 | ug/l | | 94 |
| 65) Chlorobenzene | 11.894 | 112 | 113379 | 18.612 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131 | 39102 | 18.200 | ug/l | | 98 |
| 67) Ethyl Benzene | 11.965 | 91 | 207967 | 18.610 | ug/l | | 100 |
| 68) m/p-Xylenes | 12.070 | 106 | 156037 | 37.275 | ug/l | | 96 |
| 69) o-Xylene | 12.400 | 106 | 77090 | 18.672 | ug/l | | 99 |
| 70) Styrene | 12.412 | 104 | 128820 | 18.577 | ug/l | | 99 |
| 71) Bromoform | 12.576 | 173 | 29629 | 18.204 | ug/l | # | 98 |
| 73) Isopropylbenzene | 12.694 | 105 | 200138 | 18.440 | ug/l | | 100 |
| 74) N-amyl acetate | 12.494 | 43 | 86625 | 16.317 | ug/l | | 95 |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83 | 55535 | 18.091 | ug/l | | 97 |
| 76) 1,2,3-Trichloropropane | 12.994 | 75 | 51599m | 18.118 | ug/l | | |
| 77) Bromobenzene | 12.982 | 156 | 45972 | 19.068 | ug/l | | 98 |
| 78) n-propylbenzene | 13.035 | 91 | 230409 | 18.436 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 13.123 | 91 | 145219 | 18.328 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 13.170 | 105 | 169051 | 18.604 | ug/l | | 96 |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75 | 23009 | 17.574 | ug/l | | 89 |
| 82) 4-Chlorotoluene | 13.223 | 91 | 144886 | 18.230 | ug/l | | 99 |
| 83) tert-Butylbenzene | 13.441 | 119 | 146571 | 18.214 | ug/l | | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.482 | 105 | 171027 | 18.676 | ug/l | | 99 |
| 85) sec-Butylbenzene | 13.617 | 105 | 205876 | 18.750 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 13.729 | 119 | 166899 | 18.409 | ug/l | | 98 |
| 87) 1,3-Dichlorobenzene | 13.735 | 146 | 82823 | 18.256 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 13.812 | 146 | 83205 | 18.192 | ug/l | | 97 |
| 89) n-Butylbenzene | 14.059 | 91 | 147482 | 18.774 | ug/l | | 97 |
| 90) Hexachloroethane | 14.335 | 117 | 30402 | 17.357 | ug/l | | 95 |
| 91) 1,2-Dichlorobenzene | 14.106 | 146 | 79697 | 18.154 | ug/l | | 97 |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75 | 12380 | 16.620 | ug/l | | 99 |
| 93) 1,2,4-Trichlorobenzene | 15.394 | 180 | 44773 | 18.204 | ug/l | | 97 |
| 94) Hexachlorobutadiene | 15.500 | 225 | 19366 | 17.705 | ug/l | | 99 |
| 95) Naphthalene | 15.641 | 128 | 149685 | 17.181 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.841 | 180 | 42430 | 17.435 | ug/l | | 98 |

Sample Results: **VN083229.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083229.D
Acq On : 12 Aug 2024 11:46
Operator : JC\MD
Sample : VN0812WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 13 04:14:06 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081224\
Data File : VN083229.D
Acq On : 12 Aug 2024 11:46
Operator : JC\MD
Sample : VN0812WBSD01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 13 04:14:06 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N080724W.M
Quant Title : SW846 8260
QLast Update : Thu Aug 08 06:30:41 2024
Response via : Initial Calibration

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations APPROVED**

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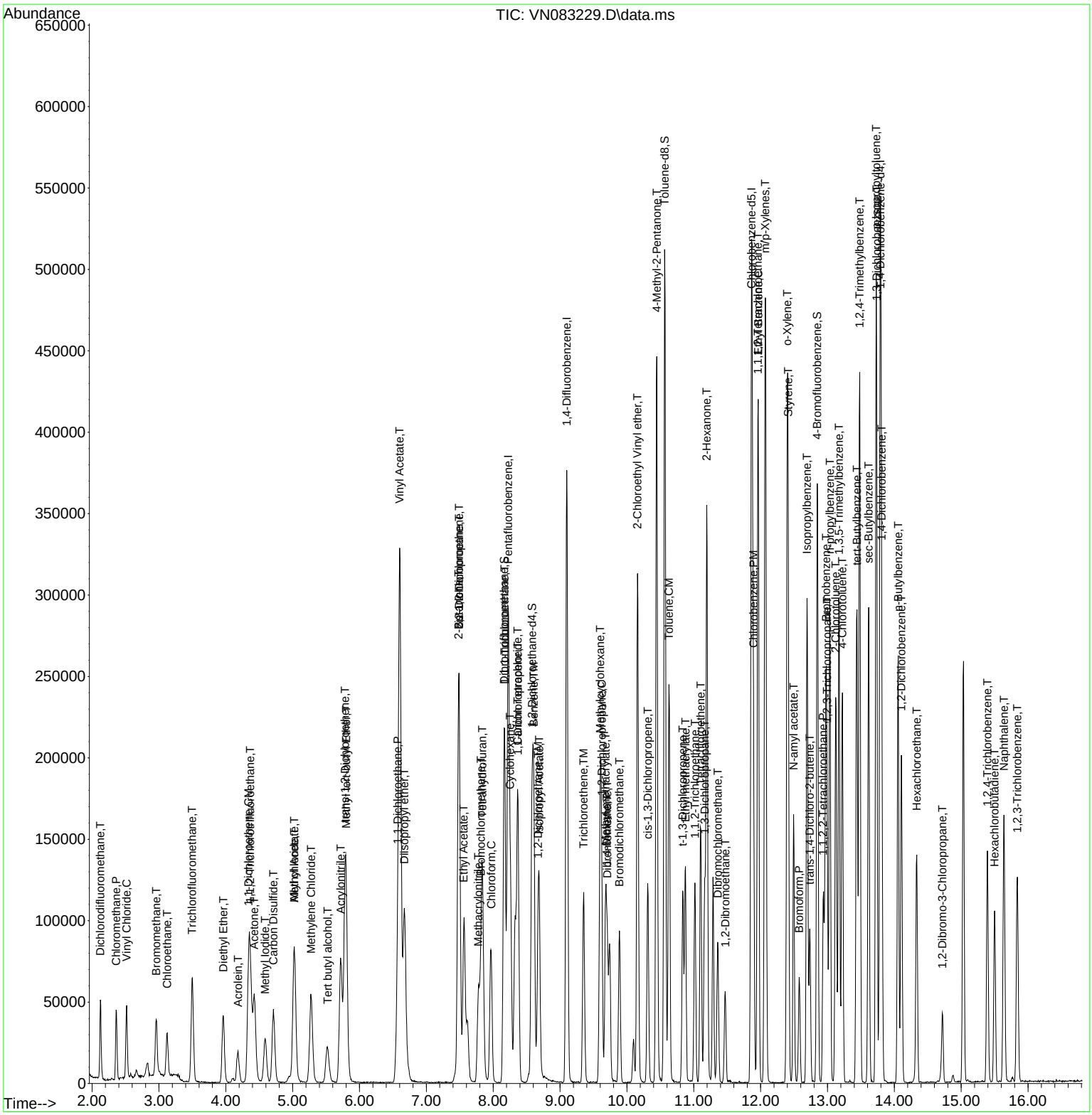
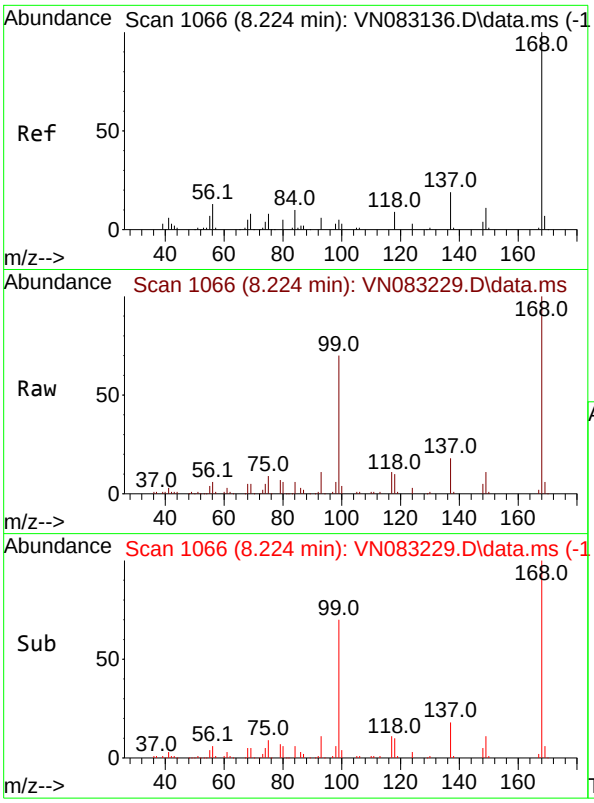
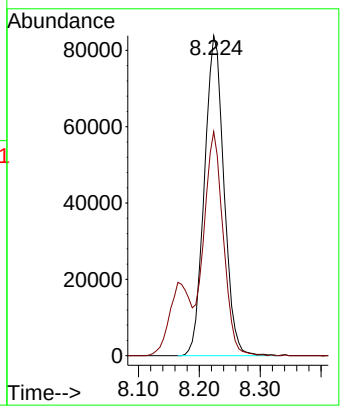





#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:168 Resp: 18674

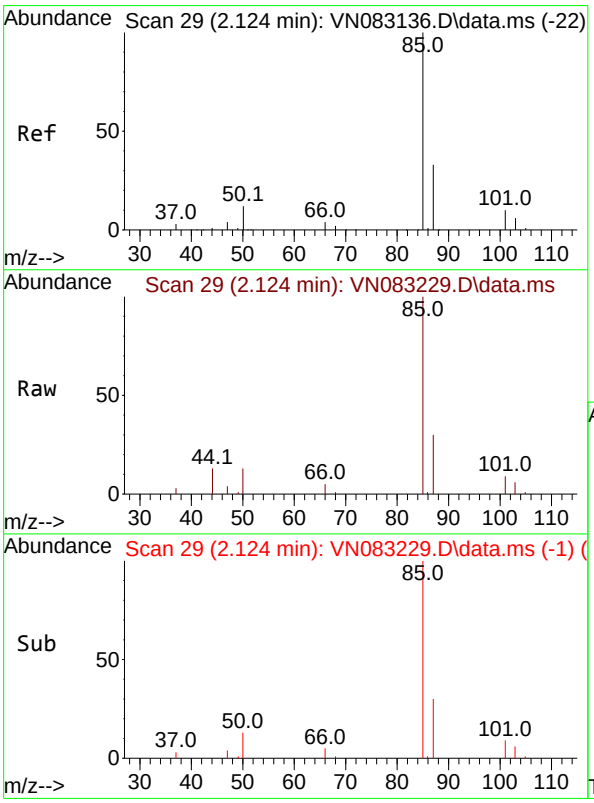
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 70.0 | 48.2 | 72.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

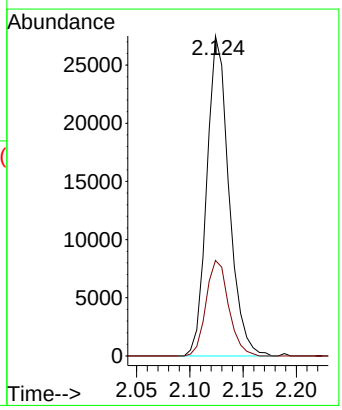
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

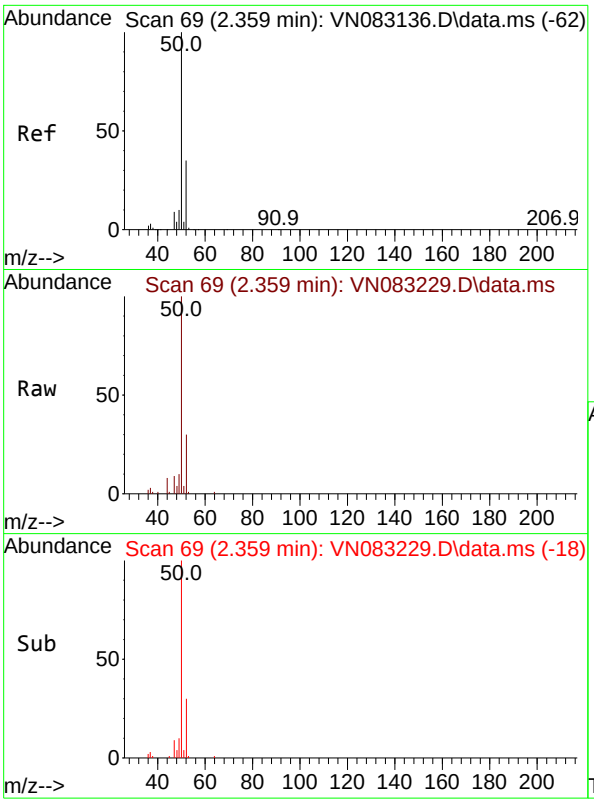



#2
Dichlorodifluoromethane
Concen: 18.741 ug/l
RT: 2.124 min Scan# 29
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 85 Resp: 39688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 29.9 | 15.7 | 47.0 |






#3
Chloromethane
Concen: 17.961 ug/l
RT: 2.359 min Scan# 6
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

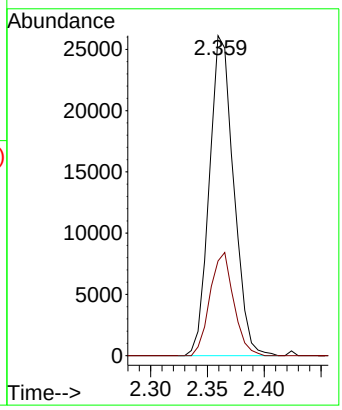
Tgt Ion: 50 Resp: 3894

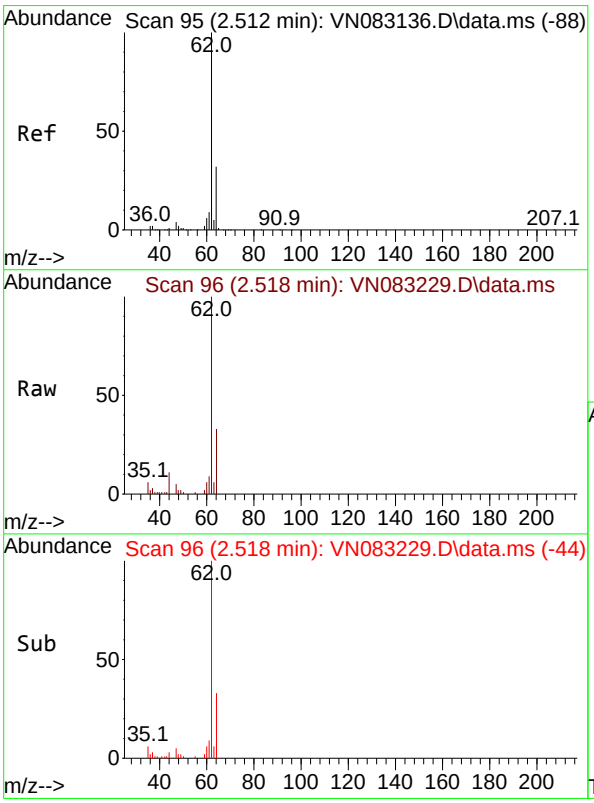
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 29.6 | 25.0 | 37.4 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

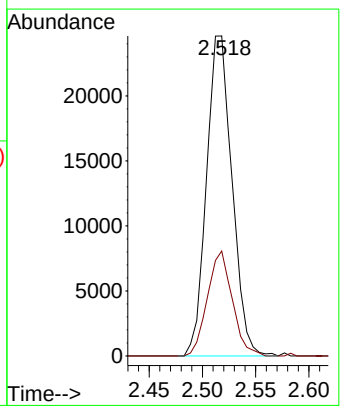


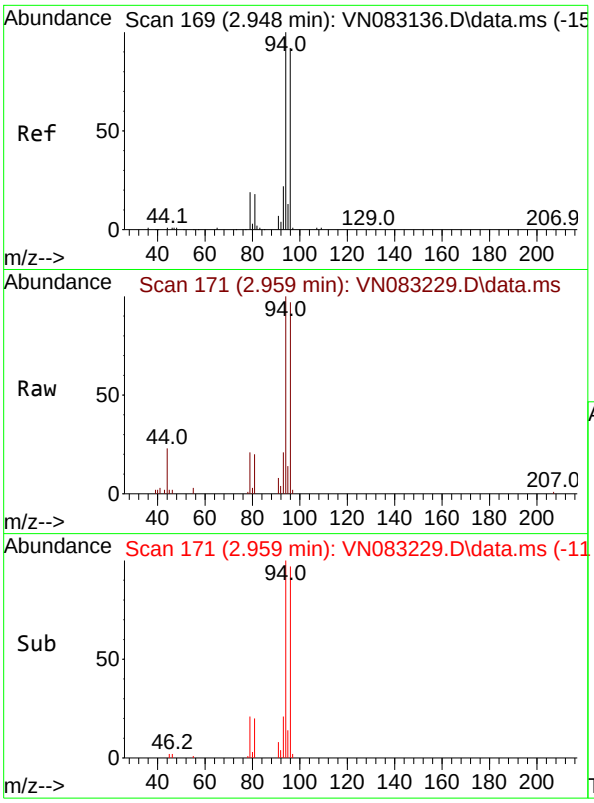




#4
Vinyl Chloride
Concen: 18.595 ug/l
RT: 2.518 min Scan# 96
Delta R.T. 0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 62 Resp: 41139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.8 | 25.0 | 37.6 |






#5
Bromomethane
Concen: 19.236 ug/l
RT: 2.959 min Scan# 1
Delta R.T. 0.012 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

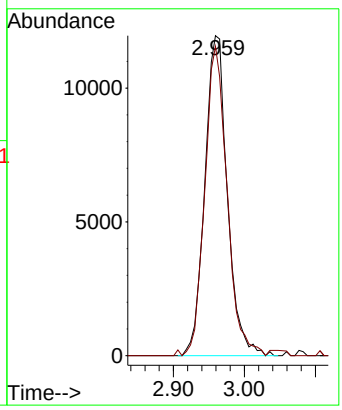
Tgt Ion: 94 Resp: 2640

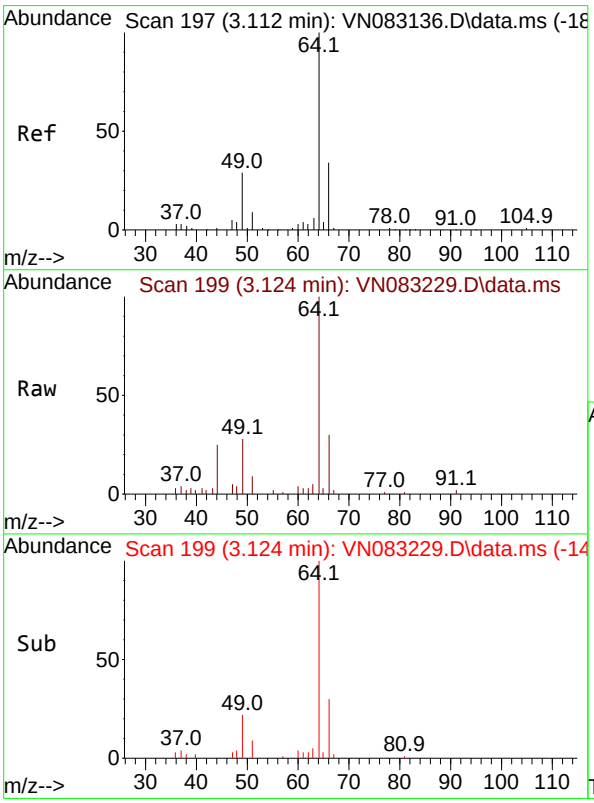
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 95.0 | 78.0 | 117.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

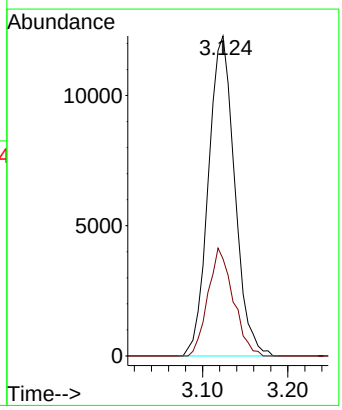


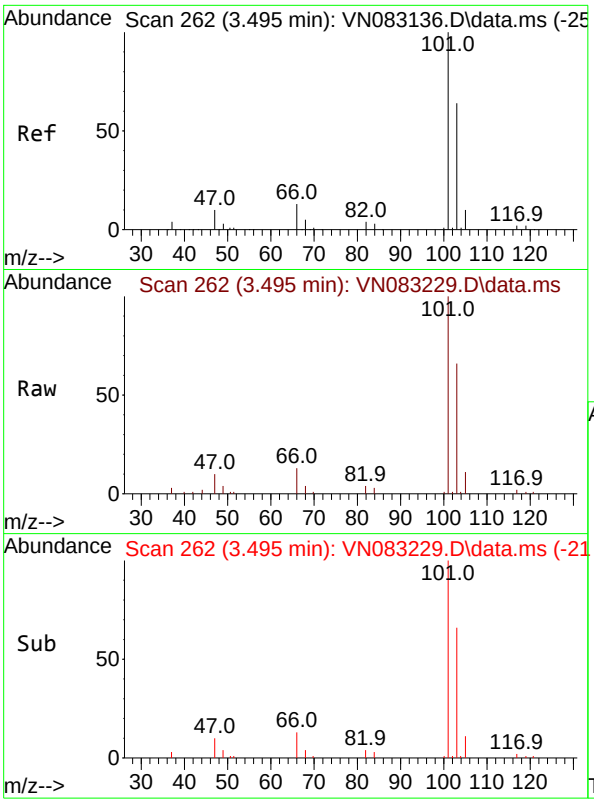




#6
Chloroethane
Concen: 19.009 ug/l
RT: 3.124 min Scan# 199
Delta R.T. 0.012 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 64 Resp: 26311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.4 | 26.6 | 40.0 |






#7
Trichlorofluoromethane
Concen: 18.995 ug/l
RT: 3.495 min Scan# 2(
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:101 Resp: 6942(

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.3 | 52.7 | 79.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
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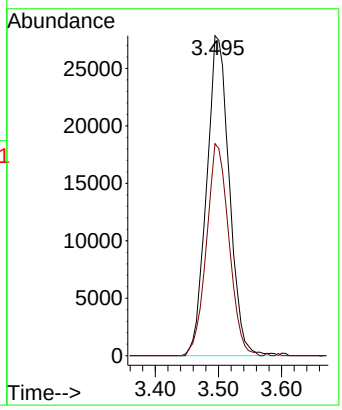
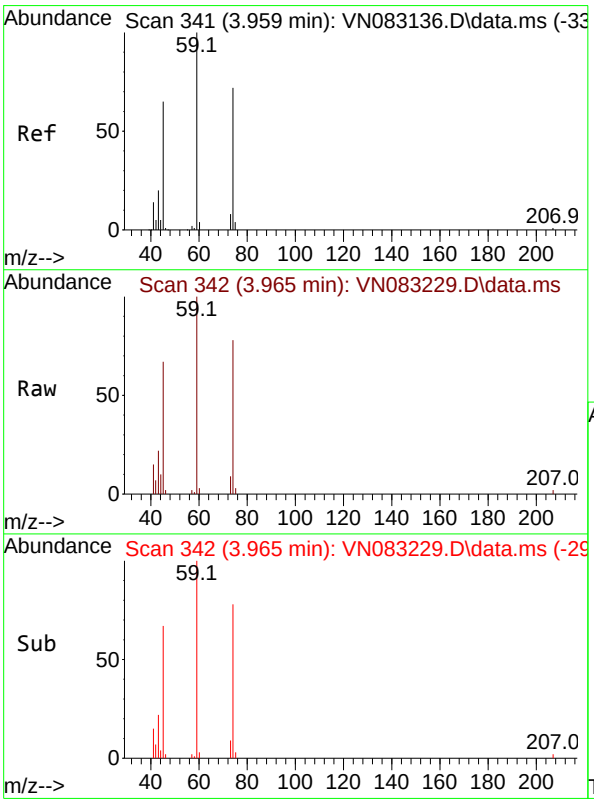
Supervised By :Semsettin Yesilyurt 08/13/2024

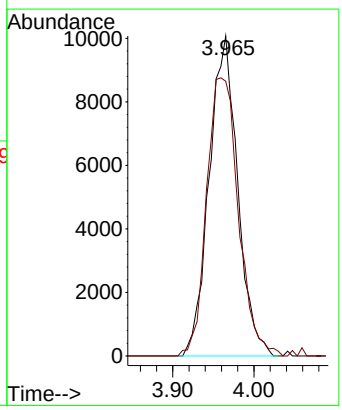


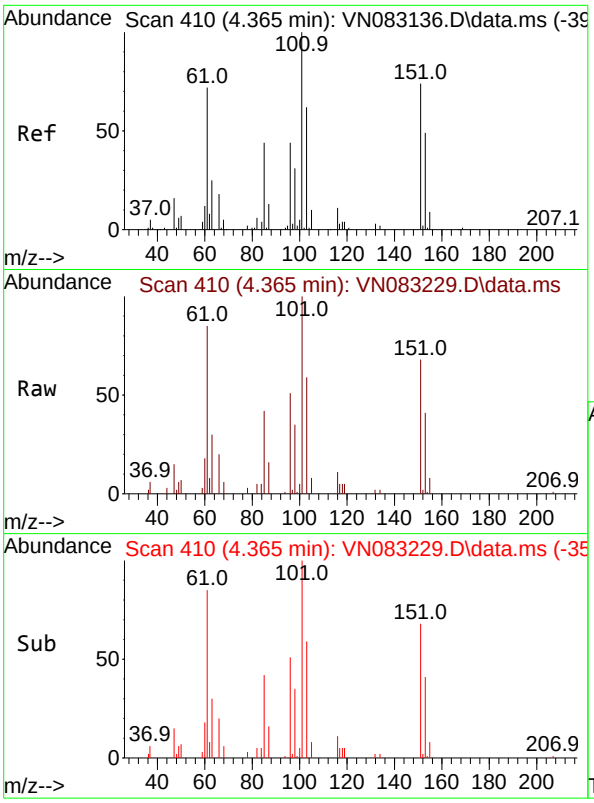




#8
Diethyl Ether
Concen: 18.078 ug/l
RT: 3.965 min Scan# 342
Delta R.T. 0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 74 Resp: 24585

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 97.0 | 55.5 | 166.3 |






#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.344 ug/l
RT: 4.365 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

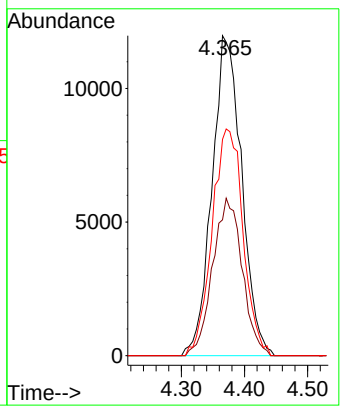
Tgt Ion:101 Resp: 3897

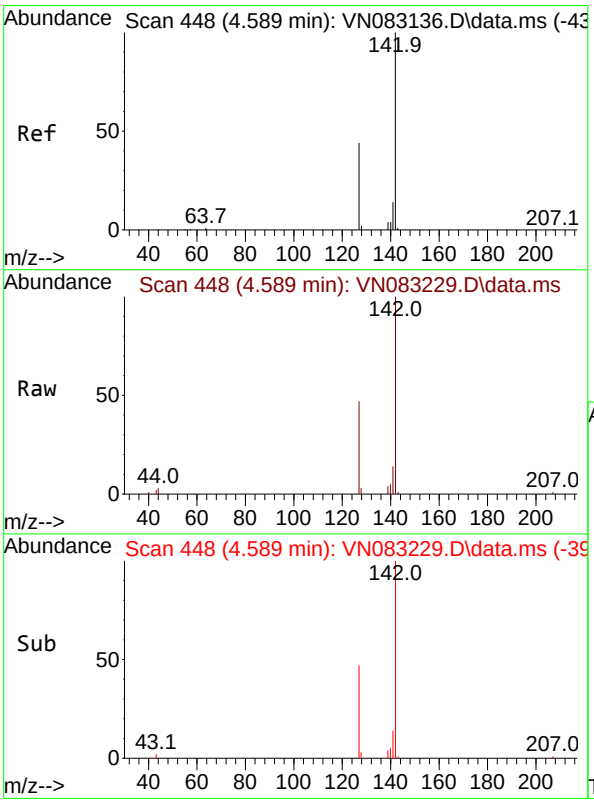
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 49.2 | 38.3 | 57.5 |
| 151 | 74.1 | 59.3 | 88.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

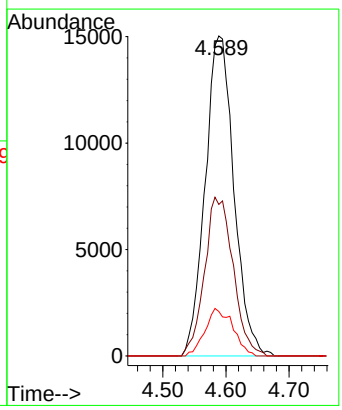


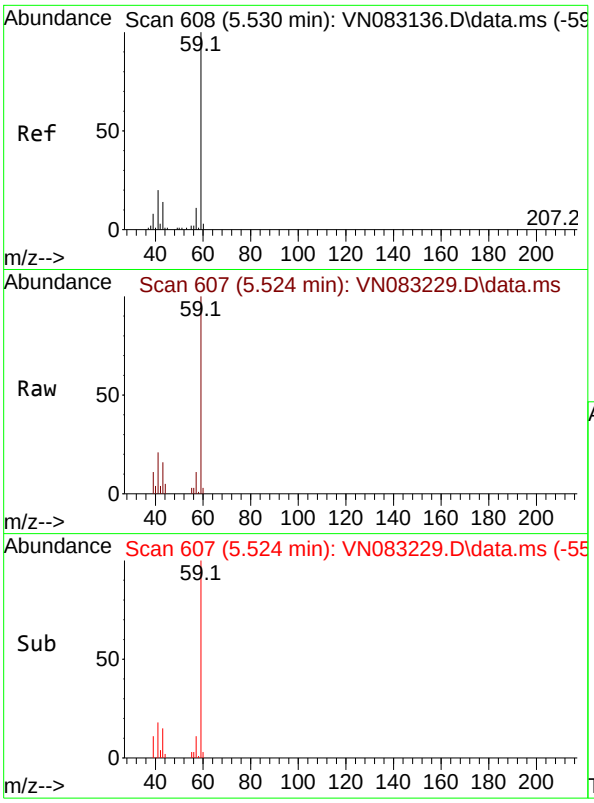




#10
Methyl Iodide
Concen: 17.921 ug/l
RT: 4.589 min Scan# 448
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:142 Resp: 47501

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 47.4 | 37.5 | 56.3 |
| 141 | 13.9 | 13.1 | 19.7 |






#11
Tert butyl alcohol
Concen: 79.023 ug/l
RT: 5.524 min Scan# 6
Delta R.T. -0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 59 Resp: 4365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.5 | 8.9 | 13.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

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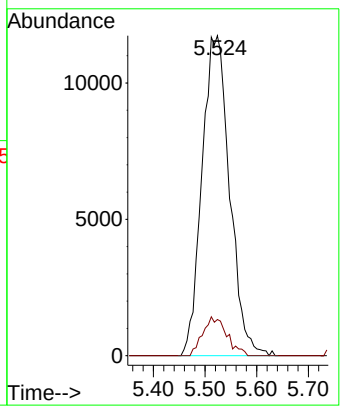
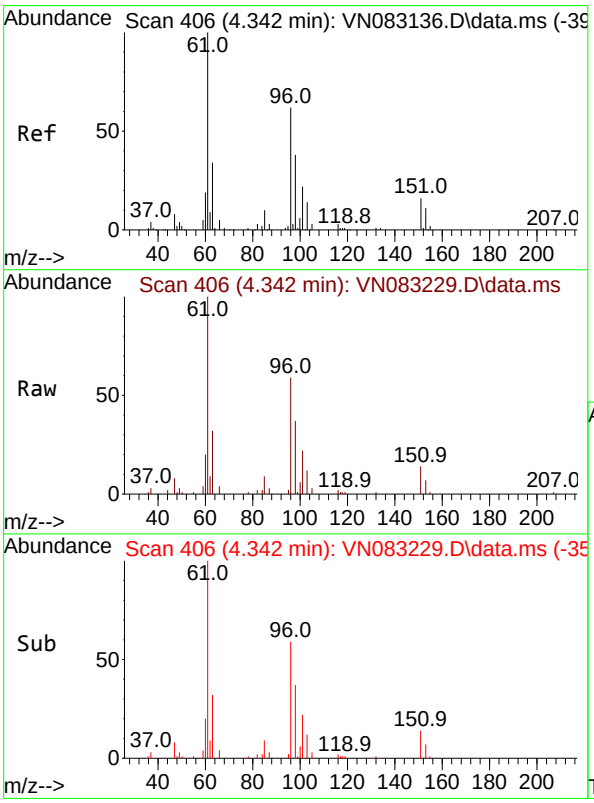
Supervised By :Semsettin Yesilyurt 08/13/2024

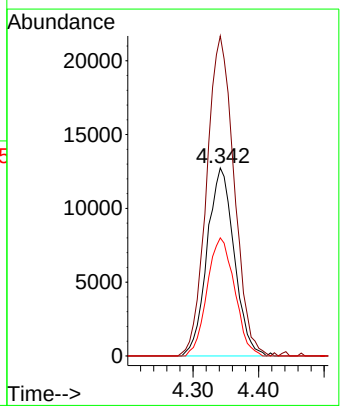


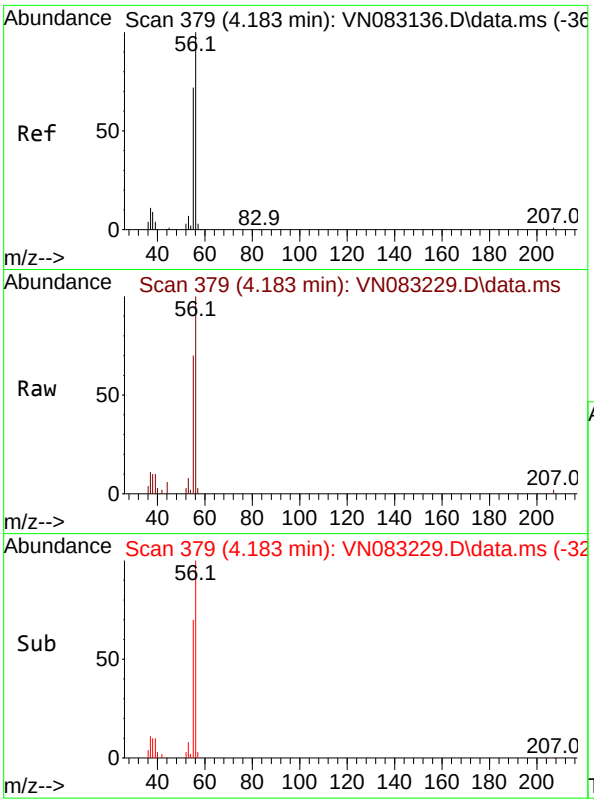




#12
1,1-Dichloroethene
Concen: 17.695 ug/l
RT: 4.342 min Scan# 406
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 96 Resp: 36631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 170.2 | 149.7 | 224.5 |
| 98 | 62.8 | 50.1 | 75.1 |

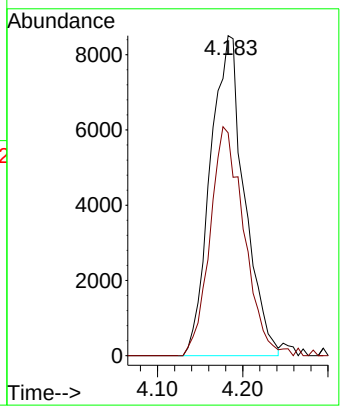





#13
Acrolein
Concen: 65.517 ug/l
RT: 4.183 min Scan# 3
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 56 Resp: 2358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.7 | 56.4 | 84.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
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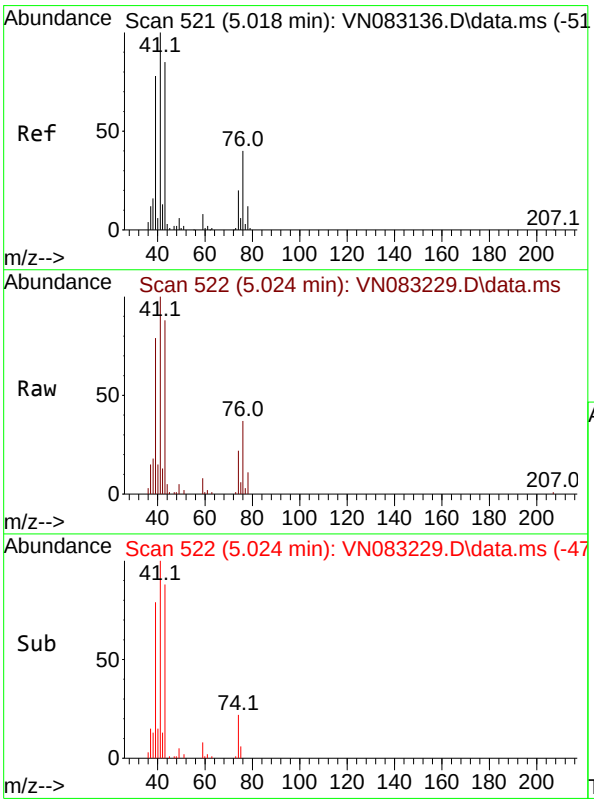
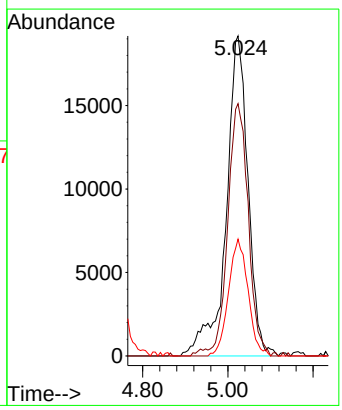
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

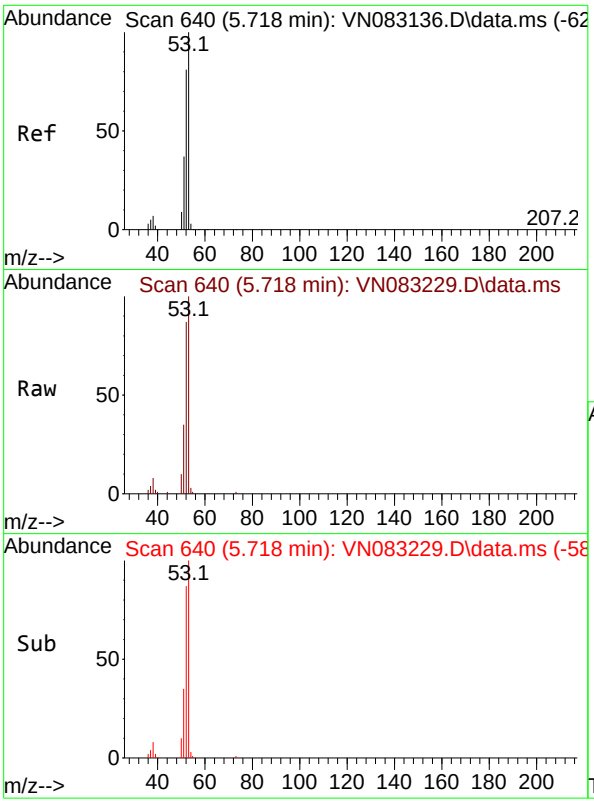



#14
Allyl chloride
Concen: 17.486 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 41 Resp: 68407

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 74.1 | 67.8 | 101.6 |
| 76 | 32.6 | 25.8 | 38.8 |

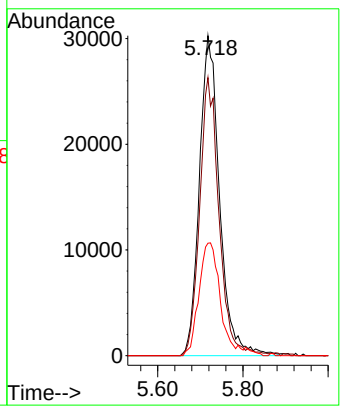





#15
Acrylonitrile
Concen: 87.591 ug/l
RT: 5.718 min Scan# 64
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 53 Resp: 9951

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.4 | 66.6 | 100.0 |
| 51 | 37.0 | 30.1 | 45.1 |




**Instrument :**
MSVOA_N
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VN0812WBSD01

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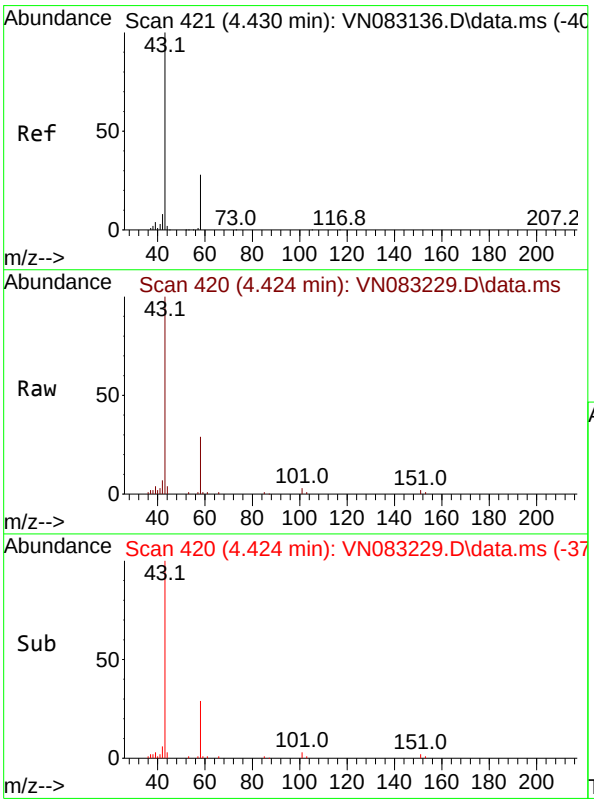
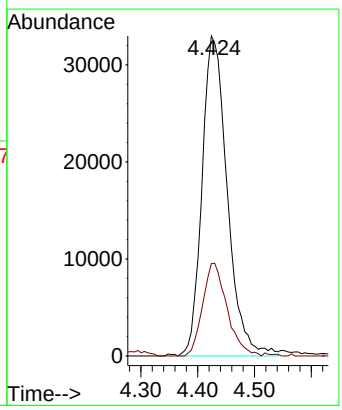
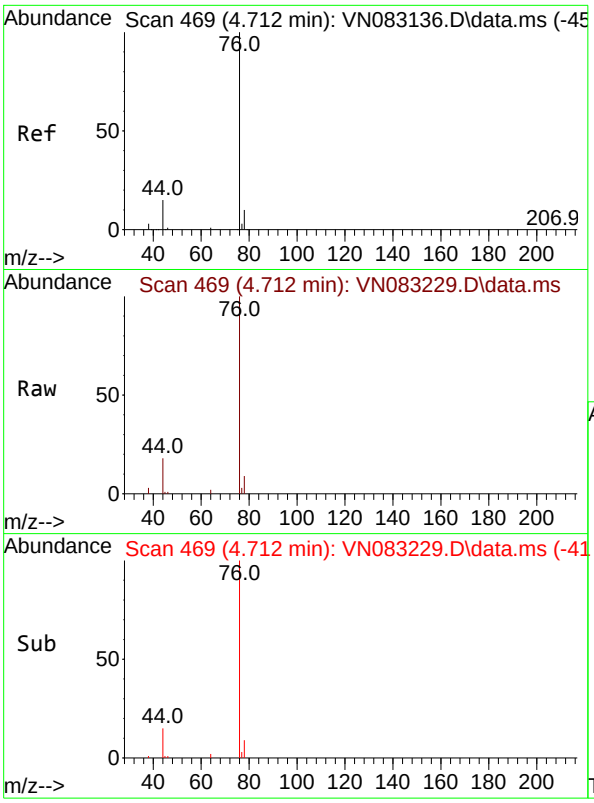



#16
Acetone
Concen: 97.812 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 43 Resp: 101736

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.8 | 21.8 | 32.6 |

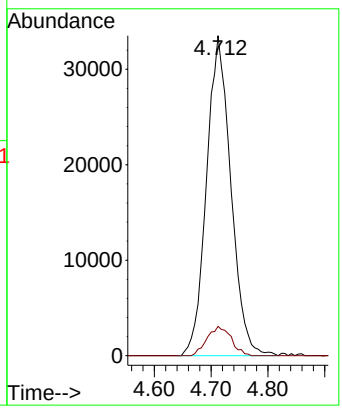





#17
Carbon Disulfide
Concen: 16.462 ug/l
RT: 4.712 min Scan# 4
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 76 Resp: 9971

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.2 | 7.2 | 10.8 |




**Instrument :**
MSVOA_N
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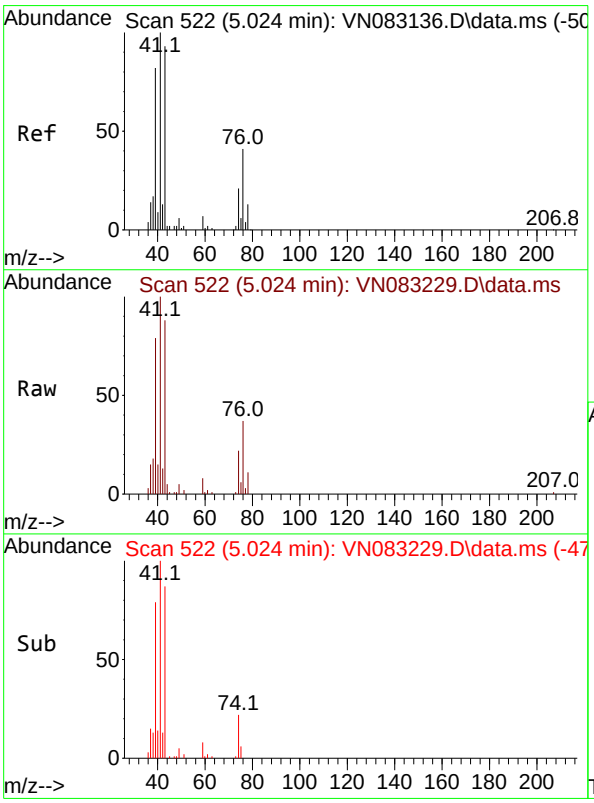
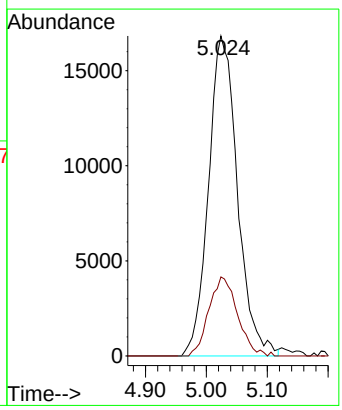
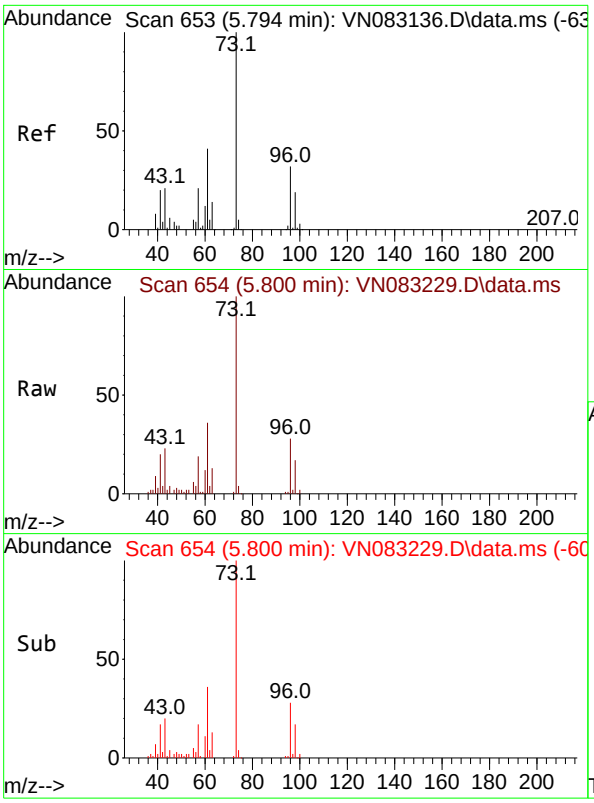



#18
Methyl Acetate
Concen: 17.939 ug/l
RT: 5.024 min Scan# 522
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 43 Resp: 55591

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 24.4 | 16.3 | 24.5 |

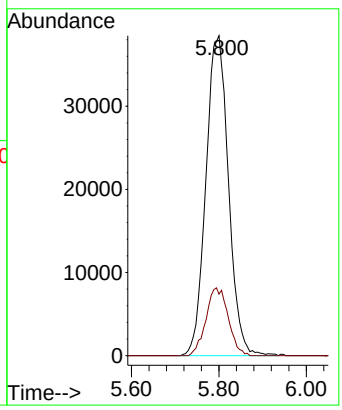





#19
Methyl tert-butyl Ether
Concen: 18.501 ug/l
RT: 5.800 min Scan# 6
Delta R.T. 0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 73 Resp: 13823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 19.3 | 17.9 | 26.9 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

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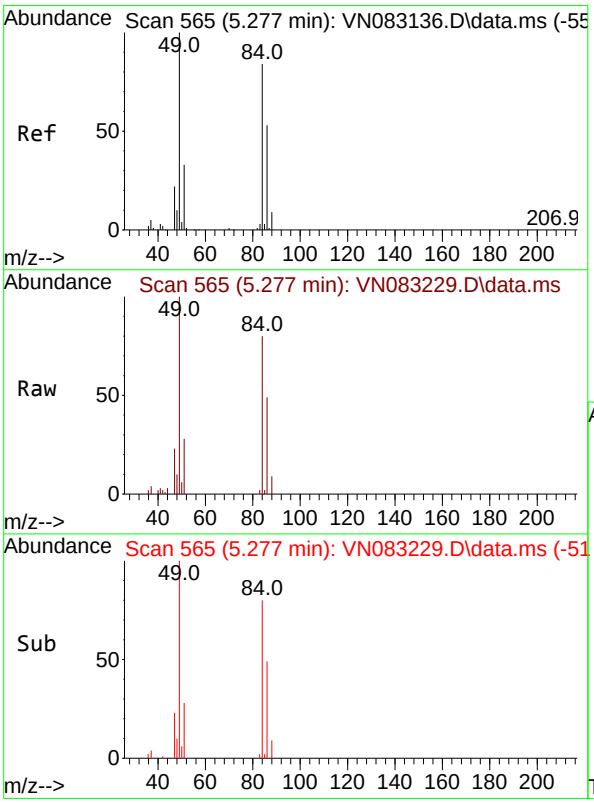
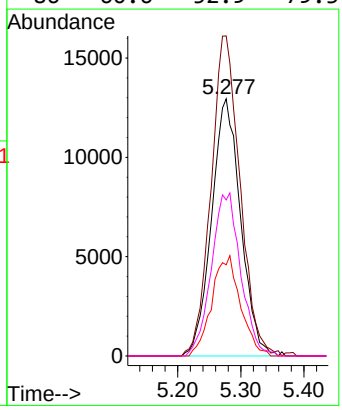
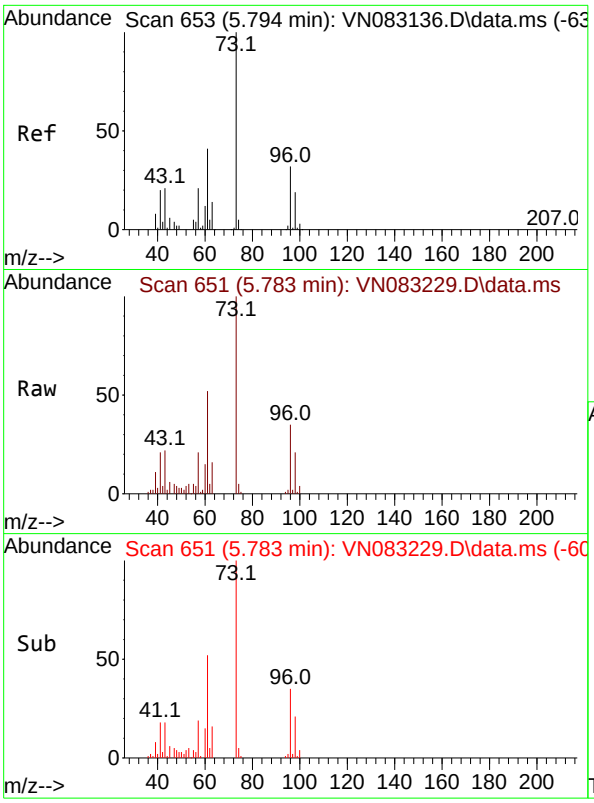



#20
Methylene Chloride
Concen: 17.257 ug/l
RT: 5.277 min Scan# 565
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 84 Resp: 41310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 124.5 | 119.6 | 179.4 |
| 51 | 35.5 | 34.8 | 52.2 |
| 86 | 60.6 | 52.9 | 79.3 |

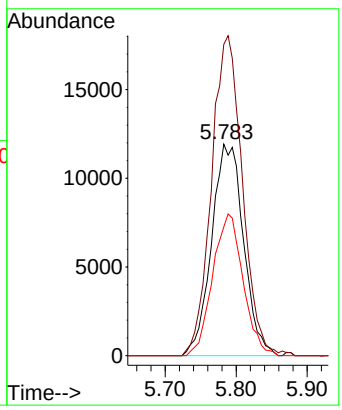





#21
trans-1,2-Dichloroethene
Concen: 17.410 ug/l
RT: 5.783 min Scan# 6
Delta R.T. -0.012 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 96 Resp: 3725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 147.2 | 123.4 | 185.2 |
| 98 | 60.9 | 49.3 | 73.9 |




**Instrument :**
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VN0812WBSD01

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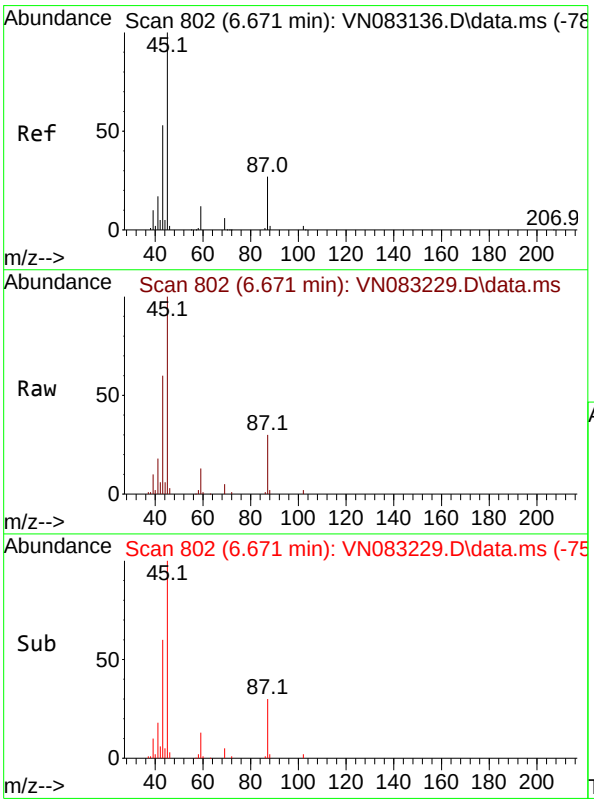
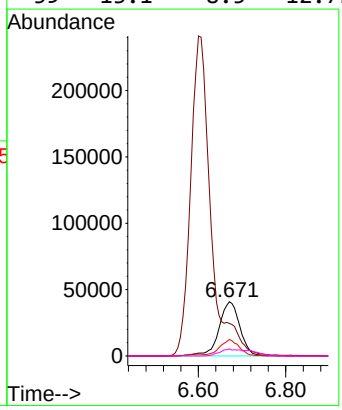
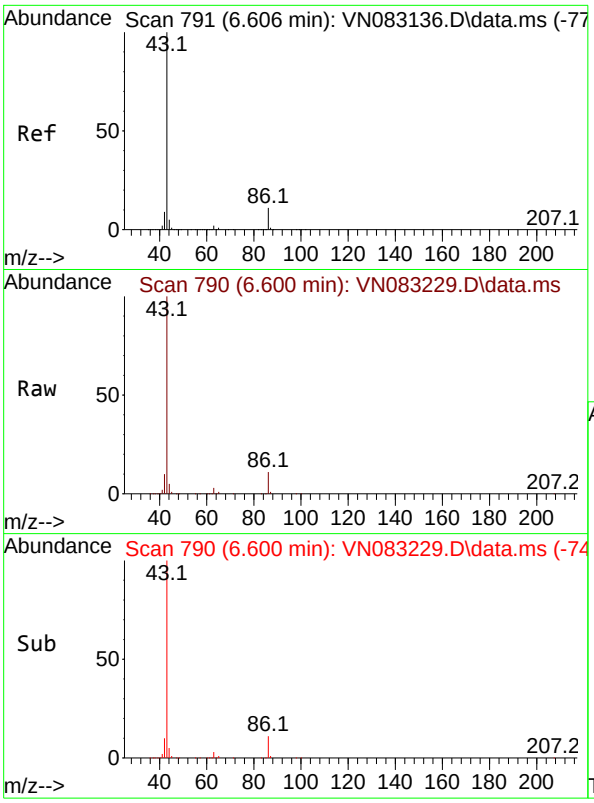



