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# Cover Page

**Order ID :** M1785

**Project ID :** Ebenzer Plaza-1 - 20918.10

**Client :** Chazen Companies

| Lab Sample Number | Client Sample Number |
|---|---|
| M1785-10 | MW-1 |
| M1785-11 | MW-1MS |
| M1785-12 | MW-1MSD |
| M1785-13 | MW-2 |
| M1785-14 | MW-3R |
| M1785-15 | MW-4 |
| M1785-16 | MW-5R |
| M1785-17 | FD-032321 |
| M1785-18 | TRIP-BLANK |

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: 4/5/2021

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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# CASE NARRATIVE

**Chazen Companies**
**Project Name: Ebenzer Plaza-1 - 20918.10**
**Project # N/A**
**Chemtech Project # M1785**
**Test Name: VOCMS Group2**

**A. Number of Samples and Date of Receipt:**
9 Water samples were received on 03/23/2021.

**B. Parameters**
According to the Chain of Custody document, the following analyses were requested: VOCMS Group2. This data package contains results for VOCMS Group2.

**C. Analytical Techniques:**
The analysis performed on instrument MSVOA_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UIThe analysis of VOCMS Group2 was based on method 8260-Low.

**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 MS {M1785-11MS} with File ID: VX021589.D recoveries met the requirements for all compounds except for 1,2,4-Trimethylbenzene [58%] and N-propylbenzene[76%] .
The MSD {M1785-12MSD} with File ID: VX021590.D recoveries met the acceptable requirements except for 1,2,4-Trimethylbenzene[58%] and N-propylbenzene[74%].
The RPD met criteria. due to high concentration of original sample MS/MSD recovery outside the QC limit.

The Blank Spike met requirements for all samples.
The Blank analysis did not indicate the presence of lab contamination.

The % RSD is greater than 15% in the Initial Calibration method (82X032421W.M) for Chloromethane and 1,2-Dibromo-3-Chloropropane are passing on Linear regression.
The Continuous Calibration met the requirements.
The Tuning criteria met requirements.

Samples MW-1, MW-2, MW-3R, MW-4, MW-5R and FD-032321 the samples are analyzed at straight dilution due to high contamination of analyte 124-trimethyl benzene.
Sample MW-3R was diluted due to high concentration.

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**E. Additional Comments:**

This data Package has been revised due to TICS corrected for sample # 14.

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.

**F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

---

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

Signature_____

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# DATA REPORTING QUALIFIERS- ORGANIC

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

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

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# GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: M1785 MATRIX: Water

METHOD: 8260-Low

| | | 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.<br>The % RSD is greater than 15% in the Initial Calibration method (82X032421W.M) for Chloromethane and 1,2-Dibromo-3-Chloropropane are passing on Linear regression.<br>The Continuous Calibration met the requirements . | | ✓ | |
| 6. | Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 7. | Surrogate Recoveries Meet Criteria<br>If not met, list those compounds and their recoveries which fall outside the acceptable ranges. | | | ✓ |

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

| | | NA | NO | YES |
|---|---|---|---|---|
| 8. | Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria | | ✓ | |
| | If not met, list those compounds and their recoveries which fall outside the acceptable range.<br><br>The MS {M1785-11MS} with File ID: VX021589.D recoveries met the requirements for all compounds except for 1,2,4-Trimethylbenzene [58%] and N-propylbenzene[76%] .<br>The MSD {M1785-12MSD} with File ID: VX021590.D recoveries met the acceptable requirements except for 1,2,4-Trimethylbenzene[58%] and N-propylbenzene[74%].<br>The RPD met criteria. due to high concentration of original sample MS/MSD recovery outside the QC limit.. | | | |
| 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: | | | |

ADDITIONAL COMMENTS:

This data Package has been revised due to TICS corrected for sample # 14.

Samples MW-1, MW-2, MW-3R, MW-4, MW-5R and FD-032321 the samples are analyzed at straight dilution due to high contamination of analyte 124-trimethyl benzene.

Sample MW-3R was diluted due to high concentration.

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 #:** **M1785**

| | 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:** **04/05/2021**

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

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# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | M1785 | **OrderDate:** | 3/23/2021 12:41:00 PM |
| **Client:** | Chazen Companies | **Project:** | Ebenzer Plaza-1 - 20918.10 |
| **Contact:** | Kevin McGrath | **Location:** | VOA Ref. #3 Water |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **M1785-10** | **MW-1** | **Water** | | | **03/23/21** | | | **03/23/21** |
| | | | VOCMS Group2 | 8260-Low | | | 03/29/21 | |
| **M1785-13** | **MW-2** | **Water** | | | **03/23/21** | | | **03/23/21** |
| | | | VOCMS Group2 | 8260-Low | | | 03/29/21 | |
| **M1785-14** | **MW-3R** | **Water** | | | **03/23/21** | | | **03/23/21** |
| | | | VOCMS Group2 | 8260-Low | | | 03/29/21 | |
| **M1785-14DL** | **MW-3RDL** | **Water** | | | **03/23/21** | | | **03/23/21** |
| | | | VOCMS Group2 | 8260-Low | | | 03/29/21 | |
| **M1785-15** | **MW-4** | **Water** | | | **03/23/21** | | | **03/23/21** |
| | | | VOCMS Group2 | 8260-Low | | | 03/29/21 | |
| **M1785-16** | **MW-5R** | **Water** | | | **03/23/21** | | | **03/23/21** |
| | | | VOCMS Group2 | 8260-Low | | | 03/29/21 | |
| **M1785-17** | **FD-032321** | **Water** | | | **03/23/21** | | | **03/23/21** |
| | | | VOCMS Group2 | 8260-Low | | | 03/29/21 | |
| **M1785-18** | **TRIP-BLANK** | **Water** | | | **03/23/21** | | | **03/23/21** |
| | | | VOCMS Group2 | 8260-Low | | | 03/29/21 | |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** M1785

**Client:** Chazen Companies

| Sample ID | Client ID | Matrix | Parameter | | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|
| **Client ID:** | **MW-1** | | | | | | | | |
| M1785-10 | MW-1 | Water | Trichloroethene | | 12.80 | | 1.70 | 10.0 | ug/L |
| M1785-10 | MW-1 | Water | Ethyl Benzene | | 13.40 | | 1.80 | 10.0 | ug/L |
| M1785-10 | MW-1 | Water | Total Xylenes | | 21.30 | J | 5.10 | 30.0 | ug/L |
| M1785-10 | MW-1 | Water | Isopropylbenzene | | 300.00 | | 2.30 | 10.0 | ug/L |
| M1785-10 | MW-1 | Water | n-propylbenzene | | 500.00 | | 2.40 | 10.0 | ug/L |
| M1785-10 | MW-1 | Water | tert-Butylbenzene | | 36.50 | | 2.60 | 10.0 | ug/L |
| M1785-10 | MW-1 | Water | 1,2,4-Trimethylbenzene | | 810.00 | | 2.00 | 10.0 | ug/L |
| M1785-10 | MW-1 | Water | sec-Butylbenzene | | 130.00 | | 2.30 | 10.0 | ug/L |
| M1785-10 | MW-1 | Water | n-Butylbenzene | | 62.20 | | 1.90 | 10.0 | ug/L |
| | | | **Total Voc :** | | 1886.2 | | | | |
| M1785-10 | MW-1 | Water | Benzene, 1,2-diethyl- | * | 94.50 | J | 0 | 0 | ug/L |
| M1785-10 | MW-1 | Water | Benzene, 1,2,3,4-tetramethyl- | * | 140.00 | J | 0 | 0 | ug/L |
| M1785-10 | MW-1 | Water | Benzene, 1,2,3-trimethyl- | * | 87.80 | J | 0 | 0 | ug/L |
| M1785-10 | MW-1 | Water | o-Cymene | * | 89.80 | J | 0 | 0 | ug/L |
| M1785-10 | MW-1 | Water | Benzene, 1-ethenyl-4-methyl- | * | 620.00 | J | 0 | 0 | ug/L |
| M1785-10 | MW-1 | Water | Benzene, 4-ethyl-1,2-dimethyl- | * | 160.00 | J | 0 | 0 | ug/L |
| M1785-10 | MW-1 | Water | (E)-1-Phenyl-1-butene | * | 79.80 | J | 0 | 0 | ug/L |
| M1785-10 | MW-1 | Water | Benzene, 2-ethyl-1,4-dimethyl- | * | 300.00 | J | 0 | 0 | ug/L |
| M1785-10 | MW-1 | Water | Benzene, 1-ethenyl-4-ethyl- | * | 310.00 | J | 0 | 0 | ug/L |
| M1785-10 | MW-1 | Water | 1H-Indene, 2,3-dihydro-1,6-din | * | 60.80 | J | 0 | 0 | ug/L |
| M1785-10 | MW-1 | Water | m/p-Xylenes | * | 21.30 | J | 3.20 | 20.0 | ug/L |
| M1785-10 | MW-1 | Water | Alkylbenzenes, Total | * | 1,800.00 | J | 18.1 | 80.0 | ug/L |
| M1785-10 | MW-1 | Water | Naphthalene | * | 34.30 | J | 2.60 | 10.0 | ug/L |
| | | | **Total Tics :** | | 3798.3 | | | | |
| | | | **Total Concentration:** | | 3863.2 | | | | |
| **Client ID:** | **MW-2** | | | | | | | | |
| M1785-13 | MW-2 | Water | Ethyl Benzene | | 57.20 | | 1.80 | 10.0 | ug/L |
| M1785-13 | MW-2 | Water | Total Xylenes | | 62.80 | | 5.10 | 30.0 | ug/L |
| M1785-13 | MW-2 | Water | Isopropylbenzene | | 190.00 | | 2.30 | 10.0 | ug/L |
| M1785-13 | MW-2 | Water | n-propylbenzene | | 320.00 | | 2.40 | 10.0 | ug/L |
| M1785-13 | MW-2 | Water | 1,3,5-Trimethylbenzene | | 37.00 | | 2.50 | 10.0 | ug/L |
| M1785-13 | MW-2 | Water | tert-Butylbenzene | | 22.50 | | 2.60 | 10.0 | ug/L |
| M1785-13 | MW-2 | Water | 1,2,4-Trimethylbenzene | | 1,200.00 | | 2.00 | 10.0 | ug/L |
| M1785-13 | MW-2 | Water | sec-Butylbenzene | | 88.70 | | 2.30 | 10.0 | ug/L |
| M1785-13 | MW-2 | Water | n-Butylbenzene | | 50.70 | | 1.90 | 10.0 | ug/L |
| | | | **Total Voc :** | | 2028.9 | | | | |
| M1785-13 | MW-2 | Water | Benzene, 1,2,4,5-tetramethyl- | * | 100.00 | J | 0 | 0 | ug/L |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** M1785

**Client:** Chazen Companies

| Sample ID | Client ID | Matrix | Parameter | | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|
| M1785-13 | MW-2 | Water | Benzene, 1,2,3-trimethyl- | * | 440.00 | J | 0 | 0 | ug/L |
| M1785-13 | MW-2 | Water | Benzene, 1,2,3,5-tetramethyl- | * | 120.00 | J | 0 | 0 | ug/L |
| M1785-13 | MW-2 | Water | Benzene, 1-ethyl-2-methyl- | * | 160.00 | J | 0 | 0 | ug/L |
| M1785-13 | MW-2 | Water | Benzene, 1-ethenyl-2-methyl- | * | 400.00 | J | 0 | 0 | ug/L |
| M1785-13 | MW-2 | Water | Benzene, (2-methyl-1-propenyl | * | 210.00 | J | 0 | 0 | ug/L |
| M1785-13 | MW-2 | Water | Benzene, 1-ethyl-2,3-dimethyl- | * | 64.70 | J | 0 | 0 | ug/L |
| M1785-13 | MW-2 | Water | Benzene, 4-ethyl-1,2-dimethyl- | * | 200.00 | J | 0 | 0 | ug/L |
| M1785-13 | MW-2 | Water | Benzene, 2-butenyl- | * | 130.00 | J | 0 | 0 | ug/L |
| M1785-13 | MW-2 | Water | 2,2-Dimethylindene, 2,3-dihydı | * | 57.50 | J | 0 | 0 | ug/L |
| M1785-13 | MW-2 | Water | m/p-Xylenes | * | 62.80 | J | 3.20 | 20.0 | ug/L |
| M1785-13 | MW-2 | Water | Alkylbenzenes, Total | * | 1,900.00 | J | 18.1 | 80.0 | ug/L |
| M1785-13 | MW-2 | Water | p-Isopropyltoluene | * | 15.60 | J | 2.10 | 10.0 | ug/L |
| M1785-13 | MW-2 | Water | Naphthalene | * | 42.00 | J | 2.60 | 10.0 | ug/L |
| | | | **Total Tics :** | | 3902.6 | | | | |
| | | | **Total Concentration:** | | 3968.7 | | | | |
| **Client ID:** | **MW-3R** | | | | | | | | |
| M1785-14 | MW-3R | Water | Methylcyclohexane | | 10.60 | | 1.40 | 10.0 | ug/L |
| M1785-14 | MW-3R | Water | Ethyl Benzene | | 33.30 | | 1.80 | 10.0 | ug/L |
| M1785-14 | MW-3R | Water | Total Xylenes | | 142.00 | | 5.10 | 30.0 | ug/L |
| M1785-14 | MW-3R | Water | Isopropylbenzene | | 150.00 | | 2.30 | 10.0 | ug/L |
| M1785-14 | MW-3R | Water | n-propylbenzene | | 290.00 | | 2.40 | 10.0 | ug/L |
| M1785-14 | MW-3R | Water | 1,3,5-Trimethylbenzene | | 77.20 | | 2.50 | 10.0 | ug/L |
| M1785-14 | MW-3R | Water | tert-Butylbenzene | | 32.90 | | 2.60 | 10.0 | ug/L |
| M1785-14 | MW-3R | Water | 1,2,4-Trimethylbenzene | | 1,600.00 | E | 2.00 | 10.0 | ug/L |
| M1785-14 | MW-3R | Water | sec-Butylbenzene | | 140.00 | | 2.30 | 10.0 | ug/L |
| M1785-14 | MW-3R | Water | n-Butylbenzene | | 97.70 | | 1.90 | 10.0 | ug/L |
| | | | **Total Voc :** | | 2573.7 | | | | |
| M1785-14 | MW-3R | Water | Benzene, 1,2,4,5-tetramethyl- | * | 98.50 | J | 0 | 0 | ug/L |
| M1785-14 | MW-3R | Water | Benzene, 2-propenyl- | * | 420.00 | J | 0 | 0 | ug/L |
| M1785-14 | MW-3R | Water | Benzene, 1,2,3-trimethyl- | * | 400.00 | J | 0 | 0 | ug/L |
| M1785-14 | MW-3R | Water | Benzene, 1,2,3,5-tetramethyl- | * | 120.00 | J | 0 | 0 | ug/L |
| M1785-14 | MW-3R | Water | o-Cymene | * | 270.00 | J | 0 | 0 | ug/L |
| M1785-14 | MW-3R | Water | Cyclohexene, 4-methyl- | * | 97.50 | J | 0 | 0 | ug/L |
| M1785-14 | MW-3R | Water | Benzene, (1-methyl-1-propenyl)- | * | ( 160.00 | J | 0 | 0 | ug/L |
| M1785-14 | MW-3R | Water | Benzene, (2-methyl-1-propenyl)- | * | 250.00 | J | 0 | 0 | ug/L |
| M1785-14 | MW-3R | Water | Benzene, 2-ethyl-1,4-dimethyl- | * | 140.00 | J | 0 | 0 | ug/L |
| M1785-14 | MW-3R | Water | m/p-Xylenes | * | 130.00 | J | 3.20 | 20.0 | ug/L |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** M1785

**Client:** Chazen Companies

| Sample ID | Client ID | Matrix | Parameter | | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|
| M1785-14 | MW-3R | Water | o-Xylene | * | 12.00 | J | 1.90 | 10.0 | ug/L |
| M1785-14 | MW-3R | Water | Alkylbenzenes, Total | * | 2,400.00 | J | 18.1 | 80.0 | ug/L |
| M1785-14 | MW-3R | Water | p-Isopropyltoluene | * | 39.70 | J | 2.10 | 10.0 | ug/L |
| M1785-14 | MW-3R | Water | Naphthalene | * | 7.50 | J | 2.60 | 10.0 | ug/L |
| | | | **Total Tics :** | | 4545.2 | | | | |
| | | | **Total Concentration:** | | 4580.0 | | | | |
| **Client ID:** | **MW-3RDL** | | | | | | | | |
| M1785-14DL | MW-3RDL | Water | Methylcyclohexane | | 17.60 | JD | 5.70 | 40.0 | ug/L |
| M1785-14DL | MW-3RDL | Water | Ethyl Benzene | | 52.00 | D | 7.30 | 40.0 | ug/L |
| M1785-14DL | MW-3RDL | Water | Total Xylenes | | 218.00 | D | 20.4 | 120 | ug/L |
| M1785-14DL | MW-3RDL | Water | Isopropylbenzene | | 200.00 | D | 9.20 | 40.0 | ug/L |
| M1785-14DL | MW-3RDL | Water | n-propylbenzene | | 360.00 | D | 9.60 | 40.0 | ug/L |
| M1785-14DL | MW-3RDL | Water | 1,3,5-Trimethylbenzene | | 90.80 | D | 9.90 | 40.0 | ug/L |
| M1785-14DL | MW-3RDL | Water | tert-Butylbenzene | | 36.40 | JD | 10.3 | 40.0 | ug/L |
| M1785-14DL | MW-3RDL | Water | 1,2,4-Trimethylbenzene | | 2,000.00 | D | 8.00 | 40.0 | ug/L |
| M1785-14DL | MW-3RDL | Water | sec-Butylbenzene | | 150.00 | D | 9.00 | 40.0 | ug/L |
| M1785-14DL | MW-3RDL | Water | n-Butylbenzene | | 93.20 | D | 7.60 | 40.0 | ug/L |
| | | | **Total Voc :** | | 3218.4 | | | | |
| | | | **Total Concentration:** | | 3218.4 | | | | |
| **Client ID:** | **MW-4** | | | | | | | | |
| M1785-15 | MW-4 | Water | Ethyl Benzene | | 110.00 | | 3.60 | 20.0 | ug/L |
| M1785-15 | MW-4 | Water | Total Xylenes | | 68.80 | | 10.2 | 60.0 | ug/L |
| M1785-15 | MW-4 | Water | Isopropylbenzene | | 100.00 | | 4.60 | 20.0 | ug/L |
| M1785-15 | MW-4 | Water | n-propylbenzene | | 170.00 | | 4.80 | 20.0 | ug/L |
| M1785-15 | MW-4 | Water | 1,3,5-Trimethylbenzene | | 39.00 | | 4.90 | 20.0 | ug/L |
| M1785-15 | MW-4 | Water | tert-Butylbenzene | | 16.00 | J | 5.20 | 20.0 | ug/L |
| M1785-15 | MW-4 | Water | 1,2,4-Trimethylbenzene | | 1,600.00 | | 4.00 | 20.0 | ug/L |
| M1785-15 | MW-4 | Water | sec-Butylbenzene | | 61.40 | | 4.50 | 20.0 | ug/L |
| M1785-15 | MW-4 | Water | n-Butylbenzene | | 40.40 | | 3.80 | 20.0 | ug/L |
| | | | **Total Voc :** | | 2205.6 | | | | |
| M1785-15 | MW-4 | Water | Benzene, 1,2,4,5-tetramethyl- | * | 110.00 | J | 0 | 0 | ug/L |
| M1785-15 | MW-4 | Water | Indane | * | 350.00 | J | 0 | 0 | ug/L |
| M1785-15 | MW-4 | Water | Benzene, 1,2,3-trimethyl- | * | 950.00 | J | 0 | 0 | ug/L |
| M1785-15 | MW-4 | Water | o-Cymene | * | 110.00 | J | 0 | 0 | ug/L |
| M1785-15 | MW-4 | Water | Benzene, 1-ethyl-2-methyl- | * | 100.00 | J | 0 | 0 | ug/L |
| M1785-15 | MW-4 | Water | 1-Phenyl-1-butene | * | 220.00 | J | 0 | 0 | ug/L |
| M1785-15 | MW-4 | Water | 3-Phenylbut-1-ene | * | 150.00 | J | 0 | 0 | ug/L |
| M1785-15 | MW-4 | Water | Benzene, 4-ethyl-1,2-dimethyl- | * | 170.00 | J | 0 | 0 | ug/L |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** M1785

**Client:** Chazen Companies

| Sample ID | Client ID | Matrix | Parameter | | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|
| M1785-15 | MW-4 | Water | m/p-Xylenes | * | 68.80 | J | 6.50 | 40.0 | ug/L |
| M1785-15 | MW-4 | Water | Alkylbenzenes, Total | * | 2,000.00 | J | 35.9 | 160 | ug/L |
| M1785-15 | MW-4 | Water | p-Isopropyltoluene | * | 16.00 | J | 4.10 | 20.0 | ug/L |
| M1785-15 | MW-4 | Water | Naphthalene | * | 100.00 | J | 5.20 | 20.0 | ug/L |
| | | | **Total Tics :** | | 4344.8 | | | | |
| | | | **Total Concentration:** | | 4481.6 | | | | |
| **Client ID:** | **MW-5R** | | | | | | | | |
| M1785-16 | MW-5R | Water | Ethyl Benzene | | 18.10 | | 1.80 | 10.0 | ug/L |
| M1785-16 | MW-5R | Water | Total Xylenes | | 115.00 | | 5.10 | 30.0 | ug/L |
| M1785-16 | MW-5R | Water | Isopropylbenzene | | 180.00 | | 2.30 | 10.0 | ug/L |
| M1785-16 | MW-5R | Water | n-propylbenzene | | 360.00 | | 2.40 | 10.0 | ug/L |
| M1785-16 | MW-5R | Water | 1,3,5-Trimethylbenzene | | 270.00 | | 2.50 | 10.0 | ug/L |
| M1785-16 | MW-5R | Water | tert-Butylbenzene | | 31.50 | | 2.60 | 10.0 | ug/L |
| M1785-16 | MW-5R | Water | 1,2,4-Trimethylbenzene | | 1,200.00 | | 2.00 | 10.0 | ug/L |
| M1785-16 | MW-5R | Water | sec-Butylbenzene | | 140.00 | | 2.30 | 10.0 | ug/L |
| M1785-16 | MW-5R | Water | n-Butylbenzene | | 130.00 | | 1.90 | 10.0 | ug/L |
| | | | **Total Voc :** | | 2445 | | | | |
| M1785-16 | MW-5R | Water | Benzene, 1,2,4,5-tetramethyl- | * | 260.00 | J | 0 | 0 | ug/L |
| M1785-16 | MW-5R | Water | Benzene, 1,2-diethyl- | * | 120.00 | J | 0 | 0 | ug/L |
| M1785-16 | MW-5R | Water | Benzene, 1,2,3-trimethyl- | * | 600.00 | J | 0 | 0 | ug/L |
| M1785-16 | MW-5R | Water | Benzene, 1,2,3,5-tetramethyl- | * | 110.00 | J | 0 | 0 | ug/L |
| M1785-16 | MW-5R | Water | o-Cymene | * | 470.00 | J | 0 | 0 | ug/L |
| M1785-16 | MW-5R | Water | Benzene, 1-ethyl-2-methyl- | * | 240.00 | J | 0 | 0 | ug/L |
| M1785-16 | MW-5R | Water | Benzene, 1-ethenyl-4-methyl- | * | 660.00 | J | 0 | 0 | ug/L |
| M1785-16 | MW-5R | Water | Indan, 1-methyl- | * | 430.00 | J | 0 | 0 | ug/L |
| M1785-16 | MW-5R | Water | 1-Phenyl-1-butene | * | 130.00 | J | 0 | 0 | ug/L |
| M1785-16 | MW-5R | Water | Benzene, 4-ethyl-1,2-dimethyl- | * | 440.00 | J | 0 | 0 | ug/L |
| M1785-16 | MW-5R | Water | m/p-Xylenes | * | 110.00 | J | 3.20 | 20.0 | ug/L |
| M1785-16 | MW-5R | Water | o-Xylene | * | 5.40 | J | 1.90 | 10.0 | ug/L |
| M1785-16 | MW-5R | Water | Alkylbenzenes, Total | * | 2,300.00 | J | 18.1 | 80.0 | ug/L |
| M1785-16 | MW-5R | Water | Naphthalene | * | 6.30 | J | 2.60 | 10.0 | ug/L |
| | | | **Total Tics :** | | 5881.7 | | | | |
| | | | **Total Concentration:** | | 5911.3 | | | | |
| **Client ID:** | **FD-032321** | | | | | | | | |
| M1785-17 | FD-032321 | Water | Trichloroethene | | 3.20 | J | 1.70 | 10.0 | ug/L |
| M1785-17 | FD-032321 | Water | Ethyl Benzene | | 20.00 | | 1.80 | 10.0 | ug/L |
| M1785-17 | FD-032321 | Water | Total Xylenes | | 126.00 | | 5.10 | 30.0 | ug/L |
| M1785-17 | FD-032321 | Water | Isopropylbenzene | | 230.00 | | 2.30 | 10.0 | ug/L |

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# Hit Summary Sheet
**SW-846**

**SDG No.:** M1785

**Client:** Chazen Companies

| Sample ID | Client ID | Matrix | Parameter | | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|---|
| M1785-17 | FD-032321 | Water | n-propylbenzene | | 450.00 | | 2.40 | 10.0 | ug/L |
| M1785-17 | FD-032321 | Water | 1,3,5-Trimethylbenzene | | 320.00 | | 2.50 | 10.0 | ug/L |
| M1785-17 | FD-032321 | Water | tert-Butylbenzene | | 39.30 | | 2.60 | 10.0 | ug/L |
| M1785-17 | FD-032321 | Water | 1,2,4-Trimethylbenzene | | 1,400.00 | | 2.00 | 10.0 | ug/L |
| M1785-17 | FD-032321 | Water | sec-Butylbenzene | | 160.00 | | 2.30 | 10.0 | ug/L |
| M1785-17 | FD-032321 | Water | n-Butylbenzene | | 140.00 | | 1.90 | 10.0 | ug/L |
| | | | **Total Voc :** | | 2888 | | | | |
| M1785-17 | FD-032321 | Water | Benzene, 1,2-diethyl- | * | 150.00 | J | 0 | 0 | ug/L |
| M1785-17 | FD-032321 | Water | Benzene, 1,2,3,4-tetramethyl- | * | 540.00 | J | 0 | 0 | ug/L |
| M1785-17 | FD-032321 | Water | Benzene, 1,2,3-trimethyl- | * | 720.00 | J | 0 | 0 | ug/L |
| M1785-17 | FD-032321 | Water | Benzene, 1,2,3,5-tetramethyl- | * | 290.00 | J | 0 | 0 | ug/L |
| M1785-17 | FD-032321 | Water | o-Cymene | * | 490.00 | J | 0 | 0 | ug/L |
| M1785-17 | FD-032321 | Water | Benzene, 1-ethenyl-2-methyl- | * | 790.00 | J | 0 | 0 | ug/L |
| M1785-17 | FD-032321 | Water | Benzene, 1-ethyl-3-methyl- | * | 300.00 | J | 0 | 0 | ug/L |
| M1785-17 | FD-032321 | Water | Indan, 1-methyl- | * | 500.00 | J | 0 | 0 | ug/L |
| M1785-17 | FD-032321 | Water | (E)-1-Phenyl-1-butene | * | 140.00 | J | 0 | 0 | ug/L |
| M1785-17 | FD-032321 | Water | Benzene, 2-ethyl-1,4-dimethyl- | * | 120.00 | J | 0 | 0 | ug/L |
| M1785-17 | FD-032321 | Water | m/p-Xylenes | * | 120.00 | J | 3.20 | 20.0 | ug/L |
| M1785-17 | FD-032321 | Water | o-Xylene | * | 5.50 | J | 1.90 | 10.0 | ug/L |
| M1785-17 | FD-032321 | Water | Alkylbenzenes, Total | * | 2,700.00 | J | 18.1 | 80.0 | ug/L |
| M1785-17 | FD-032321 | Water | Naphthalene | * | 7.30 | J | 2.60 | 10.0 | ug/L |
| | | | **Total Tics :** | | 6872.8 | | | | |
| | | | **Total Concentration:** | | 6935.3 | | | | |
| **Client ID:** | **TRIP-BLANK** | | | | | | | | |
| M1785-18 | TRIP-BLANK | Water | Acetone | | 4.50 | J | 1.60 | 5.00 | ug/L |
| | | | **Total Voc :** | | 4.5 | | | | |
| | | | **Total Concentration:** | | 4.5 | | | | |

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# QC SUMMARY

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# Surrogate Summary

**SDG No.:** M1785

**Client:** Chazen Companies

**Analytical Method:** SW8260-Low

| Lab Sample ID | Client ID | Parameter | Spike | Result | RecoveryQual | Limits Low | Limits High |
|---|---|---|---|---|---|---|---|
| M1785-10 | MW-1 | 1,2-Dichloroethane-d4 | 50 | 50.6 | 101 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 50.1 | 100 | 75 | 124 |
| | | Toluene-d8 | 50 | 50.1 | 100 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 52.4 | 105 | 83 | 123 |
| M1785-11MS | MW-1MS | 1,2-Dichloroethane-d4 | 50 | 50.9 | 102 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 52.6 | 105 | 75 | 124 |
| | | Toluene-d8 | 50 | 53.1 | 106 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 54.4 | 109 | 83 | 123 |
| M1785-12MSD | MW-1MSD | 1,2-Dichloroethane-d4 | 50 | 52.8 | 105 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 50.9 | 102 | 75 | 124 |
| | | Toluene-d8 | 50 | 51.5 | 103 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 52.3 | 105 | 83 | 123 |
| M1785-13 | MW-2 | 1,2-Dichloroethane-d4 | 50 | 52.5 | 105 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 50.6 | 101 | 75 | 124 |
| | | Toluene-d8 | 50 | 51.1 | 102 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 59.1 | 118 | 83 | 123 |
| M1785-14 | MW-3R | 1,2-Dichloroethane-d4 | 50 | 50.9 | 102 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 50.0 | 100 | 75 | 124 |
| | | Toluene-d8 | 50 | 50.1 | 100 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 52.8 | 106 | 83 | 123 |
| M1785-14DL | MW-3RDL | 1,2-Dichloroethane-d4 | 50 | 51.5 | 103 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 50.6 | 101 | 75 | 124 |
| | | Toluene-d8 | 50 | 50.4 | 101 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 56.9 | 114 | 83 | 123 |
| M1785-15 | MW-4 | 1,2-Dichloroethane-d4 | 50 | 51.0 | 102 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 50.2 | 100 | 75 | 124 |
| | | Toluene-d8 | 50 | 50.2 | 100 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 56.1 | 112 | 83 | 123 |
| M1785-16 | MW-5R | 1,2-Dichloroethane-d4 | 50 | 52.4 | 105 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 50.4 | 101 | 75 | 124 |
| | | Toluene-d8 | 50 | 51.2 | 102 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 57.5 | 115 | 83 | 123 |
| M1785-17 | FD-032321 | 1,2-Dichloroethane-d4 | 50 | 51.8 | 104 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 50.8 | 102 | 75 | 124 |
| | | Toluene-d8 | 50 | 48.9 | 98 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 51.5 | 103 | 83 | 123 |
| M1785-18 | TRIP-BLANK | 1,2-Dichloroethane-d4 | 50 | 51.7 | 103 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 51.1 | 102 | 75 | 124 |
| | | Toluene-d8 | 50 | 50.4 | 101 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 53.1 | 106 | 83 | 123 |
| VX0329WBL01 | VX0329WBL01 | 1,2-Dichloroethane-d4 | 50 | 50.4 | 101 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 50.0 | 100 | 75 | 124 |
| | | Toluene-d8 | 50 | 50.1 | 100 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 53.7 | 107 | 83 | 123 |
| VX0329WBS01 | VX0329WBS01 | 1,2-Dichloroethane-d4 | 50 | 49.8 | 100 | 78 | 117 |
| | | Dibromofluoromethane | 50 | 50.6 | 101 | 75 | 124 |
| | | Toluene-d8 | 50 | 50.9 | 102 | 92 | 112 |
| | | 4-Bromofluorobenzene | 50 | 49.9 | 100 | 83 | 123 |

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## Matrix Spike/Matrix Spike Duplicate Summary
## SW-846

**SDG No.:** M1785

**Client:** Chazen Companies

**Analytical Method:** SW8260-Low

| Parameter | Spike | Sample Result | Result | Units | Rec | Rec Qual | RPD | RPD Qual | Limits Low | Limits High | Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Sample ID :** M1785-11MS | **Client Sample ID :** MW-1MS | | | | | | | **Datafile :** | VX021589.D | | |
| Dichlorodifluoromethane | 500 | 0 | 450 | ug/L | 90 | | | | 73 | 120 | |
| Chloromethane | 500 | 0 | 460 | ug/L | 92 | | | | 58 | 133 | |
| Vinyl chloride | 500 | 0 | 480 | ug/L | 96 | | | | 69 | 125 | |
| Bromomethane | 500 | 0 | 520 | ug/L | 104 | | | | 45 | 135 | |
| Chloroethane | 500 | 0 | 470 | ug/L | 94 | | | | 77 | 119 | |
| Trichlorofluoromethane | 500 | 0 | 480 | ug/L | 96 | | | | 72 | 124 | |
| 1,1,2-Trichlorotrifluoroethane | 500 | 0 | 470 | ug/L | 94 | | | | 75 | 117 | |
| 1,1-Dichloroethene | 500 | 0 | 460 | ug/L | 92 | | | | 77 | 118 | |
| Acetone | 2500 | 0 | 2400 | ug/L | 96 | | | | 57 | 139 | |
| Carbon disulfide | 500 | 0 | 410 | ug/L | 82 | | | | 67 | 118 | |
| Methyl tert-butyl Ether | 500 | 0 | 480 | ug/L | 96 | | | | 60 | 148 | |
| Methyl Acetate | 500 | 0 | 530 | ug/L | 106 | | | | 60 | 133 | |
| Methylene Chloride | 500 | 0 | 460 | ug/L | 92 | | | | 79 | 115 | |
| trans-1,2-Dichloroethene | 500 | 0 | 460 | ug/L | 92 | | | | 60 | 133 | |
| 1,1-Dichloroethane | 500 | 0 | 480 | ug/L | 96 | | | | 78 | 122 | |
| Cyclohexane | 500 | 0 | 460 | ug/L | 92 | | | | 71 | 119 | |
| 2-Butanone | 2500 | 0 | 2500 | ug/L | 100 | | | | 67 | 137 | |
| Carbon Tetrachloride | 500 | 0 | 500 | ug/L | 100 | | | | 84 | 115 | |
| cis-1,2-Dichloroethene | 500 | 0 | 470 | ug/L | 94 | | | | 56 | 145 | |
| Bromochloromethane | 500 | 0 | 490 | ug/L | 98 | | | | 72 | 130 | |
| Chloroform | 500 | 0 | 490 | ug/L | 98 | | | | 83 | 119 | |
| 1,1,1-Trichloroethane | 500 | 0 | 480 | ug/L | 96 | | | | 83 | 117 | |
| Methylcyclohexane | 500 | 0 | 460 | ug/L | 92 | | | | 64 | 120 | |
| Benzene | 500 | 0 | 480 | ug/L | 96 | | | | 83 | 115 | |
| 1,2-Dichloroethane | 500 | 0 | 490 | ug/L | 98 | | | | 76 | 120 | |
| Trichloroethene | 500 | 12.8 | 480 | ug/L | 93 | | | | 45 | 149 | |
| 1,2-Dichloropropane | 500 | 0 | 490 | ug/L | 98 | | | | 85 | 116 | |
| Bromodichloromethane | 500 | 0 | 500 | ug/L | 100 | | | | 86 | 117 | |
| 4-Methyl-2-Pentanone | 2500 | 0 | 2600 | ug/L | 104 | | | | 72 | 137 | |
| Toluene | 500 | 0 | 500 | ug/L | 100 | | | | 85 | 115 | |
| t-1,3-Dichloropropene | 500 | 0 | 490 | ug/L | 98 | | | | 78 | 117 | |
| cis-1,3-Dichloropropene | 500 | 0 | 480 | ug/L | 96 | | | | 77 | 115 | |
| 1,1,2-Trichloroethane | 500 | 0 | 500 | ug/L | 100 | | | | 87 | 119 | |
| 2-Hexanone | 2500 | 0 | 2700 | ug/L | 108 | | | | 75 | 131 | |
| Dibromochloromethane | 500 | 0 | 520 | ug/L | 104 | | | | 88 | 118 | |
| 1,2-Dibromoethane | 500 | 0 | 500 | ug/L | 100 | | | | 85 | 119 | |
| Tetrachloroethene | 500 | 0 | 500 | ug/L | 100 | | | | 65 | 114 | |
| Chlorobenzene | 500 | 0 | 490 | ug/L | 98 | | | | 62 | 141 | |
| Ethyl Benzene | 500 | 13.4 | 500 | ug/L | 97 | | | | 62 | 134 | |
| m/p-Xylenes | 1000 | 21.3 | 1000 | ug/L | 98 | | | | 83 | 117 | |
| o-Xylene | 500 | 0 | 500 | ug/L | 100 | | | | 81 | 120 | |
| Styrene | 500 | 0 | 500 | ug/L | 100 | | | | 53 | 143 | |
| Bromoform | 500 | 0 | 500 | ug/L | 100 | | | | 83 | 121 | |
| Isopropylbenzene | 500 | 300 | 730 | ug/L | 86 | | | | 76 | 121 | |
| 1,1,2,2-Tetrachloroethane | 500 | 0 | 510 | ug/L | 102 | | | | 66 | 145 | |
| N-propylbenzene | 500 | 500 | 880 | ug/L | 76 | * | | | 79 | 116 | |
| 1,3,5-Trimethylbenzene | 500 | 0 | 510 | ug/L | 102 | | | | 40 | 169 | |

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## Matrix Spike/Matrix Spike Duplicate Summary
## SW-846

**SDG No.:** M1785

**Client:** Chazen Companies

**Analytical Method:** SW8260-Low

| Parameter | Spike | Sample Result | Result | Units | Rec | Rec Qual | RPD | RPD Qual | Limits Low | Limits High | Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | 500 | 36.5 | 540 | ug/L | 101 | | | | 80 | 116 | |
| 1,2,4-Trimethylbenzene | 500 | 810 | 1100 | ug/L | 58 | * | | | 81 | 116 | |
| Sec-butylbenzene | 500 | 130 | 610 | ug/L | 96 | | | | 70 | 122 | |
| 1,3-Dichlorobenzene | 500 | 0 | 500 | ug/L | 100 | | | | 84 | 110 | |
| 1,4-Dichlorobenzene | 500 | 0 | 490 | ug/L | 98 | | | | 81 | 111 | |
| n-Butylbenzene | 500 | 62.2 | 550 | ug/L | 98 | | | | 53 | 140 | |
| 1,2-Dichlorobenzene | 500 | 0 | 510 | ug/L | 102 | | | | 82 | 113 | |
| 1,2-Dibromo-3-Chloropropane | 500 | 0 | 490 | ug/L | 98 | | | | 55 | 152 | |
| 1,2,4-Trichlorobenzene | 500 | 0 | 510 | ug/L | 102 | | | | 73 | 120 | |
| 1,2,3-Trichlorobenzene | 500 | 0 | 480 | ug/L | 96 | | | | 75 | 119 | |
| 1,4-Dioxane | 10000 | 0 | 10100 | ug/L | 101 | | | | 50 | 150 | |

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## Matrix Spike/Matrix Spike Duplicate Summary
## SW-846

**SDG No.:** M1785

**Client:** Chazen Companies

**Analytical Method:** SW8260-Low

| Parameter | Spike | Sample Result | Result | Units | Rec | Rec Qual | RPD | RPD Qual | Limits Low | Limits High | Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Sample ID :** M1785-12MSD | **Client Sample ID :** | | MW-1MSD | | | | | **Datafile :** | VX021590.D | | |
| Dichlorodifluoromethane | 500 | 0 | 470 | ug/L | 94 | | 4 | | 73 | 120 | 20 |
| Chloromethane | 500 | 0 | 470 | ug/L | 94 | | 2 | | 58 | 133 | 20 |
| Vinyl chloride | 500 | 0 | 500 | ug/L | 100 | | 4 | | 69 | 125 | 20 |
| Bromomethane | 500 | 0 | 560 | ug/L | 112 | | 7 | | 45 | 135 | 20 |
| Chloroethane | 500 | 0 | 490 | ug/L | 98 | | 4 | | 77 | 119 | 20 |
| Trichlorofluoromethane | 500 | 0 | 500 | ug/L | 100 | | 4 | | 72 | 124 | 20 |
| 1,1,2-Trichlorotrifluoroethane | 500 | 0 | 490 | ug/L | 98 | | 4 | | 75 | 117 | 20 |
| 1,1-Dichloroethene | 500 | 0 | 470 | ug/L | 94 | | 2 | | 77 | 118 | 20 |
| Acetone | 2500 | 0 | 2500 | ug/L | 100 | | 4 | | 57 | 139 | 20 |
| Carbon disulfide | 500 | 0 | 420 | ug/L | 84 | | 2 | | 67 | 118 | 20 |
| Methyl tert-butyl Ether | 500 | 0 | 500 | ug/L | 100 | | 4 | | 60 | 148 | 20 |
| Methyl Acetate | 500 | 0 | 550 | ug/L | 110 | | 4 | | 60 | 133 | 20 |
| Methylene Chloride | 500 | 0 | 480 | ug/L | 96 | | 4 | | 79 | 115 | 20 |
| trans-1,2-Dichloroethene | 500 | 0 | 470 | ug/L | 94 | | 2 | | 60 | 133 | 20 |
| 1,1-Dichloroethane | 500 | 0 | 500 | ug/L | 100 | | 4 | | 78 | 122 | 20 |
| Cyclohexane | 500 | 0 | 480 | ug/L | 96 | | 4 | | 71 | 119 | 20 |
| 2-Butanone | 2500 | 0 | 2600 | ug/L | 104 | | 4 | | 67 | 137 | 20 |
| Carbon Tetrachloride | 500 | 0 | 490 | ug/L | 98 | | 2 | | 84 | 115 | 20 |
| cis-1,2-Dichloroethene | 500 | 0 | 490 | ug/L | 98 | | 4 | | 56 | 145 | 20 |
| Bromochloromethane | 500 | 0 | 510 | ug/L | 102 | | 4 | | 72 | 130 | 20 |
| Chloroform | 500 | 0 | 510 | ug/L | 102 | | 4 | | 83 | 119 | 20 |
| 1,1,1-Trichloroethane | 500 | 0 | 500 | ug/L | 100 | | 4 | | 83 | 117 | 20 |
| Methylcyclohexane | 500 | 0 | 450 | ug/L | 90 | | 2 | | 64 | 120 | 20 |
| Benzene | 500 | 0 | 480 | ug/L | 96 | | 0 | | 83 | 115 | 20 |
| 1,2-Dichloroethane | 500 | 0 | 490 | ug/L | 98 | | 0 | | 76 | 120 | 20 |
| Trichloroethene | 500 | 12.8 | 480 | ug/L | 93 | | 0 | | 45 | 149 | 20 |
| 1,2-Dichloropropane | 500 | 0 | 490 | ug/L | 98 | | 0 | | 85 | 116 | 20 |
| Bromodichloromethane | 500 | 0 | 490 | ug/L | 98 | | 2 | | 86 | 117 | 20 |
| 4-Methyl-2-Pentanone | 2500 | 0 | 2600 | ug/L | 104 | | 0 | | 72 | 137 | 20 |
| Toluene | 500 | 0 | 500 | ug/L | 100 | | 0 | | 85 | 115 | 20 |
| t-1,3-Dichloropropene | 500 | 0 | 490 | ug/L | 98 | | 0 | | 78 | 117 | 20 |
| cis-1,3-Dichloropropene | 500 | 0 | 480 | ug/L | 96 | | 0 | | 77 | 115 | 20 |
| 1,1,2-Trichloroethane | 500 | 0 | 500 | ug/L | 100 | | 0 | | 87 | 119 | 20 |
| 2-Hexanone | 2500 | 0 | 2600 | ug/L | 104 | | 4 | | 75 | 131 | 20 |
| Dibromochloromethane | 500 | 0 | 510 | ug/L | 102 | | 2 | | 88 | 118 | 20 |
| 1,2-Dibromoethane | 500 | 0 | 500 | ug/L | 100 | | 0 | | 85 | 119 | 20 |
| Tetrachloroethene | 500 | 0 | 490 | ug/L | 98 | | 2 | | 65 | 114 | 20 |
| Chlorobenzene | 500 | 0 | 490 | ug/L | 98 | | 0 | | 62 | 141 | 20 |
| Ethyl Benzene | 500 | 13.4 | 500 | ug/L | 97 | | 0 | | 62 | 134 | 20 |
| m/p-Xylenes | 1000 | 21.3 | 1000 | ug/L | 98 | | 0 | | 83 | 117 | 20 |
| o-Xylene | 500 | 0 | 510 | ug/L | 102 | | 2 | | 81 | 120 | 20 |
| Styrene | 500 | 0 | 500 | ug/L | 100 | | 0 | | 53 | 143 | 20 |
| Bromoform | 500 | 0 | 520 | ug/L | 104 | | 4 | | 83 | 121 | 20 |
| Isopropylbenzene | 500 | 300 | 730 | ug/L | 86 | | 0 | | 76 | 121 | 20 |
| 1,1,2,2-Tetrachloroethane | 500 | 0 | 500 | ug/L | 100 | | 2 | | 66 | 145 | 20 |
| N-propylbenzene | 500 | 500 | 870 | ug/L | 74 | * | 3 | | 79 | 116 | 20 |
| 1,3,5-Trimethylbenzene | 500 | 0 | 510 | ug/L | 102 | | 0 | | 40 | 169 | 20 |

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## Matrix Spike/Matrix Spike Duplicate Summary
## SW-846

**SDG No.:** M1785

**Client:** Chazen Companies

**Analytical Method:** SW8260-Low

| Parameter | Spike | Sample Result | Result | Units | Rec | Rec Qual | RPD | RPD Qual | Limits Low | Limits High | Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | 500 | 36.5 | 530 | ug/L | 99 | | 2 | | 80 | 116 | 20 |
| 1,2,4-Trimethylbenzene | 500 | 810 | 1100 | ug/L | 58 | * | 0 | | 81 | 116 | 20 |
| Sec-butylbenzene | 500 | 130 | 600 | ug/L | 94 | | 2 | | 70 | 122 | 20 |
| 1,3-Dichlorobenzene | 500 | 0 | 500 | ug/L | 100 | | 0 | | 84 | 110 | 20 |
| 1,4-Dichlorobenzene | 500 | 0 | 480 | ug/L | 96 | | 2 | | 81 | 111 | 20 |
| n-Butylbenzene | 500 | 62.2 | 550 | ug/L | 98 | | 0 | | 53 | 140 | 20 |
| 1,2-Dichlorobenzene | 500 | 0 | 500 | ug/L | 100 | | 2 | | 82 | 113 | 20 |
| 1,2-Dibromo-3-Chloropropane | 500 | 0 | 480 | ug/L | 96 | | 2 | | 55 | 152 | 20 |
| 1,2,4-Trichlorobenzene | 500 | 0 | 480 | ug/L | 96 | | 6 | | 73 | 120 | 20 |
| 1,2,3-Trichlorobenzene | 500 | 0 | 480 | ug/L | 96 | | 0 | | 75 | 119 | 20 |
| 1,4-Dioxane | 10000 | 0 | 10300 | ug/L | 103 | | 2 | | 50 | 150 | 20 |

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**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**
**SW-846**

**SDG No.:** M1785

**Client:** Chazen Companies

**Analytical Method:** SW8260-Low **Datafile :** VX021566.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VX0329WBS01 | Dichlorodifluoromethane | 20 | 18.4 | ug/L | 92 | | | 69 | 116 | |
| | Chloromethane | 20 | 18.6 | ug/L | 93 | | | 65 | 116 | |
| | Vinyl chloride | 20 | 19.1 | ug/L | 96 | | | 65 | 117 | |
| | Bromomethane | 20 | 23.5 | ug/L | 117 | | | 55 | 134 | |
| | Chloroethane | 20 | 18.7 | ug/L | 94 | | | 73 | 112 | |
| | Trichlorofluoromethane | 20 | 19.4 | ug/L | 97 | | | 73 | 115 | |
| | 1,1,2-Trichlorotrifluoroethane | 20 | 19.3 | ug/L | 97 | | | 80 | 112 | |
| | 1,1-Dichloroethene | 20 | 18.6 | ug/L | 93 | | | 74 | 110 | |
| | Acetone | 100 | 94.1 | ug/L | 94 | | | 60 | 125 | |
| | Carbon disulfide | 20 | 17.0 | ug/L | 85 | | | 64 | 112 | |
| | Methyl tert-butyl Ether | 20 | 19.4 | ug/L | 97 | | | 78 | 114 | |
| | Methyl Acetate | 20 | 20.8 | ug/L | 104 | | | 67 | 125 | |
| | Methylene Chloride | 20 | 18.6 | ug/L | 93 | | | 72 | 114 | |
| | trans-1,2-Dichloroethene | 20 | 18.5 | ug/L | 93 | | | 75 | 108 | |
| | 1,1-Dichloroethane | 20 | 19.7 | ug/L | 99 | | | 78 | 112 | |
| | Cyclohexane | 20 | 18.5 | ug/L | 93 | | | 75 | 110 | |
| | 2-Butanone | 100 | 94.8 | ug/L | 95 | | | 65 | 122 | |
| | Carbon Tetrachloride | 20 | 20.1 | ug/L | 101 | | | 77 | 113 | |
| | cis-1,2-Dichloroethene | 20 | 19.1 | ug/L | 96 | | | 77 | 110 | |
| | Bromochloromethane | 20 | 20.7 | ug/L | 104 | | | 70 | 124 | |
| | Chloroform | 20 | 19.7 | ug/L | 99 | | | 79 | 113 | |
| | 1,1,1-Trichloroethane | 20 | 19.6 | ug/L | 98 | | | 80 | 108 | |
| | Methylcyclohexane | 20 | 18.5 | ug/L | 93 | | | 72 | 115 | |
| | Benzene | 20 | 19.7 | ug/L | 99 | | | 82 | 109 | |
| | 1,2-Dichloroethane | 20 | 20.2 | ug/L | 101 | | | 80 | 115 | |
| | Trichloroethene | 20 | 19.3 | ug/L | 97 | | | 77 | 113 | |
| | 1,2-Dichloropropane | 20 | 19.9 | ug/L | 100 | | | 83 | 111 | |
| | Bromodichloromethane | 20 | 20.2 | ug/L | 101 | | | 83 | 110 | |
| | 4-Methyl-2-Pentanone | 100 | 99.7 | ug/L | 100 | | | 74 | 118 | |
| | Toluene | 20 | 19.9 | ug/L | 100 | | | 82 | 110 | |
| | t-1,3-Dichloropropene | 20 | 19.4 | ug/L | 97 | | | 79 | 110 | |
| | cis-1,3-Dichloropropene | 20 | 19.9 | ug/L | 100 | | | 82 | 110 | |
| | 1,1,2-Trichloroethane | 20 | 20.1 | ug/L | 101 | | | 83 | 112 | |
| | 2-Hexanone | 100 | 98.8 | ug/L | 99 | | | 73 | 117 | |
| | Dibromochloromethane | 20 | 20.3 | ug/L | 102 | | | 82 | 110 | |
| | 1,2-Dibromoethane | 20 | 19.8 | ug/L | 99 | | | 81 | 110 | |
| | Tetrachloroethene | 20 | 20.3 | ug/L | 102 | | | 67 | 123 | |
| | Chlorobenzene | 20 | 19.2 | ug/L | 96 | | | 82 | 109 | |
| | Ethyl Benzene | 20 | 19.2 | ug/L | 96 | | | 83 | 109 | |
| | m/p-Xylenes | 40 | 39.4 | ug/L | 99 | | | 82 | 110 | |
| | o-Xylene | 20 | 19.6 | ug/L | 98 | | | 83 | 109 | |
| | Styrene | 20 | 19.2 | ug/L | 96 | | | 80 | 111 | |
| | Bromoform | 20 | 20.2 | ug/L | 101 | | | 79 | 109 | |
| | Isopropylbenzene | 20 | 20.2 | ug/L | 101 | | | 83 | 112 | |
| | 1,1,2,2-Tetrachloroethane | 20 | 20.1 | ug/L | 101 | | | 76 | 118 | |
| | N-propylbenzene | 20 | 20.1 | ug/L | 101 | | | 83 | 112 | |
| | 1,3,5-Trimethylbenzene | 20 | 20.4 | ug/L | 102 | | | 85 | 112 | |
| | tert-Butylbenzene | 20 | 19.8 | ug/L | 99 | | | 83 | 112 | |
| | 1,2,4-Trimethylbenzene | 20 | 20.2 | ug/L | 101 | | | 85 | 111 | |

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**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**
**SW-846**

**SDG No.:** M1785

**Client:** Chazen Companies

**Analytical Method:** SW8260-Low **Datafile :** VX021566.D

| Lab Sample ID | Parameter | Spike | Result | Unit | Rec | RPD | Qual | Limits Low | Limits High | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| VX0329WBS01 | Sec-butylbenzene | 20 | 20.0 | ug/L | 100 | | | 81 | 114 | |
| | 1,3-Dichlorobenzene | 20 | 19.8 | ug/L | 99 | | | 82 | 108 | |
| | 1,4-Dichlorobenzene | 20 | 19.2 | ug/L | 96 | | | 82 | 107 | |
| | n-Butylbenzene | 20 | 18.6 | ug/L | 93 | | | 75 | 115 | |
| | 1,2-Dichlorobenzene | 20 | 19.4 | ug/L | 97 | | | 82 | 109 | |
| | 1,2-Dibromo-3-Chloropropane | 20 | 19.5 | ug/L | 98 | | | 68 | 112 | |
| | 1,2,4-Trichlorobenzene | 20 | 19.0 | ug/L | 95 | | | 74 | 114 | |
| | 1,2,3-Trichlorobenzene | 20 | 19.1 | ug/L | 96 | | | 77 | 113 | |
| | 1,4-Dioxane | 400 | 400 | ug/L | 100 | | | 54 | 145 | |

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# VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0329WBL01

Lab Name: CHEMTECH Contract: CHAZ02

Lab Code: CHEM Case No.: M1785 SAS No.: M1785 SDG NO.: M1785

Lab File ID: VX021565.D Lab Sample ID: VX0329WBL01

Date Analyzed: 03/29/2021 Time Analyzed: 10:36

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

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

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| VX0329WBS01 | VX0329WBS01 | VX021566.D | 03/29/2021 |
| MW-1 | M1785-10 | VX021571.D | 03/29/2021 |
| MW-3RDL | M1785-14DL | VX021573.D | 03/29/2021 |
| MW-4 | M1785-15 | VX021574.D | 03/29/2021 |
| TRIP-BLANK | M1785-18 | VX021576.D | 03/29/2021 |
| FD-032321 | M1785-17 | VX021578.D | 03/29/2021 |
| MW-2 | M1785-13 | VX021579.D | 03/29/2021 |
| MW-3R | M1785-14 | VX021580.D | 03/29/2021 |
| MW-5R | M1785-16 | VX021581.D | 03/29/2021 |
| MW-1MS | M1785-11MS | VX021589.D | 03/29/2021 |
| MW-1MSD | M1785-12MSD | VX021590.D | 03/29/2021 |

COMMENTS:

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

Lab Name: CHEMTECH Contract: CHAZ02

Lab Code: CHEM Case No.: M1785 SAS No.: M1785 SDG NO.: M1785

Lab File ID: VX021422.D BFB Injection Date: 03/24/2021

Instrument ID: MSVOA_X BFB Injection Time: 08:21

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 21.9 |
| 75 | 30.0 - 60.0% of mass 95 | 57 |
| 95 | Base Peak, 100% relative abundance | 100 |
| 96 | 5.0 - 9.0% of mass 95 | 6.3 |
| 173 | Less than 2.0% of mass 174 | 0.7 ( 1.1 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 68 |
| 175 | 5.0 - 9.0% of mass 174 | 5.6 ( 8.3 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 64.6 ( 94.9 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.7 ( 7.3 ) 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 |
|---|---|---|---|---|
| VSTDICC001 | VSTDICC001 | VX021424.D | 03/24/2021 | 10:04 |
| VSTDICC005 | VSTDICC005 | VX021425.D | 03/24/2021 | 10:26 |
| VSTDICC020 | VSTDICC020 | VX021426.D | 03/24/2021 | 10:49 |
| VSTDICCC050 | VSTDICCC050 | VX021427.D | 03/24/2021 | 11:13 |
| VSTDICC100 | VSTDICC100 | VX021428.D | 03/24/2021 | 11:36 |
| VSTDICC150 | VSTDICC150 | VX021429.D | 03/24/2021 | 11:58 |

Raw Data: **VX021563.D**

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

Lab Name: CHEMTECH Contract: CHAZ02

Lab Code: CHEM Case No.: M1785 SAS No.: M1785 SDG NO.: M1785

Lab File ID: VX021563.D BFB Injection Date: 03/29/2021

Instrument ID: MSVOA_X BFB Injection Time: 09:02

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 22.8 |
| 75 | 30.0 - 60.0% of mass 95 | 55.8 |
| 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 | 0.4 ( 0.6 ) 1 |
| 174 | 50.0 - 100.0% of mass 95 | 71.4 |
| 175 | 5.0 - 9.0% of mass 174 | 5.9 ( 8.3 ) 1 |
| 176 | 95.0 - 101.0% of mass 174 | 69.1 ( 96.8 ) 1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.6 ( 6.7 ) 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 | VX021564.D | 03/29/2021 | 09:35 |
| VX0329WBL01 | VX0329WBL01 | VX021565.D | 03/29/2021 | 10:36 |
| VX0329WBS01 | VX0329WBS01 | VX021566.D | 03/29/2021 | 10:59 |
| MW-1 | M1785-10 | VX021571.D | 03/29/2021 | 12:55 |
| MW-3RDL | M1785-14DL | VX021573.D | 03/29/2021 | 13:42 |
| MW-4 | M1785-15 | VX021574.D | 03/29/2021 | 14:05 |
| TRIP-BLANK | M1785-18 | VX021576.D | 03/29/2021 | 14:52 |
| FD-032321 | M1785-17 | VX021578.D | 03/29/2021 | 15:39 |
| MW-2 | M1785-13 | VX021579.D | 03/29/2021 | 16:02 |
| MW-3R | M1785-14 | VX021580.D | 03/29/2021 | 16:26 |
| MW-5R | M1785-16 | VX021581.D | 03/29/2021 | 16:49 |
| MW-1MS | M1785-11MS | VX021589.D | 03/29/2021 | 19:57 |
| MW-1MSD | M1785-12MSD | VX021590.D | 03/29/2021 | 20:21 |

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# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CHAZ02

Lab Code: CHEM Case No.: M1785 SAS No.: M1785 SDG NO.: M1785

Lab File ID: VX021564.D Date Analyzed: 03/29/2021

Instrument ID: MSVOA_X Time Analyzed: 09:35

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

| | IS1 AREA # | RT # | IS2 AREA # | RT # | IS3 AREA # | RT # |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 94419 | 5.62 | 152632 | 6.82 | 141896 | 10.09 |
| UPPER LIMIT | 188838 | 6.117 | 305264 | 7.323 | 283792 | 10.594 |
| LOWER LIMIT | 47209.5 | 5.117 | 76316 | 6.323 | 70948 | 9.594 |
| EPA SAMPLE NO. | | | | | | |
| MW-1 | 58534 | 5.63 | 105367 | 6.83 | 106458 | 10.09 |
| MW-1MS | 80858 | 5.63 | 132095 | 6.83 | 125590 | 10.09 |
| MW-1MSD | 78212 | 5.63 | 133786 | 6.83 | 126299 | 10.09 |
| MW-2 | 59245 | 5.63 | 110177 | 6.83 | 115434 | 10.09 |
| MW-3R | 60069 | 5.62 | 110895 | 6.83 | 109772 | 10.09 |
| MW-3RDL | 62545 | 5.63 | 114308 | 6.83 | 121053 | 10.09 |
| MW-4 | 62597 | 5.62 | 114338 | 6.83 | 118030 | 10.09 |
| MW-5R | 59069 | 5.64 | 109090 | 6.83 | 113700 | 10.09 |
| FD-032321 | 60301 | 5.63 | 109753 | 6.83 | 108566 | 10.09 |
| TRIP-BLANK | 59024 | 5.63 | 107931 | 6.83 | 113630 | 10.09 |
| VX0329WBL01 | 66153 | 5.62 | 120176 | 6.83 | 126472 | 10.09 |
| VX0329WBS01 | 89704 | 5.62 | 146257 | 6.83 | 138179 | 10.09 |

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: CHAZ02

Lab Code: CHEM Case No.: M1785 SAS No.: M1785 SDG NO.: M1785

Lab File ID: VX021564.D Date Analyzed: 03/29/2021

Instrument ID: MSVOA_X Time Analyzed: 09:35

GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

| | IS4 AREA # | RT # | | | | |
|---|---|---|---|---|---|---|
| 12 HOUR STD | 70614 | 12.059 | | | | |
| UPPER LIMIT | 141228 | 12.559 | | | | |
| LOWER LIMIT | 35307 | 11.559 | | | | |
| EPA SAMPLE NO. | | | | | | |
| MW-1 | 48214 | 12.06 | | | | |
| MW-1MS | 60876 | 12.06 | | | | |
| MW-1MSD | 62506 | 12.06 | | | | |
| MW-2 | 57707 | 12.06 | | | | |
| MW-3R | 50223 | 12.07 | | | | |
| MW-3RDL | 59501 | 12.06 | | | | |
| MW-4 | 58057 | 12.06 | | | | |
| MW-5R | 57549 | 12.06 | | | | |
| FD-032321 | 50719 | 12.07 | | | | |
| TRIP-BLANK | 47890 | 12.06 | | | | |
| VX0329WBL01 | 57784 | 12.06 | | | | |
| VX0329WBS01 | 65643 | 12.06 | | | | |

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: **VX021571.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-1 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-10 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021571.D | 10 | | 03/29/21 12:55 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 10.0 | U | 2.30 | 10.0 | ug/L |
| 74-87-3 | Chloromethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 75-01-4 | Vinyl Chloride | 10.0 | U | 1.90 | 10.0 | ug/L |
| 74-83-9 | Bromomethane | 50.0 | U | 8.70 | 50.0 | ug/L |
| 75-00-3 | Chloroethane | 10.0 | U | 3.50 | 10.0 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 10.0 | U | 2.50 | 10.0 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 10.0 | U | 2.10 | 10.0 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 10.0 | U | 2.60 | 10.0 | ug/L |
| 67-64-1 | Acetone | 50.0 | U | 16.1 | 50.0 | ug/L |
| 75-15-0 | Carbon Disulfide | 10.0 | U | 2.50 | 10.0 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 10.0 | U | 2.20 | 10.0 | ug/L |
| 79-20-9 | Methyl Acetate | 10.0 | U | 4.70 | 10.0 | ug/L |
| 75-09-2 | Methylene Chloride | 10.0 | U | 1.80 | 10.0 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 10.0 | U | 2.10 | 10.0 | ug/L |
| 110-82-7 | Cyclohexane | 50.0 | U | 13.0 | 50.0 | ug/L |
| 78-93-3 | 2-Butanone | 50.0 | U | 9.00 | 50.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 10.0 | U | 2.70 | 10.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 10.0 | U | 2.20 | 10.0 | ug/L |
| 74-97-5 | Bromochloromethane | 10.0 | U | 2.60 | 10.0 | ug/L |
| 67-66-3 | Chloroform | 10.0 | U | 2.70 | 10.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 108-87-2 | Methylcyclohexane | 10.0 | U | 1.40 | 10.0 | ug/L |
| 71-43-2 | Benzene | 10.0 | U | 1.80 | 10.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 10.0 | U | 2.50 | 10.0 | ug/L |
| 79-01-6 | Trichloroethene | 12.8 | | 1.70 | 10.0 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 10.0 | U | 1.70 | 10.0 | ug/L |
| 75-27-4 | Bromodichloromethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 50.0 | U | 8.70 | 50.0 | ug/L |
| 108-88-3 | Toluene | 10.0 | U | 2.20 | 10.0 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 10.0 | U | 1.80 | 10.0 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 10.0 | U | 1.70 | 10.0 | ug/L |

Raw Data: **VX021571.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-1 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-10 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021571.D | 10 | | 03/29/21 12:55 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 10.0 | U | 2.40 | 10.0 | ug/L |
| 591-78-6 | 2-Hexanone | 50.0 | U | 9.20 | 50.0 | ug/L |
| 124-48-1 | Dibromochloromethane | 10.0 | U | 1.80 | 10.0 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 10.0 | U | 1.60 | 10.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 108-90-7 | Chlorobenzene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 100-41-4 | Ethyl Benzene | 13.4 | | 1.80 | 10.0 | ug/L |
| 1330-20-7 | Total Xylenes | 21.3 | J | 5.10 | 30.0 | ug/L |
| 100-42-5 | Styrene | 10.0 | U | 1.60 | 10.0 | ug/L |
| 75-25-2 | Bromoform | 10.0 | U | 1.90 | 10.0 | ug/L |
| 98-82-8 | Isopropylbenzene | 300 | | 2.30 | 10.0 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 10.0 | U | 2.90 | 10.0 | ug/L |
| 103-65-1 | n-propylbenzene | 500 | | 2.40 | 10.0 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 10.0 | U | 2.50 | 10.0 | ug/L |
| 98-06-6 | tert-Butylbenzene | 36.5 | | 2.60 | 10.0 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 810 | | 2.00 | 10.0 | ug/L |
| 135-98-8 | sec-Butylbenzene | 130 | | 2.30 | 10.0 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 10.0 | U | 2.00 | 10.0 | ug/L |
| 104-51-8 | n-Butylbenzene | 62.2 | | 1.90 | 10.0 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 10.0 | U | 4.70 | 10.0 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10.0 | U | 3.00 | 10.0 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 10.0 | U | 3.50 | 10.0 | ug/L |
| 123-91-1 | 1,4-Dioxane | 1000 | U | 69.8 | 1000 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 50.6 | | 78 - 117 | 101% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.1 | | 75 - 124 | 100% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 50.1 | | 92 - 112 | 100% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 52.4 | | 83 - 123 | 105% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 58500 | 5.629 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 105000 | 6.829 | | | |

Raw Data: **VX021571.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-1 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-10 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021571.D | 10 | | 03/29/21 12:55 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 106000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 48200 | 12.059 | | | |
| **TENTATIVE IDENTIFIED COMPOUNDS** | | | | | | |
| 179601-23-1 | m/p-Xylenes | 21.3 | J | | 10.3 | ug/L |
| 000526-73-8 | Benzene, 1,2,3-trimethyl- | 87.8 | J | | 12.1 | ug/L |
| 000527-84-4 | o-Cymene | 89.8 | J | | 12.2 | ug/L |
| 000622-97-9 | Benzene, 1-ethenyl-4-methyl- | 620 | J | | 12.3 | ug/L |
| 000135-01-3 | Benzene, 1,2-diethyl- | 94.5 | J | | 12.4 | ug/L |
| 001758-88-9 | Benzene, 2-ethyl-1,4-dimethyl- | 300 | J | | 12.7 | ug/L |
| 001005-64-7 | (E)-1-Phenyl-1-butene | 79.8 | J | | 12.7 | ug/L |
| 003454-07-7 | Benzene, 1-ethenyl-4-ethyl- | 310 | J | | 12.7 | ug/L |
| 017059-48-2 | 1H-Indene, 2,3-dihydro-1,6-dimethy | 60.8 | J | | 12.9 | ug/L |
| 000488-23-3 | Benzene, 1,2,3,4-tetramethyl- | 140 | J | | 13.0 | ug/L |
| 000934-80-5 | Benzene, 4-ethyl-1,2-dimethyl- | 160 | J | | 13.3 | ug/L |
| 91-20-3 | Naphthalene | 34.3 | J | | 13.8 | ug/L |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
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: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

Quant Time: Mar 30 03:26:17 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 58534 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 105367 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 106458 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 48214 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.035 | 65 | 49320 | 50.64 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 101.28% | | | | |
| 35) Dibromofluoromethane | 5.458 | 113 | 37501 | 50.10 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.20% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 133624 | 50.10 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 100.20% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 54349 | 52.41 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 104.82% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 44) Trichloroethene | 7.188 | 130 | 993 | 1.28 | ug/l | | 87 |
| 67) Ethyl Benzene | 10.235 | 91 | 5238 | 1.34 | ug/l | | 91 |
| 68) m/p-Xylenes | 10.341 | 106 | 2963 | 2.13 | ug/l | | 92 |
| 73) Isopropylbenzene | 11.000 | 105 | 102371 | 30.22 | ug/l | | 99 |
| 78) n-propylbenzene | 11.341 | 91 | 200026 | 50.00 | ug/l | | 97 |
| 83) tert-Butylbenzene | 11.753 | 119 | 10295 | 3.65 | ug/l | | 81 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 235955 | 80.88 | ug/l | | 98 |
| 85) sec-Butylbenzene | 11.930 | 105 | 43181 | 13.29 | ug/l | | 98 |
| 89) n-Butylbenzene | 12.371 | 91 | 16860 | 6.22 | ug/l | # | 81 |
| 95) Naphthalene | 13.812 | 128 | 10784 | 3.43 | ug/l | | 99 |

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

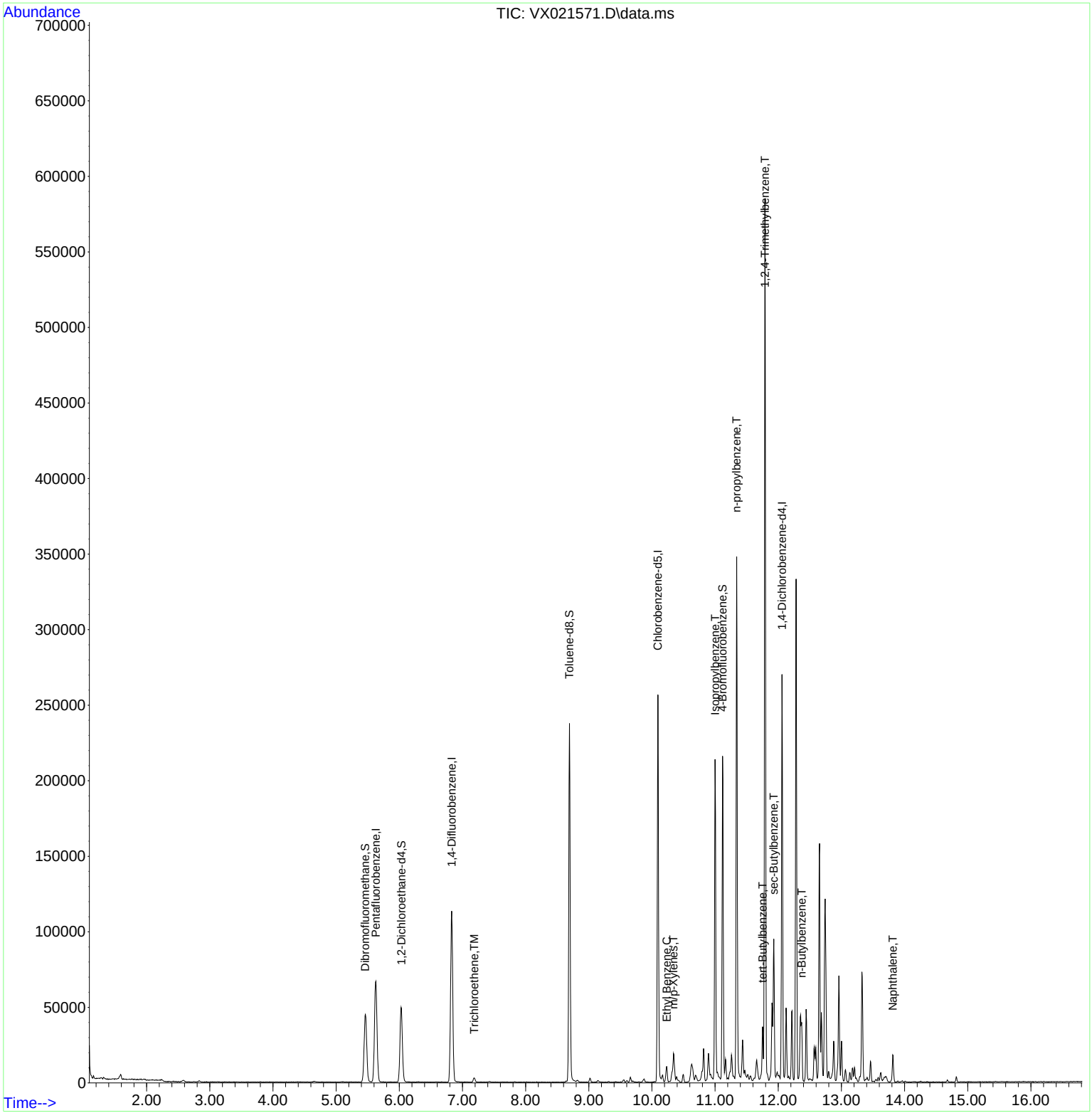
Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

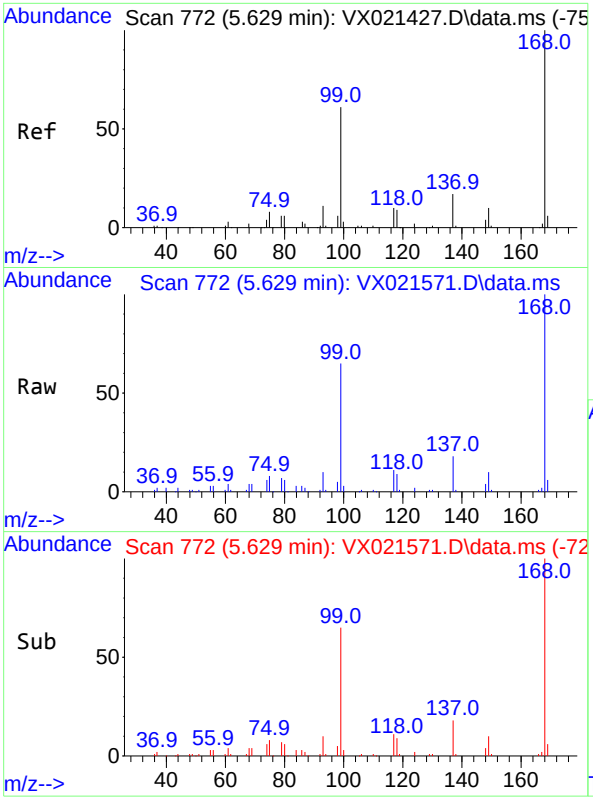
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

Quant Time: Mar 30 03:26:17 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

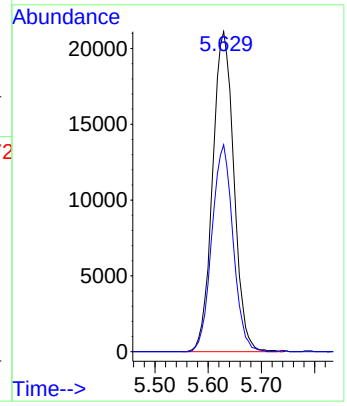
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

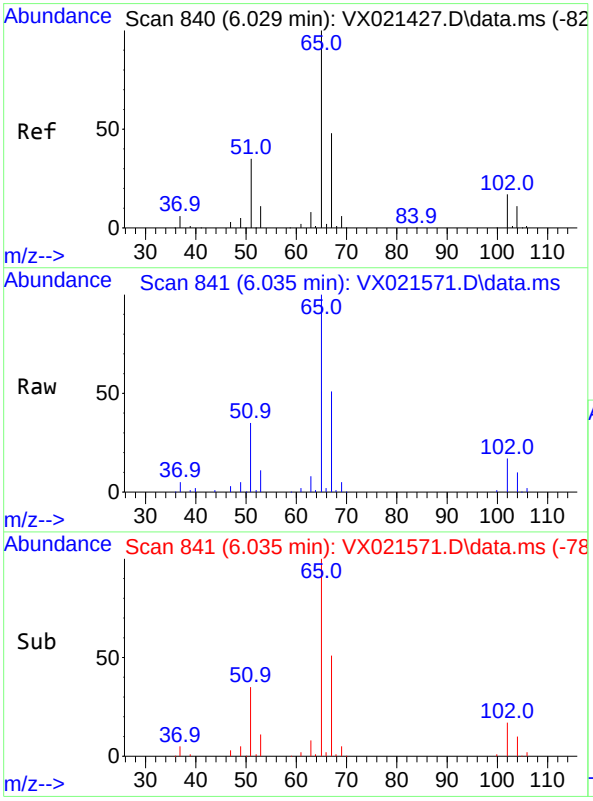



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. -0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

Tgt Ion:168 Resp: 58534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 64.7 | 45.8 | 68.6 |

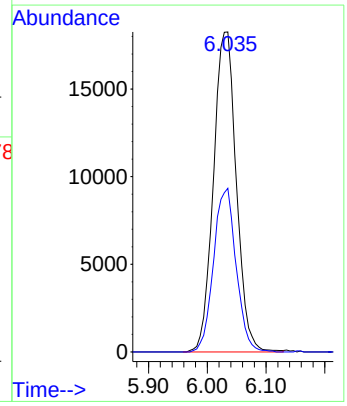



#33
1,2-Dichloroethane-d4
Concen: 50.64 ug/l
RT: 6.035 min Scan# 841
Delta R.T. 0.006 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

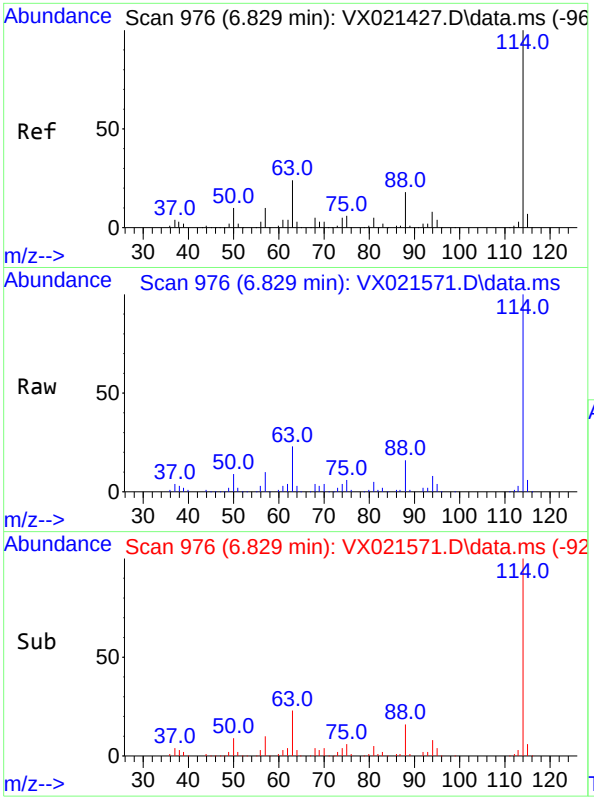
Tgt Ion: 65 Resp: 49320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.4 | 0.0 | 105.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

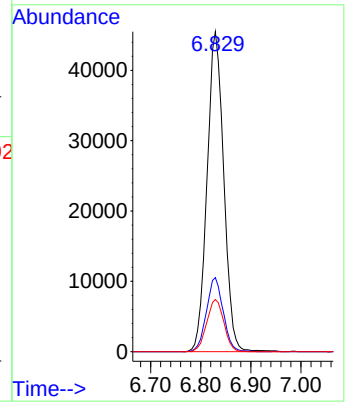
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

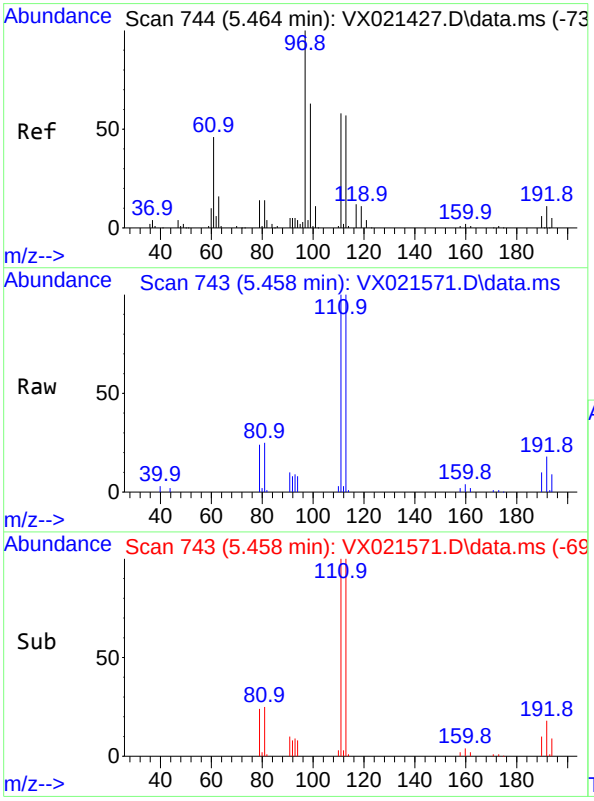



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

Tgt Ion:114 Resp: 105367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.2 | 0.0 | 40.8 |
| 88 | 16.3 | 0.0 | 32.8 |

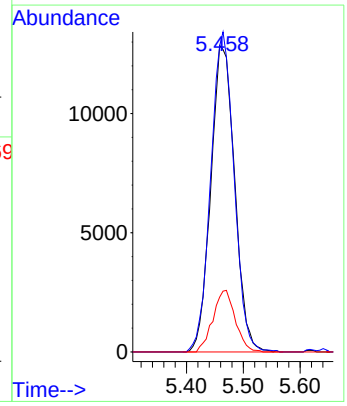



#35
Dibromofluoromethane
Concen: 50.10 ug/l
RT: 5.458 min Scan# 743
Delta R.T. -0.006 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

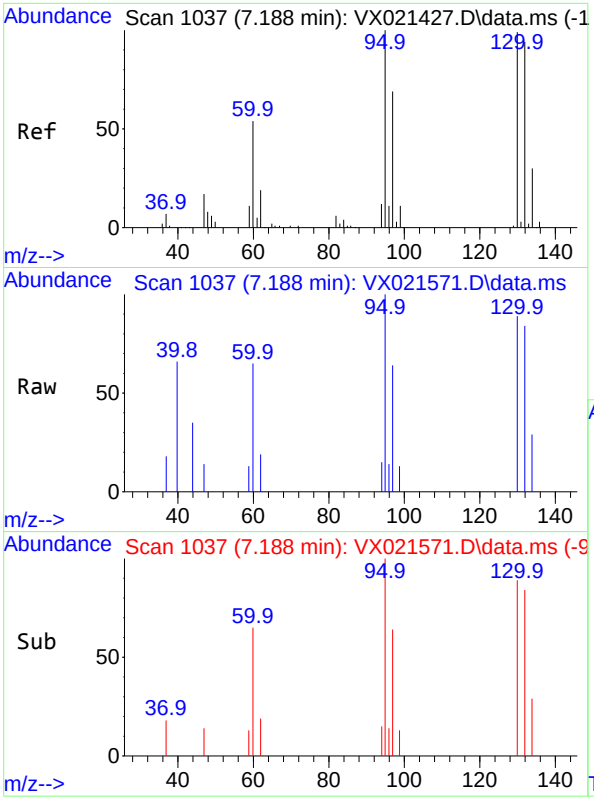
Tgt Ion:113 Resp: 37501

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.9 | 81.9 | 122.9 |
| 192 | 18.8 | 16.7 | 25.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

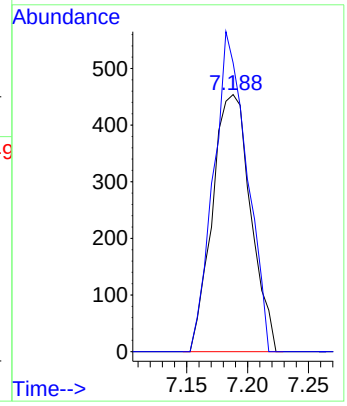
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

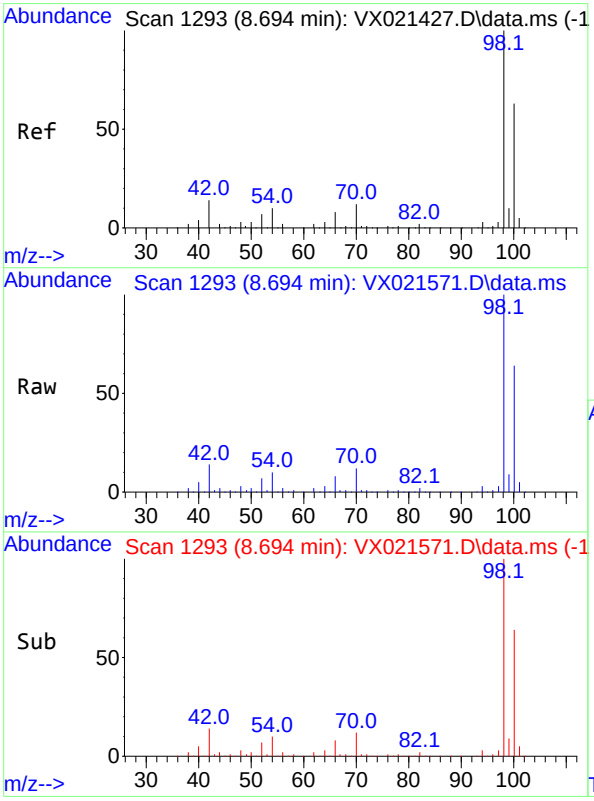



#44
Trichloroethene
Concen: 1.28 ug/l
RT: 7.188 min Scan# 1037
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

Tgt Ion:130 Resp: 993

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 112.3 | 0.0 | 198.0 |

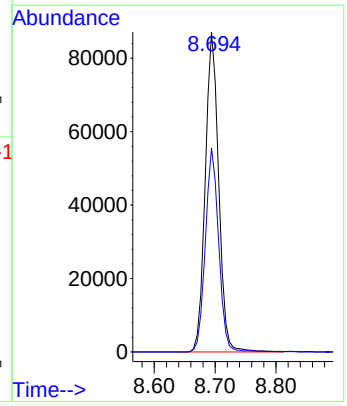



#50
Toluene-d8
Concen: 50.10 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

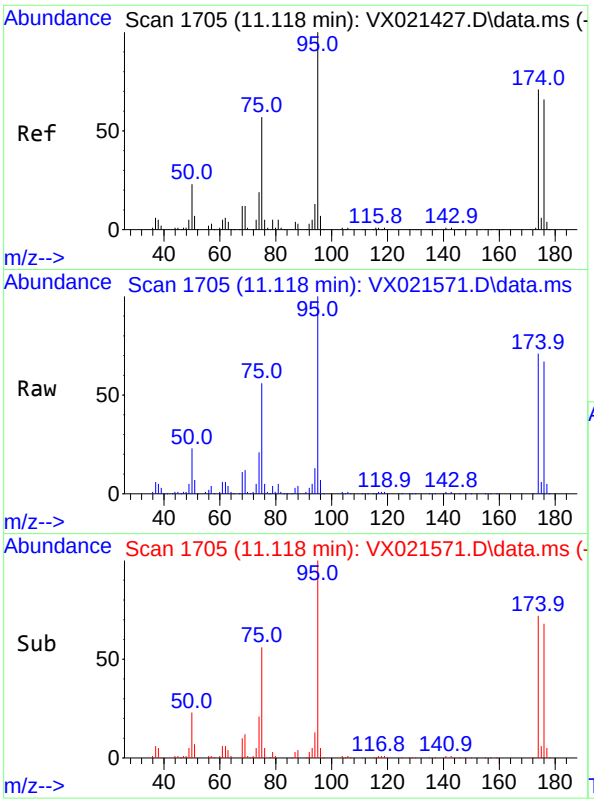
Tgt Ion: 98 Resp: 133624

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.4 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

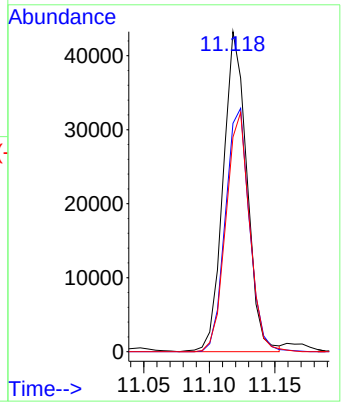
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

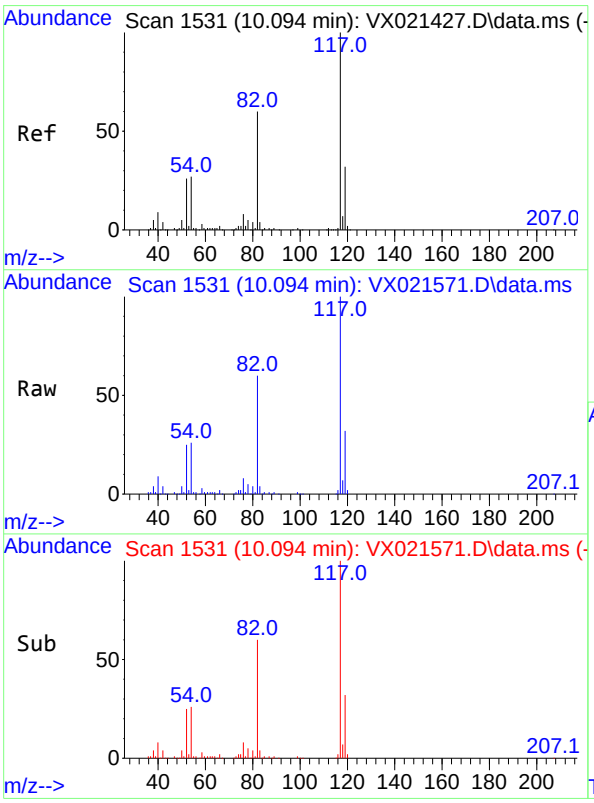



#62
4-Bromofluorobenzene
Concen: 52.41 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

Tgt Ion: 95 Resp: 54349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 77.1 | 0.0 | 154.6 |
| 176 | 74.5 | 0.0 | 155.8 |

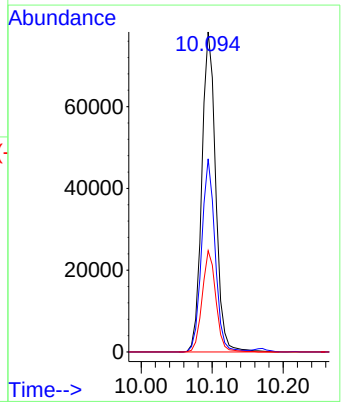



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

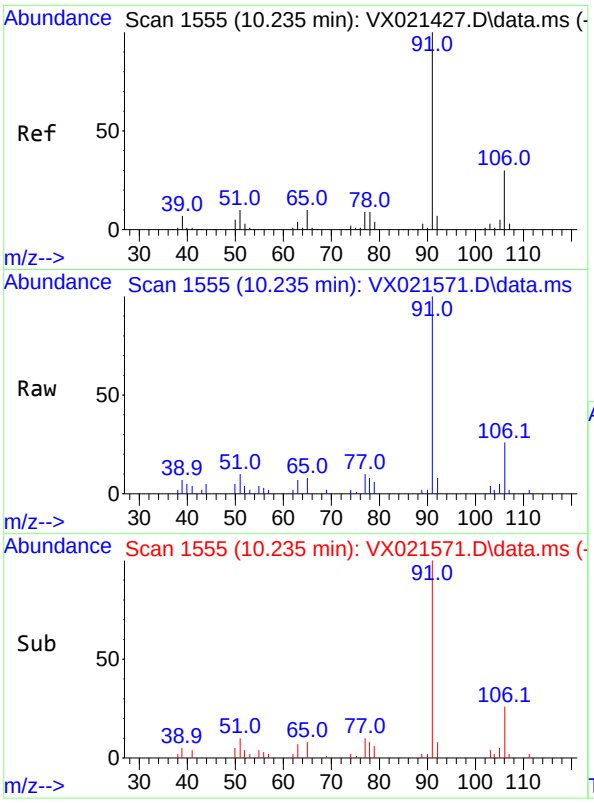
Tgt Ion:117 Resp: 106458

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.4 | 47.4 | 71.2 |
| 119 | 31.6 | 26.6 | 39.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

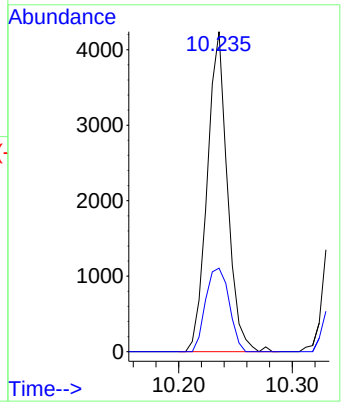
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

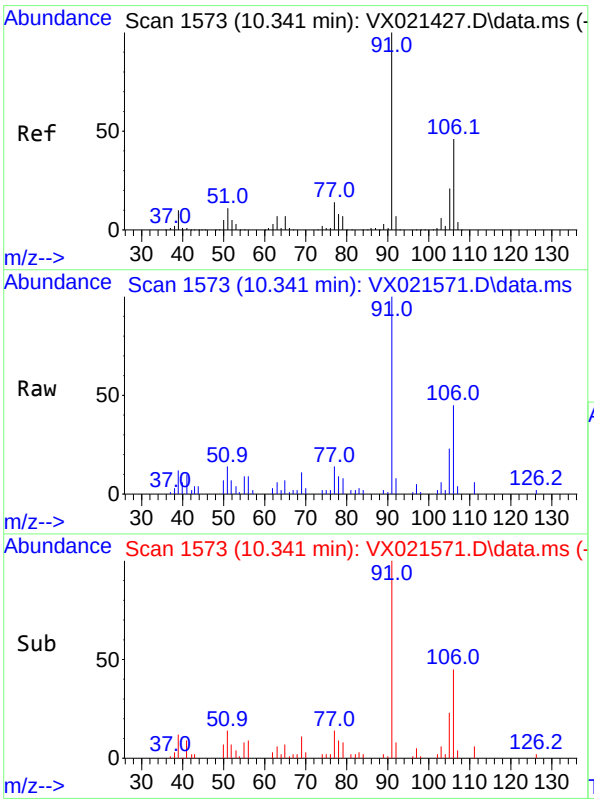



#67
Ethyl Benzene
Concen: 1.34 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

Tgt Ion: 91 Resp: 5238

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 26.1 | 24.6 | 37.0 |

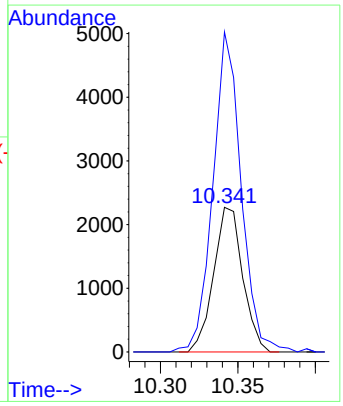



#68
m/p-Xylenes
Concen: 2.13 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

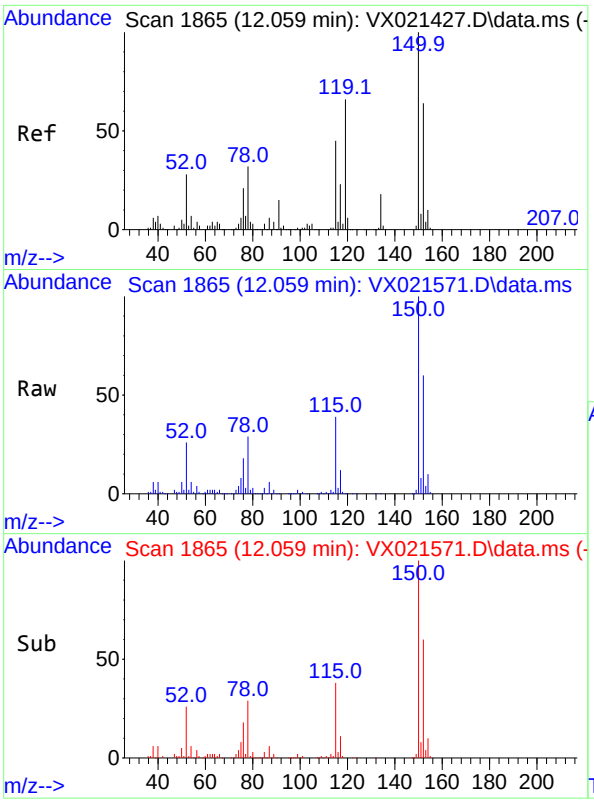
Tgt Ion:106 Resp: 2963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 215.0 | 162.8 | 244.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

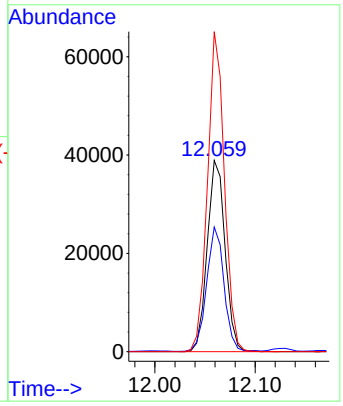
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

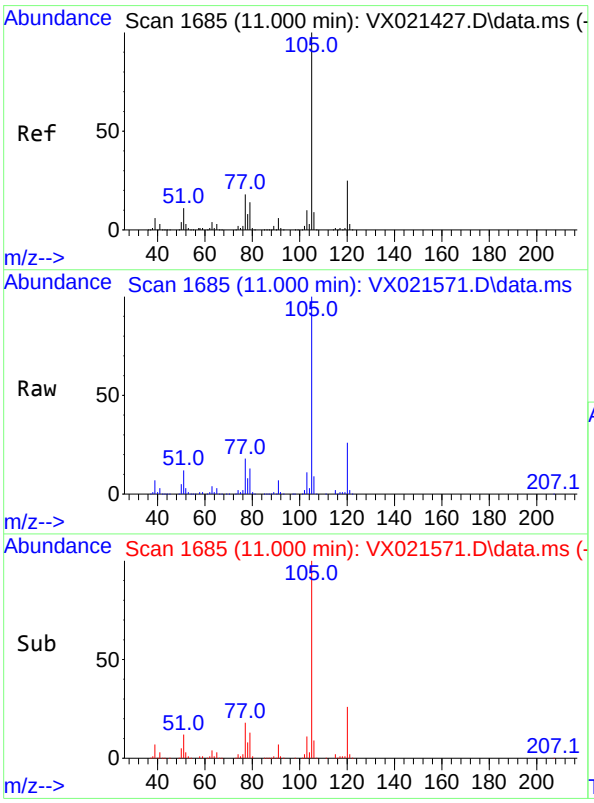



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

Tgt Ion:152 Resp: 48214

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.5 | 41.1 | 123.3 |
| 150 | 158.5 | 0.0 | 349.0 |

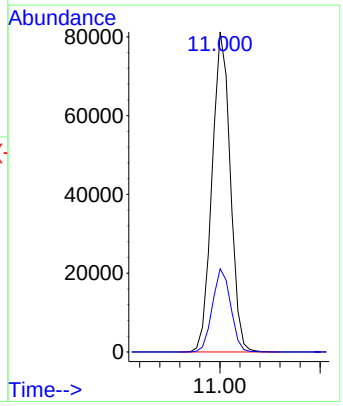



#73
Isopropylbenzene
Concen: 30.22 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

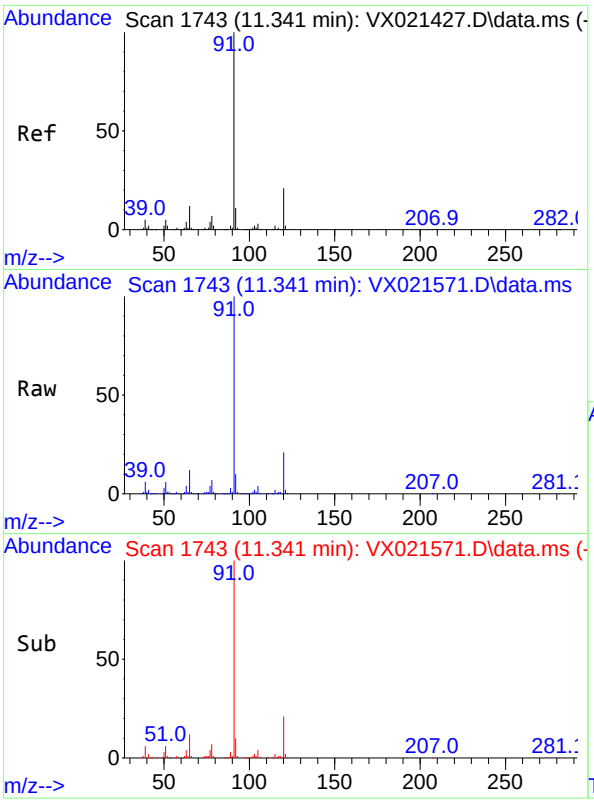
Tgt Ion:105 Resp: 102371

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.9 | 13.2 | 39.6 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

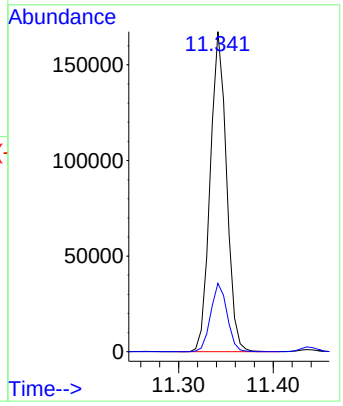
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

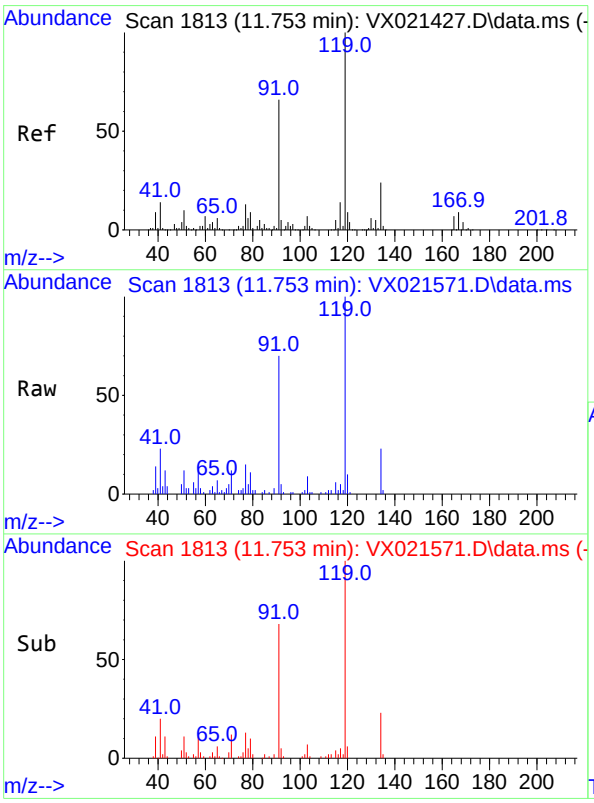



#78
n-propylbenzene
Concen: 50.00 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

Tgt Ion: 91 Resp: 200026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.4 | 11.5 | 34.5 |