#22
Diisopropyl ether
Concen: 18.391 ug/l
RT: 6.671 min Scan# 802
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 45 Resp: 135241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 58.3 | 44.0 | 66.0 |
| 87 | 30.4 | 19.7 | 29.5# |
| 59 | 13.1 | 8.5 | 12.7# |






#23
Vinyl Acetate
Concen: 94.533 ug/l m
RT: 6.600 min Scan# 7
Delta R.T. -0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 43 Resp: 71251

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.9 | 7.3 | 10.9# |

**Instrument :**
MSVOA_N
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VN0812WBSD01

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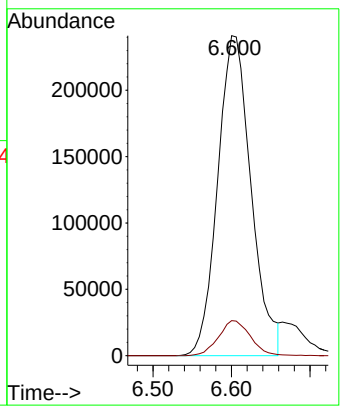
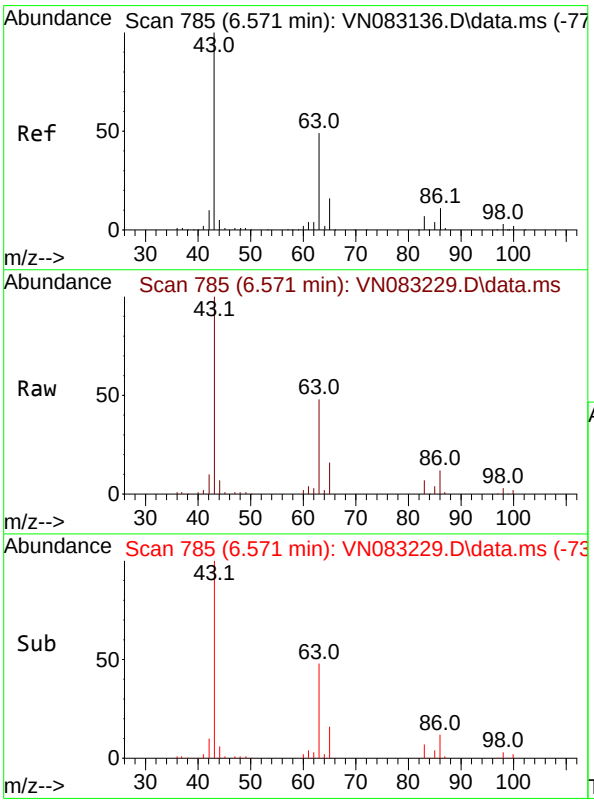
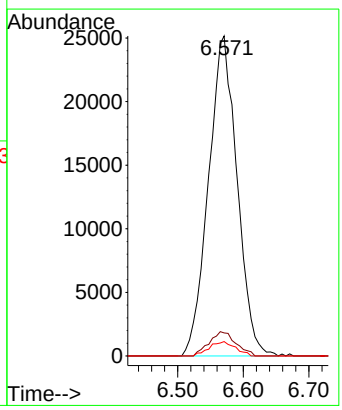


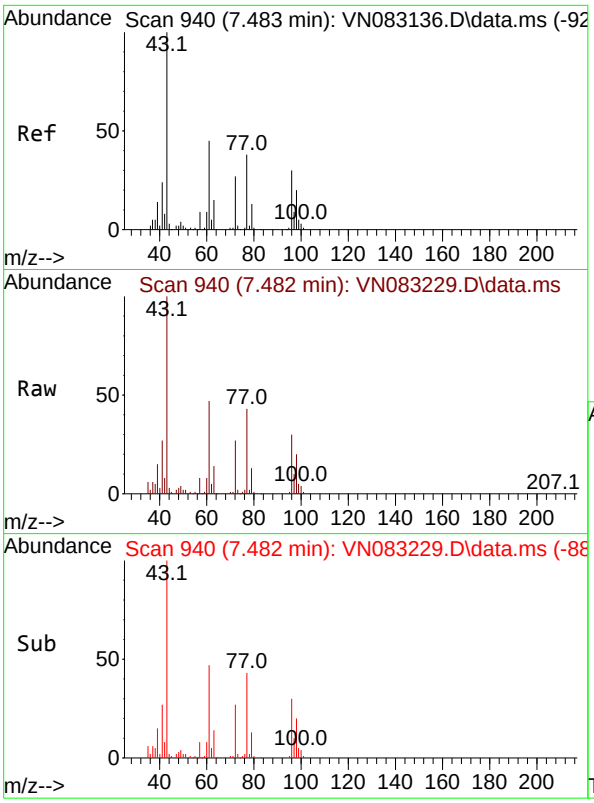




#24
1,1-Dichloroethane
Concen: 19.035 ug/l
RT: 6.571 min Scan# 785
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 63 Resp: 76297

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.2 | 3.3 | 9.9 |
| 100 | 4.5 | 2.0 | 6.0 |






#25
2-Butanone
Concen: 91.673 ug/l
RT: 7.482 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 43 Resp: 14640

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 27.1 | 18.2 | 27.2 |

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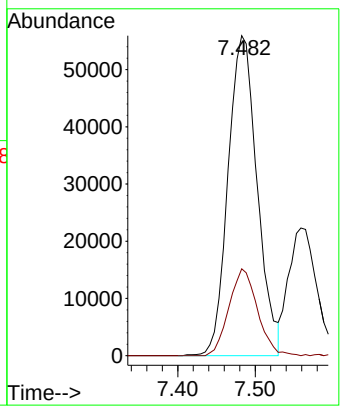
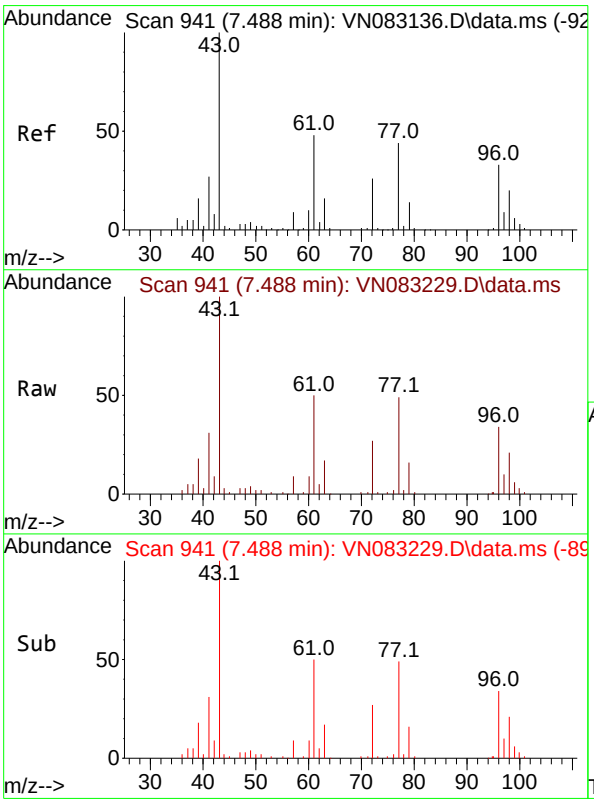
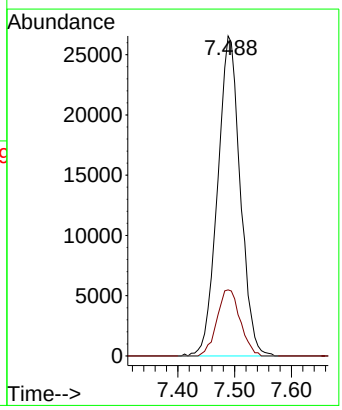


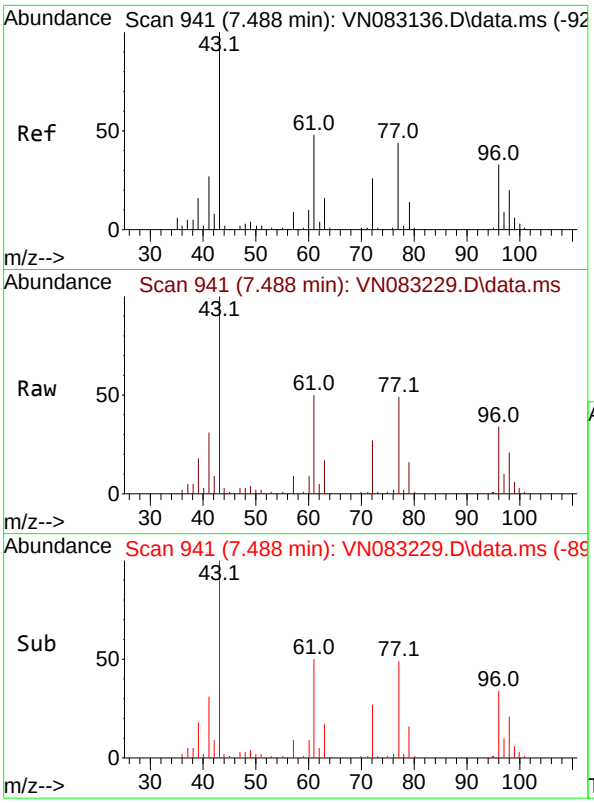




#26
2,2-Dichloropropane
Concen: 19.767 ug/l
RT: 7.488 min Scan# 941
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 77 Resp: 73580

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.2 | 10.3 | 30.9 |






#27
cis-1,2-Dichloroethene
Concen: 18.366 ug/l
RT: 7.488 min Scan# 94
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 96 Resp: 4741

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 153.4 | 0.0 | 329.6 |
| 98 | 63.4 | 0.0 | 128.6 |

**Instrument :**
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VN0812WBSD01

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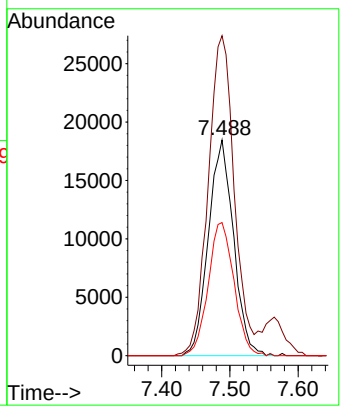
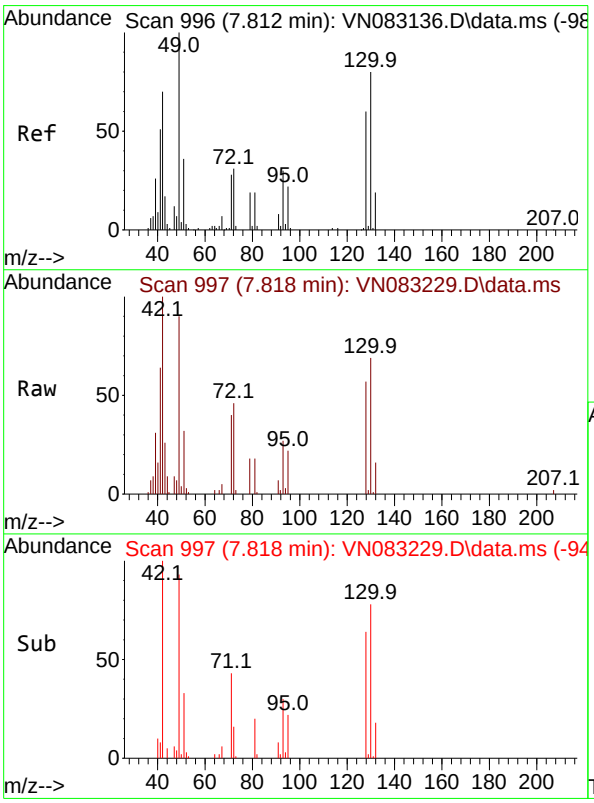
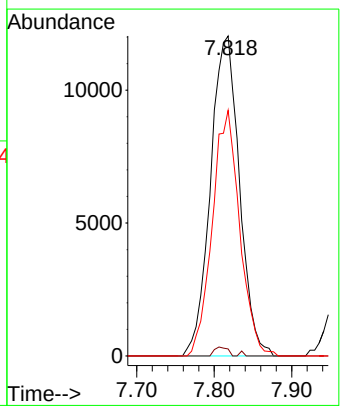


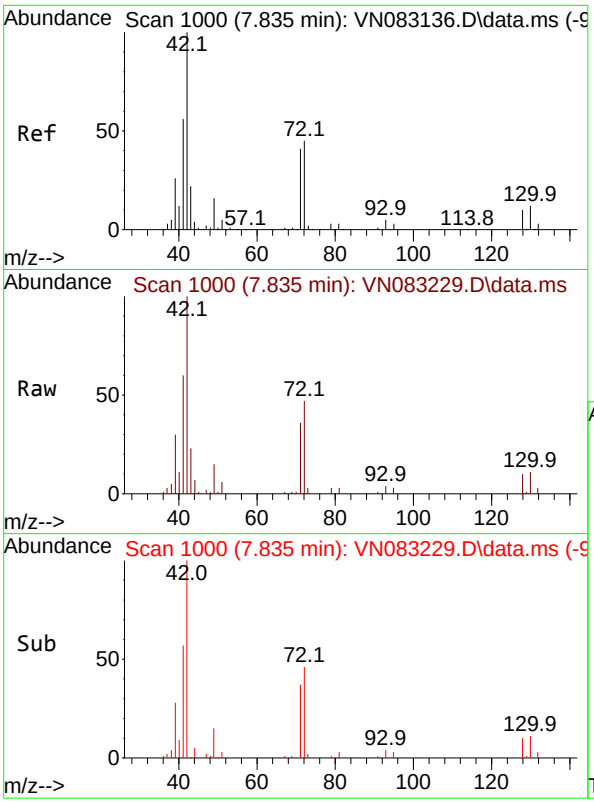




#28
Bromochloromethane
Concen: 19.093 ug/l
RT: 7.818 min Scan# 997
Delta R.T. 0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 49 Resp: 31274

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.3 | 0.0 | 3.8 |
| 130 | 72.7 | 50.5 | 75.7 |

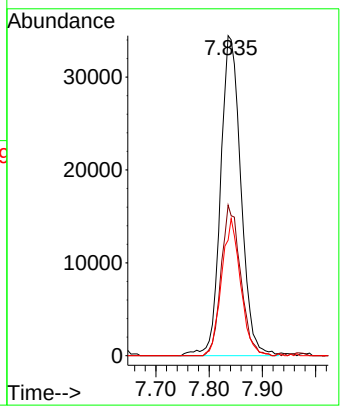





#29
Tetrahydrofuran
Concen: 88.475 ug/l
RT: 7.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 42 Resp: 9134

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 45.0 | 30.0 | 45.0 |
| 71 | 40.0 | 28.3 | 42.5 |




**Instrument :**
MSVOA_N
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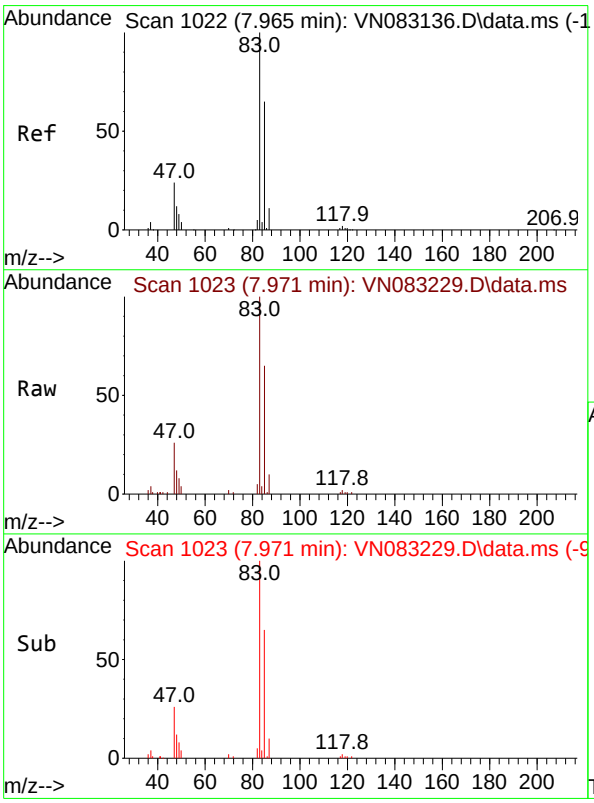
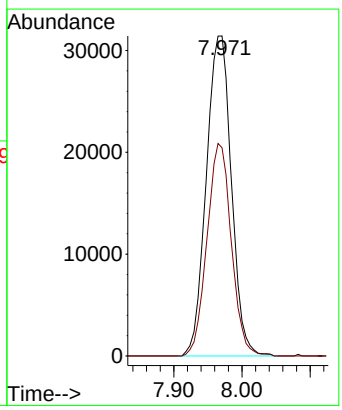
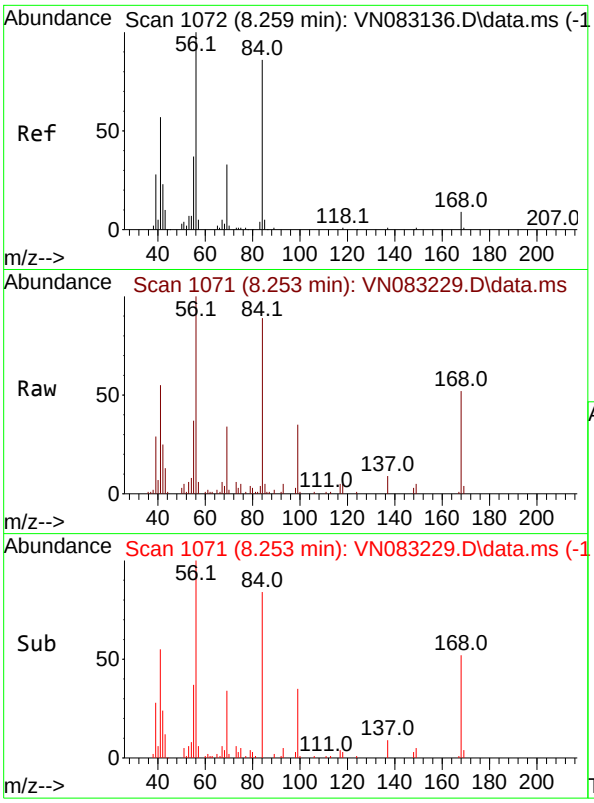



#30
Chloroform
Concen: 19.328 ug/l
RT: 7.971 min Scan# 1023
Delta R.T. 0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 83 Resp: 80486

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.0 | 50.9 | 76.3 |

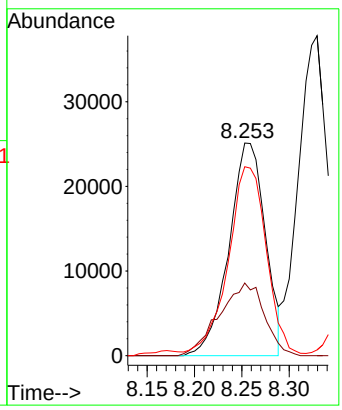





#31
Cyclohexane
Concen: 17.051 ug/l
RT: 8.253 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 56 Resp: 6716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 34.1 | 24.5 | 36.7 |
| 84 | 87.1 | 66.0 | 99.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
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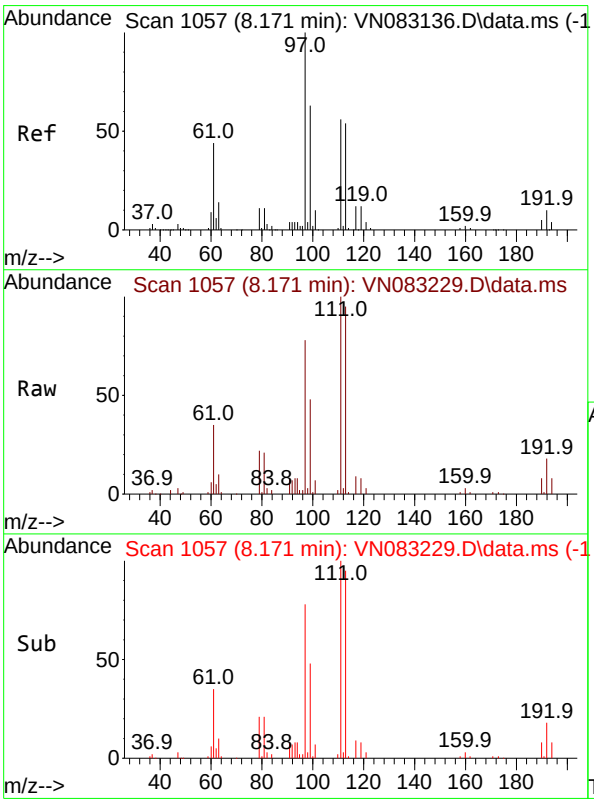
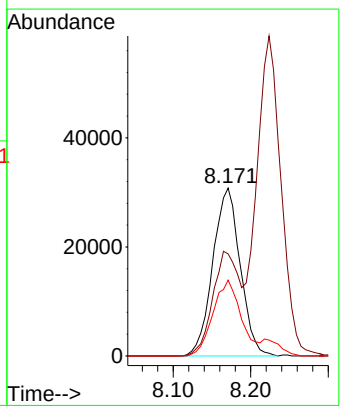
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

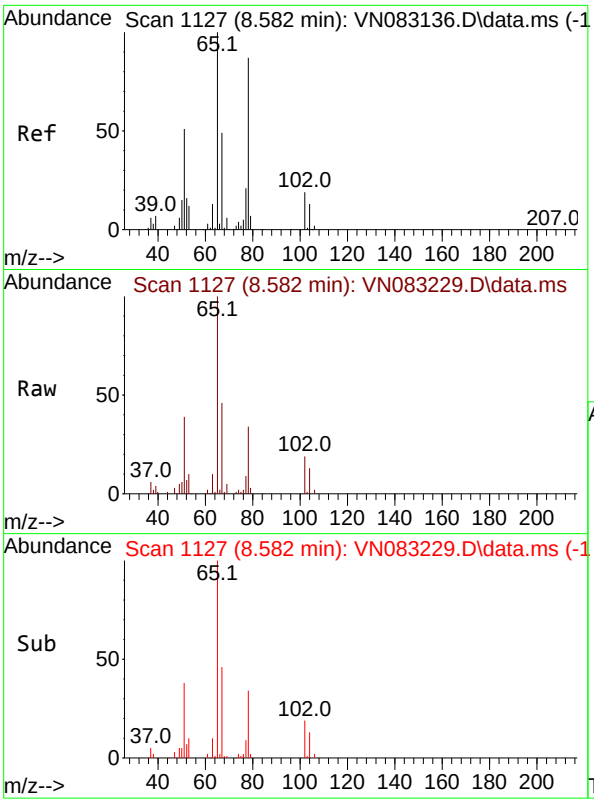



#32
1,1,1-Trichloroethane
Concen: 19.206 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 97 Resp: 75701

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 59.4 | 52.0 | 78.0 |
| 61 | 46.8 | 42.1 | 63.1 |

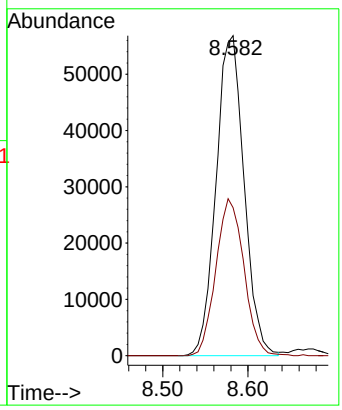





#33
1,2-Dichloroethane-d4
Concen: 48.752 ug/l
RT: 8.582 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 65 Resp: 12958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.1 | 0.0 | 104.4 |




**Instrument :**
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VN0812WBSD01

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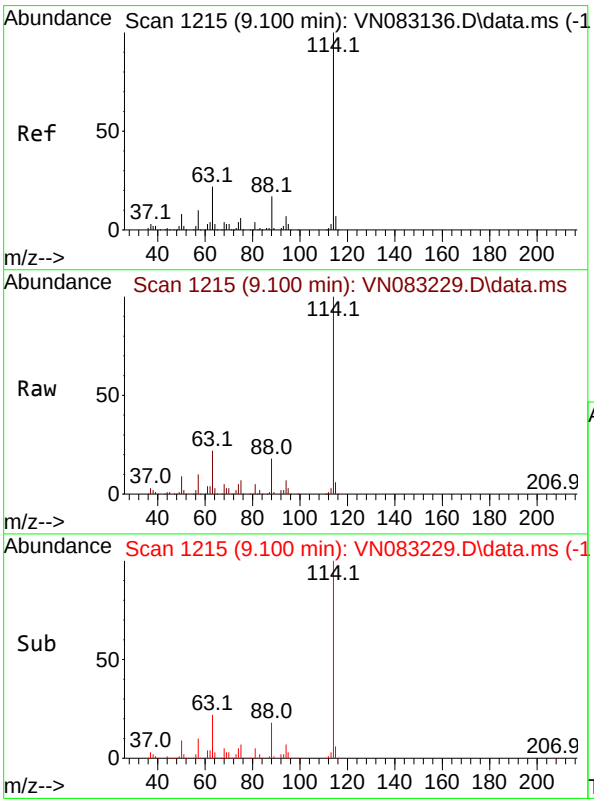
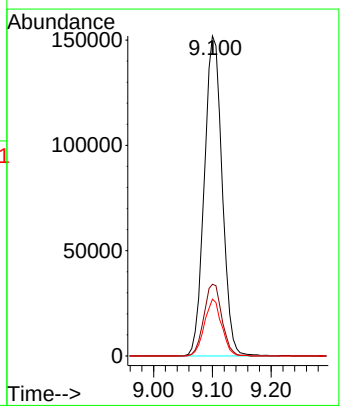
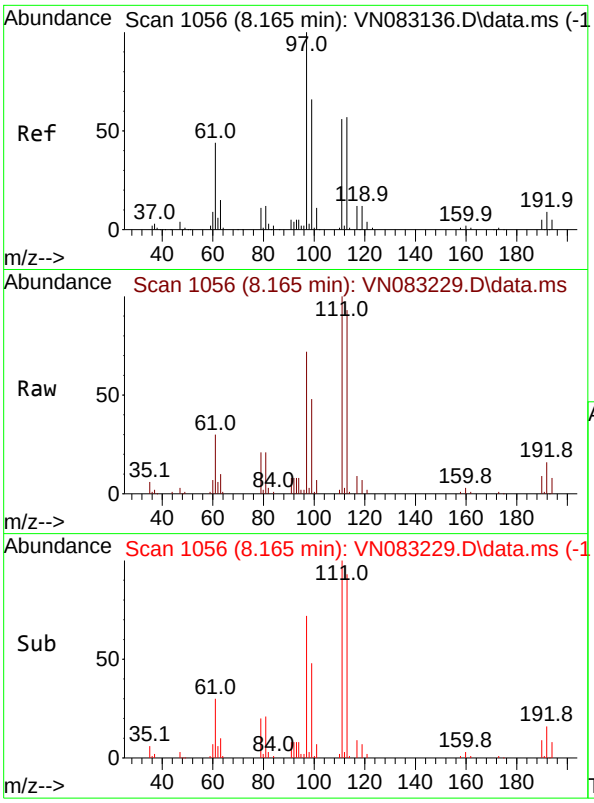



#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.100 min Scan# 1215
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:114 Resp: 319813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.4 | 0.0 | 44.6 |
| 88 | 17.7 | 0.0 | 31.4 |

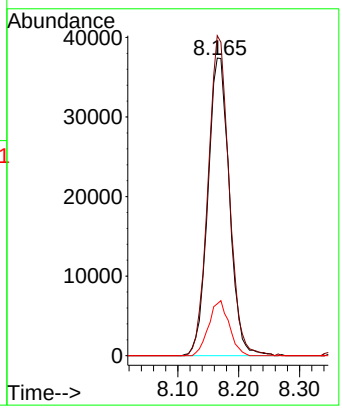





#35
Dibromofluoromethane
Concen: 45.954 ug/l
RT: 8.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:113 Resp: 9173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 105.3 | 82.4 | 123.6 |
| 192 | 17.6 | 14.9 | 22.3 |




**Instrument :**
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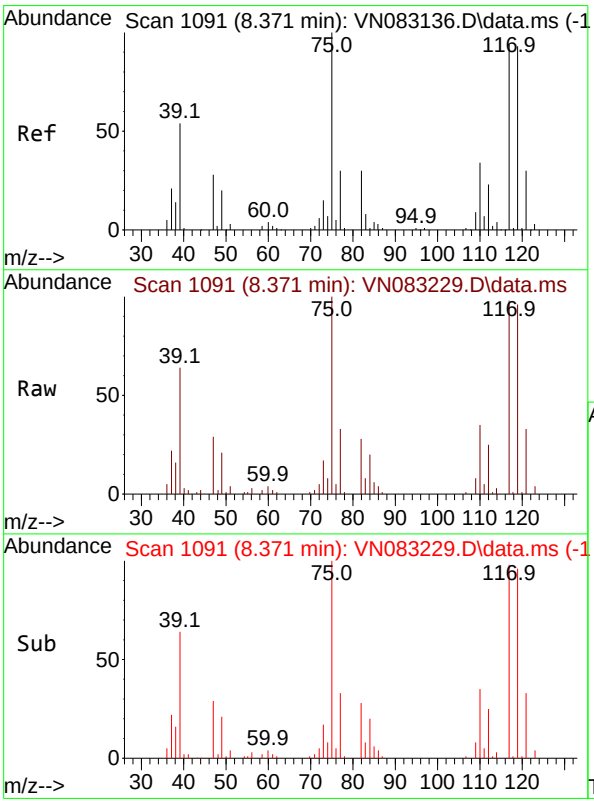
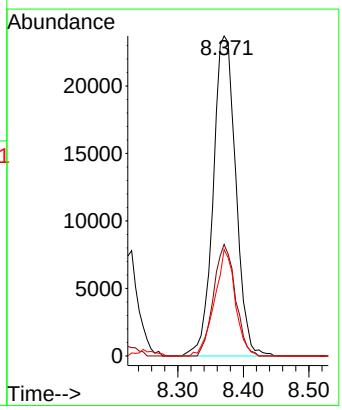
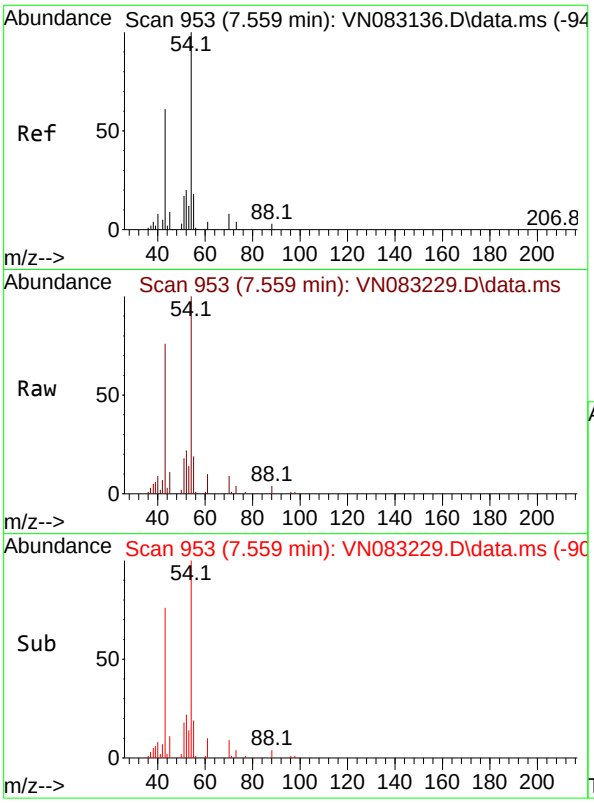



#36
1,1-Dichloropropene
Concen: 18.733 ug/l
RT: 8.371 min Scan# 1091
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 75 Resp: 56568

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.6 | 16.3 | 48.9 |
| 77 | 30.5 | 24.6 | 37.0 |






#37
Ethyl Acetate
Concen: 16.960 ug/l
RT: 7.559 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 43 Resp: 5734

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 10.9 | 9.3 | 13.9 |
| 70 | 10.8 | 7.0 | 10.6 |

**Instrument :**
MSVOA_N
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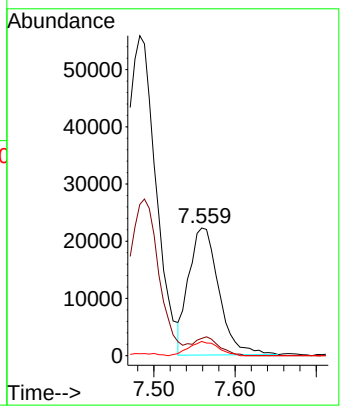
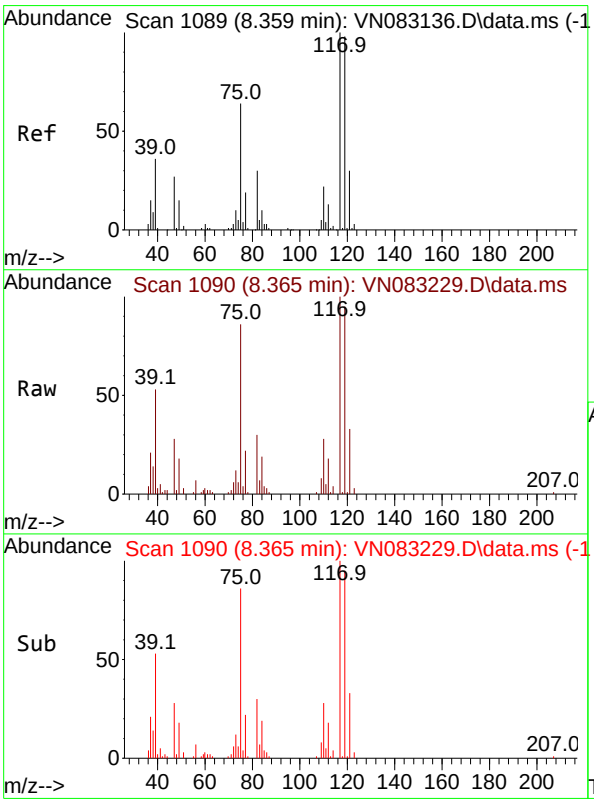
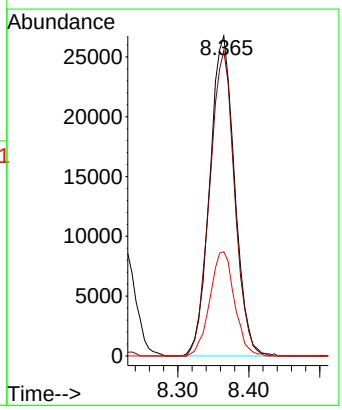


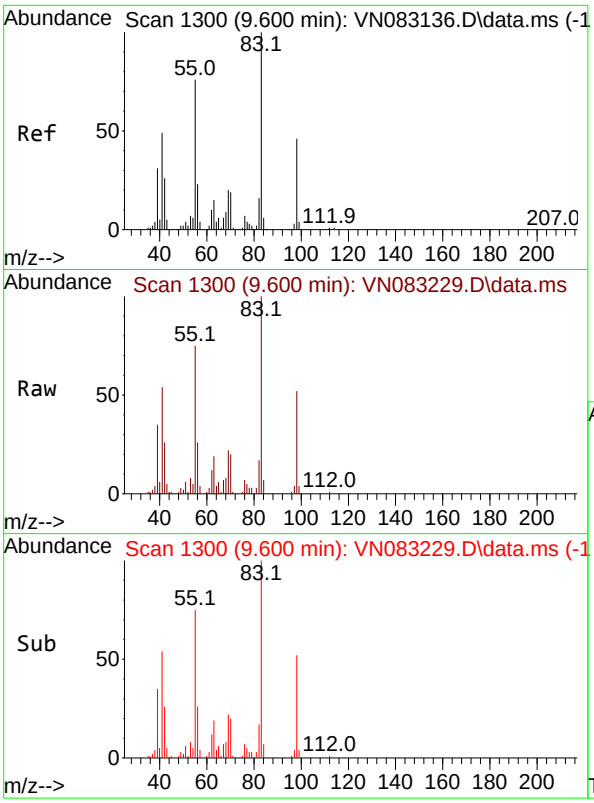




#38
Carbon Tetrachloride
Concen: 19.042 ug/l
RT: 8.365 min Scan# 1090
Delta R.T. 0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:117 Resp: 64763

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 95.4 | 74.9 | 112.3 |
| 121 | 32.6 | 24.3 | 36.5 |

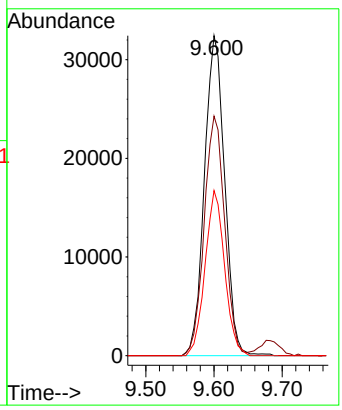





#39
Methylcyclohexane
Concen: 18.078 ug/l
RT: 9.600 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 83 Resp: 6705

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 74.9 | 66.4 | 99.6 |
| 98 | 51.6 | 40.7 | 61.1 |




**Instrument :**
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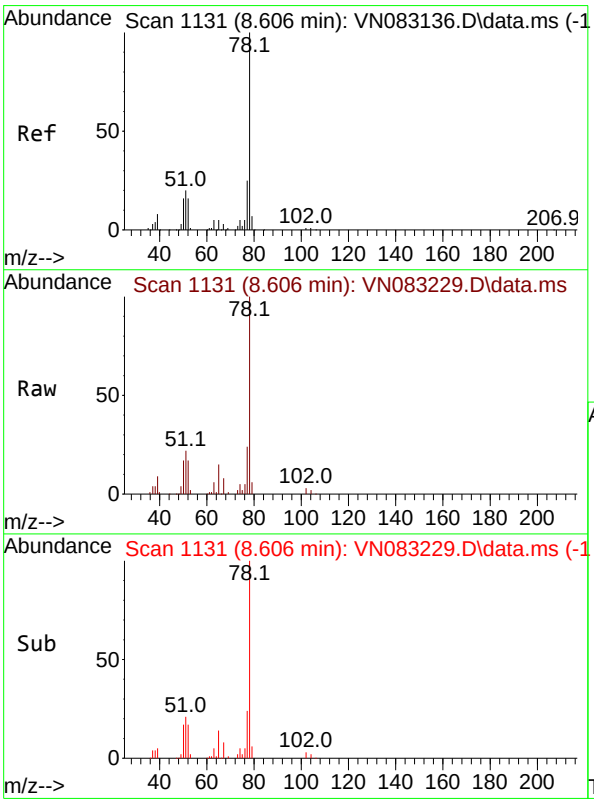
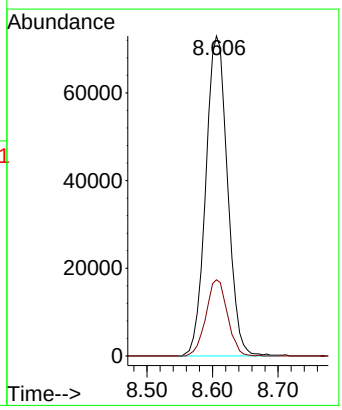
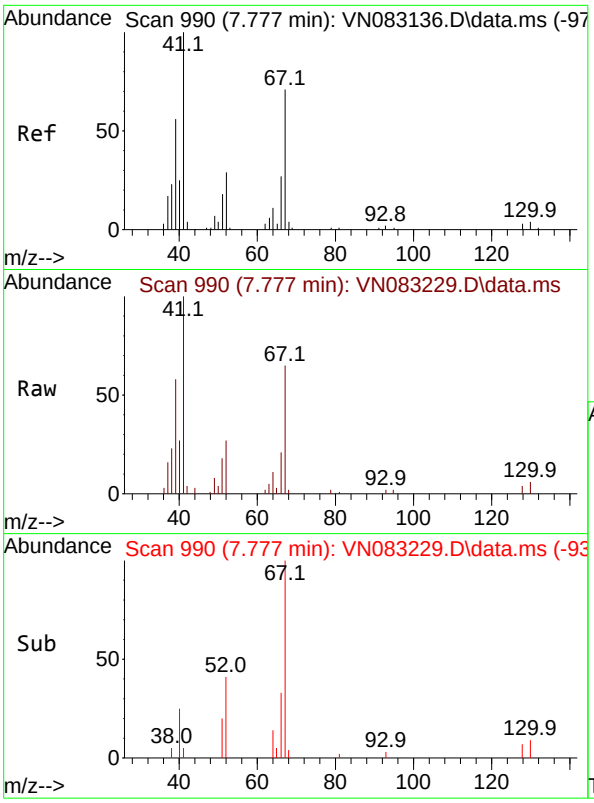



#40
Benzene
Concen: 18.707 ug/l
RT: 8.606 min Scan# 1131
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 78 Resp: 168282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.8 | 19.0 | 28.4 |

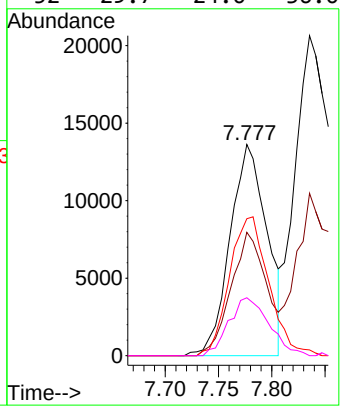





#41
Methacrylonitrile
Concen: 17.115 ug/l
RT: 7.777 min Scan# 9
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 41 Resp: 3290

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 55.8 | 45.5 | 68.3 |
| 67 | 69.5 | 50.5 | 75.7 |
| 52 | 29.7 | 24.0 | 36.0 |




**Instrument :**
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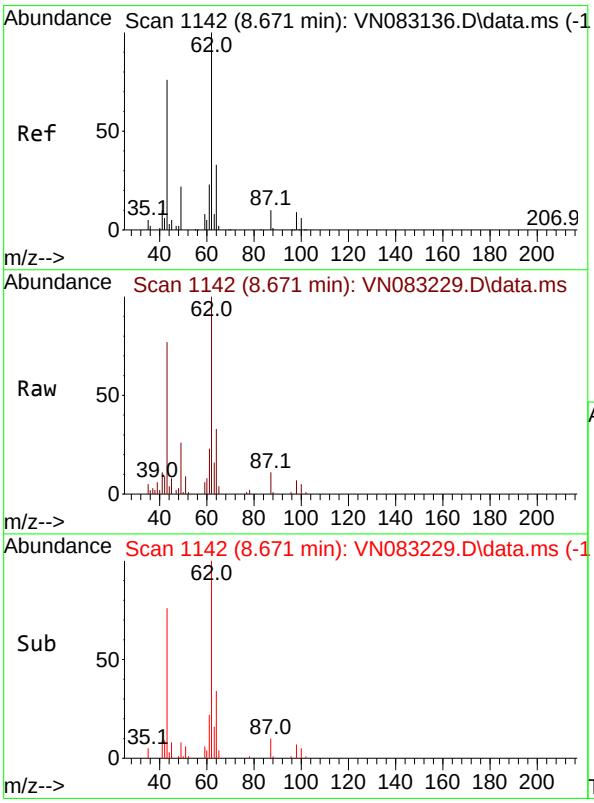
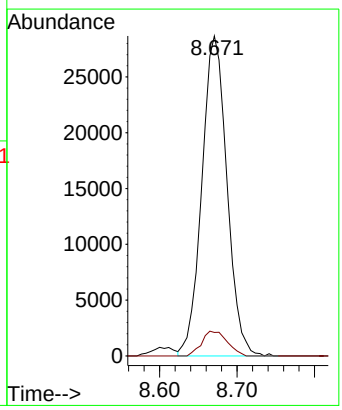
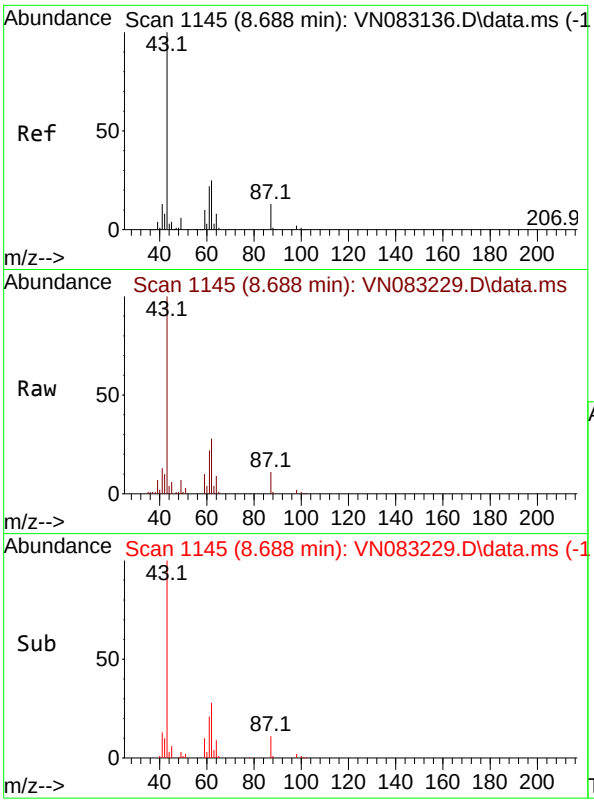



#42
1,2-Dichloroethane
Concen: 19.711 ug/l
RT: 8.671 min Scan# 1142
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 62 Resp: 64593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.9 | 0.0 | 15.8 |






#43
Isopropyl Acetate
Concen: 17.579 ug/l
RT: 8.688 min Scan# 1
Delta R.T. 0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 43 Resp: 11152

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 23.0 | 17.8 | 26.6 |
| 87 | 12.1 | 8.2 | 12.2 |

**Instrument :**
MSVOA_N
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VN0812WBSD01

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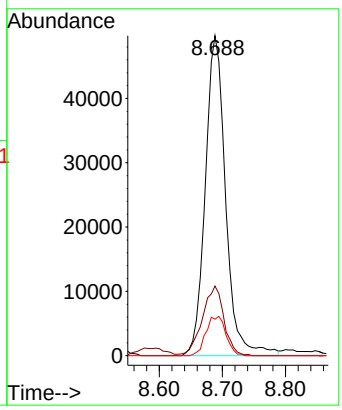
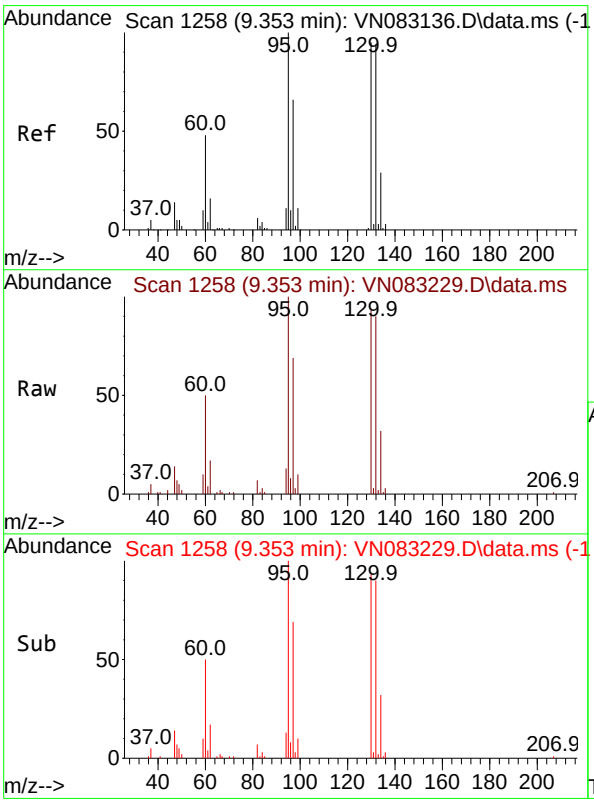
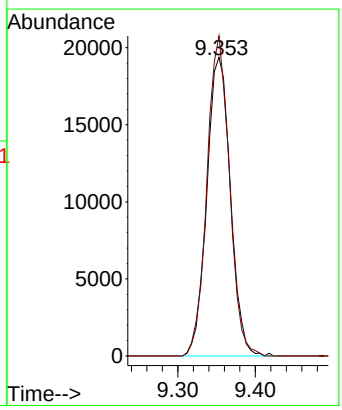


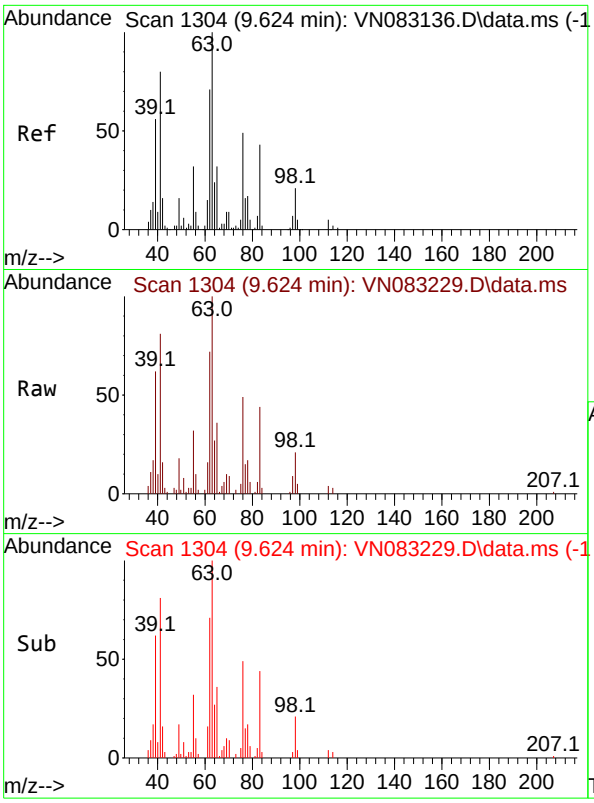




#44
Trichloroethene
Concen: 19.161 ug/l
RT: 9.353 min Scan# 1258
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:130 Resp: 41028

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 107.1 | 0.0 | 197.8 |






#45
1,2-Dichloropropane
Concen: 19.385 ug/l
RT: 9.624 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 63 Resp: 4139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 36.1 | 24.4 | 36.6 |

**Instrument :**
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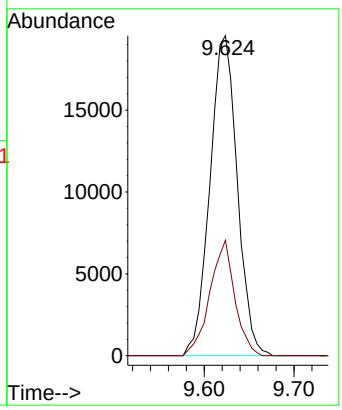
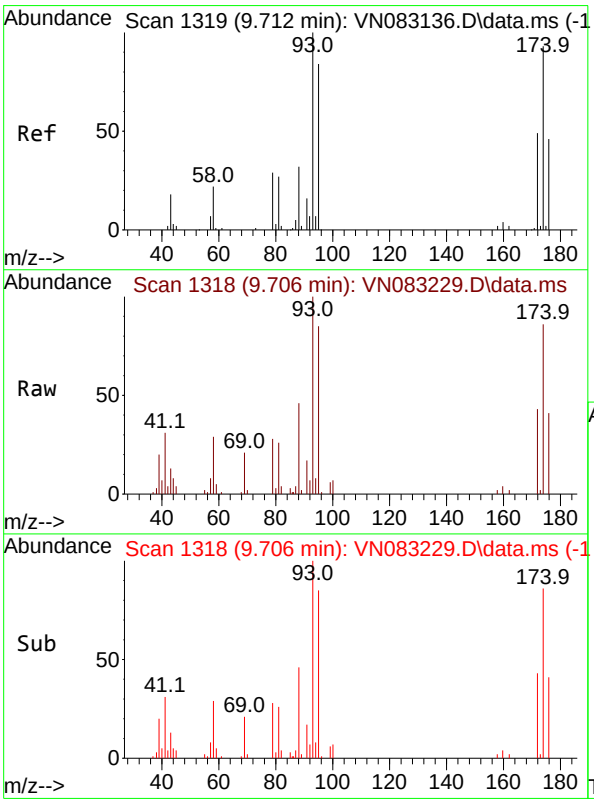
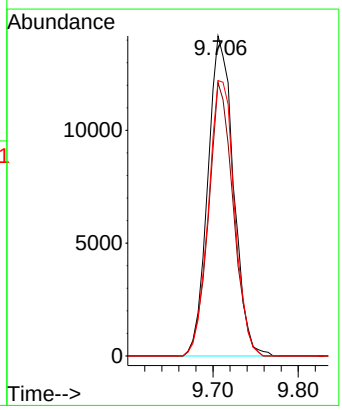


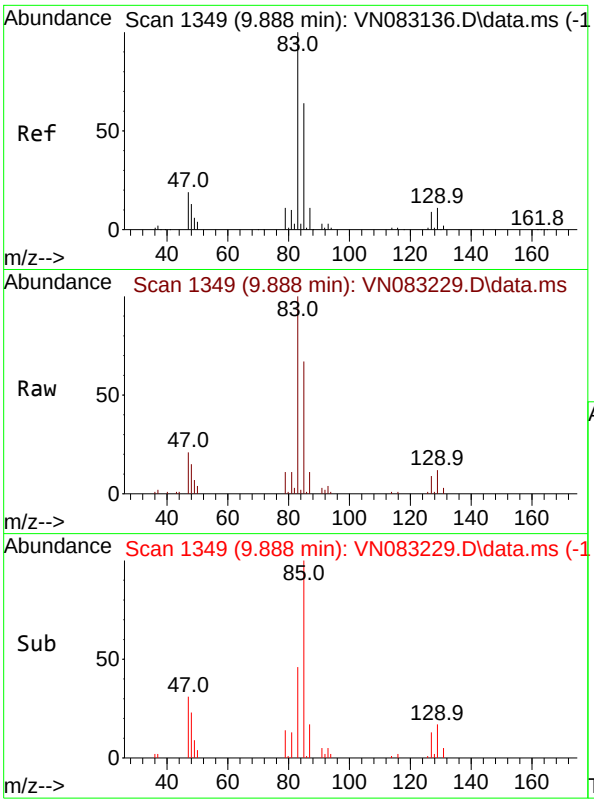




#46
Dibromomethane
Concen: 19.387 ug/l
RT: 9.706 min Scan# 1318
Delta R.T. -0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 93 Resp: 29632

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.0 | 65.8 | 98.6 |
| 174 | 87.3 | 71.7 | 107.5 |

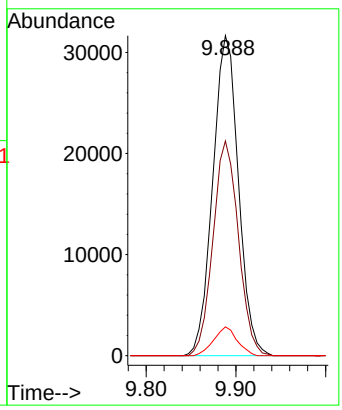





#47
Bromodichloromethane
Concen: 18.300 ug/l
RT: 9.888 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 83 Resp: 6280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 67.1 | 51.1 | 76.7 |
| 127 | 9.0 | 7.2 | 10.8 |