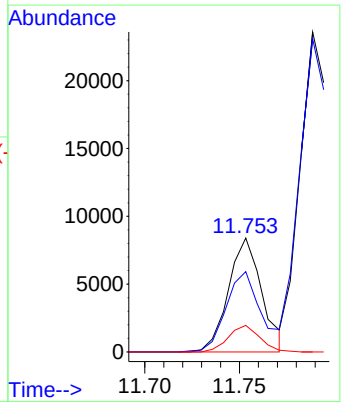



#83
tert-Butylbenzene
Concen: 3.65 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

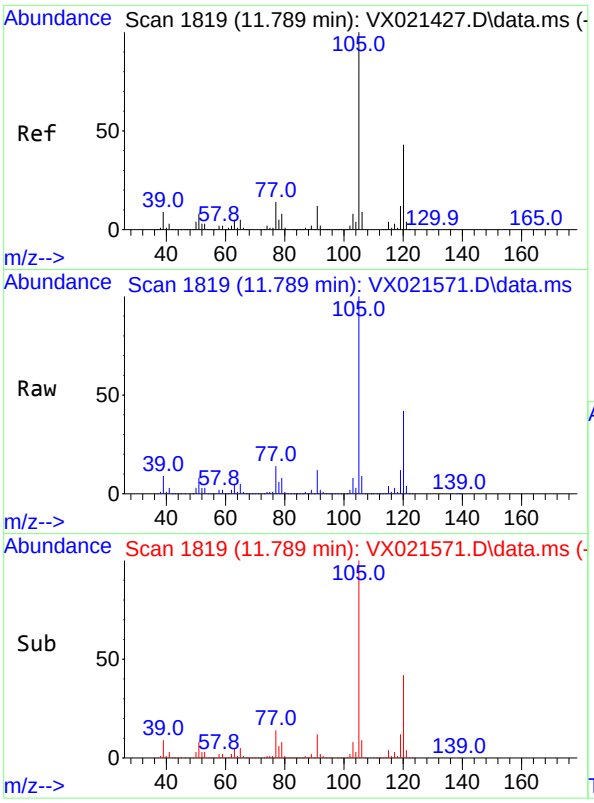
Tgt Ion:119 Resp: 10295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 74.4 | 27.9 | 83.7 |
| 134 | 22.0 | 11.3 | 33.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

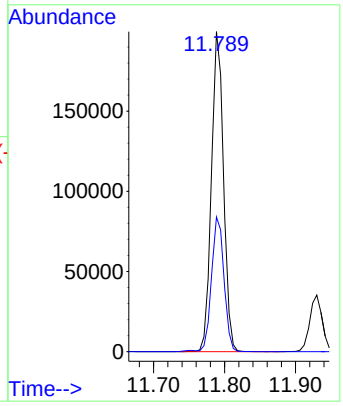
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

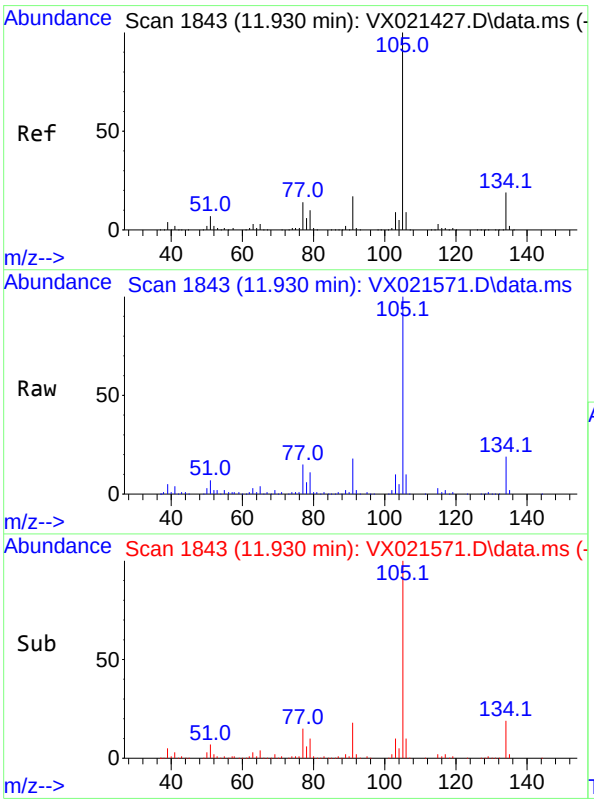



#84
1,2,4-Trimethylbenzene
Concen: 80.88 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. -0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

Tgt Ion:105 Resp: 235955

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.7 | 22.4 | 67.3 |

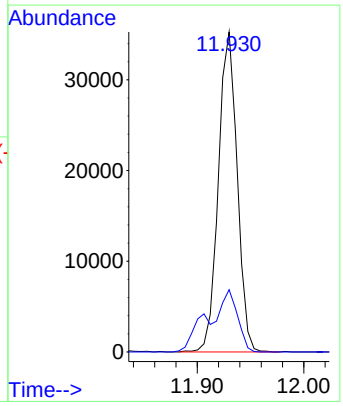



#85
sec-Butylbenzene
Concen: 13.29 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

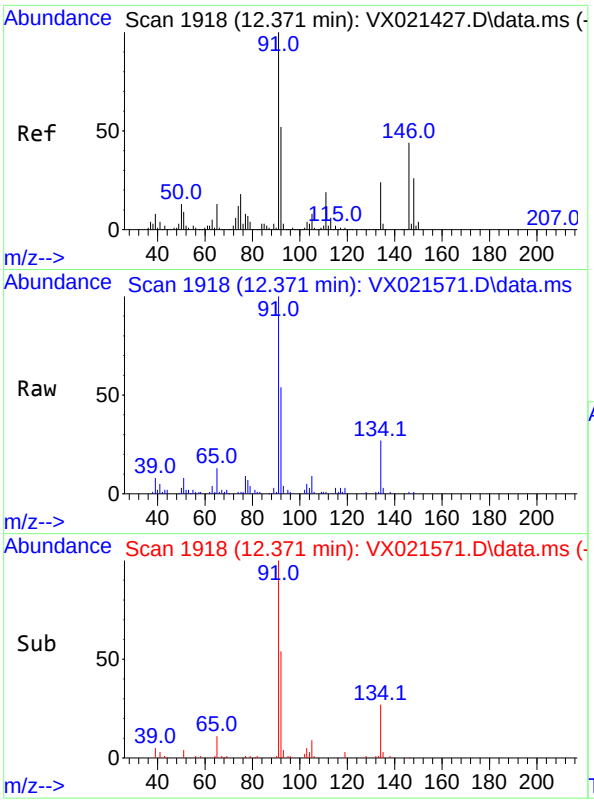
Tgt Ion:105 Resp: 43181

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.2 | 10.0 | 29.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

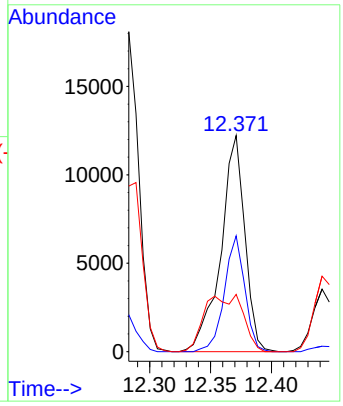
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:39 PM

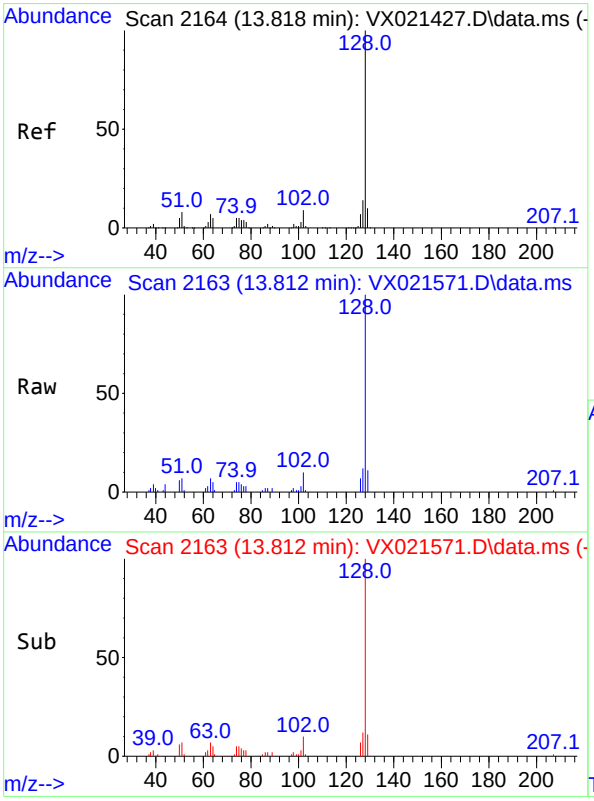



#89
n-Butylbenzene
Concen: 6.22 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

Tgt Ion: 91 Resp: 16860

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 45.3 | 27.4 | 82.0 |
| 134 | 42.1 | 13.2 | 39.5# |

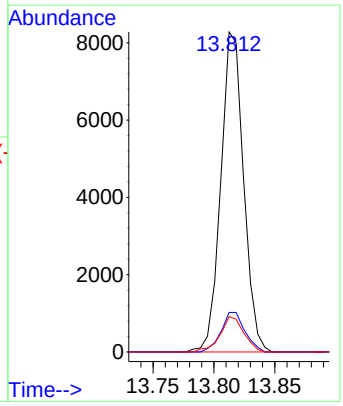



#95
Naphthalene
Concen: 3.43 ug/l
RT: 13.812 min Scan# 2163
Delta R.T. -0.006 min
Lab File: VX021571.D
Acq: 29 Mar 2021 12:55

Tgt Ion:128 Resp: 10784

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.0 | 10.3 | 15.5 |
| 129 | 11.5 | 8.8 | 13.2 |



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :** MSVOA_X
**ClientSampleId :** MW-1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

Signal : TIC: VX021571.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.464 | 732 | 744 | 761 | rBV2 | 44621 | 128488 | 18.53% | 2.385% |
| 2 | 5.629 | 761 | 772 | 786 | rVB | 66622 | 186216 | 26.85% | 3.457% |
| 3 | 6.029 | 830 | 840 | 857 | rBV | 49351 | 131520 | 18.97% | 2.442% |
| 4 | 6.829 | 965 | 976 | 987 | rBV | 113210 | 265005 | 38.21% | 4.920% |
| 5 | 8.694 | 1286 | 1293 | 1310 | rVB | 236999 | 366090 | 52.79% | 6.796% |
| 6 | 10.094 | 1525 | 1531 | 1540 | rBV | 256251 | 345118 | 49.77% | 6.407% |
| 7 | 10.235 | 1548 | 1555 | 1559 | rVB | 10155 | 15637 | 2.25% | 0.290% |
| 8 | 10.341 | 1563 | 1573 | 1579 | rBV3 | 18531 | 39138 | 5.64% | 0.727% |
| 9 | 10.494 | 1592 | 1599 | 1604 | rVB2 | 5179 | 7738 | 1.12% | 0.144% |
| 10 | 10.630 | 1608 | 1622 | 1629 | rBV5 | 12072 | 33892 | 4.89% | 0.629% |
| 11 | 10.794 | 1639 | 1650 | 1651 | rBV4 | 6452 | 10097 | 1.46% | 0.187% |
| 12 | 10.818 | 1651 | 1654 | 1659 | rVB | 21423 | 26615 | 3.84% | 0.494% |
| 13 | 10.894 | 1659 | 1667 | 1671 | rBV3 | 18273 | 29260 | 4.22% | 0.543% |
| 14 | 11.000 | 1680 | 1685 | 1690 | rBV | 211622 | 265037 | 38.22% | 4.920% |
| 15 | 11.118 | 1700 | 1705 | 1710 | rBV | 213641 | 274659 | 39.61% | 5.099% |
| 16 | 11.165 | 1710 | 1713 | 1717 | rVB2 | 12959 | 16665 | 2.40% | 0.309% |
| 17 | 11.259 | 1721 | 1729 | 1733 | rBV5 | 15872 | 29635 | 4.27% | 0.550% |
| 18 | 11.341 | 1738 | 1743 | 1752 | rBV | 345520 | 420901 | 60.69% | 7.814% |
| 19 | 11.436 | 1754 | 1759 | 1763 | rBV2 | 24714 | 34664 | 5.00% | 0.644% |
| 20 | 11.659 | 1791 | 1797 | 1804 | rVB5 | 12708 | 23705 | 3.42% | 0.440% |
| 21 | 11.753 | 1804 | 1813 | 1815 | rBV | 34899 | 46857 | 6.76% | 0.870% |
| 22 | 11.789 | 1815 | 1819 | 1825 | rVV | 582082 | 693485 | 100.00% | 12.874% |
| 23 | 11.900 | 1829 | 1838 | 1840 | rBV | 51307 | 69523 | 10.03% | 1.291% |
| 24 | 11.930 | 1840 | 1843 | 1848 | rVB | 91528 | 110264 | 15.90% | 2.047% |
| 25 | 12.059 | 1860 | 1865 | 1871 | rBV | 267569 | 322603 | 46.52% | 5.989% |
| 26 | 12.124 | 1871 | 1876 | 1881 | rVB | 46259 | 56673 | 8.17% | 1.052% |
| 27 | 12.218 | 1886 | 1892 | 1897 | rVB | 45646 | 57930 | 8.35% | 1.075% |
| 28 | 12.283 | 1897 | 1903 | 1908 | rBV | 331532 | 400716 | 57.78% | 7.439% |
| 29 | 12.353 | 1909 | 1915 | 1916 | rBV | 42248 | 54272 | 7.83% | 1.008% |
| 30 | 12.442 | 1924 | 1930 | 1937 | rBV | 47832 | 60972 | 8.79% | 1.132% |
| 31 | 12.571 | 1947 | 1952 | 1954 | rBV | 22209 | 31207 | 4.50% | 0.579% |
| 32 | 12.595 | 1954 | 1956 | 1960 | rVV | 21381 | 21683 | 3.13% | 0.403% |
| 33 | 12.653 | 1960 | 1966 | 1969 | rVV | 155968 | 194209 | 28.00% | 3.605% |
| 34 | 12.683 | 1969 | 1971 | 1976 | rVV | 43780 | 51490 | 7.42% | 0.956% |
| 35 | 12.742 | 1976 | 1981 | 1988 | rVB3 | 118474 | 199733 | 28.80% | 3.708% |
| 36 | 12.877 | 1996 | 2004 | 2009 | rVB2 | 26201 | 39197 | 5.65% | 0.728% |

Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 37 | 12.959 | 2010 | 2018 | 2022 | rBV | 69404 | 92337 | 13.31% | 1.714% |
| 38 | 13.001 | 2022 | 2025 | 2031 | rVB | 26507 | 33124 | 4.78% | 0.615% |
| 39 | 13.065 | 2031 | 2036 | 2043 | rVB3 | 8126 | 12383 | 1.79% | 0.230% |
| 40 | 13.130 | 2043 | 2047 | 2051 | rBV | 6244 | 8745 | 1.26% | 0.162% |
| 41 | 13.177 | 2051 | 2055 | 2057 | rBV2 | 7744 | 9332 | 1.35% | 0.173% |
| 42 | 13.206 | 2057 | 2060 | 2063 | rVB | 7238 | 7987 | 1.15% | 0.148% |
| 43 | 13.324 | 2075 | 2080 | 2087 | rVB2 | 72148 | 103588 | 14.94% | 1.923% |
| 44 | 13.459 | 2099 | 2103 | 2107 | rVB | 13343 | 17325 | 2.50% | 0.322% |
| 45 | 13.624 | 2126 | 2131 | 2135 | rVB4 | 5270 | 7567 | 1.09% | 0.140% |
| 46 | 13.701 | 2142 | 2144 | 2155 | rVB5 | 3784 | 7003 | 1.01% | 0.130% |
| 47 | 13.812 | 2155 | 2163 | 2169 | rVB | 18040 | 26278 | 3.79% | 0.488% |

Sum of corrected areas: 5386563

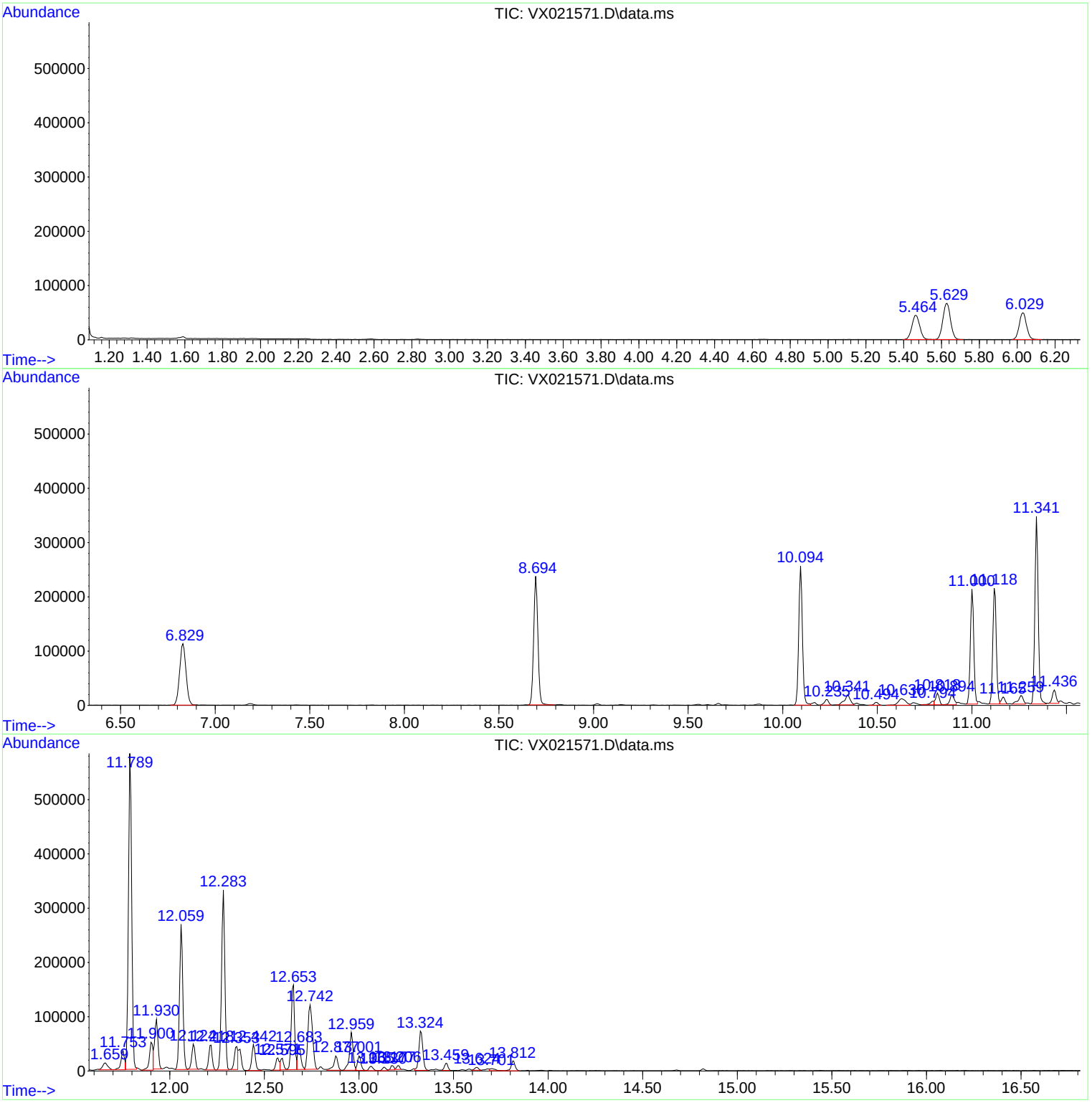
Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

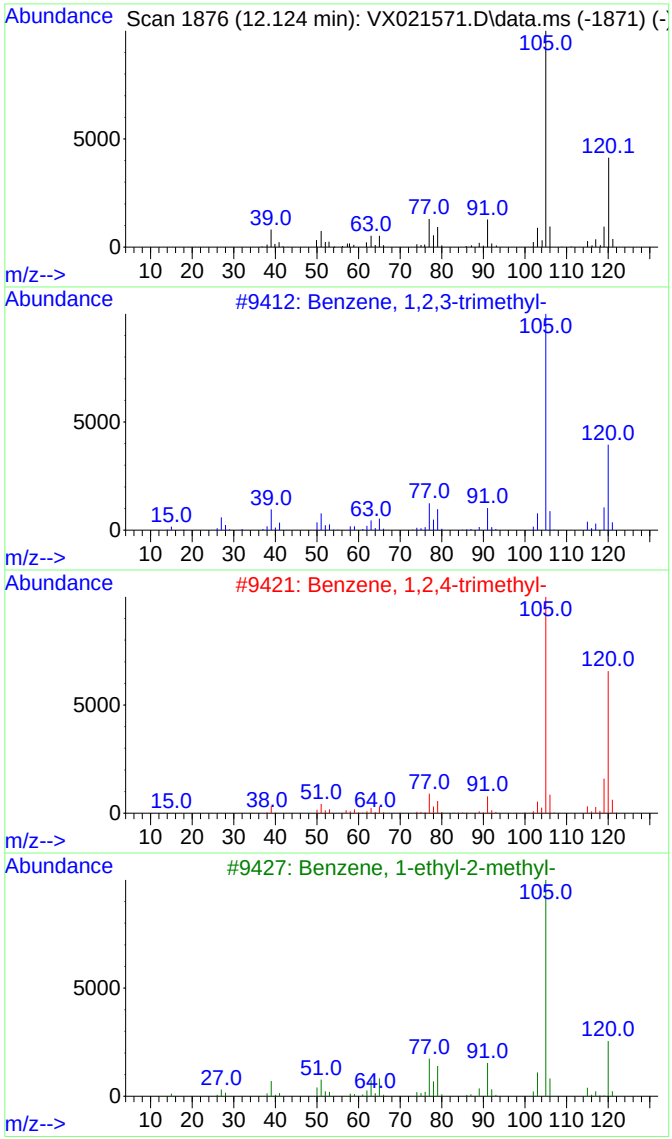
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

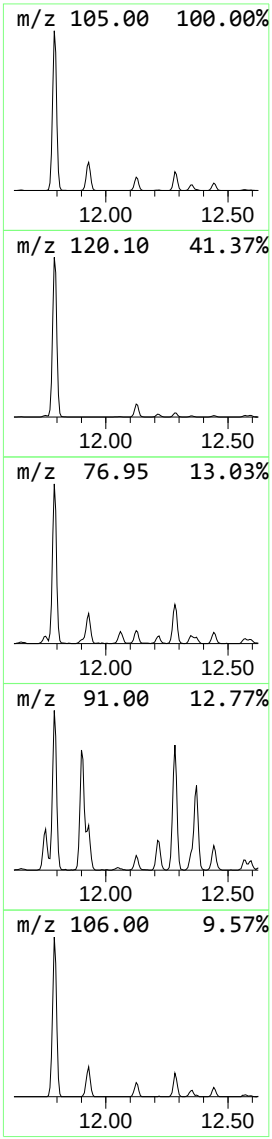
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 1 Benzene, 1,2,3-trimethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.124 | 8.78 ug/l | 56673 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 97 |
| 2 | Benzene, 1,2,4-trimethyl- | 120 | C9H12 | 000095-63-6 | 94 |
| 3 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 93 |
| 4 | Mesitylene | 120 | C9H12 | 000108-67-8 | 91 |
| 5 | Benzene, 1-ethyl-3-methyl- | 120 | C9H12 | 000620-14-4 | 91 |



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

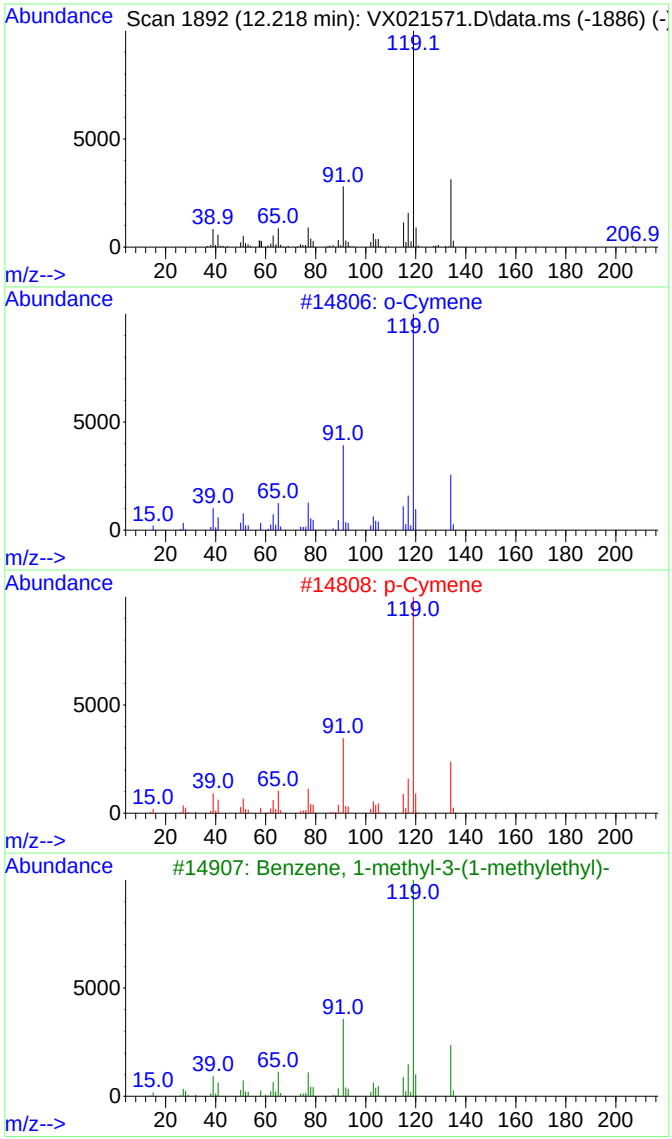
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

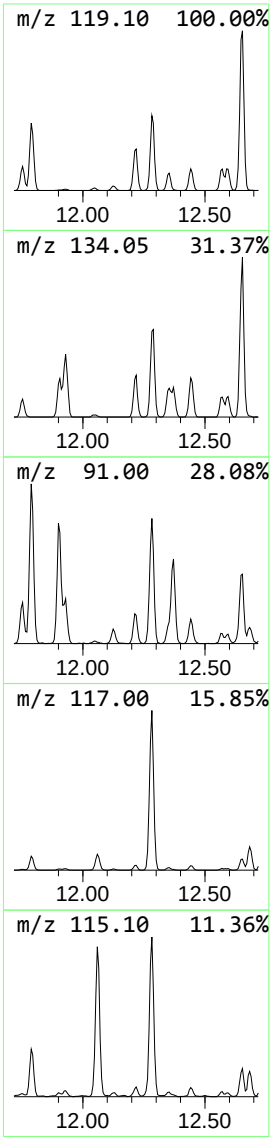
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 2 o-Cymene Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.218 | 8.98 ug/l | 57930 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | o-Cymene | 134 | C10H14 | 000527-84-4 | 95 |
| 2 | p-Cymene | 134 | C10H14 | 000099-87-6 | 94 |
| 3 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 94 |
| 4 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 91 |
| 5 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 91 |



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

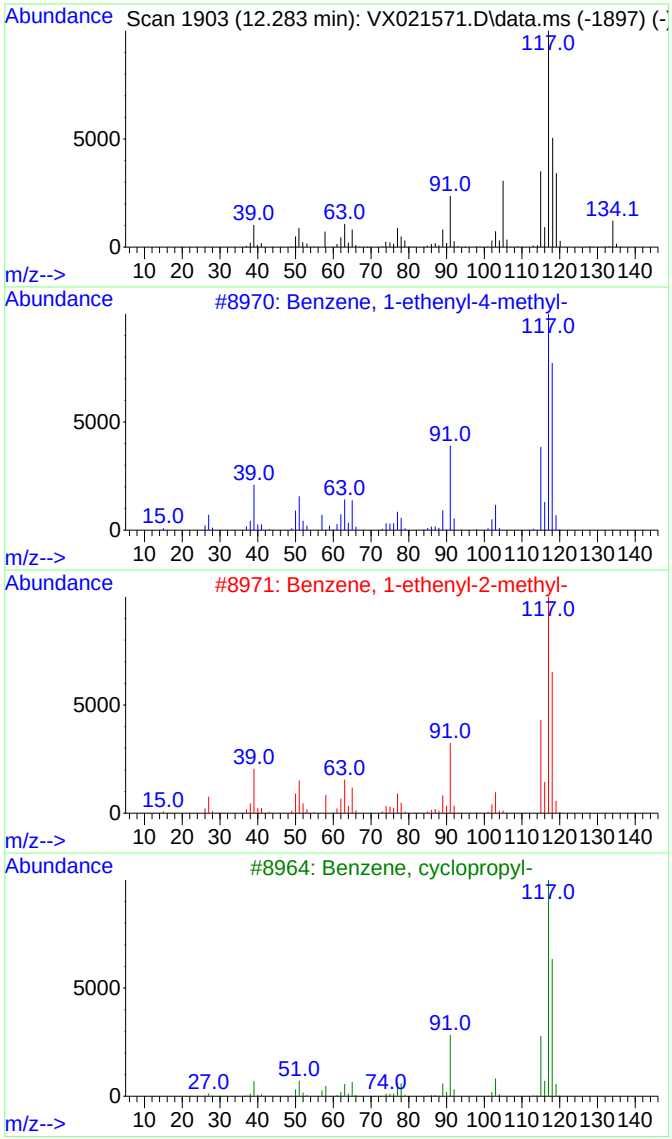
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

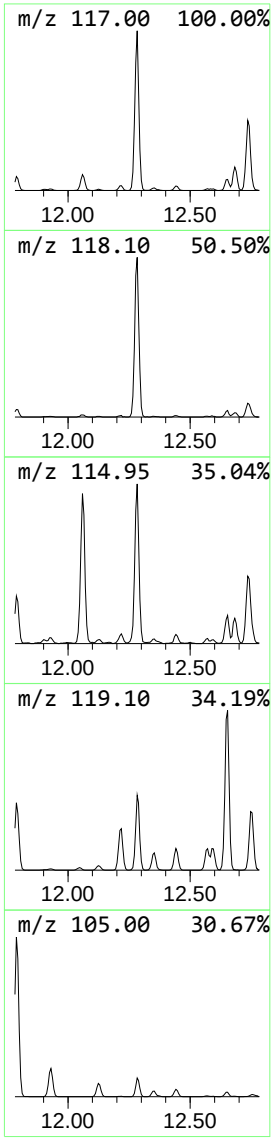
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 3 Benzene, 1-ethenyl-4-methyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.283 | 62.11 ug/l | 400716 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethenyl-4-methyl- | 118 | C9H10 | 000622-97-9 | 86 |
| 2 | Benzene, 1-ethenyl-2-methyl- | 118 | C9H10 | 000611-15-4 | 83 |
| 3 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 64 |
| 4 | Benzene, 1-propenyl- | 118 | C9H10 | 000637-50-3 | 64 |
| 5 | Benzene, 2-propenyl- | 118 | C9H10 | 000300-57-2 | 64 |



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

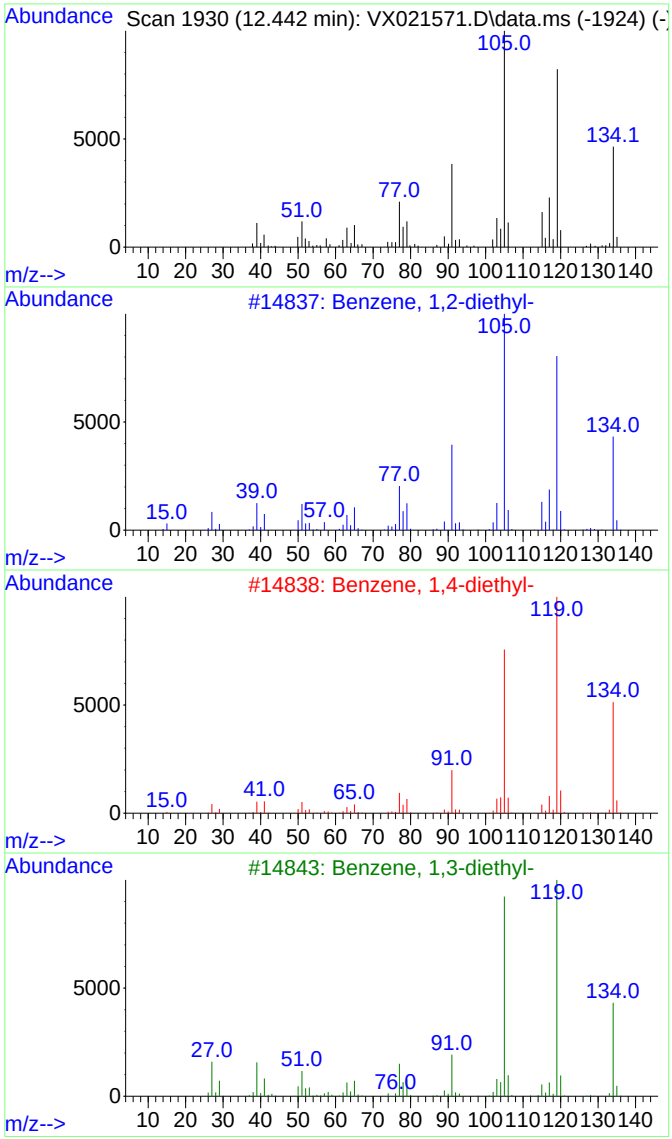
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

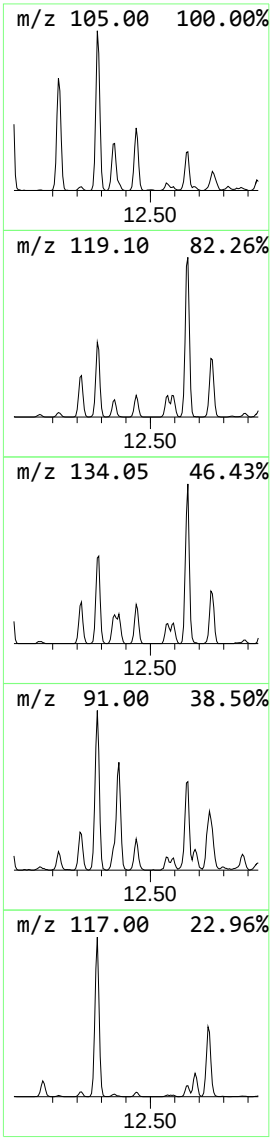
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 4 Benzene, 1,2-diethyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.442 | 9.45 ug/l | 60972 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 98 |
| 2 | Benzene, 1,4-diethyl- | 134 | C10H14 | 000105-05-5 | 90 |
| 3 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 87 |
| 4 | Benzene, 1-ethyl-3,5-dimethyl- | 134 | C10H14 | 000934-74-7 | 74 |
| 5 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 68 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

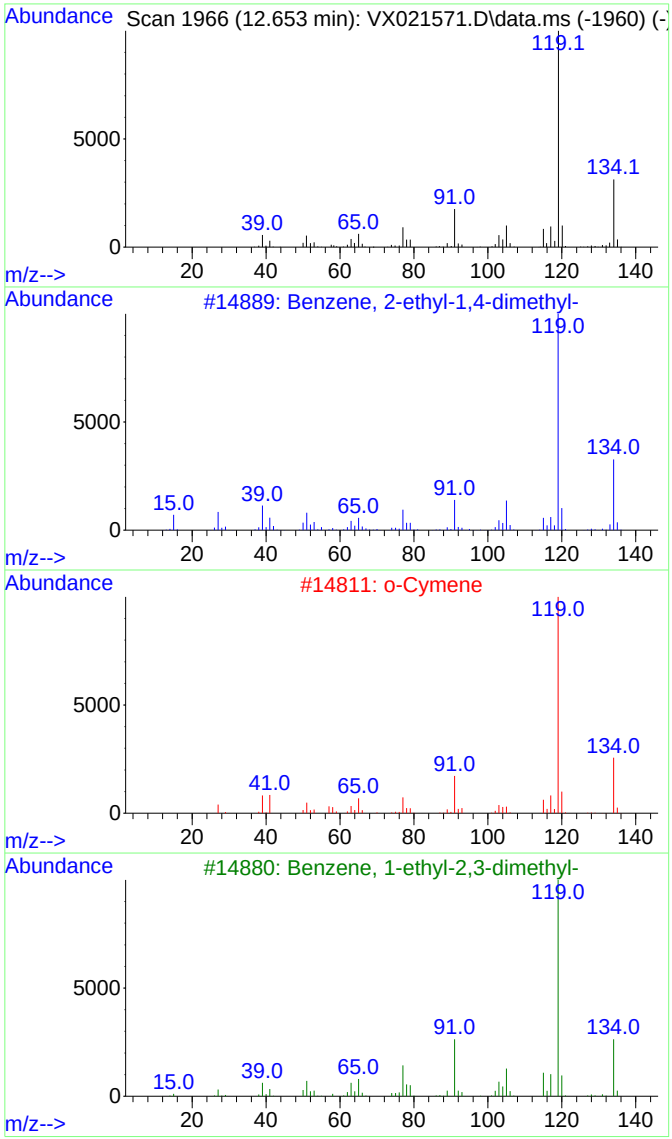
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

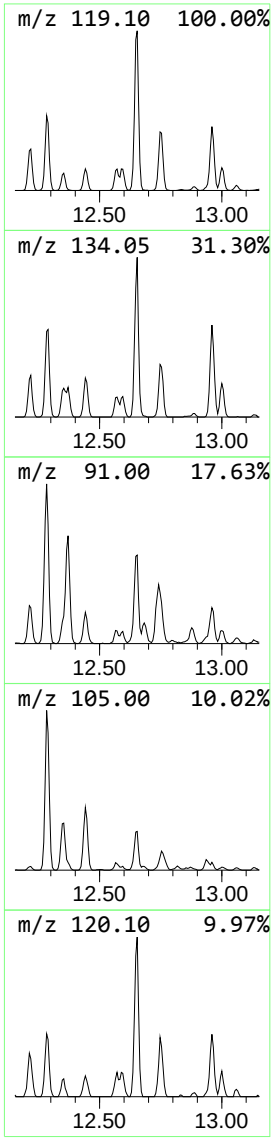
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 5 Benzene, 2-ethyl-1,4-dimethyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.653 | 30.10 ug/l | 194209 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 95 |
| 2 | o-Cymene | 134 | C10H14 | 000527-84-4 | 95 |
| 3 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 95 |
| 4 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 94 |
| 5 | p-Cymene | 134 | C10H14 | 000099-87-6 | 94 |



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

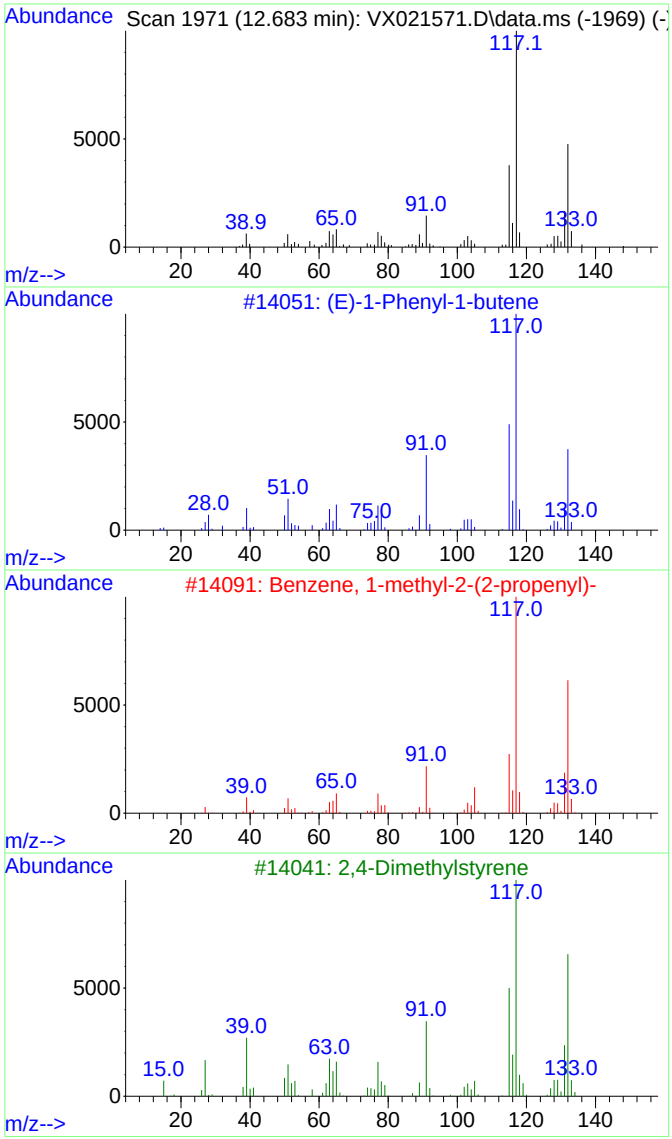
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

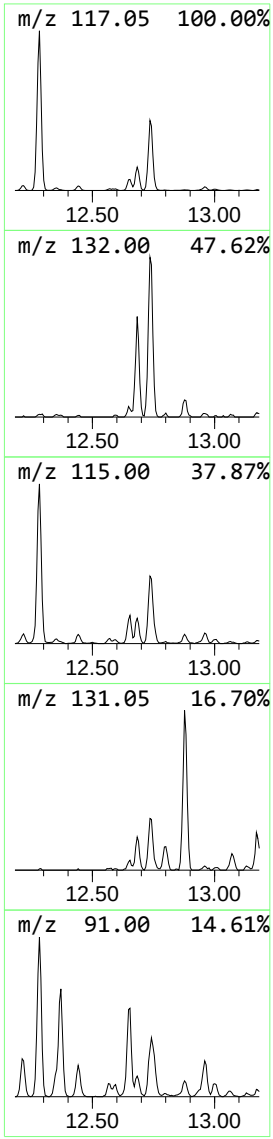
**********

Peak Number 6 (E)-1-Phenyl-1-butene Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.683 | 7.98 ug/l | 51490 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | (E)-1-Phenyl-1-butene | 132 | C10H12 | 001005-64-7 | 94 |
| 2 | Benzene, 1-methyl-2-(2-propenyl)- | 132 | C10H12 | 001587-04-8 | 94 |
| 3 | 2,4-Dimethylstyrene | 132 | C10H12 | 002234-20-0 | 93 |
| 4 | Benzene, 2-ethenyl-1,4-dimethyl- | 132 | C10H12 | 002039-89-6 | 92 |
| 5 | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12 | 000767-99-7 | 91 |



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

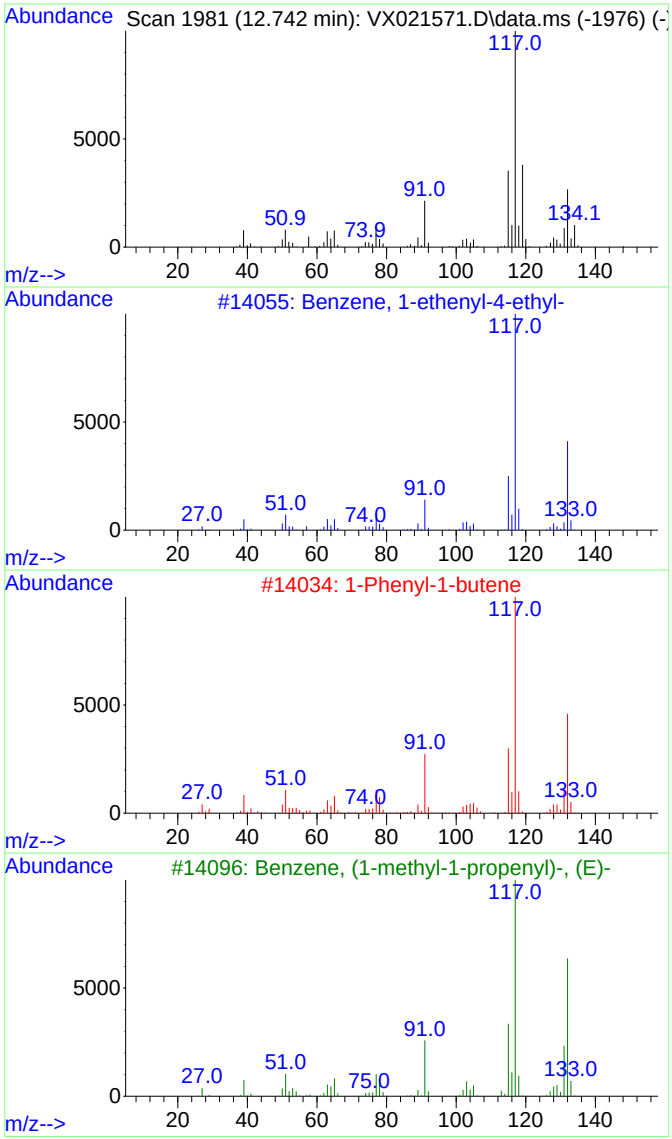
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Quant Title : SW846 8260

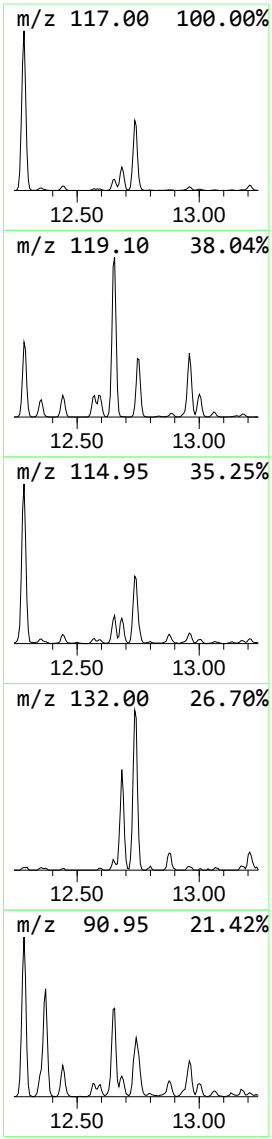
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 7 Benzene, 1-ethenyl-4-ethyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.742 | 30.96 ug/l | 199733 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethenyl-4-ethyl- | 132 | C10H12 | 003454-07-7 | 81 |
| 2 | 1-Phenyl-1-butene | 132 | C10H12 | 000824-90-8 | 81 |
| 3 | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12 | 000768-00-3 | 81 |
| 4 | Indan, 1-methyl- | 132 | C10H12 | 000767-58-8 | 81 |
| 5 | 3-Phenylbut-1-ene | 132 | C10H12 | 000934-10-1 | 74 |



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

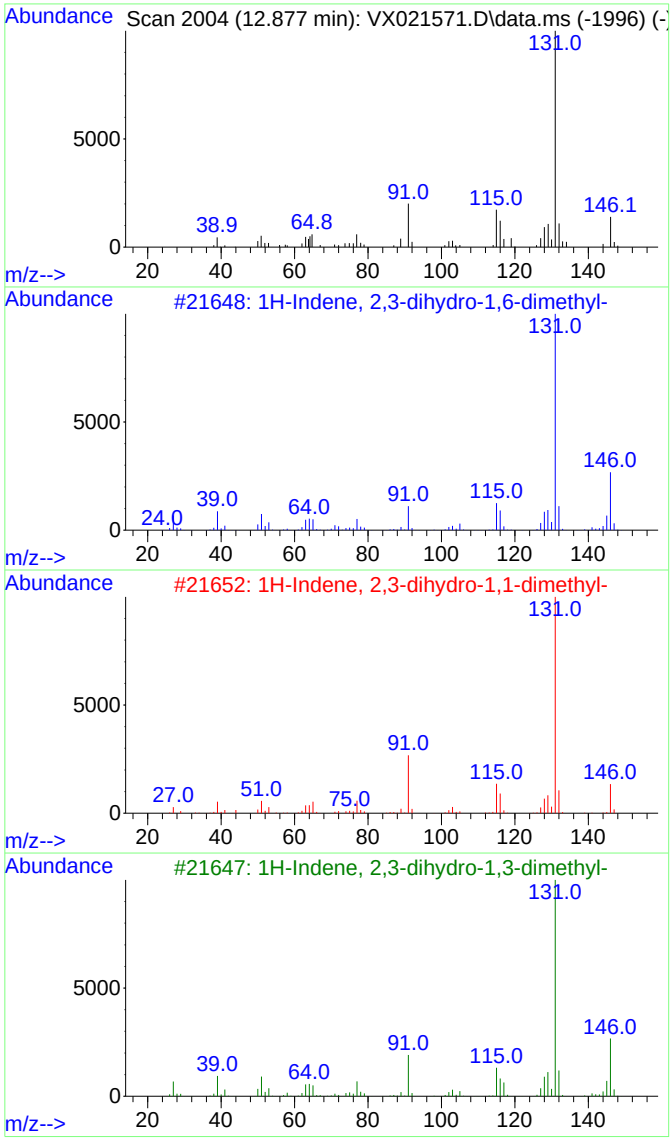
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Quant Title : SW846 8260

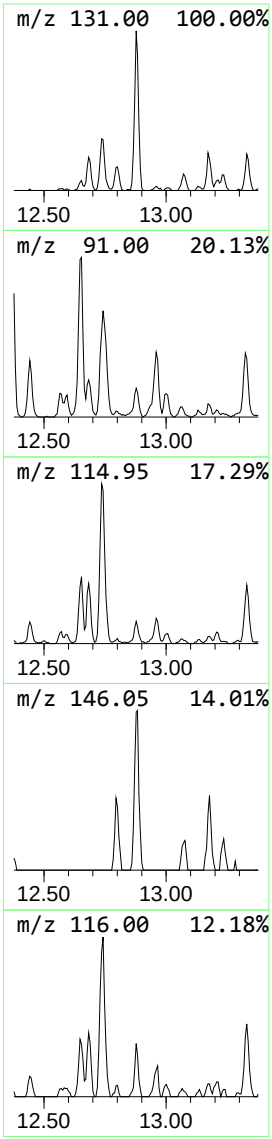
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 8 1H-Indene, 2,3-dihydro-1,6-... Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.877 | 6.08 ug/l | 39197 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1H-Indene, 2,3-dihydro-1,6-dimet... | 146 | C11H14 | 017059-48-2 | 96 |
| 2 | 1H-Indene, 2,3-dihydro-1,1-dimet... | 146 | C11H14 | 004912-92-9 | 94 |
| 3 | 1H-Indene, 2,3-dihydro-1,3-dimet... | 146 | C11H14 | 004175-53-5 | 90 |
| 4 | Benzene, 1-methyl-2-(1-methyl-2-... | 146 | C11H14 | 097664-19-2 | 90 |
| 5 | 2,2-Dimethylindene, 2,3-dihydro- | 146 | C11H14 | 020836-11-7 | 90 |



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

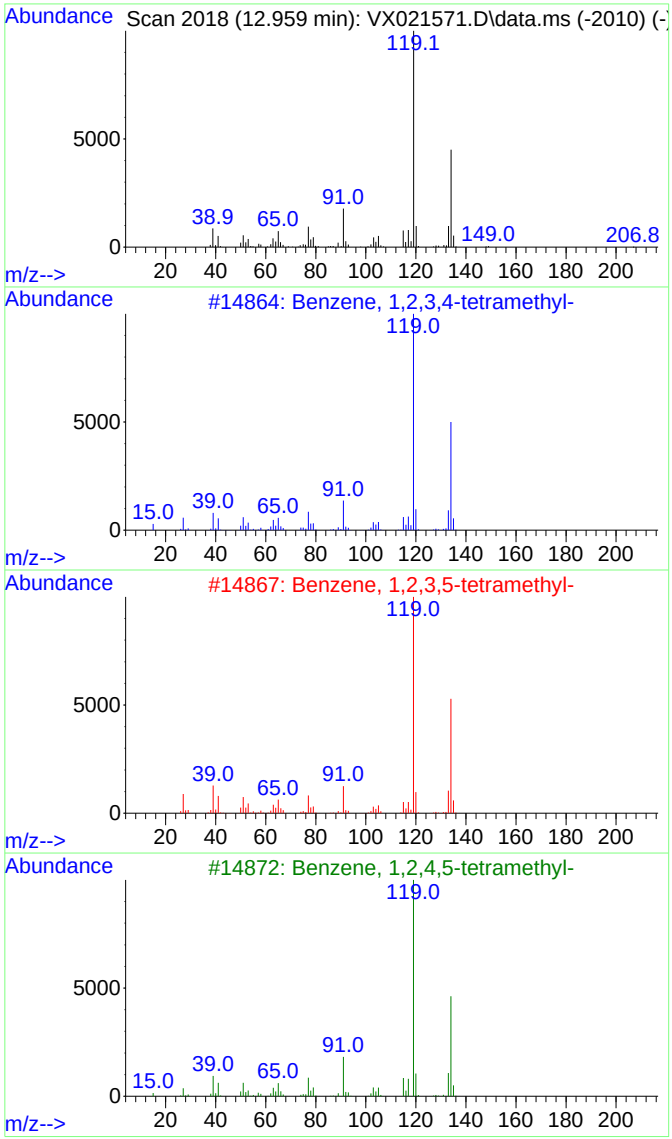
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Quant Title : SW846 8260