**Instrument :**
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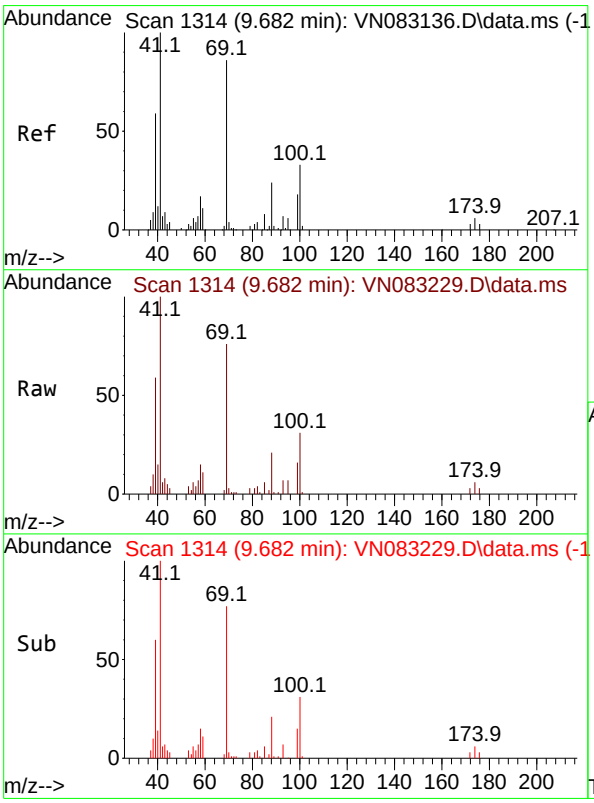
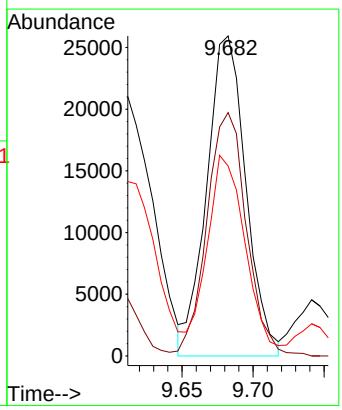
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

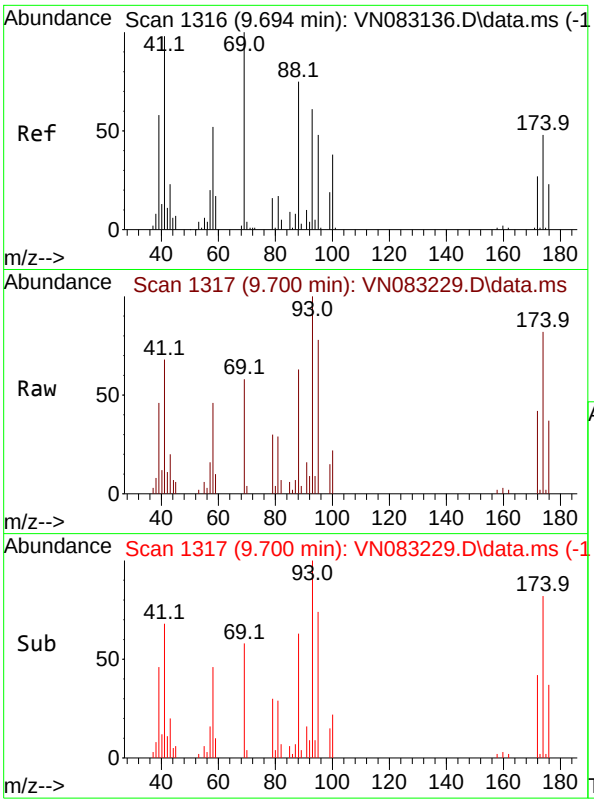



#48
Methyl methacrylate
Concen: 17.790 ug/l
RT: 9.682 min Scan# 1314
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 41 Resp: 49729

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 77.1 | 56.3 | 84.5 |
| 39 | 61.0 | 50.3 | 75.5 |






#49
1,4-Dioxane
Concen: 336.746 ug/l
RT: 9.700 min Scan# 1
Delta R.T. 0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 88 Resp: 1698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 32.5 | 27.8 | 41.8 |
| 58 | 71.9 | 59.4 | 89.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
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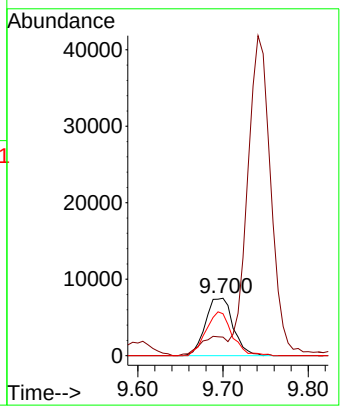
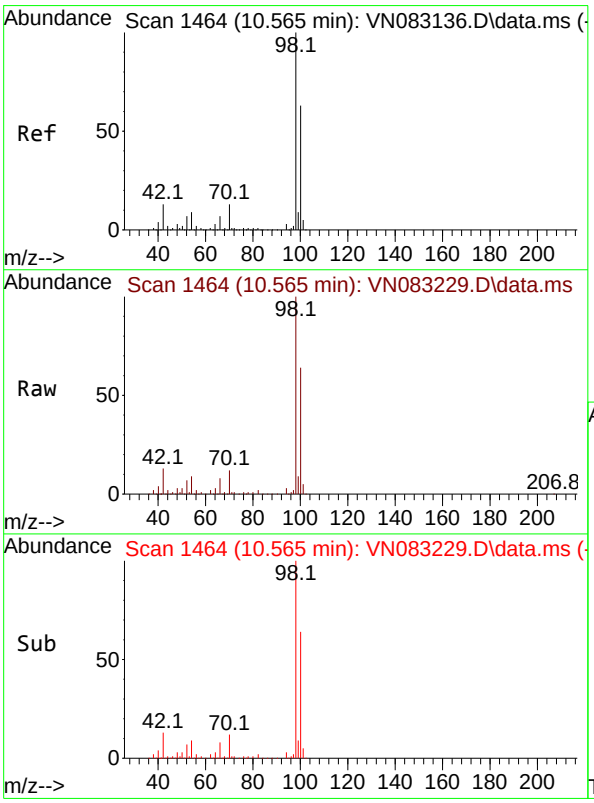
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

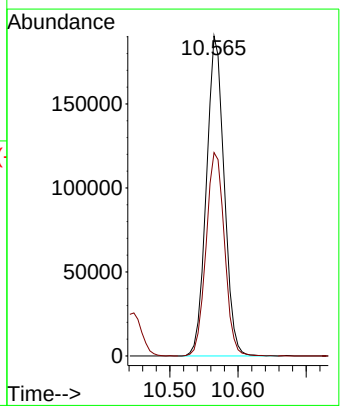


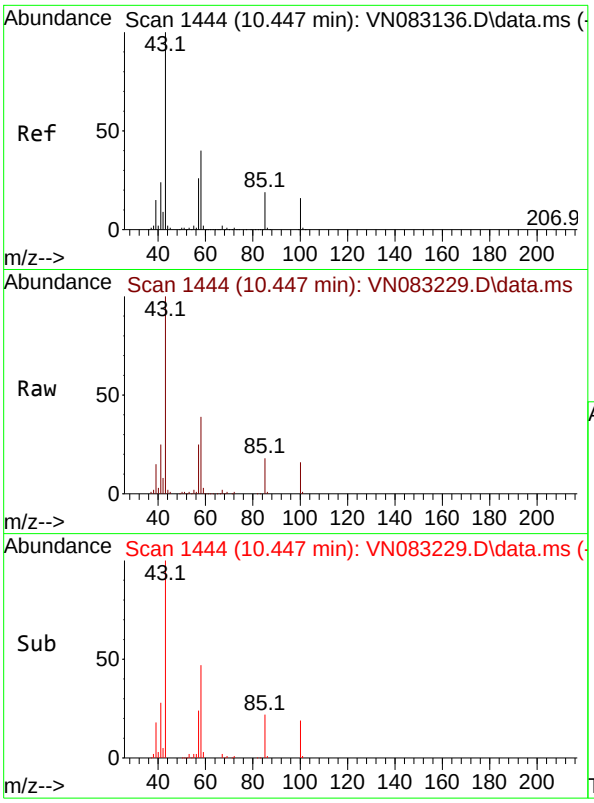




#50
Toluene-d8
Concen: 46.374 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 98 Resp: 345314

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 51.5 | 77.3 |






#51
4-Methyl-2-Pentanone
Concen: 91.498 ug/l
RT: 10.447 min Scan# 14
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 43 Resp: 29254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 39.5 | 28.2 | 42.4 |

**Instrument :**
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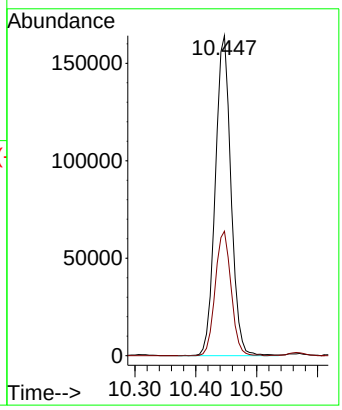
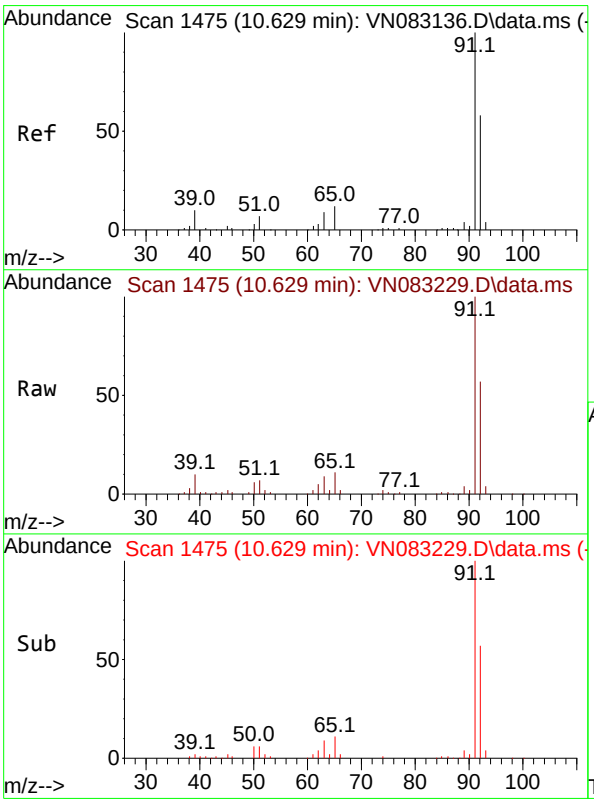
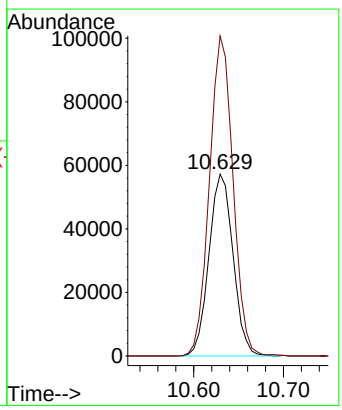


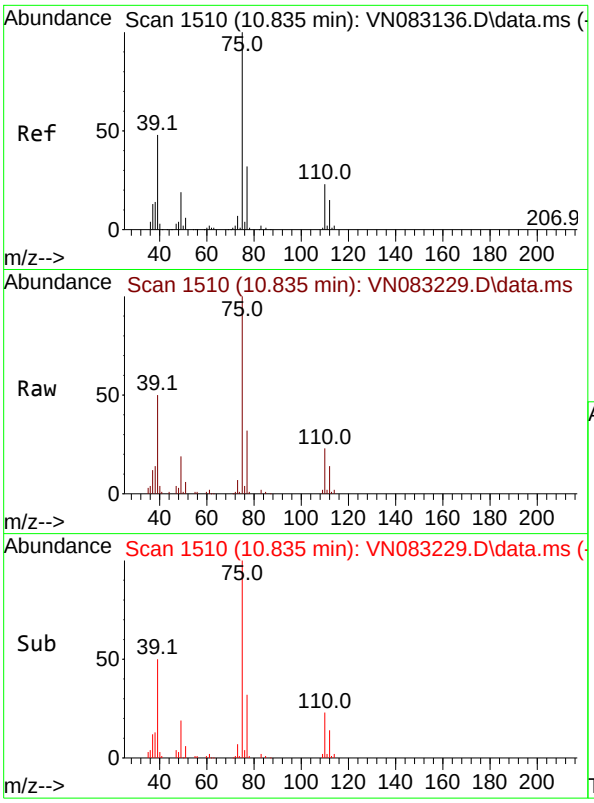




#52
Toluene
Concen: 18.783 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 92 Resp: 106758

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.5 | 139.4 | 209.0 |

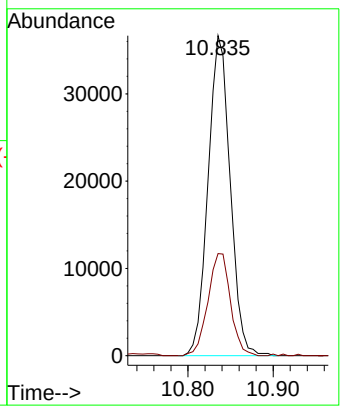





#53
t-1,3-Dichloropropene
Concen: 18.732 ug/l
RT: 10.835 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 75 Resp: 6603

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 25.7 | 38.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
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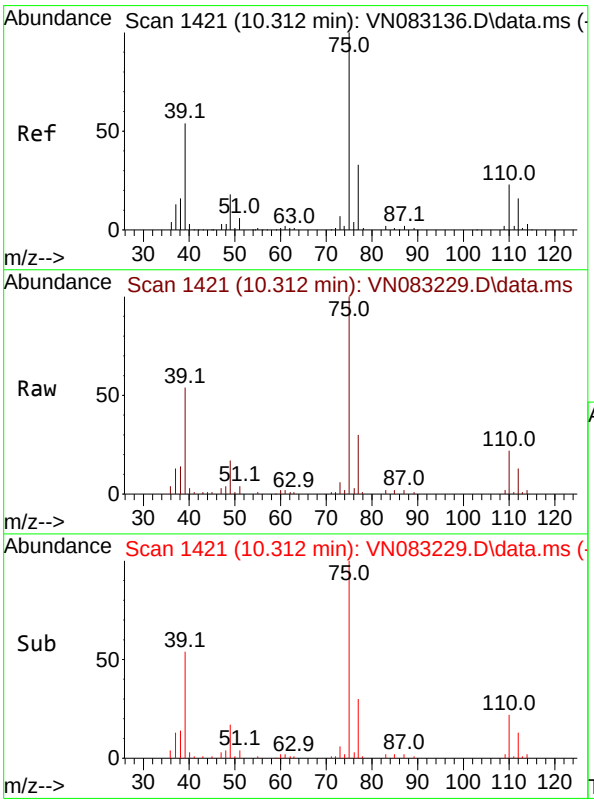
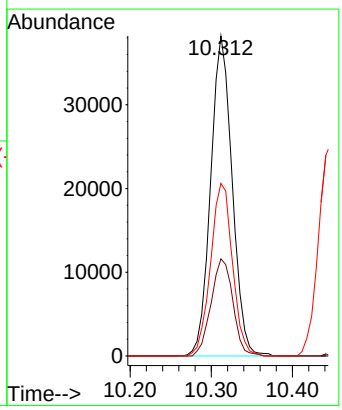
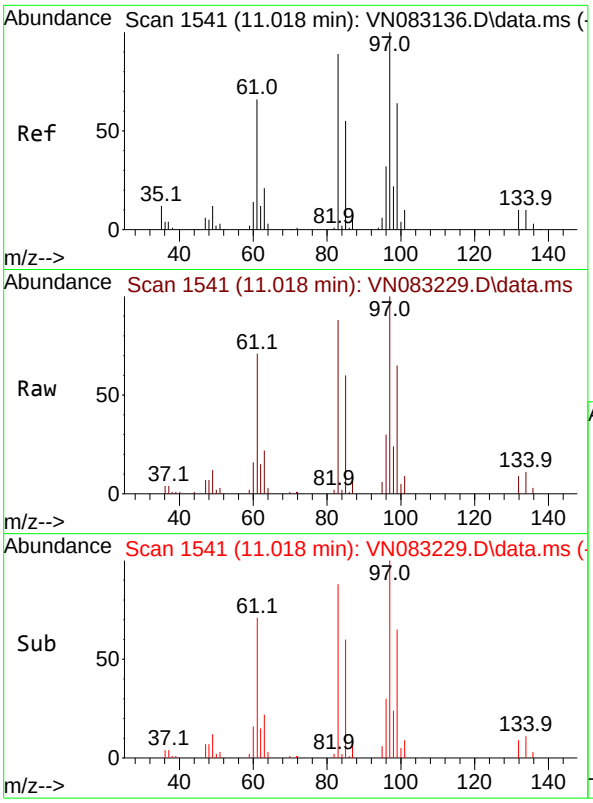



#54
cis-1,3-Dichloropropene
Concen: 18.781 ug/l
RT: 10.312 min Scan# 1421
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 75 Resp: 70422

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.4 | 24.3 | 36.5 |
| 39 | 53.9 | 50.5 | 75.7 |

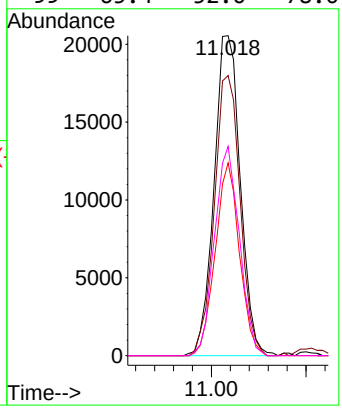





#55
1,1,2-Trichloroethane
Concen: 19.437 ug/l
RT: 11.018 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 97 Resp: 3959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.5 | 71.4 | 107.0 |
| 85 | 60.2 | 45.8 | 68.6 |
| 99 | 65.4 | 52.0 | 78.0 |




**Instrument :**
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VN0812WBSD01

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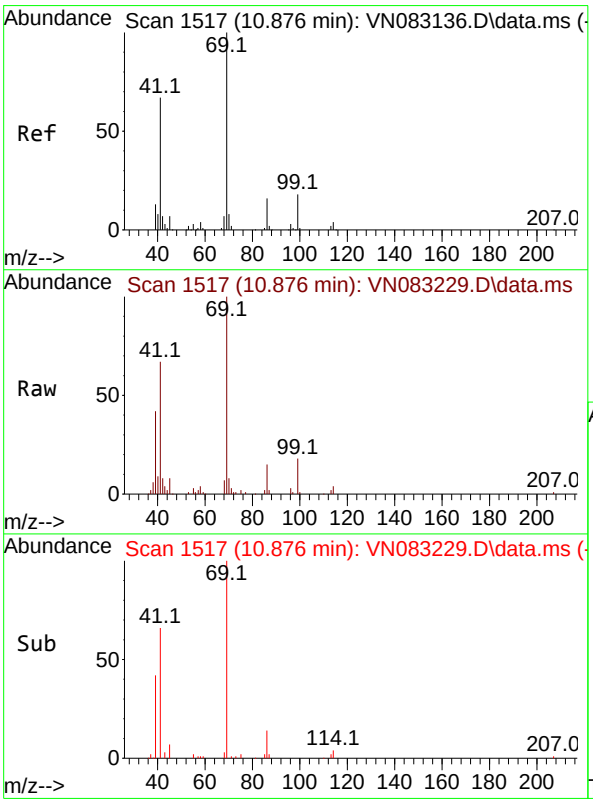
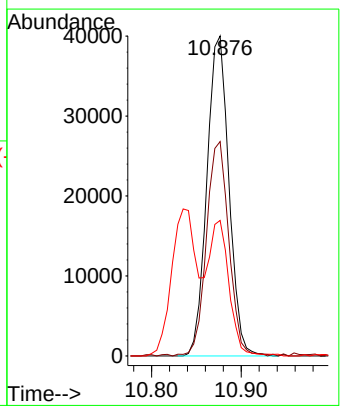
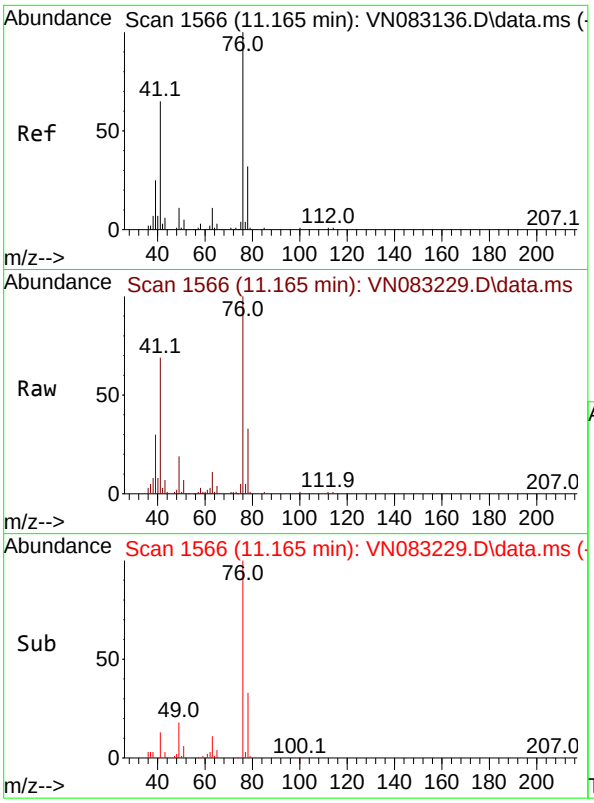



#56
Ethyl methacrylate
Concen: 17.773 ug/l
RT: 10.876 min Scan# 1517
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 69 Resp: 68248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 68.3 | 63.4 | 95.2 |
| 39 | 37.5 | 37.4 | 56.0 |






#57
1,3-Dichloropropane
Concen: 18.689 ug/l
RT: 11.165 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 76 Resp: 6785

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.9 | 25.6 | 38.4 |

**Instrument :**
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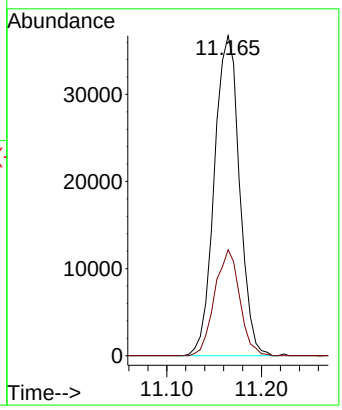
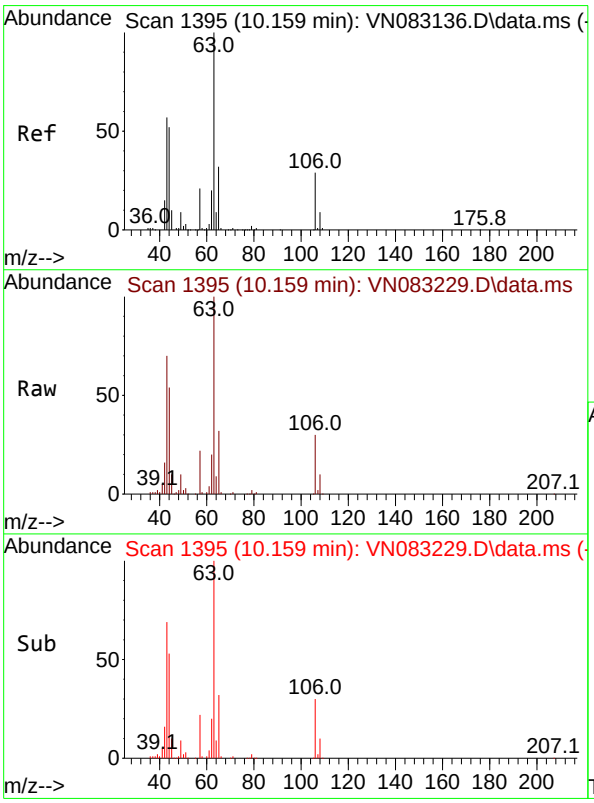
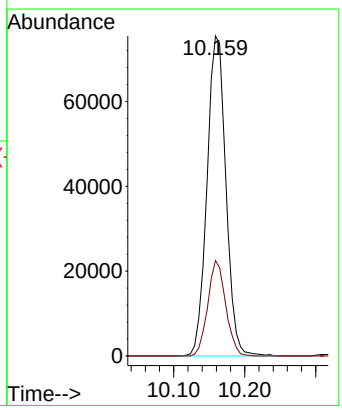


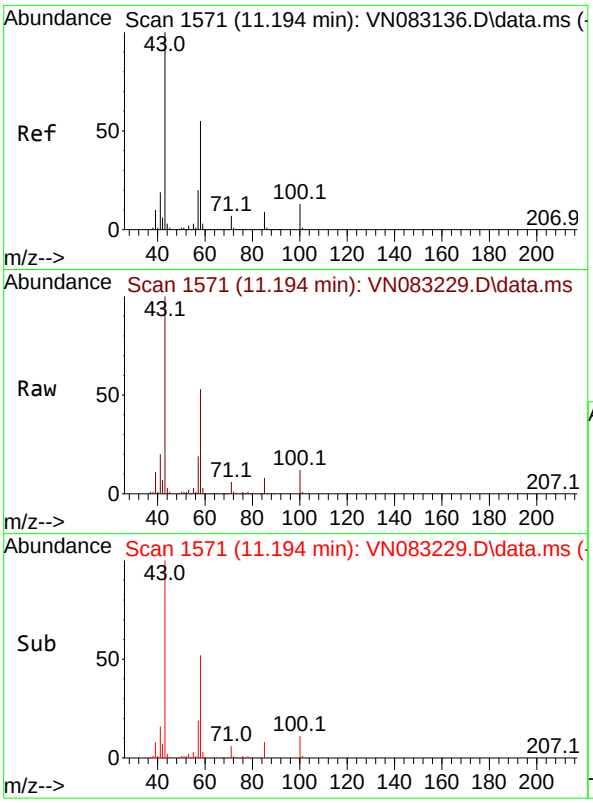




#58
2-Chloroethyl Vinyl ether
Concen: 85.993 ug/l
RT: 10.159 min Scan# 1395
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 63 Resp: 139581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.2 | 21.4 | 32.0 |






#59
2-Hexanone
Concen: 90.989 ug/l
RT: 11.194 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 43 Resp: 22506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 53.5 | 24.6 | 73.8 |

**Instrument :**
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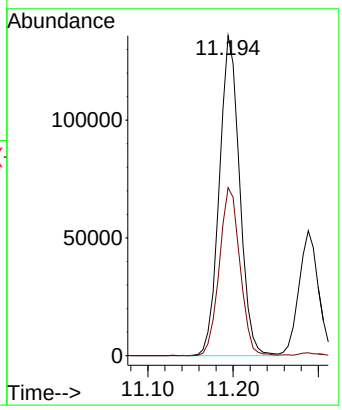
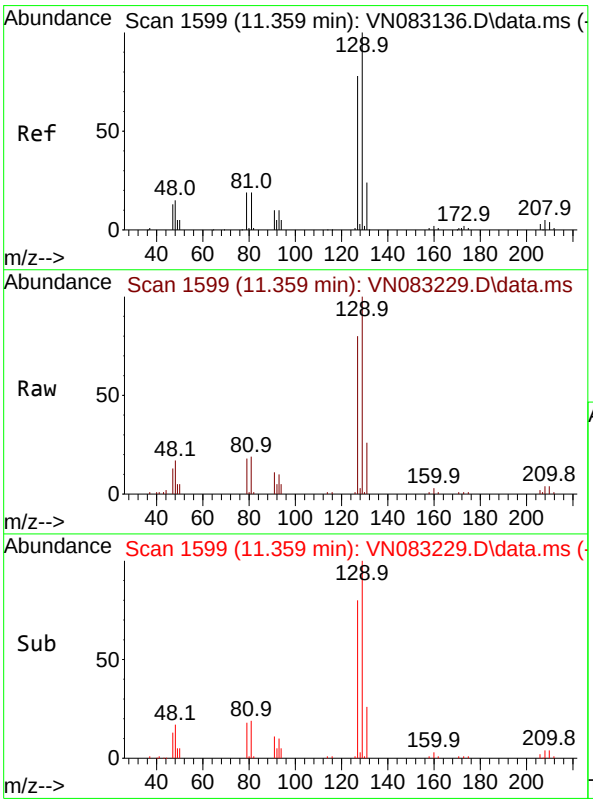
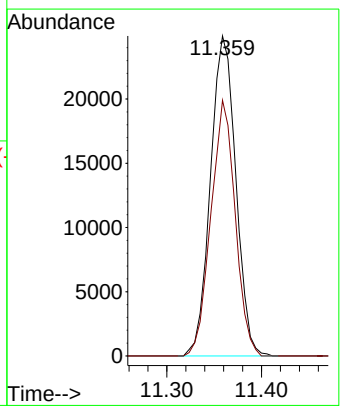


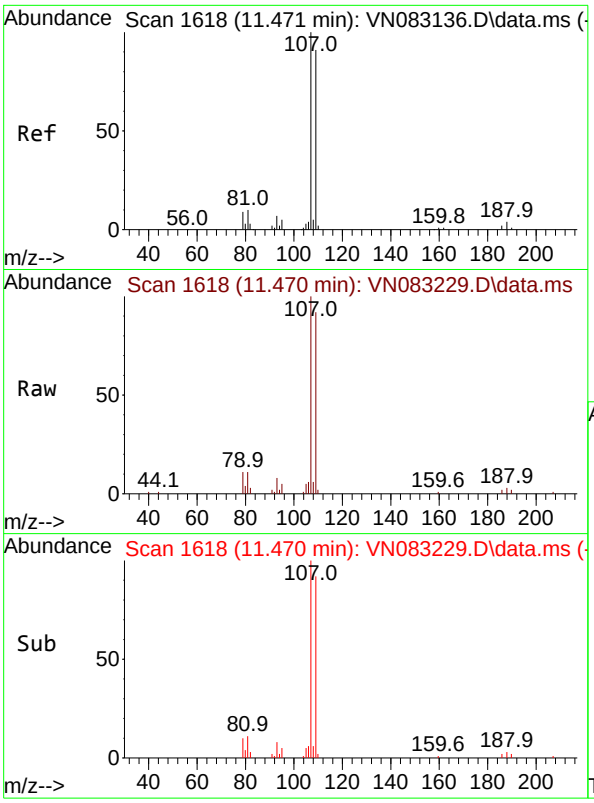




#60
Dibromochloromethane
Concen: 18.810 ug/l
RT: 11.359 min Scan# 1599
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:129 Resp: 46323

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.6 | 39.2 | 117.6 |






#61
1,2-Dibromoethane
Concen: 18.313 ug/l
RT: 11.470 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:107 Resp: 3918

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.0 | 73.7 | 110.5 |

**Instrument :**
MSVOA_N
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VN0812WBSD01

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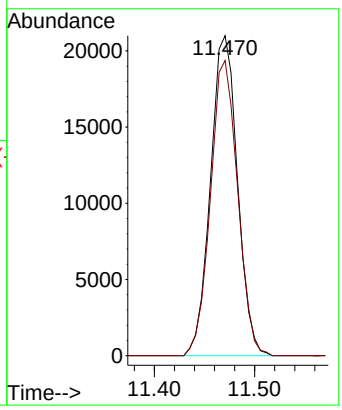
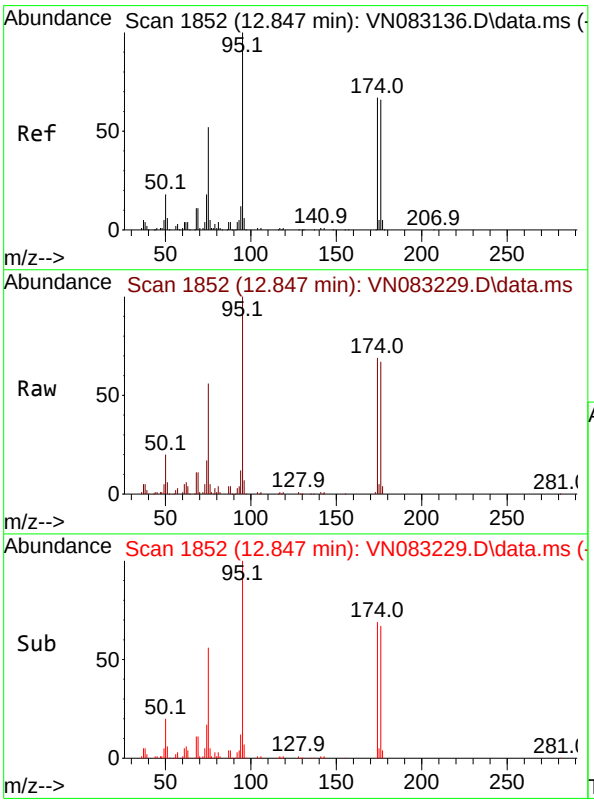
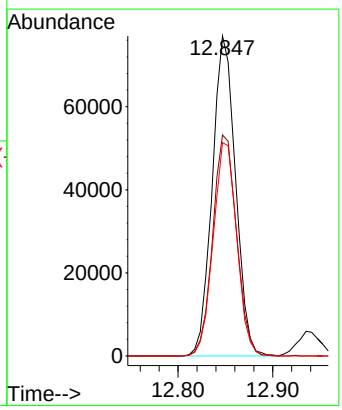


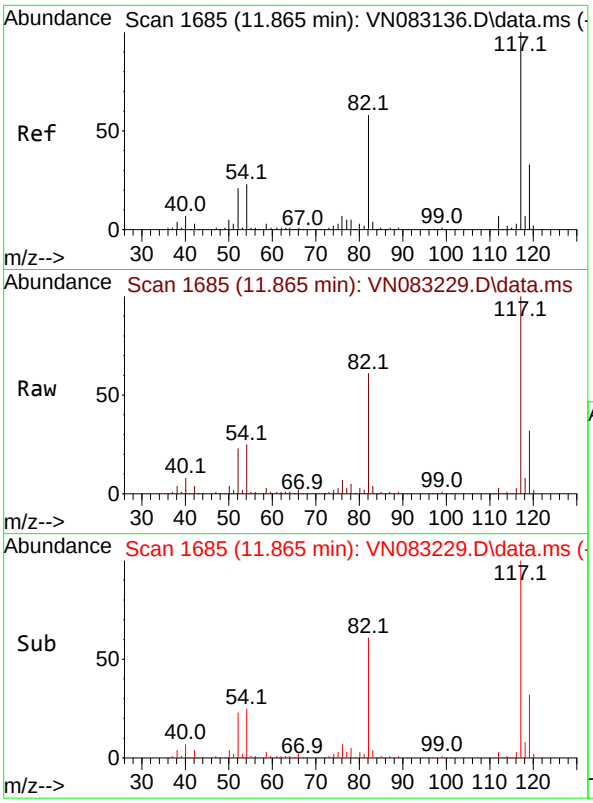




#62
4-Bromofluorobenzene
Concen: 45.324 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 95 Resp: 131576

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 70.9 | 0.0 | 159.2 |
| 176 | 67.5 | 0.0 | 147.6 |

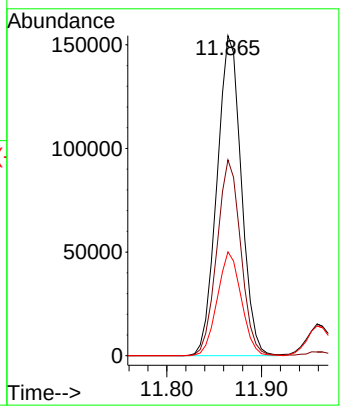





#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.865 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:117 Resp: 27566

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.2 | 47.5 | 71.3 |
| 119 | 32.5 | 25.6 | 38.4 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
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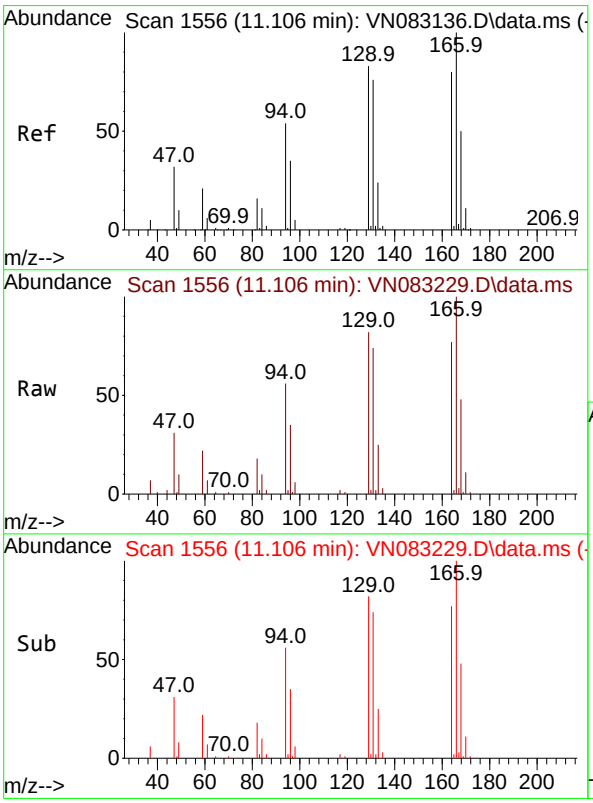
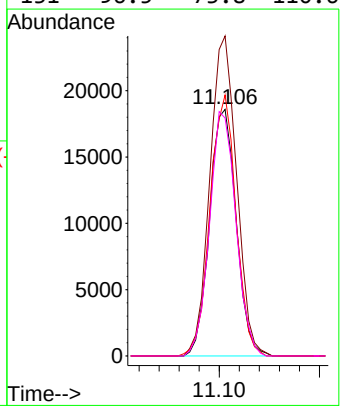
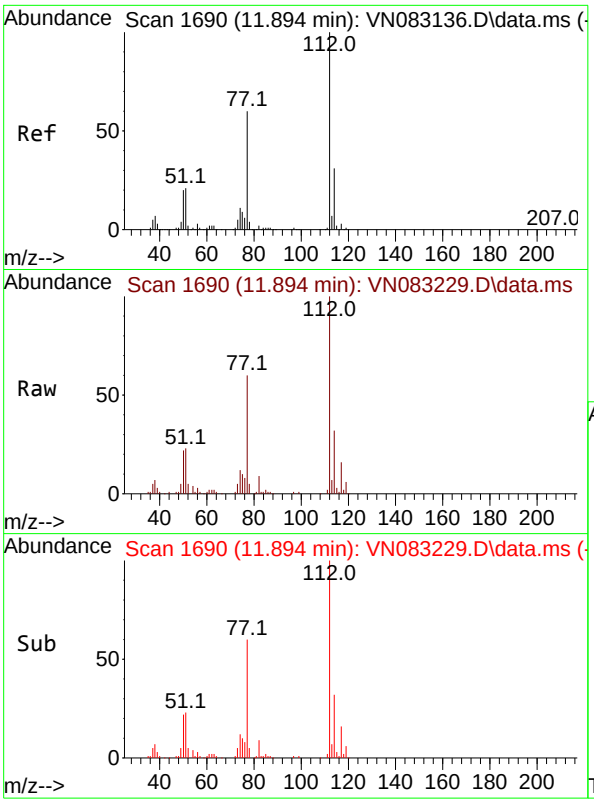



#64
Tetrachloroethene
Concen: 18.732 ug/l
RT: 11.106 min Scan# 1556
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:164 Resp: 34197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 129.8 | 101.4 | 152.0 |
| 129 | 105.8 | 75.7 | 113.5 |
| 131 | 96.5 | 73.8 | 110.6 |

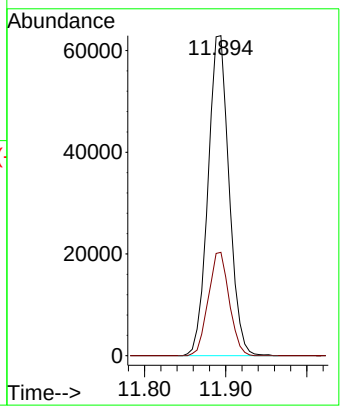





#65
Chlorobenzene
Concen: 18.612 ug/l
RT: 11.894 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:112 Resp: 11337

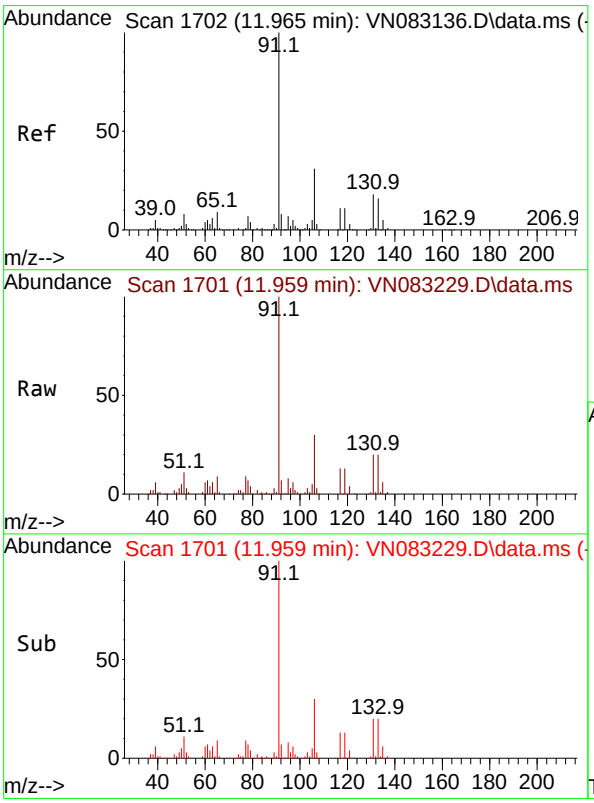
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.3 | 26.2 | 39.2 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

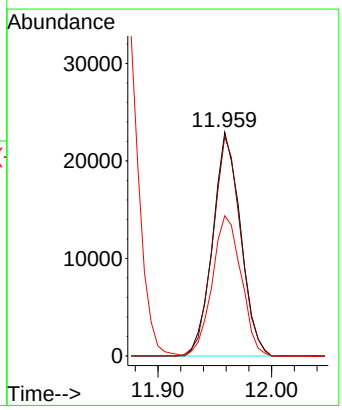
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

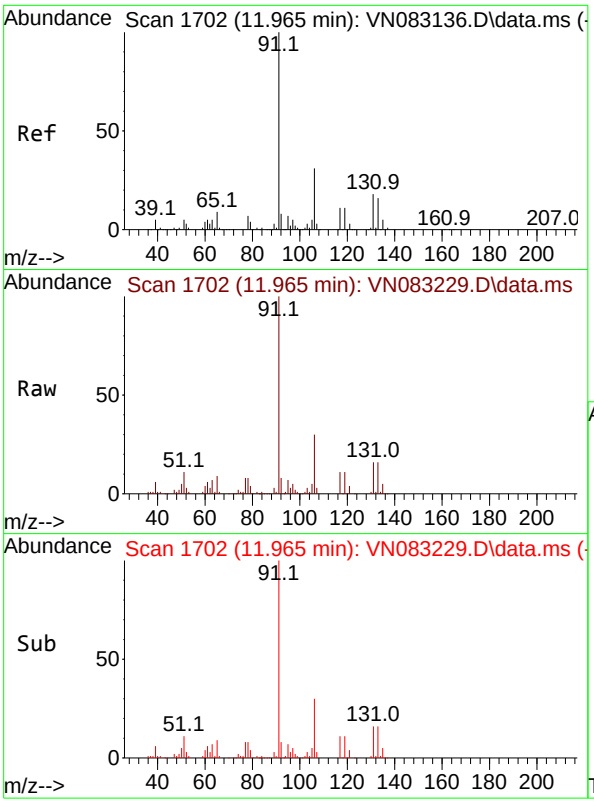



#66
1,1,1,2-Tetrachloroethane
Concen: 18.200 ug/l
RT: 11.959 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:131 Resp: 39102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 98.0 | 47.3 | 142.0 |
| 119 | 65.0 | 32.5 | 97.4 |






#67
Ethyl Benzene
Concen: 18.610 ug/l
RT: 11.965 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 91 Resp: 20796

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.0 | 24.0 | 36.0 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
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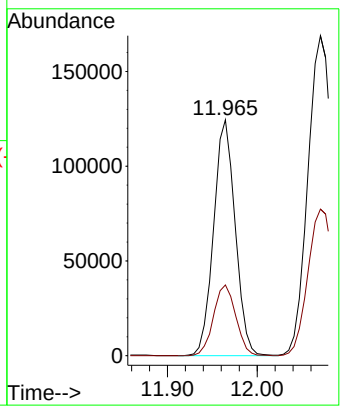
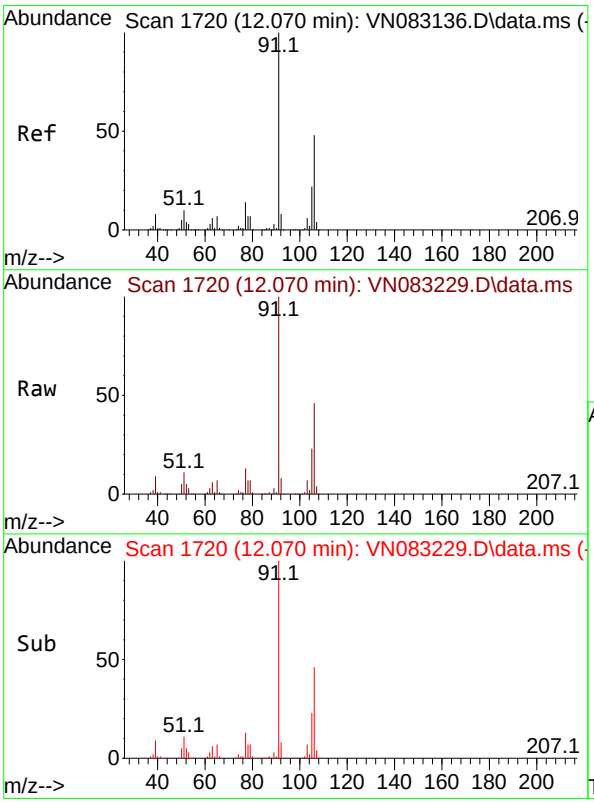
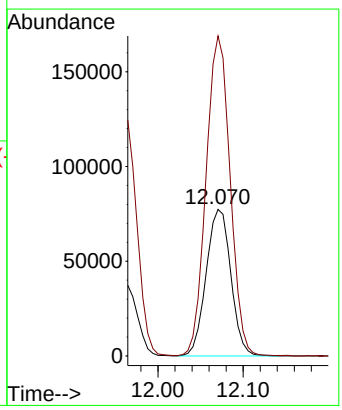


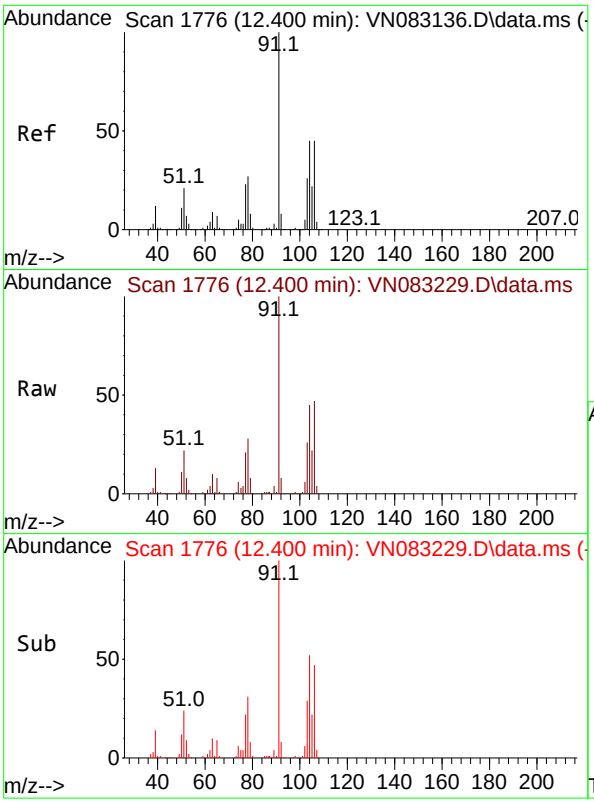




#68
m/p-Xylenes
Concen: 37.275 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:106 Resp: 156037

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 213.1 | 166.1 | 249.1 |






#69
o-Xylene
Concen: 18.672 ug/l
RT: 12.400 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:106 Resp: 7709

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 221.5 | 111.3 | 333.9 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
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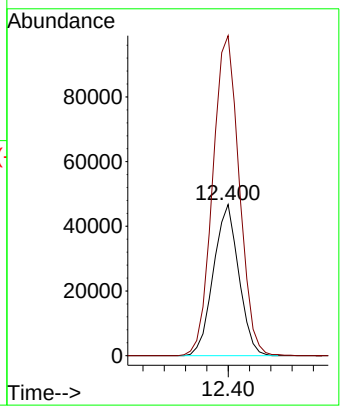
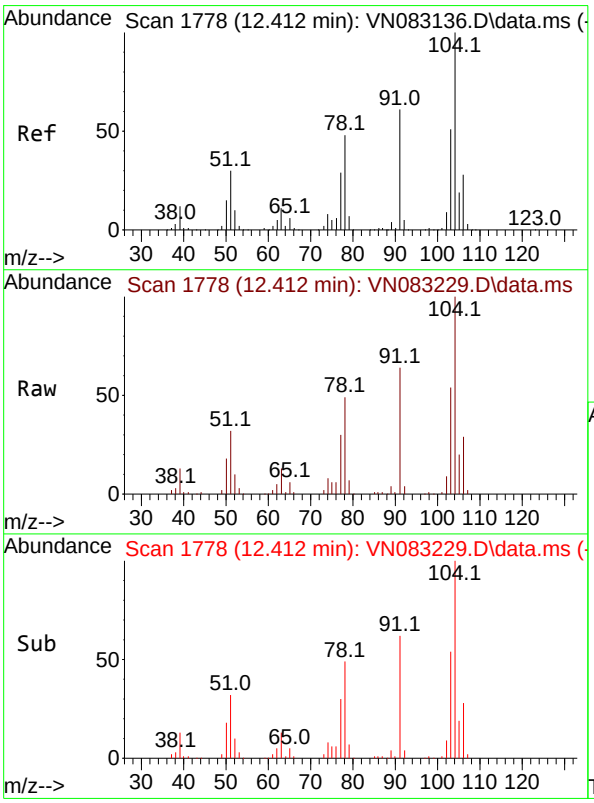
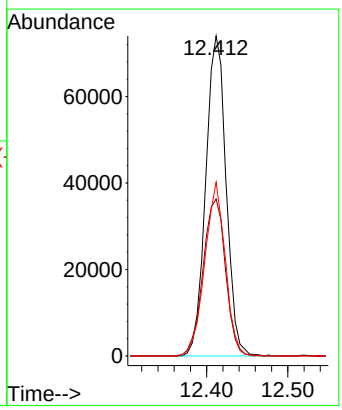


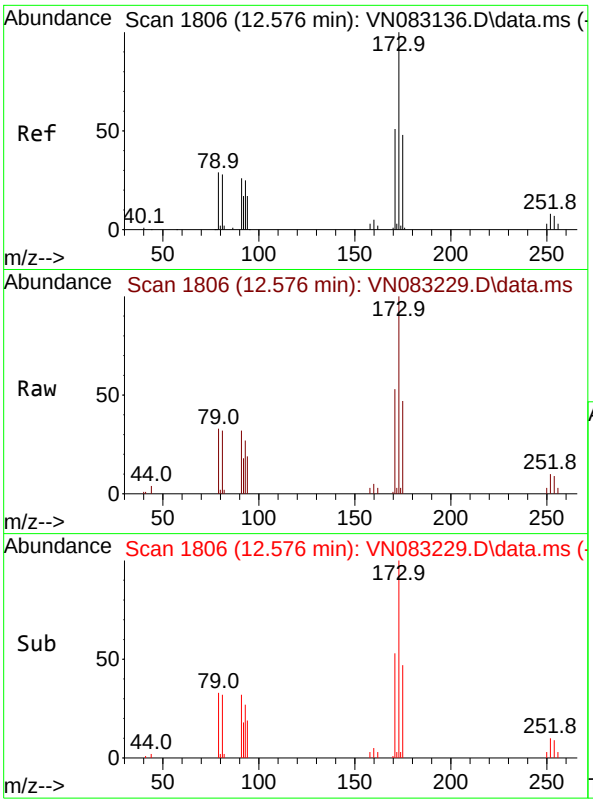




#70
Styrene
Concen: 18.577 ug/l
RT: 12.412 min Scan# 1778
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:104 Resp: 128820

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 53.9 | 41.6 | 62.4 |
| 103 | 54.8 | 44.0 | 66.0 |

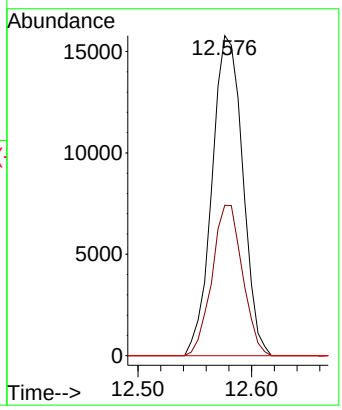





#71
Bromoform
Concen: 18.204 ug/l
RT: 12.576 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:173 Resp: 2962

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 46.6 | 24.0 | 72.0 |
| 254 | 0.0 | 0.0 | 0.0 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
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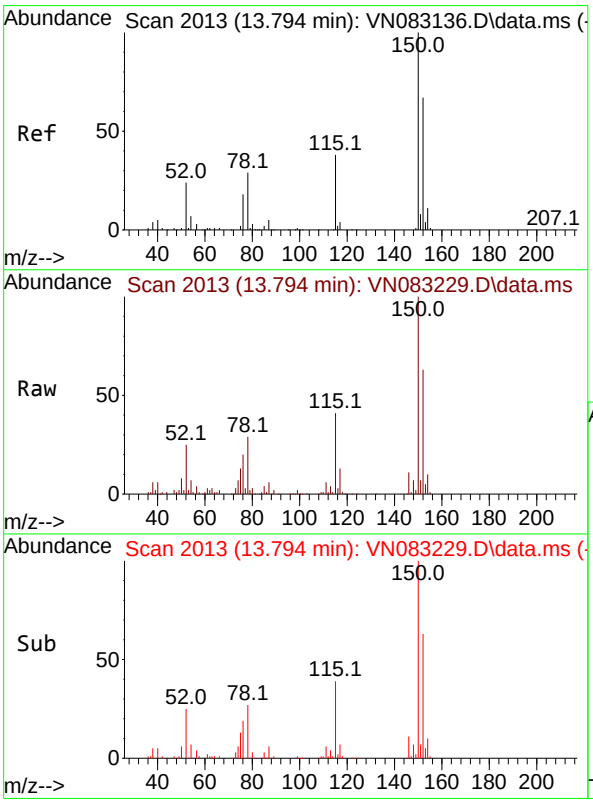
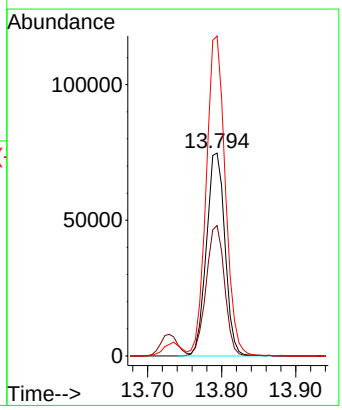
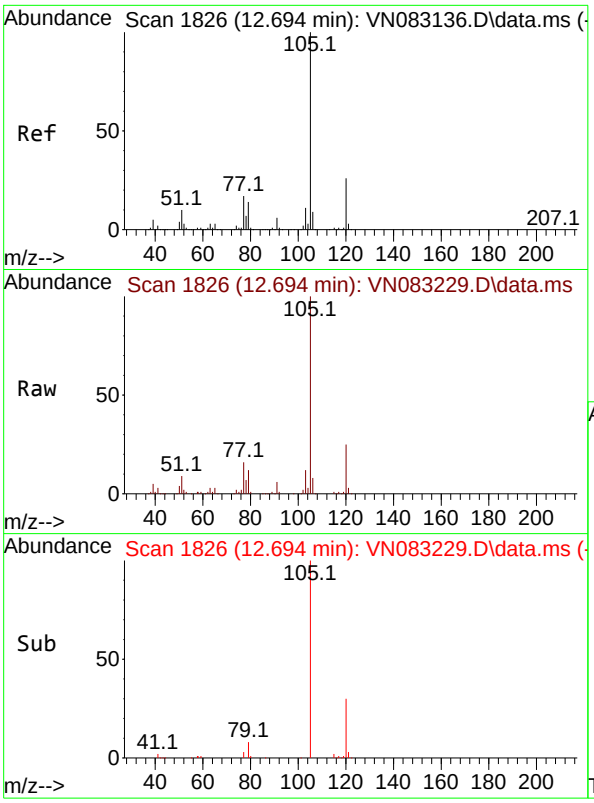