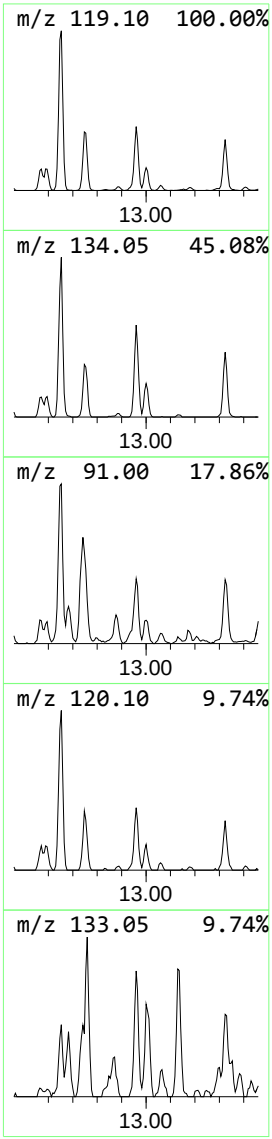
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 9 Benzene, 1,2,3,4-tetramethyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.959 | 14.31 ug/l | 92337 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 97 |
| 2 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 96 |
| 3 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 96 |
| 4 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 95 |
| 5 | Benzene, 2-ethyl-1,3-dimethyl- | 134 | C10H14 | 002870-04-4 | 95 |



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

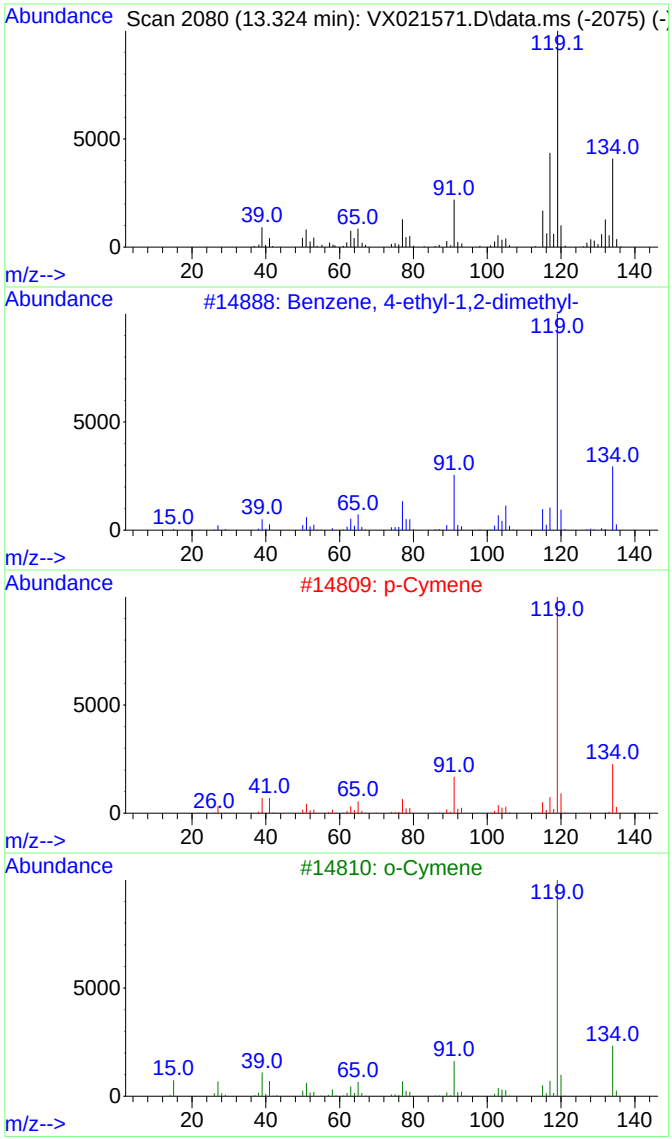
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

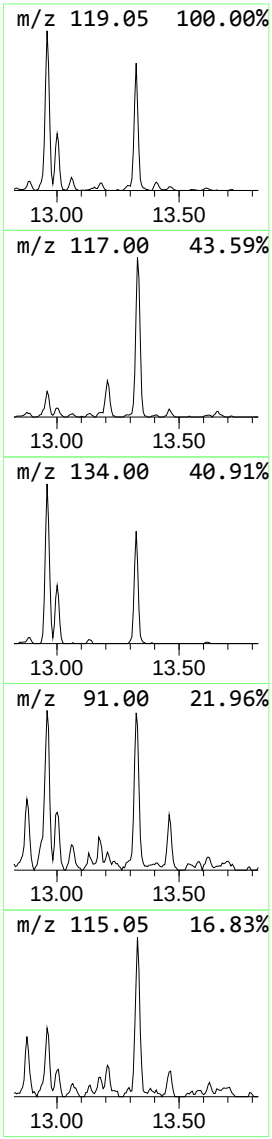
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 10 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.324 | 16.06 ug/l | 103588 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 70 |
| 2 | p-Cymene | 134 | C10H14 | 000099-87-6 | 70 |
| 3 | o-Cymene | 134 | C10H14 | 000527-84-4 | 70 |
| 4 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 70 |
| 5 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 64 |



Sample Results: **VX021571.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021571.D
Acq On : 29 Mar 2021 12:55
Operator : JC/MD
Sample : M1785-10 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Benzene, 1,2,3-... | 12.124 | 8.8 | ug/l | 56673 | 4 | 12.059 | 322603 | 50.0 |
| o-Cymene | 12.218 | 9.0 | ug/l | 57930 | 4 | 12.059 | 322603 | 50.0 |
| Benzene, 1-ethe... | 12.283 | 62.1 | ug/l | 400716 | 4 | 12.059 | 322603 | 50.0 |
| Benzene, 1,2-di... | 12.442 | 9.4 | ug/l | 60972 | 4 | 12.059 | 322603 | 50.0 |
| Benzene, 2-ethy... | 12.653 | 30.1 | ug/l | 194209 | 4 | 12.059 | 322603 | 50.0 |
| (E)-1-Phenyl-1-... | 12.683 | 8.0 | ug/l | 51490 | 4 | 12.059 | 322603 | 50.0 |
| Benzene, 1-ethe... | 12.742 | 31.0 | ug/l | 199733 | 4 | 12.059 | 322603 | 50.0 |
| 1H-Indene, 2,3-... | 12.877 | 6.1 | ug/l | 39197 | 4 | 12.059 | 322603 | 50.0 |
| Benzene, 1,2,3,... | 12.959 | 14.3 | ug/l | 92337 | 4 | 12.059 | 322603 | 50.0 |
| Benzene, 4-ethy... | 13.324 | 16.1 | ug/l | 103588 | 4 | 12.059 | 322603 | 50.0 |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-2 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-13 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021579.D | 10 | | 03/29/21 16:02 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 10.0 | U | 2.30 | 10.0 | ug/L |
| 74-87-3 | Chloromethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 75-01-4 | Vinyl Chloride | 10.0 | U | 1.90 | 10.0 | ug/L |
| 74-83-9 | Bromomethane | 50.0 | U | 8.70 | 50.0 | ug/L |
| 75-00-3 | Chloroethane | 10.0 | U | 3.50 | 10.0 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 10.0 | U | 2.50 | 10.0 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 10.0 | U | 2.10 | 10.0 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 10.0 | U | 2.60 | 10.0 | ug/L |
| 67-64-1 | Acetone | 50.0 | U | 16.1 | 50.0 | ug/L |
| 75-15-0 | Carbon Disulfide | 10.0 | U | 2.50 | 10.0 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 10.0 | U | 2.20 | 10.0 | ug/L |
| 79-20-9 | Methyl Acetate | 10.0 | U | 4.70 | 10.0 | ug/L |
| 75-09-2 | Methylene Chloride | 10.0 | U | 1.80 | 10.0 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 10.0 | U | 2.10 | 10.0 | ug/L |
| 110-82-7 | Cyclohexane | 50.0 | U | 13.0 | 50.0 | ug/L |
| 78-93-3 | 2-Butanone | 50.0 | U | 9.00 | 50.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 10.0 | U | 2.70 | 10.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 10.0 | U | 2.20 | 10.0 | ug/L |
| 74-97-5 | Bromochloromethane | 10.0 | U | 2.60 | 10.0 | ug/L |
| 67-66-3 | Chloroform | 10.0 | U | 2.70 | 10.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 108-87-2 | Methylcyclohexane | 10.0 | U | 1.40 | 10.0 | ug/L |
| 71-43-2 | Benzene | 10.0 | U | 1.80 | 10.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 10.0 | U | 2.50 | 10.0 | ug/L |
| 79-01-6 | Trichloroethene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 10.0 | U | 1.70 | 10.0 | ug/L |
| 75-27-4 | Bromodichloromethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 50.0 | U | 8.70 | 50.0 | ug/L |
| 108-88-3 | Toluene | 10.0 | U | 2.20 | 10.0 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 10.0 | U | 1.80 | 10.0 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 10.0 | U | 1.70 | 10.0 | ug/L |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-2 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-13 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021579.D | 10 | | 03/29/21 16:02 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 10.0 | U | 2.40 | 10.0 | ug/L |
| 591-78-6 | 2-Hexanone | 50.0 | U | 9.20 | 50.0 | ug/L |
| 124-48-1 | Dibromochloromethane | 10.0 | U | 1.80 | 10.0 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 10.0 | U | 1.60 | 10.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 108-90-7 | Chlorobenzene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 100-41-4 | Ethyl Benzene | 57.2 | | 1.80 | 10.0 | ug/L |
| 1330-20-7 | Total Xylenes | 62.8 | | 5.10 | 30.0 | ug/L |
| 100-42-5 | Styrene | 10.0 | U | 1.60 | 10.0 | ug/L |
| 75-25-2 | Bromoform | 10.0 | U | 1.90 | 10.0 | ug/L |
| 98-82-8 | Isopropylbenzene | 190 | | 2.30 | 10.0 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 10.0 | U | 2.90 | 10.0 | ug/L |
| 103-65-1 | n-propylbenzene | 320 | | 2.40 | 10.0 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 37.0 | | 2.50 | 10.0 | ug/L |
| 98-06-6 | tert-Butylbenzene | 22.5 | | 2.60 | 10.0 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1200 | | 2.00 | 10.0 | ug/L |
| 135-98-8 | sec-Butylbenzene | 88.7 | | 2.30 | 10.0 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 10.0 | U | 2.00 | 10.0 | ug/L |
| 104-51-8 | n-Butylbenzene | 50.7 | | 1.90 | 10.0 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 10.0 | U | 4.70 | 10.0 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10.0 | U | 3.00 | 10.0 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 10.0 | U | 3.50 | 10.0 | ug/L |
| 123-91-1 | 1,4-Dioxane | 1000 | U | 69.8 | 1000 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 52.5 | | 78 - 117 | 105% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.6 | | 75 - 124 | 101% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.1 | | 92 - 112 | 102% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 59.1 | | 83 - 123 | 118% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 59200 | 5.629 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 110000 | 6.829 | | | |

Raw Data: **VX021579.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-2 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-13 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021579.D | 10 | | 03/29/21 16:02 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 115000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 57700 | 12.059 | | | |
| **TENTATIVE IDENTIFIED COMPOUNDS** | | | | | | |
| 179601-23-1 | m/p-Xylenes | 62.8 | J | | 10.3 | ug/L |
| 000611-14-3 | Benzene, 1-ethyl-2-methyl- | 160 | J | | 11.4 | ug/L |
| 99-87-6 | p-Isopropyltoluene | 15.6 | J | | 12.0 | ug/L |
| 000526-73-8 | Benzene, 1,2,3-trimethyl- | 440 | J | | 12.1 | ug/L |
| 000611-15-4 | Benzene, 1-ethenyl-2-methyl- | 400 | J | | 12.3 | ug/L |
| 000933-98-2 | Benzene, 1-ethyl-2,3-dimethyl- | 64.7 | J | | 12.6 | ug/L |
| 000934-80-5 | Benzene, 4-ethyl-1,2-dimethyl- | 200 | J | | 12.7 | ug/L |
| 000768-49-0 | Benzene, (2-methyl-1-propenyl)- | 210 | J | | 12.7 | ug/L |
| 020836-11-7 | 2,2-Dimethylindene, 2,3-dihydro- | 57.5 | J | | 12.9 | ug/L |
| 000095-93-2 | Benzene, 1,2,4,5-tetramethyl- | 100 | J | | 13.0 | ug/L |
| 000527-53-7 | Benzene, 1,2,3,5-tetramethyl- | 120 | J | | 13.0 | ug/L |
| 001560-06-1 | Benzene, 2-butenyl- | 130 | J | | 13.3 | ug/L |
| 91-20-3 | Naphthalene | 42.0 | J | | 13.8 | ug/L |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
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: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

Quant Time: Mar 30 03:29:08 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 59245 | 50.00 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 110177 | 50.00 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 115434 | 50.00 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 57707 | 50.00 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 51735 | 52.48 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 104.96% | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 39601 | 50.60 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.20% | | | |
| 50) Toluene-d8 | 8.694 | 98 | 142625 | 51.14 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 102.28% | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 64038 | 59.06 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 118.12% | | | |
| Target Compounds | | | | | | Qvalue |
| 67) Ethyl Benzene | 10.236 | 91 | 24185 | 5.72 | ug/l | 98 |
| 68) m/p-Xylenes | 10.347 | 106 | 9459 | 6.28 | ug/l | 97 |
| 73) Isopropylbenzene | 11.000 | 105 | 75339 | 18.58 | ug/l | 100 |
| 78) n-propylbenzene | 11.342 | 91 | 154000 | 32.16 | ug/l | 98 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 12821 | 3.70 | ug/l | 96 |
| 83) tert-Butylbenzene | 11.753 | 119 | 7593 | 2.25 | ug/l | 86 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 410364 | 117.52 | ug/l | 98 |
| 85) sec-Butylbenzene | 11.930 | 105 | 34495 | 8.87 | ug/l | 92 |
| 86) p-Isopropyltoluene | 12.048 | 119 | 5507 | 1.56 | ug/l | 87 |
| 89) n-Butylbenzene | 12.371 | 91 | 16461 | 5.07 | ug/l # | 75 |
| 95) Naphthalene | 13.818 | 128 | 15789 | 4.20 | ug/l | 99 |

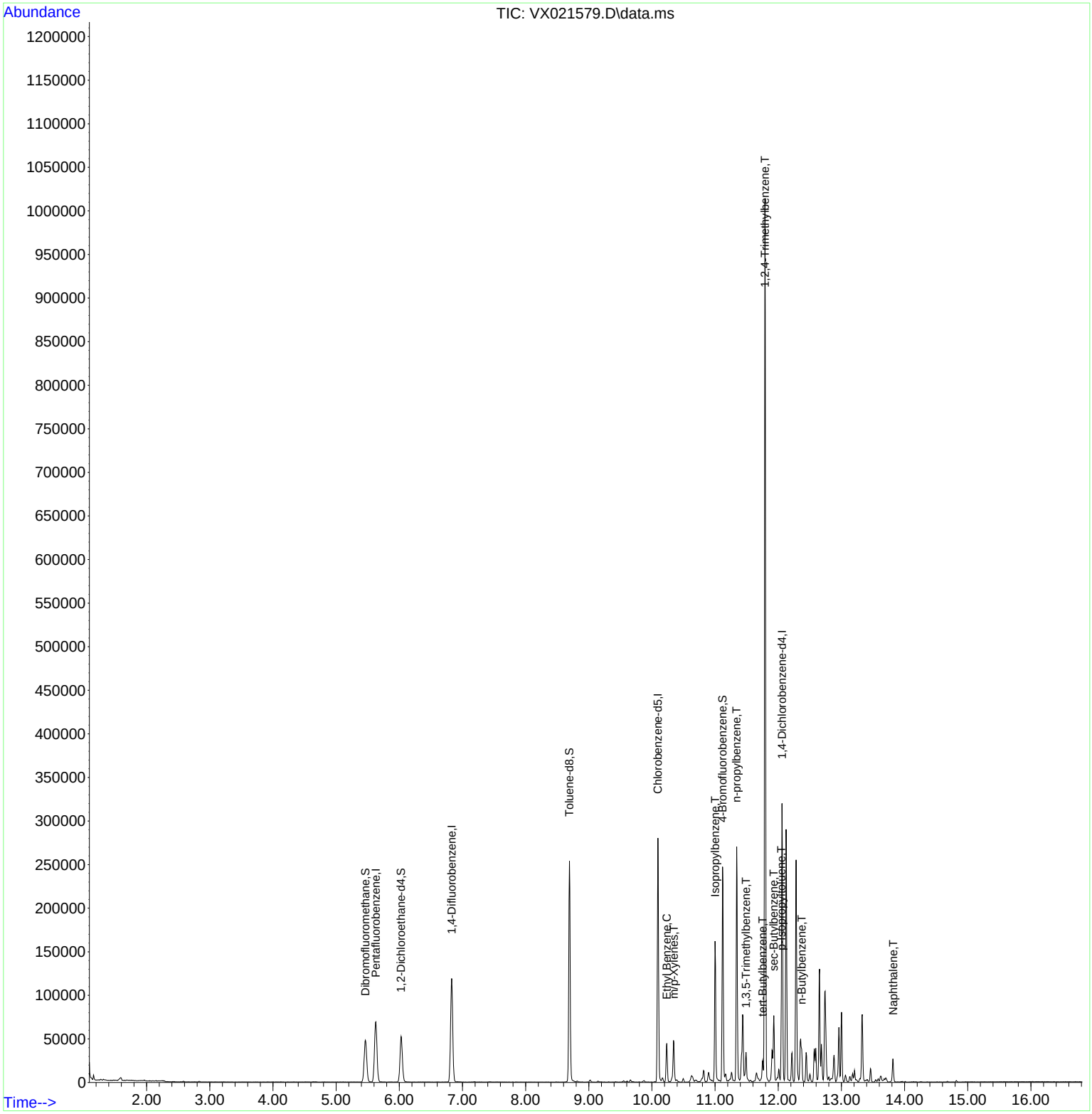
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample Results: **VX021579.D**

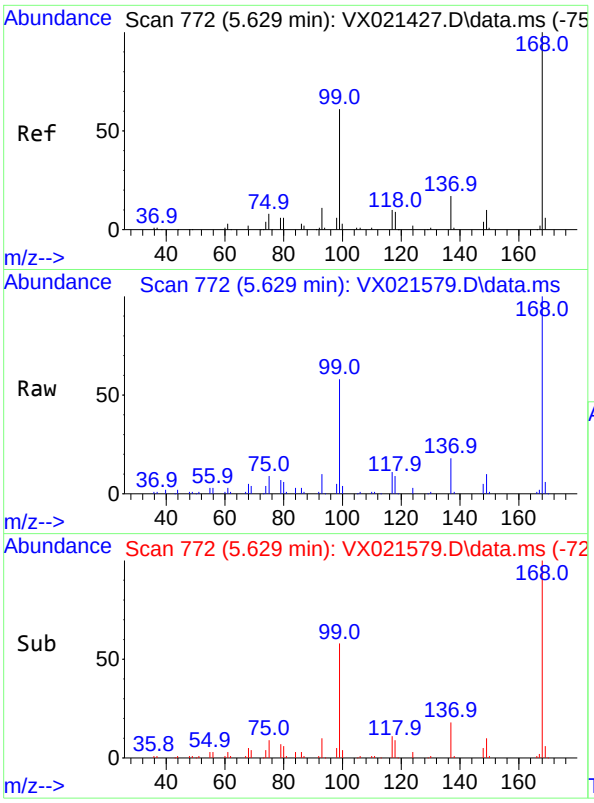
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

Quant Time: Mar 30 03:29:08 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration



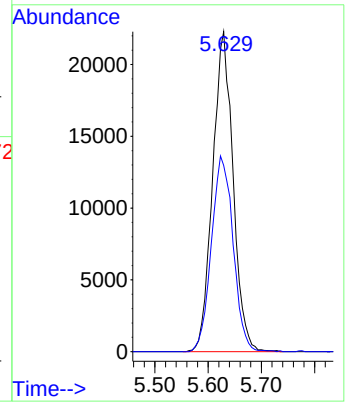
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

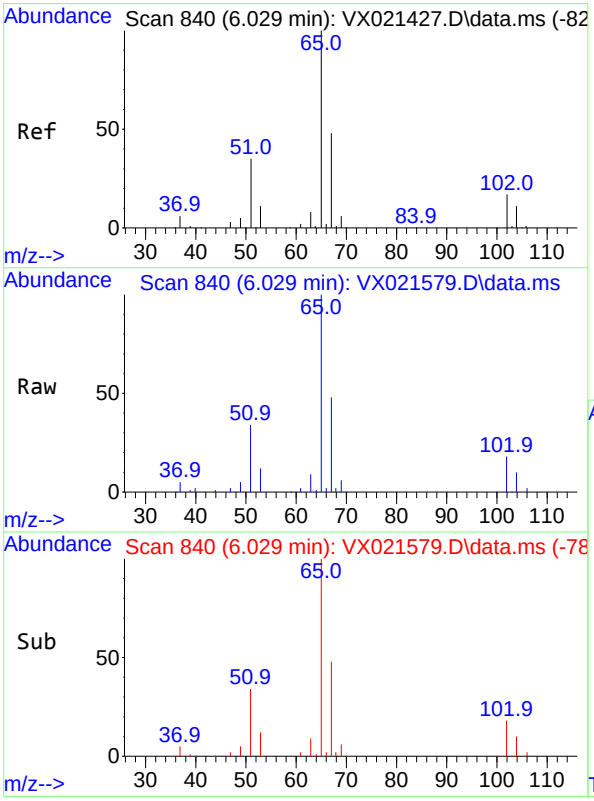



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:168 Resp: 59245

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 58.2 | 45.8 | 68.6 |

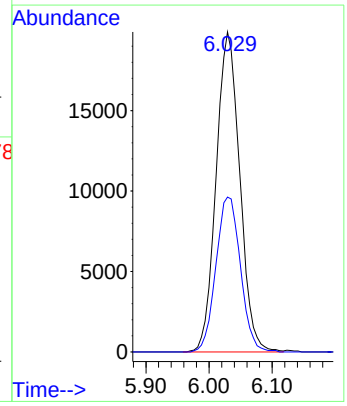


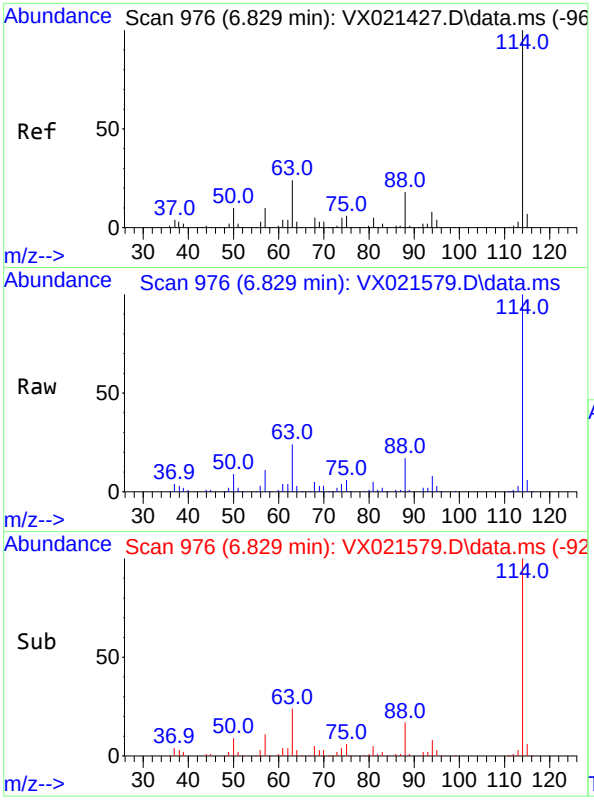

#33
1,2-Dichloroethane-d4
Concen: 52.48 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion: 65 Resp: 51735

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.2 | 0.0 | 105.4 |



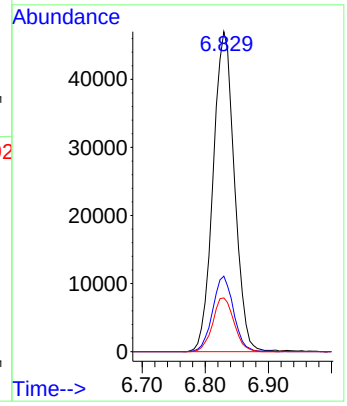
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

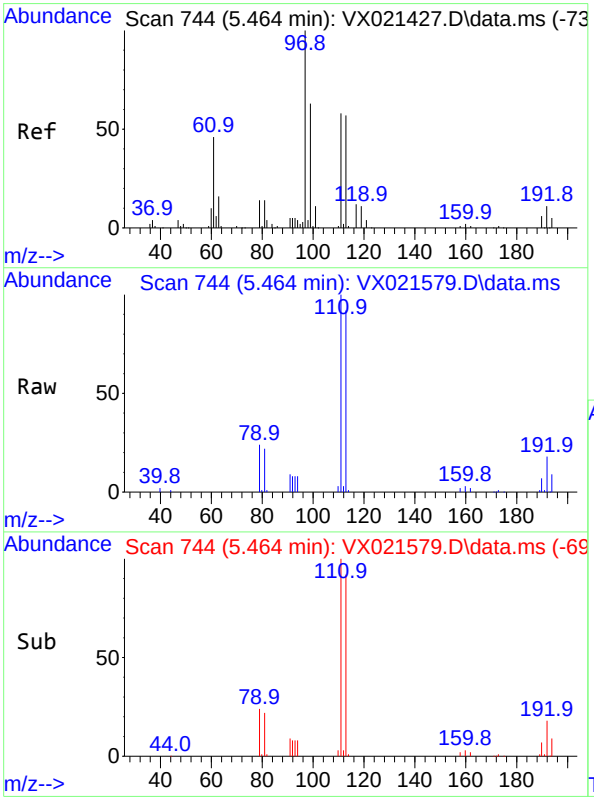



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:114 Resp: 110177

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.6 | 0.0 | 40.8 |
| 88 | 16.8 | 0.0 | 32.8 |

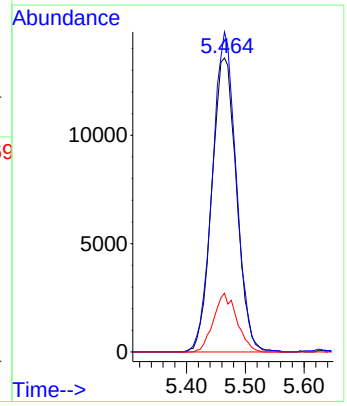


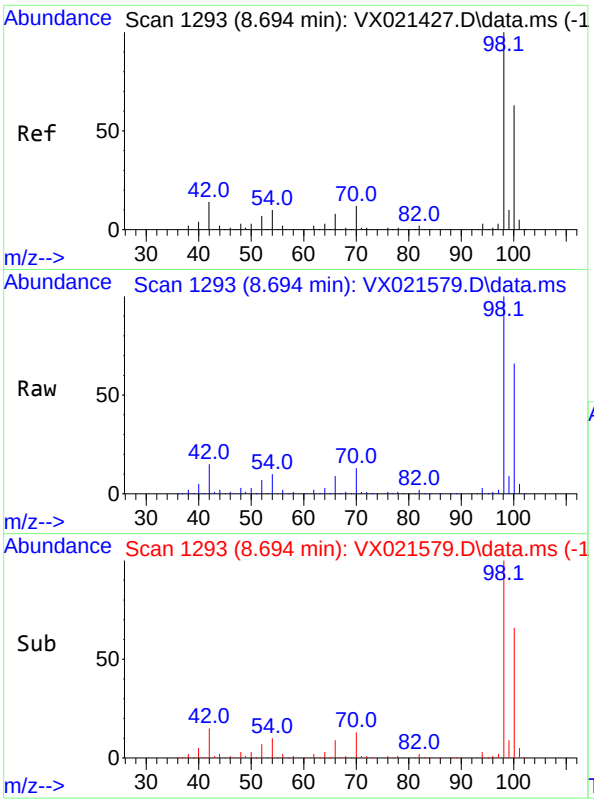

#35
Dibromofluoromethane
Concen: 50.60 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:113 Resp: 39601

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 105.1 | 81.9 | 122.9 |
| 192 | 18.8 | 16.7 | 25.1 |



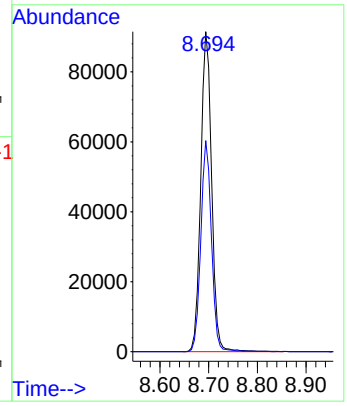
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

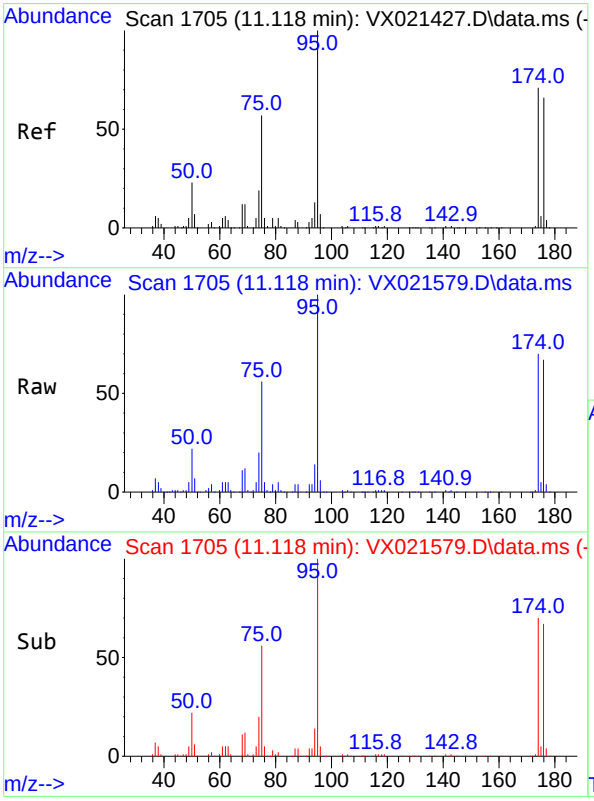



#50
Toluene-d8
Concen: 51.14 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion: 98 Resp: 142625

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.5 | 51.9 | 77.9 |

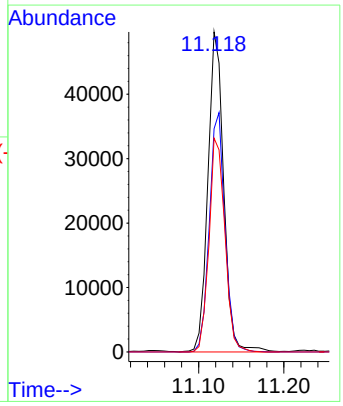


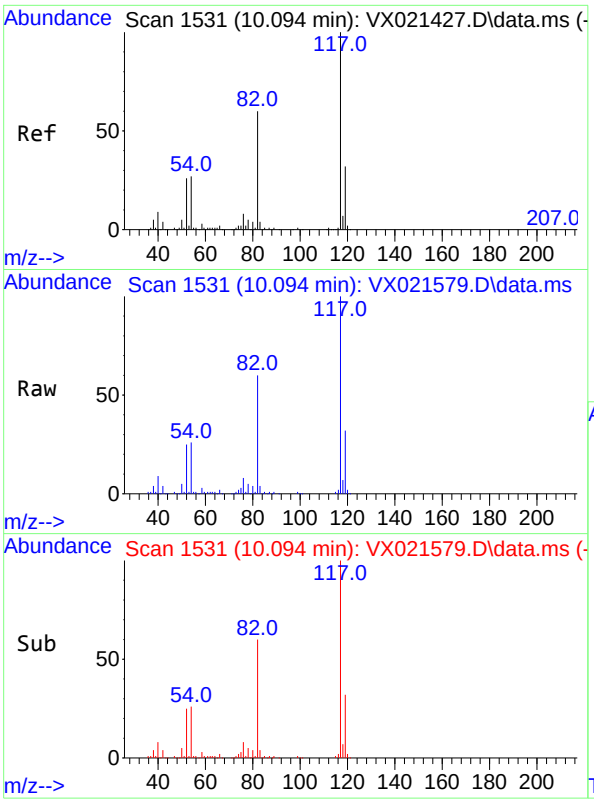

#62
4-Bromofluorobenzene
Concen: 59.06 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion: 95 Resp: 64038

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.7 | 0.0 | 154.6 |
| 176 | 67.0 | 0.0 | 155.8 |



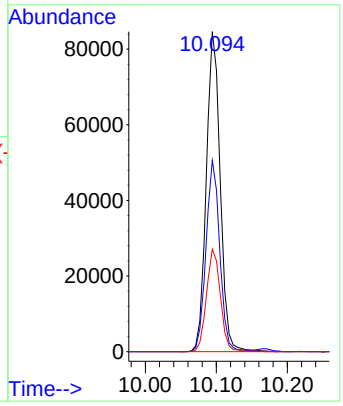
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

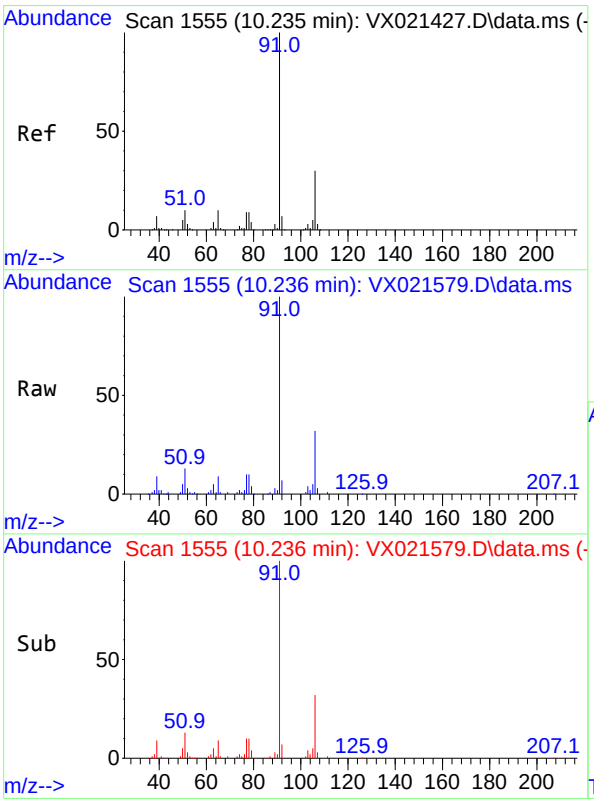



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:117 Resp: 115434

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.7 | 47.4 | 71.2 |
| 119 | 32.0 | 26.6 | 39.8 |

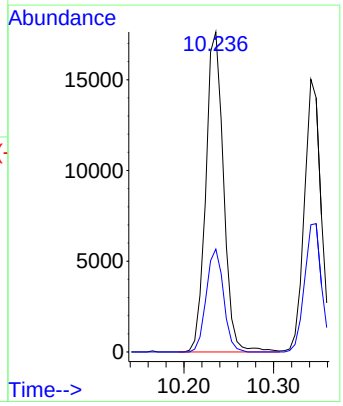


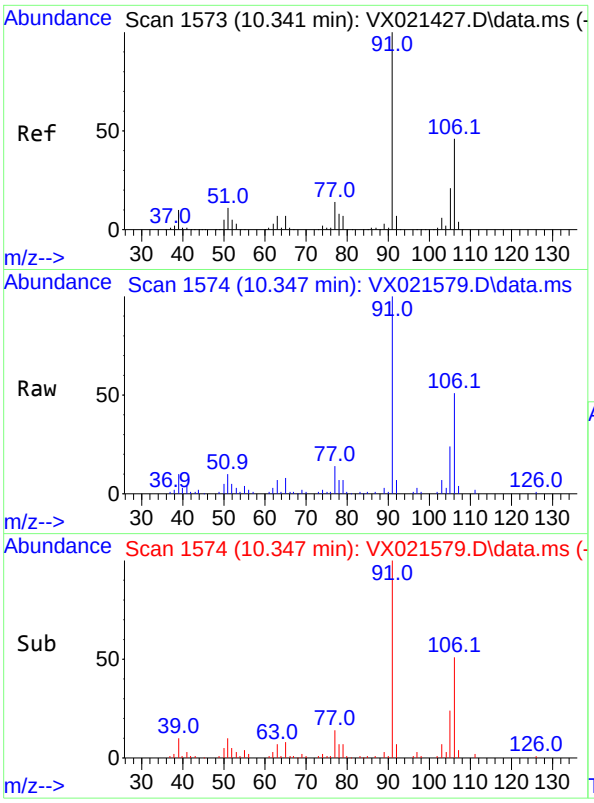

#67
Ethyl Benzene
Concen: 5.72 ug/l
RT: 10.236 min Scan# 1555
Delta R.T. 0.001 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion: 91 Resp: 24185

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 32.2 | 24.6 | 37.0 |



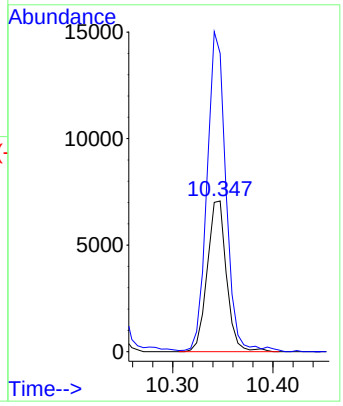
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

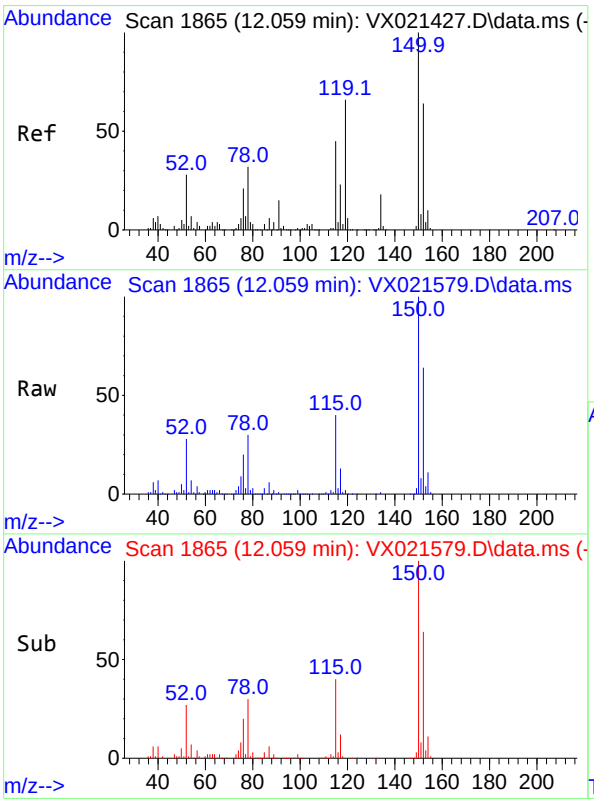



#68
m/p-Xylenes
Concen: 6.28 ug/l
RT: 10.347 min Scan# 1574
Delta R.T. 0.006 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:106 Resp: 9459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 208.6 | 162.8 | 244.2 |

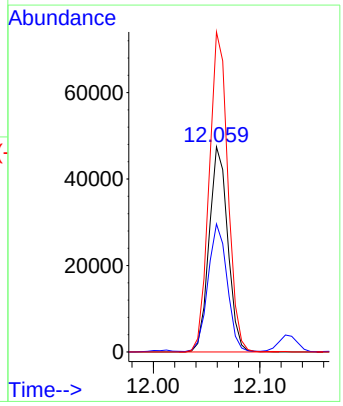


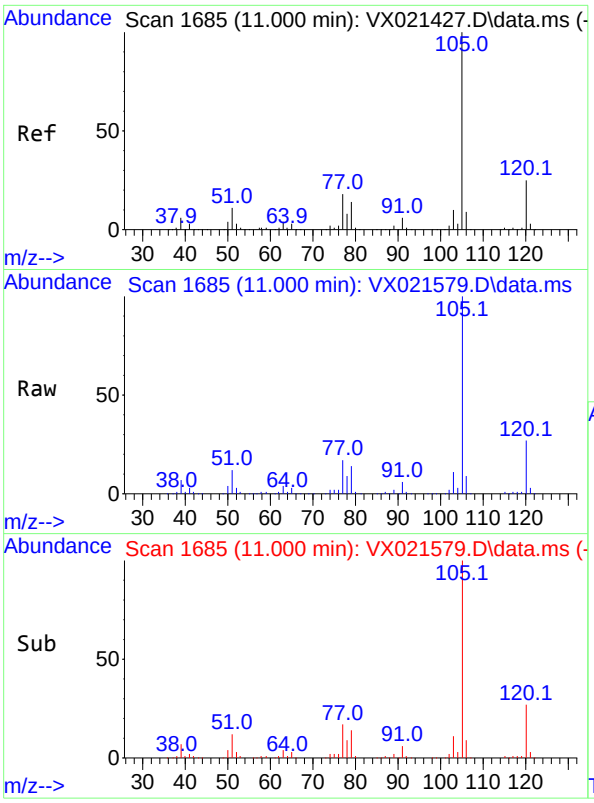

#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:152 Resp: 57707

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.7 | 41.1 | 123.3 |
| 150 | 156.3 | 0.0 | 349.0 |



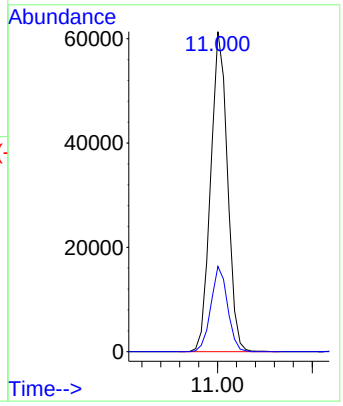
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

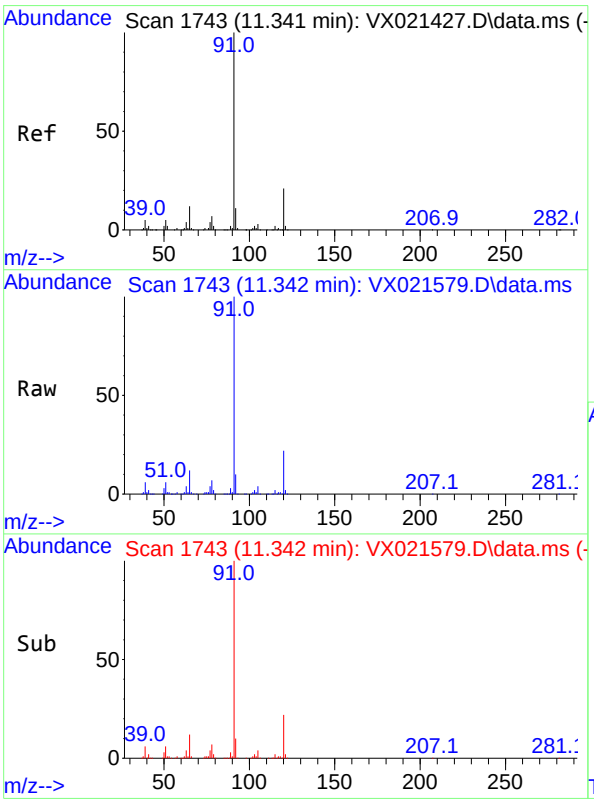



#73
Isopropylbenzene
Concen: 18.58 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:105 Resp: 75339

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.4 | 13.2 | 39.6 |

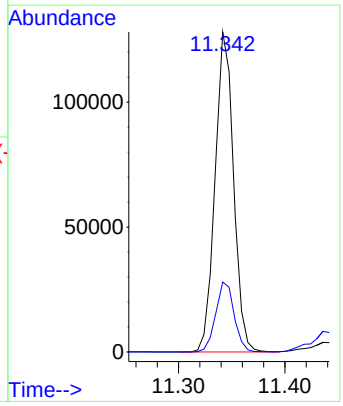


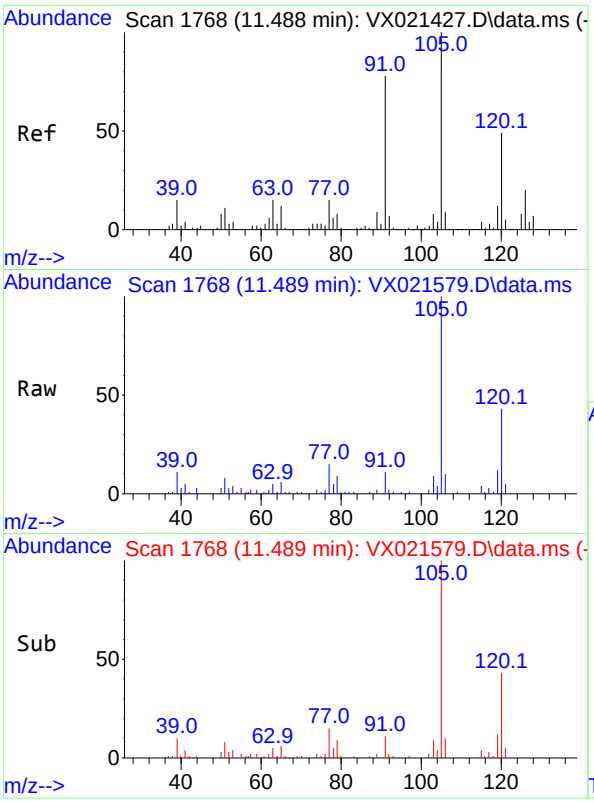

#78
n-propylbenzene
Concen: 32.16 ug/l
RT: 11.342 min Scan# 1743
Delta R.T. 0.001 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion: 91 Resp: 154000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.9 | 11.5 | 34.5 |



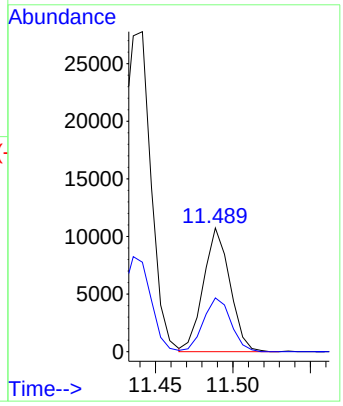
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

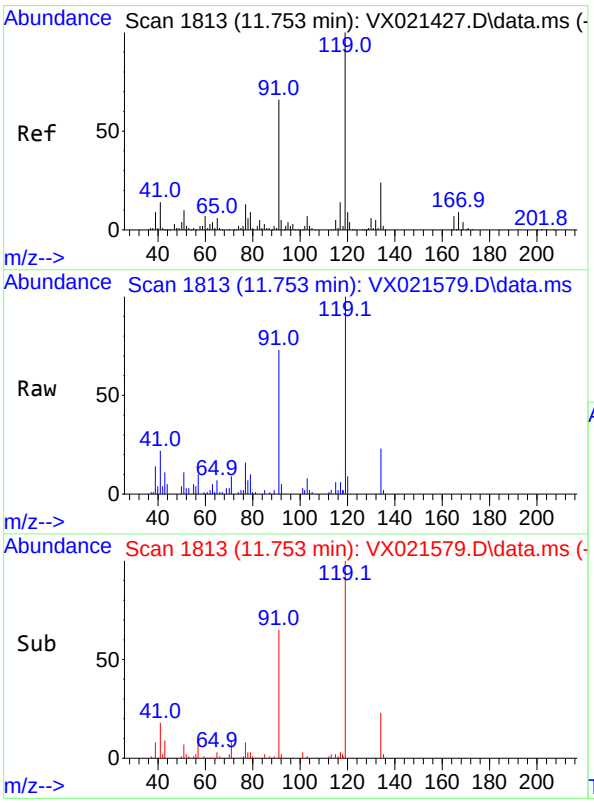



#80
1,3,5-Trimethylbenzene
Concen: 3.70 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.001 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:105 Resp: 12821

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.8 | 23.8 | 71.5 |

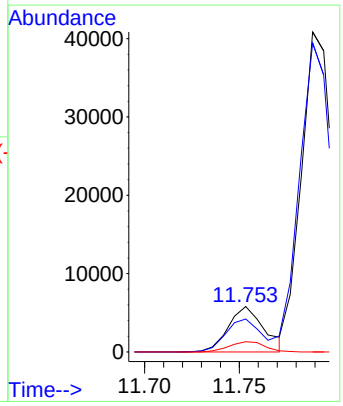


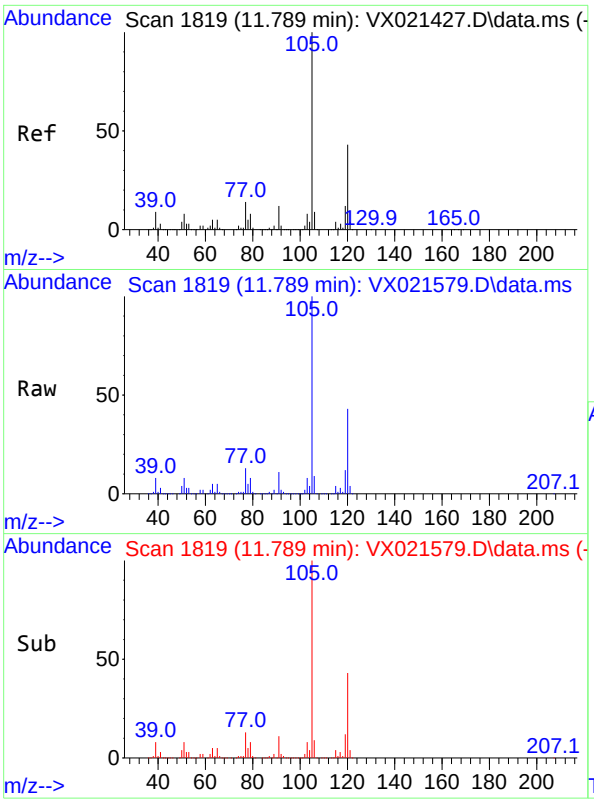

#83
tert-Butylbenzene
Concen: 2.25 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:119 Resp: 7593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 70.3 | 27.9 | 83.7 |
| 134 | 22.4 | 11.3 | 33.9 |



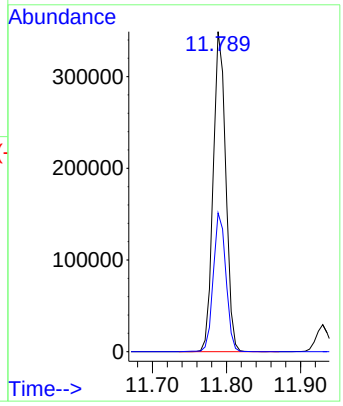
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

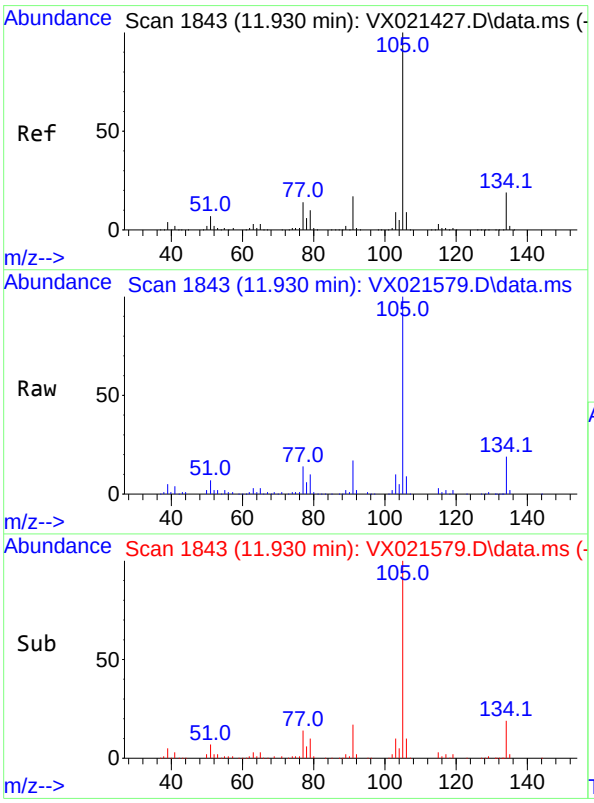



#84
1,2,4-Trimethylbenzene
Concen: 117.52 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. -0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:105 Resp: 410364

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.5 | 22.4 | 67.3 |

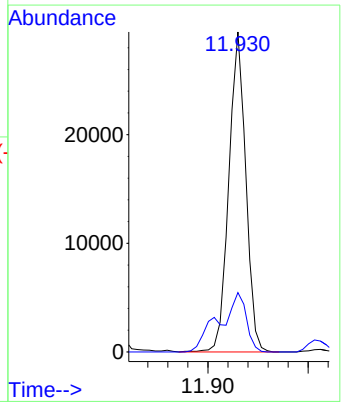


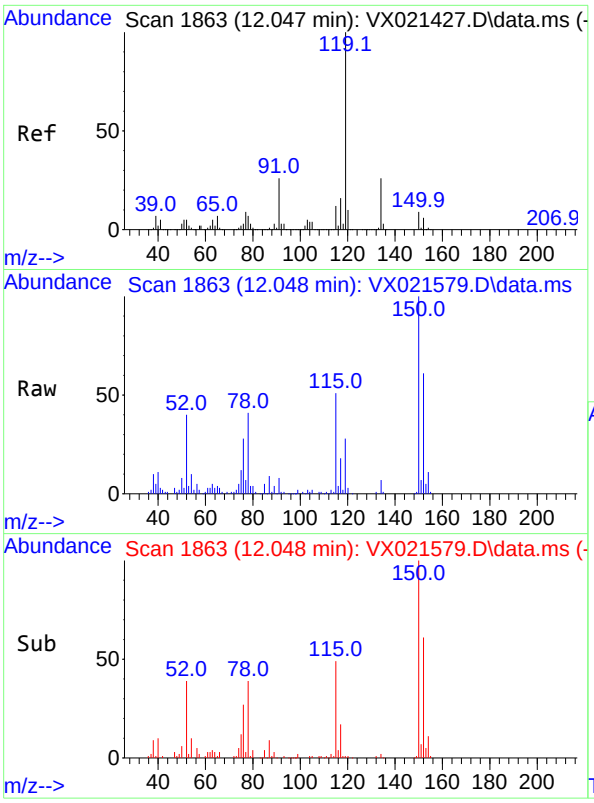

#85
sec-Butylbenzene
Concen: 8.87 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:105 Resp: 34495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 16.4 | 10.0 | 29.8 |



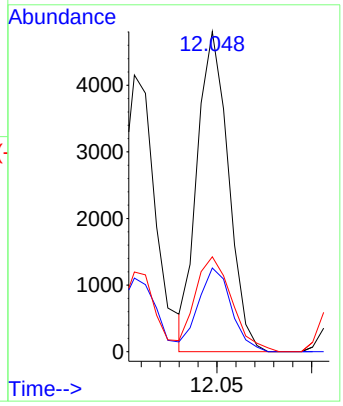
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

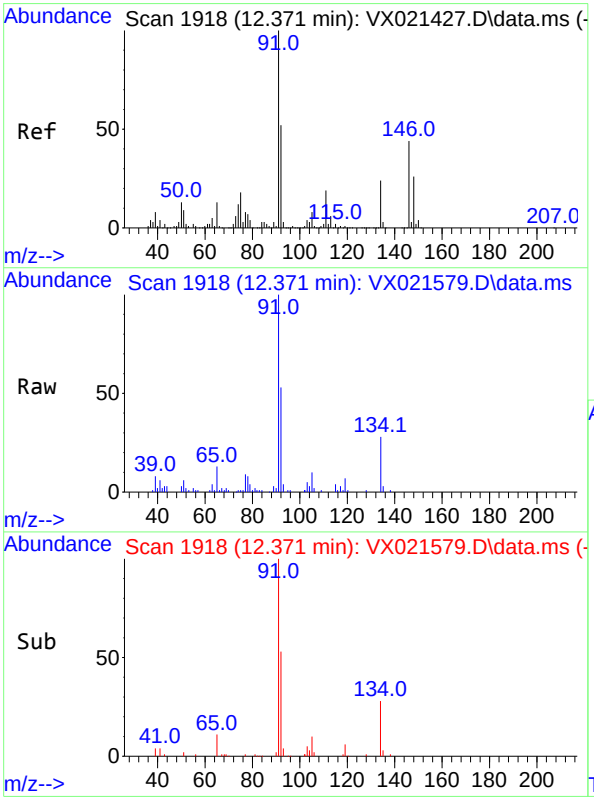



#86
p-Isopropyltoluene
Concen: 1.56 ug/l
RT: 12.048 min Scan# 1863
Delta R.T. 0.001 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:119 Resp: 5507

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 27.6 | 12.9 | 38.7 |
| 91 | 34.8 | 11.7 | 35.0 |

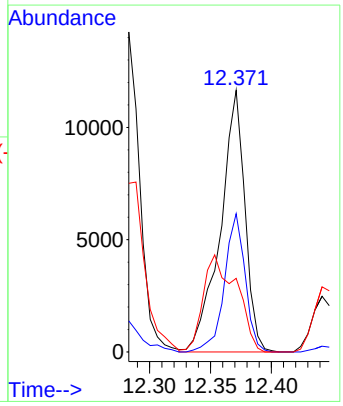


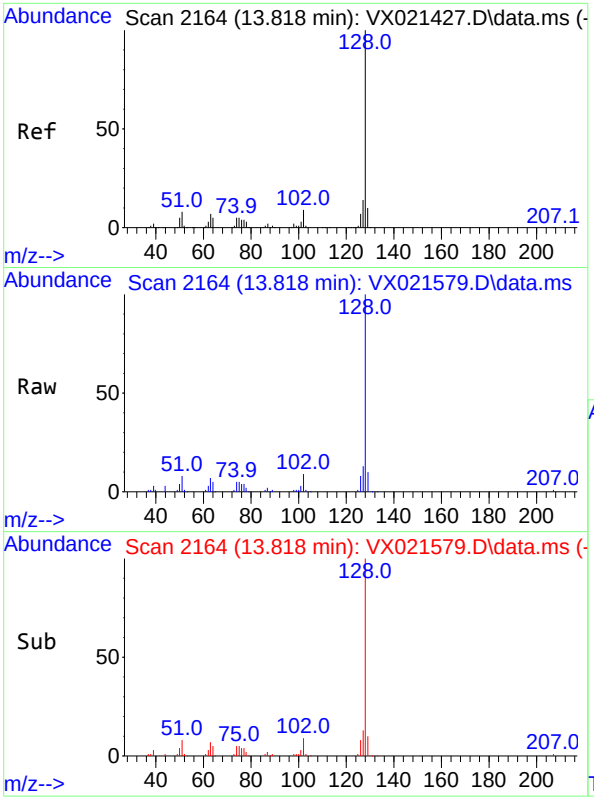

#89
n-Butylbenzene
Concen: 5.07 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion: 91 Resp: 16461

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 44.3 | 27.4 | 82.0 |
| 134 | 50.0 | 13.2 | 39.5# |



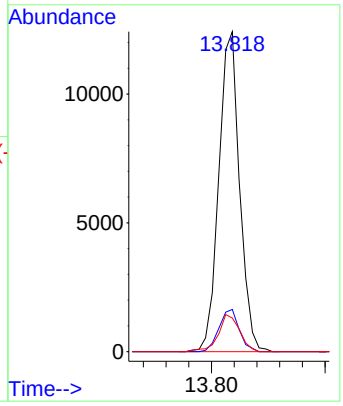
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2




#95
Naphthalene
Concen: 4.20 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021579.D
Acq: 29 Mar 2021 16:02

Tgt Ion:128 Resp: 15789

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.9 | 10.3 | 15.5 |
| 129 | 11.9 | 8.8 | 13.2 |



Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

Signal : TIC: VX021579.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.464 | 732 | 744 | 756 | rBV | 48054 | 137121 | 11.45% | 2.199% |
| 2 | 5.629 | 761 | 772 | 783 | rBV | 68992 | 191604 | 16.00% | 3.072% |
| 3 | 6.029 | 829 | 840 | 852 | rBV | 52186 | 137059 | 11.45% | 2.198% |
| 4 | 6.829 | 966 | 976 | 989 | rBV | 118792 | 278954 | 23.30% | 4.473% |
| 5 | 8.694 | 1282 | 1293 | 1310 | rBV | 253581 | 396842 | 33.14% | 6.363% |
| 6 | 10.094 | 1525 | 1531 | 1539 | rBV | 279923 | 376562 | 31.45% | 6.038% |
| 7 | 10.236 | 1548 | 1555 | 1560 | rBV | 44304 | 60536 | 5.06% | 0.971% |
| 8 | 10.341 | 1564 | 1573 | 1579 | rBV | 47405 | 72157 | 6.03% | 1.157% |
| 9 | 10.630 | 1614 | 1622 | 1629 | rBV5 | 7197 | 18487 | 1.54% | 0.296% |
| 10 | 10.818 | 1643 | 1654 | 1659 | rVB3 | 13143 | 24386 | 2.04% | 0.391% |
| 11 | 10.894 | 1662 | 1667 | 1675 | rBV3 | 10320 | 18733 | 1.56% | 0.300% |
| 12 | 11.000 | 1680 | 1685 | 1694 | rBV | 160969 | 201343 | 16.82% | 3.229% |
| 13 | 11.118 | 1700 | 1705 | 1711 | rBV | 245963 | 314623 | 26.28% | 5.045% |
| 14 | 11.342 | 1738 | 1743 | 1751 | rBV | 268627 | 324162 | 27.07% | 5.198% |
| 15 | 11.436 | 1751 | 1759 | 1763 | rVV | 76422 | 127358 | 10.64% | 2.042% |
| 16 | 11.489 | 1763 | 1768 | 1777 | rVB | 33353 | 49202 | 4.11% | 0.789% |
| 17 | 11.653 | 1785 | 1796 | 1801 | rBV7 | 10175 | 20966 | 1.75% | 0.336% |
| 18 | 11.753 | 1805 | 1813 | 1815 | rVV | 23551 | 34973 | 2.92% | 0.561% |
| 19 | 11.789 | 1815 | 1819 | 1829 | rVB | 1012548 | 1197354 | 100.00% | 19.199% |
| 20 | 11.900 | 1829 | 1838 | 1840 | rBV | 35928 | 49163 | 4.11% | 0.788% |
| 21 | 11.930 | 1840 | 1843 | 1848 | rVB | 74404 | 87116 | 7.28% | 1.397% |
| 22 | 12.006 | 1853 | 1856 | 1860 | rVV | 13465 | 17488 | 1.46% | 0.280% |
| 23 | 12.059 | 1860 | 1865 | 1871 | rVV | 318479 | 399750 | 33.39% | 6.410% |
| 24 | 12.124 | 1871 | 1876 | 1882 | rVV | 288395 | 348516 | 29.11% | 5.588% |
| 25 | 12.218 | 1886 | 1892 | 1897 | rVB | 32861 | 42595 | 3.56% | 0.683% |
| 26 | 12.283 | 1897 | 1903 | 1910 | rBV | 254197 | 321300 | 26.83% | 5.152% |
| 27 | 12.353 | 1910 | 1915 | 1923 | rVB2 | 49029 | 100336 | 8.38% | 1.609% |
| 28 | 12.442 | 1925 | 1930 | 1936 | rBV | 33451 | 42990 | 3.59% | 0.689% |
| 29 | 12.571 | 1946 | 1952 | 1954 | rBV | 37776 | 51743 | 4.32% | 0.830% |
| 30 | 12.595 | 1954 | 1956 | 1960 | rVV | 36407 | 35439 | 2.96% | 0.568% |
| 31 | 12.653 | 1960 | 1966 | 1969 | rVV | 127177 | 155950 | 13.02% | 2.501% |
| 32 | 12.683 | 1969 | 1971 | 1976 | rVB | 41022 | 44186 | 3.69% | 0.709% |
| 33 | 12.742 | 1976 | 1981 | 1988 | rBV2 | 101626 | 170756 | 14.26% | 2.738% |
| 34 | 12.883 | 1999 | 2005 | 2010 | rVB2 | 30349 | 46004 | 3.84% | 0.738% |
| 35 | 12.959 | 2010 | 2018 | 2021 | rVV | 62348 | 80677 | 6.74% | 1.294% |
| 36 | 13.001 | 2021 | 2025 | 2031 | rVV | 79784 | 96876 | 8.09% | 1.553% |

Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 37 | 13.330 | 2076 | 2081 | 2087 | rVB2 | 76521 | 106235 | 8.87% | 1.703% |
| 38 | 13.459 | 2099 | 2103 | 2110 | rVB | 15665 | 20159 | 1.68% | 0.323% |
| 39 | 13.818 | 2154 | 2164 | 2170 | rBV | 26347 | 36702 | 3.07% | 0.589% |

Sum of corrected areas: 6236403

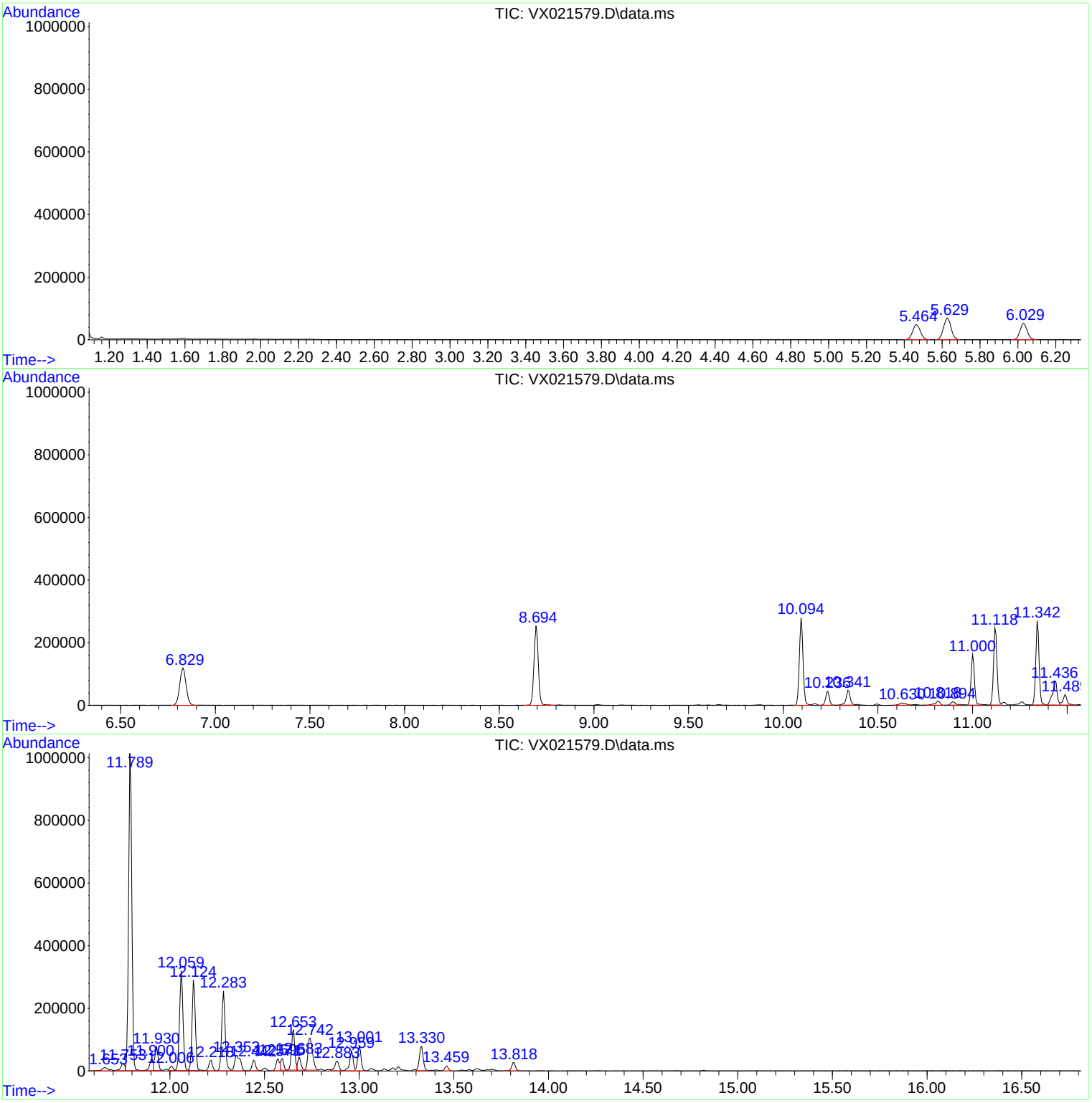
Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P



Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

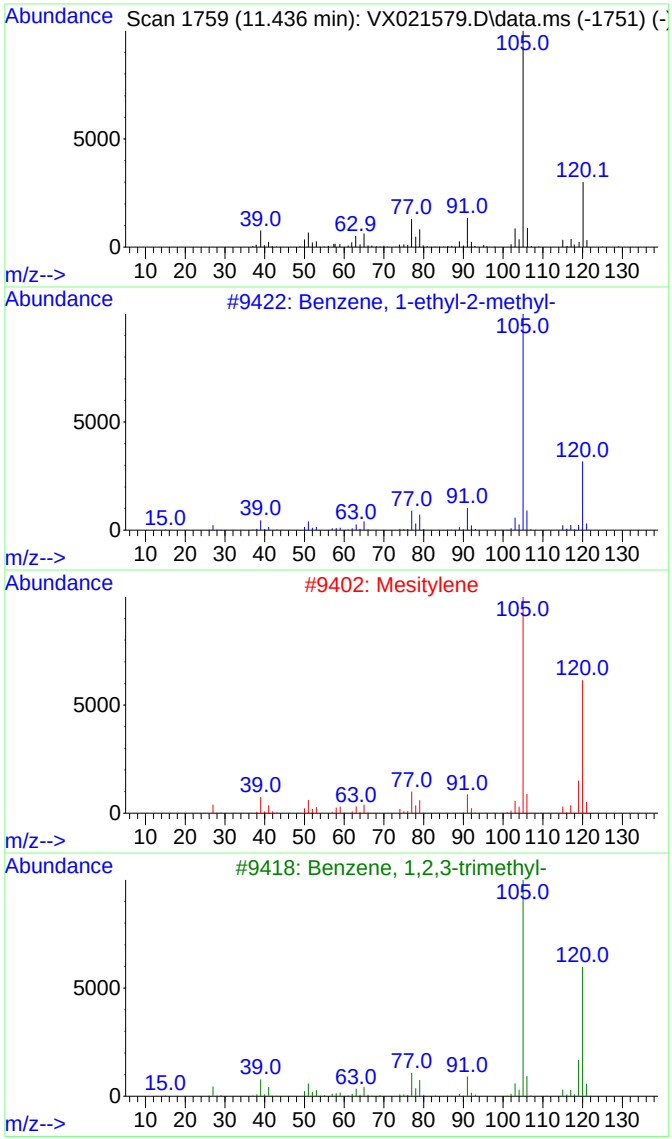
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

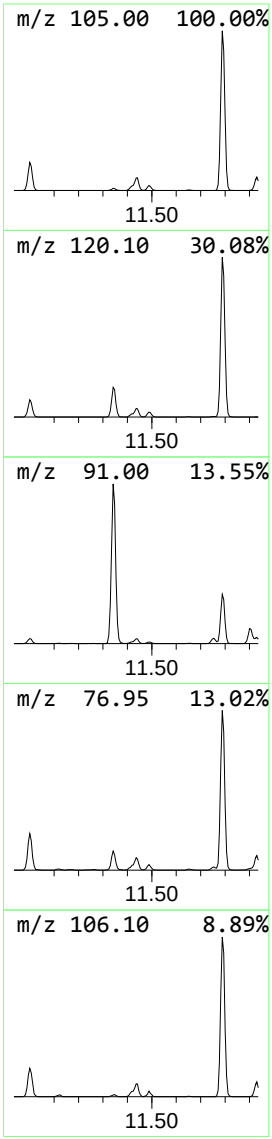
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 1 Benzene, 1-ethyl-2-methyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.436 | 15.93 ug/l | 127358 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 95 |
| 2 | Mesitylene | 120 | C9H12 | 000108-67-8 | 91 |
| 3 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 91 |
| 4 | Benzene, 1-ethyl-4-methyl- | 120 | C9H12 | 000622-96-8 | 91 |
| 5 | Benzene, 1-ethyl-3-methyl- | 120 | C9H12 | 000620-14-4 | 91 |



Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

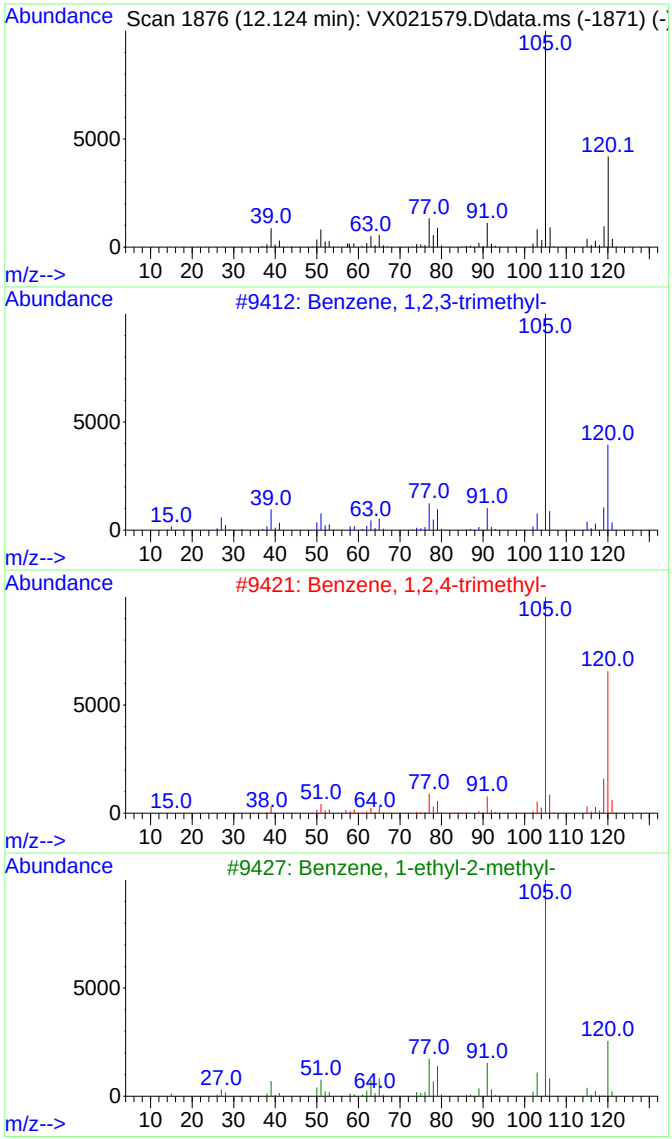
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

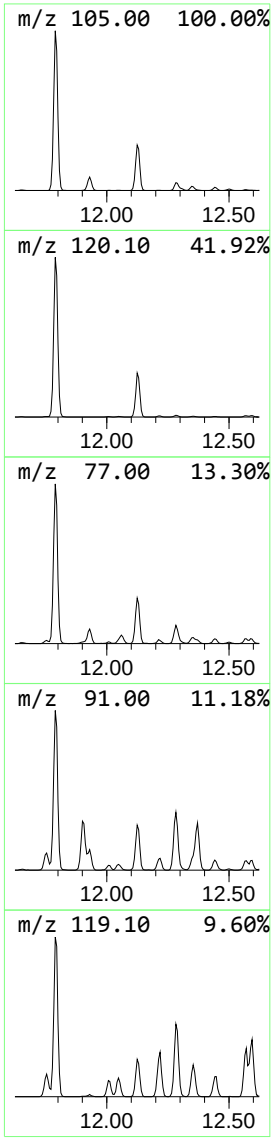
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 2 Benzene, 1,2,3-trimethyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.124 | 43.59 ug/l | 348516 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 95 |
| 2 | Benzene, 1,2,4-trimethyl- | 120 | C9H12 | 000095-63-6 | 94 |
| 3 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 93 |
| 4 | Mesitylene | 120 | C9H12 | 000108-67-8 | 91 |
| 5 | Benzene, 1-ethyl-4-methyl- | 120 | C9H12 | 000622-96-8 | 90 |



Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

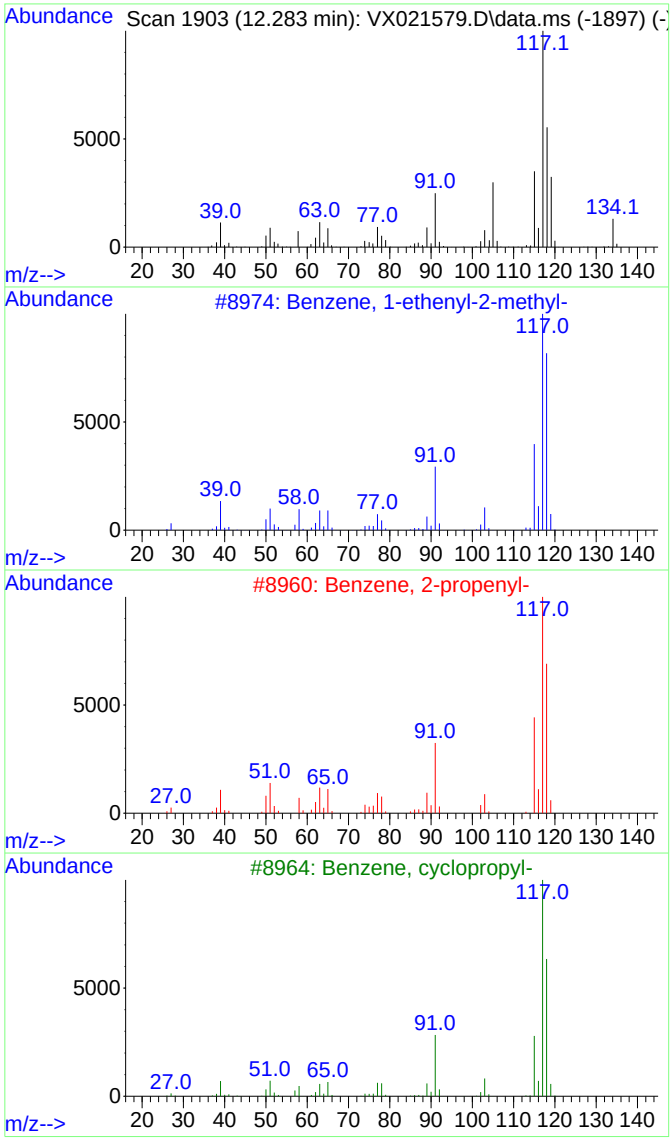
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

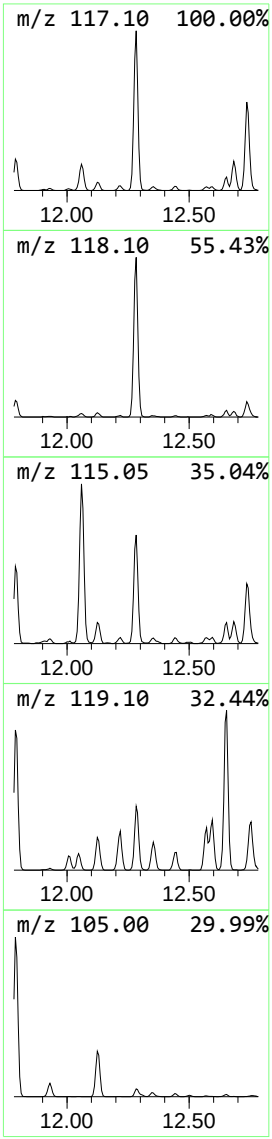
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 3 Benzene, 1-ethenyl-2-methyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.283 | 40.19 ug/l | 321300 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethenyl-2-methyl- | 118 | C9H10 | 000611-15-4 | 93 |
| 2 | Benzene, 2-propenyl- | 118 | C9H10 | 000300-57-2 | 70 |
| 3 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 70 |
| 4 | Indane | 118 | C9H10 | 000496-11-7 | 64 |
| 5 | Benzene, 1-propenyl- | 118 | C9H10 | 000637-50-3 | 64 |



Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

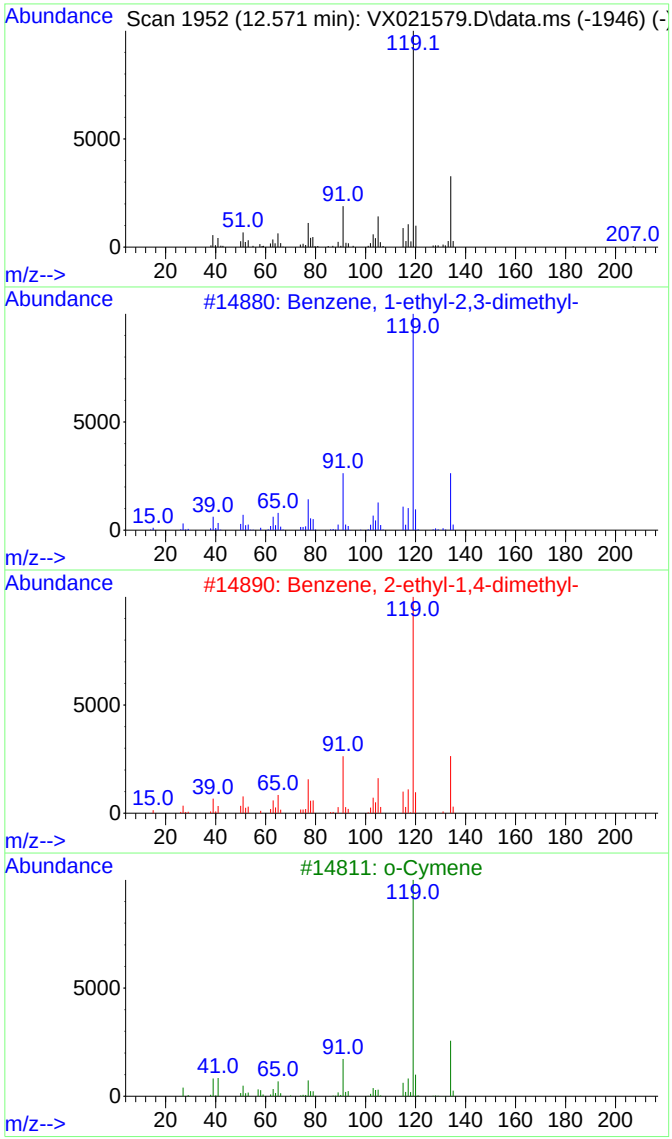
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

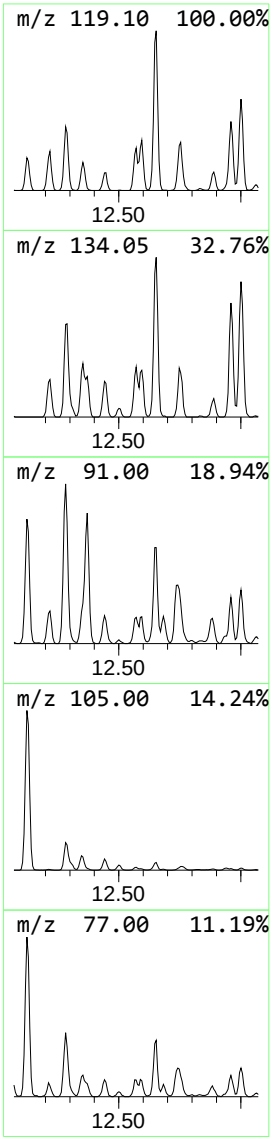
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 4 Benzene, 1-ethyl-2,3-dimethyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.571 | 6.47 ug/l | 51743 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 96 |
| 2 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 96 |
| 3 | o-Cymene | 134 | C10H14 | 000527-84-4 | 95 |
| 4 | p-Cymene | 134 | C10H14 | 000099-87-6 | 95 |
| 5 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 95 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

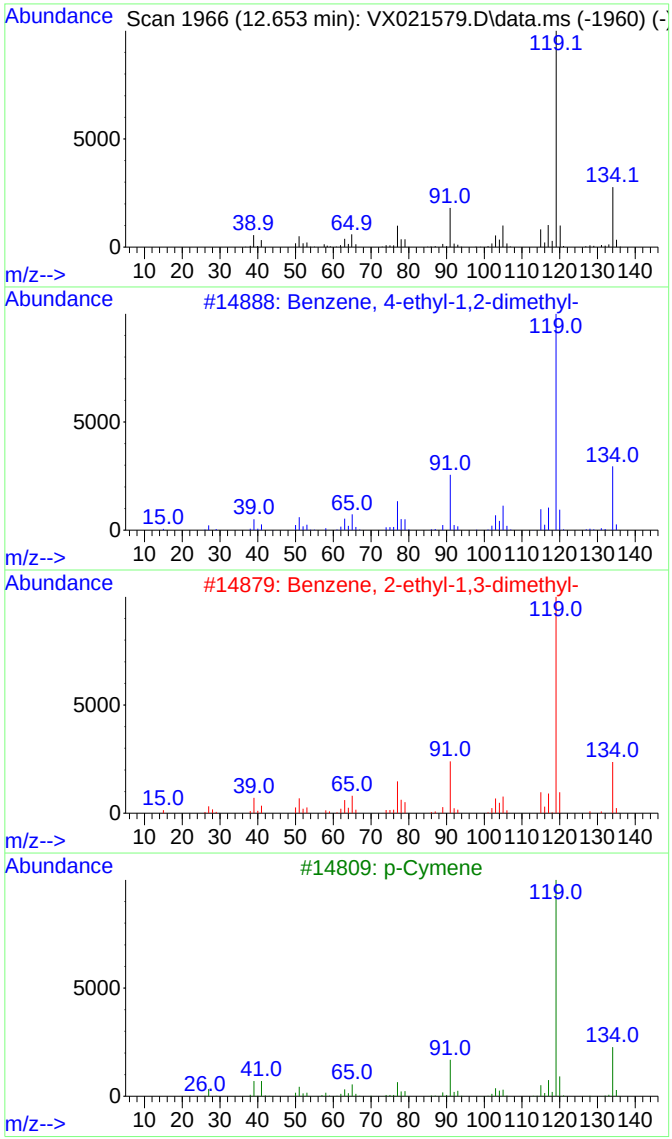
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

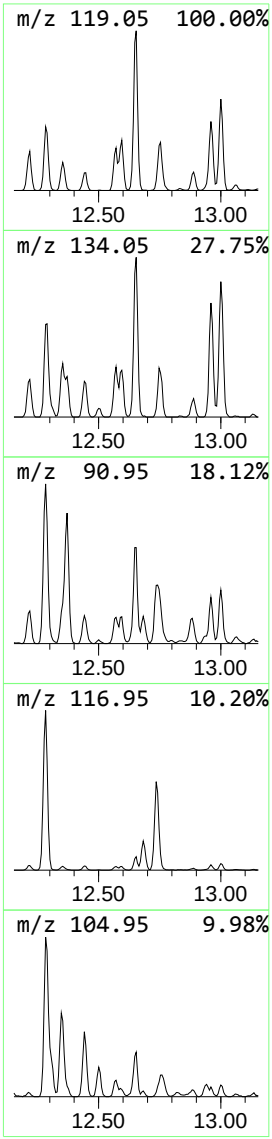
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 5 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.653 | 19.51 ug/l | 155950 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 96 |
| 2 | Benzene, 2-ethyl-1,3-dimethyl- | 134 | C10H14 | 002870-04-4 | 95 |
| 3 | p-Cymene | 134 | C10H14 | 000099-87-6 | 95 |
| 4 | o-Cymene | 134 | C10H14 | 000527-84-4 | 95 |
| 5 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 95 |



Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

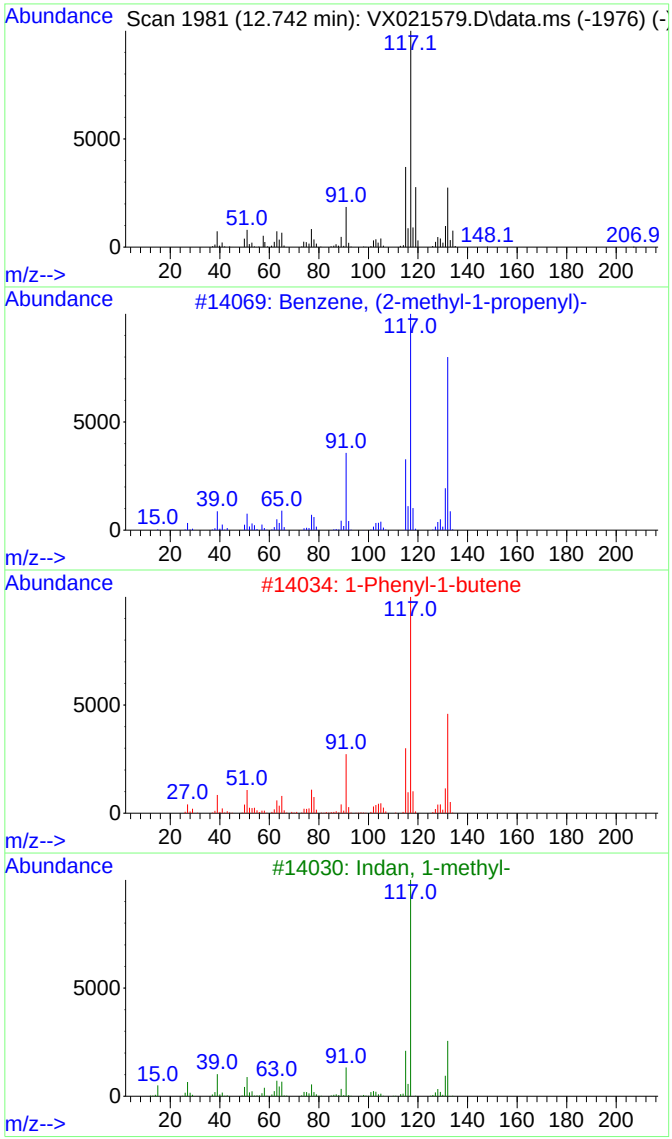
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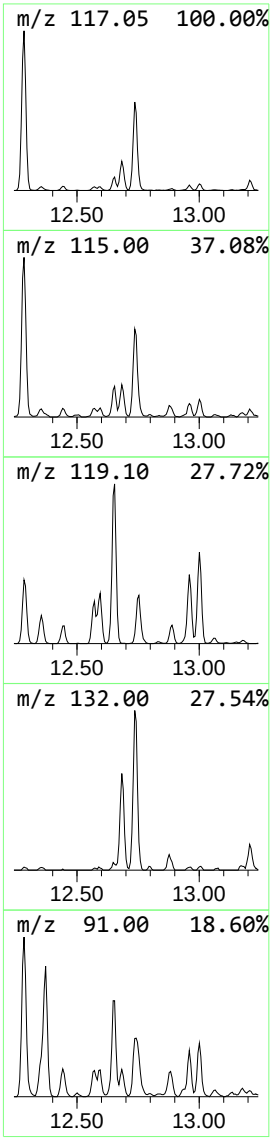
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 6 Benzene, (2-methyl-1-propen... Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.742 | 21.36 ug/l | 170756 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, (2-methyl-1-propenyl)- | 132 | C10H12 | 000768-49-0 | 83 |
| 2 | 1-Phenyl-1-butene | 132 | C10H12 | 000824-90-8 | 81 |
| 3 | Indan, 1-methyl- | 132 | C10H12 | 000767-58-8 | 76 |
| 4 | Benzene, 1-methyl-2-(2-propenyl)- | 132 | C10H12 | 001587-04-8 | 74 |
| 5 | Benzene, 1-ethenyl-4-ethyl- | 132 | C10H12 | 003454-07-7 | 70 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

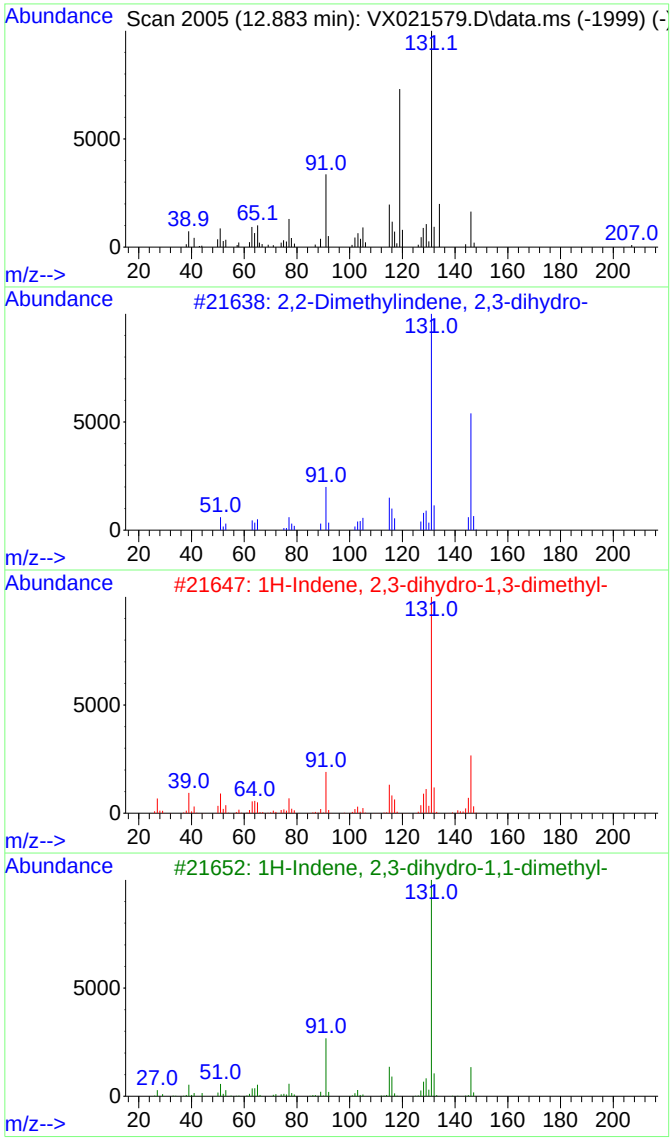
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Quant Title : SW846 8260

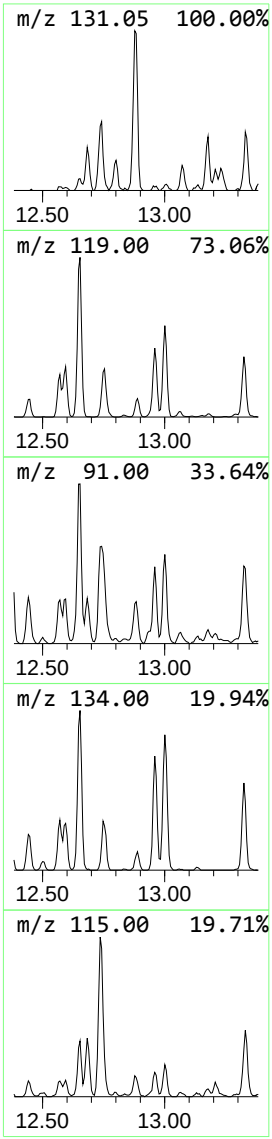
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 7 2,2-Dimethylindene, 2,3-dih... Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.883 | 5.75 ug/l | 46004 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 2,2-Dimethylindene, 2,3-dihydro- | 146 | C11H14 | 020836-11-7 | 94 |
| 2 | 1H-Indene, 2,3-dihydro-1,3-dimet... | 146 | C11H14 | 004175-53-5 | 86 |
| 3 | 1H-Indene, 2,3-dihydro-1,1-dimet... | 146 | C11H14 | 004912-92-9 | 64 |
| 4 | Benzene, 1-methyl-3-(1-methyl-2-... | 146 | C11H14 | 052161-57-6 | 58 |
| 5 | Benzene, (2-methyl-1-butenyl)- | 146 | C11H14 | 056253-64-6 | 50 |



Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

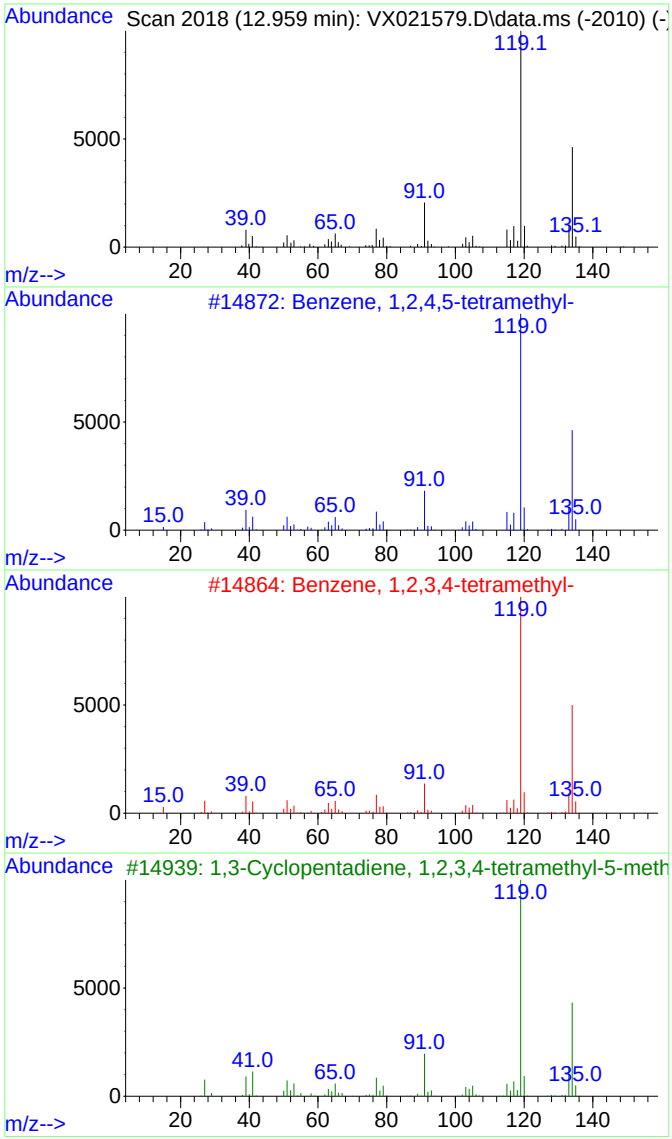
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Quant Title : SW846 8260

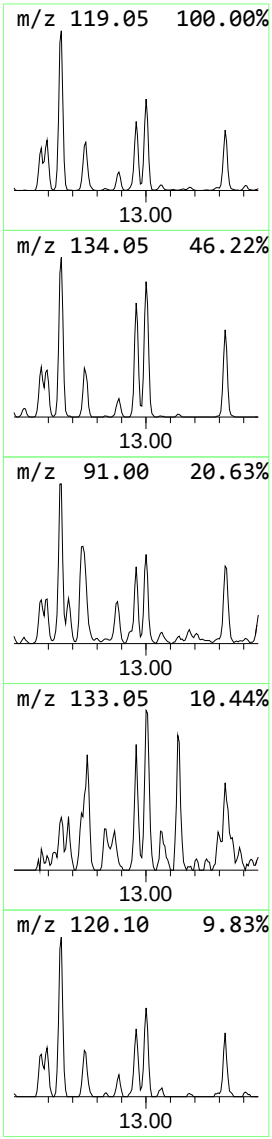
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 8 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.959 | 10.09 ug/l | 80677 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 96 |
| 2 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 3 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 94 |
| 4 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 91 |
| 5 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 91 |



Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

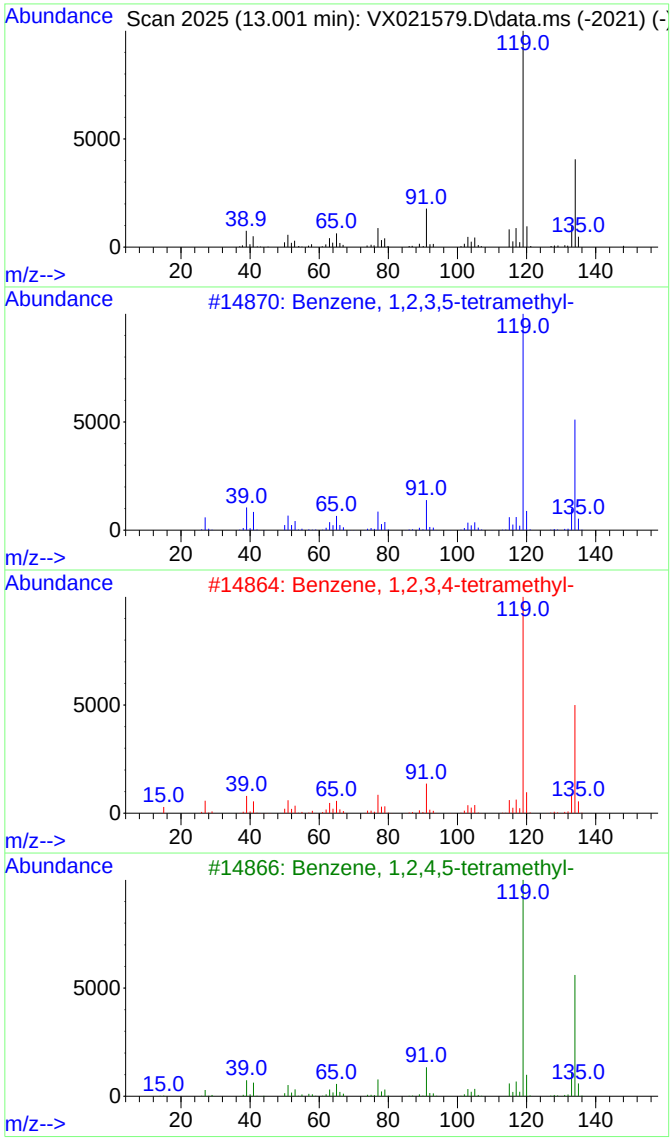
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Quant Title : SW846 8260

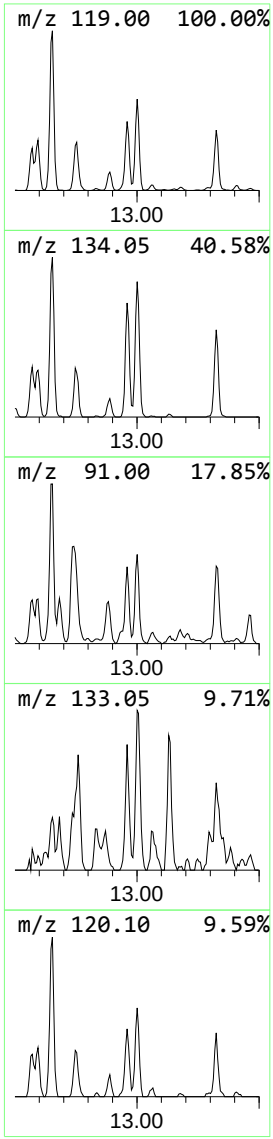
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 9 Benzene, 1,2,3,5-tetramethyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.001 | 12.12 ug/l | 96876 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 95 |
| 2 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 3 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 95 |
| 4 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 94 |
| 5 | Benzene, 2-ethyl-1,3-dimethyl- | 134 | C10H14 | 002870-04-4 | 94 |



Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

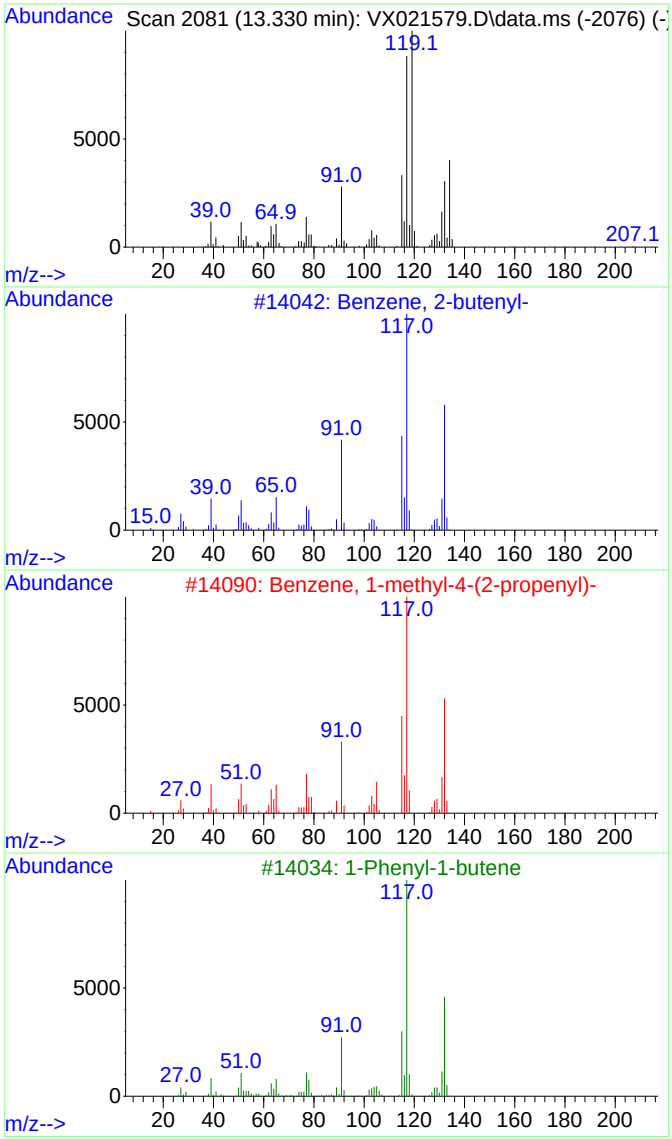
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Quant Title : SW846 8260

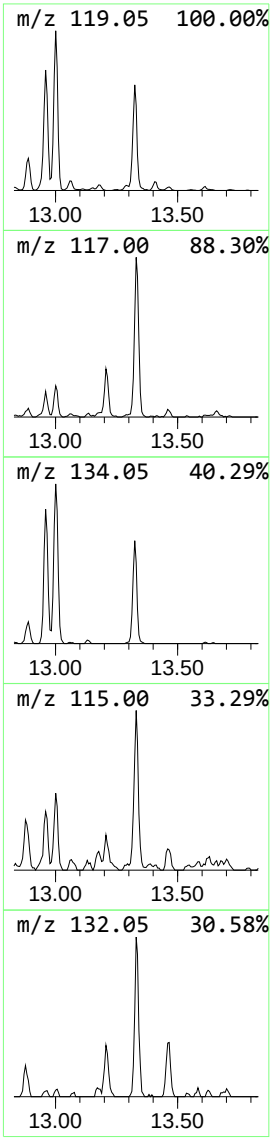
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 10 Benzene, 2-butenyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.330 | 13.29 ug/l | 106235 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-butenyl- | 132 | C10H12 | 001560-06-1 | 89 |
| 2 | Benzene, 1-methyl-4-(2-propenyl)- | 132 | C10H12 | 003333-13-9 | 70 |
| 3 | 1-Phenyl-1-butene | 132 | C10H12 | 000824-90-8 | 55 |
| 4 | 3-Phenylbut-1-ene | 132 | C10H12 | 000934-10-1 | 55 |
| 5 | Benzene, (2-methyl-2-propenyl)- | 132 | C10H12 | 003290-53-7 | 55 |



Sample Results: **VX021579.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021579.D
Acq On : 29 Mar 2021 16:02
Operator : JC/MD
Sample : M1785-13 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 17 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-2

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Benzene, 1-ethy... | 11.436 | 15.9 | ug/l | 127358 | 4 | 12.059 | 399750 | 50.0 |
| Benzene, 1,2,3-... | 12.124 | 43.6 | ug/l | 348516 | 4 | 12.059 | 399750 | 50.0 |
| Benzene, 1-ethe... | 12.283 | 40.2 | ug/l | 321300 | 4 | 12.059 | 399750 | 50.0 |
| Benzene, 1-ethy... | 12.571 | 6.5 | ug/l | 51743 | 4 | 12.059 | 399750 | 50.0 |
| Benzene, 4-ethy... | 12.653 | 19.5 | ug/l | 155950 | 4 | 12.059 | 399750 | 50.0 |
| Benzene, (2-met... | 12.742 | 21.4 | ug/l | 170756 | 4 | 12.059 | 399750 | 50.0 |
| 2,2-Dimethylind... | 12.883 | 5.8 | ug/l | 46004 | 4 | 12.059 | 399750 | 50.0 |
| Benzene, 1,2,4,... | 12.959 | 10.1 | ug/l | 80677 | 4 | 12.059 | 399750 | 50.0 |
| Benzene, 1,2,3,... | 13.001 | 12.1 | ug/l | 96876 | 4 | 12.059 | 399750 | 50.0 |
| Benzene, 2-bute... | 13.330 | 13.3 | ug/l | 106235 | 4 | 12.059 | 399750 | 50.0 |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-3R | SDG No.: | M1785 |
| Lab Sample ID: | M1785-14 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021580.D | 10 | | 03/29/21 16:26 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 10.0 | U | 2.30 | 10.0 | ug/L |
| 74-87-3 | Chloromethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 75-01-4 | Vinyl Chloride | 10.0 | U | 1.90 | 10.0 | ug/L |
| 74-83-9 | Bromomethane | 50.0 | U | 8.70 | 50.0 | ug/L |
| 75-00-3 | Chloroethane | 10.0 | U | 3.50 | 10.0 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 10.0 | U | 2.50 | 10.0 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 10.0 | U | 2.10 | 10.0 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 10.0 | U | 2.60 | 10.0 | ug/L |
| 67-64-1 | Acetone | 50.0 | U | 16.1 | 50.0 | ug/L |
| 75-15-0 | Carbon Disulfide | 10.0 | U | 2.50 | 10.0 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 10.0 | U | 2.20 | 10.0 | ug/L |
| 79-20-9 | Methyl Acetate | 10.0 | U | 4.70 | 10.0 | ug/L |
| 75-09-2 | Methylene Chloride | 10.0 | U | 1.80 | 10.0 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 10.0 | U | 2.10 | 10.0 | ug/L |
| 110-82-7 | Cyclohexane | 50.0 | U | 13.0 | 50.0 | ug/L |
| 78-93-3 | 2-Butanone | 50.0 | U | 9.00 | 50.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 10.0 | U | 2.70 | 10.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 10.0 | U | 2.20 | 10.0 | ug/L |
| 74-97-5 | Bromochloromethane | 10.0 | U | 2.60 | 10.0 | ug/L |
| 67-66-3 | Chloroform | 10.0 | U | 2.70 | 10.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 108-87-2 | Methylcyclohexane | 10.6 | | 1.40 | 10.0 | ug/L |
| 71-43-2 | Benzene | 10.0 | U | 1.80 | 10.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 10.0 | U | 2.50 | 10.0 | ug/L |
| 79-01-6 | Trichloroethene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 10.0 | U | 1.70 | 10.0 | ug/L |
| 75-27-4 | Bromodichloromethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 50.0 | U | 8.70 | 50.0 | ug/L |
| 108-88-3 | Toluene | 10.0 | U | 2.20 | 10.0 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 10.0 | U | 1.80 | 10.0 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 10.0 | U | 1.70 | 10.0 | ug/L |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-3R | SDG No.: | M1785 |
| Lab Sample ID: | M1785-14 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021580.D | 10 | | 03/29/21 16:26 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 10.0 | U | 2.40 | 10.0 | ug/L |
| 591-78-6 | 2-Hexanone | 50.0 | U | 9.20 | 50.0 | ug/L |
| 124-48-1 | Dibromochloromethane | 10.0 | U | 1.80 | 10.0 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 10.0 | U | 1.60 | 10.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 108-90-7 | Chlorobenzene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 100-41-4 | Ethyl Benzene | 33.3 | | 1.80 | 10.0 | ug/L |
| 1330-20-7 | Total Xylenes | 142 | | 5.10 | 30.0 | ug/L |
| 100-42-5 | Styrene | 10.0 | U | 1.60 | 10.0 | ug/L |
| 75-25-2 | Bromoform | 10.0 | U | 1.90 | 10.0 | ug/L |
| 98-82-8 | Isopropylbenzene | 150 | | 2.30 | 10.0 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 10.0 | U | 2.90 | 10.0 | ug/L |
| 103-65-1 | n-propylbenzene | 290 | | 2.40 | 10.0 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 77.2 | | 2.50 | 10.0 | ug/L |
| 98-06-6 | tert-Butylbenzene | 32.9 | | 2.60 | 10.0 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1600 | E | 2.00 | 10.0 | ug/L |
| 135-98-8 | sec-Butylbenzene | 140 | | 2.30 | 10.0 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 10.0 | U | 2.00 | 10.0 | ug/L |
| 104-51-8 | n-Butylbenzene | 97.7 | | 1.90 | 10.0 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 10.0 | U | 4.70 | 10.0 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10.0 | U | 3.00 | 10.0 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 10.0 | U | 3.50 | 10.0 | ug/L |
| 123-91-1 | 1,4-Dioxane | 1000 | U | 69.8 | 1000 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 50.9 | | 78 - 117 | 102% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.0 | | 75 - 124 | 100% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 50.1 | | 92 - 112 | 100% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 52.8 | | 83 - 123 | 106% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 60100 | 5.623 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 111000 | 6.829 | | | |

Raw Data: **VX021580.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-3R | SDG No.: | M1785 |
| Lab Sample ID: | M1785-14 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021580.D | 10 | | 03/29/21 16:26 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 110000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 50200 | 12.065 | | | |
| **TENTATIVE IDENTIFIED COMPOUNDS** | | | | | | |
| 179601-23-1 | m/p-Xylenes | 130 | J | | 10.3 | ug/L |
| 95-47-6 | o-Xylene | 12.0 | J | | 10.7 | ug/L |
| 000591-47-9 | Cyclohexene, 4-methyl- | 97.5 | J | | 10.8 | ug/L |
| 99-87-6 | p-Isopropyltoluene | 39.7 | J | | 12.0 | ug/L |
| 000526-73-8 | Benzene, 1,2,3-trimethyl- | 400 | J | | 12.1 | ug/L |
| 000300-57-2 | Benzene, 2-propenyl- | 420 | J | | 12.3 | ug/L |
| 001758-88-9 | Benzene, 2-ethyl-1,4-dimethyl- | 140 | J | | 12.6 | ug/L |
| 000527-84-4 | o-Cymene | 270 | J | | 12.7 | ug/L |
| 000768-49-0 | Benzene, (2-methyl-1-propenyl)- | 250 | J | | 12.7 | ug/L |
| 000095-93-2 | Benzene, 1,2,4,5-tetramethyl- | 98.5 | J | | 13.0 | ug/L |
| 000527-53-7 | Benzene, 1,2,3,5-tetramethyl- | 120 | J | | 13.0 | ug/L |
| 000767-99-7 | Benzene, (1-methyl-1-propenyl)-, ( | 160 | J | | 13.3 | ug/L |
| 91-20-3 | Naphthalene | 7.50 | J | | 13.8 | ug/L |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
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: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

Quant Time: Mar 30 03:29:28 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.623 | 168 | 60069 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 110895 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 109772 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.065 | 152 | 50223 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 50819 | 50.85 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 101.70% | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 39411 | 50.03 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.06% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 140546 | 50.07 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 100.14% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 57611 | 52.79 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 105.58% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 39) Methylcyclohexane | 7.435 | 83 | 1280 | 1.06 | ug/l | # | 87 |
| 67) Ethyl Benzene | 10.235 | 91 | 13370 | 3.33 | ug/l | | 95 |
| 68) m/p-Xylenes | 10.341 | 106 | 18714 | 13.07 | ug/l | | 91 |
| 69) o-Xylene | 10.677 | 106 | 1671 | 1.20 | ug/l | | 87 |
| 73) Isopropylbenzene | 11.000 | 105 | 54510 | 15.45 | ug/l | | 98 |
| 78) n-propylbenzene | 11.341 | 91 | 119235 | 28.61 | ug/l | | 96 |
| 80) 1,3,5-Trimethylbenzene | 11.488 | 105 | 23261 | 7.72 | ug/l | | 96 |
| 83) tert-Butylbenzene | 11.753 | 119 | 9665 | 3.29 | ug/l | | 87 |
| 84) 1,2,4-Trimethylbenzene | 11.788 | 105 | 476928 | 156.93 | ug/l | | 98 |
| 85) sec-Butylbenzene | 11.930 | 105 | 48871 | 14.43 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 12246 | 3.97 | ug/l | | 93 |
| 89) n-Butylbenzene | 12.371 | 91 | 27595 | 9.77 | ug/l | # | 72 |
| 95) Naphthalene | 13.818 | 128 | 2459 | 0.75 | ug/l | | 97 |

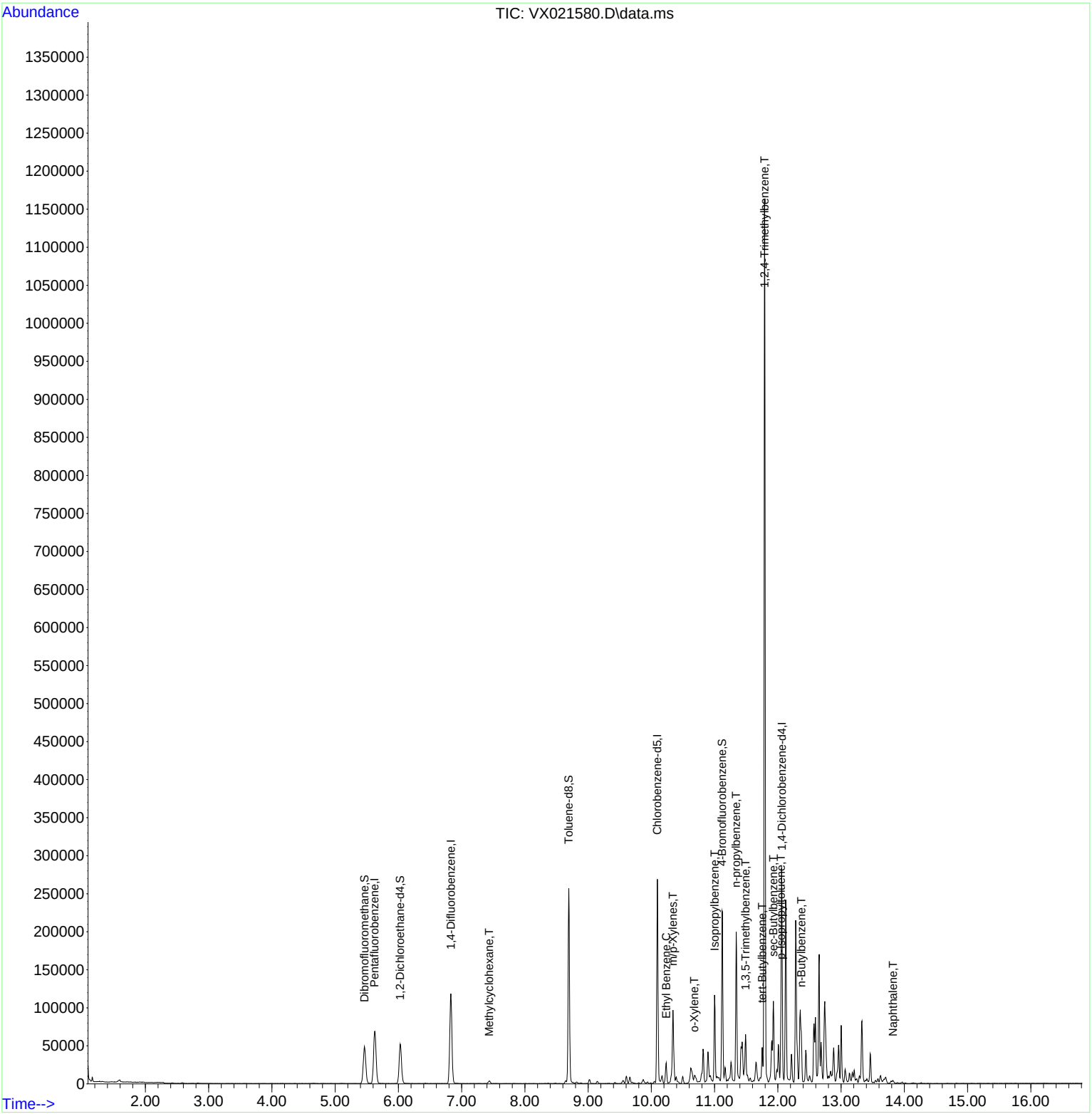
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample Results: **VX021580.D**

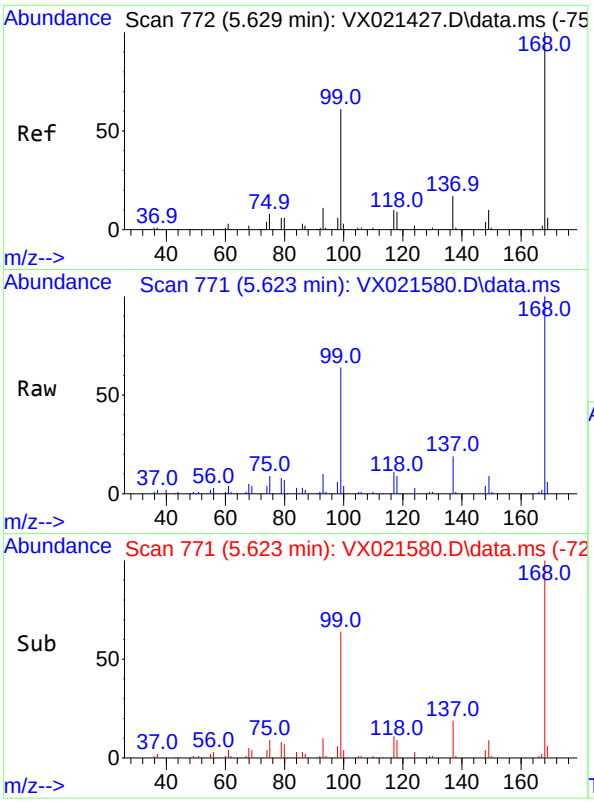
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

Quant Time: Mar 30 03:29:28 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration



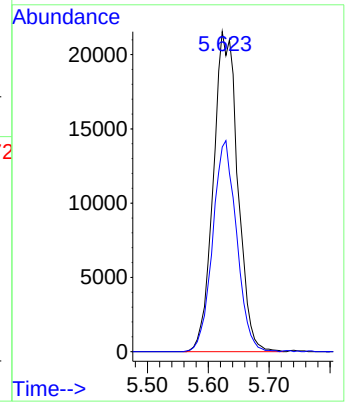
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

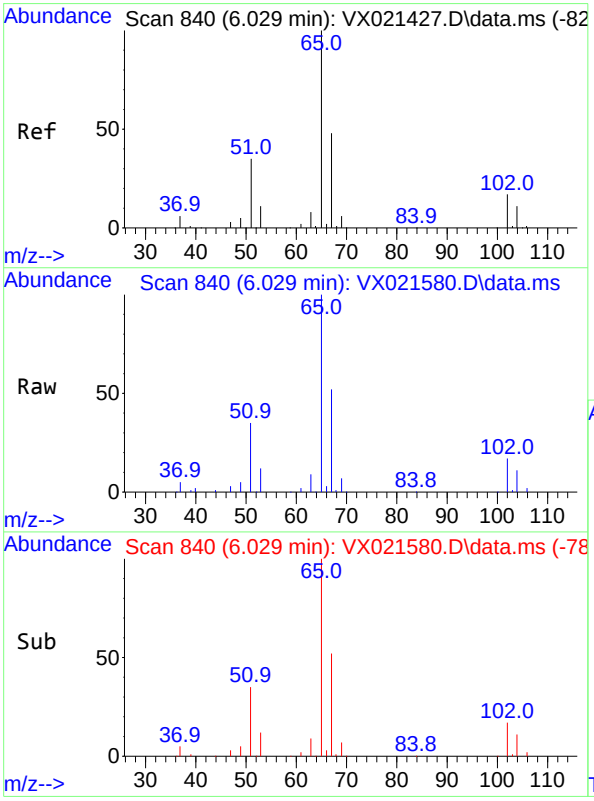



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.623 min Scan# 771
Delta R.T. -0.006 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:168 Resp: 60069

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 64.0 | 45.8 | 68.6 |

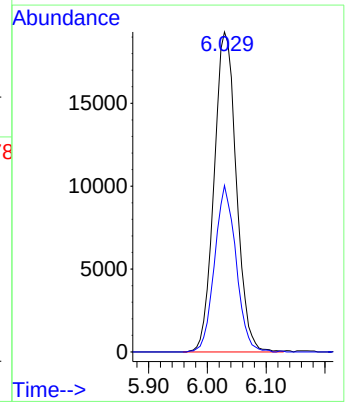


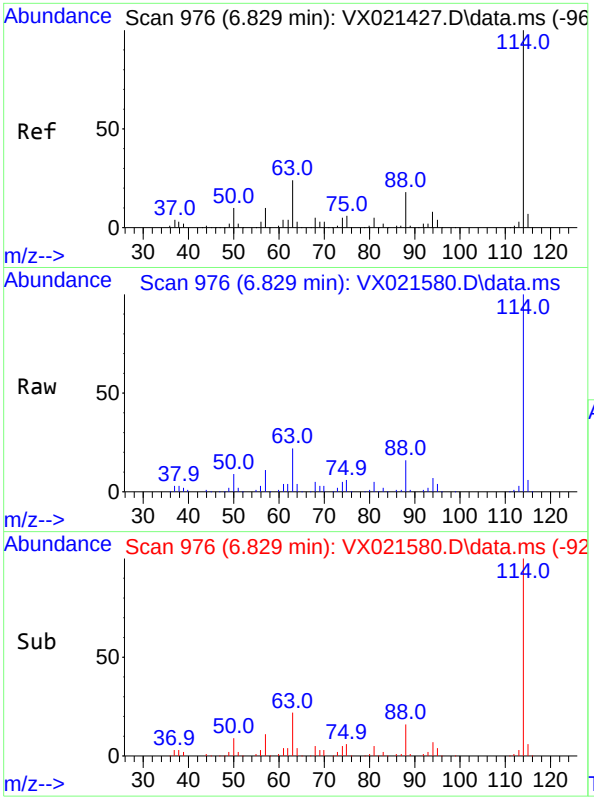

#33
1,2-Dichloroethane-d4
Concen: 50.85 ug/l
RT: 6.029 min Scan# 840
Delta R.T. -0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion: 65 Resp: 50819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.1 | 0.0 | 105.4 |



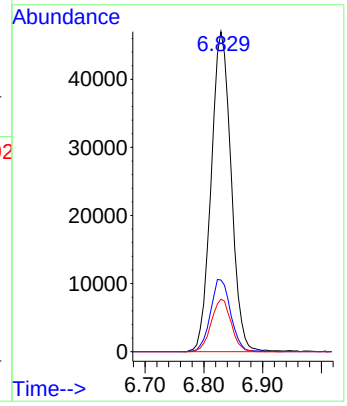
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

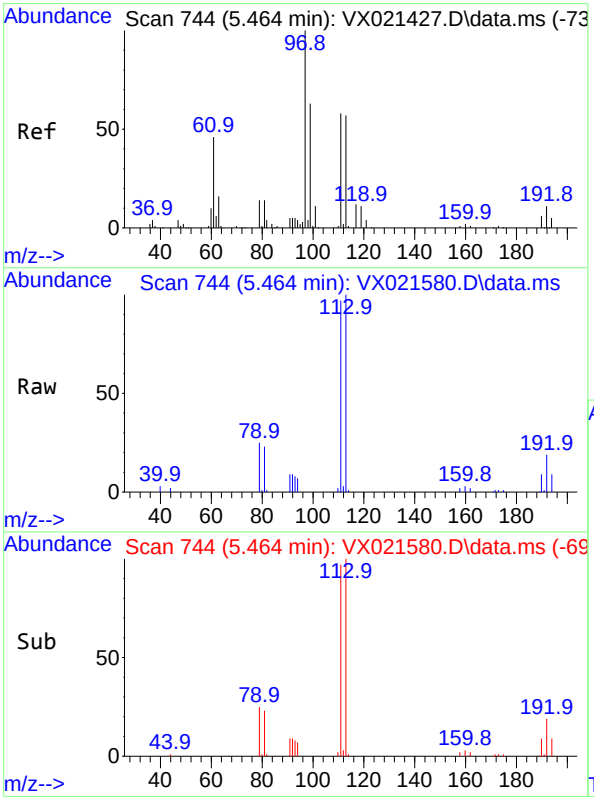



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. -0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:114 Resp: 110895

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.4 | 0.0 | 40.8 |
| 88 | 16.4 | 0.0 | 32.8 |

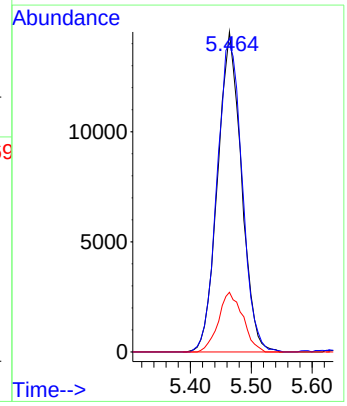


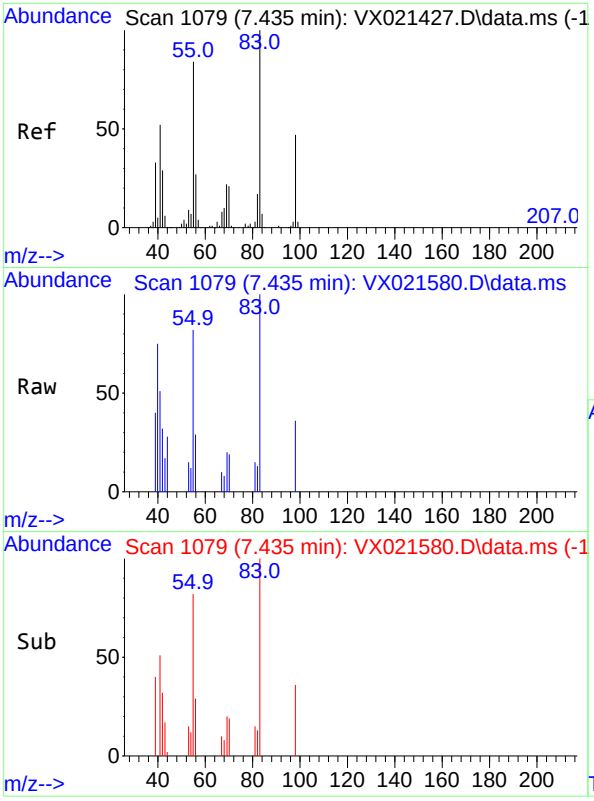

#35
Dibromofluoromethane
Concen: 50.03 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:113 Resp: 39411

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.3 | 81.9 | 122.9 |
| 192 | 19.1 | 16.7 | 25.1 |



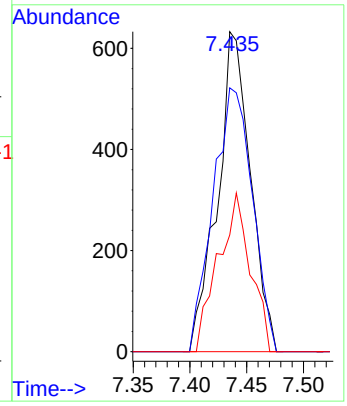
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

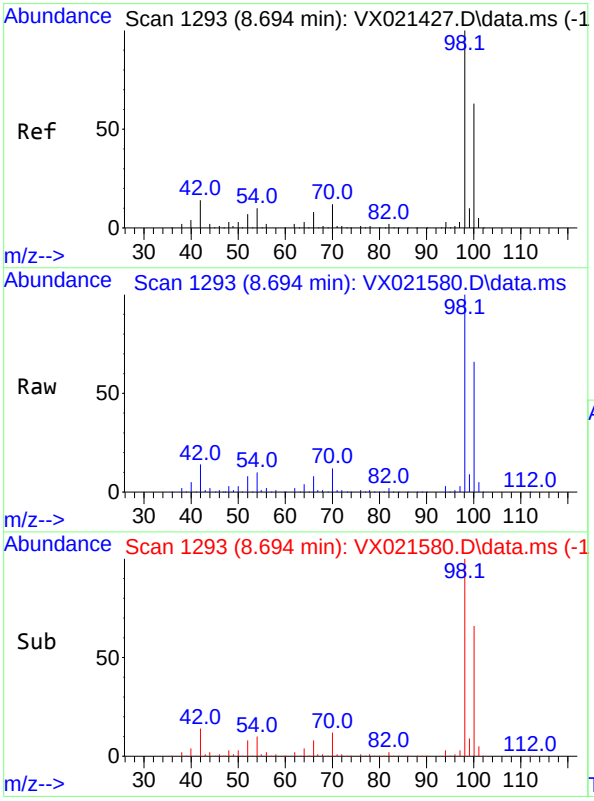



#39
Methylcyclohexane
Concen: 1.06 ug/l
RT: 7.435 min Scan# 1079
Delta R.T. -0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion: 83 Resp: 1280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 82.5 | 58.9 | 88.3 |
| 98 | 36.5 | 38.1 | 57.1# |

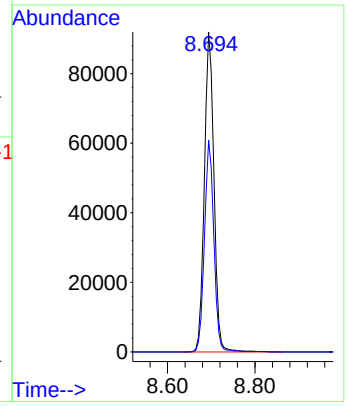


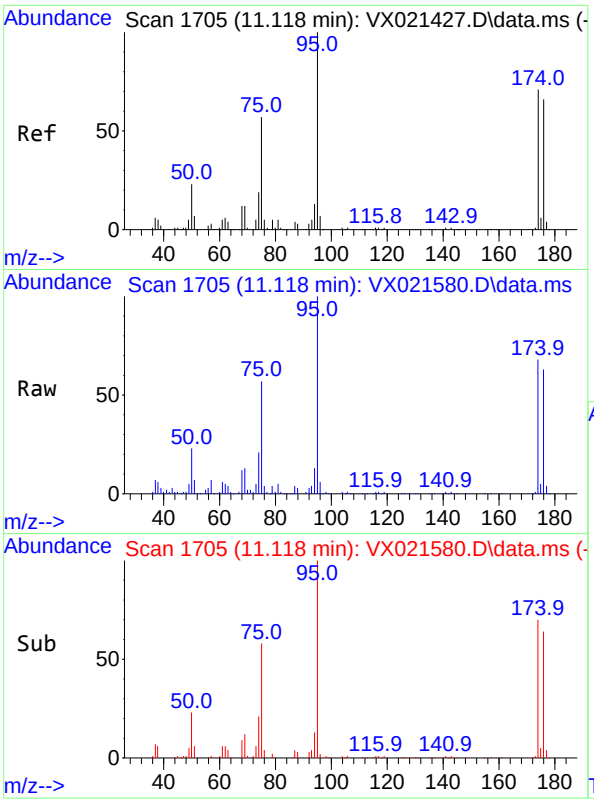

#50
Toluene-d8
Concen: 50.07 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. -0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion: 98 Resp: 140546

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.8 | 51.9 | 77.9 |



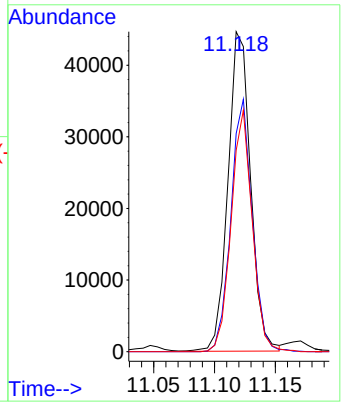
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

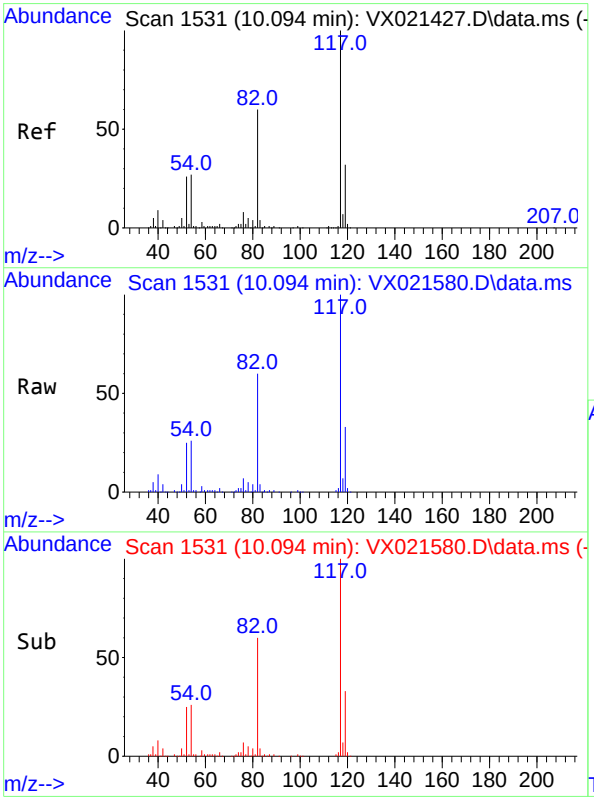



#62
4-Bromofluorobenzene
Concen: 52.79 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion: 95 Resp: 57611

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.9 | 0.0 | 154.6 |
| 176 | 70.7 | 0.0 | 155.8 |

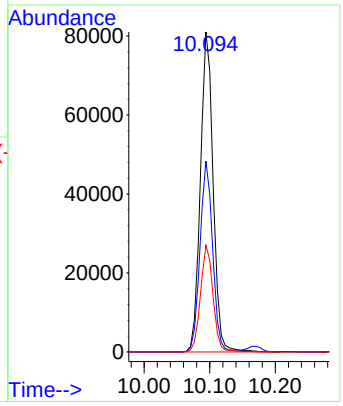


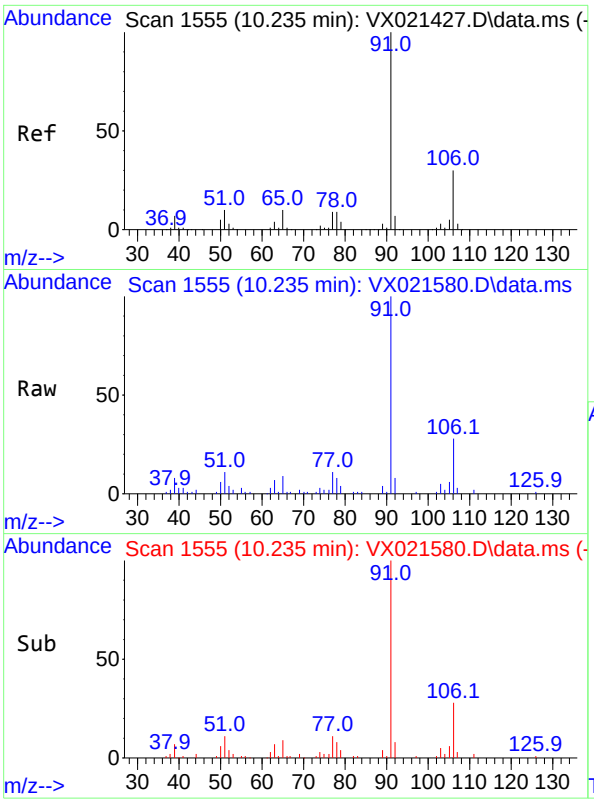

#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:117 Resp: 109772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.7 | 47.4 | 71.2 |
| 119 | 33.4 | 26.6 | 39.8 |



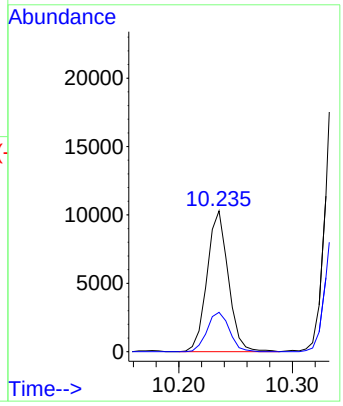
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

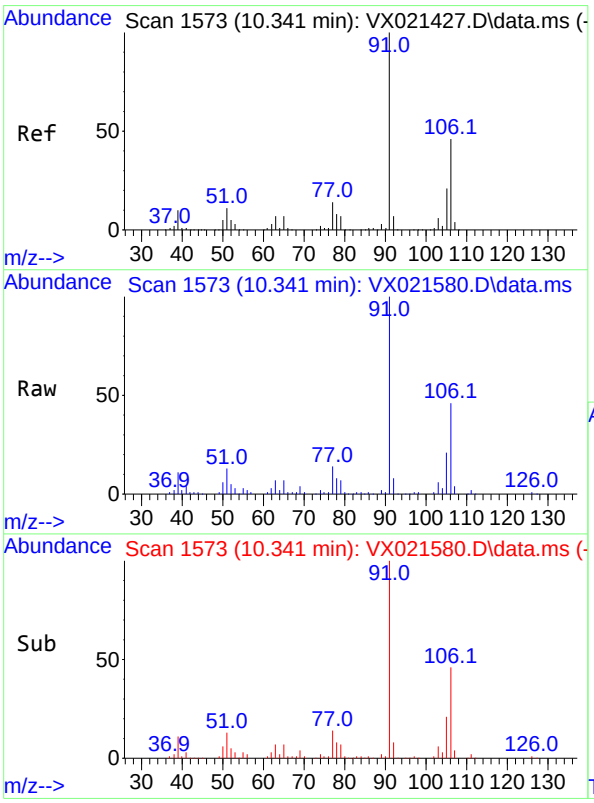



#67
Ethyl Benzene
Concen: 3.33 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion: 91 Resp: 13370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 27.9 | 24.6 | 37.0 |

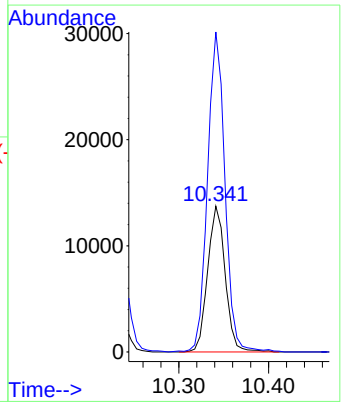


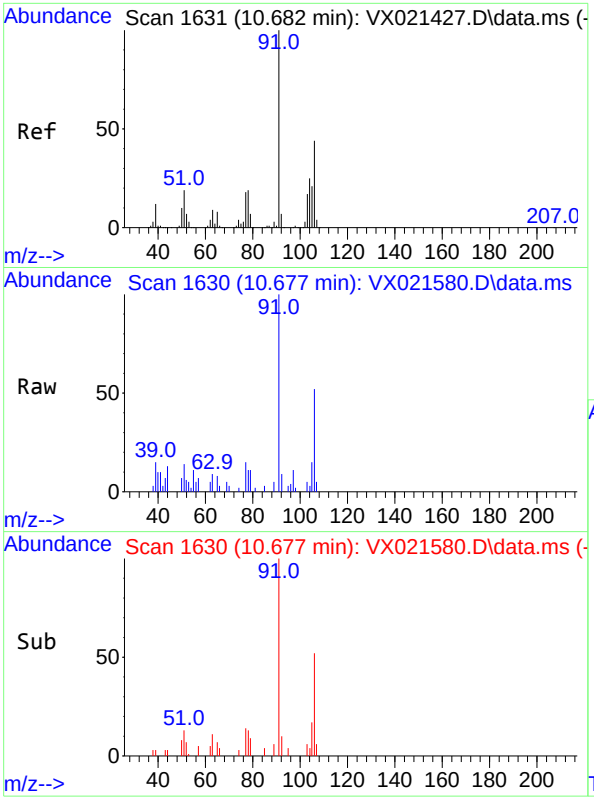

#68
m/p-Xylenes
Concen: 13.07 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:106 Resp: 18714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 217.2 | 162.8 | 244.2 |



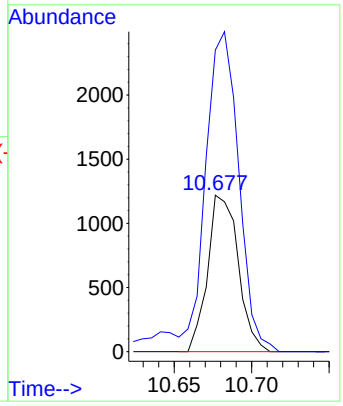
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

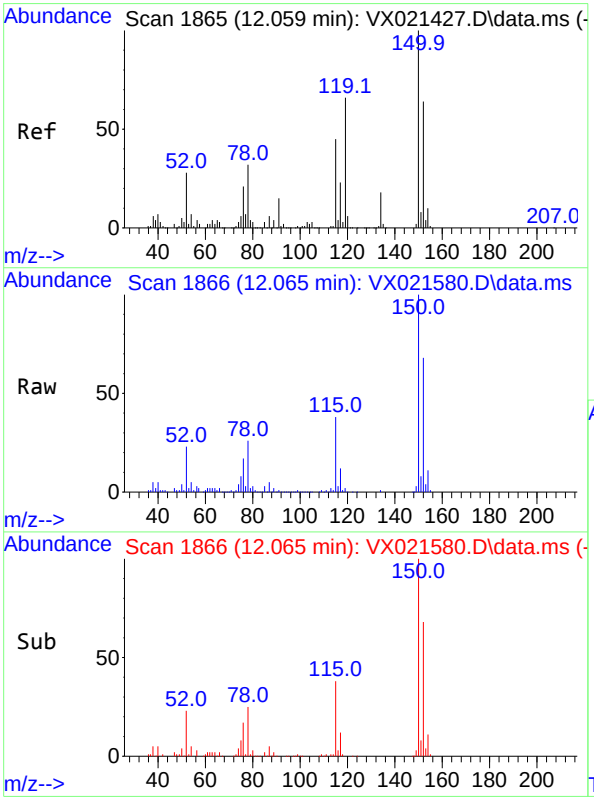



#69
o-Xylene
Concen: 1.20 ug/l
RT: 10.677 min Scan# 1630
Delta R.T. -0.005 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:106 Resp: 1671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 236.4 | 108.1 | 324.2 |

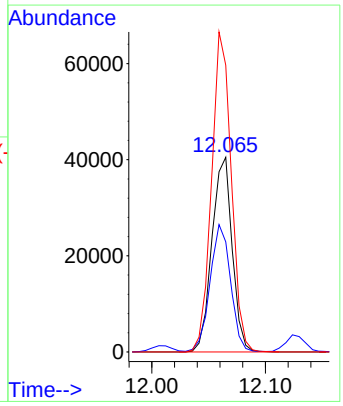


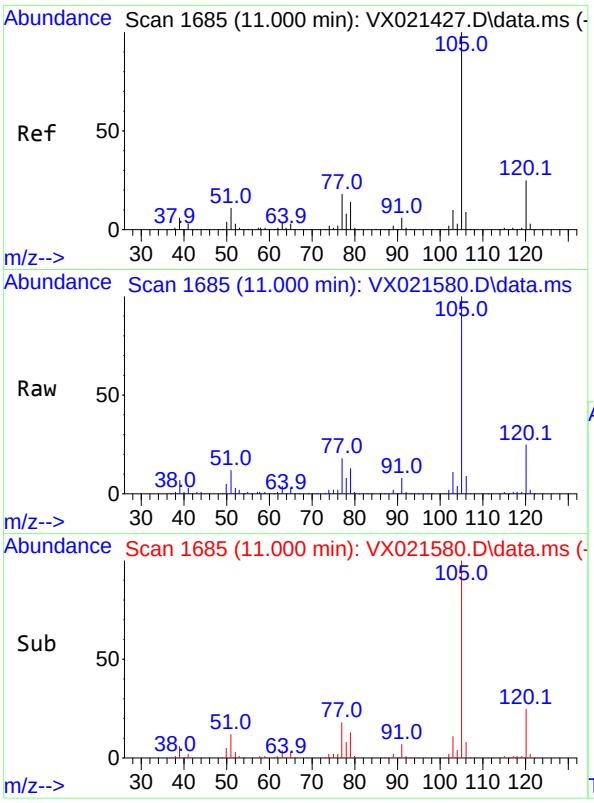

#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.065 min Scan# 1866
Delta R.T. 0.006 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:152 Resp: 50223

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 66.1 | 41.1 | 123.3 |
| 150 | 159.7 | 0.0 | 349.0 |



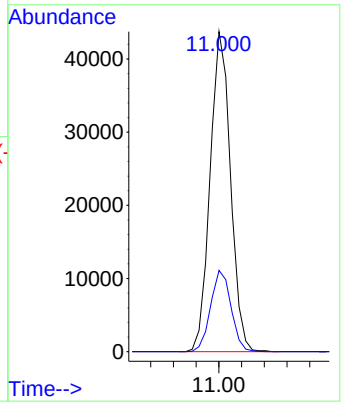
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

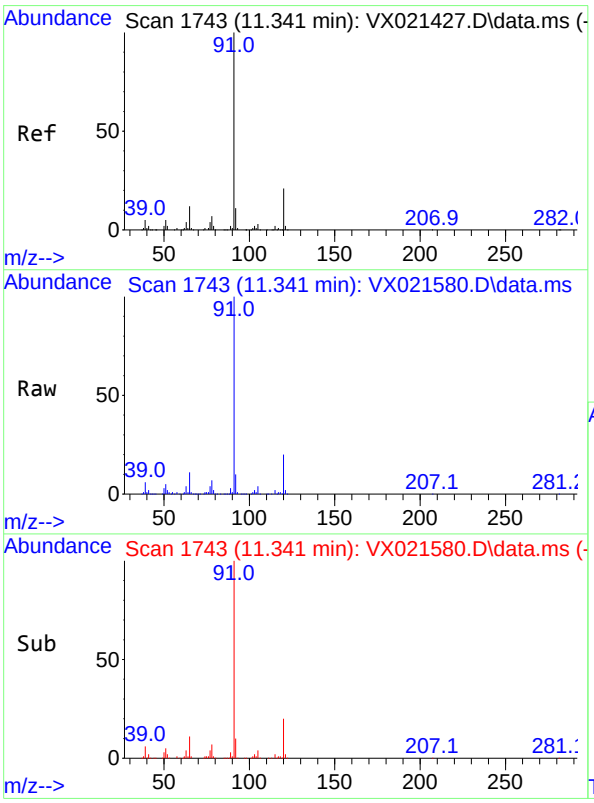



#73
Isopropylbenzene
Concen: 15.45 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:105 Resp: 54510

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.5 | 13.2 | 39.6 |

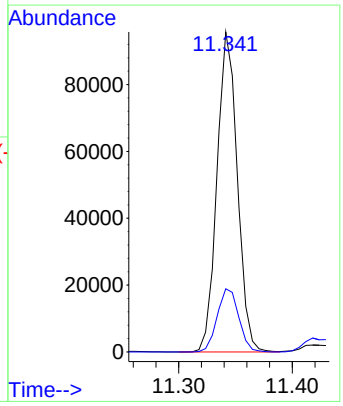


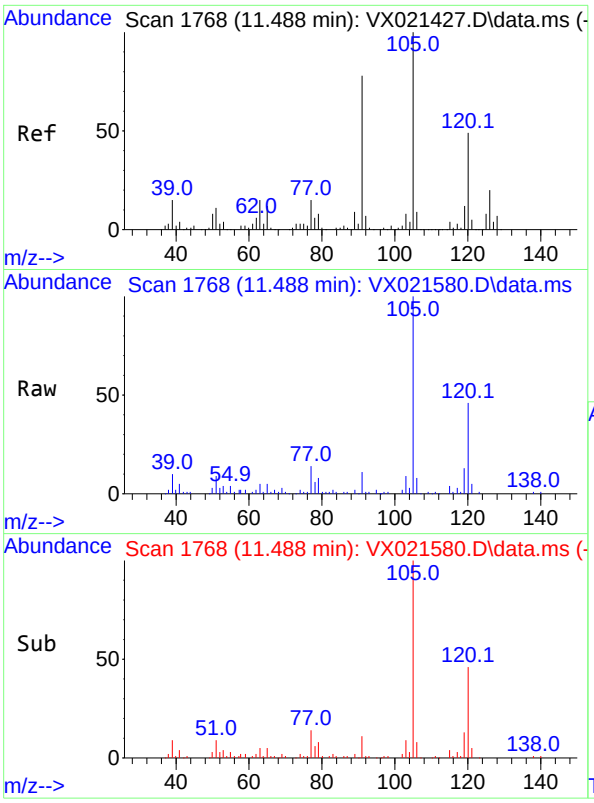

#78
n-propylbenzene
Concen: 28.61 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion: 91 Resp: 119235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 20.9 | 11.5 | 34.5 |



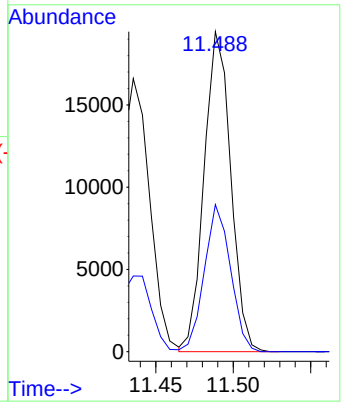
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

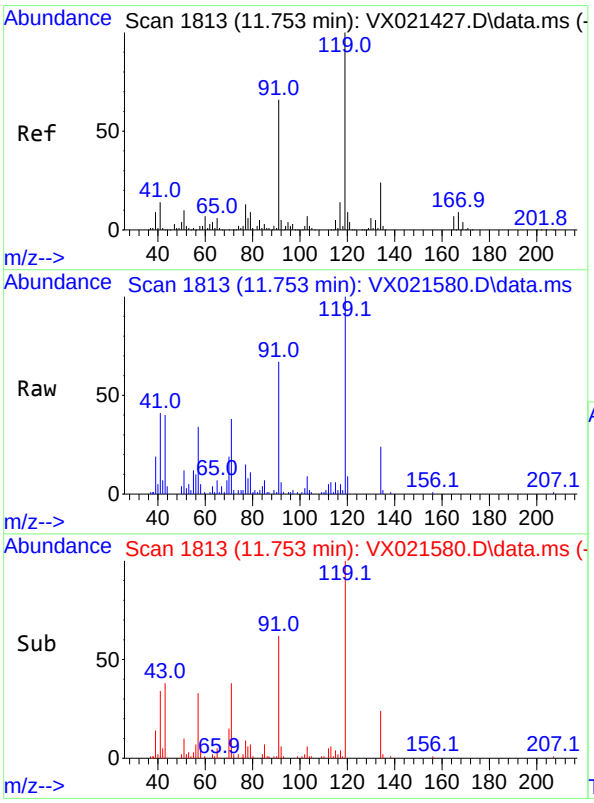



#80
1,3,5-Trimethylbenzene
Concen: 7.72 ug/l
RT: 11.488 min Scan# 1768
Delta R.T. 0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:105 Resp: 23261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 45.2 | 23.8 | 71.5 |