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.794 min Scan# 2013
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:152 Resp: 129761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.3 | 30.6 | 91.6 |
| 150 | 162.3 | 0.0 | 348.6 |






#73
Isopropylbenzene
Concen: 18.440 ug/l
RT: 12.694 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:105 Resp: 20013

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.5 | 12.9 | 38.6 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

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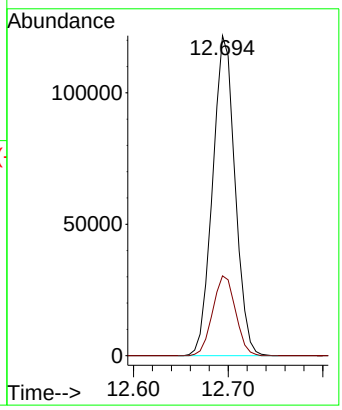
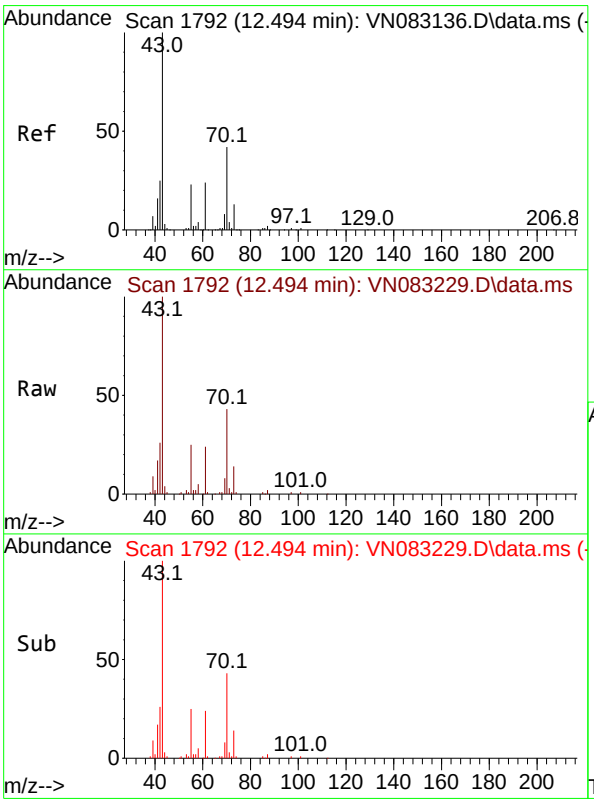
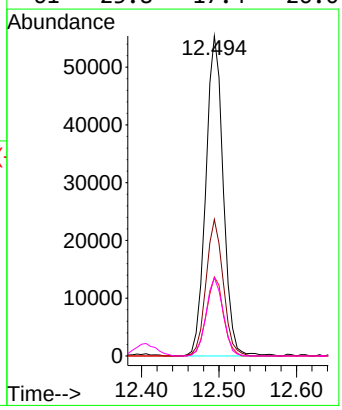


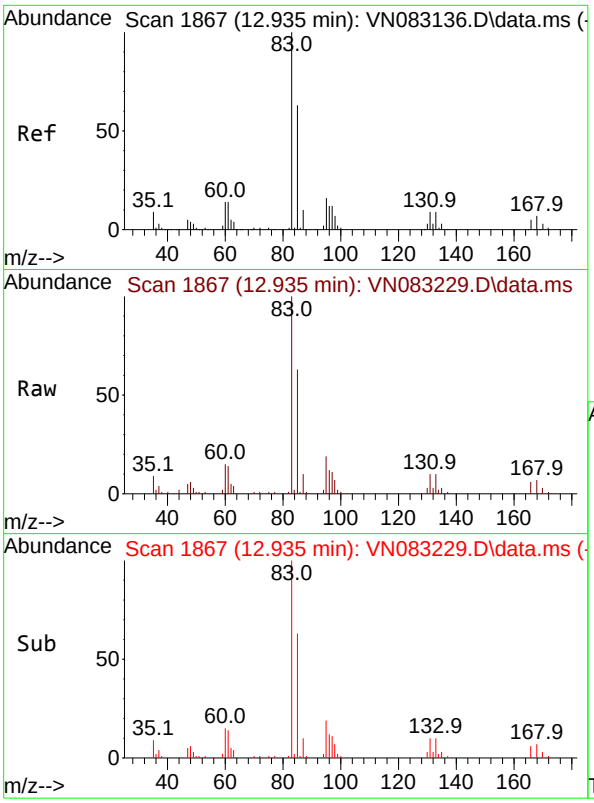




#74
N-amyl acetate
Concen: 16.317 ug/l
RT: 12.494 min Scan# 1792
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 43 Resp: 86625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 42.0 | 29.8 | 44.6 |
| 55 | 24.1 | 18.7 | 28.1 |
| 61 | 23.8 | 17.4 | 26.0 |






#75
1,1,2,2-Tetrachloroethane
Concen: 18.091 ug/l
RT: 12.935 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 83 Resp: 5553

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.3 | 5.0 | 14.9 |
| 85 | 61.5 | 31.9 | 95.7 |

**Instrument :**
MSVOA_N
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VN0812WBSD01

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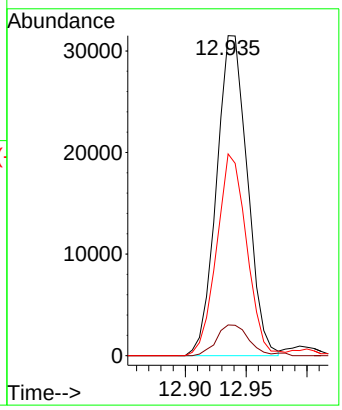
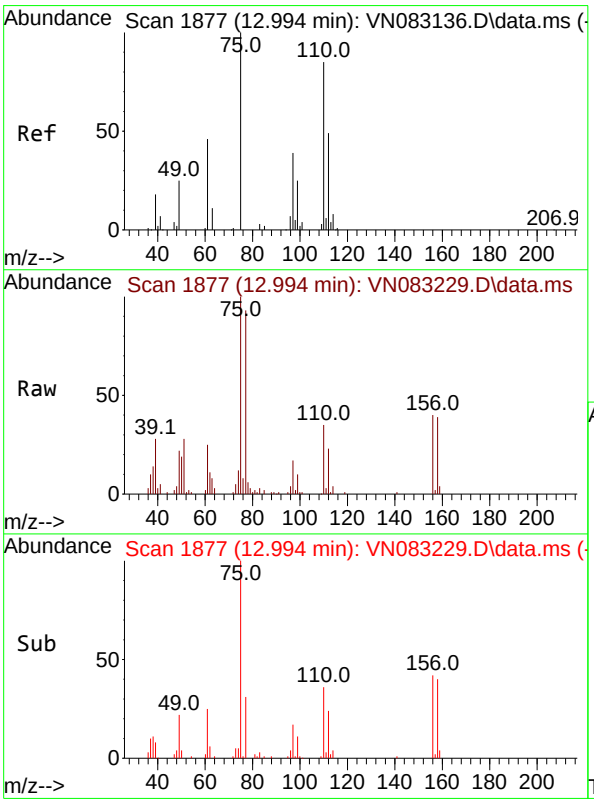
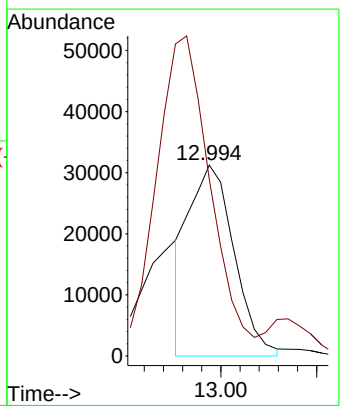


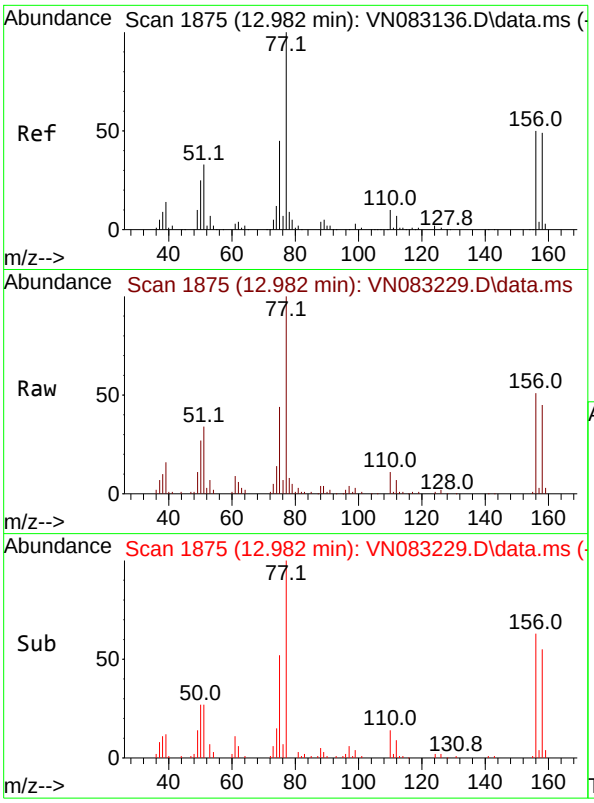




#76
1,2,3-Trichloropropane
Concen: 18.118 ug/l m
RT: 12.994 min Scan# 1877
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 75 Resp: 51599

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 200.0 | 110.9 | 332.6 |

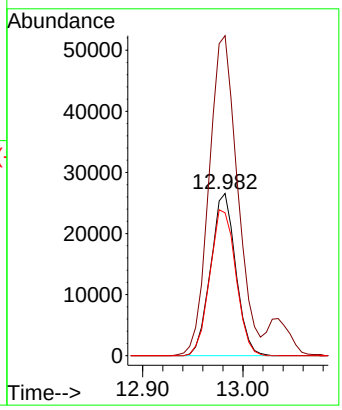





#77
Bromobenzene
Concen: 19.068 ug/l
RT: 12.982 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:156 Resp: 4597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 224.5 | 111.3 | 333.8 |
| 158 | 93.4 | 48.3 | 144.9 |




**Instrument :**
MSVOA_N
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VN0812WBSD01

**Manual Integrations**
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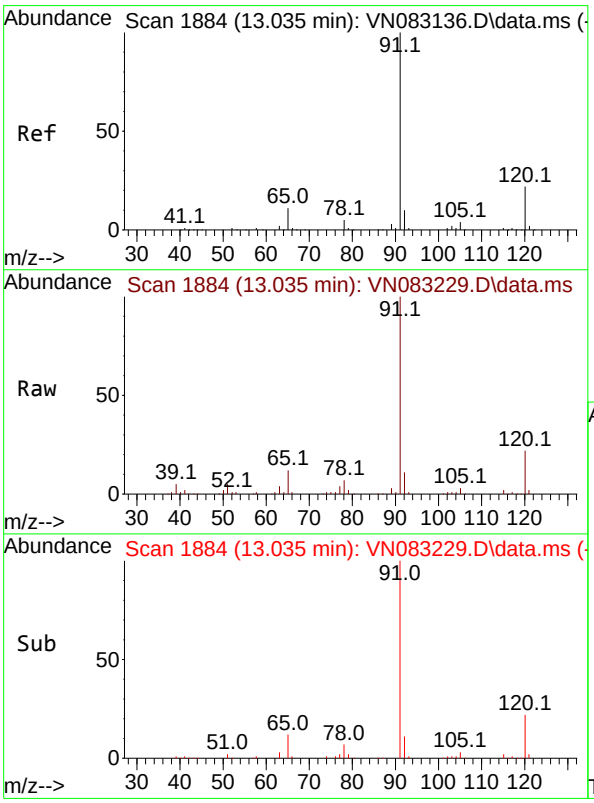
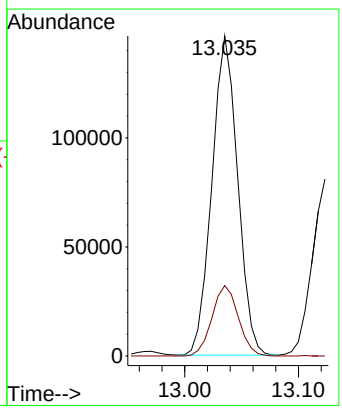
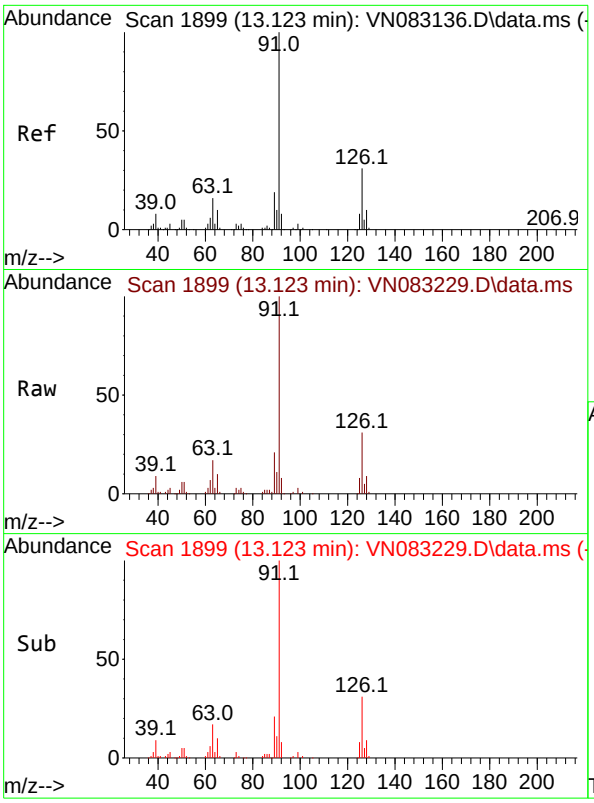



#78
n-propylbenzene
Concen: 18.436 ug/l
RT: 13.035 min Scan# 1884
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 91 Resp: 230409

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.5 | 10.9 | 32.9 |

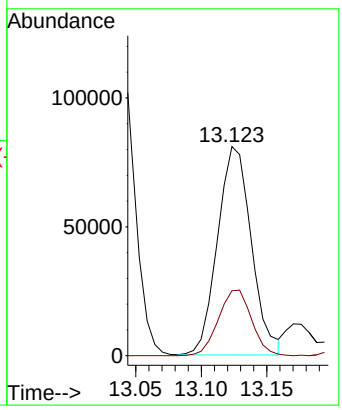





#79
2-Chlorotoluene
Concen: 18.328 ug/l
RT: 13.123 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 91 Resp: 14521

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.8 | 16.2 | 48.6 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

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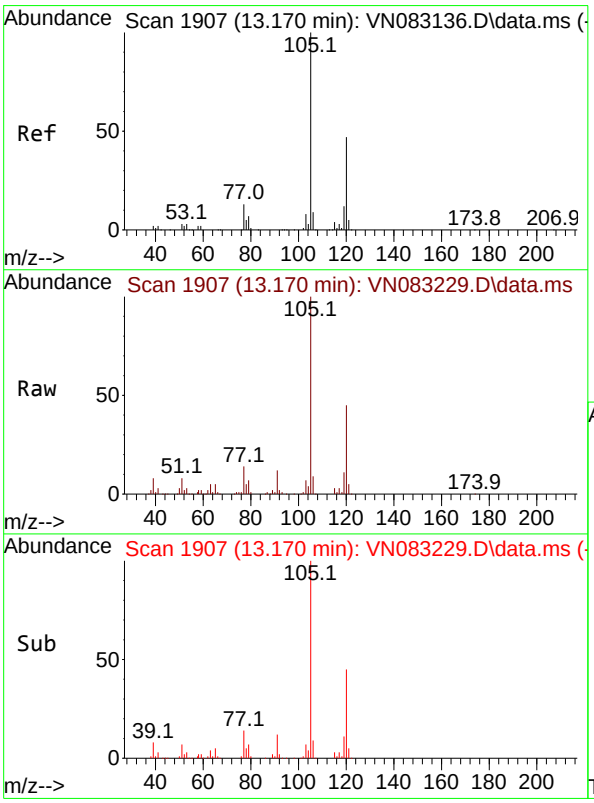
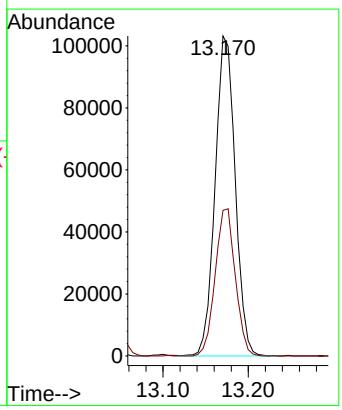
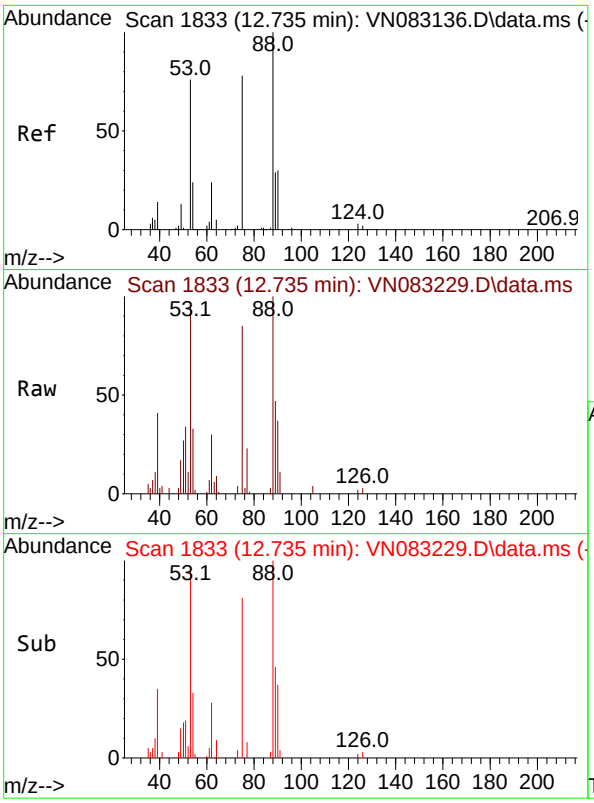



#80
1,3,5-Trimethylbenzene
Concen: 18.604 ug/l
RT: 13.170 min Scan# 1907
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:105 Resp: 169051

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.0 | 24.3 | 72.8 |






#81
trans-1,4-Dichloro-2-butene
Concen: 17.574 ug/l
RT: 12.735 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 75 Resp: 2300

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 95.8 | 88.4 | 132.6 |
| 89 | 42.9 | 36.3 | 54.5 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

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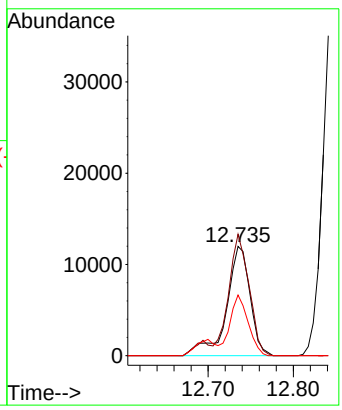
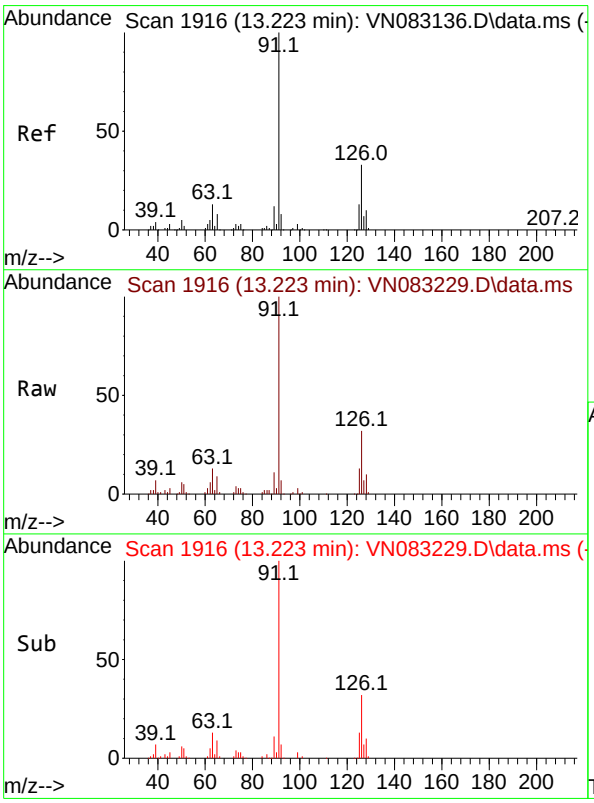
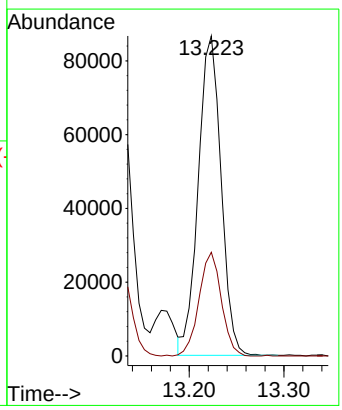


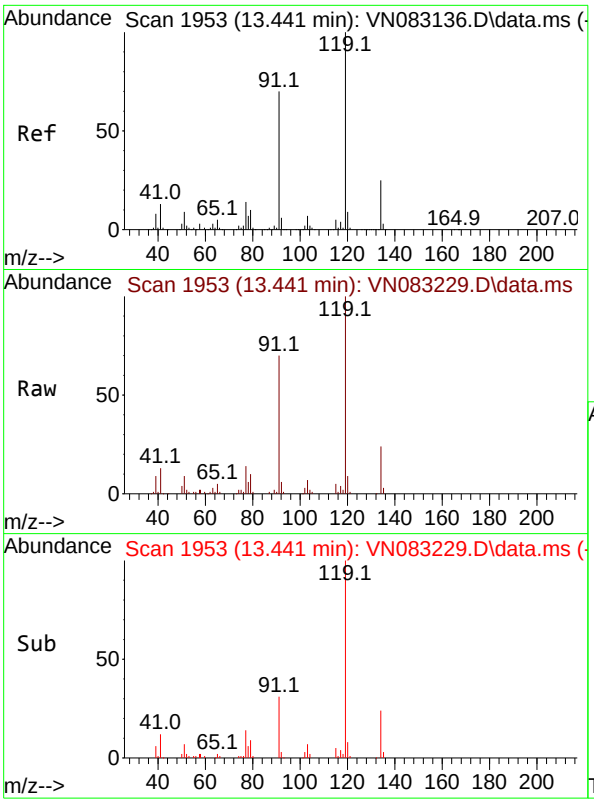




#82
4-Chlorotoluene
Concen: 18.230 ug/l
RT: 13.223 min Scan# 1916
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 91 Resp: 144886

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.9 | 16.2 | 48.6 |

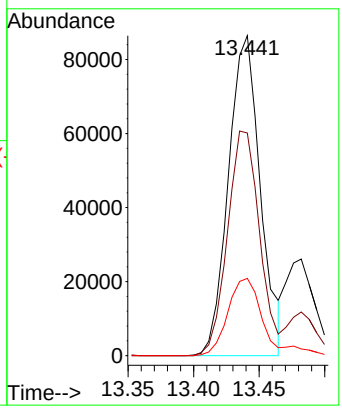





#83
tert-Butylbenzene
Concen: 18.214 ug/l
RT: 13.441 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:119 Resp: 14657

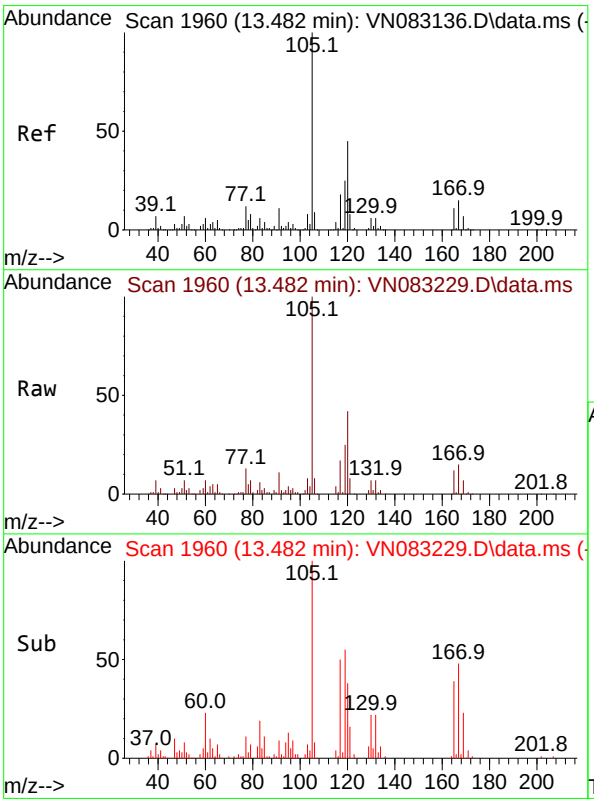
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.5 | 35.0 | 105.1 |
| 134 | 26.9 | 13.3 | 39.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

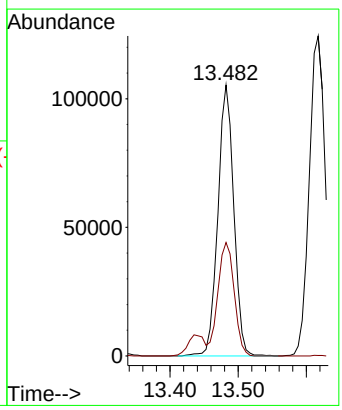
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

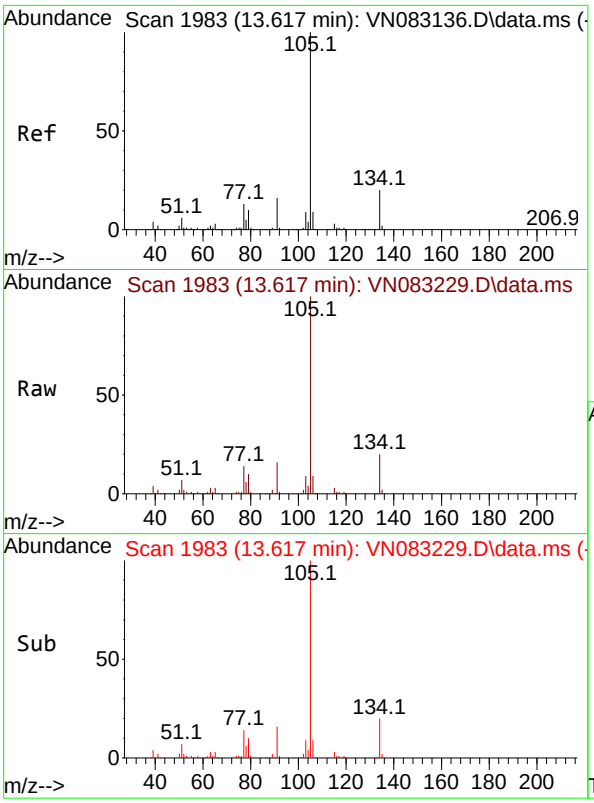



#84
1,2,4-Trimethylbenzene
Concen: 18.676 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:105 Resp: 171027

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.2 | 21.9 | 65.8 |

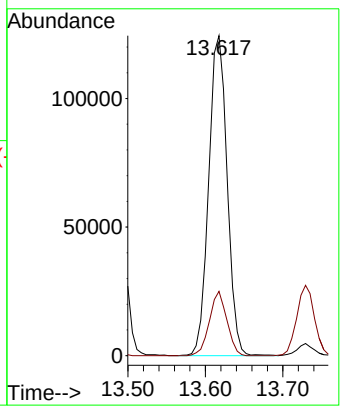





#85
sec-Butylbenzene
Concen: 18.750 ug/l
RT: 13.617 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:105 Resp: 20587

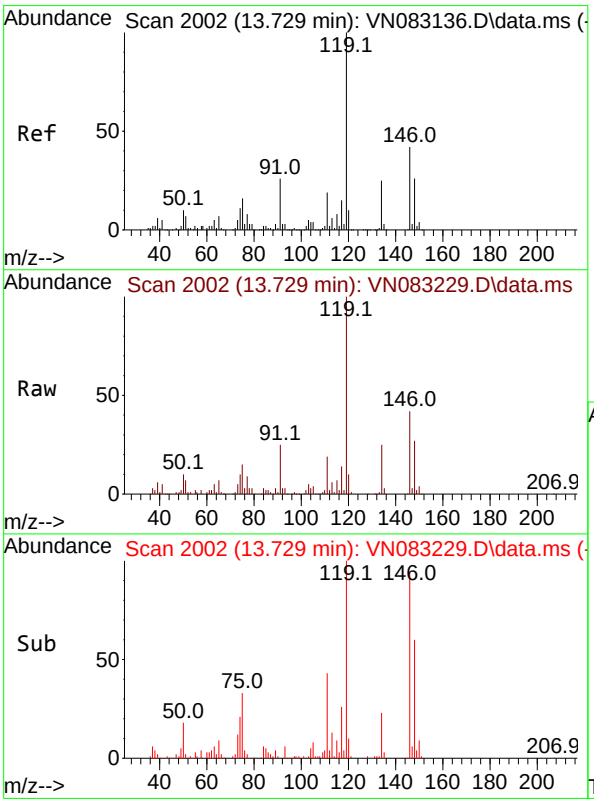
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.0 | 9.8 | 29.3 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

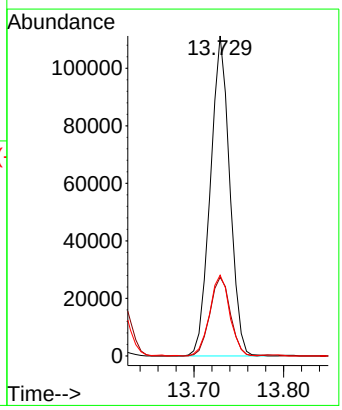
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

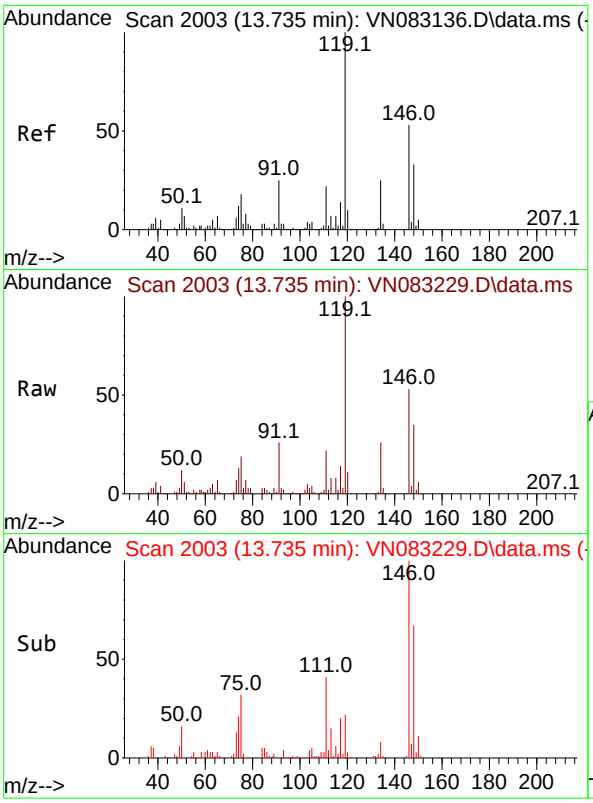



#86
p-Isopropyltoluene
Concen: 18.409 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:119 Resp: 166899

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.9 | 13.0 | 39.0 |
| 91 | 26.2 | 12.3 | 36.9 |






#87
1,3-Dichlorobenzene
Concen: 18.256 ug/l
RT: 13.735 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

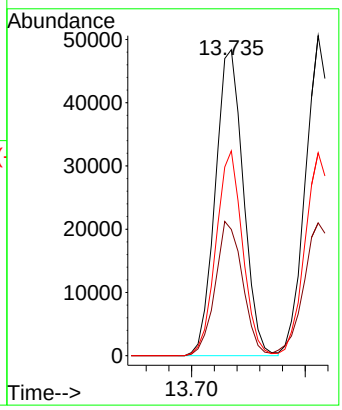
Tgt Ion:146 Resp: 8282

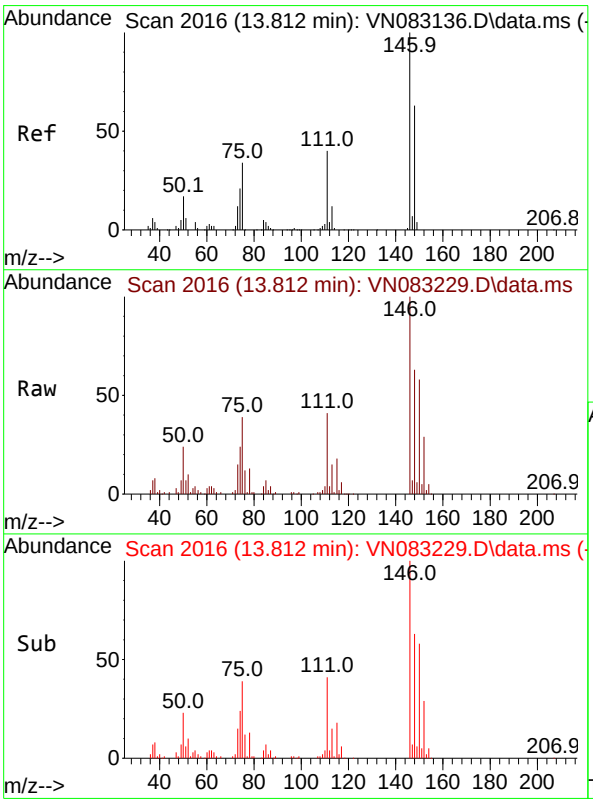
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.9 | 20.6 | 61.9 |
| 148 | 63.5 | 31.8 | 95.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

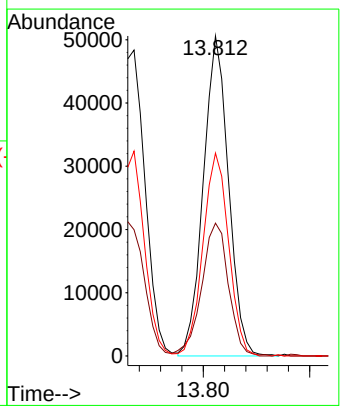


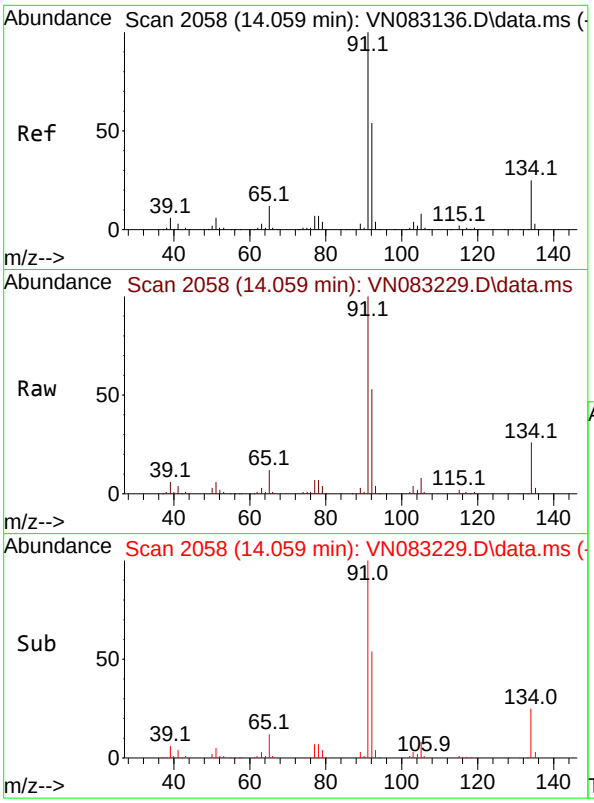




#88
1,4-Dichlorobenzene
Concen: 18.192 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:146 Resp: 83205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.3 | 20.1 | 60.3 |
| 148 | 64.7 | 32.2 | 96.6 |






#89
n-Butylbenzene
Concen: 18.774 ug/l
RT: 14.059 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

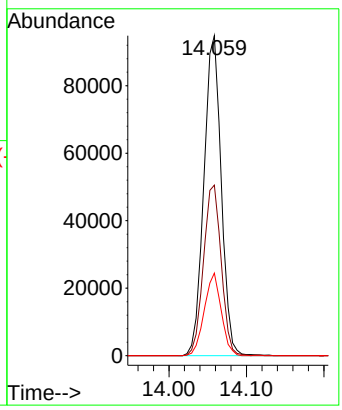
Tgt Ion: 91 Resp: 14748

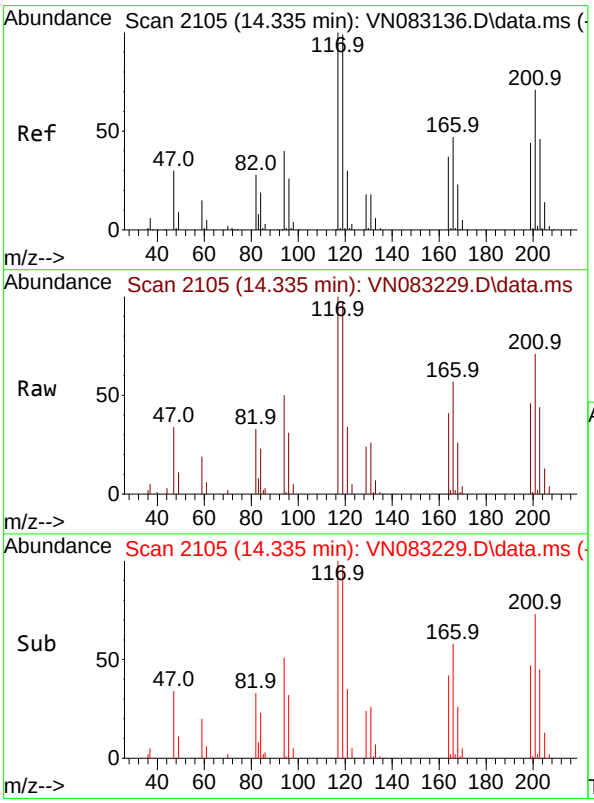
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.4 | 26.1 | 78.3 |
| 134 | 25.1 | 12.1 | 36.3 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

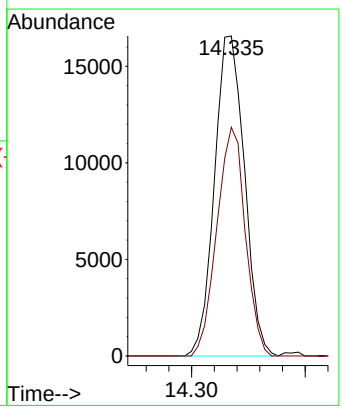


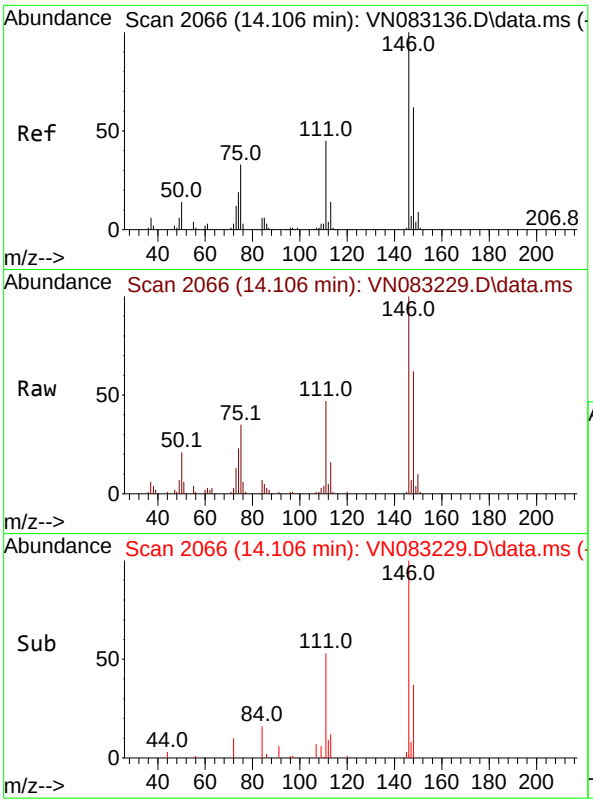




#90
Hexachloroethane
Concen: 17.357 ug/l
RT: 14.335 min Scan# 2105
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:117 Resp: 30402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 67.7 | 35.8 | 107.3 |

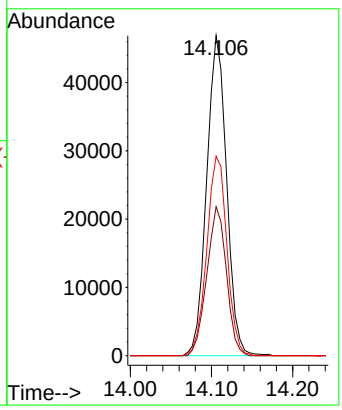





#91
1,2-Dichlorobenzene
Concen: 18.154 ug/l
RT: 14.106 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:146 Resp: 7969

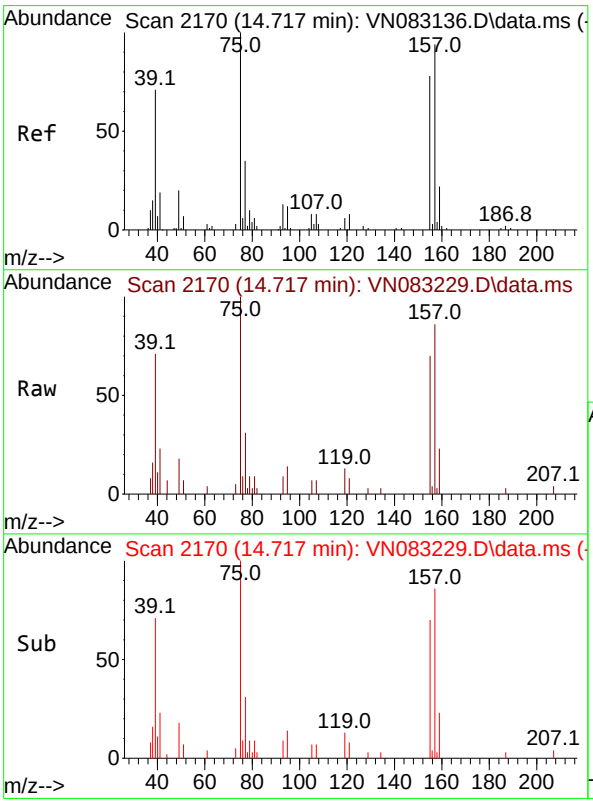
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 45.9 | 21.4 | 64.2 |
| 148 | 63.1 | 32.1 | 96.5 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

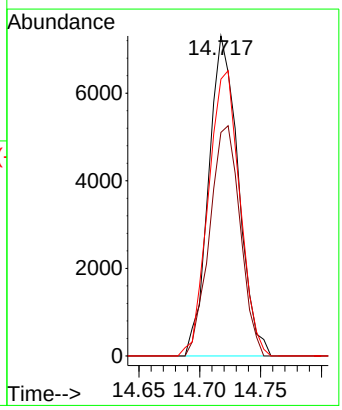
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

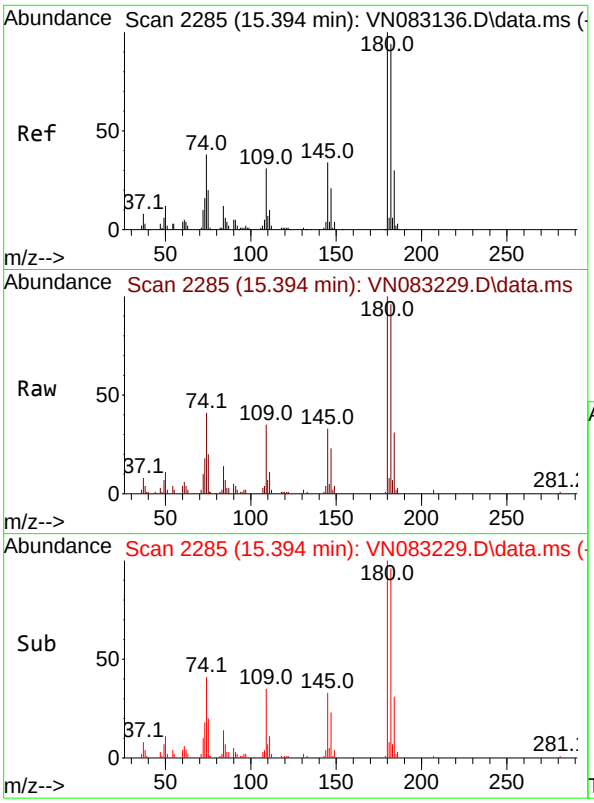



#92
1,2-Dibromo-3-Chloropropane
Concen: 16.620 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion: 75 Resp: 12380

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 74.1 | 36.6 | 109.8 |
| 157 | 94.4 | 46.9 | 140.6 |






#93
1,2,4-Trichlorobenzene
Concen: 18.204 ug/l
RT: 15.394 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

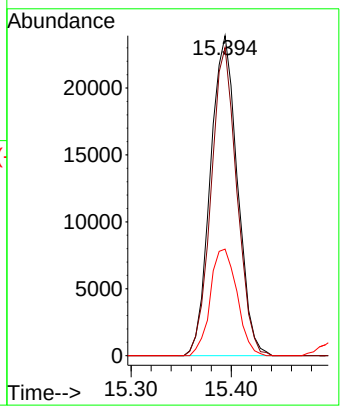
Tgt Ion:180 Resp: 4477

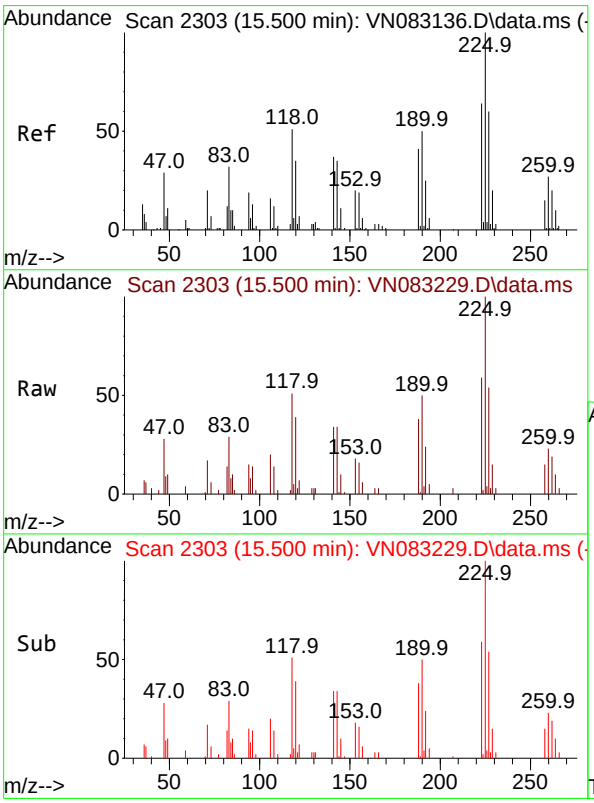
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 91.5 | 47.3 | 141.8 |
| 145 | 33.0 | 15.7 | 47.1 |

**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024

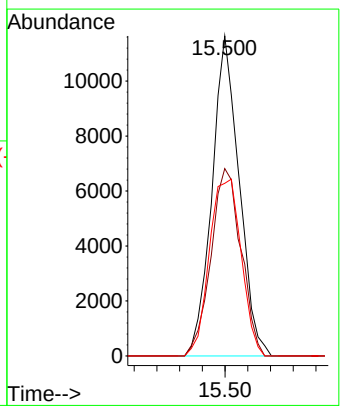


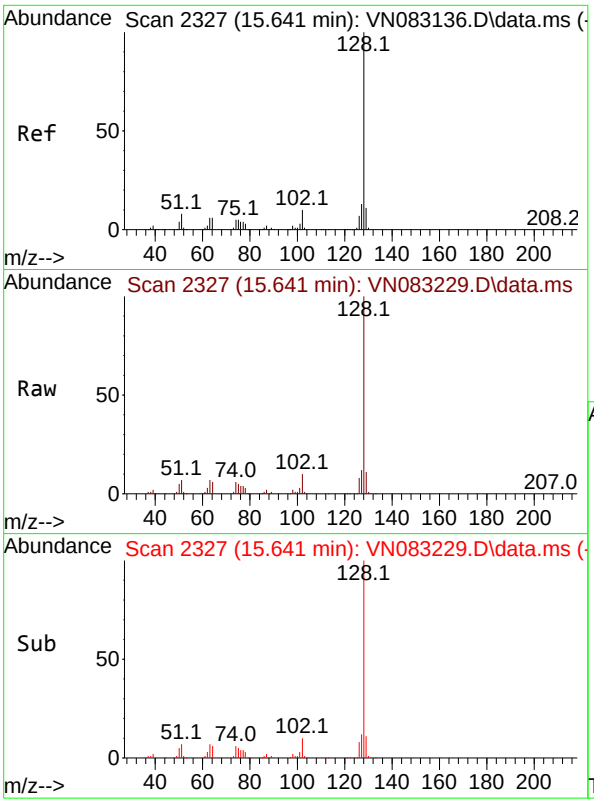




#94
Hexachlorobutadiene
Concen: 17.705 ug/l
RT: 15.500 min Scan# 2303
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:225 Resp: 19366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 64.8 | 31.9 | 95.7 |
| 227 | 64.5 | 32.5 | 97.5 |

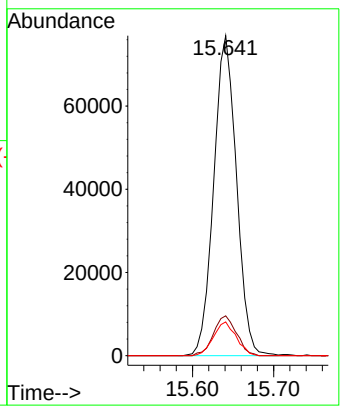





#95
Naphthalene
Concen: 17.181 ug/l
RT: 15.641 min Scan# 2
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:128 Resp: 14968

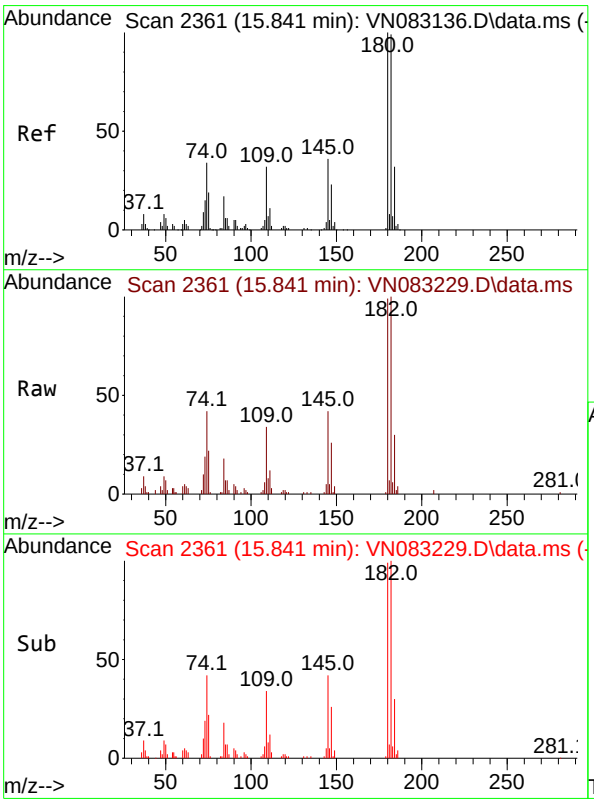
| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.6 | 16.0 |
| 129 | 10.6 | 8.6 | 12.8 |




**Instrument :**
MSVOA_N
**ClientSampleId :**
VN0812WBSD01

**Manual Integrations**
**APPROVED**

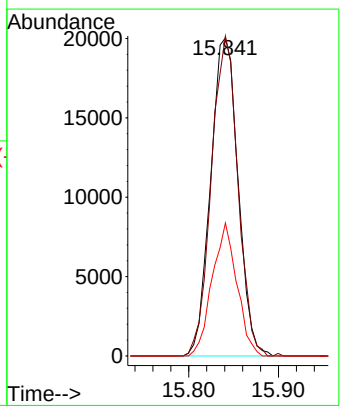
Reviewed By :John Carlone 08/13/2024
Supervised By :Semsettin Yesilyurt 08/13/2024




#96
1,2,3-Trichlorobenzene
Concen: 17.435 ug/l
RT: 15.841 min Scan# 2361
Delta R.T. -0.000 min
Lab File: VN083229.D
Acq: 12 Aug 2024 11:46

Tgt Ion:180 Resp: 42430

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.5 | 48.9 | 146.8 |
| 145 | 37.8 | 16.8 | 50.4 |



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# Manual Integration Report

| Sequence: | vn080724 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDICC100 | VN083135.D | 1,2,3-Trichloropropane | JOHN | 8/8/2024 9:35:12 AM | MMDadoda | 8/9/2024 6:15:44 AM | Peak Integrated by Software incorrectly |
| VSTDICCC050 | VN083136.D | 1,2,3-Trichloropropane | JOHN | 8/8/2024 9:35:17 AM | MMDadoda | 8/9/2024 6:15:45 AM | Peak Integrated by Software incorrectly |
| VSTDICCC050 | VN083136.D | Vinyl Acetate | JOHN | 8/8/2024 9:35:17 AM | MMDadoda | 8/9/2024 6:15:45 AM | Peak Integrated by Software incorrectly |
| VSTDICC020 | VN083137.D | 1,2,3-Trichloropropane | JOHN | 8/8/2024 9:35:21 AM | MMDadoda | 8/9/2024 6:15:46 AM | Peak Integrated by Software incorrectly |
| VSTDICC020 | VN083137.D | Vinyl Acetate | JOHN | 8/8/2024 9:35:21 AM | MMDadoda | 8/9/2024 6:15:46 AM | Peak Integrated by Software incorrectly |
| VSTDICC010 | VN083138.D | 1,2,3-Trichloropropane | JOHN | 8/8/2024 9:35:26 AM | MMDadoda | 8/9/2024 6:15:48 AM | Peak Integrated by Software incorrectly |
| VSTDICC005 | VN083139.D | 1,2,3-Trichloropropane | JOHN | 8/8/2024 9:35:30 AM | MMDadoda | 8/9/2024 6:15:49 AM | Peak Integrated by Software incorrectly |
| VSTDICC005 | VN083139.D | Vinyl Acetate | JOHN | 8/8/2024 9:35:30 AM | MMDadoda | 8/9/2024 6:15:49 AM | Peak Integrated by Software incorrectly |
| VSTDICC001 | VN083140.D | 1,2,3-Trichloropropane | JOHN | 8/8/2024 9:35:34 AM | MMDadoda | 8/9/2024 6:15:51 AM | Peak Integrated by Software incorrectly |
| VSTDICC001 | VN083140.D | 1,4-Dichlorobenzene | JOHN | 8/8/2024 9:35:34 AM | MMDadoda | 8/9/2024 6:15:51 AM | Peak Integrated by Software incorrectly |
| VSTDICV050 | VN083142.D | 1,2,3-Trichloropropane | JOHN | 8/8/2024 9:35:41 AM | MMDadoda | 8/9/2024 6:15:52 AM | Peak Integrated by Software incorrectly |

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# Manual Integration Report

| Sequence: | VN081224 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC050 | VN083225.D | 1,2,3-Trichloropropane | JOHN | 8/13/2024 9:33:50 AM | SAM | 8/13/2024 6:55:23 PM | Peak Integrated by Software incorrectly |
| VN0812WBS01 | VN083228.D | 1,2,3-Trichloropropane | JOHN | 8/13/2024 9:33:54 AM | SAM | 8/13/2024 6:55:24 PM | Peak Integrated by Software incorrectly |
| VN0812WBS01 | VN083228.D | Vinyl Acetate | JOHN | 8/13/2024 9:33:54 AM | SAM | 8/13/2024 6:55:24 PM | Peak Integrated by Software incorrectly |
| VN0812WBSD01 | VN083229.D | 1,2,3-Trichloropropane | JOHN | 8/13/2024 9:33:58 AM | SAM | 8/13/2024 6:55:26 PM | Peak Integrated by Software incorrectly |
| VN0812WBSD01 | VN083229.D | Vinyl Acetate | JOHN | 8/13/2024 9:33:58 AM | SAM | 8/13/2024 6:55:26 PM | Peak Integrated by Software incorrectly |

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# Manual Integration Report

| Sequence: | vn081324 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC050 | VN083246.D | 1,2,3-Trichloropropane | MMDadoda | 8/14/2024 5:14:33 AM | SAM | 8/14/2024 5:25:05 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VN083246.D | Vinyl Acetate | MMDadoda | 8/14/2024 5:14:33 AM | SAM | 8/14/2024 5:25:05 AM | Peak Integrated by Software incorrectly |
| VN0813WBS01 | VN083249.D | 1,2,3-Trichloropropane | MMDadoda | 8/14/2024 5:14:35 AM | SAM | 8/14/2024 5:25:06 AM | Peak Integrated by Software incorrectly |
| VN0813WBS01 | VN083249.D | Vinyl Acetate | MMDadoda | 8/14/2024 5:14:35 AM | SAM | 8/14/2024 5:25:06 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VN083271.D | 1,2,3-Trichloropropane | MMDadoda | 8/14/2024 5:14:48 AM | SAM | 8/14/2024 5:25:19 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VN083271.D | Vinyl Acetate | MMDadoda | 8/14/2024 5:14:48 AM | SAM | 8/14/2024 5:25:19 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VN083273.D | 1,2,3-Trichloropropane | JOHN | 8/14/2024 9:36:48 AM | MMDadoda | 8/14/2024 6:38:01 PM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VN083273.D | Vinyl Acetate | JOHN | 8/14/2024 9:36:48 AM | MMDadoda | 8/14/2024 6:38:01 PM | Peak Integrated by Software incorrectly |

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# Manual Integration Report

| Sequence: | VN081424 | Instrument | MSVOA_n |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC050 | VN083295.D | 1,2,3-Trichloropropane | MMDadoda | 8/15/2024 1:43:36 AM | SAM | 8/15/2024 1:45:44 AM | Peak Integrated by Software incorrectly |
| VN0814WBS01 | VN083298.D | 1,2,3-Trichloropropane | MMDadoda | 8/15/2024 1:43:39 AM | SAM | 8/15/2024 1:45:49 AM | Peak Integrated by Software incorrectly |
| VN0814WBS01 | VN083298.D | Allyl chloride | MMDadoda | 8/15/2024 1:43:39 AM | SAM | 8/15/2024 1:45:49 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VN083318.D | 1,2,3-Trichloropropane | MMDadoda | 8/15/2024 1:43:56 AM | SAM | 8/15/2024 1:46:04 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VN083318.D | Allyl chloride | MMDadoda | 8/15/2024 1:43:56 AM | SAM | 8/15/2024 1:46:04 AM | Peak Integrated by Software incorrectly |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN080724

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 8/8/2024 9:36:00 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 8/9/2024 6:16:03 AM | | |
| SubDirectory | VN080724 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129516 |
| Initial Calibration Stds | VP129526,VP129527,VP129528,VP129529,VP129530,VP129531 |
| CCC | |
| Internal Standard/PEM | |
| ICV/I.BLK | VP129532 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN083134.D | 07 Aug 2024 10:09 | JC\MD | Ok |
| 2 | VSTDICC100 | VN083135.D | 07 Aug 2024 10:33 | JC\MD | Ok,M |
| 3 | VSTDICCC050 | VN083136.D | 07 Aug 2024 10:58 | JC\MD | Ok,M |
| 4 | VSTDICC020 | VN083137.D | 07 Aug 2024 11:22 | JC\MD | Ok,M |
| 5 | VSTDICC010 | VN083138.D | 07 Aug 2024 11:46 | JC\MD | Ok,M |
| 6 | VSTDICC005 | VN083139.D | 07 Aug 2024 12:10 | JC\MD | Ok,M |
| 7 | VSTDICC001 | VN083140.D | 07 Aug 2024 12:34 | JC\MD | Ok,M |
| 8 | IBLK | VN083141.D | 07 Aug 2024 13:22 | JC\MD | Ok |
| 9 | VSTDICV050 | VN083142.D | 07 Aug 2024 14:49 | JC\MD | Ok,M |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081224

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 8/13/2024 9:40:53 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/13/2024 6:55:20 PM | | |
| SubDirectory | VN081224 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129638,VP129662 |
| Initial Calibration Stds | |
| CCC | VP129639,VP129640,VP129663,VP129664 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN083224.D | 12 Aug 2024 08:44 | JC\MD | Ok |
| 2 | VSTDCCC050 | VN083225.D | 12 Aug 2024 09:48 | JC\MD | Ok,M |
| 3 | VN0812MBL01 | VN083226.D | 12 Aug 2024 10:22 | JC\MD | Ok |
| 4 | VN0812WBL01 | VN083227.D | 12 Aug 2024 10:46 | JC\MD | Ok |
| 5 | VN0812WBS01 | VN083228.D | 12 Aug 2024 11:10 | JC\MD | Ok,M |
| 6 | VN0812WBSD01 | VN083229.D | 12 Aug 2024 11:46 | JC\MD | Ok,M |
| 7 | P3476-03 | VN083230.D | 12 Aug 2024 12:10 | JC\MD | Ok |
| 8 | P3506-02 | VN083231.D | 12 Aug 2024 12:35 | JC\MD | Ok |
| 9 | P3530-01 | VN083232.D | 12 Aug 2024 12:59 | JC\MD | Ok |
| 10 | P3545-01 | VN083233.D | 12 Aug 2024 13:23 | JC\MD | Ok |
| 11 | PB162664ZHE#01 | VN083234.D | 12 Aug 2024 13:47 | JC\MD | Ok |
| 12 | PB162664ZHE#02 | VN083235.D | 12 Aug 2024 14:11 | JC\MD | Ok |
| 13 | PB162664ZHE#03 | VN083236.D | 12 Aug 2024 14:35 | JC\MD | Ok |
| 14 | PB162664ZHE#04 | VN083237.D | 12 Aug 2024 14:59 | JC\MD | Ok |
| 15 | PB162664ZHE#05 | VN083238.D | 12 Aug 2024 15:23 | JC\MD | Ok |
| 16 | PB162591TB | VN083239.D | 12 Aug 2024 15:48 | JC\MD | Ok |
| 17 | P3530-02 | VN083240.D | 12 Aug 2024 16:12 | JC\MD | Ok |
| 18 | P3530-03 | VN083241.D | 12 Aug 2024 16:36 | JC\MD | Ok |
| 19 | P3426-01 | VN083242.D | 12 Aug 2024 17:00 | JC\MD | Ok |
| 20 | P3426-02 | VN083243.D | 12 Aug 2024 17:24 | JC\MD | Ok |
| 21 | P3429-01 | VN083244.D | 12 Aug 2024 17:49 | JC\MD | Ok |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081324

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 8/14/2024 5:15:42 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/14/2024 5:25:48 AM | | |
| SubDirectory | VN081324 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129669,VP129708 |
| Initial Calibration Stds | |
| CCC | VP129670,VP129671,VP129701,VP129702,VP129703,VP129704,VP129709,VP129710 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN083245.D | 13 Aug 2024 09:54 | JC\MD | Ok |
| 2 | VSTDCCC050 | VN083246.D | 13 Aug 2024 10:18 | JC\MD | Ok,M |
| 3 | VN0813MBL01 | VN083247.D | 13 Aug 2024 10:52 | JC\MD | Ok |
| 4 | VN0813WBL01 | VN083248.D | 13 Aug 2024 11:16 | JC\MD | Ok |
| 5 | VN0813WBS01 | VN083249.D | 13 Aug 2024 11:40 | JC\MD | Ok,M |
| 6 | P3429-02 | VN083250.D | 13 Aug 2024 12:06 | JC\MD | Ok |
| 7 | P3440-01 | VN083251.D | 13 Aug 2024 12:30 | JC\MD | Ok |
| 8 | P3440-02MS | VN083252.D | 13 Aug 2024 12:55 | JC\MD | Ok,M |
| 9 | P3440-03MSD | VN083253.D | 13 Aug 2024 13:19 | JC\MD | Ok,M |
| 10 | VN0813MBS01 | VN083254.D | 13 Aug 2024 13:43 | JC\MD | Ok,M |
| 11 | P3393-20DL2 | VN083255.D | 13 Aug 2024 14:07 | JC\MD | Ok |
| 12 | P3429-04 | VN083256.D | 13 Aug 2024 14:31 | JC\MD | Ok |
| 13 | P3390-07 0.2PPB | VN083257.D | 13 Aug 2024 14:55 | JC\MD | Ok,M |
| 14 | P3390-07 0.5PPB | VN083258.D | 13 Aug 2024 15:19 | JC\MD | Ok,M |
| 15 | P3390-07 0.75PPB | VN083259.D | 13 Aug 2024 15:43 | JC\MD | Ok,M |
| 16 | P3390-07 2.5PPB | VN083260.D | 13 Aug 2024 16:07 | JC\MD | Ok,M |
| 17 | P3440-04 | VN083261.D | 13 Aug 2024 16:31 | JC\MD | Ok |
| 18 | P3440-05 | VN083262.D | 13 Aug 2024 16:56 | JC\MD | Ok |
| 19 | P3543-02 | VN083263.D | 13 Aug 2024 17:20 | JC\MD | Ok |
| 20 | P3548-05 | VN083264.D | 13 Aug 2024 17:44 | JC\MD | Ok |
| 21 | P3548-08 | VN083265.D | 13 Aug 2024 18:08 | JC\MD | Ok |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081324

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 8/14/2024 5:15:42 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/14/2024 5:25:48 AM | | |
| SubDirectory | VN081324 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129669,VP129708 |
| Initial Calibration Stds | |
| CCC | VP129670,VP129671,VP129701,VP129702,VP129703,VP129704,VP129709,VP129710 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | P3548-11 | VN083266.D | 13 Aug 2024 18:33 | JC\MD | Ok |
| 23 | P3548-14 | VN083267.D | 13 Aug 2024 18:57 | JC\MD | Ok |
| 24 | PB162644TB | VN083268.D | 13 Aug 2024 19:21 | JC\MD | Ok |
| 25 | P3429-03 | VN083269.D | 13 Aug 2024 19:45 | JC\MD | Dilution |
| 26 | PB162587TB | VN083270.D | 13 Aug 2024 20:10 | JC\MD | Ok |
| 27 | VSTDCCC050 | VN083271.D | 13 Aug 2024 20:34 | JC\MD | Ok,M |
| 28 | BFB | VN083272.D | 14 Aug 2024 01:50 | JC\MD | Ok |
| 29 | VSTDCCC050 | VN083273.D | 14 Aug 2024 02:14 | JC\MD | Ok,M |
| 30 | VN0813WBL02 | VN083274.D | 14 Aug 2024 03:22 | JC\MD | Ok |
| 31 | VN0813WBS02 | VN083275.D | 14 Aug 2024 03:46 | JC\MD | Not Ok |
| 32 | VN0813WBS03 | VN083276.D | 14 Aug 2024 04:10 | JC\MD | Ok,M |
| 33 | P3450-01 | VN083277.D | 14 Aug 2024 04:52 | JC\MD | Ok |
| 34 | P3450-02 | VN083278.D | 14 Aug 2024 05:16 | JC\MD | Ok |
| 35 | P3450-03 | VN083279.D | 14 Aug 2024 05:40 | JC\MD | Ok |
| 36 | P3450-04 | VN083280.D | 14 Aug 2024 06:04 | JC\MD | Ok |
| 37 | P3467-01 | VN083281.D | 14 Aug 2024 06:28 | JC\MD | Ok |
| 38 | P3467-02 | VN083282.D | 14 Aug 2024 06:52 | JC\MD | Ok |
| 39 | P3451-01 | VN083283.D | 14 Aug 2024 07:16 | JC\MD | Ok |
| 40 | P3451-02 | VN083284.D | 14 Aug 2024 07:40 | JC\MD | Ok |
| 41 | P3534-05 | VN083285.D | 14 Aug 2024 08:04 | JC\MD | Ok |
| 42 | P3534-06 | VN083286.D | 14 Aug 2024 08:28 | JC\MD | Ok |
| 43 | P3466-01 | VN083287.D | 14 Aug 2024 08:52 | JC\MD | Not Ok |
| 44 | P3466-04 | VN083288.D | 14 Aug 2024 09:16 | JC\MD | Not Ok |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081324

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 8/14/2024 5:15:42 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/14/2024 5:25:48 AM | | |
| SubDirectory | VN081324 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129669,VP129708 |
| Initial Calibration Stds | |
| CCC | VP129670,VP129671,VP129701,VP129702,VP129703,VP129704,VP129709,VP129710 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 45 | P3466-05 | VN083289.D | 14 Aug 2024 09:40 | JC\MD | Not Ok |
| 46 | P3466-06 | VN083290.D | 14 Aug 2024 10:04 | JC\MD | Not Ok |
| 47 | P3466-02MS | VN083291.D | 14 Aug 2024 10:28 | JC\MD | Not Ok |
| 48 | P3466-03MSD | VN083292.D | 14 Aug 2024 10:52 | JC\MD | Not Ok |
| 49 | VSTDCCC050 | VN083293.D | 14 Aug 2024 11:16 | JC\MD | Ok |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081424

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 8/15/2024 1:44:31 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/15/2024 1:46:18 AM | | |
| SubDirectory | VN081424 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129723 |
| Initial Calibration Stds | |
| CCC | VP129724,VP129725,VP129726,VP129727,VP129728,VP129729,VP129730,VP129731 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VN083294.D | 14 Aug 2024 12:07 | JC\MD | Ok |
| 2 | VSTDCCC050 | VN083295.D | 14 Aug 2024 12:41 | JC\MD | Ok,M |
| 3 | VN0814MBL01 | VN083296.D | 14 Aug 2024 13:16 | JC\MD | Not Ok |
| 4 | VN0814WBL01 | VN083297.D | 14 Aug 2024 13:39 | JC\MD | Ok |
| 5 | VN0814WBS01 | VN083298.D | 14 Aug 2024 14:03 | JC\MD | Ok,M |
| 6 | P3429-03DL | VN083299.D | 14 Aug 2024 14:27 | JC\MD | Ok |
| 7 | VN0814WBSD01 | VN083300.D | 14 Aug 2024 14:51 | JC\MD | Ok,M |
| 8 | P3390-09 0.2PPB | VN083301.D | 14 Aug 2024 15:15 | JC\MD | Not Ok |
| 9 | P3390-09 0.5PPB | VN083302.D | 14 Aug 2024 15:40 | JC\MD | Ok,M |
| 10 | P3390-09 0.75PPB | VN083303.D | 14 Aug 2024 16:04 | JC\MD | Ok,M |
| 11 | P3390-09 2.5PPB | VN083304.D | 14 Aug 2024 16:28 | JC\MD | Ok,M |
| 12 | P3390-08 1.0PPB | VN083305.D | 14 Aug 2024 16:52 | JC\MD | Ok,M |
| 13 | P3390-08 5.0PPB | VN083306.D | 14 Aug 2024 17:16 | JC\MD | Ok,M |
| 14 | P3596-03 | VN083307.D | 14 Aug 2024 17:41 | JC\MD | Ok |
| 15 | P3601-03 | VN083308.D | 14 Aug 2024 18:05 | JC\MD | Ok |
| 16 | P3596-01 | VN083309.D | 14 Aug 2024 18:29 | JC\MD | Ok |
| 17 | P3596-02 | VN083310.D | 14 Aug 2024 18:54 | JC\MD | Ok |
| 18 | P3601-01 | VN083311.D | 14 Aug 2024 19:18 | JC\MD | Ok |
| 19 | P3601-02 | VN083312.D | 14 Aug 2024 19:42 | JC\MD | Ok |
| 20 | PB162684TB | VN083313.D | 14 Aug 2024 20:07 | JC\MD | Ok |
| 21 | P3574-01 | VN083314.D | 14 Aug 2024 20:31 | JC\MD | Ok,M |

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**Instrument ID: MSVOA_N**

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081424

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 8/15/2024 1:44:31 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/15/2024 1:46:18 AM | | |
| SubDirectory | VN081424 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129723 |
| Initial Calibration Stds | |
| CCC | VP129724,VP129725,VP129726,VP129727,VP129728,VP129729,VP129730,VP129731 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | |
|---|---|---|---|---|---|
| 22 | P3609-03 | VN083315.D | 14 Aug 2024 20:55 | JC\MD | Ok |
| 23 | P3609-01 | VN083316.D | 14 Aug 2024 21:19 | JC\MD | Ok |
| 24 | P3609-02 | VN083317.D | 14 Aug 2024 21:43 | JC\MD | Ok |
| 25 | VSTDCCC050 | VN083318.D | 14 Aug 2024 22:08 | JC\MD | Ok,M |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN080724

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 8/8/2024 9:36:00 AM | | |
| Supervise By | Mahesh Dadoda | Supervise On | 8/9/2024 6:16:03 AM | | |
| SubDirectory | VN080724 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129516 |
| Initial Calibration Stds | VP129526,VP129527,VP129528,VP129529,VP129530,VP129531 |
| CCC | |
| Internal Standard/PEM | |
| ICV/I.BLK | VP129532 |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VN083134.D | 07 Aug 2024 10:09 | | JC\MD | Ok |
| 2 | VSTDICC100 | VSTDICC100 | VN083135.D | 07 Aug 2024 10:33 | Good for DOD | JC\MD | Ok,M |
| 3 | VSTDICCC050 | VSTDICCC050 | VN083136.D | 07 Aug 2024 10:58 | QR- 43 | JC\MD | Ok,M |
| 4 | VSTDICC020 | VSTDICC020 | VN083137.D | 07 Aug 2024 11:22 | | JC\MD | Ok,M |
| 5 | VSTDICC010 | VSTDICC010 | VN083138.D | 07 Aug 2024 11:46 | | JC\MD | Ok,M |
| 6 | VSTDICC005 | VSTDICC005 | VN083139.D | 07 Aug 2024 12:10 | | JC\MD | Ok,M |
| 7 | VSTDICC001 | VSTDICC001 | VN083140.D | 07 Aug 2024 12:34 | | JC\MD | Ok,M |
| 8 | IBLK | IBLK | VN083141.D | 07 Aug 2024 13:22 | | JC\MD | Ok |
| 9 | VSTDICV050 | ICVVN080724 | VN083142.D | 07 Aug 2024 14:49 | | JC\MD | Ok,M |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081224

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 8/13/2024 9:40:53 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/13/2024 6:55:20 PM | | |
| SubDirectory | VN081224 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129638,VP129662 |
| Initial Calibration Stds | |
| CCC | VP129639,VP129640,VP129663,VP129664 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VN083224.D | 12 Aug 2024 08:44 | | JC\MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VN083225.D | 12 Aug 2024 09:48 | V13516 | JC\MD | Ok,M |
| 3 | VN0812MBL01 | VN0812MBL01 | VN083226.D | 12 Aug 2024 10:22 | | JC\MD | Ok |
| 4 | VN0812WBL01 | VN0812WBL01 | VN083227.D | 12 Aug 2024 10:46 | | JC\MD | Ok |
| 5 | VN0812WBS01 | VN0812WBS01 | VN083228.D | 12 Aug 2024 11:10 | BS Low for com.#87 | JC\MD | Ok,M |
| 6 | VN0812WBSD01 | VN0812WBSD01 | VN083229.D | 12 Aug 2024 11:46 | | JC\MD | Ok,M |
| 7 | P3476-03 | MUL05 | VN083230.D | 12 Aug 2024 12:10 | vial B pH#6.0 | JC\MD | Ok |
| 8 | P3506-02 | RT4534 | VN083231.D | 12 Aug 2024 12:35 | vial B pH#5.0 | JC\MD | Ok |
| 9 | P3530-01 | WC-S-04-202408 | VN083232.D | 12 Aug 2024 12:59 | vial B pH#5.0 | JC\MD | Ok |
| 10 | P3545-01 | BUR-1295 | VN083233.D | 12 Aug 2024 13:23 | vial A pH<2 | JC\MD | Ok |
| 11 | PB162664ZHE#01 | PB162664ZHE#01 | VN083234.D | 12 Aug 2024 13:47 | | JC\MD | Ok |
| 12 | PB162664ZHE#02 | PB162664ZHE#02 | VN083235.D | 12 Aug 2024 14:11 | | JC\MD | Ok |
| 13 | PB162664ZHE#03 | PB162664ZHE#03 | VN083236.D | 12 Aug 2024 14:35 | | JC\MD | Ok |
| 14 | PB162664ZHE#04 | PB162664ZHE#04 | VN083237.D | 12 Aug 2024 14:59 | | JC\MD | Ok |
| 15 | PB162664ZHE#05 | PB162664ZHE#05 | VN083238.D | 12 Aug 2024 15:23 | | JC\MD | Ok |
| 16 | PB162591TB | PB162591TB | VN083239.D | 12 Aug 2024 15:48 | | JC\MD | Ok |
| 17 | P3530-02 | WC-A-04-202408 | VN083240.D | 12 Aug 2024 16:12 | vial A pH#5.0 | JC\MD | Ok |
| 18 | P3530-03 | WC-A-05-202408 | VN083241.D | 12 Aug 2024 16:36 | vial A pH#5.0 | JC\MD | Ok |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081224

| | | | | | |
|---|---|---|---|---|---|
| Review By | John Carlone | Review On | 8/13/2024 9:40:53 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/13/2024 6:55:20 PM | | |
| SubDirectory | VN081224 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129638,VP129662 |
| Initial Calibration Stds | |
| CCC | VP129639,VP129640,VP129663,VP129664 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | P3426-01 | 927-K1-WS-073124 | VN083242.D | 12 Aug 2024 17:00 | vial A pH<2 | JC\MD | Ok |
| 20 | P3426-02 | 927-K1-WS-073124-FD | VN083243.D | 12 Aug 2024 17:24 | vial A pH<2 | JC\MD | Ok |
| 21 | P3429-01 | 926-K1-WS-073124 | VN083244.D | 12 Aug 2024 17:49 | vial B pH<2 | JC\MD | Ok |

M : Manual Integration

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081324

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 8/14/2024 5:15:42 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/14/2024 5:25:48 AM | | |
| SubDirectory | VN081324 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129669,VP129708 |
| Initial Calibration Stds | |
| CCC | VP129670,VP129671,VP129701,VP129702,VP129703,VP129704,VP129709,VP129710 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VN083245.D | 13 Aug 2024 09:54 | | JC\MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VN083246.D | 13 Aug 2024 10:18 | V13516 | JC\MD | Ok,M |
| 3 | VN0813MBL01 | VN0813MBL01 | VN083247.D | 13 Aug 2024 10:52 | | JC\MD | Ok |
| 4 | VN0813WBL01 | VN0813WBL01 | VN083248.D | 13 Aug 2024 11:16 | | JC\MD | Ok |
| 5 | VN0813WBS01 | VN0813WBS01 | VN083249.D | 13 Aug 2024 11:40 | | JC\MD | Ok,M |
| 6 | P3429-02 | 931-K1-WS-073124 | VN083250.D | 13 Aug 2024 12:06 | vial B pH<2 | JC\MD | Ok |
| 7 | P3440-01 | 923-K1-WS-080124 | VN083251.D | 13 Aug 2024 12:30 | vial A pH<2 | JC\MD | Ok |
| 8 | P3440-02MS | 923-K1-WS-080124MS | VN083252.D | 13 Aug 2024 12:55 | vial A pH<2 | JC\MD | Ok,M |
| 9 | P3440-03MSD | 923-K1-WS-080124MS | VN083253.D | 13 Aug 2024 13:19 | vial A pH<2 | JC\MD | Ok,M |
| 10 | VN0813MBS01 | VN0813MBS01 | VN083254.D | 13 Aug 2024 13:43 | | JC\MD | Ok,M |
| 11 | P3393-20DL2 | S-849-GI-SO-13.5-14-0 | VN083255.D | 13 Aug 2024 14:07 | | JC\MD | Ok |
| 12 | P3429-04 | TB-01-073124 | VN083256.D | 13 Aug 2024 14:31 | vial A pH<2 TB | JC\MD | Ok |
| 13 | P3390-07 0.2PPB | LOD-MDL-WATER-01-( | VN083257.D | 13 Aug 2024 14:55 | | JC\MD | Ok,M |
| 14 | P3390-07 0.5PPB | LOD-MDL-WATER-01-( | VN083258.D | 13 Aug 2024 15:19 | | JC\MD | Ok,M |
| 15 | P3390-07 0.75PPB | LOD-MDL-WATER-01-( | VN083259.D | 13 Aug 2024 15:43 | | JC\MD | Ok,M |
| 16 | P3390-07 2.5PPB | LOD-MDL-WATER-01-( | VN083260.D | 13 Aug 2024 16:07 | | JC\MD | Ok,M |
| 17 | P3440-04 | 922-K1-WS-080124 | VN083261.D | 13 Aug 2024 16:31 | vial A pH<2 | JC\MD | Ok |
| 18 | P3440-05 | TB-01-080124 | VN083262.D | 13 Aug 2024 16:56 | vial A pH<2 TB | JC\MD | Ok |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081324

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 8/14/2024 5:15:42 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/14/2024 5:25:48 AM | | |
| SubDirectory | VN081324 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129669,VP129708 |
| Initial Calibration Stds | |
| CCC | VP129670,VP129671,VP129701,VP129702,VP129703,VP129704,VP129709,VP129710 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | P3543-02 | ARS20-0019 | VN083263.D | 13 Aug 2024 17:20 | vial A pH#5.0 | JC\MD | Ok |
| 20 | P3548-05 | RBR200036 | VN083264.D | 13 Aug 2024 17:44 | vial A pH#5.0 | JC\MD | Ok |
| 21 | P3548-08 | 343 | VN083265.D | 13 Aug 2024 18:08 | vial A pH#5.0 | JC\MD | Ok |
| 22 | P3548-11 | 289 | VN083266.D | 13 Aug 2024 18:33 | vial A pH#5.0 | JC\MD | Ok |
| 23 | P3548-14 | IN-SITU-SOIL | VN083267.D | 13 Aug 2024 18:57 | vial A pH#5.0 | JC\MD | Ok |
| 24 | PB162644TB | PB162644TB | VN083268.D | 13 Aug 2024 19:21 | | JC\MD | Ok |
| 25 | P3429-03 | 925-K1-WS-073124 | VN083269.D | 13 Aug 2024 19:45 | vial A pH<2 Need 20X | JC\MD | Dilution |
| 26 | PB162587TB | PB162587TB | VN083270.D | 13 Aug 2024 20:10 | | JC\MD | Ok |
| 27 | VSTDCCC050 | VSTDCCC050EC | VN083271.D | 13 Aug 2024 20:34 | | JC\MD | Ok,M |
| 28 | BFB | BFB | VN083272.D | 14 Aug 2024 01:50 | | JC\MD | Ok |
| 29 | VSTDCCC050 | VSTDCCC050 | VN083273.D | 14 Aug 2024 02:14 | | JC\MD | Ok,M |
| 30 | VN0813WBL02 | VN0813WBL02 | VN083274.D | 14 Aug 2024 03:22 | | JC\MD | Ok |
| 31 | VN0813WBS02 | VN0813WBS02 | VN083275.D | 14 Aug 2024 03:46 | Surrogate Fail | JC\MD | Not Ok |
| 32 | VN0813WBS03 | VN0813WBS03 | VN083276.D | 14 Aug 2024 04:10 | | JC\MD | Ok,M |
| 33 | P3450-01 | 921-J-WP0-0.25-08012 | VN083277.D | 14 Aug 2024 04:52 | vial A pH<2 | JC\MD | Ok |
| 34 | P3450-02 | 923-K1-WP0-0.25-0801 | VN083278.D | 14 Aug 2024 05:16 | vial A pH<2 | JC\MD | Ok |
| 35 | P3450-03 | 922-K1-WP0-0.25-0801 | VN083279.D | 14 Aug 2024 05:40 | vial A pH<2 | JC\MD | Ok |
| 36 | P3450-04 | TB-02-080124 | VN083280.D | 14 Aug 2024 06:04 | vial A pH<2 TB | JC\MD | Ok |
| 37 | P3467-01 | 919-J-WS-080224 | VN083281.D | 14 Aug 2024 06:28 | vial A pH<2 | JC\MD | Ok |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081324

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 8/14/2024 5:15:42 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/14/2024 5:25:48 AM | | |
| SubDirectory | VN081324 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129669,VP129708 |
| Initial Calibration Stds | |
| CCC | VP129670,VP129671,VP129701,VP129702,VP129703,VP129704,VP129709,VP129710 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 38 | P3467-02 | TB-03-080224 | VN083282.D | 14 Aug 2024 06:52 | vial A pH<2 TB | JC\MD | Ok |
| 39 | P3451-01 | 921-J-WS-080124 | VN083283.D | 14 Aug 2024 07:16 | vial A pH<2 | JC\MD | Ok |
| 40 | P3451-02 | TB-03-080124 | VN083284.D | 14 Aug 2024 07:40 | vial A pH<2 TB | JC\MD | Ok |
| 41 | P3534-05 | PIPE-BLAST-GRIT(FB) | VN083285.D | 14 Aug 2024 08:04 | vial A pH<2 FB | JC\MD | Ok |
| 42 | P3534-06 | HP-IP(FB) | VN083286.D | 14 Aug 2024 08:28 | vial A pH<2 FB | JC\MD | Ok |
| 43 | P3466-01 | 924-K1-WP0-0.25-0802 | VN083287.D | 14 Aug 2024 08:52 | vial A pH<2 sample canceled | JC\MD | Not Ok |
| 44 | P3466-04 | 932-K1-WP0-0.25-0802 | VN083288.D | 14 Aug 2024 09:16 | vial A pH<2 sample canceled | JC\MD | Not Ok |
| 45 | P3466-05 | 919-J-WP0-0.25-08022 | VN083289.D | 14 Aug 2024 09:40 | vial A pH<2 canceled | JC\MD | Not Ok |
| 46 | P3466-06 | TB-02-080224 | VN083290.D | 14 Aug 2024 10:04 | vial A pH<2 canceled | JC\MD | Not Ok |
| 47 | P3466-02MS | 924-K1-WP0-0.25-0802 | VN083291.D | 14 Aug 2024 10:28 | vial A pH<2 canceled | JC\MD | Not Ok |
| 48 | P3466-03MSD | 924-K1-WP0-0.25-0802 | VN083292.D | 14 Aug 2024 10:52 | vial A pH<2 canceled | JC\MD | Not Ok |
| 49 | VSTDCCC050 | VSTDCCC050EC | VN083293.D | 14 Aug 2024 11:16 | | JC\MD | Ok |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081424

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 8/15/2024 1:44:31 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/15/2024 1:46:18 AM | | |
| SubDirectory | VN081424 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129723 |
| Initial Calibration Stds | |
| CCC | VP129724,VP129725,VP129726,VP129727,VP129728,VP129729,VP129730,VP129731 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VN083294.D | 14 Aug 2024 12:07 | | JC\MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VN083295.D | 14 Aug 2024 12:41 | | JC\MD | Ok,M |
| 3 | VN0814MBL01 | VN0814MBL01 | VN083296.D | 14 Aug 2024 13:16 | RT Differ;Not Required | JC\MD | Not Ok |
| 4 | VN0814WBL01 | VN0814WBL01 | VN083297.D | 14 Aug 2024 13:39 | | JC\MD | Ok |
| 5 | VN0814WBS01 | VN0814WBS01 | VN083298.D | 14 Aug 2024 14:03 | | JC\MD | Ok,M |
| 6 | P3429-03DL | 925-K1-WS-073124DL | VN083299.D | 14 Aug 2024 14:27 | | JC\MD | Ok |
| 7 | VN0814WBSD01 | VN0814WBSD01 | VN083300.D | 14 Aug 2024 14:51 | | JC\MD | Ok,M |
| 8 | P3390-09 0.2PPB | MDL-WATER-03-QT3-2 | VN083301.D | 14 Aug 2024 15:15 | Recovery low | JC\MD | Not Ok |
| 9 | P3390-09 0.5PPB | MDL-WATER-03-QT3-2 | VN083302.D | 14 Aug 2024 15:40 | | JC\MD | Ok,M |
| 10 | P3390-09 0.75PPB | MDL-WATER-03-QT3-2 | VN083303.D | 14 Aug 2024 16:04 | | JC\MD | Ok,M |
| 11 | P3390-09 2.5PPB | MDL-WATER-03-QT3-2 | VN083304.D | 14 Aug 2024 16:28 | | JC\MD | Ok,M |
| 12 | P3390-08 1.0PPB | LOQ-WATER-02-QT3-2 | VN083305.D | 14 Aug 2024 16:52 | | JC\MD | Ok,M |
| 13 | P3390-08 5.0PPB | LOQ-WATER-02-QT3-2 | VN083306.D | 14 Aug 2024 17:16 | | JC\MD | Ok,M |
| 14 | P3596-03 | TB-01-081324 | VN083307.D | 14 Aug 2024 17:41 | TB | JC\MD | Ok |
| 15 | P3601-03 | TB-02-081324 | VN083308.D | 14 Aug 2024 18:05 | TB | JC\MD | Ok |
| 16 | P3596-01 | 918-J-WS-081324 | VN083309.D | 14 Aug 2024 18:29 | | JC\MD | Ok |
| 17 | P3596-02 | 918-J-WS-081324-FD | VN083310.D | 14 Aug 2024 18:54 | | JC\MD | Ok |
| 18 | P3601-01 | 918-J-WPO-0.25-08132 | VN083311.D | 14 Aug 2024 19:18 | | JC\MD | Ok |

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**Instrument ID:** MSVOA_N

## Daily Analysis Runlog For Sequence/QCBatch ID # VN081424

| | | | | | |
|---|---|---|---|---|---|
| Review By | Mahesh Dadoda | Review On | 8/15/2024 1:44:31 AM | | |
| Supervise By | Semsettin Yesilyurt | Supervise On | 8/15/2024 1:46:18 AM | | |
| SubDirectory | VN081424 | HP Acquire Method | | HP Processing Method | 82N080724W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP129723 |
| Initial Calibration Stds | |
| CCC | VP129724,VP129725,VP129726,VP129727,VP129728,VP129729,VP129730,VP129731 |
| Internal Standard/PEM | |
| ICV/I.BLK | |
| Surrogate Standard | |
| MS/MSD Standard | |
| LCS Standard | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | P3601-02 | 918-J-WPO-0.25-08132 | VN083312.D | 14 Aug 2024 19:42 | | JC\MD | Ok |
| 20 | PB162684TB | PB162684TB | VN083313.D | 14 Aug 2024 20:07 | | JC\MD | Ok |
| 21 | P3574-01 | WC-S-06-202408 | VN083314.D | 14 Aug 2024 20:31 | | JC\MD | Ok,M |
| 22 | P3609-03 | TB-01-081424 | VN083315.D | 14 Aug 2024 20:55 | TB | JC\MD | Ok |
| 23 | P3609-01 | 915-J-WS-081424 | VN083316.D | 14 Aug 2024 21:19 | | JC\MD | Ok |
| 24 | P3609-02 | 920-J-WS-081424 | VN083317.D | 14 Aug 2024 21:43 | | JC\MD | Ok |
| 25 | VSTDCCC050 | VSTDCCC050EC | VN083318.D | 14 Aug 2024 22:08 | | JC\MD | Ok,M |

M : Manual Integration

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# Prep Standard - Chemical Standard Summary

**Order ID :** P3429

**Test :** VOCMS Group6

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** VN081224,vn081324,VN081424,

**Standard ID :**
VP126666,VP128290,VP128298,VP128523,VP128632,VP128634,VP128762,VP128764,VP128765,VP128766,VP128768,
VP128769,VP129196,VP129228,VP129230,VP129231,VP129232,VP129235,VP129236,VP129238,VP129517,VP129519,
VP129520,VP129638,VP129639,VP129640,VP129662,VP129663,VP129664,VP129669,VP129670,VP129671,VP129701,
VP129702,VP129703,VP129704,VP129708,VP129709,VP129710,VP129723,VP129724,VP129725,VP129726,VP129727,
VP129728,VP129729,VP129730,VP129731,

**Chemical ID :**
V12794,V12798,V12966,V13390,V13444,V13448,V13462,V13463,V13539,V13581,V13707,V13708,V13800,V13801,V1381
2,V13952,V13953,V13959,V14016,V14017,V14093,V14103,V14104,V14123,V14141,V14142,V14143,V14147,V14148,V14
169,V14170,V14177,V14202,V14207,V14219,V14288,V14411,V14412,V14413,V14414,V14415,W3112,

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 617 | 8260 Surrogate, 400PPM | VP126666 | 03/19/2024 | 09/19/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 03/28/2024 |

**FROM** 0.80000ml of V13708 + 49.20000ml of V14141 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 218 | BFB, 25PPM | VP128290 | 06/10/2024 | 11/23/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 06/12/2024 |

**FROM** 0.25000ml of V13390 + 24.75000ml of V14148 = Final Quantity: 25.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 247 | 8260 Internal Standard, 250PPM | VP128298 | 06/10/2024 | 11/23/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 06/12/2024 |

**FROM** 0.10000ml of V14288 + 9.90000ml of V14148 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 251 | 8260 Internal STD & Surrogate Mix, 250PPM | VP128523 | 06/10/2024 | 12/10/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 06/22/2024 |

**FROM** 0.25000ml of V13707 + 0.25000ml of V14288 + 24.50000ml of V14142 = Final Quantity: 25.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1817 | 8260 Working Std(2-CVE)-SS, 800ppm | VP128632 | 06/25/2024 | 12/11/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/02/2024 |

**FROM** 0.80000ml of V13581 + 9.20000ml of V14147 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1818 | 8260 Working Std(2-CVE)-SS, 50ppm | VP128634 | 06/25/2024 | 12/11/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/02/2024 |

**FROM** 4.68750ml of V14147 + 0.31250ml of VP128632 = Final Quantity: 5.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1810 | 8260 Working Std(2-CVE)-800ppm | VP128762 | 07/01/2024 | 12/11/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/02/2024 |

**FROM** 0.50000ml of V12798 + 1.50000ml of V12794 + 23.00000ml of V14147 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1812 | 8260 Working Std(2-CVE)-100ppm | VP128764 | 07/01/2024 | 12/11/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/02/2024 |

**FROM** 0.20000ml of V12798 + 19.08000ml of V14147 = Final Quantity: 20.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1813 | 8260 Working Std(2-CVE)-50ppm | VP128765 | 07/01/2024 | 12/11/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/02/2024 |

**FROM** 9.37500ml of V14147 + 0.62500ml of VP128762 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 719 | 8260 Working STD (BCM)-First source, 400PPM | VP128766 | 07/01/2024 | 12/11/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/02/2024 |

**FROM** 1.50000ml of V13462 + 1.50000ml of V13463 + 12.00000ml of V14147 = Final Quantity: 15.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 253 | 8260 Working STD (BCM)-First source, 20PPM | VP128768 | 07/01/2024 | 12/11/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/02/2024 |

**FROM** 0.10000ml of V13463 + 9.90000ml of V14147 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 254 | 8260 Working STD (BCM)-First source, 10PPM | VP128769 | 07/01/2024 | 12/11/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/02/2024 |

**FROM** 0.05000ml of V13463 + 9.95000ml of V14147 = Final Quantity: 10.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 825 | 8260 Working STD (BCM)-Second source, 10PPM | VP129196 | 07/22/2024 | 01/22/2025 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/26/2024 |

**FROM** 0.10000ml of V12966 + 9.90000ml of V14143 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 51 | 8260 Working STD (Acrolein) -first source, 800PPM | VP129228 | 07/25/2024 | 08/24/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/30/2024 |

**FROM** 1.00000ml of V14411 + 1.00000ml of V14412 + 1.00000ml of V14413 + 1.00000ml of V14414 + 21.00000ml of V14143 = Final Quantity: 25.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 180 | 8260 Working STD (Acrolein)-First source, 100PPM | VP129230 | 07/25/2024 | 08/24/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/30/2024 |

**FROM** 17.50000ml of V14143 + 2.50000ml of VP129228 = Final Quantity: 20.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 181 | 8260 Working STD (Acrolein)-First source, 50PPM | VP129231 | 07/25/2024 | 08/24/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/30/2024 |

**FROM** 9.37500ml of V14143 + 0.62500ml of VP129228 = Final Quantity: 10.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 263 | 8260 Working STD (Acrolein)-Second source, 800PPM | VP129232 | 07/25/2024 | 08/23/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/30/2024 |

**FROM** 0.60000ml of V14414 + 1.00000ml of V14415 + 8.40000ml of V14143 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 826 | 8260 Working STD (Acrolein)-Second source, 50PPM | VP129235 | 07/25/2024 | 08/23/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/30/2024 |

**FROM** 4.68750ml of V14143 + 0.31250ml of VP129232 = Final Quantity: 5.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 259 | 8260 Calibration Working STD Mix-Second source, 160PPM | VP129236 | 07/22/2024 | 08/31/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/30/2024 |

**FROM** 0.16000ml of V13448 + 0.80000ml of V13812 + 0.80000ml of V13959 + 0.80000ml of V14093 + 0.80000ml of V14123 + 0.80000ml of V14177 + 1.60000ml of V13539 + 4.24000ml of V14143 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 820 | 8260 Calibration Working STD Mix-Second source, 10PPM | VP129238 | 07/22/2024 | 08/31/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 07/30/2024 |

**FROM** 4.68750ml of V14143 + 0.31250ml of VP129236 = Final Quantity: 5.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 257 | 8260 Calibration Working STD Mix-First source, 160PPM | VP129517 | 08/05/2024 | 09/14/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 08/08/2024 |

**FROM** 0.40000ml of V13444 + 1.00000ml of V13800 + 1.00000ml of V13801 + 1.00000ml of V13952 + 1.00000ml of V13953 + 1.00000ml of V14016 + 1.00000ml of V14017 + 1.00000ml of V14103 + 1.00000ml of V14104 + 1.00000ml of V14169 + 1.00000ml of V14170 + 1.00000ml of V14219 + 1.50000ml of V14202 + 1.50000ml of V14207 + 10.60000ml of V14143 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 245 | 8260 Calibration Working STD Mix-First source, 20PPM | VP129519 | 08/05/2024 | 09/14/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 08/08/2024 |

**FROM** 17.50000ml of V14143 + 2.50000ml of VP129517 = Final Quantity: 20.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 246 | 8260 Calibration Working STD Mix-First source, 10PPM | VP129520 | 08/05/2024 | 09/14/2024 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 08/08/2024 |

**FROM** 9.37500ml of V14143 + 0.62500ml of VP129517 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 589 | BFB TUNE CHECK | VP129638 | 08/12/2024 | 08/13/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP128290 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP129639 | 08/12/2024 | 08/13/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP129640 | 08/12/2024 | 08/13/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 589 | BFB TUNE CHECK | VP129662 | 08/12/2024 | 08/13/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP128290 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP129663 | 08/12/2024 | 08/13/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP129664 | 08/12/2024 | 08/13/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 589 | BFB TUNE CHECK | VP129669 | 08/13/2024 | 08/14/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP128290 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP129670 | 08/13/2024 | 08/14/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP129671 | 08/13/2024 | 08/14/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2390 | 0.2PPB LOD, 8260-Water | VP129701 | 08/13/2024 | 08/14/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.98840ml of W3112 + 0.00080ml of VP128634 + 0.00080ml of VP129196 + 0.00080ml of VP129235 + 0.00080ml of VP129238 + 0.00800ml of VP128523 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 834 | 0.5 PPB LOD, 8260-WATER | VP129702 | 08/13/2024 | 08/14/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.98300ml of W3112 + 0.00200ml of VP128634 + 0.00200ml of VP129196 + 0.00200ml of VP129235 + 0.00200ml of VP129238 + 0.00800ml of VP128523 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 891 | 0.75 PPB LOD, 8260-WATER | VP129703 | 08/13/2024 | 08/14/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.97000ml of W3112 + 0.00300ml of VP128634 + 0.00300ml of VP129196 + 0.00300ml of VP129235 + 0.00300ml of VP129238 + 0.00500ml of VP126666 + 0.00800ml of VP128298 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 837 | 2.5 PPB LOD, 8260-WATER | VP129704 | 08/13/2024 | 08/14/2024 | John Carlone | None | None | Mahesh Dadoda 08/14/2024 |

**FROM** 39.94200ml of W3112 + 0.00800ml of VP128523 + 0.01000ml of VP128634 + 0.01000ml of VP129196 + 0.01000ml of VP129235 + 0.01000ml of VP129238 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 589 | BFB TUNE CHECK | VP129708 | 08/13/2024 | 08/14/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP128290 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP129709 | 08/13/2024 | 08/14/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP129710 | 08/13/2024 | 08/14/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 589 | BFB TUNE CHECK | VP129723 | 08/14/2024 | 08/15/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.98400ml of W3112 + 0.01600ml of VP128290 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP129724 | 08/14/2024 | 08/15/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP129725 | 08/14/2024 | 08/15/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.94450ml of W3112 + 0.00500ml of VP126666 + 0.00500ml of VP128766 + 0.00800ml of VP128298 + 0.01250ml of VP128762 + 0.01250ml of VP129228 + 0.01250ml of VP129517 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2390 | 0.2PPB LOD, 8260-Water | VP129726 | 08/14/2024 | 08/15/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.98840ml of W3112 + 0.00080ml of VP128634 + 0.00080ml of VP129196 + 0.00080ml of VP129235 + 0.00080ml of VP129238 + 0.00800ml of VP128523 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2947 | 0.5 ppb MDL 8260 Water | VP129727 | 08/14/2024 | 08/15/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.98000ml of W3112 + 0.00100ml of VP128764 + 0.00100ml of VP128768 + 0.00100ml of VP129230 + 0.00100ml of VP129519 + 0.00500ml of VP126666 + 0.00800ml of VP128298 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3585 | 0.75 PPB MDL 8260 WATER | VP129728 | 08/14/2024 | 08/15/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.97000ml of W3112 + 0.00300ml of VP128765 + 0.00300ml of VP128769 + 0.00300ml of VP129231 + 0.00300ml of VP129520 + 0.00500ml of VP126666 + 0.00800ml of VP128298 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3786 | 2.5 PPB 8260 MDL-WATER | VP129729 | 08/14/2024 | 08/15/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.92000ml of W3112 + 0.00800ml of VP128523 + 0.01000ml of VP128765 + 0.01000ml of VP128769 + 0.01000ml of VP129231 + 0.01000ml of VP129520 = Final Quantity: 40.000 ml

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# VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3742 | 1.0 PPB LOQ 8260 Water | VP129730 | 08/14/2024 | 08/15/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.98000ml of W3112 + 0.00200ml of VP128764 + 0.00200ml of VP128768 + 0.00200ml of VP129230 + 0.00200ml of VP129519 + 0.00500ml of VP126666 + 0.00800ml of VP128298 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3748 | 8260 5.0 PPB LOQ/WATER | VP129731 | 08/14/2024 | 08/15/2024 | John Carlone | None | None | Mahesh Dadoda 08/15/2024 |

**FROM** 39.94000ml of W3112 + 0.00500ml of VP126666 + 0.00800ml of VP128298 + 0.01000ml of VP128764 + 0.01000ml of VP128768 + 0.01000ml of VP129230 + 0.01000ml of VP129519 = Final Quantity: 40.000 ml

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Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95318 / 2-Chloroethyl Vinyl Ether (Min = 5) | 121321 | 12/13/2024 | 06/25/2024 / SAM | 03/30/2022 / SAM | V12794 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95318 / 2-Chloroethyl Vinyl Ether (Min = 5) | 121321 | 12/13/2024 | 06/25/2024 / SAM | 03/30/2022 / SAM | V12798 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 70046 / Bromochloromethane Std. sol/methanol 1000ppm | 070122 | 01/22/2025 | 07/22/2024 / SAM | 07/06/2022 / SAM | V12966 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30067 / BFB tuneing solution | A0191805 | 12/08/2024 | 12/08/2023 / SAM | 01/13/2023 / SAM | V13390 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM | A0181905 | 12/14/2024 | 06/14/2024 / SAM | 01/23/2023 / SAM | V13444 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM | A0191703 | 12/03/2024 | 06/03/2024 / SAM | 01/23/2023 / SAM | V13448 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0193071 | 01/01/2025 | 07/01/2024 / SAM | 01/27/2023 / SAM | V13462 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul | A0193071 | 01/01/2025 | 07/01/2024 / SAM | 01/27/2023 / SAM | V13463 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A0186767 | 11/29/2024 | 05/29/2024 / SAM | 01/27/2023 / SAM | V13539 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95318 / 2-Chloroethyl Vinyl Ether (Min = 5) | 111722 | 12/25/2024 | 06/25/2024 / SAM | 01/30/2023 / SAM | V13581 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2] | A0196865 | 06/10/2025 | 06/10/2024 / SAM | 04/12/2023 / SAM | V13707 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2] | A0196865 | 09/19/2024 | 03/19/2024 / SAM | 04/12/2023 / SAM | V13708 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000ug/ml, PTM, 1ml | A0194279 | 01/30/2025 | 07/30/2024 / SAM | 05/31/2023 / SAM | V13800 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000ug/ml, PTM, 1ml | A0194279 | 12/28/2024 | 06/28/2024 / SAM | 05/31/2023 / SAM | V13801 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000ug/ml, PTM, 1ml | A0197644 | 11/29/2024 | 05/29/2024 / SAM | 05/31/2023 / SAM | V13812 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL | A0196115 | 09/30/2024 | 06/14/2024 / SAM | 09/25/2023 / SAM | V13952 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL | A0196115 | 09/30/2024 | 06/14/2024 / SAM | 09/25/2023 / SAM | V13953 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL | A0199224 | 12/31/2024 | 07/22/2024 / SAM | 09/25/2023 / SAM | V13959 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95319 / Revised Additions Mix (Min = 5) | 032922 | 12/14/2024 | 06/14/2024 / SAM | 11/22/2023 / SAM | V14016 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95319 / Revised Additions Mix (Min = 5) | 032922 | 12/14/2024 | 06/14/2024 / SAM | 11/22/2023 / SAM | V14017 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS | A0205177 | 11/14/2024 | 05/14/2024 / SAM | 12/22/2023 / SAM | V14093 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS | A0205179 | 12/14/2024 | 06/14/2024 / SAM | 12/22/2023 / SAM | V14103 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE LOTS | A0205179 | 12/14/2024 | 06/14/2024 / SAM | 12/22/2023 / SAM | V14104 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95319 / Revised Additions Mix (Min = 5) | 011624 | 12/03/2024 | 06/03/2024 / SAM | 01/17/2024 / SAM | V14123 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 09/19/2024 | 03/19/2024 / SAM | 02/06/2024 / SAM | V14141 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 12/10/2024 | 06/10/2024 / SAM | 02/06/2024 / SAM | V14142 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 01/22/2025 | 07/22/2024 / SAM | 02/06/2024 / SAM | V14143 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 12/11/2024 | 06/11/2024 / pedro | 02/06/2024 / SAM | V14147 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA9077-02 / Methanol, Purge/Trap (cs=6x1L) | 22L0562016 | 11/23/2024 | 05/23/2024 / pedro | 02/06/2024 / SAM | V14148 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95317 / Universal VOA Mega Mix (Min order = 5) | 021624 | 12/14/2024 | 06/14/2024 / SAM | 02/20/2024 / SAM | V14169 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95317 / Universal VOA Mega Mix (Min order = 5) | 021624 | 12/14/2024 | 06/14/2024 / SAM | 02/20/2024 / SAM | V14170 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95317 / Universal VOA Mega Mix (Min order = 5) | 021524 | 12/03/2024 | 06/03/2024 / SAM | 02/20/2024 / SAM | V14177 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A0200785 | 12/25/2024 | 06/25/2024 / SAM | 02/28/2024 / SAM | V14202 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A0200785 | 12/25/2024 | 06/25/2024 / SAM | 02/28/2024 / SAM | V14207 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A0200785 | 12/25/2024 | 06/25/2024 / SAM | 02/28/2024 / SAM | V14219 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555581 / Custom Standard, 8260 Internal Std [CS 5179-1] | A0210184 | 06/10/2025 | 06/10/2024 / SAM | 04/15/2024 / SAM | V14288 |

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 072424 | 08/24/2024 | 07/25/2024 / SAM | 07/25/2024 / SAM | V14411 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 072424 | 08/24/2024 | 07/25/2024 / SAM | 07/25/2024 / SAM | V14412 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 072424 | 08/24/2024 | 07/25/2024 / SAM | 07/25/2024 / SAM | V14413 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 072424 | 08/24/2024 | 07/25/2024 / SAM | 07/25/2024 / SAM | V14414 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 072424 | 08/24/2024 | 07/25/2024 / SAM | 07/25/2024 / SAM | V14415 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | DIW / DI Water | Daily Lab-Certified | 07/03/2029 | 07/03/2024 / Iwona | 07/03/2024 / Iwona | W3112 |

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

*Certified Reference Material CRM*

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ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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## CERTIFIED WEIGHT REPORT

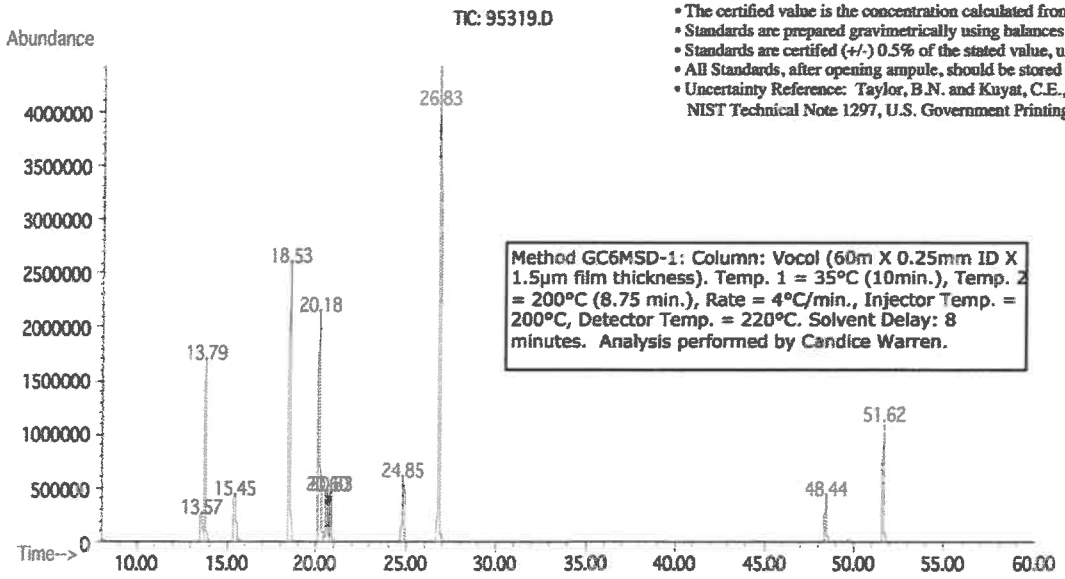
**Part Number:** 95319
**Lot Number:** 011624
**Description:** Revised Additions Mix
11 components
**Expiration Date:** 011627
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** Varied
**NIST Test ID#:** 6UTB