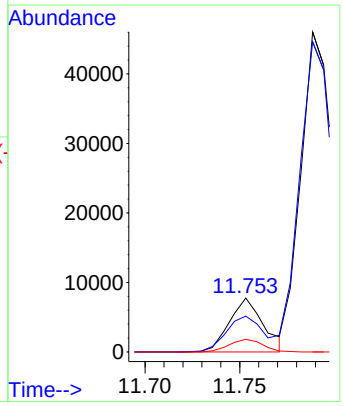


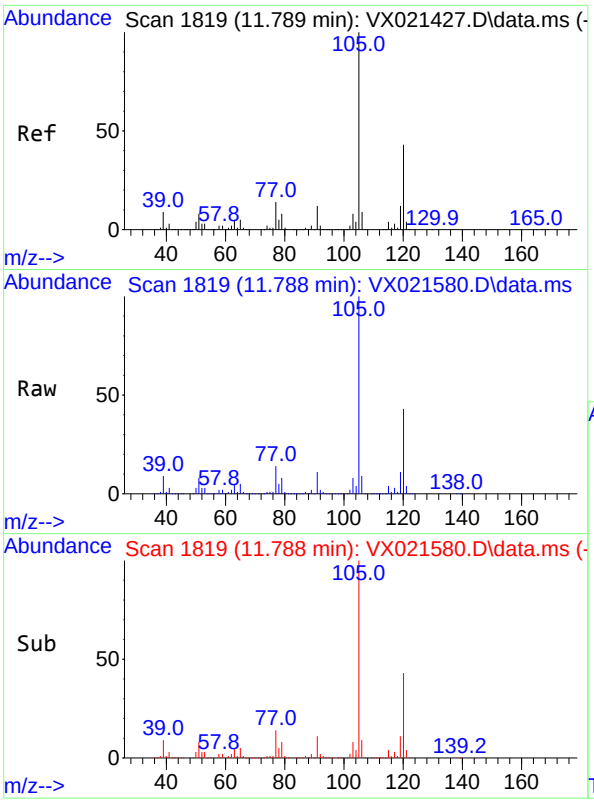

#83
tert-Butylbenzene
Concen: 3.29 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:119 Resp: 9665

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 69.2 | 27.9 | 83.7 |
| 134 | 23.1 | 11.3 | 33.9 |



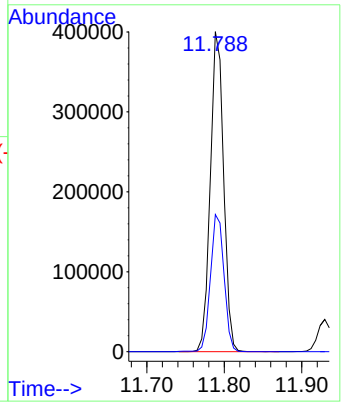
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

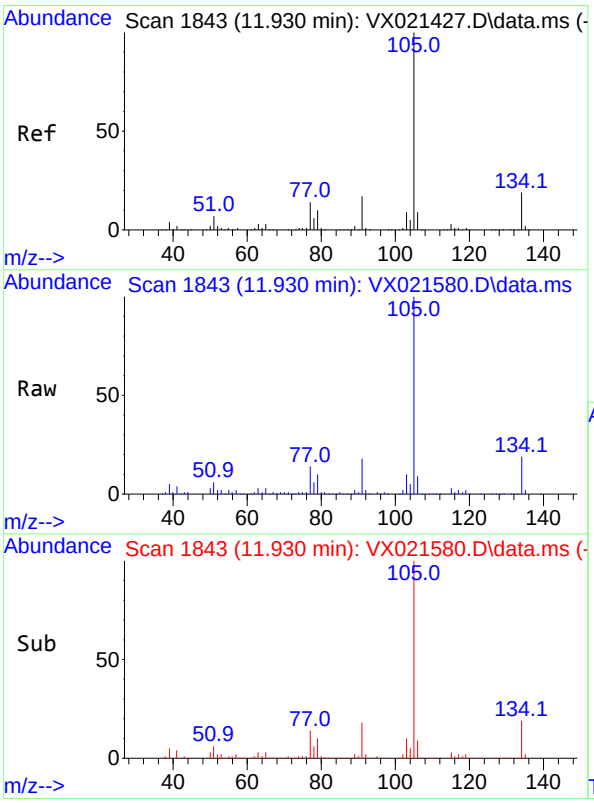



#84
1,2,4-Trimethylbenzene
Concen: 156.93 ug/l
RT: 11.788 min Scan# 1819
Delta R.T. -0.001 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:105 Resp: 476928

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.8 | 22.4 | 67.3 |

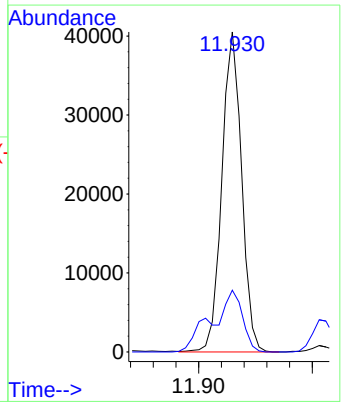


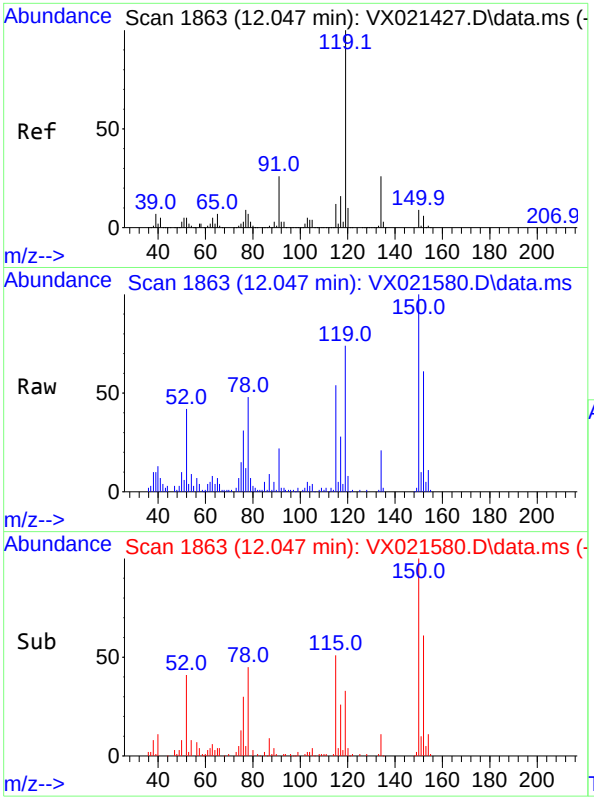

#85
sec-Butylbenzene
Concen: 14.43 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:105 Resp: 48871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.8 | 10.0 | 29.8 |



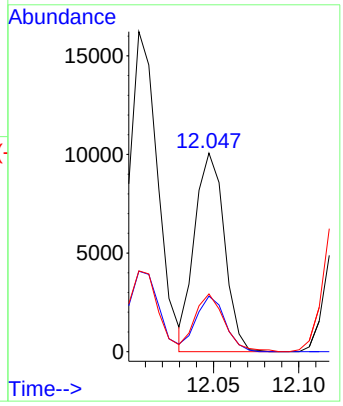
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

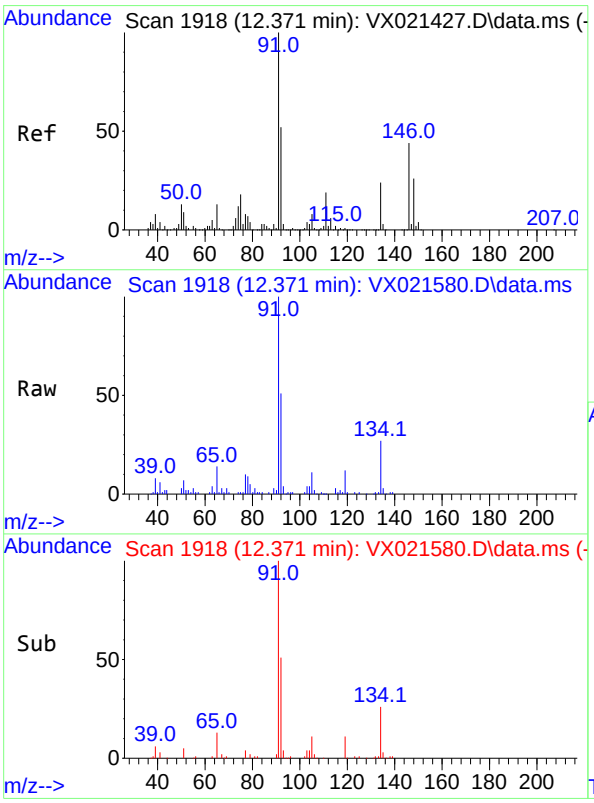



#86
p-Isopropyltoluene
Concen: 3.97 ug/l
RT: 12.047 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:119 Resp: 12246

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 27.3 | 12.9 | 38.7 |
| 91 | 29.1 | 11.7 | 35.0 |

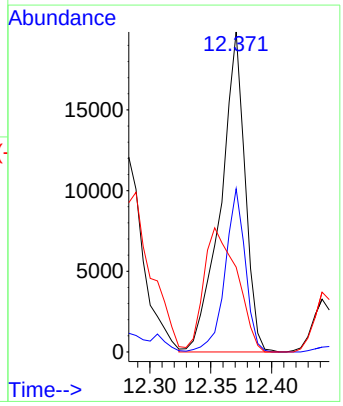


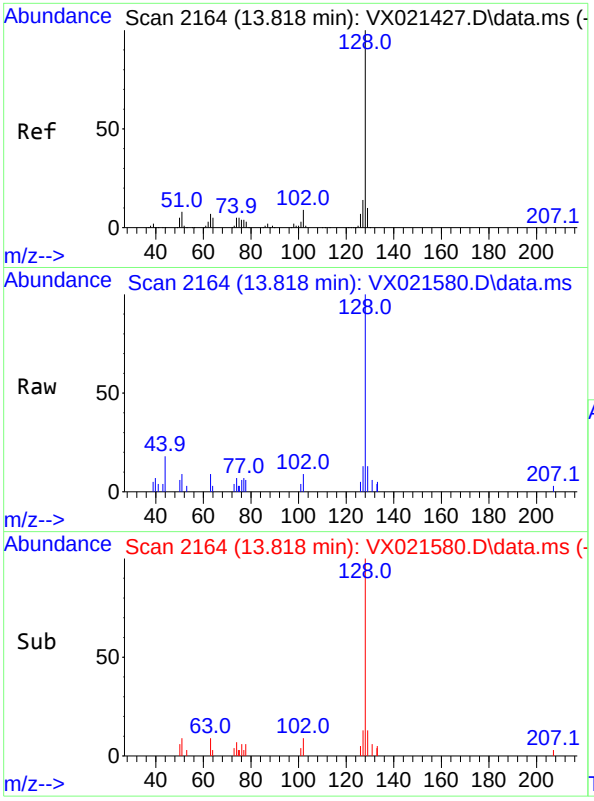

#89
n-Butylbenzene
Concen: 9.77 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. -0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion: 91 Resp: 27595

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 42.3 | 27.4 | 82.0 |
| 134 | 52.9 | 13.2 | 39.5# |



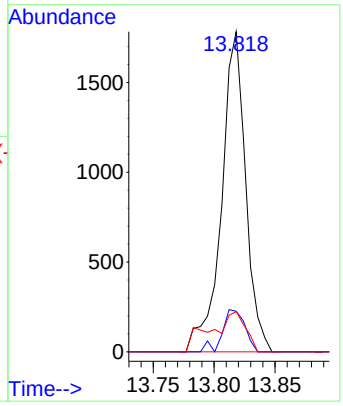
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R




#95
Naphthalene
Concen: 0.75 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021580.D
Acq: 29 Mar 2021 16:26

Tgt Ion:128 Resp: 2459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.2 | 10.3 | 15.5 |
| 129 | 9.6 | 8.8 | 13.2 |



LSC Area Percent Report

Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :** MSVOA_X
**ClientSampleId :** MW-3R

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

Signal : TIC: VX021580.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.464 | 726 | 744 | 756 | rBV | 48465 | 135484 | 9.65% | 1.944% |
| 2 | 5.629 | 761 | 772 | 789 | rVB | 68613 | 193263 | 13.76% | 2.773% |
| 3 | 6.029 | 829 | 840 | 858 | rBV | 51718 | 135438 | 9.64% | 1.943% |
| 4 | 6.829 | 965 | 976 | 988 | rBV | 117898 | 277962 | 19.79% | 3.988% |
| 5 | 8.694 | 1287 | 1293 | 1303 | rVB | 255146 | 385112 | 27.42% | 5.526% |
| 6 | 10.094 | 1526 | 1531 | 1539 | rBV | 267237 | 356034 | 25.35% | 5.108% |
| 7 | 10.171 | 1539 | 1544 | 1548 | rVB | 9858 | 15772 | 1.12% | 0.226% |
| 8 | 10.235 | 1548 | 1555 | 1560 | rBV | 26976 | 39241 | 2.79% | 0.563% |
| 9 | 10.341 | 1560 | 1573 | 1579 | rBV | 95623 | 157639 | 11.23% | 2.262% |
| 10 | 10.624 | 1609 | 1621 | 1628 | rBV5 | 20236 | 52660 | 3.75% | 0.756% |
| 11 | 10.682 | 1628 | 1631 | 1640 | rVB4 | 8845 | 19719 | 1.40% | 0.283% |
| 12 | 10.818 | 1645 | 1654 | 1659 | rVB2 | 43438 | 69422 | 4.94% | 0.996% |
| 13 | 10.894 | 1659 | 1667 | 1671 | rBV3 | 39857 | 61213 | 4.36% | 0.878% |
| 14 | 11.000 | 1680 | 1685 | 1690 | rBV | 113501 | 142569 | 10.15% | 2.046% |
| 15 | 11.118 | 1700 | 1705 | 1710 | rBV | 223429 | 291246 | 20.74% | 4.179% |
| 16 | 11.165 | 1710 | 1713 | 1717 | rVB | 17913 | 23045 | 1.64% | 0.331% |
| 17 | 11.259 | 1721 | 1729 | 1738 | rVV4 | 24210 | 38922 | 2.77% | 0.558% |
| 18 | 11.341 | 1738 | 1743 | 1752 | rVV | 195842 | 255081 | 18.16% | 3.660% |
| 19 | 11.418 | 1752 | 1756 | 1757 | rVV | 44440 | 51017 | 3.63% | 0.732% |
| 20 | 11.435 | 1757 | 1759 | 1763 | rVV | 51283 | 64173 | 4.57% | 0.921% |
| 21 | 11.488 | 1763 | 1768 | 1777 | rVB | 61206 | 96329 | 6.86% | 1.382% |
| 22 | 11.653 | 1791 | 1796 | 1803 | rBV5 | 24652 | 43535 | 3.10% | 0.625% |
| 23 | 11.753 | 1809 | 1813 | 1815 | rBV | 40460 | 46549 | 3.31% | 0.668% |
| 24 | 11.788 | 1815 | 1819 | 1829 | rVB | 1160962 | 1404249 | 100.00% | 20.148% |
| 25 | 11.906 | 1829 | 1839 | 1840 | rBV | 54698 | 77934 | 5.55% | 1.118% |
| 26 | 11.930 | 1840 | 1843 | 1848 | rVB | 103654 | 125764 | 8.96% | 1.804% |
| 27 | 11.983 | 1848 | 1852 | 1853 | rBV | 13084 | 14043 | 1.00% | 0.201% |
| 28 | 12.006 | 1853 | 1856 | 1860 | rVV | 44702 | 52479 | 3.74% | 0.753% |
| 29 | 12.059 | 1860 | 1865 | 1871 | rVB2 | 277919 | 371749 | 26.47% | 5.334% |
| 30 | 12.124 | 1871 | 1876 | 1887 | rVB | 236883 | 294995 | 21.01% | 4.233% |
| 31 | 12.218 | 1887 | 1892 | 1898 | rVB | 36639 | 50890 | 3.62% | 0.730% |
| 32 | 12.283 | 1898 | 1903 | 1910 | rBV2 | 212928 | 313594 | 22.33% | 4.500% |
| 33 | 12.353 | 1910 | 1915 | 1923 | rVB2 | 94680 | 183368 | 13.06% | 2.631% |
| 34 | 12.441 | 1924 | 1930 | 1937 | rBV | 41653 | 56886 | 4.05% | 0.816% |
| 35 | 12.571 | 1946 | 1952 | 1954 | rBV | 76651 | 106709 | 7.60% | 1.531% |
| 36 | 12.594 | 1954 | 1956 | 1960 | rVV | 80310 | 80913 | 5.76% | 1.161% |

Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 37 | 12.653 | 1961 | 1966 | 1969 | rVV | 163260 | 197806 | 14.09% | 2.838% |
| 38 | 12.683 | 1969 | 1971 | 1976 | rVB | 47914 | 53472 | 3.81% | 0.767% |
| 39 | 12.742 | 1976 | 1981 | 1989 | rBV3 | 101423 | 185690 | 13.22% | 2.664% |
| 40 | 12.883 | 2001 | 2005 | 2010 | rVB2 | 44020 | 61188 | 4.36% | 0.878% |
| 41 | 12.959 | 2010 | 2018 | 2022 | rBV2 | 47328 | 73248 | 5.22% | 1.051% |
| 42 | 13.000 | 2022 | 2025 | 2032 | rVB | 74966 | 88692 | 6.32% | 1.273% |
| 43 | 13.065 | 2032 | 2036 | 2042 | rBV3 | 17347 | 26701 | 1.90% | 0.383% |
| 44 | 13.130 | 2042 | 2047 | 2052 | rBV | 11329 | 15346 | 1.09% | 0.220% |
| 45 | 13.206 | 2057 | 2060 | 2063 | rVB | 13122 | 14756 | 1.05% | 0.212% |
| 46 | 13.330 | 2076 | 2081 | 2087 | rVB2 | 79795 | 117445 | 8.36% | 1.685% |
| 47 | 13.459 | 2099 | 2103 | 2109 | rVB | 38459 | 50185 | 3.57% | 0.720% |

Sum of corrected areas: 6969527

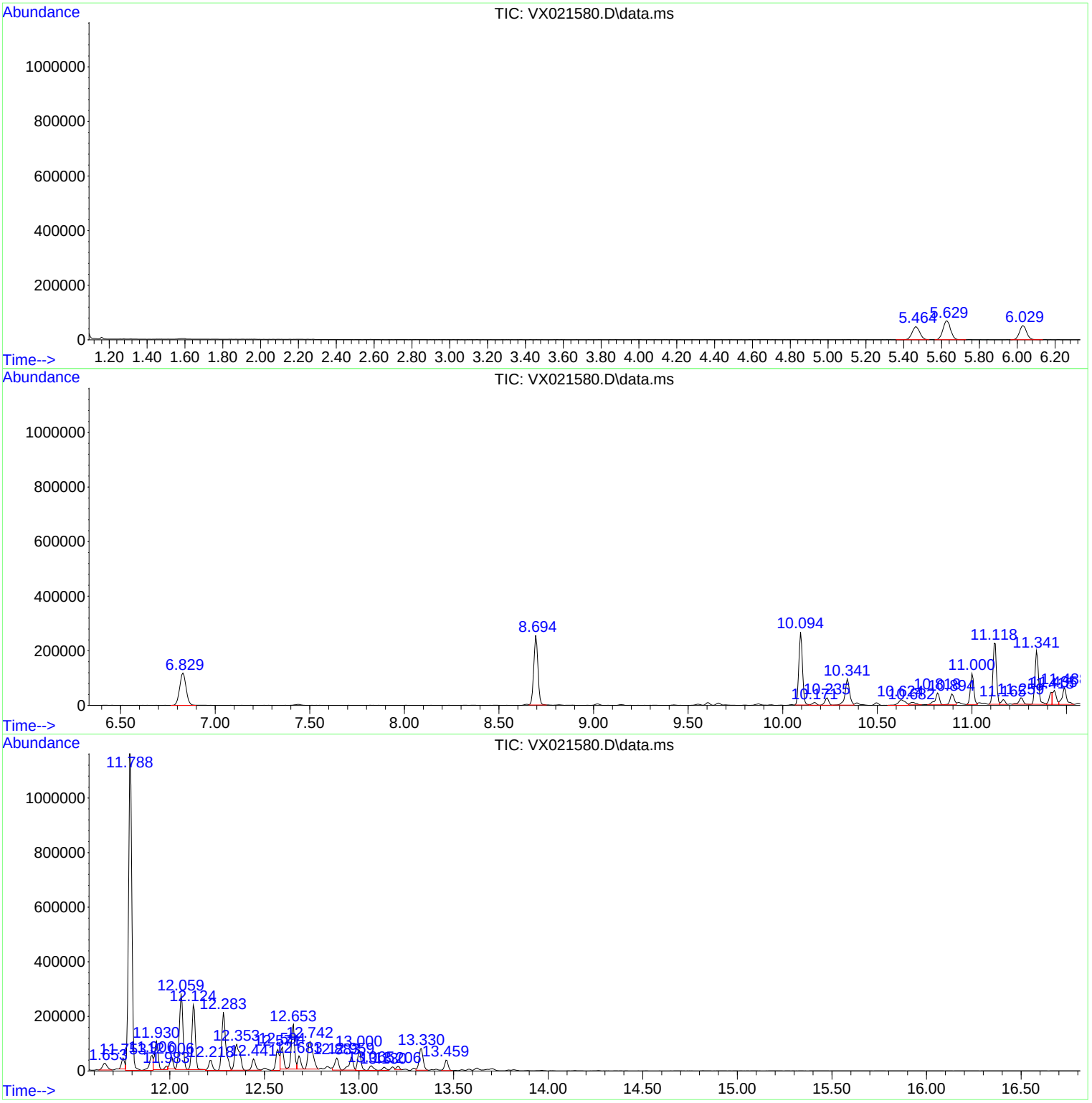
Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P



Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

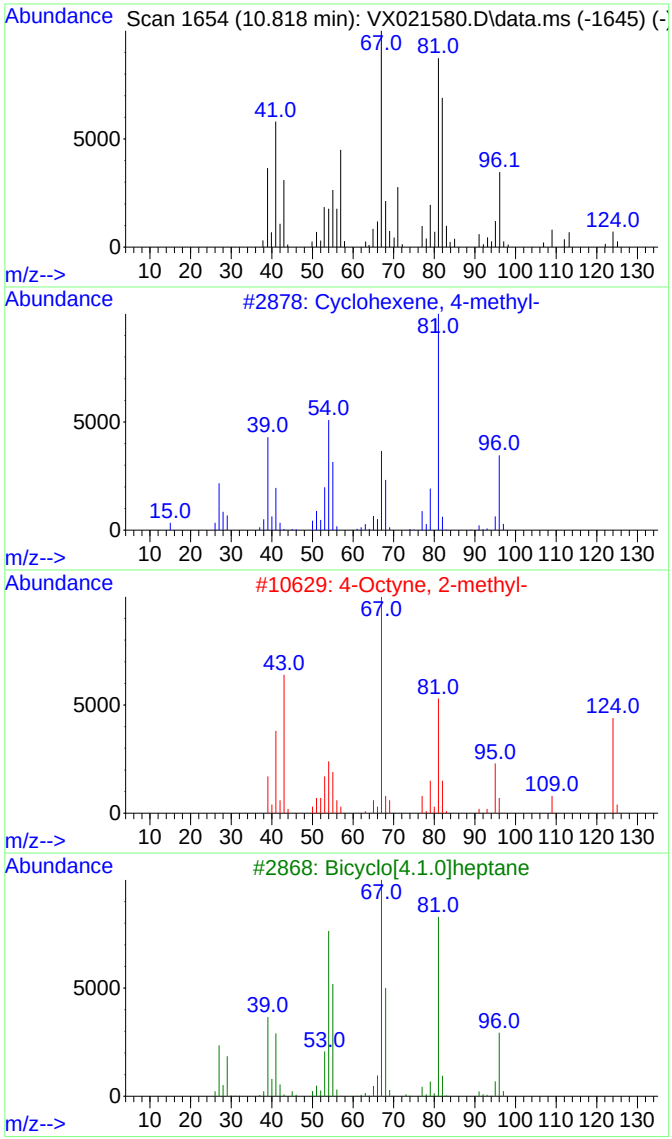
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Quant Title : SW846 8260

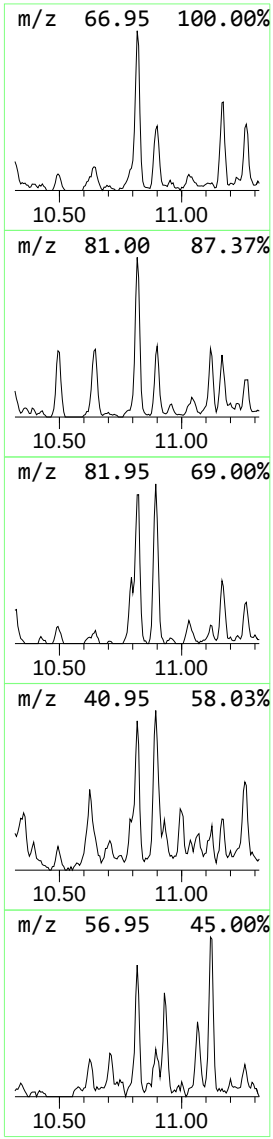
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 1 Cyclohexene, 4-methyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 10.818 | 9.75 ug/l | 69422 | Chlorobenzene-d5 | 10.094 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Cyclohexene, 4-methyl- | 96 | C7H12 | 000591-47-9 | 55 |
| 2 | 4-Octyne, 2-methyl- | 124 | C9H16 | 010306-94-2 | 52 |
| 3 | Bicyclo[4.1.0]heptane | 96 | C7H12 | 000286-08-8 | 52 |
| 4 | 1,4-Hexadiene, 2-methyl- | 96 | C7H12 | 001119-14-8 | 46 |
| 5 | Ethylidenecycloheptane | 124 | C9H16 | 010494-87-8 | 43 |



Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

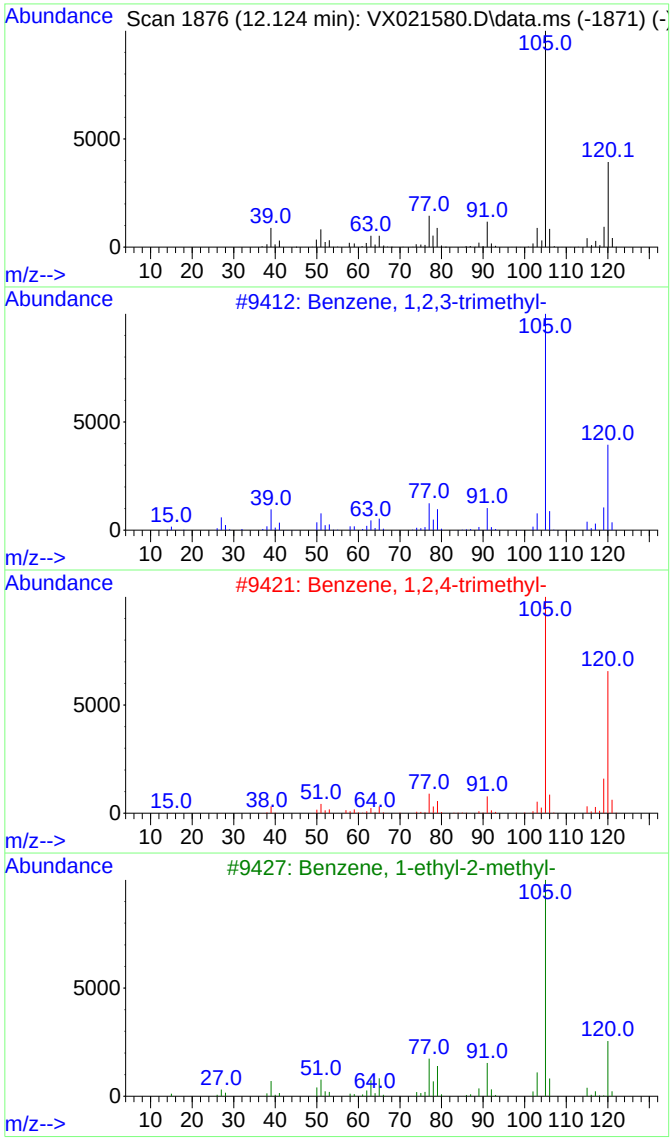
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Quant Title : SW846 8260

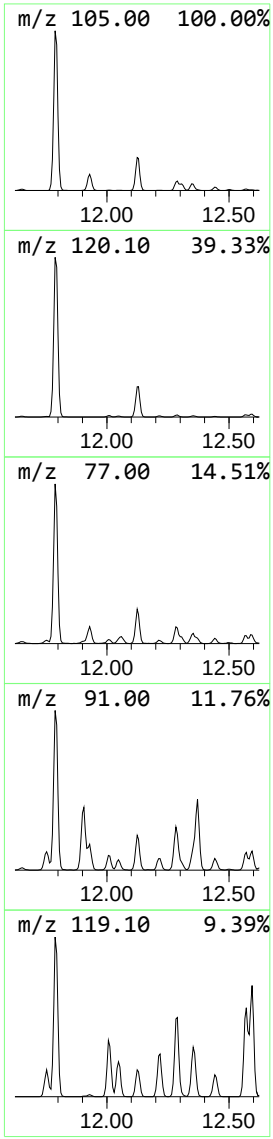
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 2 Benzene, 1,2,3-trimethyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.124 | 39.68 ug/l | 294995 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 95 |
| 2 | Benzene, 1,2,4-trimethyl- | 120 | C9H12 | 000095-63-6 | 94 |
| 3 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 93 |
| 4 | Mesitylene | 120 | C9H12 | 000108-67-8 | 91 |
| 5 | Benzene, 1-ethyl-3-methyl- | 120 | C9H12 | 000620-14-4 | 90 |



Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

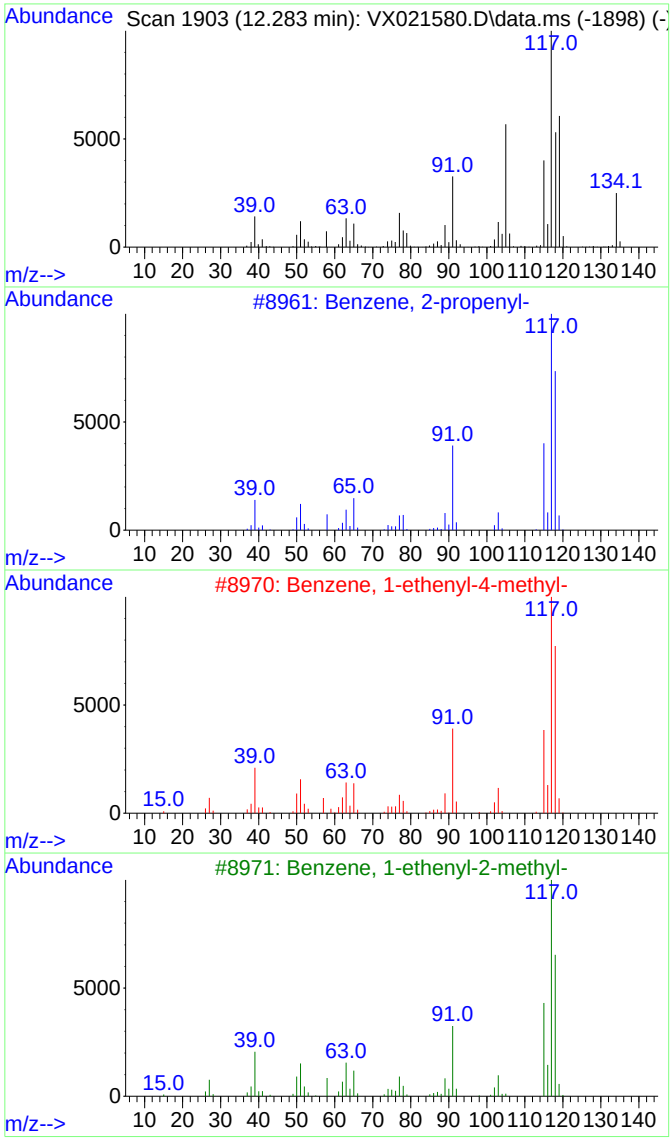
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

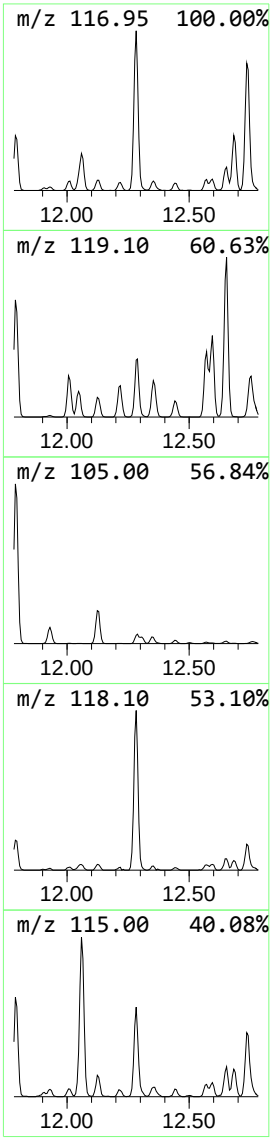
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 3 Benzene, 2-propenyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.283 | 42.18 ug/l | 313594 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-propenyl- | 118 | C9H10 | 000300-57-2 | 91 |
| 2 | Benzene, 1-ethenyl-4-methyl- | 118 | C9H10 | 000622-97-9 | 86 |
| 3 | Benzene, 1-ethenyl-2-methyl- | 118 | C9H10 | 000611-15-4 | 83 |
| 4 | Indane | 118 | C9H10 | 000496-11-7 | 70 |
| 5 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 60 |



Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

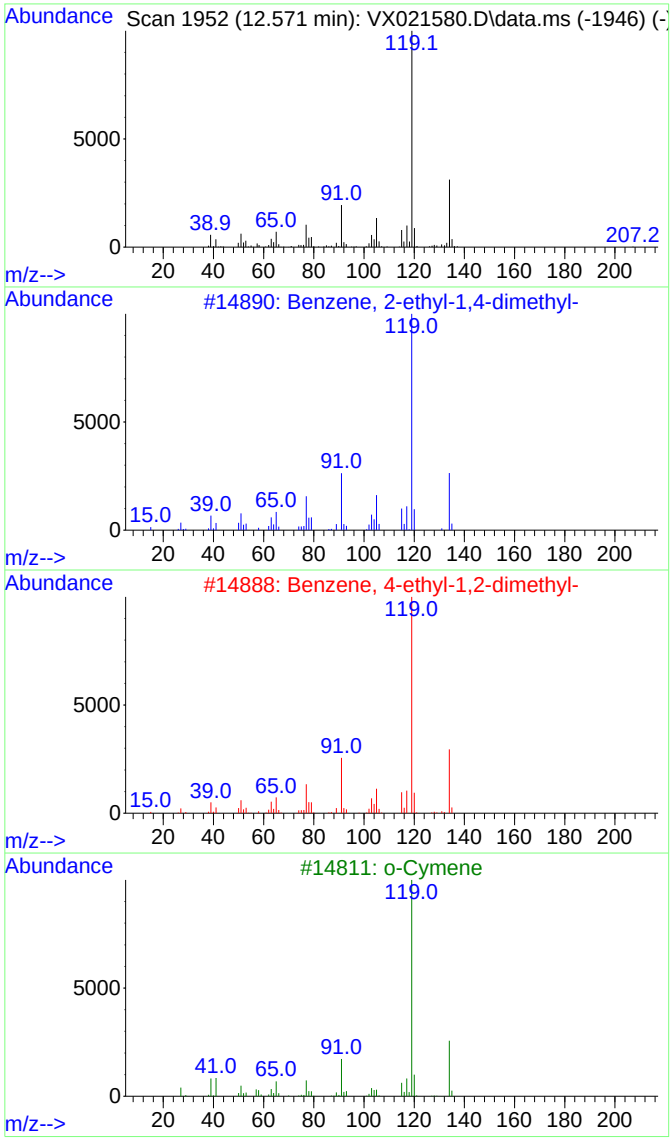
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

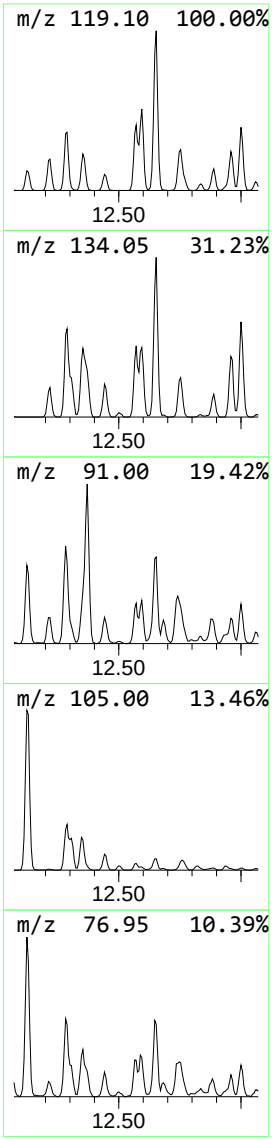
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 4 Benzene, 2-ethyl-1,4-dimethyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.571 | 14.35 ug/l | 106709 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 96 |
| 2 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 96 |
| 3 | o-Cymene | 134 | C10H14 | 000527-84-4 | 95 |
| 4 | p-Cymene | 134 | C10H14 | 000099-87-6 | 95 |
| 5 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 95 |



Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

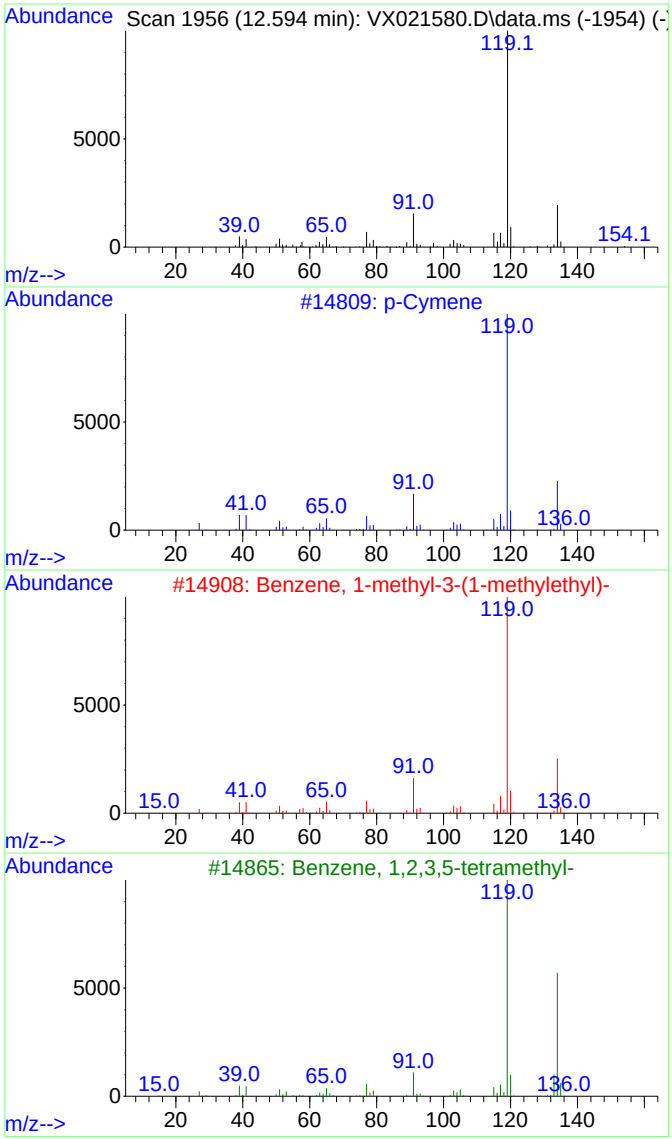
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Quant Title : SW846 8260

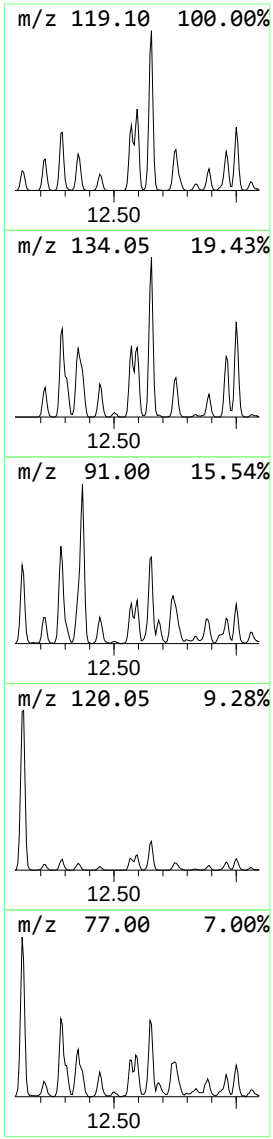
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 5 p-Cymene Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.595 | 10.88 ug/l | 80913 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | p-Cymene | 134 | C10H14 | 000099-87-6 | 95 |
| 2 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 94 |
| 3 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 91 |
| 4 | Benzene, 2-ethyl-1,3-dimethyl- | 134 | C10H14 | 002870-04-4 | 91 |
| 5 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 91 |



Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

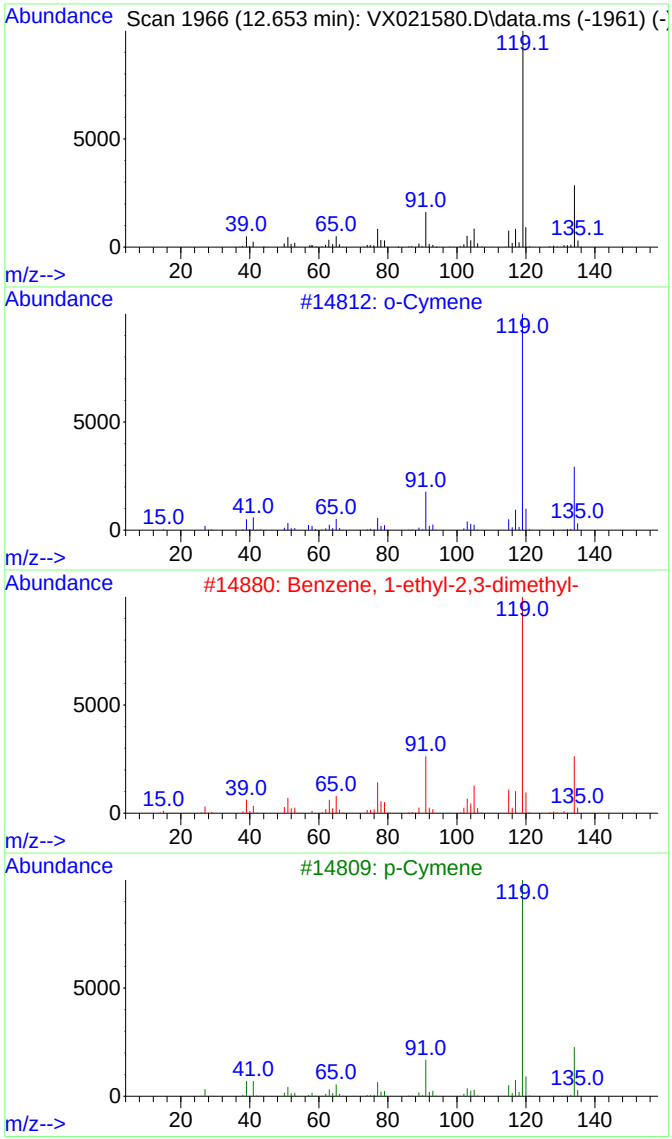
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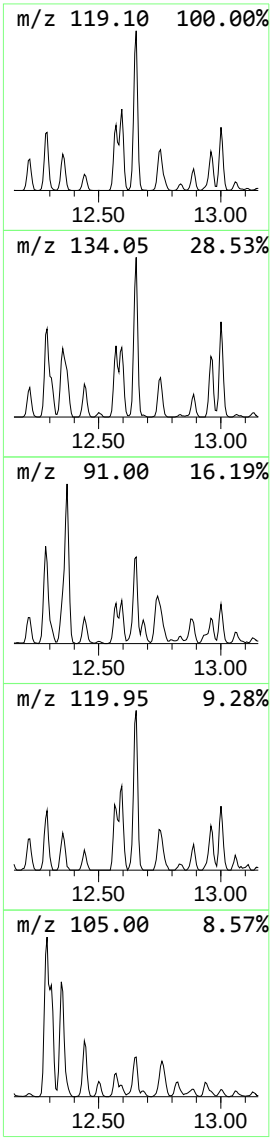
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 6 o-Cymene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.653 | 26.60 ug/l | 197806 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | o-Cymene | 134 | C10H14 | 000527-84-4 | 97 |
| 2 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 96 |
| 3 | p-Cymene | 134 | C10H14 | 000099-87-6 | 95 |
| 4 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 95 |
| 5 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 95 |



Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

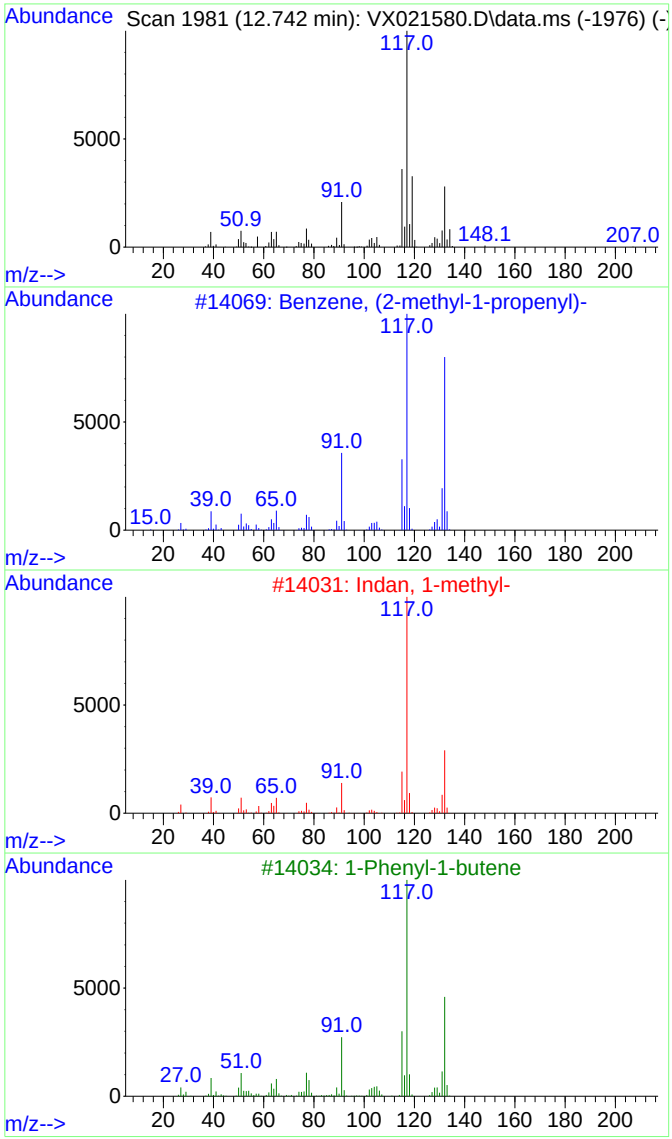
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Quant Title : SW846 8260

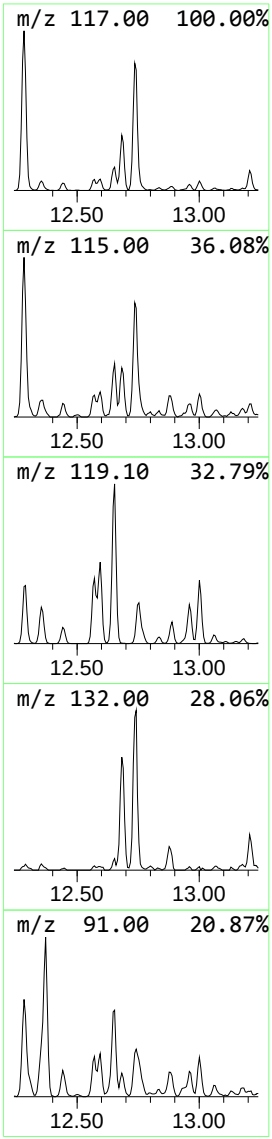
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 7 Benzene, (2-methyl-1-propen... Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.742 | 24.98 ug/l | 185690 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, (2-methyl-1-propenyl)- | 132 | C10H12 | 000768-49-0 | 87 |
| 2 | Indan, 1-methyl- | 132 | C10H12 | 000767-58-8 | 87 |
| 3 | 1-Phenyl-1-butene | 132 | C10H12 | 000824-90-8 | 87 |
| 4 | Benzene, 1-methyl-2-(2-propenyl)- | 132 | C10H12 | 001587-04-8 | 83 |
| 5 | Benzene, 1-ethenyl-3-ethyl- | 132 | C10H12 | 007525-62-4 | 83 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

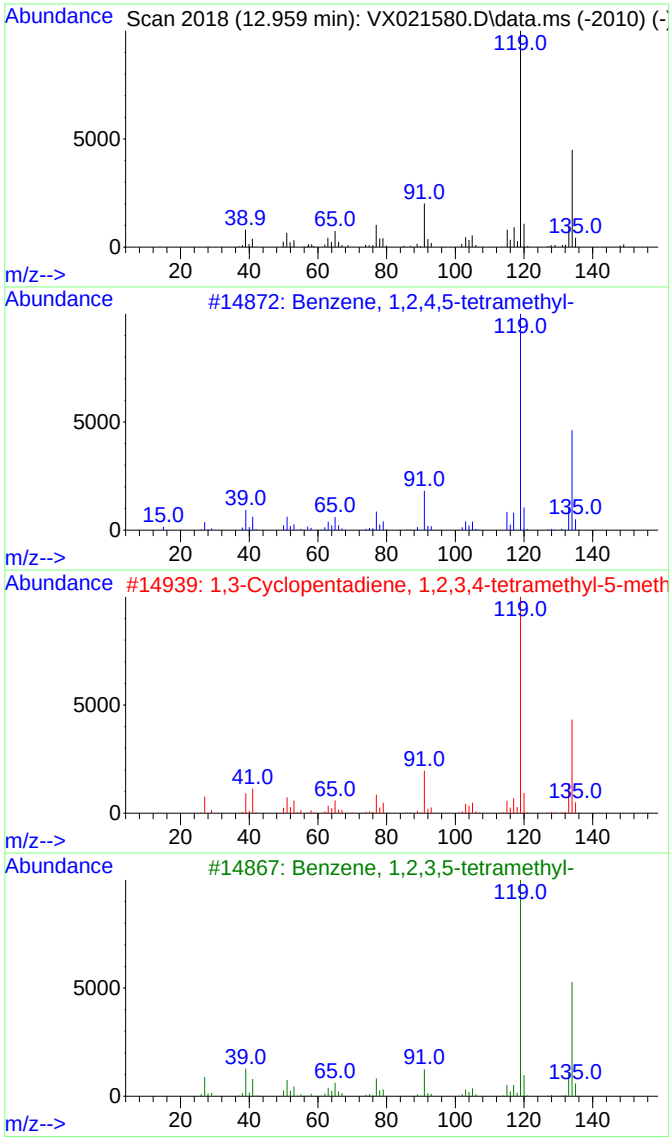
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Quant Title : SW846 8260