Solvent(s): Methanol Lot# EH471-US

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty

| Formulated By: | Prashant Chauhan | 011624 DATE |
|---|---|---|
| Reviewed By: | Pedro L. Rentas | 011624 DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrylonitrile | 7 | 4718CK | 10000 | 99 | 0.2 | 1.01035 | 1.01080 | 10004.4 | 40.6 | 107-13-1 | N/A | orl-rat 78 mg/kg |
| 2. 1-Chlorobutane | 1072 | MKCM5711 | 2000 | 99.99 | 0.2 | 0.20007 | 0.20035 | 2002.8 | 8.1 | 109-69-3 | N/A | orl-rat 2670mg/kg |
| 3. Cyclohexane | 1023 | 28930 | 2000 | 99 | 0.2 | 0.20207 | 0.20222 | 2001.5 | 8.2 | 110-82-7 | 300 ppm (1050mg/m3/8H) | orl-rat 12705mg/kg |
| 4. Di-isopropyl ether (DIPE) | 987 | 00412MX | 2000 | 99 | 0.2 | 0.20207 | 0.20227 | 2002.0 | 8.2 | 108-20-3 | 500 ppm (2100mg/m3/8H) | orl-rat 8470mg/kg |
| 5. 1,4-Dioxane | 373 | 03853KE | 40000 | 99 | 0.2 | 4.04142 | 4.04213 | 40007.0 | 162.5 | 123-91-1 | 25 ppm (90mg/m3/8H)(skin) | orl-mus 5700mg/kg |
| 6. Hexachloroethane | 199 | 12604HBV | 2000 | 99 | 0.2 | 0.20207 | 0.20221 | 2001.4 | 8.2 | 67-72-1 | 1 ppm (10mg/m3/8H)(skin) | orl-gpg 4970mg/kg |
| 7. Methylcyclohexane | 1627 | SHBG0199V | 2000 | 99 | 0.2 | 0.20207 | 0.20230 | 2002.3 | 8.2 | 108-87-2 | N/A | orl-mus 2250mg/kg |
| 8. Methyl tert-butyl ether (MTBE) | 209 | 21880 | 2000 | 99 | 0.2 | 0.20207 | 0.20227 | 2002.0 | 8.2 | 1634-04-4 | N/A | orl-rat 4g/kg |
| 9. Propionitrile | 349 | 1395468 | 20000 | 99 | 0.2 | 2.02071 | 2.02150 | 20007.8 | 81.3 | 107-12-0 | N/A | orl-rat 39mg/kg |
| 10. Tetrahydrofuran | 380 | SHBH8330 | 10000 | 99.9 | 0.2 | 1.00125 | 1.00200 | 10007.5 | 40.3 | 109-99-9 | 20 ppm (590mg/m3/8H) | orl-rat 1650mg/kg |
| 11. 1,2,3,4-Tetramethylbenzene | 491 | AP01 | 2000 | 93 | 0.2 | 0.21511 | 0.21522 | 2001.0 | 8.7 | 488-23-3 | N/A | orl-rat 6408mg/kg |




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

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1 = 35°C (10min.), Temp. 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Solvent Delay: 8 minutes. Analysis performed by Candice Warren.

| Name | MSD RT (min.) |
|---|---|
| Methyl tert-butyl ether (MTBE) | 13.56 |
| Acrylonitrile | 13.79 |
| Di-isopropyl ether | 15.44 |
| Propionitrile | 18.53 |
| Tetrahydrofuran | 20.17 |
| Cyclohexane | 20.58 |
| 1-Chlorobutane | 20.83 |
| Methylcyclohexane | 24.84 |
| 1,4-Dioxane | 26.84 |
| Hexachloroethane | 48.44 |
| 1,2,3,4-Tetramethylbenzene | 51.62 |

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021524
Description: Universal VOA Megamix
69 components
Expiration Date: 021527
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 8UTB

Solvent(s): Methanol Lot# EG359-USQ12

Formulated By: Mario Luis 021524 DATE

Reviewed By: Pedro L. Rentas 021524 DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 5E-05 Balance Uncertainty 0.021 Flask Uncertainty

| | Compound | (RM#) Part Number | Lot Number | Dil. Factor | Initial Vol. (mL) | Initial Conc.(ug/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expended Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Acetonitrile | (0324) | 021644 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20022 | 2001.5 | 8.1 | 75-05-8 | 40 ppm (70mg/m3/8H) | orl-rat 2460mg/kg |
| 2. | Allyl chloride (3-Chloropropene) | (0325) | 102396 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20222 | 2001.5 | 8.2 | 107-05-1 | 1 ppm (3mg/m3/8H) | orl-rat 700mg/kg |
| 3. | Carbon disulphide | (0060) | MKCR8561 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20020 | 2001.3 | 8.1 | 75-15-0 | 4 ppm (12mg/m3) (skin) | orl-rat 1200mg/kg |
| 4. | cis-1,4-Dichloro-2-butene | (1196) | 14718EF | NA | NA | NA | 2000 | 95 | 0.2 | NA | 0.21058 | 0.21060 | 2000.2 | 8.5 | 1476-11-5 | N/A | N/A |
| 5. | trans-1,4-Dichloro-2-butene | (0486) | MKBP6041V | NA | NA | NA | 2000 | 96.5 | 0.2 | NA | 0.20731 | 0.20734 | 2000.3 | 8.4 | 110-57-6 | N/A | N/A |
| 6. | Diethyl ether | (0153) | IK18CAS000( | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20042 | 2001.7 | 8.1 | 60-29-7 | N/A | N/A |
| 7. | Ethyl methacrylate | (0381) | 06126PX | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20231 | 2002.4 | 8.2 | 97-63-2 | N/A | orl-rat 14800mg/kg |
| 8. | Iodomethane | (0489) | SHBF8718V | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20106 | 0.20118 | 2001.2 | 8.1 | 74-88-4 | 5 ppm(28mg/m3/8H)(skin) | orl-rat 76mg/kg |
| 9. | 2-Methyl-1-propanol | (0445) | 15241EB | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20106 | 0.20120 | 2001.4 | 8.1 | 78-83-1 | 50 ppm (150mg/m3/8H) | orl-rat 2460mg/kg |
| 10. | Methacrylonitrile | (0442) | 00427ET | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20209 | 2000.2 | 8.2 | 126-98-7 | 1 ppm (3mg/m3/8H)(skin) | orl-rat 120mg/kg |
| 11. | Methyl acrylate | (1075) | SHBK0679 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20042 | 2001.7 | 8.1 | 96-33-3 | 10 ppm(35mg/m3/8H)(skin) | orl-rat 277mg/kg |
| 12. | Methyl methacrylate | (0404) | MKBW5137V | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20030 | 2000.5 | 8.1 | 80-62-6 | 100 ppm (410mg/m3/8H) | orl-rat 7872mg/kg |
| 13. | Nitrobenzene | (0228) | 01213TV | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20230 | 2002.3 | 8.2 | 98-95-3 | 1 ppm (5mg/m3/8H)(skin) | orl-rat 780mg/kg |
| 14. | 2-Nitropropane | (0461) | 14002JX | NA | NA | NA | 2000 | 97.3 | 0.2 | NA | 0.20560 | 0.20570 | 2001.0 | 8.3 | 79-46-9 | 10 ppm (35mg/m3/8H) | orl-rat 720mg/kg |
| 15. | Pentachloroethane | (0450) | HGA01 | NA | NA | NA | 2000 | 98 | 0.2 | NA | 0.20413 | 0.20415 | 2000.2 | 8.3 | 76-01-7 | N/A | N/A |
| 16. | 1,1,2-Trichlorotrifluoroethane | (0474) | 18930 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20210 | 2000.3 | 8.2 | 76-13-1 | 1000 ppm (7600mg/m3/8H) | orl-rat 43g/kg |
| 17. | Bromodichloromethane | 35171 | 101623 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 75-27-4 | N/A | orl-rat 916mg/kg |
| 18. | Dibromochloromethane | 35171 | 101623 | 0.05 | 5.00 | 40002.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 124-48-1 | N/A | orl-rat 848mg/kg |
| 19. | cis-1,2-Dichloroethene | 35171 | 101623 | 0.05 | 5.00 | 40003.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 156-59-2 | N/A | N/A |
| 20. | trans-1,2-Dichloroethene | 35171 | 101623 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 156-60-5 | N/A | orl-rat 1235mg/kg |
| 21. | Methylene chloride | 35171 | 101623 | 0.05 | 5.00 | 40002.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 75-09-2 | 500 ppm | orl-rat 820mg/kg |
| 22. | 1,1-Dichloroethene | 32251 | 102023 | 0.10 | 10.00 | 20001.6 | 2000 | NA | NA | 0.042 | NA | NA | 1999.7 | 20.4 | 75-35-4 | 1 ppm (4mg/m3/8H) | orl-rat 200mg/kg |
| 23. | Bromoform | 95321 | 020724 | 0.10 | 10.00 | 20003.2 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 75-25-2 | 0.5 ppm (5mg/m3) (skin) | orl-rat 933mg/kg |
| 24. | Carbon tetrachloride | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.4 | 56-23-5 | 2 ppm (12.6mg/m3/8H) | orl-rat 2350mg/kg |
| 25. | Chloroform | 95321 | 020724 | 0.10 | 10.00 | 20024.0 | 2000 | NA | NA | 0.042 | NA | NA | 2001.9 | 20.5 | 67-66-3 | 50 ppm (240mg/m3) (CL) | orl-rat 908mg/kg |
| 26. | Dibromomethane | 95321 | 020724 | 0.10 | 10.00 | 20002.9 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 74-95-3 | N/A | orl-rat 108mg/kg |
| 27. | 1,1-Dichloroethane | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 75-34-3 | 100 ppm | orl-rat 725mg/kg |
| 28. | 2,2-Dichloropropane | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.4 | 594-20-7 | N/A | N/A |
| 29. | Tetrachloroethene | 95321 | 020724 | 0.10 | 10.00 | 20201.1 | 2000 | NA | NA | 0.042 | NA | NA | 2019.6 | 20.6 | 127-18-4 | 25 ppm (170mg/m3/8H)(final) | orl-rat 2629mg/kg |
| 30. | 1,1,1-Trichloroethane | 95321 | 020724 | 0.10 | 10.00 | 20003.0 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 71-55-6 | 350 ppm (1900mg/m3/8H) | orl-rat 10300mg/kg |
| 31. | 1,2-Dibromo-3-chloropropane | 35161 | 112322 | 0.05 | 5.00 | 40016.5 | 2000 | NA | NA | 0.017 | NA | NA | 2000.3 | 22.9 | 96-12-8 | 0.001 ppm | orl-rat 170mg/kg |
| 32. | 1,2-Dibromoethane | 35161 | 112322 | 0.05 | 5.00 | 40024.8 | 2000 | NA | NA | 0.017 | NA | NA | 2000.7 | 22.9 | 106-93-4 | 20 ppm (8H) | orl-rat 108mg/kg |
| 33. | 1,2-Dichloroethane | 35161 | 112322 | 0.05 | 5.00 | 40018.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.4 | 22.9 | 107-06-2 | 50 ppm (8H) | orl-rat 670mg/kg |
| 34. | 1,2-Dichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40051.0 | 2000 | NA | NA | 0.017 | NA | NA | 2002.0 | 22.9 | 78-87-5 | 75 ppm (350mg/m3/8H) | orl-rat 1947mg/kg |
| 35. | 1,3-Dichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40005.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 142-28-9 | N/A | unr-mus 3600mg/kg |
| 36. | 1,1-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40012.1 | 2000 | NA | NA | 0.017 | NA | NA | 2000.1 | 29.7 | 563-58-6 | N/A | N/A |
| 37. | cis-1,3-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40010.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.0 | 23.0 | 10061-01-5 | N/A | N/A |
| 38. | trans-1,3-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40017.6 | 2000 | NA | NA | 0.017 | NA | NA | 2000.4 | 23.0 | 10061-02-6 | N/A | N/A |
| 39. | Hexachloro-1,3-butadiene | 35161 | 112322 | 0.05 | 5.00 | 40021.9 | 2000 | NA | NA | 0.017 | NA | NA | 2000.6 | 29.7 | 87-68-3 | 0.02 ppm (0.24mg/m3/8H) | orl-rat 82mg/kg |
| 40. | 1,1,1,2-Tetrachloroethane | 35161 | 112322 | 0.05 | 5.00 | 40011.9 | 2000 | NA | NA | 0.017 | NA | NA | 2000.1 | 22.9 | 630-20-6 | N/A | orl-rat 670mg/kg |
| 41. | 1,1,2,2-Tetrachloroethane | 35161 | 112322 | 0.05 | 5.00 | 40007.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 22.9 | 79-34-5 | 5 ppm (35mg/m3/8H)(skin) | orl-rat 800mg/kg |
| 42. | 1,1,2-Trichloroethane | 35161 | 112322 | 0.05 | 5.00 | 40006.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 23.0 | 79-00-5 | 10 ppm (45mg/m3/8H)(skin) | orl-rat 836mg/kg |
| 43. | Trichloroethene | 35161 | 112322 | 0.05 | 5.00 | 40029.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.9 | 22.9 | 79-01-6 | 50 ppm (270mg/m3/8H) | orl-mus 2402mg/kg |
| 44. | 1,2,3-Trichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40007.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 22.9 | 96-18-4 | 10 ppm (60mg/m3/8H) | orl-rat 149.6mg/kg |
| 45. | Benzene | 35162 | 050823 | 0.05 | 5.00 | 40005.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 71-43-2 | 1 ppm | orl-rat 4894mg/kg |
| 46. | Bromobenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-86-1 | N/A | orl-rat 2699mg/kg |
| 47. | n-Butyl benzene | 35162 | 050823 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 104-51-8 | N/A | N/A |
| 48. | Ethyl benzene | 35162 | 050823 | 0.05 | 5.00 | 40004.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 100-41-4 | 100 ppm (435mg/m3/8H) | orl-rat >2000mg/kg |
| 49. | p-Isopropyl toluene | 35162 | 050823 | 0.05 | 5.00 | 40005.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 99-87-6 | N/A | orl-rat 4750mg/kg |
| 50. | Naphthalene | 35162 | 050823 | 0.05 | 5.00 | 40006.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 91-20-3 | 10 ppm (50mg/m3/8H) | orl-rat 490mg/kg |
| 51. | Styrene | 35162 | 050823 | 0.05 | 5.00 | 40004.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 100-42-5 | 100 ppm | orl-rat 5000mg/kg |
| 52. | Toluene | 35162 | 050823 | 0.05 | 5.00 | 40006.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-88-3 | 200 ppm | orl-rat 5000mg/kg |
| 53. | 1,2,3-Trichlorobenzene | 35162 | 050823 | 0.05 | 5.00 | 40003.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 87-61-6 | N/A | ipr-mus 1390mg/kg |
| 54. | 1,2,4-Trichlorobenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 120-82-1 | 5 ppm (CL) (40mg/m3) | orl-rat 756mg/kg |
| 55. | 1,2,4-Trimethylbenzene | 35162 | 050823 | 0.05 | 5.00 | 40001.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 95-63-6 | N/A | orl-rat 5g/kg |
| 56. | 1,3,5-Trimethylbenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-67-8 | N/A | orl-rat 5000mg/kg |
| 57. | m-Xylene | 35162 | 050823 | 0.05 | 5.00 | 40005.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-38-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |
| 58. | tert-Butyl benzene | 35163 | 101923 | 0.05 | 5.00 | 40001.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 98-06-6 | N/A | N/A |
| 59. | sec-Butyl benzene | 35163 | 101923 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 135-98-8 | N/A | orl-rat 2240mg/kg |
| 60. | Chlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 108-90-7 | 75 ppm (350mg/m3/8H) | orl-rat 2290mg/kg |
| 61. | 2-Chlorotoluene | 35163 | 101923 | 0.05 | 5.00 | 40000.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 95-49-8 | 50 ppm (250mg/m3/8H) | orl-rat 3900mg/kg |
| 62. | 4-Chlorotoluene | 35163 | 101923 | 0.05 | 5.00 | 40003.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 106-43-4 | N/A | orl-rat 2100mg/kg |
| 63. | 1,2-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 95-50-1 | 50 ppm (300mg/m3) (CL) | orl-rat 500mg/kg |
| 64. | 1,3-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 541-73-1 | N/A | ipr-mus 1062mg/kg |
| 65. | 1,4-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40001.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 106-46-7 | 75 ppm (450mg/m3/8H) | orl-rat 500mg/kg |
| 66. | Isopropylbenzene | 35163 | 101923 | 0.05 | 5.00 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 98-82-8 | 50 ppm (245mg/m3/8H) | orl-rat 1400mg/kg |
| 67. | n-Propylbenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 23.0 | 103-65-1 | N/A | orl-rat 6040mg/kg |
| 68. | o-Xylene | 35163 | 101923 | 0.05 | 5.00 | 40040.8 | 2000 | NA | NA | 0.017 | NA | NA | 2001.5 | 23.0 | 95-47-6 | 100 ppm (435mg/m3/8H) | ipr-mus 1364mg/kg |
| 69. | p-Xylene | 35163 | 101923 | 0.05 | 5.00 | 40000.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 106-42-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |

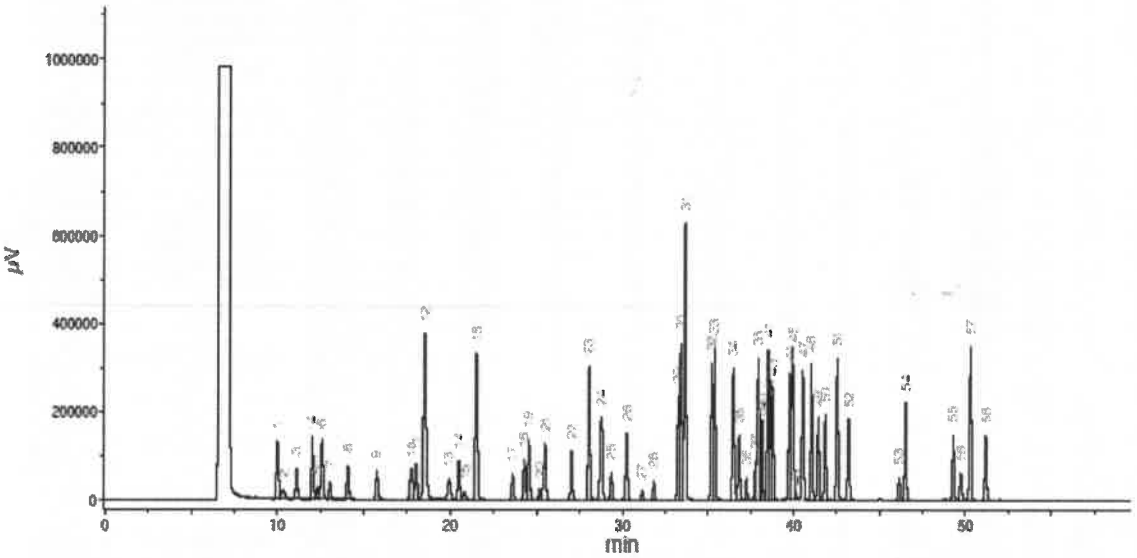
- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value,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

## Run 17, "P95317 L021524 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 10:04:27 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

### Comments

GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydrogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3




| Peak # | Name | FID RT (min.) |
|---|---|---|
| 1 | Ether | 9.97 |
| 2 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.33 |
| 3 | 1,1-Dichloroethene | 11.10 |
| 4 | Acetonitrile | 12.00 |
| 5 | Iodomethane | 12.31 |
| 6 | Allyl chloride | 12.56 |
| 7 | Carbon disulfide/Methylene chloride | 13.04 |
| 8 | trans-1,2-Dichloroethene | 14.07 |
| 9 | 1,1-Dichloroethane | 15.74 |
| 10 | 2,2-Dichloropropane | 17.74 |
| 11 | cis-1,2-Dichloroethene | 18.00 |
| 12 | Methacrylonitrile/Methyl acrylate/Chloroform | 18.49 |
| 13 | Isobutanol/1,1,1-Trichloroethane | 19.91 |
| 14 | 1,1-Dichloropropene | 20.46 |
| 15 | Carbon tetrachloride | 20.79 |
| 16 | Benzene/1,2-Dichloroethane | 21.48 |
| 17 | Trichloroethene | 23.58 |
| 18 | 1,2-Dichloropropane | 24.26 |
| 19 | Methyl methacrylate | 24.52 |
| 20 | Bromodichloromethane | 25.13 |
| 21 | Dibromomethane/2-Nitropropane | 25.46 |
| 22 | cis-1,3-Dichloropropene | 27.02 |
| 23 | Toluene | 28.05 |
| 24 | Ethyl methacrylate/trans-1,3-Dichloropropene | 28.73 |
| 25 | 1,1,2-Trichloroethane | 29.34 |
| 26 | Tetrachloroethene/1,3-Dichloropropane | 30.24 |
| 27 | Dibromochloromethane | 31.16 |
| 28 | 1,2-Dibromoethane | 31.84 |
| 29 | Chlorobenzene | 33.26 |
| 30 | Ethylbenzene/1,1,1,2-Tetrachloroethane | 33.40 |
| 31 | m-Xylene/p-Xylene | 33.66 |
| 32 | o-Xylene | 33.22 |
| 33 | Styrene | 35.39 |
| 34 | Isopropylbenzene/Bromoform | 36.48 |
| 35 | cis-1,4-Dichloro-2-butene | 36.80 |
| 36 | 1,1,2,2-Tetrachloroethane | 37.23 |
| 37 | 1,2,3-Trichloropropane | 37.77 |
| 38 | n-Propylbenzene | 37.92 |
| 39 | trans-1,4-Dichloro-2-butene | 38.05 |
| 40 | Bromobenzene | 38.14 |
| 41 | 1,3,5-Trimethylbenzene | 38.50 |
| 42 | 2-Chlorotoluene | 38.62 |
| 43 | 4-Chlorotoluene | 38.77 |
| 44 | tert-Butylbenzene | 39.76 |
| 45 | 1,2,4-Trimethylbenzene | 39.91 |
| 46 | Pentachloroethane | 40.17 |
| 47 | sec-Butylbenzene | 40.52 |
| 48 | p-Isopropyltoluene | 41.02 |
| 49 | 1,3-Dichlorobenzene | 41.42 |
| 50 | 1,4-Dichlorobenzene | 41.83 |
| 51 | n-Butylbenzene | 42.52 |
| 52 | 1,2-Dichlorobenzene | 43.18 |
| 53 | 1,2-Dibromo-3-chloropropane | 46.12 |
| 54 | Nitrobenzene | 46.48 |
| 55 | 1,2,4-Trichlorobenzene | 48.26 |
| 56 | Hexachlorobutadiene | 49.22 |
| 57 | Naphthalene | 50.26 |
| 58 | 1,2,3-Trichlorobenzene | 51.16 |

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty 5E-05 Balance Uncertainty

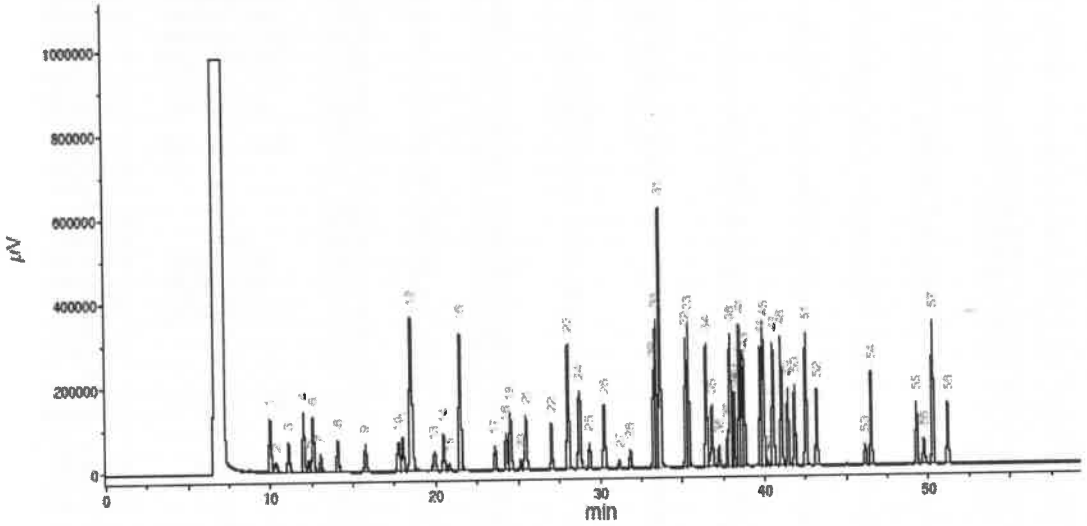
| Compound | (RM#) Part Number | Lot Number | Dil. Factor | Initial Vol. (mL) | Initial Conc.(ug/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acetonitrile | (0324) | 021644 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20020 | 2001.3 | 8.1 | 75-05-8 | 40 ppm (70mg/m3/8H) | orl-rat 2460mg/kg |
| 2. Allyl chloride (3-Chloropropene) | (0325) | 102396 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20221 | 2001.4 | 8.2 | 107-05-1 | 1 ppm (3mg/m3/8H) | orl-rat 700mg/kg |
| 3. Carbon disulphide | (0060) | MKCR8561 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20023 | 2001.6 | 8.1 | 75-15-0 | 4 ppm (12mg/m3) (skin) | orl-rat 1200mg/kg |
| 4. cis-1,4-Dichloro-2-butene | (1196) | 14718EF | NA | NA | NA | 2000 | 95 | 0.2 | NA | 0.21058 | 0.21069 | 2001.1 | 8.5 | 1476-11-5 | N/A | N/A |
| 5. trans-1,4-Dichloro-2-butene | (0486) | MKBP6041V | NA | NA | NA | 2000 | 96.5 | 0.2 | NA | 0.20731 | 0.20748 | 2001.7 | 8.4 | 110-57-6 | N/A | N/A |
| 6. Diethyl ether | (0153) | IK18CAS0000 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20040 | 2001.5 | 8.1 | 60-29-7 | N/A | N/A |
| 7. Ethyl methacrylate | (0361) | 06126PX | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20230 | 2002.3 | 8.2 | 97-63-2 | N/A | orl-rat 14800mg/kg |
| 8. Iodomethane | (0489) | SHBF8718V | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20106 | 0.20121 | 2001.5 | 8.2 | 74-88-4 | 5 ppm(28mg/m3/8H)(skin) | orl-rat 76mg/kg |
| 9. 2-Methyl-1-propanol | (0445) | 15241EB | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20106 | 0.20120 | 2001.4 | 8.1 | 78-83-1 | 50 ppm (150mg/m3/8H) | orl-rat 2460mg/kg |
| 10. Methacrylonitrile | (0442) | 00427ET | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20221 | 2001.4 | 8.2 | 126-98-7 | 1 ppm (3mg/m3/8H)(skin) | orl-rat 120mg/kg |
| 11. Methyl acrylate | (1075) | SHBK0679 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20040 | 2001.5 | 8.1 | 96-33-3 | 10 ppm(35mg/m3/8H)(skin) | orl-rat 277mg/kg |
| 12. Methyl methacrylate | (0404) | MKBW5137V | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20041 | 2001.6 | 8.1 | 80-62-6 | 100 ppm (410mg/m3/8H) | orl-rat 7872mg/kg |
| 13. Nitrobenzene | (0228) | 01213TV | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20220 | 2001.3 | 8.2 | 98-95-3 | 1 ppm (5mg/m3/8H)(skin) | orl-rat 780mg/kg |
| 14. 2-Nitropropane | (0461) | 14002JX | NA | NA | NA | 2000 | 97.3 | 0.2 | NA | 0.20560 | 0.20577 | 2001.6 | 8.3 | 79-46-9 | 10 ppm (35mg/m3/8H) | orl-rat 720mg/kg |
| 15. Pentachloroethane | (0450) | HGA01 | NA | NA | NA | 2000 | 98 | 0.2 | NA | 0.20413 | 0.20430 | 2001.6 | 8.3 | 76-01-7 | N/A | N/A |
| 16. 1,1,2-Trichlorotrifluoroethane | (0474) | 18930 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20225 | 2001.8 | 8.2 | 76-13-1 | 1000 ppm (7600mg/m3/8H) | orl-rat 43g/kg |
| 17. Bromodichloromethane | 35171 | 101623 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 75-27-4 | N/A | orl-rat 916mg/kg |
| 18. Dibromochloromethane | 35171 | 101623 | 0.05 | 5.00 | 40002.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 124-48-1 | N/A | orl-rat 848mg/kg |
| 19. cis-1,2-Dichloroethene | 35171 | 101623 | 0.05 | 5.00 | 40003.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 156-59-2 | N/A | N/A |
| 20. trans-1,2-Dichloroethene | 35171 | 101623 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 156-60-5 | N/A | orl-rat 1235mg/kg |
| 21. Methylene chloride | 35171 | 101623 | 0.05 | 5.00 | 40002.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 75-09-2 | 500 ppm | orl-rat 820mg/kg |
| 22. 1,1-Dichloroethene | 32251 | 102023 | 0.10 | 10.00 | 20001.6 | 2000 | NA | NA | 0.042 | NA | NA | 1999.7 | 20.4 | 75-35-4 | 1 ppm (4mg/m3/8H) | orl-rat 200mg/kg |
| 23. Bromoform | 95321 | 020724 | 0.10 | 10.00 | 20003.2 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 75-25-2 | 0.5 ppm (5mg/m3) (skin) | orl-rat 933mg/kg |
| 24. Carbon tetrachloride | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.4 | 56-23-5 | 2 ppm (12.6mg/m3/8H) | orl-rat 2350mg/kg |
| 25. Chloroform | 95321 | 020724 | 0.10 | 10.00 | 20024.0 | 2000 | NA | NA | 0.042 | NA | NA | 2001.9 | 20.5 | 67-66-3 | 50 ppm (240mg/m3) (CL) | orl-rat 908mg/kg |
| 26. Dibromomethane | 95321 | 020724 | 0.10 | 10.00 | 20002.9 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 74-95-3 | N/A | orl-rat 108mg/kg |
| 27. 1,1-Dichloroethane | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 75-34-3 | 100 ppm | orl-rat 725mg/kg |
| 28. 2,2-Dichloropropane | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.4 | 594-20-7 | N/A | N/A |
| 29. Tetrachloroethene | 95321 | 020724 | 0.10 | 10.00 | 20201.1 | 2000 | NA | NA | 0.042 | NA | NA | 2019.6 | 20.6 | 127-18-4 | 25 ppm (170mg/m3/8H)(final) | orl-rat 2629mg/kg |
| 30. 1,1,1-Trichloroethane | 95321 | 020724 | 0.10 | 10.00 | 20003.0 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 71-55-6 | 350 ppm (1900mg/m3/8H) | orl-rat 10300mg/kg |
| 31. 1,2-Dibromo-3-chloropropane | 35161 | 112322 | 0.05 | 5.00 | 40016.5 | 2000 | NA | NA | 0.017 | NA | NA | 2000.3 | 22.9 | 96-12-8 | 0.001 ppm | orl-rat 170mg/kg |
| 32. 1,2-Dibromoethane | 35161 | 112322 | 0.05 | 5.00 | 40024.8 | 2000 | NA | NA | 0.017 | NA | NA | 2000.7 | 22.9 | 106-93-4 | 20 ppm (8H) | orl-rat 108mg/kg |
| 33. 1,2-Dichloroethane | 35161 | 112322 | 0.05 | 5.00 | 40018.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.4 | 22.9 | 107-06-2 | 50 ppm (8H) | orl-rat 670mg/kg |
| 34. 1,2-Dichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40051.0 | 2000 | NA | NA | 0.017 | NA | NA | 2002.0 | 22.9 | 78-87-5 | 75 ppm (350mg/m3/8H) | orl-rat 1947mg/kg |
| 35. 1,3-Dichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40005.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 142-28-9 | N/A | unr-mus 3600mg/kg |
| 36. 1,1-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40012.1 | 2000 | NA | NA | 0.017 | NA | NA | 2000.1 | 29.7 | 563-58-6 | N/A | N/A |
| 37. cis-1,3-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40010.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.0 | 23.0 | 10061-01-5 | N/A | N/A |
| 38. trans-1,3-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40017.8 | 2000 | NA | NA | 0.017 | NA | NA | 2000.4 | 23.0 | 10061-02-6 | N/A | N/A |
| 39. Hexachloro-1,3-butadiene | 35161 | 112322 | 0.05 | 5.00 | 40021.9 | 2000 | NA | NA | 0.017 | NA | NA | 2000.6 | 29.7 | 87-68-3 | 0.02 ppm (0.24mg/m3/8H) | orl-rat 82mg/kg |
| 40. 1,1,1,2-Tetrachloroethane | 35161 | 112322 | 0.05 | 5.00 | 40011.9 | 2000 | NA | NA | 0.017 | NA | NA | 2000.1 | 22.9 | 630-20-6 | N/A | orl-rat 670mg/kg |
| 41. 1,1,2,2-Tetrachloroethane | 35161 | 112322 | 0.05 | 5.00 | 40007.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 22.9 | 79-34-5 | 5 ppm (35mg/m3/8H)(skin) | orl-rat 800mg/kg |
| 42. 1,1,2-Trichloroethane | 35161 | 112322 | 0.05 | 5.00 | 40006.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 23.0 | 79-00-5 | 10 ppm (46mg/m3/8H)(skin) | orl-rat 836mg/kg |
| 43. Trichloroethene | 35161 | 112322 | 0.05 | 5.00 | 40029.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.9 | 22.9 | 79-01-6 | 50 ppm (270mg/m3/8H) | orl-mus 2402mg/kg |
| 44. 1,2,3-Trichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40007.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 22.9 | 96-18-4 | 10 ppm (60mg/m3/8H) | orl-rat 149.6mg/kg |
| 45. Benzene | 35162 | 050823 | 0.05 | 5.00 | 40005.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 71-43-2 | 1 ppm | orl-rat 4894mg/kg |
| 46. Bromobenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-86-1 | N/A | orl-rat 2699mg/kg |
| 47. n-Butyl benzene | 35162 | 050823 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 104-51-8 | N/A | N/A |
| 48. Ethyl benzene | 35162 | 050823 | 0.05 | 5.00 | 40004.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 100-41-4 | 100 ppm (435mg/m3/8H) | orl-rat >2000mg/kg |
| 49. p-Isopropyl toluene | 35162 | 050823 | 0.05 | 5.00 | 40005.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 99-87-6 | N/A | orl-rat 4750mg/kg |
| 50. Naphthalene | 35162 | 050823 | 0.05 | 5.00 | 40006.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 91-20-3 | 10 ppm (50mg/m3/8H) | orl-rat 490mg/kg |
| 51. Styrene | 35162 | 050823 | 0.05 | 5.00 | 40004.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 100-42-5 | 100 ppm | orl-rat 5000mg/kg |
| 52. Toluene | 35162 | 050823 | 0.05 | 5.00 | 40006.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-88-3 | 200 ppm | orl-rat 5000mg/kg |
| 53. 1,2,3-Trichlorobenzene | 35162 | 050823 | 0.05 | 5.00 | 40003.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 87-61-6 | N/A | ipr-mus 1390mg/kg |
| 54. 1,2,4-Trichlorobenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 120-82-1 | 5 ppm (CL) (40mg/m3) | orl-rat 756mg/kg |
| 55. 1,2,4-Trimethylbenzene | 35162 | 050823 | 0.05 | 5.00 | 40001.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 95-63-6 | N/A | orl-rat 5g/kg |
| 56. 1,3,5-Trimethylbenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-67-8 | N/A | orl-rat 5000mg/kg |
| 57. m-Xylene | 35162 | 050823 | 0.05 | 5.00 | 40005.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-38-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |
| 58. tert-Butyl benzene | 35163 | 101923 | 0.05 | 5.00 | 40001.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 98-06-6 | N/A | N/A |
| 59. sec-Butyl benzene | 35163 | 101923 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 135-98-8 | N/A | orl-rat 2240mg/kg |
| 60. Chlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 108-90-7 | 75 ppm (350mg/m3/8H) | orl-rat 2290mg/kg |
| 61. 2-Chlorotoluene | 35163 | 101923 | 0.05 | 5.00 | 40000.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 95-49-8 | 50 ppm (250mg/m3/8H) | orl-rat 3900mg/kg |
| 62. 4-Chlorotoluene | 35163 | 101923 | 0.05 | 5.00 | 40003.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 106-43-4 | N/A | orl-rat 2100mg/kg |
| 63. 1,2-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 95-50-1 | 50 ppm (300mg/m3) (CL) | orl-rat 500mg/kg |
| 64. 1,3-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 541-73-1 | N/A | ipr-mus 1062mg/kg |
| 65. 1,4-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40001.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 106-46-7 | 75 ppm (450mg/m3/8H) | orl-rat 500mg/kg |
| 66. Isopropylbenzene | 35163 | 101923 | 0.05 | 5.00 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 98-82-8 | 50 ppm (245mg/m3/8H) | orl-rat 1400mg/kg |
| 67. n-Propylbenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 23.0 | 103-65-1 | N/A | orl-rat 6040mg/kg |
| 68. o-Xylene | 35163 | 101923 | 0.05 | 5.00 | 40040.8 | 2000 | NA | NA | 0.017 | NA | NA | 2001.5 | 23.0 | 95-47-6 | 100 ppm (435mg/m3/8H) | ipr-mus 1364mg/kg |
| 69. p-Xylene | 35163 | 101923 | 0.05 | 5.00 | 40000.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 106-42-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |

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

## Run 16, "P95317 L021624 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

**Comments**
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3




| Peak # | Name | FID RT (min.) |
|---|---|---|
| 1 | Ether | 9.97 |
| 2 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.33 |
| 3 | 1,1-Dichloroethene | 11.10 |
| 4 | Acetonitrile | 12.00 |
| 5 | Iodomethane | 12.31 |
| 6 | Allyl chloride | 12.56 |
| 7 | Carbon disulfide/Methylene chloride | 13.04 |
| 8 | trans-1,2-Dichloroethene | 14.07 |
| 9 | 1,1-Dichloroethane | 15.74 |
| 10 | 2,2-Dichloropropane | 17.74 |
| 11 | cis-1,2-Dichloroethene | 18.00 |
| 12 | Methacrylonitrile/Methyl acrylate/Chloroform | 18.46 |
| 13 | Isobutanol/1,1,1-Trichloroethane | 19.91 |
| 14 | 1,1-Dichloropropene | 20.46 |
| 15 | Carbon tetrachloride | 20.79 |
| 16 | Benzene/1,2-Dichloroethane | 21.49 |
| 17 | Trichloroethene | 23.58 |
| 18 | 1,2-Dichloropropane | 24.28 |
| 19 | Methyl methacrylate | 24.52 |
| 20 | Bromodichloromethane | 25.13 |
| 21 | Dibromomethane/2-Nitropropane | 25.46 |
| 22 | cis-1,3-Dichloropropene | 27.02 |
| 23 | Toluene | 28.05 |
| 24 | Ethyl methacrylate/trans-1,3-Dichloropropene | 28.73 |
| 25 | 1,1,2-Trichloroethane | 29.34 |
| 26 | Tetrachloroethene/1,3-Dichloropropane | 30.24 |
| 27 | Dibromochloromethane | 31.16 |
| 28 | 1,2-Dibromoethane | 31.84 |
| 29 | Chlorobenzene | 33.26 |
| 30 | Ethylbenzene/1,1,1,2-Tetrachloroethane | 33.40 |
| 31 | m-Xylene/p-Xylene | 33.86 |
| 32 | o-Xylene | 35.22 |
| 33 | Styrene | 35.38 |
| 34 | Isopropylbenzene/Bromoform | 36.18 |
| 35 | cis-1,4-Dichloro-2-Butene | 36.80 |
| 36 | 1,1,2,2-Tetrachloroethane | 37.23 |
| 37 | 1,2,3-Trichloropropane | 37.77 |
| 38 | n-Propylbenzene | 37.93 |
| 39 | trans-1,4-Dichloro-2-Butene | 38.05 |
| 40 | Bromobenzene | 38.14 |
| 41 | 1,3,5-Trimethylbenzene | 38.80 |
| 42 | 2-Chlorotoluene | 38.82 |
| 43 | 4-Chlorotoluene | 38.77 |
| 44 | tert-Butylbenzene | 39.76 |
| 45 | 1,2,4-Trimethylbenzene | 39.91 |
| 46 | Pentachloroethane | 40.17 |
| 47 | sec-Butylbenzene | 40.52 |
| 48 | p-Isopropyltoluene | 41.02 |
| 49 | 1,3-Dichlorobenzene | 41.42 |
| 50 | 1,4-Dichlorobenzene | 41.83 |
| 51 | n-Butylbenzene | 42.53 |
| 52 | 1,2-Dichlorobenzene | 43.18 |
| 53 | 1,2-Dibromo-3-chloropropane | 46.12 |
| 54 | Nitrobenzene | 46.48 |
| 55 | 1,2,4-Trichlorobenzene | 49.26 |
| 56 | Hexachlorobutadiene | 49.72 |
| 57 | Naphthalene | 50.26 |
| 58 | 1,2,3-Trichlorobenzene | 51.16 |

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr. Hamden CT, 06514 | Emergency Telephone International | **1-352-323-3500** |
| | | Date Prepared/Revised | January 1, 2023 |

## Section II - Hazards Identification

**GHS Classification In accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | | % (optional) |
|---|---|---|---|
| Methanol | METHYL ALCOHOL | CAS#: 67-56-1 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability — Stable under recommended storage conditions.
Possibility of hazardous reactions — Vapours may form explosive mixture with air.
Conditions to avoid — Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid — Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 021624
Description: Universal VOA Megamix
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Methanol EG359-USQ12

Formulated By: Prashant Chauhan 021624 DATE

Reviewed By: Pedro L. Rentas 021624 DATE

Weight(s) shown below were combined and diluted to (mL): 100.0 0.021 Flask Uncertainty 5E-05 Balance Uncertainty

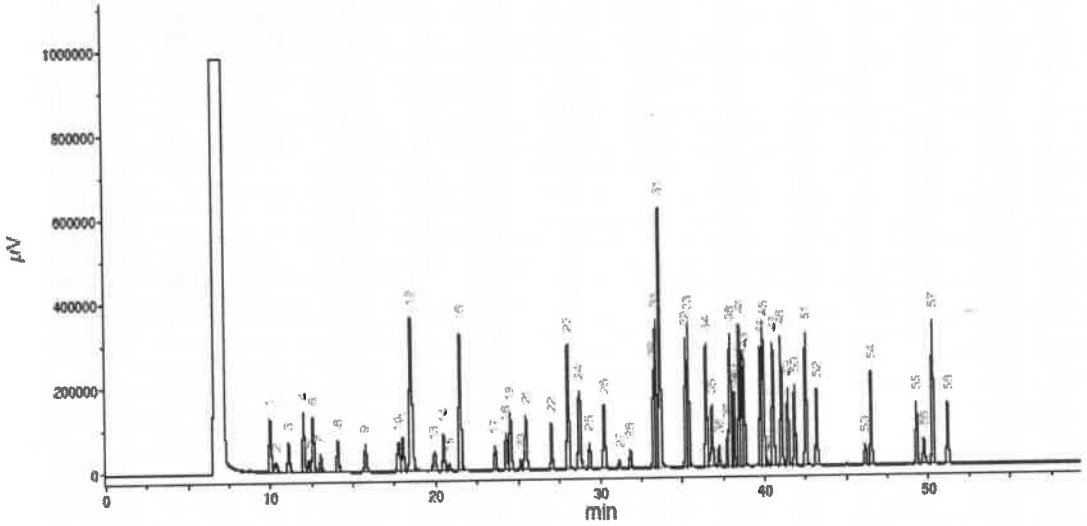
| Compound | (RM#) Part Number | Lot Number | Dil. Factor | Initial Vol. (mL) | Initial Conc.(ug/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acetonitrile | (0324) | 021644 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20020 | 2001.3 | 8.1 | 75-05-8 | 40 ppm (70mg/m3/8H) | orl-rat 2460mg/kg |
| 2. Allyl chloride (3-Chloropropene) | (0325) | 102396 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20221 | 2001.4 | 8.2 | 107-05-1 | 1 ppm (3mg/m3/8H) | orl-rat 700mg/kg |
| 3. Carbon disulphide | (0060) | MKCR8561 | NA | NA | NA | 2000 | 99.99 | 0.2 | NA | 0.20007 | 0.20023 | 2001.6 | 8.1 | 75-15-0 | 4 ppm (12mg/m3) (skin) | orl-rat 1200mg/kg |
| 4. cis-1,4-Dichloro-2-butene | (1196) | 14718EF | NA | NA | NA | 2000 | 95 | 0.2 | NA | 0.21058 | 0.21069 | 2001.1 | 8.5 | 1476-11-5 | N/A | N/A |
| 5. trans-1,4-Dichloro-2-butene | (0486) | MKBP6041V | NA | NA | NA | 2000 | 96.5 | 0.2 | NA | 0.20731 | 0.20748 | 2001.7 | 8.4 | 110-57-6 | N/A | N/A |
| 6. Diethyl ether | (0153) | IK18CAS0000 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20040 | 2001.5 | 8.1 | 60-29-7 | N/A | N/A |
| 7. Ethyl methacrylate | (0361) | 06126PX | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20230 | 2002.3 | 8.2 | 97-63-2 | N/A | orl-rat 14800mg/kg |
| 8. Iodomethane | (0489) | SHBF8718V | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20106 | 0.20121 | 2001.5 | 8.2 | 74-88-4 | 5 ppm(28mg/m3/8H)(skin) | orl-rat 76mg/kg |
| 9. 2-Methyl-1-propanol | (0445) | 15241EB | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20106 | 0.20120 | 2001.4 | 8.1 | 78-83-1 | 50 ppm (150mg/m3/8H) | orl-rat 2460mg/kg |
| 10. Methacrylonitrile | (0442) | 00427ET | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20221 | 2001.4 | 8.2 | 126-98-7 | 1 ppm (3mg/m3/8H)(skin) | orl-rat 120mg/kg |
| 11. Methyl acrylate | (1075) | SHBK0679 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20040 | 2001.5 | 8.1 | 96-33-3 | 10 ppm(35mg/m3/8H)(skin) | orl-rat 277mg/kg |
| 12. Methyl methacrylate | (0404) | MKBW5137V | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20025 | 0.20041 | 2001.6 | 8.1 | 80-62-6 | 100 ppm (410mg/m3/8H) | orl-rat 7872mg/kg |
| 13. Nitrobenzene | (0228) | 01213TV | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20220 | 2001.3 | 8.2 | 98-95-3 | 1 ppm (5mg/m3/8H)(skin) | orl-rat 780mg/kg |
| 14. 2-Nitropropane | (0461) | 14002JX | NA | NA | NA | 2000 | 97.3 | 0.2 | NA | 0.20560 | 0.20577 | 2001.6 | 8.3 | 79-46-9 | 10 ppm (35mg/m3/8H) | orl-rat 720mg/kg |
| 15. Pentachloroethane | (0450) | HGA01 | NA | NA | NA | 2000 | 98 | 0.2 | NA | 0.20413 | 0.20430 | 2001.6 | 8.3 | 76-01-7 | N/A | N/A |
| 16. 1,1,2-Trichlorotrifluoroethane | (0474) | 18930 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20207 | 0.20225 | 2001.8 | 8.2 | 76-13-1 | 1000 ppm (7600mg/m3/8H) | orl-rat 43g/kg |
| 17. Bromodichloromethane | 35171 | 101623 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 75-27-4 | N/A | orl-rat 916mg/kg |
| 18. Dibromochloromethane | 35171 | 101623 | 0.05 | 5.00 | 40002.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 124-48-1 | N/A | orl-rat 848mg/kg |
| 19. cis-1,2-Dichloroethene | 35171 | 101623 | 0.05 | 5.00 | 40003.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 156-59-2 | N/A | N/A |
| 20. trans-1,2-Dichloroethene | 35171 | 101623 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 156-60-5 | N/A | orl-rat 1235mg/kg |
| 21. Methylene chloride | 35171 | 101623 | 0.05 | 5.00 | 40002.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 75-09-2 | 500 ppm | orl-rat 820mg/kg |
| 22. 1,1-Dichloroethene | 32251 | 102023 | 0.10 | 10.00 | 20001.6 | 2000 | NA | NA | 0.042 | NA | NA | 1999.7 | 20.4 | 75-35-4 | 1 ppm (4mg/m3/8H) | orl-rat 200mg/kg |
| 23. Bromoform | 95321 | 020724 | 0.10 | 10.00 | 20003.2 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 75-25-2 | 0.5 ppm (5mg/m3) (skin) | orl-rat 933mg/kg |
| 24. Carbon tetrachloride | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.4 | 56-23-5 | 2 ppm (12.6mg/m3/8H) | orl-rat 2350mg/kg |
| 25. Chloroform | 95321 | 020724 | 0.10 | 10.00 | 20024.0 | 2000 | NA | NA | 0.042 | NA | NA | 2001.9 | 20.5 | 67-66-3 | 50 ppm (240mg/m3) (CL) | orl-rat 908mg/kg |
| 26. Dibromomethane | 95321 | 020724 | 0.10 | 10.00 | 20002.9 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 74-95-3 | N/A | orl-rat 108mg/kg |
| 27. 1,1-Dichloroethane | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 75-34-3 | 100 ppm | orl-rat 725mg/kg |
| 28. 2,2-Dichloropropane | 95321 | 020724 | 0.10 | 10.00 | 20003.4 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.4 | 594-20-7 | N/A | N/A |
| 29. Tetrachloroethene | 95321 | 020724 | 0.10 | 10.00 | 20201.1 | 2000 | NA | NA | 0.042 | NA | NA | 2019.6 | 20.6 | 127-18-4 | 25 ppm (170mg/m3/8H)(final) | orl-rat 2629mg/kg |
| 30. 1,1,1-Trichloroethane | 95321 | 020724 | 0.10 | 10.00 | 20003.0 | 2000 | NA | NA | 0.042 | NA | NA | 1999.8 | 20.5 | 71-55-6 | 350 ppm (1900mg/m3/8H) | orl-rat 10300mg/kg |
| 31. 1,2-Dibromo-3-chloropropane | 35161 | 112322 | 0.05 | 5.00 | 40016.5 | 2000 | NA | NA | 0.017 | NA | NA | 2000.3 | 22.9 | 96-12-8 | 0.001 ppm | orl-rat 170mg/kg |
| 32. 1,2-Dibromoethane | 35161 | 112322 | 0.05 | 5.00 | 40024.8 | 2000 | NA | NA | 0.017 | NA | NA | 2000.7 | 22.9 | 106-93-4 | 20 ppm (8H) | orl-rat 108mg/kg |
| 33. 1,2-Dichloroethane | 35161 | 112322 | 0.05 | 5.00 | 40018.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.4 | 22.9 | 107-06-2 | 50 ppm (8H) | orl-rat 670mg/kg |
| 34. 1,2-Dichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40051.0 | 2000 | NA | NA | 0.017 | NA | NA | 2002.0 | 22.9 | 78-87-5 | 75 ppm (350mg/m3/8H) | orl-rat 1947mg/kg |
| 35. 1,3-Dichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40005.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 142-28-9 | N/A | unr-mus 3600mg/kg |
| 36. 1,1-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40012.1 | 2000 | NA | NA | 0.017 | NA | NA | 2000.1 | 29.7 | 563-58-6 | N/A | N/A |
| 37. cis-1,3-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40010.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.0 | 23.0 | 10061-01-5 | N/A | N/A |
| 38. trans-1,3-Dichloropropene | 35161 | 112322 | 0.05 | 5.00 | 40017.8 | 2000 | NA | NA | 0.017 | NA | NA | 2000.4 | 23.0 | 10061-02-6 | N/A | N/A |
| 39. Hexachloro-1,3-butadiene | 35161 | 112322 | 0.05 | 5.00 | 40021.9 | 2000 | NA | NA | 0.017 | NA | NA | 2000.6 | 29.7 | 87-68-3 | 0.02 ppm (0.24mg/m3/8H) | orl-rat 82mg/kg |
| 40. 1,1,1,2-Tetrachloroethane | 35161 | 112322 | 0.05 | 5.00 | 40011.9 | 2000 | NA | NA | 0.017 | NA | NA | 2000.1 | 22.9 | 630-20-6 | N/A | orl-rat 670mg/kg |
| 41. 1,1,2,2-Tetrachloroethane | 35161 | 112322 | 0.05 | 5.00 | 40007.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 22.9 | 79-34-5 | 5 ppm (35mg/m3/8H)(skin) | orl-rat 800mg/kg |
| 42. 1,1,2-Trichloroethane | 35161 | 112322 | 0.05 | 5.00 | 40006.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 23.0 | 79-00-5 | 10 ppm (46mg/m3/8H)(skin) | orl-rat 836mg/kg |
| 43. Trichloroethene | 35161 | 112322 | 0.05 | 5.00 | 40029.0 | 2000 | NA | NA | 0.017 | NA | NA | 2000.9 | 22.9 | 79-01-6 | 50 ppm (270mg/m3/8H) | orl-mus 2402mg/kg |
| 44. 1,2,3-Trichloropropane | 35161 | 112322 | 0.05 | 5.00 | 40007.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 22.9 | 96-18-4 | 10 ppm (60mg/m3/8H) | orl-rat 149.6mg/kg |
| 45. Benzene | 35162 | 050823 | 0.05 | 5.00 | 40005.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 71-43-2 | 1 ppm | orl-rat 4894mg/kg |
| 46. Bromobenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-86-1 | N/A | orl-rat 2699mg/kg |
| 47. n-Butyl benzene | 35162 | 050823 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 104-51-8 | N/A | N/A |
| 48. Ethyl benzene | 35162 | 050823 | 0.05 | 5.00 | 40004.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 100-41-4 | 100 ppm (435mg/m3/8H) | orl-rat >2000mg/kg |
| 49. p-Isopropyl toluene | 35162 | 050823 | 0.05 | 5.00 | 40005.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 99-87-6 | N/A | orl-rat 4750mg/kg |
| 50. Naphthalene | 35162 | 050823 | 0.05 | 5.00 | 40006.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 91-20-3 | 10 ppm (50mg/m3/8H) | orl-rat 490mg/kg |
| 51. Styrene | 35162 | 050823 | 0.05 | 5.00 | 40004.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 100-42-5 | 100 ppm | orl-rat 5000mg/kg |
| 52. Toluene | 35162 | 050823 | 0.05 | 5.00 | 40006.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-88-3 | 200 ppm | orl-rat 5000mg/kg |
| 53. 1,2,3-Trichlorobenzene | 35162 | 050823 | 0.05 | 5.00 | 40003.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 87-61-6 | N/A | ipr-mus 1390mg/kg |
| 54. 1,2,4-Trichlorobenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 120-82-1 | 5 ppm (CL) (40mg/m3) | orl-rat 756mg/kg |
| 55. 1,2,4-Trimethylbenzene | 35162 | 050823 | 0.05 | 5.00 | 40001.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 95-63-6 | N/A | orl-rat 5g/kg |
| 56. 1,3,5-Trimethylbenzene | 35162 | 050823 | 0.05 | 5.00 | 40006.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-67-8 | N/A | orl-rat 5000mg/kg |
| 57. m-Xylene | 35162 | 050823 | 0.05 | 5.00 | 40005.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 22.9 | 108-38-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |
| 58. tert-Butyl benzene | 35163 | 101923 | 0.05 | 5.00 | 40001.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 98-06-6 | N/A | N/A |
| 59. sec-Butyl benzene | 35163 | 101923 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 135-98-8 | N/A | orl-rat 2240mg/kg |
| 60. Chlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 108-90-7 | 75 ppm (350mg/m3/8H) | orl-rat 2290mg/kg |
| 61. 2-Chlorotoluene | 35163 | 101923 | 0.05 | 5.00 | 40000.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 95-49-8 | 50 ppm (250mg/m3/8H) | orl-rat 3900mg/kg |
| 62. 4-Chlorotoluene | 35163 | 101923 | 0.05 | 5.00 | 40003.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 106-43-4 | N/A | orl-rat 2100mg/kg |
| 63. 1,2-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 22.9 | 95-50-1 | 50 ppm (300mg/m3) (CL) | orl-rat 500mg/kg |
| 64. 1,3-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 23.0 | 541-73-1 | N/A | ipr-mus 1062mg/kg |
| 65. 1,4-Dichlorobenzene | 35163 | 101923 | 0.05 | 5.00 | 40001.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.6 | 22.9 | 106-46-7 | 75 ppm (450mg/m3/8H) | orl-rat 500mg/kg |
| 66. Isopropylbenzene | 35163 | 101923 | 0.05 | 5.00 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 98-82-8 | 50 ppm (245mg/m3/8H) | orl-rat 1400mg/kg |
| 67. n-Propylbenzene | 35163 | 101923 | 0.05 | 5.00 | 40003.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.7 | 23.0 | 103-65-1 | N/A | orl-rat 6040mg/kg |
| 68. o-Xylene | 35163 | 101923 | 0.05 | 5.00 | 40040.8 | 2000 | NA | NA | 0.017 | NA | NA | 2001.5 | 23.0 | 95-47-6 | 100 ppm (435mg/m3/8H) | ipr-mus 1364mg/kg |
| 69. p-Xylene | 35163 | 101923 | 0.05 | 5.00 | 40000.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.5 | 22.9 | 106-42-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |

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

## Run 16, "P95317 L021624 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

**Comments**
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3




| Peak # | Name | FID RT (min.) |
|---|---|---|
| 1 | Ether | 9.97 |
| 2 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.33 |
| 3 | 1,1-Dichloroethene | 11.10 |
| 4 | Acetonitrile | 12.00 |
| 5 | Iodomethane | 12.31 |
| 6 | Allyl chloride | 12.56 |
| 7 | Carbon disulfide/Methylene chloride | 13.04 |
| 8 | trans-1,2-Dichloroethene | 14.07 |
| 9 | 1,1-Dichloroethane | 15.74 |
| 10 | 2,2-Dichloropropane | 17.74 |
| 11 | cis-1,2-Dichloroethene | 18.00 |
| 12 | Methacrylonitrile/Methyl acrylate/Chloroform | 18.46 |
| 13 | Isobutanol/1,1,1-Trichloroethane | 19.91 |
| 14 | 1,1-Dichloropropene | 20.46 |
| 15 | Carbon tetrachloride | 20.79 |
| 16 | Benzene/1,2-Dichloroethane | 21.49 |
| 17 | Trichloroethene | 23.58 |
| 18 | 1,2-Dichloropropane | 24.28 |
| 19 | Methyl methacrylate | 24.52 |
| 20 | Bromodichloromethane | 25.13 |
| 21 | Dibromomethane/2-Nitropropane | 25.46 |
| 22 | cis-1,3-Dichloropropene | 27.02 |
| 23 | Toluene | 28.05 |
| 24 | Ethyl methacrylate/trans-1,3-Dichloropropene | 28.73 |
| 25 | 1,1,2-Trichloroethane | 29.34 |
| 26 | Tetrachloroethene/1,3-Dichloropropane | 30.24 |
| 27 | Dibromochloromethane | 31.16 |
| 28 | 1,2-Dibromoethane | 31.84 |
| 29 | Chlorobenzene | 33.26 |
| 30 | Ethylbenzene/1,1,1,2-Tetrachloroethane | 33.40 |
| 31 | m-Xylene/p-Xylene | 33.86 |
| 32 | o-Xylene | 35.22 |
| 33 | Styrene | 35.38 |
| 34 | Isopropylbenzene/Bromoform | 36.18 |
| 35 | cis-1,4-Dichloro-2-Butene | 36.80 |
| 36 | 1,1,2,2-Tetrachloroethane | 37.23 |
| 37 | 1,2,3-Trichloropropane | 37.77 |
| 38 | n-Propylbenzene | 37.93 |
| 39 | trans-1,4-Dichloro-2-Butene | 38.05 |
| 40 | Bromobenzene | 38.14 |
| 41 | 1,3,5-Trimethylbenzene | 38.80 |
| 42 | 2-Chlorotoluene | 38.82 |
| 43 | 4-Chlorotoluene | 38.77 |
| 44 | tert-Butylbenzene | 39.76 |
| 45 | 1,2,4-Trimethylbenzene | 39.91 |
| 46 | Pentachloroethane | 40.17 |
| 47 | sec-Butylbenzene | 40.52 |
| 48 | p-Isopropyltoluene | 41.02 |
| 49 | 1,3-Dichlorobenzene | 41.42 |
| 50 | 1,4-Dichlorobenzene | 41.83 |
| 51 | n-Butylbenzene | 42.53 |
| 52 | 1,2-Dichlorobenzene | 43.18 |
| 53 | 1,2-Dibromo-3-chloropropane | 46.12 |
| 54 | Nitrobenzene | 46.48 |
| 55 | 1,2,4-Trichlorobenzene | 49.26 |
| 56 | Hexachlorobutadiene | 49.72 |
| 57 | Naphthalene | 50.26 |
| 58 | 1,2,3-Trichlorobenzene | 51.16 |

Absolute Standards Inc.
PO Box 5585
Hamden, CT 06518-0585
Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr. Hamden CT, 06514 | Emergency Telephone International | **1-352-323-3500** |
| | | Date Prepared/Revised | January 1, 2023 |

## Section II - Hazards Identification

**GHS Classification In accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | | % (optional) |
|---|---|---|---|
| Methanol | METHYL ALCOHOL | CAS#: 67-56-1 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability — Stable under recommended storage conditions.
Possibility of hazardous reactions — Vapours may form explosive mixture with air.
Conditions to avoid — Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid — Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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

*Certified Reference Material CRM*

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

## CERTIFIED WEIGHT REPORT

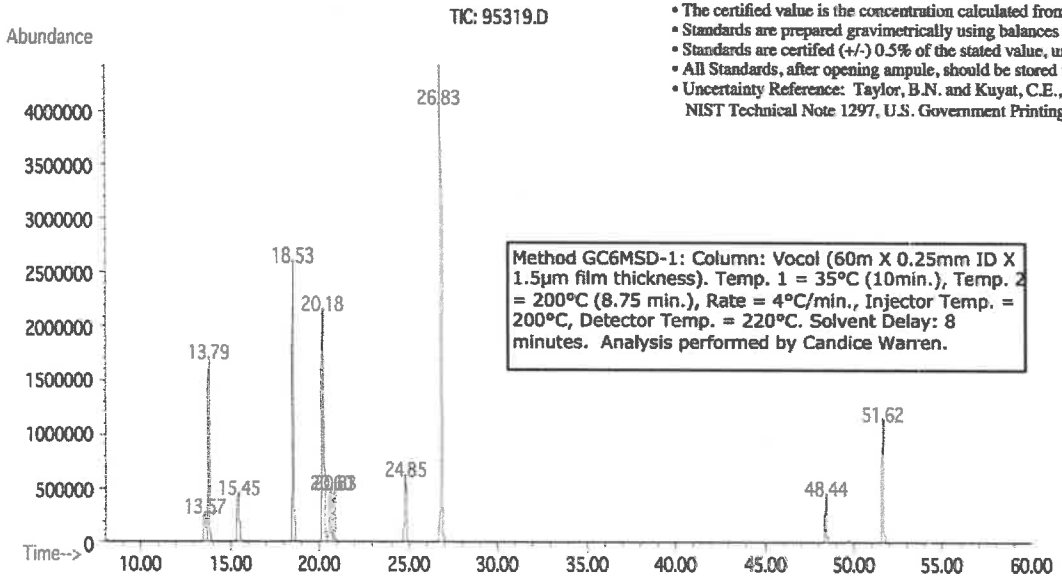
**Part Number:** 95319
**Lot Number:** 032922
**Description:** Revised Additions Mix
11 components
**Expiration Date:** 032925
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** Varied
**NIST Test ID#:** 6UTB 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

**Solvent(s):** Methanol **Lot#** EC592-US

Formulated By: Prashant Chauhan 032922 DATE

Reviewed By: Pedro L. Rentas 032922 DATE

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrylonitrile | 7 | 4718CK | 10000 | 99 | 0.2 | 1.01015 | 1.01030 | 10001.5 | 40.5 | 107-13-1 | N/A | orl-rat 78 mg/kg |
| 2. 1-Chlorobutane | 1072 | MKCM5711 | 2000 | 99.99 | 0.2 | 0.20003 | 0.20020 | 2001.7 | 8.1 | 109-69-3 | N/A | orl-rat 2670mg/kg |
| 3. Cyclohexane | 1023 | 28930 | 2000 | 99 | 0.2 | 0.20203 | 0.20215 | 2001.2 | 8.2 | 110-82-7 | 300 ppm (1050mg/m3/8H) | orl-rat 12705mg/kg |
| 4. Di-isopropyl ether (DIPE) | 987 | 00412MX | 2000 | 99 | 0.2 | 0.20203 | 0.20215 | 2001.2 | 8.2 | 108-20-3 | 500 ppm (2100mg/m3/8H) | orl-rat 8470mg/kg |
| 5. 1,4-Dioxane | 373 | 03853KE | 40000 | 99 | 0.2 | 4.04060 | 4.04100 | 40004.0 | 161.9 | 123-91-1 | 25 ppm (90mg/m3/8H)(skin) | orl-mus 5700mg/kg |
| 6. Hexachloroethane | 199 | 12604HBV | 2000 | 99 | 0.2 | 0.20203 | 0.20213 | 2001.0 | 8.2 | 67-72-1 | 1 ppm (10mg/m3/8H)(skin) | orl-gpg 4970mg/kg |
| 7. Methylcyclohexane | 1627 | 08046KN | 2000 | 99 | 0.2 | 0.20203 | 0.20215 | 2001.2 | 8.2 | 108-87-2 | N/A | N/A |
| 8. Methyl tert-butyl ether (MTBE) | 209 | 02197JJ | 2000 | 99.8 | 0.2 | 0.20041 | 0.20055 | 2001.4 | 8.1 | 1634-04-4 | N/A | orl-rat 4g/kg |
| 9. Propionitrile | 349 | 1395468 | 20000 | 99 | 0.2 | 2.02030 | 2.02045 | 20001.5 | 81.0 | 107-12-0 | N/A | orl-rat 39mg/kg |
| 10. Tetrahydrofuran | 380 | SHBH8330 | 10000 | 99.9 | 0.2 | 1.00105 | 1.00120 | 10001.5 | 40.1 | 109-99-9 | 20 ppm (590mg/m3/8H) | orl-rat 1650mg/kg |
| 11. 1,2,3,4-Tetramethylbenzene | 491 | AP01 | 2000 | 93 | 0.2 | 0.21506 | 0.21520 | 2001.3 | 8.7 | 488-23-3 | N/A | orl-rat 6408mg/kg |




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

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1 = 35°C (10min.), Temp. 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Solvent Delay: 8 minutes. Analysis performed by Candice Warren.

| Name | MSD RT (min.) |
|---|---|
| Methyl tert-butyl ether (MTBE) | 13.56 |
| Acrylonitrile | 13.79 |
| Di-isopropyl ether | 15.44 |
| Propionitrile | 18.53 |
| Tetrahydrofuran | 20.17 |
| Cyclohexane | 20.58 |
| 1-Chlorobutane | 20.83 |
| Methylcyclohexane | 24.84 |
| 1,4-Dioxane | 26.84 |
| Hexachloroethane | 48.44 |
| 1,2,3,4-Tetramethylbenzene | 51.62 |

**Absolute Standards Inc.**

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International<br>Date Prepared/Revised | **1-352-323-3500**<br>January 1, 2023 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components: | CAS#: | LD50 Oral - Rat | OSHA PEL | % (optional) |
|---|---|---|---|---|
| Methanol | 67-56-1 | 2,769 mg/kg | 200 ppm | > 99 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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*Certified Reference Material CRM*

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

## CERTIFIED WEIGHT REPORT

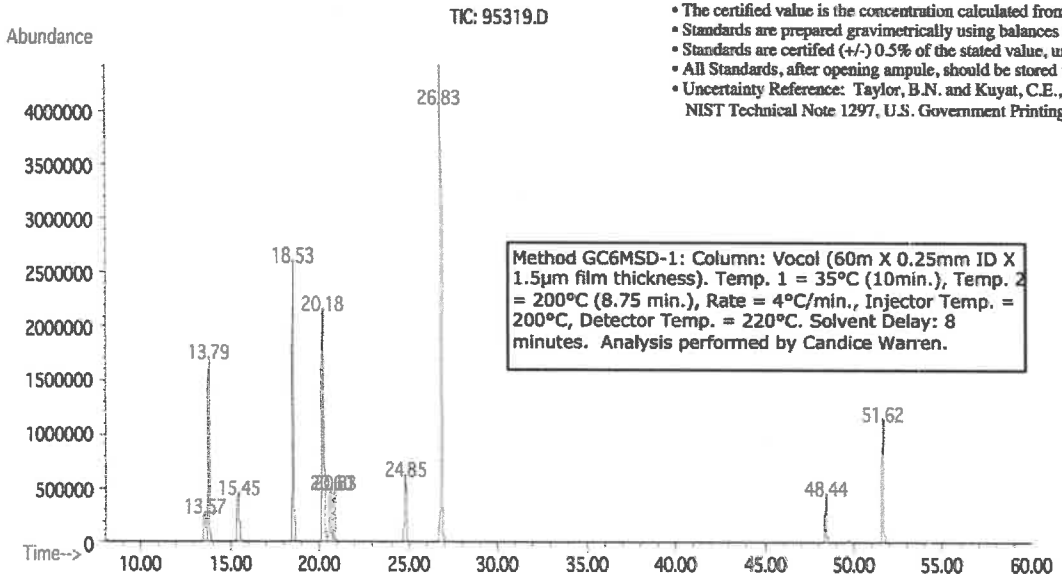
**Part Number:** 95319
**Lot Number:** 032922
**Description:** Revised Additions Mix
11 components
**Expiration Date:** 032925
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** Varied
**NIST Test ID#:** 6UTB 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.012 Flask Uncertainty

**Solvent(s):** Methanol **Lot#** EC592-US

Formulated By: Prashant Chauhan 032922 DATE

Reviewed By: Pedro L. Rentas 032922 DATE

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrylonitrile | 7 | 4718CK | 10000 | 99 | 0.2 | 1.01015 | 1.01030 | 10001.5 | 40.5 | 107-13-1 | N/A | orl-rat 78 mg/kg |
| 2. 1-Chlorobutane | 1072 | MKCM5711 | 2000 | 99.99 | 0.2 | 0.20003 | 0.20020 | 2001.7 | 8.1 | 109-69-3 | N/A | orl-rat 2670mg/kg |
| 3. Cyclohexane | 1023 | 28930 | 2000 | 99 | 0.2 | 0.20203 | 0.20215 | 2001.2 | 8.2 | 110-82-7 | 300 ppm (1050mg/m3/8H) | orl-rat 12705mg/kg |
| 4. Di-isopropyl ether (DIPE) | 987 | 00412MX | 2000 | 99 | 0.2 | 0.20203 | 0.20215 | 2001.2 | 8.2 | 108-20-3 | 500 ppm (2100mg/m3/8H) | orl-rat 8470mg/kg |
| 5. 1,4-Dioxane | 373 | 03853KE | 40000 | 99 | 0.2 | 4.04060 | 4.04100 | 40004.0 | 161.9 | 123-91-1 | 25 ppm (90mg/m3/8H)(skin) | orl-mus 5700mg/kg |
| 6. Hexachloroethane | 199 | 12604HBV | 2000 | 99 | 0.2 | 0.20203 | 0.20213 | 2001.0 | 8.2 | 67-72-1 | 1 ppm (10mg/m3/8H)(skin) | orl-gpg 4970mg/kg |
| 7. Methylcyclohexane | 1627 | 08046KN | 2000 | 99 | 0.2 | 0.20203 | 0.20215 | 2001.2 | 8.2 | 108-87-2 | N/A | N/A |
| 8. Methyl tert-butyl ether (MTBE) | 209 | 02197JJ | 2000 | 99.8 | 0.2 | 0.20041 | 0.20055 | 2001.4 | 8.1 | 1634-04-4 | N/A | orl-rat 4g/kg |
| 9. Propionitrile | 349 | 1395468 | 20000 | 99 | 0.2 | 2.02030 | 2.02045 | 20001.5 | 81.0 | 107-12-0 | N/A | orl-rat 39mg/kg |
| 10. Tetrahydrofuran | 380 | SHBH8330 | 10000 | 99.9 | 0.2 | 1.00105 | 1.00120 | 10001.5 | 40.1 | 109-99-9 | 20 ppm (590mg/m3/8H) | orl-rat 1650mg/kg |
| 11. 1,2,3,4-Tetramethylbenzene | 491 | AP01 | 2000 | 93 | 0.2 | 0.21506 | 0.21520 | 2001.3 | 8.7 | 488-23-3 | N/A | orl-rat 6408mg/kg |




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

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1 = 35°C (10min.), Temp. 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Solvent Delay: 8 minutes. Analysis performed by Candice Warren.

| Name | MSD RT (min.) |
|---|---|
| Methyl tert-butyl ether (MTBE) | 13.56 |
| Acrylonitrile | 13.79 |
| Di-isopropyl ether | 15.44 |
| Propionitrile | 18.53 |
| Tetrahydrofuran | 20.17 |
| Cyclohexane | 20.58 |
| 1-Chlorobutane | 20.83 |
| Methylcyclohexane | 24.84 |
| 1,4-Dioxane | 26.84 |
| Hexachloroethane | 48.44 |
| 1,2,3,4-Tetramethylbenzene | 51.62 |

**Absolute Standards Inc.**

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN METHANOL**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr.<br>Hamden CT, 06514 | Emergency Telephone International<br>Date Prepared/Revised | **1-352-323-3500**<br>January 1, 2023 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **H225** | **Highly Flammable Liquid and Vapor** | **H301, 311, 331** | **Toxic if swallowed, skin contact, inhaled** |
| **H370** | **Cause damage to organs** | **H351** | **Suspected of causing cancer** |
| **P271** | **Use in ventilated area** | **P280** | **Use gloves, eye protection/face sheild** |
| **P302,332** | **If on skin, wash with soap and water** | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components: | CAS#: | LD50 Oral - Rat | OSHA PEL | % (optional) |
|---|---|---|---|---|
| Methanol | 67-56-1 | 2,769 mg/kg | 200 ppm | > 99 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Flammability** | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol 67-56-1 TWA 200 ppm
Skin notation TWA 200 ppm
Potential for skin absorption , ingestion and inhalation.
Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - Physical/Chemical Characteristics

| | | | |
|---|---|---|---|
| Boiling Point | 65°C | Specific Gravity (H2O = 1) | 0.79 |
| Vapor Pressure (mm Hg) | 96 | Melting Point | -98°C |
| Vapor Density (AIR = 1) | 1.11 | Evaporation rate (Butyl Acetate = 1) | 4.6 |

Solubility in Water COMPLETE

Appearance and Odor CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Vapours may form explosive mixture with air.
Conditions to avoid Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions. - Carbon oxides

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

## Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

| | |
|---|---|
| LC50 | 15,400 mg/l - 96 h |
| EC50 | 24,500.00 mg/l - 48 h |
| EC100 | 10,000.00 mg/l - 24 h |

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

IATA
UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol

## Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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

***Certified Reference Material CRM***

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

CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 072423
Description: Acrolein

**Solvent(s):** Water **Lot#** 102422Q

5 Sum

Expiration Date: 082423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

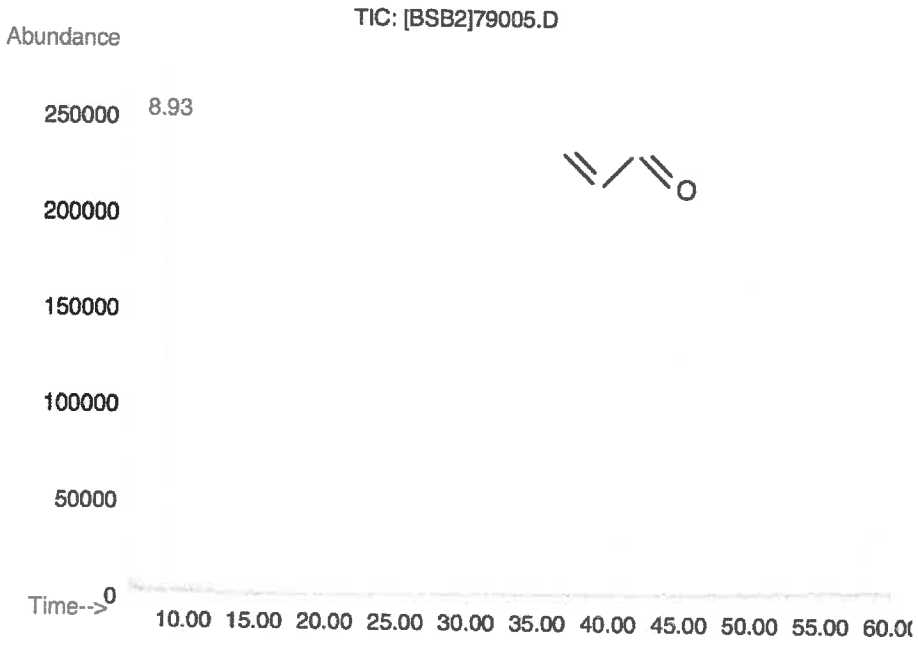
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

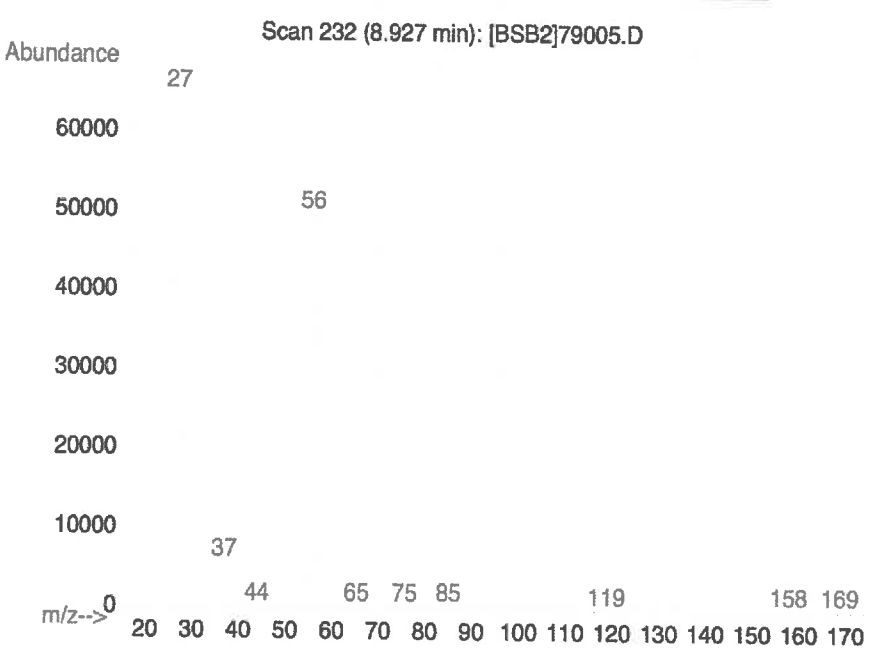
Gabriel Helland 072423
Formulated By: Gabriel Helland DATE

Pedro Rentas 072423
Reviewed By: Pedro L. Rentas DATE

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrolein | 5 | 103755R09M | 5000 | 97.1 | 0.5 | 0.05160 | 0.05170 | 5009.2 | 52.5 | 107-02-8 | 0.1 ppm | orl-rat 46mg/kg |

**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.




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

**Absolute Standards Inc.**

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN WATER**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr. | Emergency Telephone International | **1-352-323-3500** |
| | Hamden CT, 06514 | Date Prepared/Revised | May 1, 2022 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **P271** | **Use in ventilated area** | **H315** | **Causes skin and eye irritation.** |
| **P302,332** | **If on skin, wash with soap and water** | **P280** | **Use gloves, eye protection/face sheild** |
| | | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | % (optional) |
|---|---|---|
| Water | CAS#: 7732-18-5 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |
| **Hazardous Decomposition products** | Carbon oxides |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| Boiling Point | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) | | Melting Point | |

| | | | |
|---|---|---|---|
| | NA | | 0°C |
| Vapor Density (AIR = 1) | NA | Evaporation rate (Butyl Acetate = 1) | NA |

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

## Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

## Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 072423
Description: Acrolein

**Solvent(s):** Water **Lot#** 102422Q

5 Sum

Expiration Date: 082423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

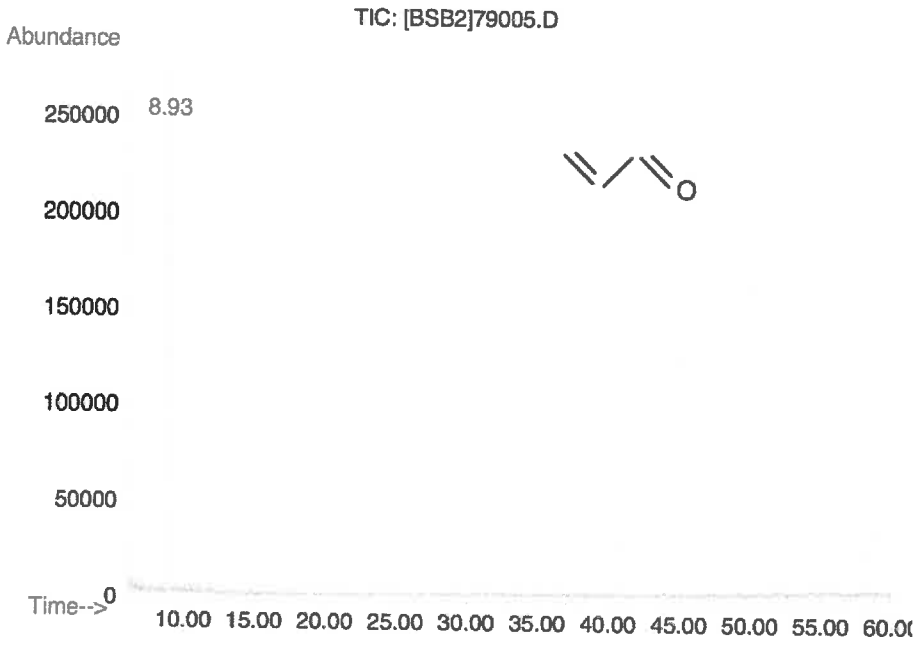
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

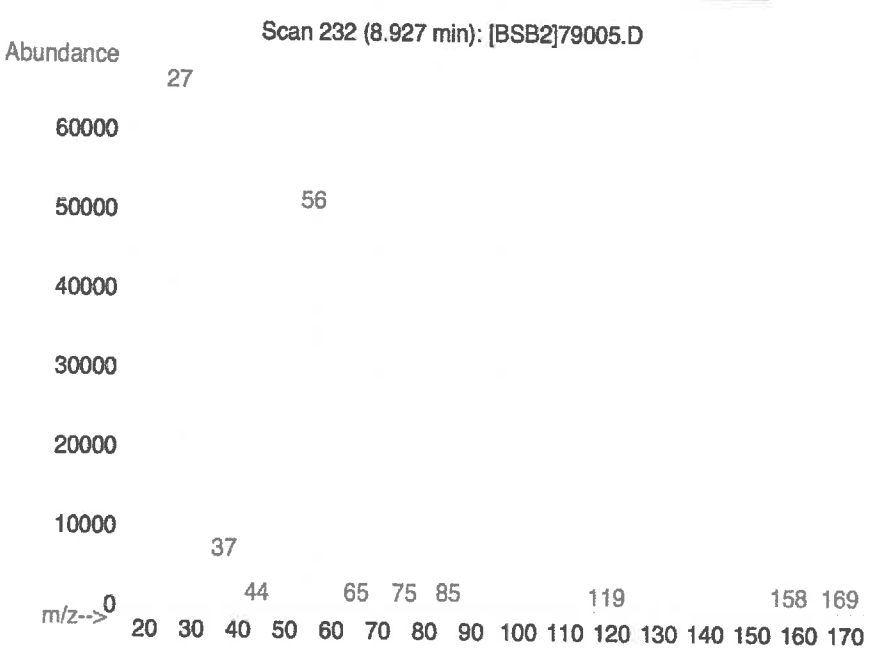
Gabriel Helland 072423
Formulated By: Gabriel Helland DATE

Pedro Rentas 072423
Reviewed By: Pedro L. Rentas DATE

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrolein | 5 | 103755R09M | 5000 | 97.1 | 0.5 | 0.05160 | 0.05170 | 5009.2 | 52.5 | 107-02-8 | 0.1 ppm | orl-rat 46mg/kg |

**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.




- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
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- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

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| | | | |
|---|---|---|---|
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| Address | 44 Rossotto Dr. | Emergency Telephone International | **1-352-323-3500** |
| | Hamden CT, 06514 | Date Prepared/Revised | May 1, 2022 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **P271** | **Use in ventilated area** | **H315** | **Causes skin and eye irritation.** |
| **P302,332** | **If on skin, wash with soap and water** | **P280** | **Use gloves, eye protection/face sheild** |
| | | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | % (optional) |
|---|---|---|
| Water | CAS#: 7732-18-5 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |
| **Hazardous Decomposition products** | Carbon oxides |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| Boiling Point | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) | | Melting Point | |

| | | | |
|---|---|---|---|
| | NA | | 0°C |
| Vapor Density (AIR = 1) | NA | Evaporation rate (Butyl Acetate = 1) | NA |

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

## Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

## Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

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CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 072423
Description: Acrolein

**Solvent(s):** Water **Lot#** 102422Q

5 Sum

Expiration Date: 082423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

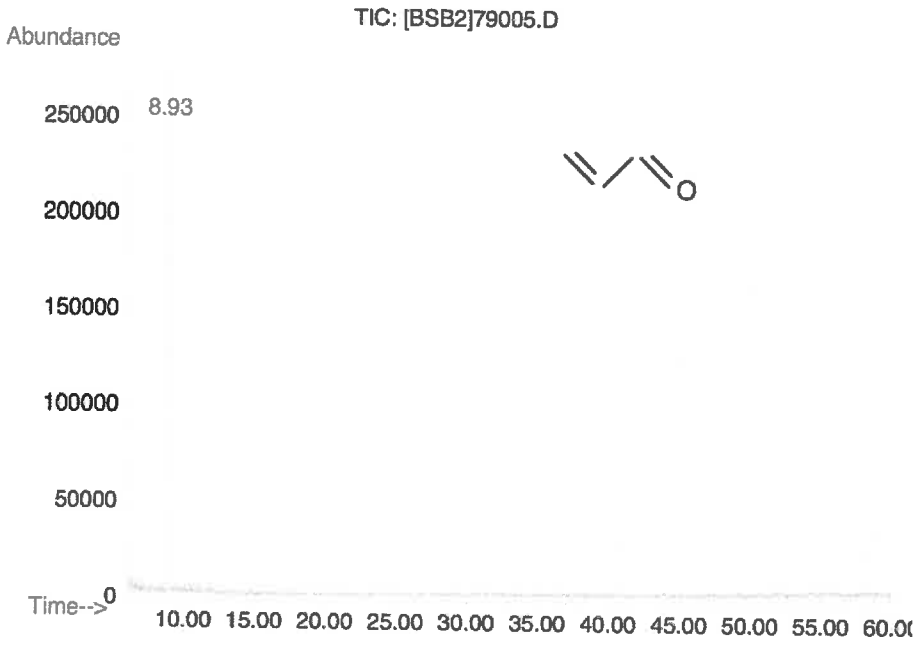
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

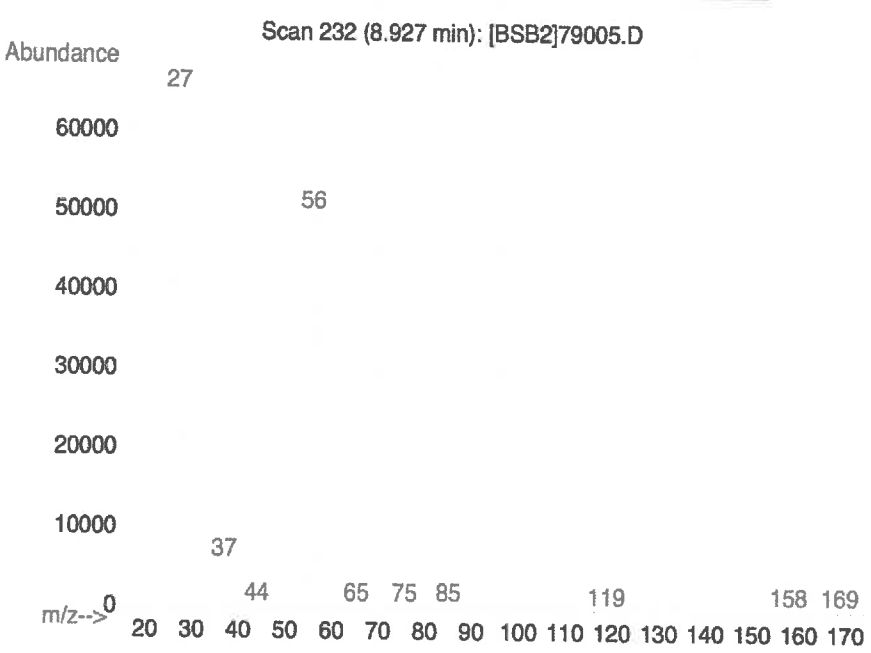
Gabriel Helland 072423
Formulated By: Gabriel Helland DATE

Pedro Rentas 072423
Reviewed By: Pedro L. Rentas DATE

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrolein | 5 | 103755R09M | 5000 | 97.1 | 0.5 | 0.05160 | 0.05170 | 5009.2 | 52.5 | 107-02-8 | 0.1 ppm | orl-rat 46mg/kg |

**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.

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**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

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| Address | 44 Rossotto Dr. | Emergency Telephone International | **1-352-323-3500** |
| | Hamden CT, 06514 | Date Prepared/Revised | May 1, 2022 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **P271** | **Use in ventilated area** | **H315** | **Causes skin and eye irritation.** |
| **P302,332** | **If on skin, wash with soap and water** | **P280** | **Use gloves, eye protection/face sheild** |
| | | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | % (optional) |
|---|---|---|
| Water | CAS#: 7732-18-5 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |
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## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
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| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| Boiling Point | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) | | Melting Point | |

| | | | |
|---|---|---|---|
| | NA | | 0°C |
| Vapor Density (AIR = 1) | NA | Evaporation rate (Butyl Acetate = 1) | NA |

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

## Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

## Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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***Certified Reference Material CRM***

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CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 072423
Description: Acrolein

**Solvent(s):** Water **Lot#** 102422Q

5 Sum

Expiration Date: 082423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

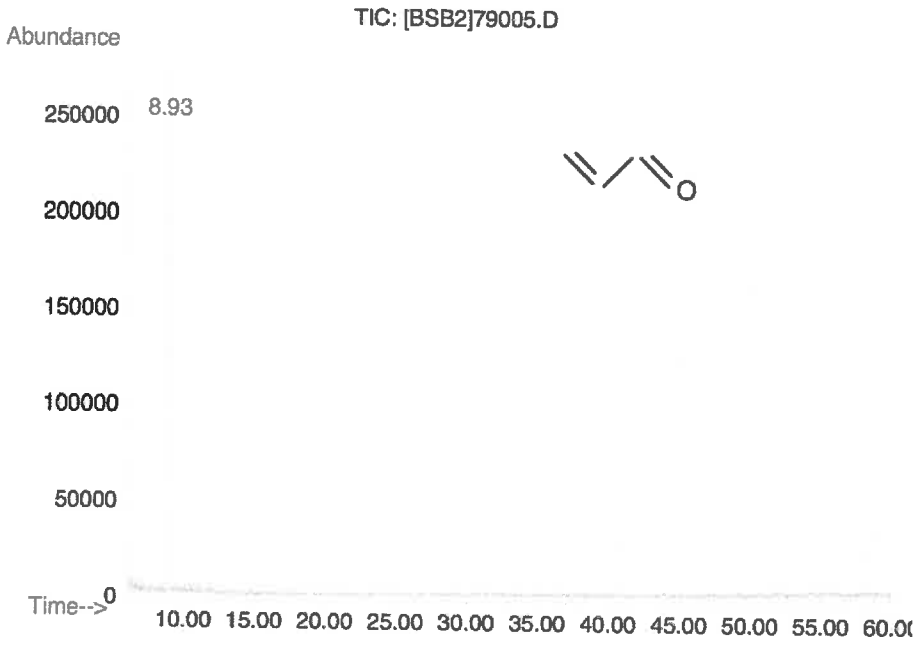
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

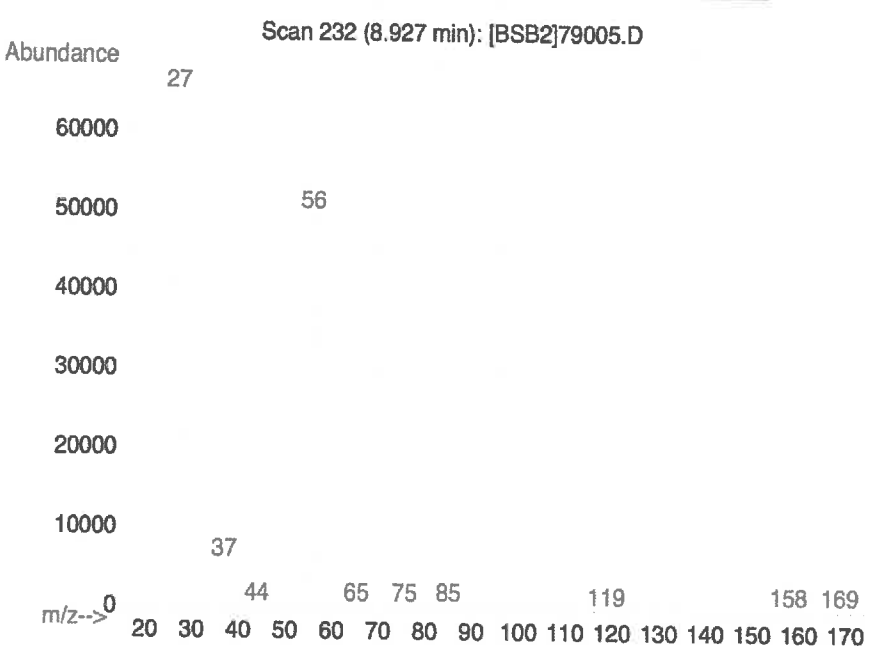
Gabriel Helland 072423
Formulated By: Gabriel Helland DATE

Pedro Rentas 072423
Reviewed By: Pedro L. Rentas DATE

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrolein | 5 | 103755R09M | 5000 | 97.1 | 0.5 | 0.05160 | 0.05170 | 5009.2 | 52.5 | 107-02-8 | 0.1 ppm | orl-rat 46mg/kg |

**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.




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

**Absolute Standards Inc.**

PO Box 5585
Hamden, CT 06518-0585

Phone: 203-281-2917
FAX: 203-281-2922

**Safety Data Sheet (SDS)** GHS/OSHA Compliant

## Section I Product and Company Identification

**IDENTITY** **ANALYTICAL STANDARD DISSOLVED IN WATER**

| | | | |
|---|---|---|---|
| Manufacturer's Name | ABSOLUTE STANDARDS INC | Emergency Telephone USA & CANADA | **1-800-535-5053** |
| Address | 44 Rossotto Dr. | Emergency Telephone International | **1-352-323-3500** |
| | Hamden CT, 06514 | Date Prepared/Revised | May 1, 2022 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **P271** | **Use in ventilated area** | **H315** | **Causes skin and eye irritation.** |
| **P302,332** | **If on skin, wash with soap and water** | **P280** | **Use gloves, eye protection/face sheild** |
| | | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | % (optional) |
|---|---|---|
| Water | CAS#: 7732-18-5 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |
| **Hazardous Decomposition products** | Carbon oxides |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| Boiling Point | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) | | Melting Point | |

| | | | |
|---|---|---|---|
| | NA | | 0°C |
| Vapor Density (AIR = 1) | NA | Evaporation rate (Butyl Acetate = 1) | NA |

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

## Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

## Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 072423
Description: Acrolein

**Solvent(s):** Water **Lot#** 102422Q

5 Sum

Expiration Date: 082423
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

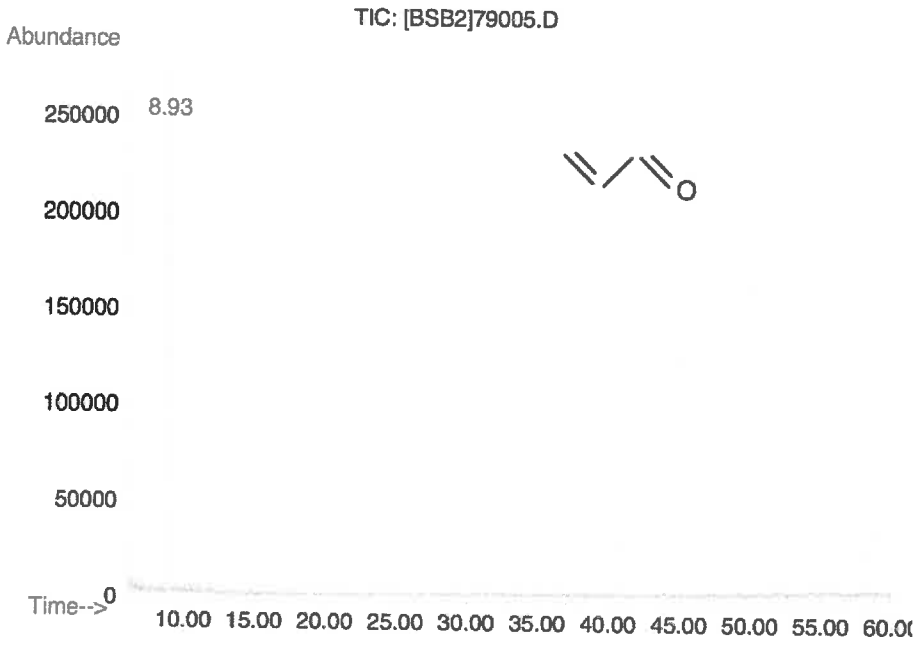
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.001 Flask Uncertainty

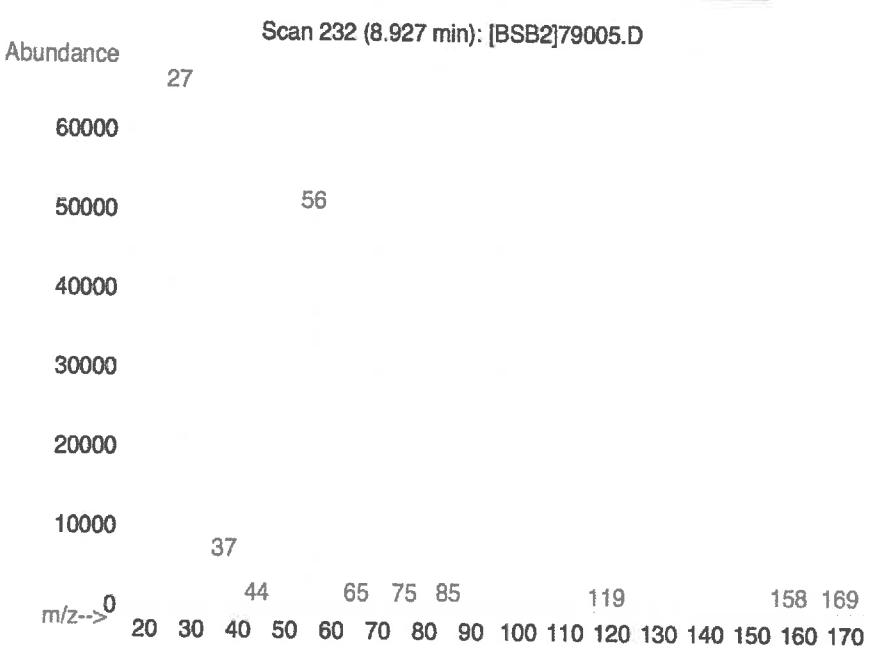
Gabriel Helland 072423
Formulated By: Gabriel Helland DATE

Pedro Rentas 072423
Reviewed By: Pedro L. Rentas DATE

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acrolein | 5 | 103755R09M | 5000 | 97.1 | 0.5 | 0.05160 | 0.05170 | 5009.2 | 52.5 | 107-02-8 | 0.1 ppm | orl-rat 46mg/kg |

**Method:** GC6MSD-1. **Detector:** Mass Selective Detector (Scan mode). **Column:** Vocol (60m X 0.25mm ID X 1.5µm film thickness). **Oven Profile:** Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2=200°C ( Time 2 = 8.75 min.) Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. **Analyst:** Pedro Rentas. **NOTE:** Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately Long term storage is not recommended. Please contact our technical department if further information is required.

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- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
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**Safety Data Sheet (SDS)** GHS/OSHA Compliant

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| Address | 44 Rossotto Dr. | Emergency Telephone International | **1-352-323-3500** |
| | Hamden CT, 06514 | Date Prepared/Revised | May 1, 2022 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| **P271** | **Use in ventilated area** | **H315** | **Causes skin and eye irritation.** |
| **P302,332** | **If on skin, wash with soap and water** | **P280** | **Use gloves, eye protection/face sheild** |
| | | **P305,351,338** | **If in eyes, remove contacts, rinse with water** |

**Signal Word: DANGER**

## Section III - Composition

| Components (Specific Chemical Identity; Common Name(s)) | | % (optional) |
|---|---|---|
| Water | CAS#: 7732-18-5 | > 97 |

**See Certified Weight Report For Other Analytes Present At Trace Quantities.**

**INTENDED USE: REFERENCE MATERIAL**

## Section IV. FIRST AID MEASURES

| | |
|---|---|
| **General advice** | Consult a physician. Show this safety data sheet to the doctor in attendance.Move to safe area. |
| **If inhaled** | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **In case of skin contact** | Wash with soap and water. Consult a physician. |
| **In case of eye contact** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. |
| **If swallowed** | Do NOT induce vomiting. Rinse mouth with water. Consult a physician. |

## Section V. FIREFIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Protective equipment for fire** | Wear self contained breathing apparatus for fire fighting if necessary. |
| **Hazardous Decomposition products** | Carbon oxides |

## Section VI. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions | Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| Clean up | Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13). |

## Section VII. HANDLING AND STORAGE

| | |
|---|---|
| Precautions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |

## Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Water CAS#: 7732-18-5 TWA: 500 ppm

Personal protective equipment Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.

## Section IX - PHYSICAL/CHEMICAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| Boiling Point | 100°C | Specific Gravity (H2O = 1) | 1 |
| Vapor Pressure (mm Hg) | | Melting Point | |

| | | | |
|---|---|---|---|
| | NA | | 0°C |
| Vapor Density (AIR = 1) | NA | Evaporation rate (Butyl Acetate = 1) | NA |

Solubility in Water Completely miscible

Appearance and Odor CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

## Section X. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions NA
Conditions to avoid NA
Materials to avoid NA
Hazardous decomposition products - No data available

## Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat NA
LC50 Inhalation - Rat NA
LD50 Dermal - Guinea pig NA
Causes skin irritation.
Eye irritation

## Section XII. ECOLOGICAL INFORMATION

LC50 NA
EC50 NA

## Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

## Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

## Section XV. REGULATORY INFORMATION

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.

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## CERTIFIED WEIGHT REPORT

**Part Number:** 95318
**Lot Number:** 111722
**Description:** 2-Chloroethyl vinyl ether

**Solvent(s):** Methanol **Lot#** EB679-US

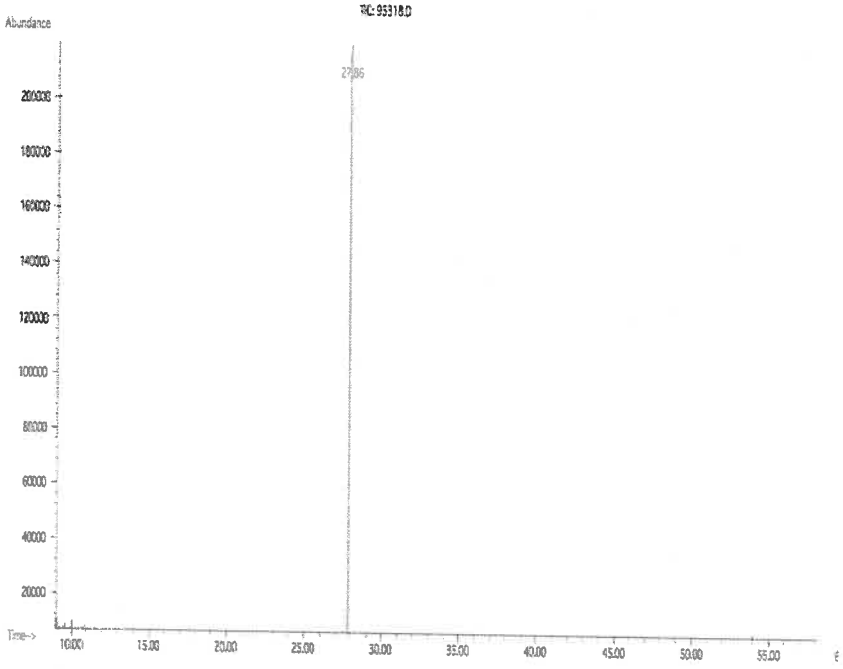
**Expiration Date:** 111725
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test ID#:** 6UTB

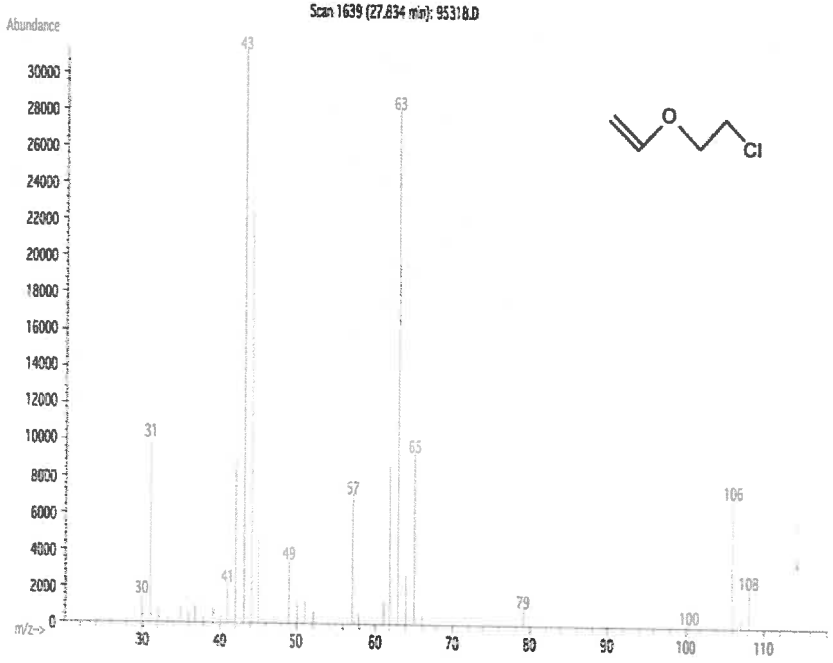
Weight(s) shown below were combined and diluted to (mL): 50.0 | 5E-05 Balance Uncertainty | 0.001 Flask Uncertainty

| | | |
|---|---|---|
| Formulated By: | Eli Aliaga | 111722 DATE |
| Reviewed By: | Pedro L. Rentas | 111722 DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc(µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. 2-Chloroethyl vinyl ether | 74 | MKCD0033 | 10000 | 99 | 0.2 | 0.50541 | 0.50551 | 10001.9 | 40.5 | 110-75-8 | N/A | orl-rat 250mg/kg |

**Method:** GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.







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- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
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## CERTIFIED WEIGHT REPORT

**Part Number:** 95318
Lot Number: 121321
Description: 2-Chloroethyl vinyl ether

**Solvent(s):** **Lot#**
Methanol EA899-US

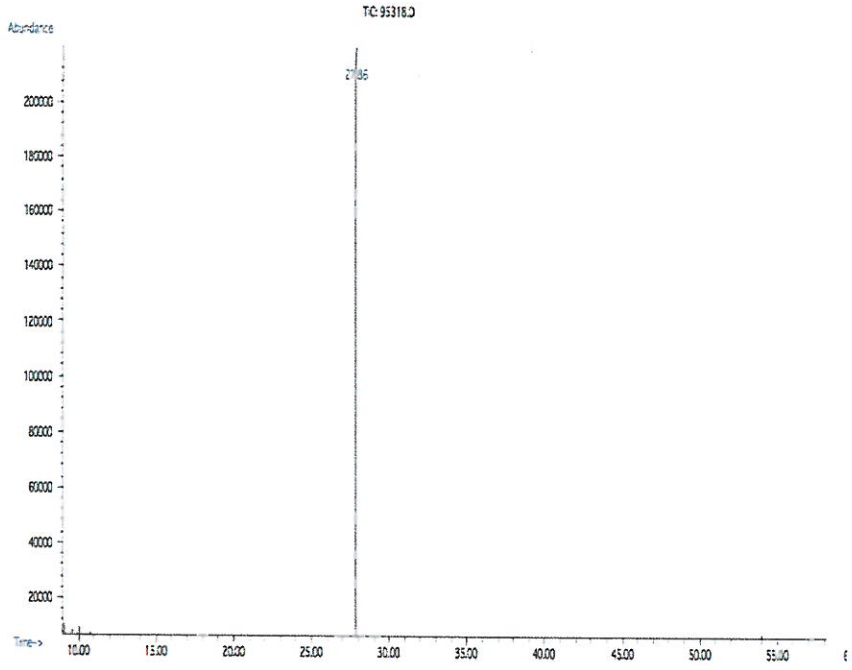
Expiration Date: 121324
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

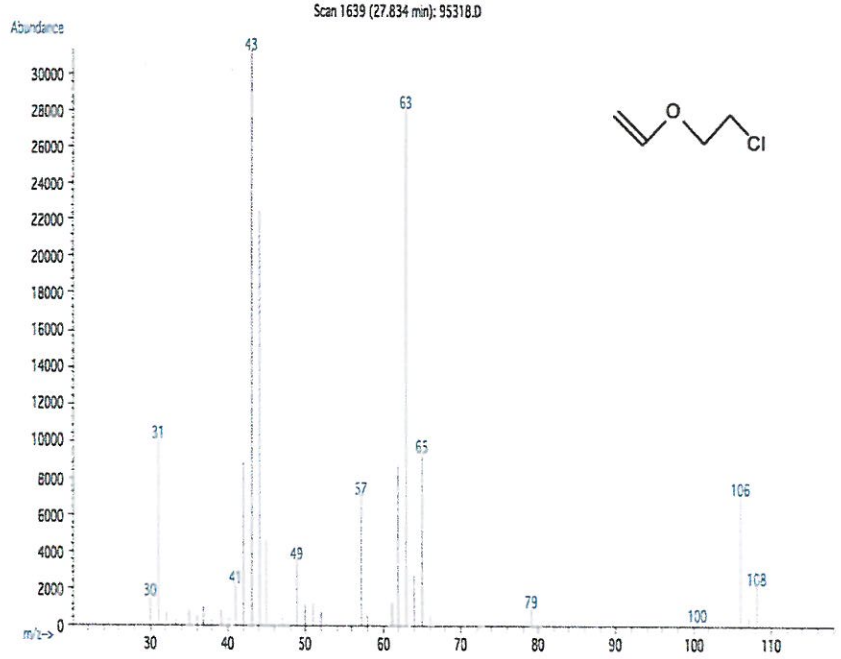
Weight(s) shown below were combined and diluted to (mL): 30.0 | 5E-05 Balance Uncertainty | 0.0003 Flask Uncertainty

| | | |
|---|---|---|
| | | 121321 |
| Formulated By: | Benson Chan | DATE |
| | | 121321 |
| Reviewed By: | Pedro L. Rentas | DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc(µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. 2-Chloroethyl vinyl ether | 74 | MKCD0033 | 10000 | 99 | 0.2 | 0.30320 | 0.30411 | 10030.2 | 40.7 | 110-75-8 | N/A | orl-rat 250mg/kg |

**Method:** GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.







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- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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## CERTIFIED WEIGHT REPORT

**Part Number:** 95318
Lot Number: 121321
Description: 2-Chloroethyl vinyl ether

**Solvent(s):** **Lot#**
Methanol EA899-US

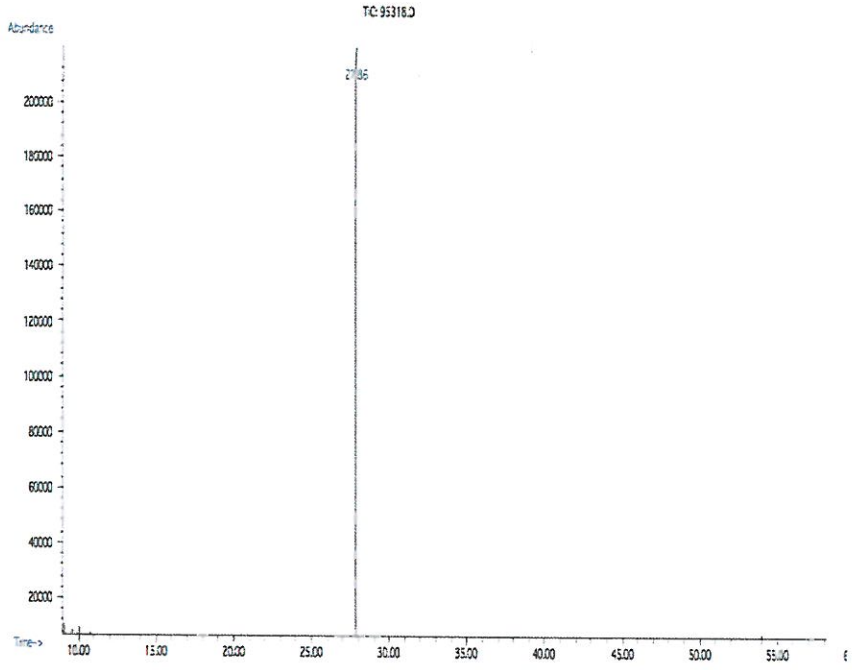
Expiration Date: 121324
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

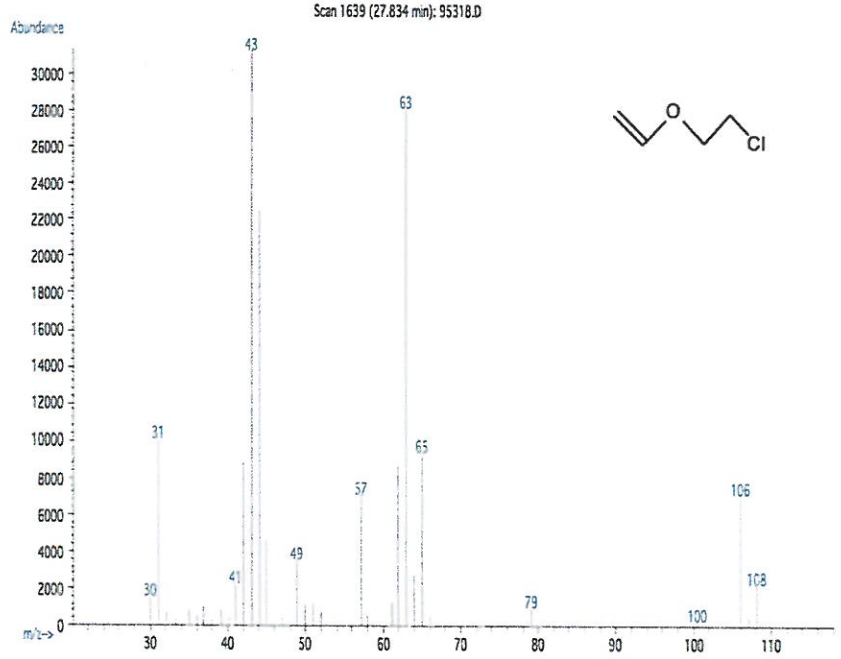
Weight(s) shown below were combined and diluted to (mL): 30.0 | 5E-05 Balance Uncertainty | 0.0003 Flask Uncertainty

| | | |
|---|---|---|
| | | 121321 |
| Formulated By: | Benson Chan | DATE |
| | | 121321 |
| Reviewed By: | Pedro L. Rentas | DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc(µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. 2-Chloroethyl vinyl ether | 74 | MKCD0033 | 10000 | 99 | 0.2 | 0.30320 | 0.30411 | 10030.2 | 40.7 | 110-75-8 | N/A | orl-rat 250mg/kg |

**Method:** GC6MSD-1.M. **Detector:** MSD. **Column:** (60m X 0.25mm X 1.5 µm). **Oven Profile:** Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp.= 200°C, Detector B Temp. = 220°C. **Analyst:** Candice Warren.







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

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30006 **Lot No.:** A0186767

**Description :** VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

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

**Expiration Date :** September 30, 2025 **Storage:** 0°C or colder

**Ship:** Ambient

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Acetone<br>**CAS #** 67-64-1 (Lot MKCQ7914)<br>**Purity** 99% | 5,046.8 µg/mL | +/- 29.3427 µg/mL<br>+/- 304.4978 µg/mL<br>+/- 305.2207 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 2-Butanone (MEK)<br>**CAS #** 78-93-3 (Lot SHBN2844)<br>**Purity** 99% | 5,048.8 µg/mL | +/- 29.3544 µg/mL<br>+/- 304.6185 µg/mL<br>+/- 305.3417 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | 4-Methyl-2-pentanone (MIBK)<br>**CAS #** 108-10-1 (Lot SHBN3601)<br>**Purity** 99% | 5,045.0 µg/mL | +/- 29.3321 µg/mL<br>+/- 304.3872 µg/mL<br>+/- 305.1099 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | 2-Hexanone<br>**CAS #** 591-78-6 (Lot MKCQ6663)<br>**Purity** 99% | 5,045.3 µg/mL | +/- 29.3340 µg/mL<br>+/- 304.4073 µg/mL<br>+/- 305.1300 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

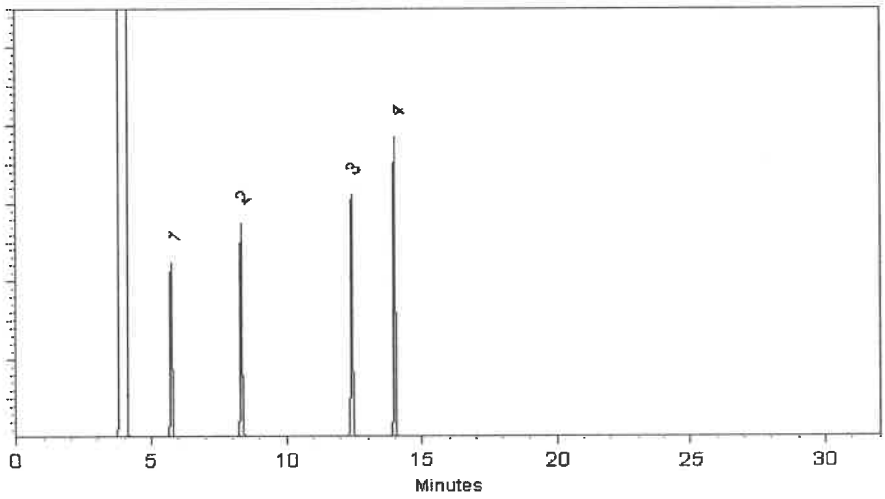
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID




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

Bethany Lowery - Operations Tech I

**Date Mixed:** 28-Jun-2022 **Balance:** B251644995

Christie Mills - Operations Tech II - ARM QC

**Date Passed:** 30-Jun-2022

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

**General Certified Reference Material Notes**

**Expiration Notes:**

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

**Purity Notes:**

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

**Certified Uncertainty Value Notes:**

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

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

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

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

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

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

**Manufacturing Notes:**

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

**Handling Notes:**

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

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30470 **Lot No.:** A0181905

**Description :** tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** February 28, 2025 **Storage:** 0°C or colder

**Ship:** Ambient

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | tert-Butanol (TBA) | 50,126.0 µg/mL | +/- 293.4988 µg/mL | Gravimetric |
| | **CAS #** 75-65-0 (Lot SHBM7694) | | +/- 1,073.7654 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 1,104.9494 µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

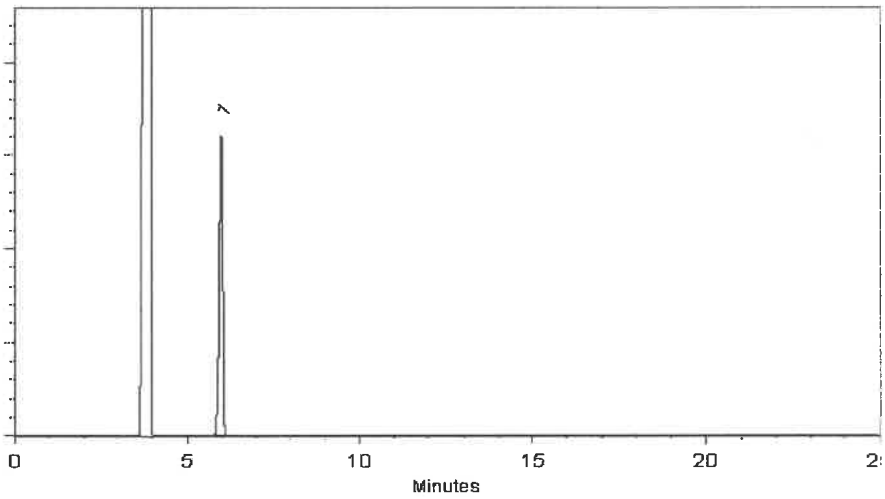
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID




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

John Friedline - Operations Technician I

**Date Mixed:** 16-Feb-2022 **Balance:** B442140311

Marlina Cowan - Operations Tech I

**Date Passed:** 21-Feb-2022

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

**General Certified Reference Material Notes**

**Expiration Notes:**

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

**Purity Notes:**

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

**Certified Uncertainty Value Notes:**

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

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

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

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

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

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

**Manufacturing Notes:**

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

**Handling Notes:**

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

4 J

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

**Catalog No. :** 30470 **Lot No.:** A0191703

**Description :** tert-Butanol Standard

tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** November 30, 2025 **Storage:** 0°C or colder

**Ship:** Ambient

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | tert-Butanol (TBA) | 50,122.0 µg/mL | +/- 293.4753 µg/mL | Gravimetric |
| | **CAS #** 75-65-0 (Lot 101619K21F-1) | | +/- 1,073.6797 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 1,104.8612 µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

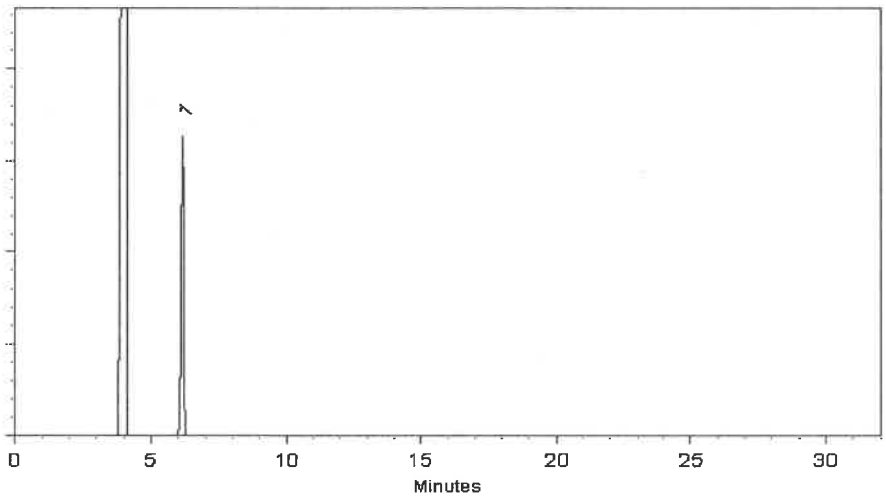
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID




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

Alicia Leathers - Operation Technician I **Date Mixed:** 15-Nov-2022 **Balance:** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 17-Nov-2022

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

**General Certified Reference Material Notes**

**Expiration Notes:**

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

**Purity Notes:**

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

**Certified Uncertainty Value Notes:**

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

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

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

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

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

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

**Manufacturing Notes:**

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

**Handling Notes:**

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

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30067 **Lot No.:** A0191805

**Description :** 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** November 30, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1-Bromo-4-fluorobenzene (BFB) | 460-00-4 | 184975 | 99% | 2,483.9 µg/mL | +/- 139.5488 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

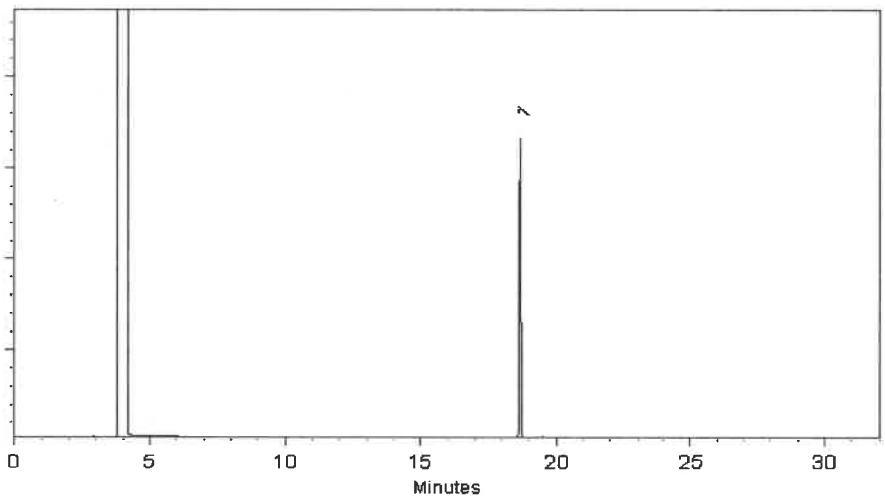
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




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

Alicia Leathers - Operation Technician I **Date Mixed:** 17-Nov-2022 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Nov-2022

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30225 **Lot No.:** A0193071

**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** December 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Bromochloromethane | 74-97-5 | 00008541 | 99% | 2,018.0 µg/mL | +/- 113.3890 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

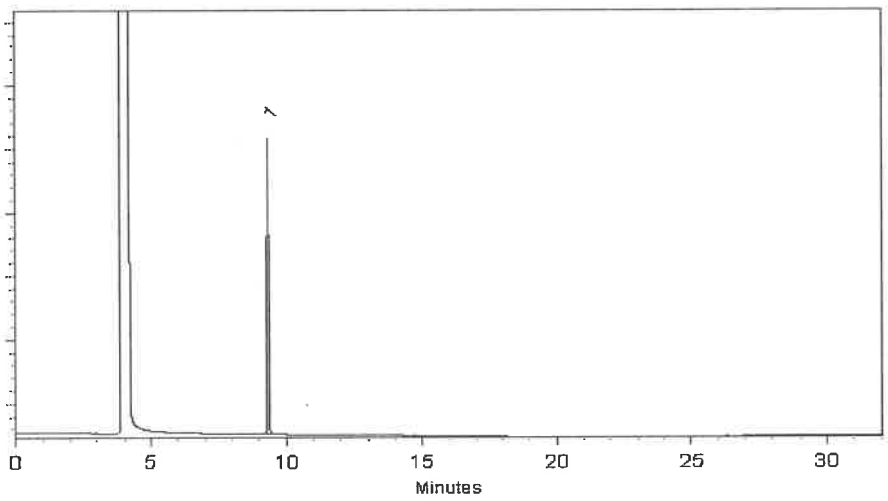
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




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

Tom Suckar - Mix Technician

**Date Mixed:** 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

**Date Passed:** 03-Jan-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30225 **Lot No.:** A0193071

**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** December 31, 2027 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Bromochloromethane | 74-97-5 | 00008541 | 99% | 2,018.0 µg/mL | +/- 113.3890 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

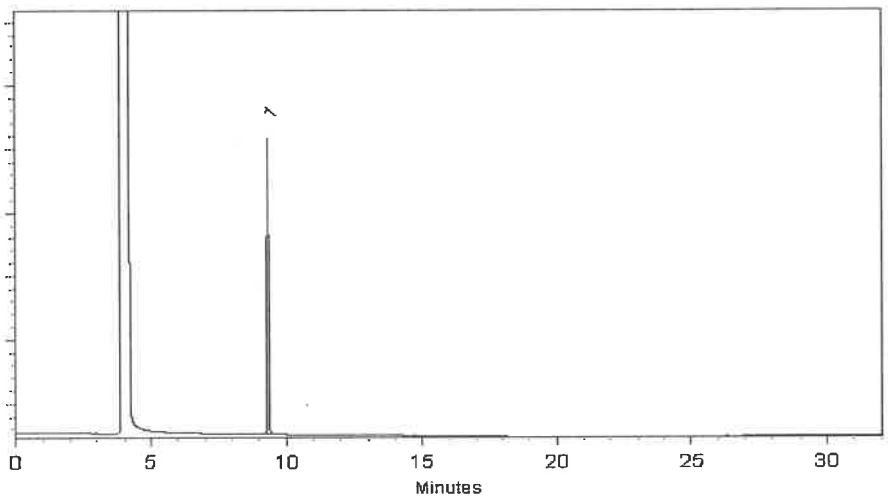
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




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

Tom Suckar - Mix Technician

**Date Mixed:** 29-Dec-2022 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

**Date Passed:** 03-Jan-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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**Catalog No. :** 30042 **Lot No.:** A0194279

**Description :** 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** October 31, 2029 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12) | 75-71-8 | 00012554 | 99% | 2,001.5 µg/mL | +/- 112.7231 |
| 2 | Chloromethane (methyl chloride) | 74-87-3 | SHBK6571 | 99% | 2,001.2 µg/mL | +/- 112.5863 |
| 3 | Vinyl chloride | 75-01-4 | 00015559 | 99% | 2,001.4 µg/mL | +/- 112.6561 |
| 4 | Bromomethane (methyl bromide) | 74-83-9 | 101604 | 99% | 2,006.4 µg/mL | +/- 112.8262 |
| 5 | Chloroethane (ethyl chloride) | 75-00-3 | 107-401039114-1 | 99% | 2,001.9 µg/mL | +/- 112.5897 |
| 6 | Trichlorofluoromethane (CFC-11) | 75-69-4 | MKCL8411 | 99% | 2,000.8 µg/mL | +/- 112.6473 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

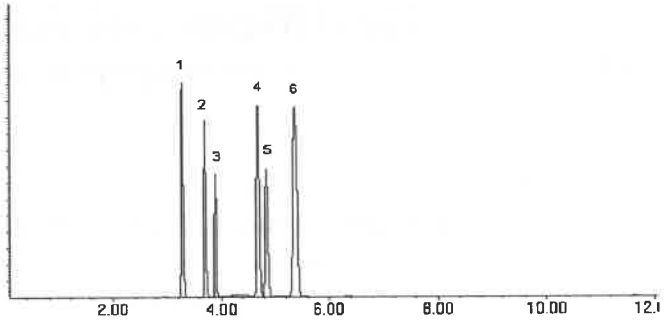
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD

**Split Vent:**
Split ratio 10:1

**Inj. Vol**
1µl




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

Tom Suckar - Mix Technician

**Date Mixed:** 03-Feb-2023 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

**Date Passed:** 07-Feb-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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**Catalog No. :** 30042 **Lot No.:** A0194279

**Description :** 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** October 31, 2029 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12) | 75-71-8 | 00012554 | 99% | 2,001.5 µg/mL | +/- 112.7231 |
| 2 | Chloromethane (methyl chloride) | 74-87-3 | SHBK6571 | 99% | 2,001.2 µg/mL | +/- 112.5863 |
| 3 | Vinyl chloride | 75-01-4 | 00015559 | 99% | 2,001.4 µg/mL | +/- 112.6561 |
| 4 | Bromomethane (methyl bromide) | 74-83-9 | 101604 | 99% | 2,006.4 µg/mL | +/- 112.8262 |
| 5 | Chloroethane (ethyl chloride) | 75-00-3 | 107-401039114-1 | 99% | 2,001.9 µg/mL | +/- 112.5897 |
| 6 | Trichlorofluoromethane (CFC-11) | 75-69-4 | MKCL8411 | 99% | 2,000.8 µg/mL | +/- 112.6473 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

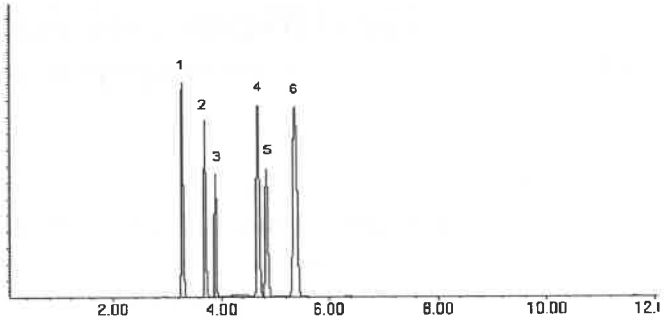
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD

**Split Vent:**
Split ratio 10:1

**Inj. Vol**
1µl




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

Tom Suckar - Mix Technician

**Date Mixed:** 03-Feb-2023 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

**Date Passed:** 07-Feb-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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

**Catalog No. :** 30489 **Lot No.:** A0196115

**Description :** 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** September 30, 2024 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Methyl acetate | 79-20-9 | SHBP3100 | 99% | 2,013.7 µg/mL | +/- 69.6015 |
| 2 | Vinyl acetate | 108-05-4 | RD220630 | 99% | 2,020.0 µg/mL | +/- 69.8205 |
| 3 | Ethyl acetate | 141-78-6 | SHBP9289 | 99% | 2,019.3 µg/mL | +/- 69.7974 |
| 4 | Isopropyl acetate | 108-21-4 | BCCG7069 | 99% | 2,014.0 µg/mL | +/- 69.6131 |
| 5 | Propyl acetate | 109-60-4 | TFFKL | 99% | 2,014.7 µg/mL | +/- 69.6361 |
| 6 | Butyl acetate | 123-86-4 | SHBP6314 | 99% | 2,014.0 µg/mL | +/- 69.6131 |
| 7 | Amyl acetate | 628-63-7 | 41325/1 | 97% | 2,016.3 µg/mL | +/- 69.6928 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

## Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

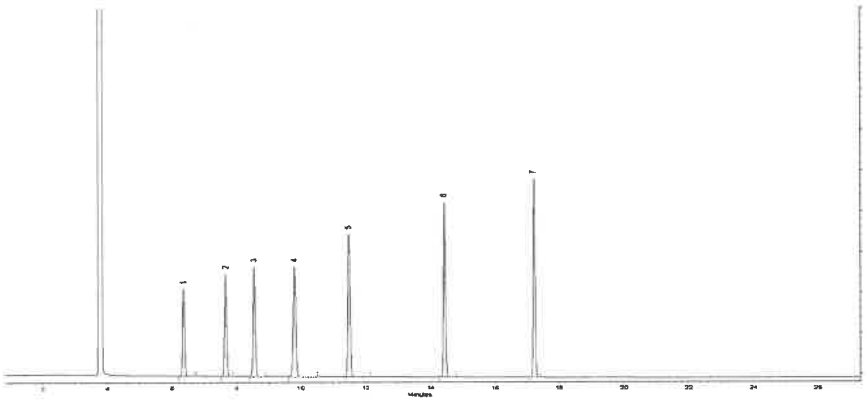
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl



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

Bethany Lowery - Operations Tech I

**Date Mixed:** 21-Mar-2023 **Balance Serial #** B251644995

John Lidgett - AD Chemist

**Date Passed:** 29-Mar-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30489 **Lot No.:** A0196115

**Description :** 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** September 30, 2024 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Methyl acetate | 79-20-9 | SHBP3100 | 99% | 2,013.7 µg/mL | +/- 69.6015 |
| 2 | Vinyl acetate | 108-05-4 | RD220630 | 99% | 2,020.0 µg/mL | +/- 69.8205 |
| 3 | Ethyl acetate | 141-78-6 | SHBP9289 | 99% | 2,019.3 µg/mL | +/- 69.7974 |
| 4 | Isopropyl acetate | 108-21-4 | BCCG7069 | 99% | 2,014.0 µg/mL | +/- 69.6131 |
| 5 | Propyl acetate | 109-60-4 | TFFKL | 99% | 2,014.7 µg/mL | +/- 69.6361 |
| 6 | Butyl acetate | 123-86-4 | SHBP6314 | 99% | 2,014.0 µg/mL | +/- 69.6131 |
| 7 | Amyl acetate | 628-63-7 | 41325/1 | 97% | 2,016.3 µg/mL | +/- 69.6928 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

## Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

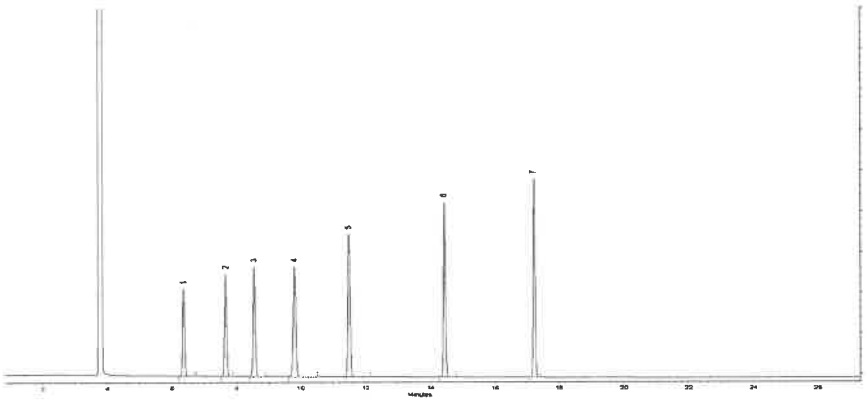
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl



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

Bethany Lowery - Operations Tech I

**Date Mixed:** 21-Mar-2023 **Balance Serial #** B251644995

John Lidgett - AD Chemist

**Date Passed:** 29-Mar-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 555582 **Lot No.:** A0196865

**Description :** Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2026 **Storage:** 10°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Component # | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2-Dichloroethane-d4 | 17060-07-0 | PR-32845 | 99% | 25,036.0 µg/mL | +/- 1,417.9179 |
| 2 | 1-Bromo-4-fluorobenzene (BFB) | 460-00-4 | 184975 | 99% | 25,132.0 µg/mL | +/- 1,423.3549 |
| 3 | Dibromofluoromethane | 1868-53-7 | 022013 | 99% | 25,040.0 µg/mL | +/- 1,418.1445 |
| 4 | Toluene-d8 | 2037-26-5 | PR-33397 | 99% | 25,028.0 µg/mL | +/- 1,417.4648 |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

Russ Bookhamer - Operations Technician I

**Date Mixed:** 11-Apr-2023 **Balance:** 1127510105

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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

**Catalog No. :** 555582 **Lot No.:** A0196865

**Description :** Custom 8260A/B Surrogate Mix

Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2026 **Storage:** 10°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Component # | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,2-Dichloroethane-d4 | 17060-07-0 | PR-32845 | 99% | 25,036.0 µg/mL | +/- 1,417.9179 |
| 2 | 1-Bromo-4-fluorobenzene (BFB) | 460-00-4 | 184975 | 99% | 25,132.0 µg/mL | +/- 1,423.3549 |
| 3 | Dibromofluoromethane | 1868-53-7 | 022013 | 99% | 25,040.0 µg/mL | +/- 1,418.1445 |
| 4 | Toluene-d8 | 2037-26-5 | PR-33397 | 99% | 25,028.0 µg/mL | +/- 1,417.4648 |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

Russ Bookhamer - Operations Technician I

**Date Mixed:** 11-Apr-2023 **Balance:** 1127510105

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

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

### Manufacturing Notes:

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

### Handling Notes:

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30042 **Lot No.:** A0197644

**Description :** 502.2 Calibration Mix #1

502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** January 31, 2030 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12) | 75-71-8 | 00012554 | 99% | 2,001.6 µg/mL | +/- 112.7159 |
| 2 | Chloromethane (methyl chloride) | 74-87-3 | SHBM9611 | 99% | 2,002.0 µg/mL | +/- 112.7840 |
| 3 | Vinyl chloride | 75-01-4 | 00015559 | 99% | 2,002.2 µg/mL | +/- 112.6713 |
| 4 | Bromomethane (methyl bromide) | 74-83-9 | 101604 | 99% | 2,006.4 µg/mL | +/- 112.8861 |
| 5 | Chloroethane (ethyl chloride) | 75-00-3 | 107-401039114-1 | 99% | 2,000.9 µg/mL | +/- 112.5990 |
| 6 | Trichlorofluoromethane (CFC-11) | 75-69-4 | MKCL8411 | 99% | 1,999.2 µg/mL | +/- 112.4861 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Quality Confirmation Test

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

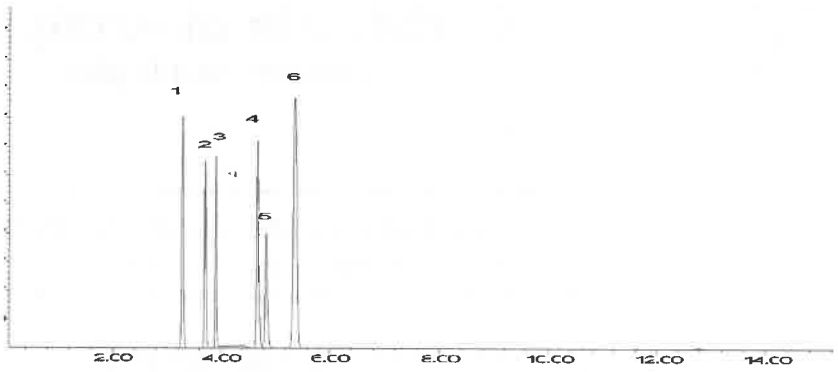
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD

**Split Vent:**
Split ratio 10:1

**Inj. Vol**
1µl




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

Brittany Federinko - Operations Tech I

**Date Mixed:** 02-May-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 08-May-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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

**Catalog No. :** 30489 **Lot No.:** A0199224

**Description :** 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** December 31, 2024 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Methyl acetate | 79-20-9 | SHBP3100 | 99% | 2,015.0 µg/mL | +/- 69.6476 |
| 2 | Vinyl acetate | 108-05-4 | RD220630 | 99% | 2,014.3 µg/mL | +/- 69.6246 |
| 3 | Ethyl acetate | 141-78-6 | SHBP9289 | 99% | 2,012.7 µg/mL | +/- 69.5670 |
| 4 | Isopropyl acetate | 108-21-4 | BCCG7069 | 99% | 2,017.0 µg/mL | +/- 69.7168 |
| 5 | Propyl acetate | 109-60-4 | KLOBM | 99% | 2,007.7 µg/mL | +/- 69.3942 |
| 6 | Butyl acetate | 123-86-4 | SHBP6314 | 99% | 2,014.3 µg/mL | +/- 69.6246 |
| 7 | Amyl acetate | 628-63-7 | 41325/1 | 97% | 2,012.1 µg/mL | +/- 69.5475 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

## Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

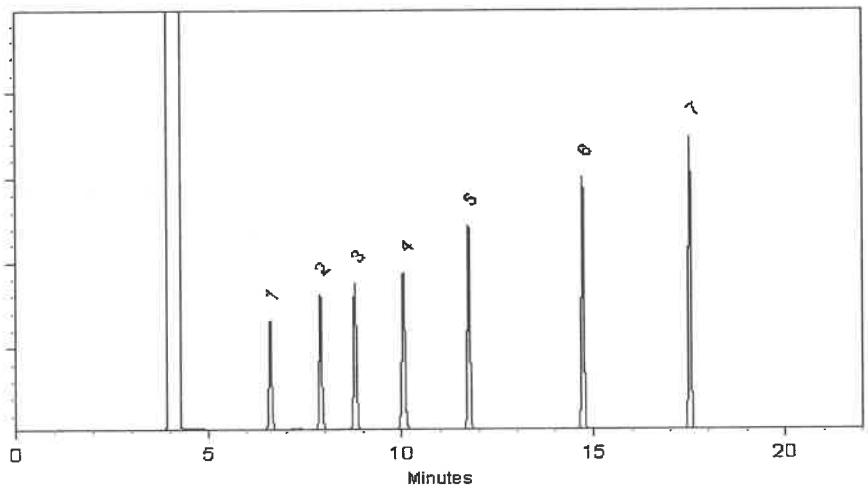
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




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

Tom Suckar - Mix Technician

**Date Mixed:** 22-Jun-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 26-Jun-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30006 **Lot No.:** A0200785

**Description :** VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

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

**Expiration Date :** November 30, 2026 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Acetone | 67-64-1 | SHBP8774 | 99% | 5,018.5 µg/mL | +/- 173.4162 |
| 2 | 2-Butanone (MEK) | 78-93-3 | SHBL5543 | 99% | 5,016.0 µg/mL | +/- 173.3298 |
| 3 | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP4724 | 99% | 5,010.7 µg/mL | +/- 173.1455 |
| 4 | 2-Hexanone | 591-78-6 | MKCQ6663 | 99% | 5,015.0 µg/mL | +/- 173.2952 |

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

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

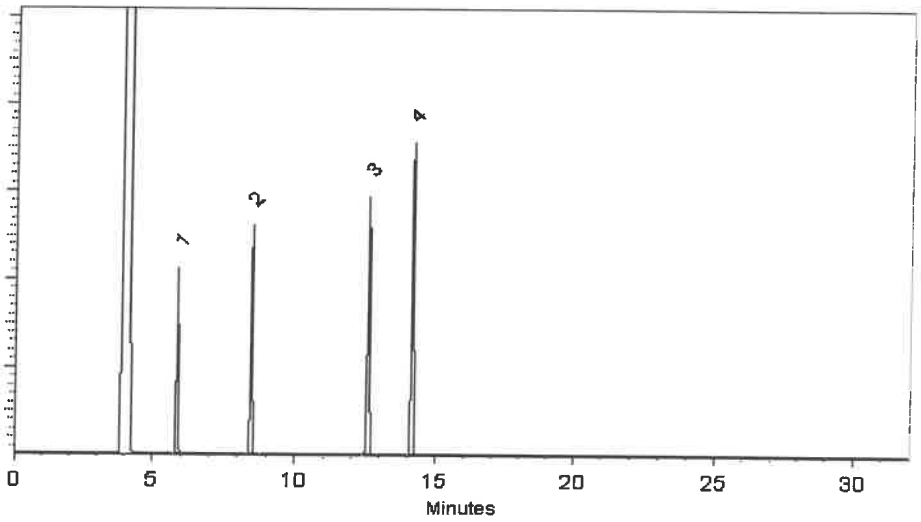
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




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

Laith Clemente - Operations Technician I

**Date Mixed:** 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

**Date Passed:** 16-Aug-2023

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

# General Certified Reference Material Notes

## Expiration Notes:

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

## Purity Notes:

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

## Certified Uncertainty Value Notes:

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

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

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

## Manufacturing Notes:

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

## Handling Notes:

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

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# Certificate of Analysis

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Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 30006 **Lot No.:** A0200785

**Description :** VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

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

**Expiration Date :** November 30, 2026 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Acetone | 67-64-1 | SHBP8774 | 99% | 5,018.5 µg/mL | +/- 173.4162 |
| 2 | 2-Butanone (MEK) | 78-93-3 | SHBL5543 | 99% | 5,016.0 µg/mL | +/- 173.3298 |
| 3 | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP4724 | 99% | 5,010.7 µg/mL | +/- 173.1455 |
| 4 | 2-Hexanone | 591-78-6 | MKCQ6663 | 99% | 5,015.0 µg/mL | +/- 173.2952 |

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

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

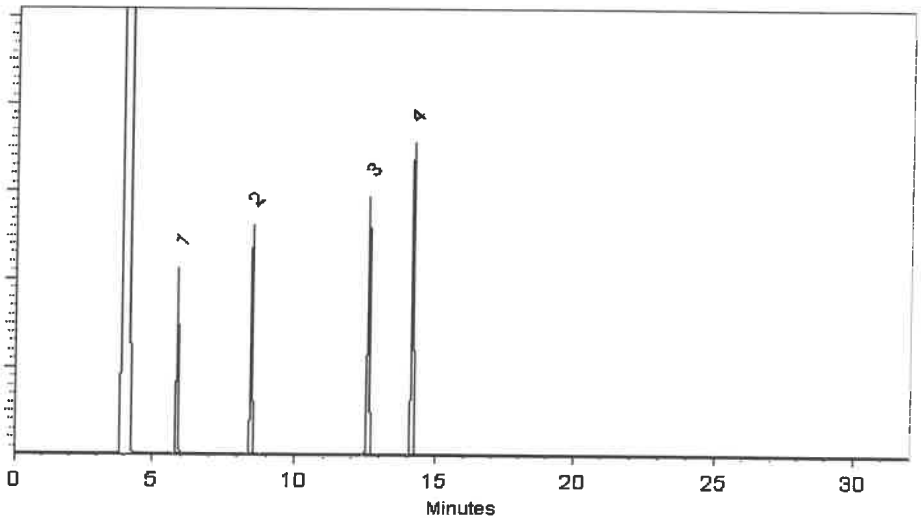
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl

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Laith Clemente - Operations Technician I

**Date Mixed:** 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

**Date Passed:** 16-Aug-2023

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

# General Certified Reference Material Notes

## Expiration Notes:

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

## Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

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

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

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

## Manufacturing Notes:

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

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate #3222.02

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

**Catalog No. :** 30006 **Lot No.:** A0200785

**Description :** VOA Calibration Mix #1

VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul

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

**Expiration Date :** November 30, 2026 **Storage:** 0°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Acetone | 67-64-1 | SHBP8774 | 99% | 5,018.5 µg/mL | +/- 173.4162 |
| 2 | 2-Butanone (MEK) | 78-93-3 | SHBL5543 | 99% | 5,016.0 µg/mL | +/- 173.3298 |
| 3 | 4-Methyl-2-pentanone (MIBK) | 108-10-1 | SHBP4724 | 99% | 5,010.7 µg/mL | +/- 173.1455 |
| 4 | 2-Hexanone | 591-78-6 | MKCQ6663 | 99% | 5,015.0 µg/mL | +/- 173.2952 |

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

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

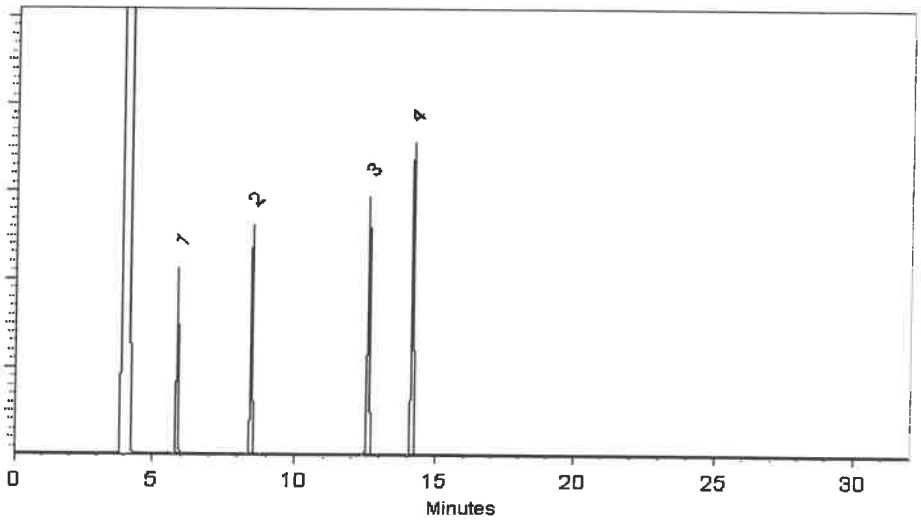
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




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

Laith Clemente - Operations Technician I

**Date Mixed:** 09-Aug-2023 **Balance Serial #** B707717271

Marlina Cowan – Operations Tech II ARM QC

**Date Passed:** 16-Aug-2023

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

# General Certified Reference Material Notes

## Expiration Notes:

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

## Purity Notes:

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

## Certified Uncertainty Value Notes:

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

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

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

## Manufacturing Notes:

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

## Handling Notes:

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

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Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 555408-FL **Lot No.:** A0205177

**Description :** Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** June 30, 2025 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Vinyl acetate | 108-05-4 | RP231030CTH | 98% | 8,047.8 µg/mL | +/- 278.1675 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

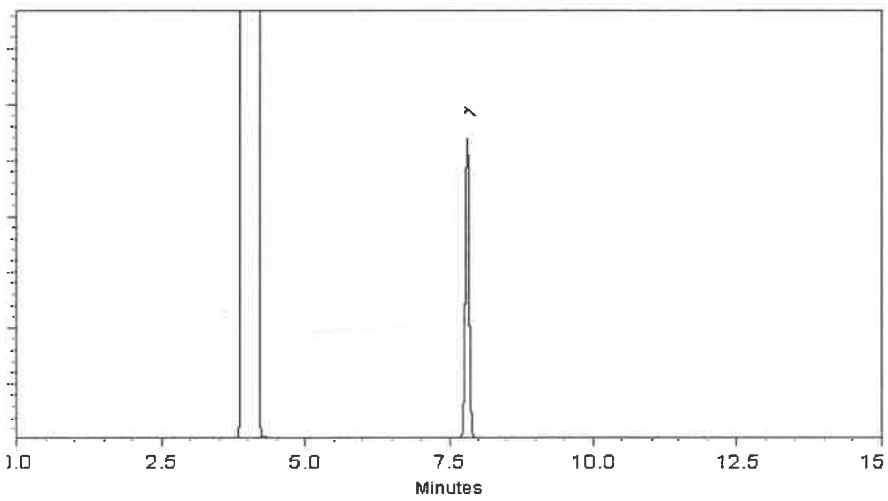
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




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

Tom Suckar - Mix Technician

**Date Mixed:** 06-Dec-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

**Date Passed:** 11-Dec-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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

# Certificate of Analysis

*chromatographic*

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 555408-SL **Lot No.:** A0205179

**Description :** Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** June 30, 2025 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Vinyl acetate | 108-05-4 | RP231030CTH | 98% | 8,075.2 µg/mL | +/- 279.1159 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

# Quality Confirmation Test

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

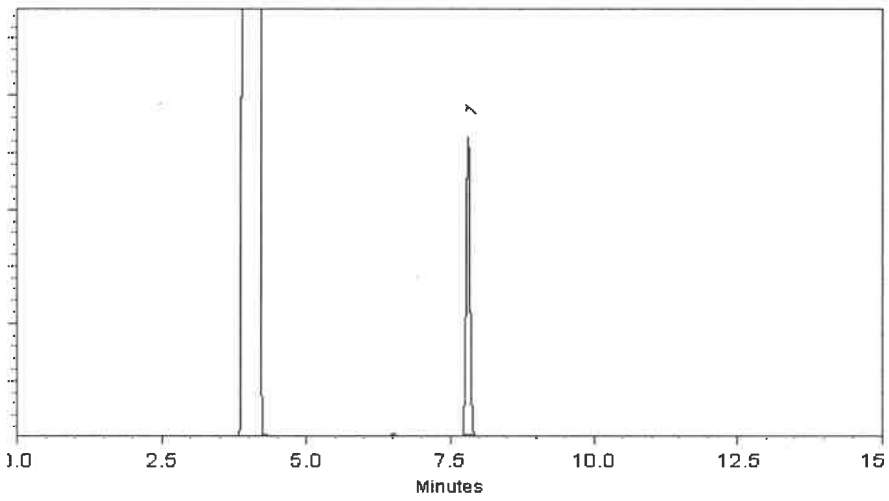
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl

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Daniel Wasson - Operations Tech I **Date Mixed:** 06-Dec-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 11-Dec-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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### Certified Uncertainty Value Notes:

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# Certificate of Analysis

*chromatographic*

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**Catalog No. :** 555408-SL **Lot No.:** A0205179

**Description :** Custom Vinyl Acetate Standard

Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** June 30, 2025 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

| Elution Order | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | Vinyl acetate | 108-05-4 | RP231030CTH | 98% | 8,075.2 µg/mL | +/- 279.1159 |

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

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

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**Column:**
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Rtx-502.2 (cat.#10910)

**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

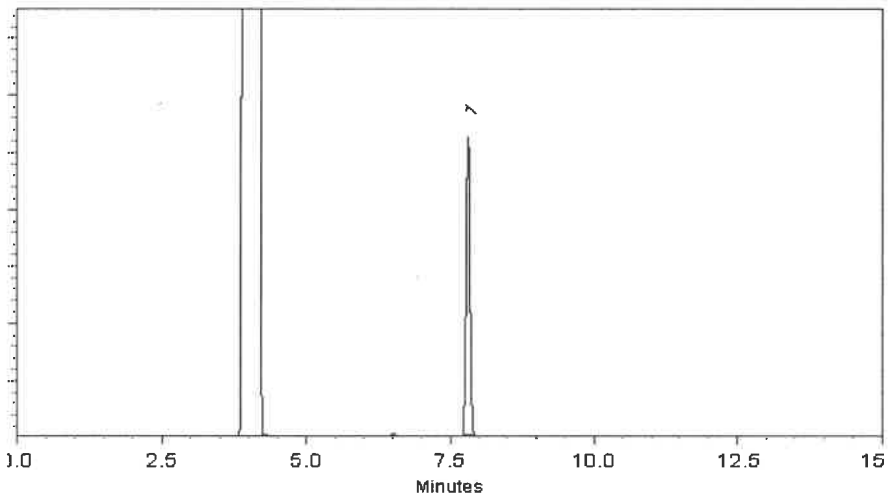
**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
FID

**Split Vent:**
40 ml/min

**Inj. Vol**
1µl




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

Daniel Wasson - Operations Tech I **Date Mixed:** 06-Dec-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 11-Dec-2023

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

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

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

***gravimetric***

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

**Catalog No. :** 555581 **Lot No.:** A0210184

**Description :** Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** April 30, 2027 **Storage:** 10°C or colder

**Ship:** Ambient

CERTIFIED VALUES

| Component # | Compound | CAS # | Lot # | Purity | Grav. Conc. (weight/volume) | Expanded Uncertainty * (95% C.L.; K=2) |
|---|---|---|---|---|---|---|
| 1 | 1,4-Dichlorobenzene-d4 | 3855-82-1 | PR-30447 | 99% | 25,212.0 µg/mL | +/- 1,427.8857 |
| 2 | 1,4-Difluorobenzene | 540-36-3 | MKCS8657 | 99% | 25,220.0 µg/mL | +/- 1,428.3388 |
| 3 | Chlorobenzene-d5 | 3114-55-4 | PR-31132 | 99% | 25,116.0 µg/mL | +/- 1,422.4487 |
| 4 | Pentafluorobenzene | 363-72-4 | MKCR9383 | 99% | 25,180.0 µg/mL | +/- 1,426.0734 |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

John Friedline - Operations Technician I

**Date Mixed:** 11-Apr-2024 **Balance:** 1127510105

REVIEWED

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

## General Certified Reference Material Notes

### Expiration Notes:

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

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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### Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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

***Certified Reference Material CRM***

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

CERTIFIED WEIGHT REPORT

**Part Number:** 70046
**Lot Number:** 070122
**Description:** Bromochloromethane

**Solvent:** Methanol **Lot#** EC592-US

**Expiration Date:** 070127
**Recommended Storage:** Refrigerate (4 °C)
**Nominal Concentration (µg/mL):** 1000
**NIST Test ID#:** 6UTB

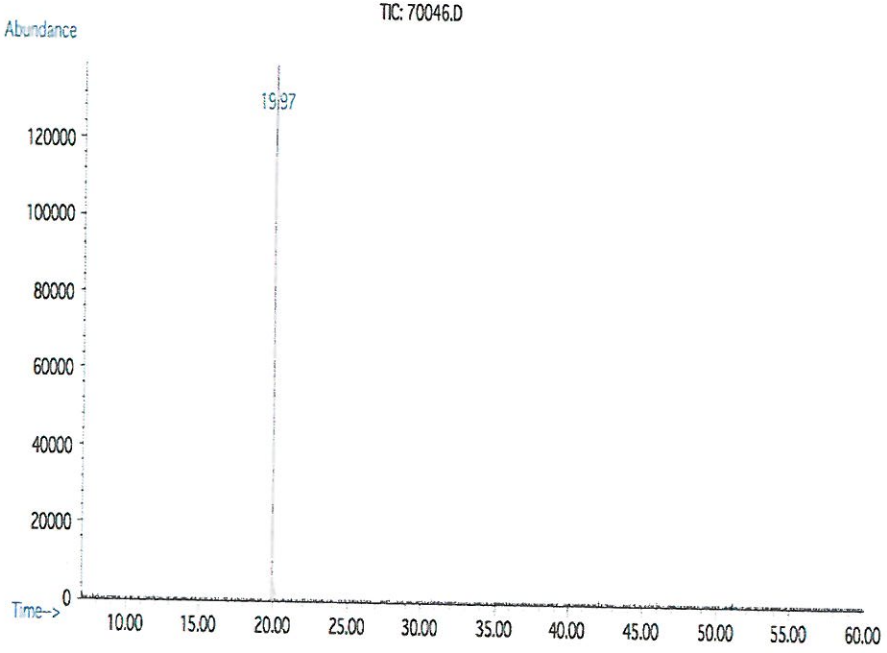
Weight(s) shown below were combined and diluted to (mL): 25.0

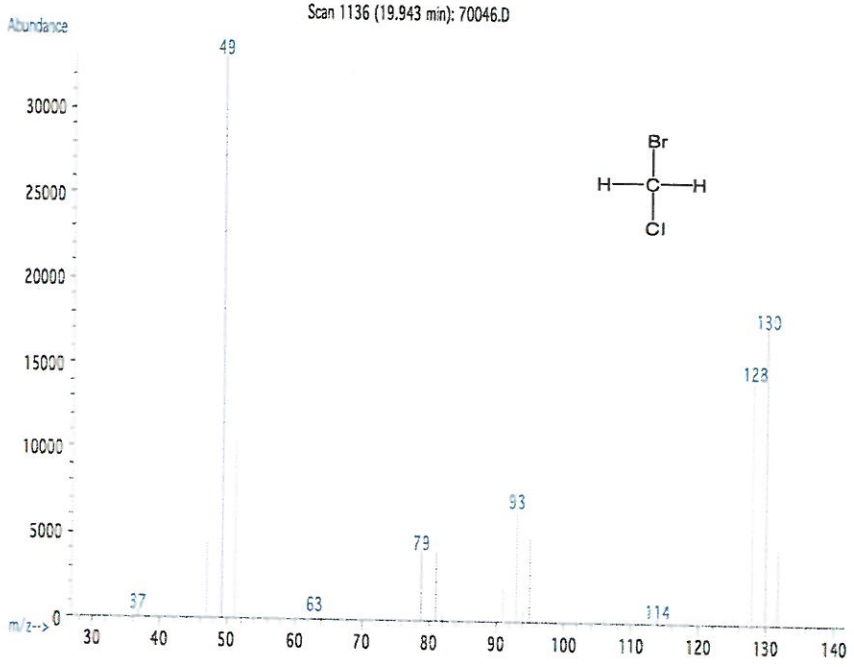
5E-05 Balance Uncertainty
0.0002 Flask Uncertainty

| | | |
|---|---|---|
| Gabriel Helland | | 070122 |
| Formulated By: | Gabriel Helland | DATE |
| Pedro Rentas | | 070122 |
| Reviewed By: | Pedro L. Rentas | DATE |

| Compound | RM# | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty Purity (%) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Bromochloromethane | 46 | AY01 | 1000 | 99 | 0.2 | 0.02530 | 0.02540 | 1004.1 | 5.7 | 74-97-5 | 200 ppm (1050mg/m3/8H) | orl-rat 5000mg/kg |

**Method GC6MSD-1.M:** Column : (60m X 0.25mm X 1.5 µm) Temp 1 = 35°C (10min.), Temp 2 = 200°C (8.75 min.), Rate = 4°C/min., Injector B= 200°C, Detector B = 220°C. Analyst: Candice Warren




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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($CH_3OH$) (by GC, corrected for water) | ≥ 99.9 % | 100.0 % |
| Residue after Evaporation | ≤ 1.0 ppm | 0.2 ppm |
| Titrable Acid (µeq/g) | ≤ 0.3 | 0.2 |
| Titrable Base (µeq/g) | ≤ 0.10 | 0.03 |
| Water (by KF, coulometric) | ≤ 0.08 % | < 0.01 % |
| Volatile Organic Trace Analysis - Below EPA 8260B CRQL | Conforms | Conforms |

For Laboratory,Research,or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

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ULTRA RESI-ANALYZED
For Purge and Trap Analysis

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Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

# SHIPPING DOCUMENTS

# CHEMTECH
## CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. / QUOTE NO. P3429
COC Number 2041346

### CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 412 Mt Kemble Ave Suite #100
CITY Morristown STATE: NJ ZIP: 07960
ATTENTION: John Yntema
PHONE: (281) 414-1714 FAX:

### CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC
PROJECT NO.: D3779922 LOCATION: Princeton Junction
PROJECT MANAGER: Mary Murphy
e-mail: Mary.Murphy@Jacobs.com
PHONE: (201) 936-0586 FAX:

### CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

### DATA TURNAROUND INFORMATION

FAX (RUSH) Standard TAT DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

### DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☒ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B
☐ Other
☐ EDD FORMAT

### ANALYSIS

1 VOCs 8260D
2 SVOCs + PAHs 8270E
3 Metals 6020B; Hg 7470A
4 SIM 8270E
5 Cr(VI) 7196A
6 7 8 9

| CHEMTECH SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE COMP | SAMPLE TYPE GRAB | SAMPLE COLLECTION DATE | SAMPLE COLLECTION TIME | # OF BOTTLES | PRESERVATIVES 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | A/E | E | B/E | E | | | | | | ← Specify Preservatives A-HCl D-NaOH B-HN03 E-ICE C-H2SO4 F-OTHER |
| 1. | 926-KI-WS-073124 | WS | | X | 7/31/24 | 1400 | 6 | 2 | 2 | 1 | 1 | | | | | | |
| 2. | 931-KI-WS-073124 | WS | | X | 7/31/24 | 1450 | 6 | 2 | 2 | 1 | 1 | | | | | | |
| 3. | 925-KI-WS-073124 | WS | | X | 7/31/24 | 1575 | 6 | 2 | 2 | 1 | 1 | | | | | | |
| 4. | TB-01-073124 | DI | | X | 7/31/24 | 1600 | 1 | 1 | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | |

### SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

| RELINQUISHED BY SAMPLER: | DATE/TIME: | RECEIVED BY: |
|---|---|---|
| 1. | 7/31/24 1630 | 1. 1630 7-31-24 |
| 2. | | 2. |
| 3. | 7-31-24 1745 | 3. |

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.5 °C
Comments: See attached table for required analytes list of ECO-VOCs, ECO-SVOCs, and ECO-metals
Short (24hr) hold time for Hexavalent Chromium!

Page ____ of ____
CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☐ Picked Up ☐ Field Sampling
Shipment Complete ☐ YES ☐ NO

Copyright © 2023
WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

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

# Laboratory Certification

| Certified By | License No. |
|---|---|
| | |
| CAS EPA CLP Contract | 68HERH20D0011 |
| | |
| Connecticut | PH-0830 |
| | |
| DOD ELAP (L-A-B) | L2219 |
| | |
| Maine | 2022022 |
| | |
| Maryland | 296 |
| | |
| New Hampshire | 255423 |
| | |
| New Jersey | 20012 |
| | |
| New York | 11376 |
| | |
| Pennsylvania | 68-00548 |
| | |
| Soil Permit | P330-21-00137 |
| | |
| Texas | T104704488 |

QA Control Code: A2070148

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

# LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** P3429 JACO05
**Client Name :** JACOBS Engineering Grou
**Client Contact :** Mary I. Murphy
**Invoice Name :** JACOBS Engineering Grou
**Invoice Contact :** Mary I. Murphy

**Order Date :** 7/31/2024 4:38:00 PM
**Project Name :** Former Schlumberger Site I
**Receive DateTime :** 7/31/2024 5:45:00 PM
**Purchase Order :**

**Project Mgr :** YAZMEEN
**Report Type :** Level 4
**EDD Type :** CH2MHILL
**Hard Copy Date :**
**Date Signoff :** 8/1/2024 9:54:09 AM

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|
| P3429-01 | 926-K1-WS-073124 | Water | 07/31/2024 | 14:00 | | | | | |
| | | | | | VOCMS Group6 | | 8260-Low | | 10 Bus. Days |
| P3429-02 | 931-K1-WS-073124 | Water | 07/31/2024 | 14:50 | | | | | |
| | | | | | VOCMS Group6 | | 8260-Low | | 10 Bus. Days |
| P3429-03 | 925-K1-WS-073124 | Water | 07/31/2024 | 15:15 | | | | | |
| | | | | | VOCMS Group6 | | 8260-Low | | 10 Bus. Days |
| P3429-04 | TB-01-073124 | Water | 07/31/2024 | 16:00 | | | | | |
| | | | | | VOCMS Group6 | | 8260-Low | | 10 Bus. Days |

**Relinguished By :**
**Date / Time :** 8-1-24 11:10

**Received By :**
**Date / Time :** 8/01/24 11:10

**Storage Area :** **VOA Refridgerator Room** Rack 4