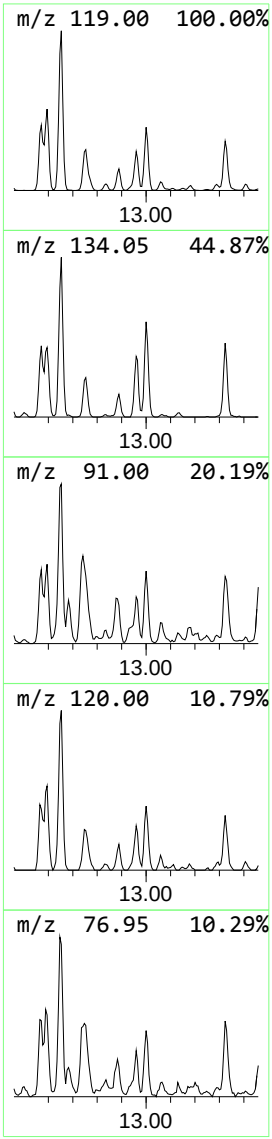
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 8 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.959 | 9.85 ug/l | 73248 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 96 |
| 2 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 94 |
| 3 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 94 |
| 4 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 93 |
| 5 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 93 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

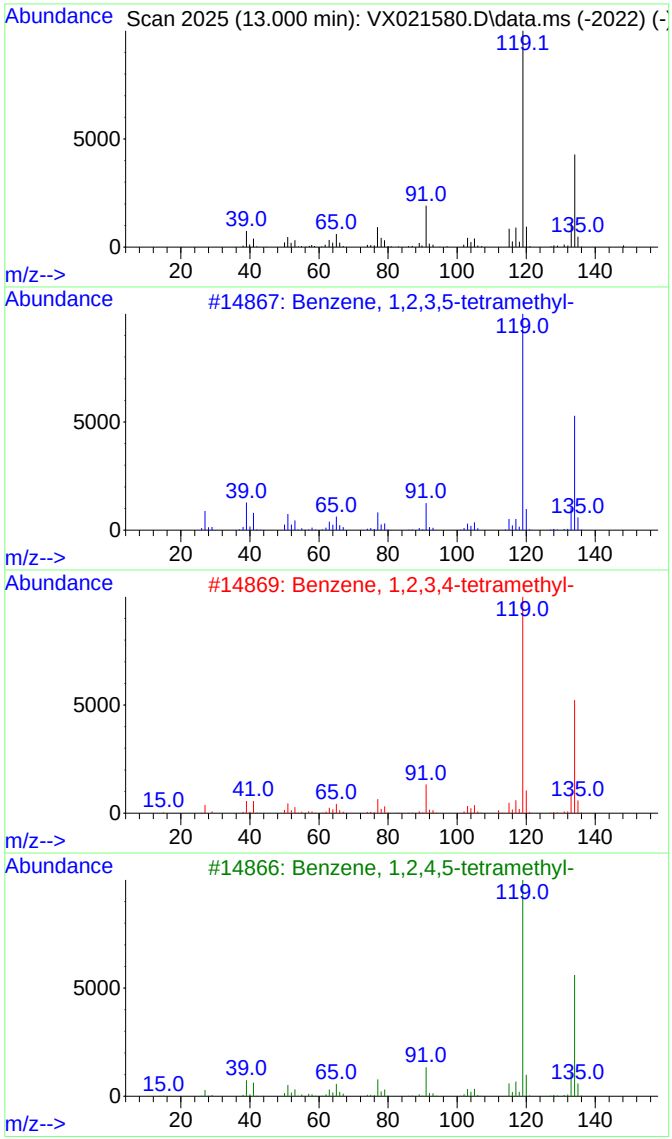
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Quant Title : SW846 8260

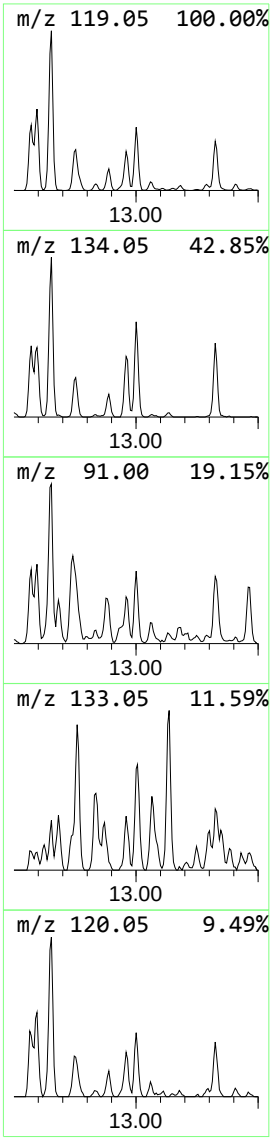
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 9 Benzene, 1,2,3,5-tetramethyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.000 | 11.93 ug/l | 88692 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 96 |
| 2 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 3 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 95 |
| 4 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 94 |
| 5 | o-Cymene | 134 | C10H14 | 000527-84-4 | 93 |



Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

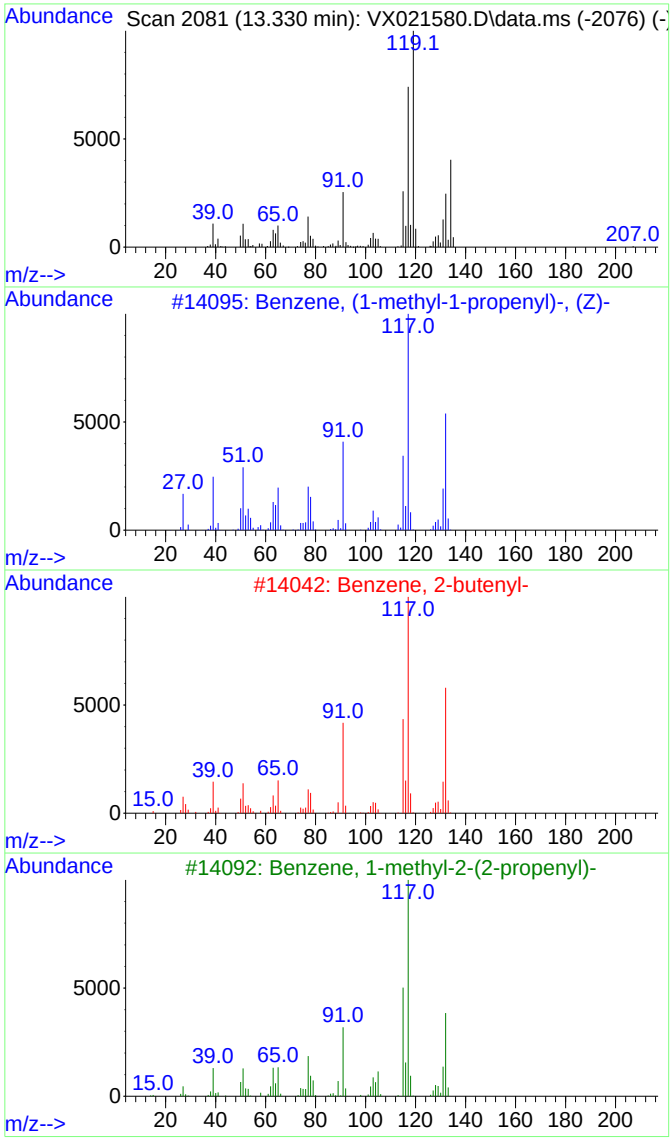
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Quant Title : SW846 8260

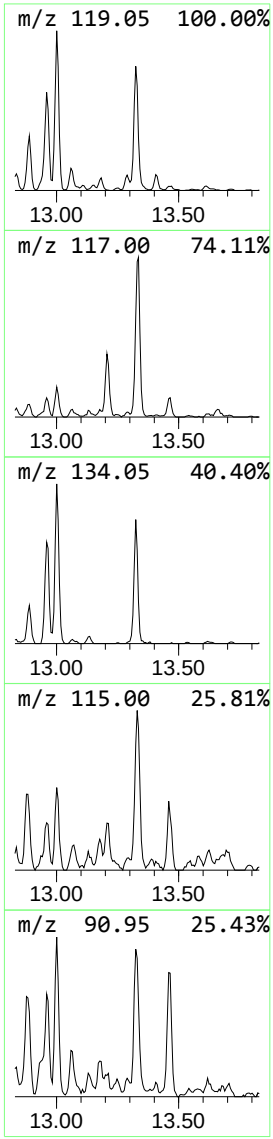
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 10 Benzene, (1-methyl-1-propen... Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.330 | 15.80 ug/l | 117445 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12 | 000767-99-7 | 90 |
| 2 | Benzene, 2-butenyl- | 132 | C10H12 | 001560-06-1 | 70 |
| 3 | Benzene, 1-methyl-2-(2-propenyl)- | 132 | C10H12 | 001587-04-8 | 70 |
| 4 | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12 | 000768-00-3 | 55 |
| 5 | Benzene, 2-ethenyl-1,3-dimethyl- | 132 | C10H12 | 002039-90-9 | 55 |



Sample Results: **VX021580.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021580.D
Acq On : 29 Mar 2021 16:26
Operator : JC/MD
Sample : M1785-14 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3R

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Cyclohexene, 4-... | 10.818 | 9.8 | ug/l | 69422 | 3 | 10.094 | 356034 | 50.0 |
| Benzene, 1,2,3-... | 12.124 | 39.7 | ug/l | 294995 | 4 | 12.065 | 371749 | 50.0 |
| Benzene, 2-prop... | 12.283 | 42.2 | ug/l | 313594 | 4 | 12.065 | 371749 | 50.0 |
| Benzene, 2-ethy... | 12.571 | 14.4 | ug/l | 106709 | 4 | 12.065 | 371749 | 50.0 |
| p-Cymene | 12.595 | 10.9 | ug/l | 80913 | 4 | 12.065 | 371749 | 50.0 |
| o-Cymene | 12.653 | 26.6 | ug/l | 197806 | 4 | 12.065 | 371749 | 50.0 |
| Benzene, (2-met... | 12.742 | 25.0 | ug/l | 185690 | 4 | 12.065 | 371749 | 50.0 |
| Benzene, 1,2,4,... | 12.959 | 9.8 | ug/l | 73248 | 4 | 12.065 | 371749 | 50.0 |
| Benzene, 1,2,3,... | 13.000 | 11.9 | ug/l | 88692 | 4 | 12.065 | 371749 | 50.0 |
| Benzene, (1-met... | 13.330 | 15.8 | ug/l | 117445 | 4 | 12.065 | 371749 | 50.0 |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-3RDL | SDG No.: | M1785 |
| Lab Sample ID: | M1785-14DL | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021573.D | 40 | | 03/29/21 13:42 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 40.0 | UD | 9.20 | 40.0 | ug/L |
| 74-87-3 | Chloromethane | 40.0 | UD | 8.10 | 40.0 | ug/L |
| 75-01-4 | Vinyl Chloride | 40.0 | UD | 7.70 | 40.0 | ug/L |
| 74-83-9 | Bromomethane | 200 | UD | 34.6 | 200 | ug/L |
| 75-00-3 | Chloroethane | 40.0 | UD | 14.1 | 40.0 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 40.0 | UD | 10.0 | 40.0 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 40.0 | UD | 8.50 | 40.0 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 40.0 | UD | 10.3 | 40.0 | ug/L |
| 67-64-1 | Acetone | 200 | UD | 64.4 | 200 | ug/L |
| 75-15-0 | Carbon Disulfide | 40.0 | UD | 10.1 | 40.0 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 40.0 | UD | 8.80 | 40.0 | ug/L |
| 79-20-9 | Methyl Acetate | 40.0 | UD | 18.8 | 40.0 | ug/L |
| 75-09-2 | Methylene Chloride | 40.0 | UD | 7.20 | 40.0 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 40.0 | UD | 7.60 | 40.0 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 40.0 | UD | 8.30 | 40.0 | ug/L |
| 110-82-7 | Cyclohexane | 200 | UD | 52.2 | 200 | ug/L |
| 78-93-3 | 2-Butanone | 200 | UD | 35.8 | 200 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 40.0 | UD | 10.9 | 40.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 40.0 | UD | 8.90 | 40.0 | ug/L |
| 74-97-5 | Bromochloromethane | 40.0 | UD | 10.3 | 40.0 | ug/L |
| 67-66-3 | Chloroform | 40.0 | UD | 10.7 | 40.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 40.0 | UD | 7.80 | 40.0 | ug/L |
| 108-87-2 | Methylcyclohexane | 17.6 | JD | 5.70 | 40.0 | ug/L |
| 71-43-2 | Benzene | 40.0 | UD | 7.20 | 40.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 40.0 | UD | 10.0 | 40.0 | ug/L |
| 79-01-6 | Trichloroethene | 40.0 | UD | 7.00 | 40.0 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 40.0 | UD | 6.80 | 40.0 | ug/L |
| 75-27-4 | Bromodichloromethane | 40.0 | UD | 7.90 | 40.0 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 200 | UD | 34.7 | 200 | ug/L |
| 108-88-3 | Toluene | 40.0 | UD | 8.60 | 40.0 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 40.0 | UD | 7.10 | 40.0 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 40.0 | UD | 6.60 | 40.0 | ug/L |

Raw Data: **VX021573.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-3RDL | SDG No.: | M1785 |
| Lab Sample ID: | M1785-14DL | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021573.D | 40 | | 03/29/21 13:42 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 40.0 | UD | 9.60 | 40.0 | ug/L |
| 591-78-6 | 2-Hexanone | 200 | UD | 36.8 | 200 | ug/L |
| 124-48-1 | Dibromochloromethane | 40.0 | UD | 7.10 | 40.0 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 40.0 | UD | 6.50 | 40.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 40.0 | UD | 6.70 | 40.0 | ug/L |
| 108-90-7 | Chlorobenzene | 40.0 | UD | 6.60 | 40.0 | ug/L |
| 100-41-4 | Ethyl Benzene | 52.0 | D | 7.30 | 40.0 | ug/L |
| 1330-20-7 | Total Xylenes | 218 | D | 20.4 | 120 | ug/L |
| 100-42-5 | Styrene | 40.0 | UD | 6.50 | 40.0 | ug/L |
| 75-25-2 | Bromoform | 40.0 | UD | 7.60 | 40.0 | ug/L |
| 98-82-8 | Isopropylbenzene | 200 | D | 9.20 | 40.0 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 40.0 | UD | 11.7 | 40.0 | ug/L |
| 103-65-1 | n-propylbenzene | 360 | D | 9.60 | 40.0 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 90.8 | D | 9.90 | 40.0 | ug/L |
| 98-06-6 | tert-Butylbenzene | 36.4 | JD | 10.3 | 40.0 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 2000 | D | 8.00 | 40.0 | ug/L |
| 135-98-8 | sec-Butylbenzene | 150 | D | 9.00 | 40.0 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 40.0 | UD | 7.80 | 40.0 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 40.0 | UD | 7.90 | 40.0 | ug/L |
| 104-51-8 | n-Butylbenzene | 93.2 | D | 7.60 | 40.0 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 40.0 | UD | 7.50 | 40.0 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 40.0 | UD | 19.0 | 40.0 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 40.0 | UD | 12.1 | 40.0 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 40.0 | UD | 13.9 | 40.0 | ug/L |
| 123-91-1 | 1,4-Dioxane | 4000 | UD | 280 | 4000 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 51.5 | | 78 - 117 | 103% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.6 | | 75 - 124 | 101% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 50.4 | | 92 - 112 | 101% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 56.9 | | 83 - 123 | 114% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 62500 | 5.629 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 114000 | 6.829 | | | |

Raw Data: **VX021573.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-3RDL | SDG No.: | M1785 |
| Lab Sample ID: | M1785-14DL | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021573.D | 40 | | 03/29/21 13:42 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 121000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 59500 | 12.059 | | | |

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: **VX021573.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021573.D
Acq On : 29 Mar 2021 13:42
Operator : JC/MD
Sample : M1785-14DL 40X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

Quant Time: Mar 30 03:27:02 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 62545 | 50.00 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 114308 | 50.00 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 121053 | 50.00 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 59501 | 50.00 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 53558 | 51.47 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 102.94% | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 41063 | 50.57 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.14% | | | |
| 50) Toluene-d8 | 8.694 | 98 | 145889 | 50.42 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 100.84% | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 64057 | 56.94 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 113.88% | | | |
| Target Compounds | | | | | | Qvalue |
| 39) Methylcyclohexane | 7.429 | 83 | 547 | 0.44 | ug/l # | 83 |
| 67) Ethyl Benzene | 10.235 | 91 | 5750 | 1.30 | ug/l | 100 |
| 68) m/p-Xylenes | 10.341 | 106 | 7938 | 5.03 | ug/l | 89 |
| 69) o-Xylene | 10.683 | 106 | 711 | 0.46 | ug/l | 81 |
| 73) Isopropylbenzene | 11.000 | 105 | 20943 | 5.01 | ug/l | 99 |
| 78) n-propylbenzene | 11.342 | 91 | 43954 | 8.90 | ug/l | 97 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 8097 | 2.27 | ug/l | 97 |
| 83) tert-Butylbenzene | 11.753 | 119 | 3160 | 0.91 | ug/l | 84 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 177928 | 49.42 | ug/l | 98 |
| 85) sec-Butylbenzene | 11.930 | 105 | 15344 | 3.83 | ug/l | 98 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 3780m | 1.04 | ug/l | |
| 89) n-Butylbenzene | 12.371 | 91 | 7801 | 2.33 | ug/l # | 71 |

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

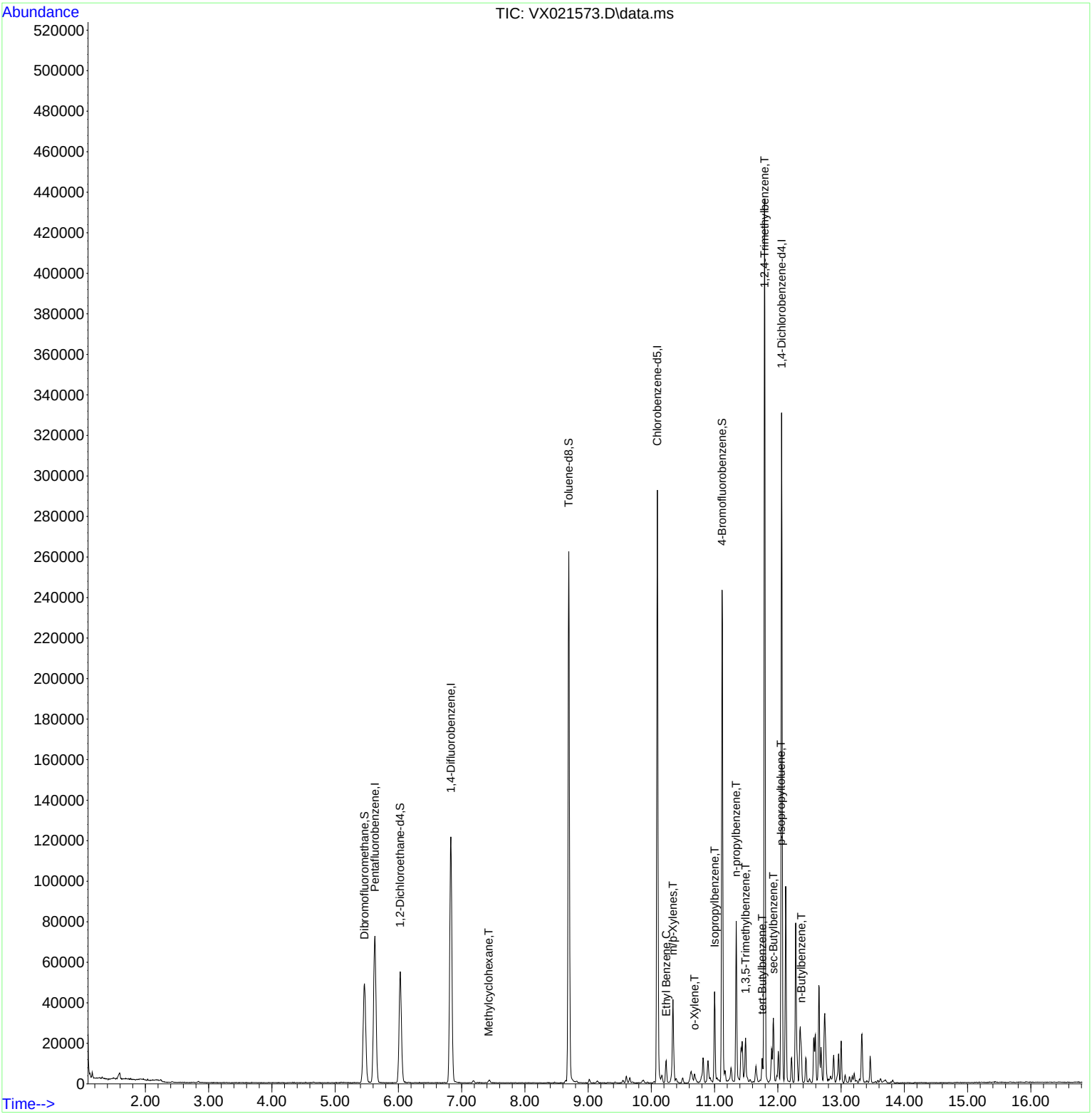
Sample Results: **VX021573.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021573.D
Acq On : 29 Mar 2021 13:42
Operator : JC/MD
Sample : M1785-14DL 40X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 30 03:27:02 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

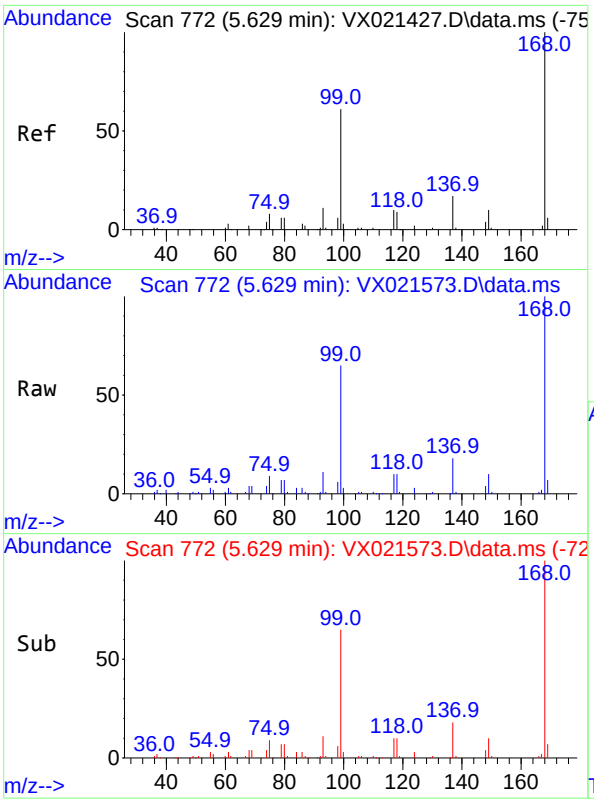
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

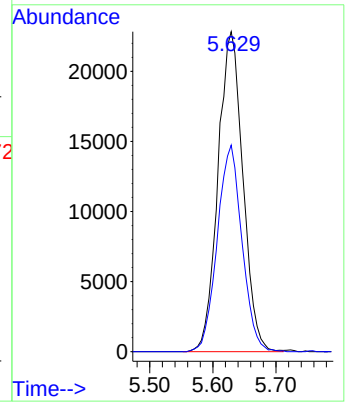
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

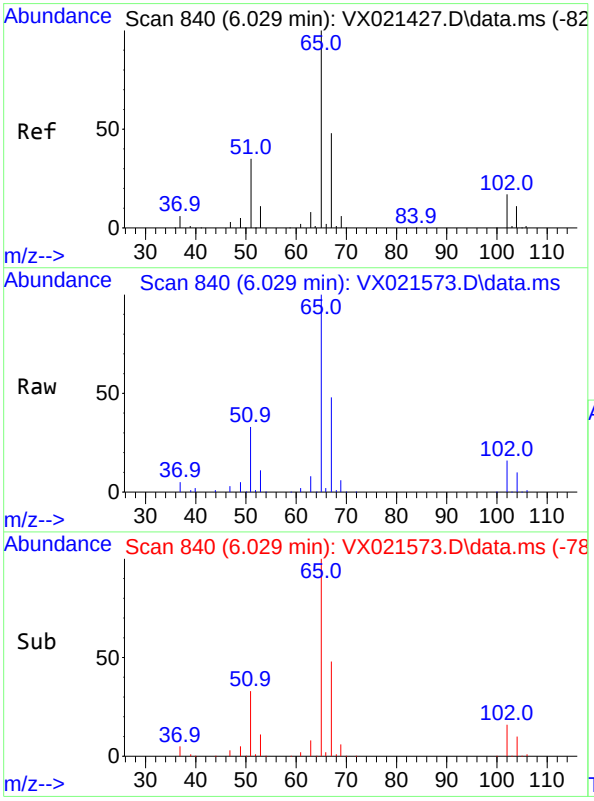



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion:168 Resp: 62545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 64.5 | 45.8 | 68.6 |

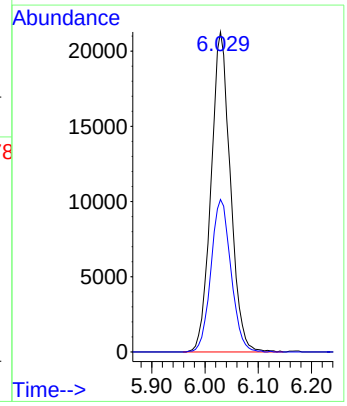



#33
1,2-Dichloroethane-d4
Concen: 51.47 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

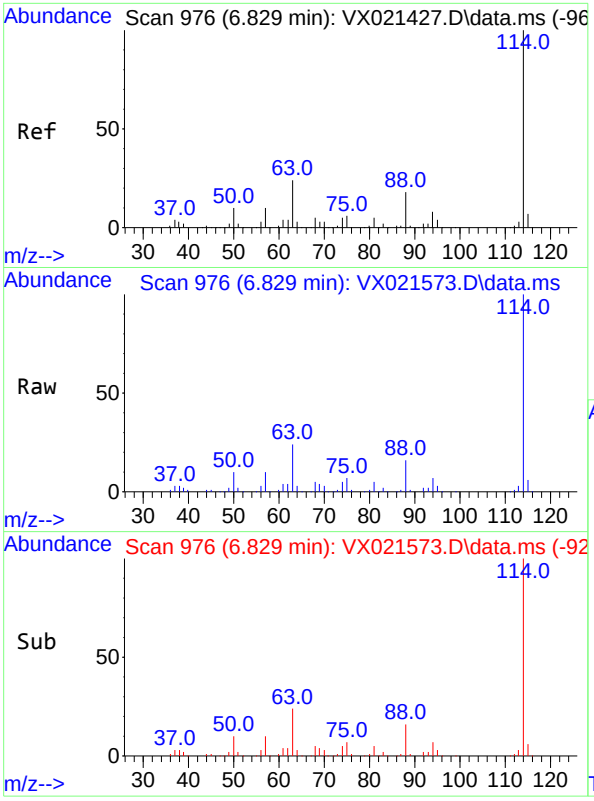
Tgt Ion: 65 Resp: 53558

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.3 | 0.0 | 105.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

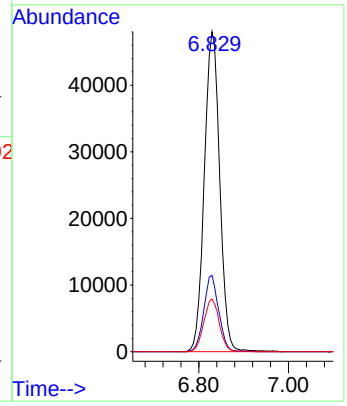
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

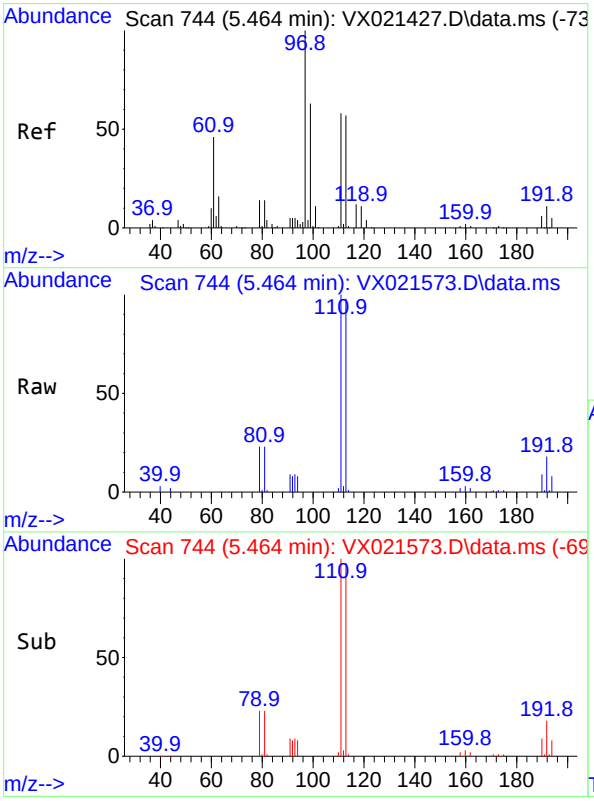



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion:114 Resp: 114308

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.8 | 0.0 | 40.8 |
| 88 | 16.4 | 0.0 | 32.8 |

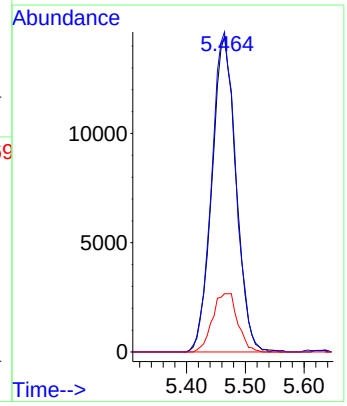



#35
Dibromofluoromethane
Concen: 50.57 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

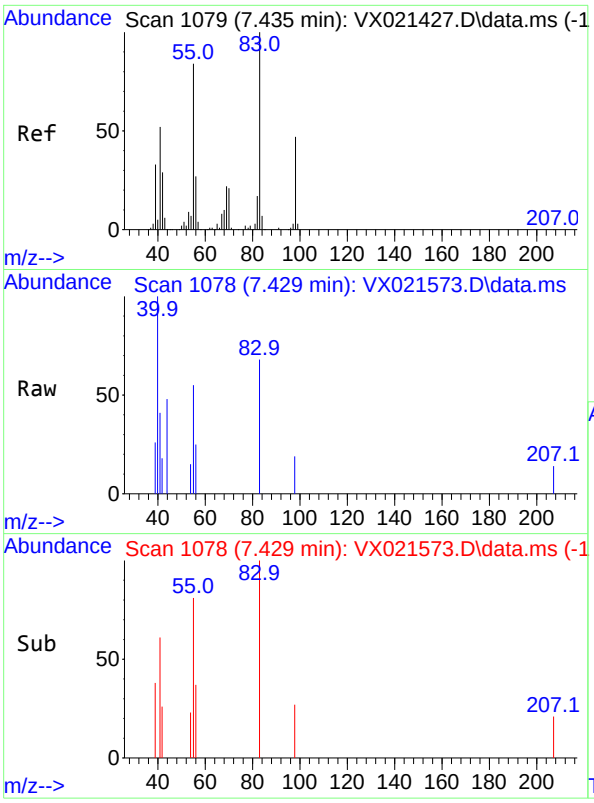
Tgt Ion:113 Resp: 41063

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.0 | 81.9 | 122.9 |
| 192 | 19.3 | 16.7 | 25.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

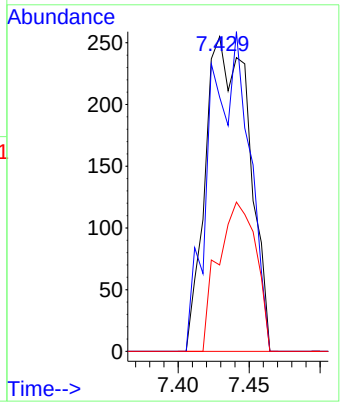
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

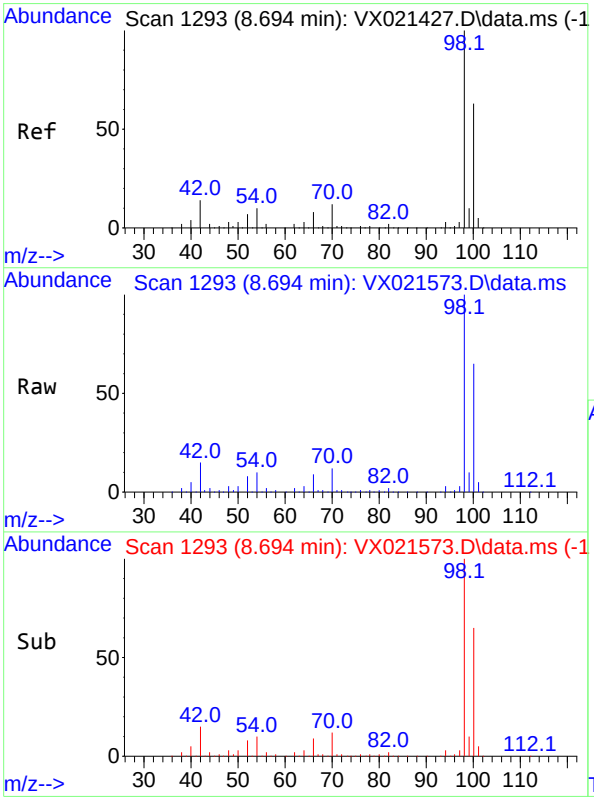



#39
Methylcyclohexane
Concen: 0.44 ug/l
RT: 7.429 min Scan# 1078
Delta R.T. -0.006 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion: 83 Resp: 547

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 80.8 | 58.9 | 88.3 |
| 98 | 27.5 | 38.1 | 57.1# |

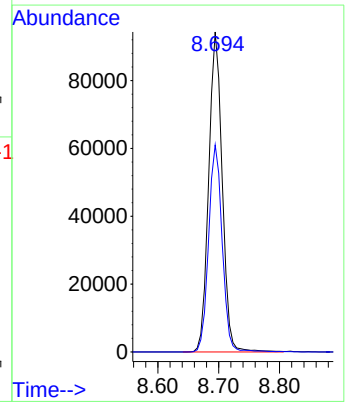



#50
Toluene-d8
Concen: 50.42 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

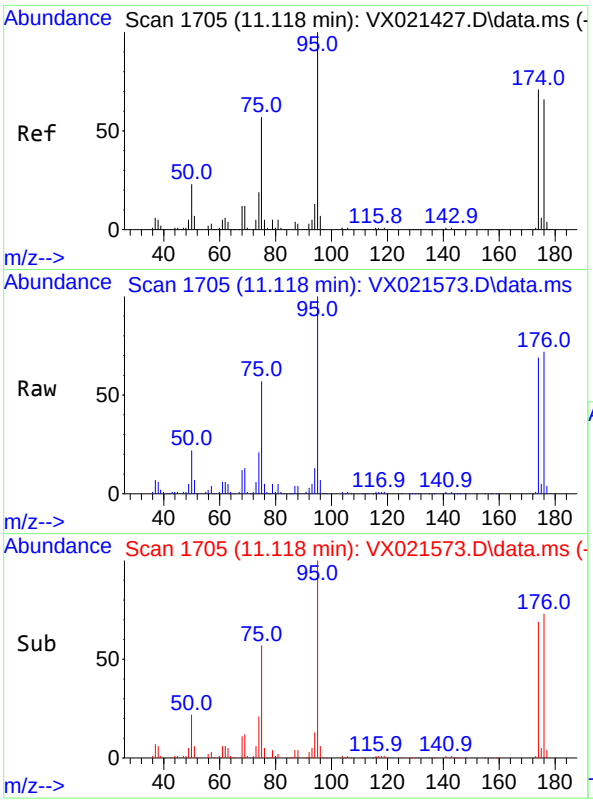
Tgt Ion: 98 Resp: 145889

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.0 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

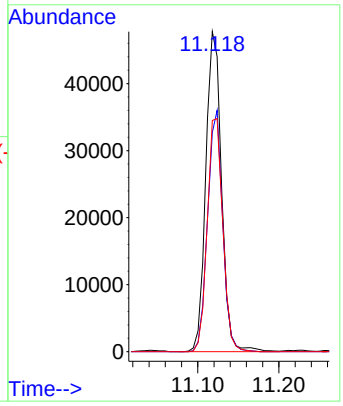
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

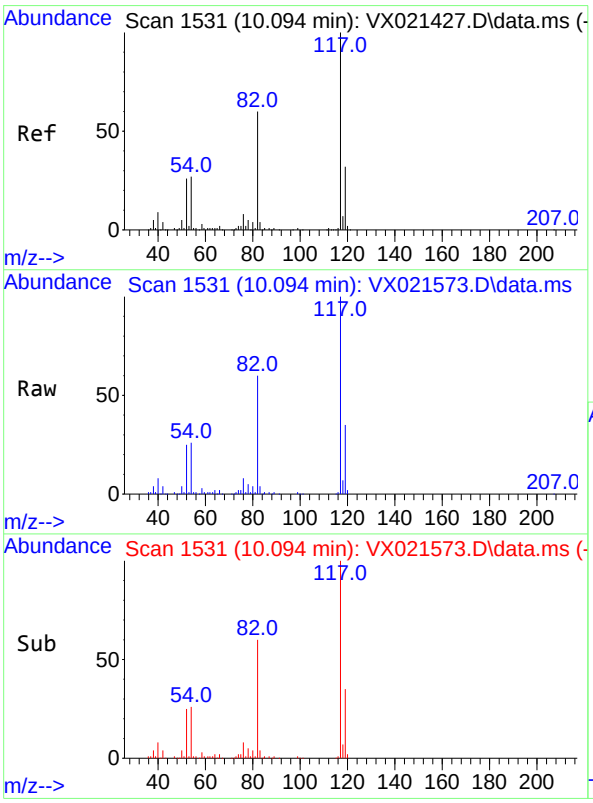



#62
4-Bromofluorobenzene
Concen: 56.94 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion: 95 Resp: 64057

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.0 | 0.0 | 154.6 |
| 176 | 72.1 | 0.0 | 155.8 |

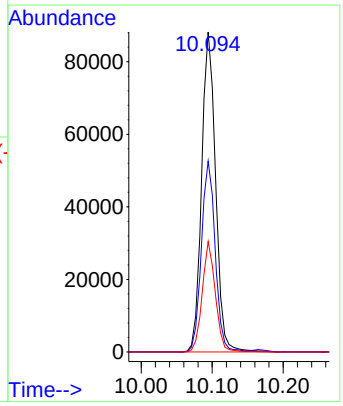



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

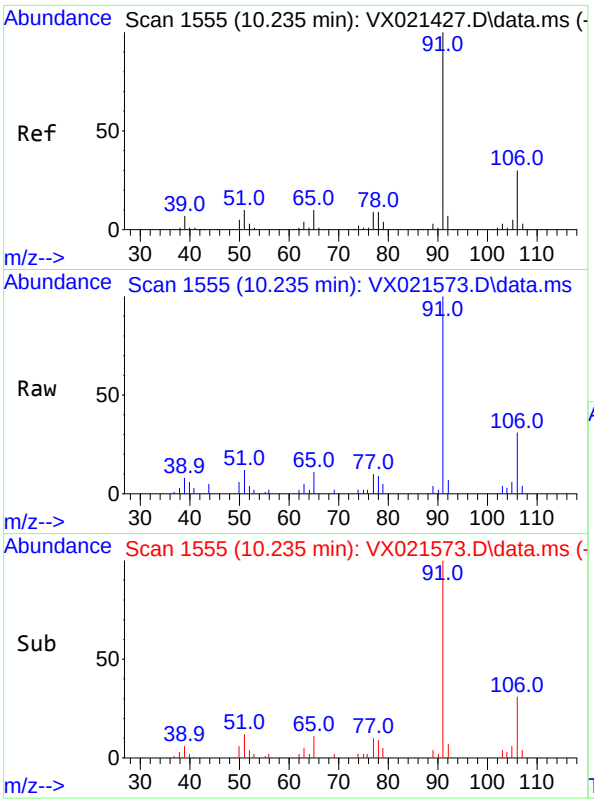
Tgt Ion:117 Resp: 121053

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.7 | 47.4 | 71.2 |
| 119 | 34.5 | 26.6 | 39.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

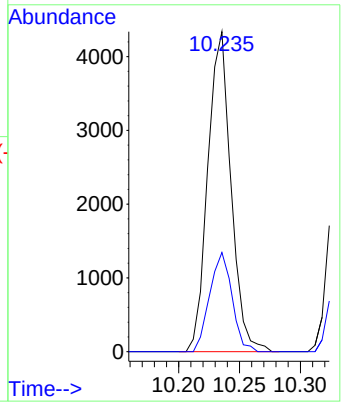
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

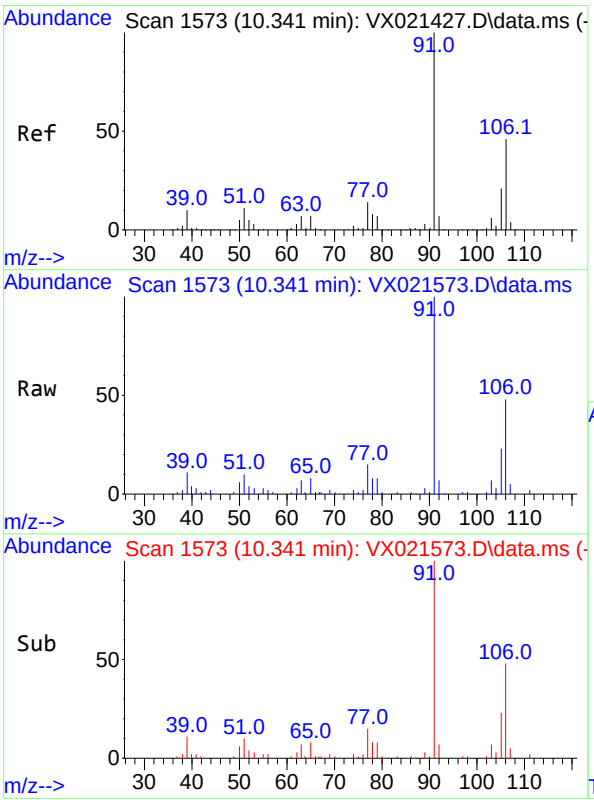



#67
Ethyl Benzene
Concen: 1.30 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion: 91 Resp: 5750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.0 | 24.6 | 37.0 |

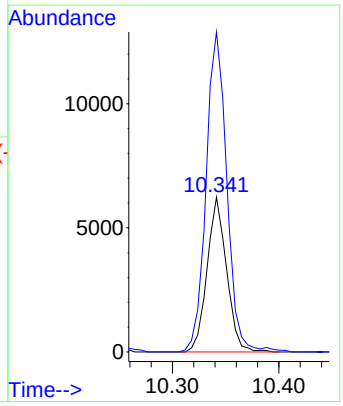



#68
m/p-Xylenes
Concen: 5.03 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

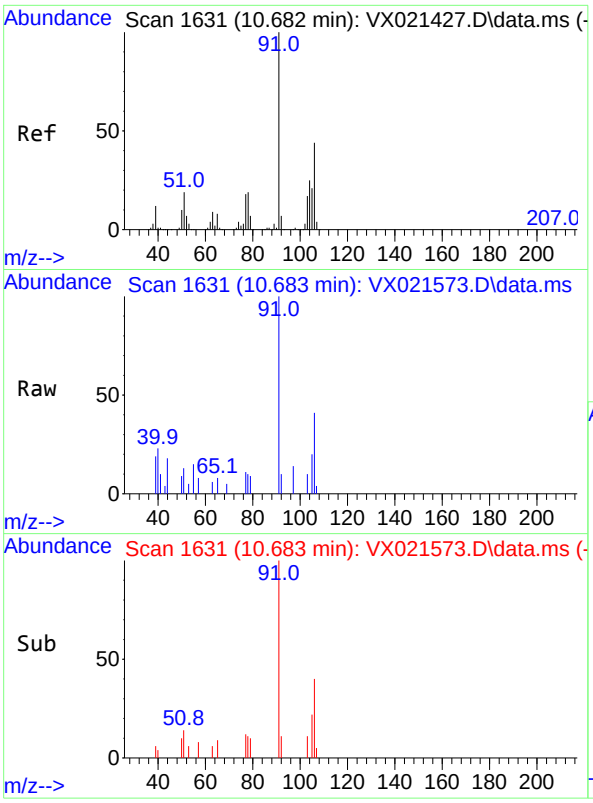
Tgt Ion:106 Resp: 7938

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 219.8 | 162.8 | 244.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

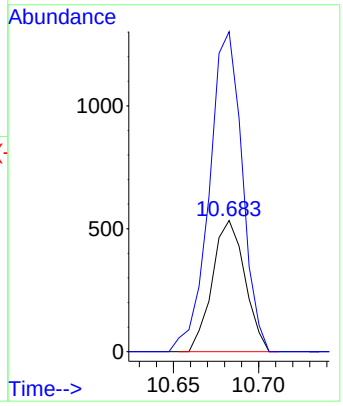
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

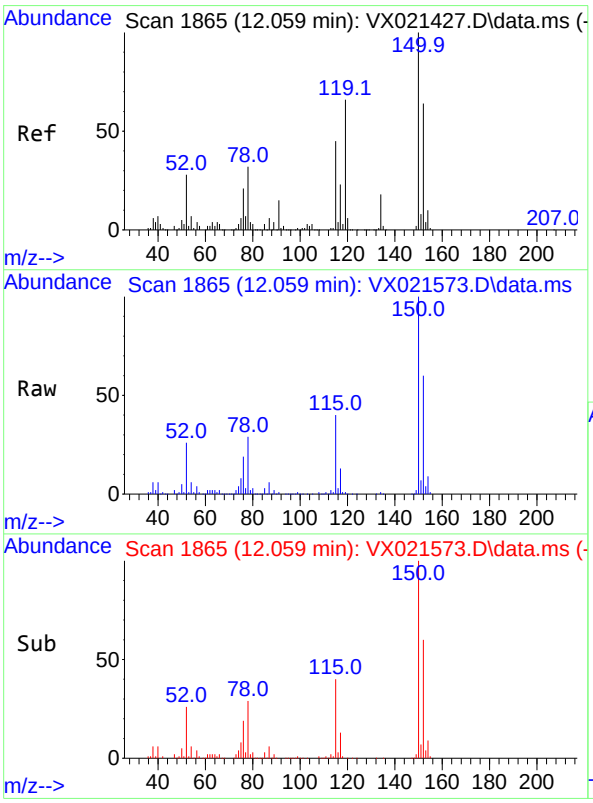



#69
o-Xylene
Concen: 0.46 ug/l
RT: 10.683 min Scan# 1631
Delta R.T. 0.001 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion:106 Resp: 711

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 246.4 | 108.1 | 324.2 |

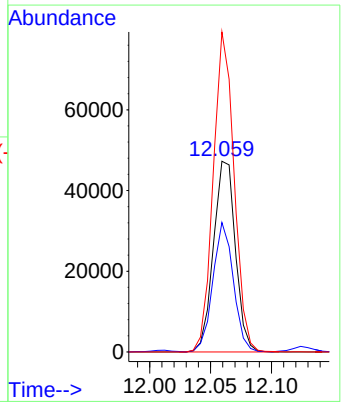



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

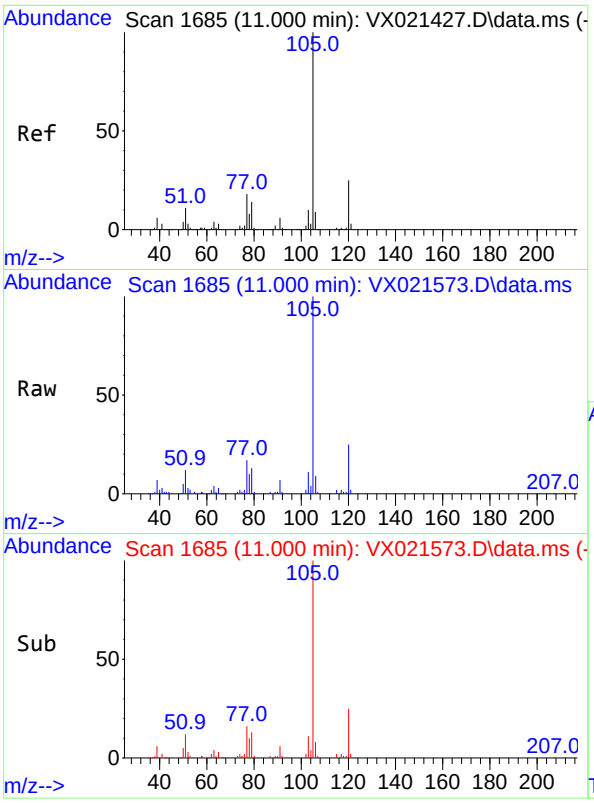
Tgt Ion:152 Resp: 59501

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.3 | 41.1 | 123.3 |
| 150 | 158.9 | 0.0 | 349.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

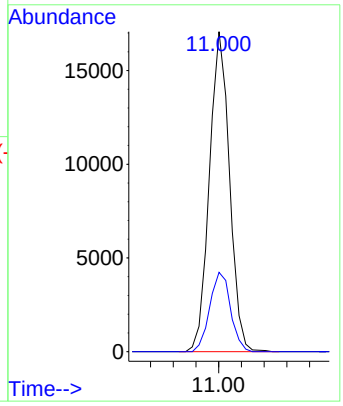
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

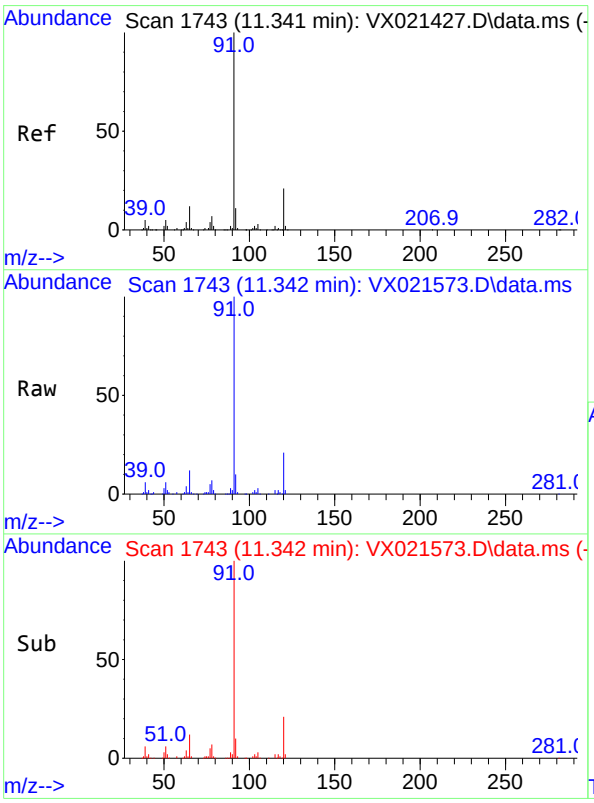



#73
Isopropylbenzene
Concen: 5.01 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion:105 Resp: 20943

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.7 | 13.2 | 39.6 |

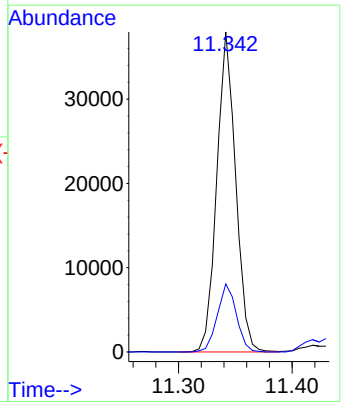



#78
n-propylbenzene
Concen: 8.90 ug/l
RT: 11.342 min Scan# 1743
Delta R.T. 0.001 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

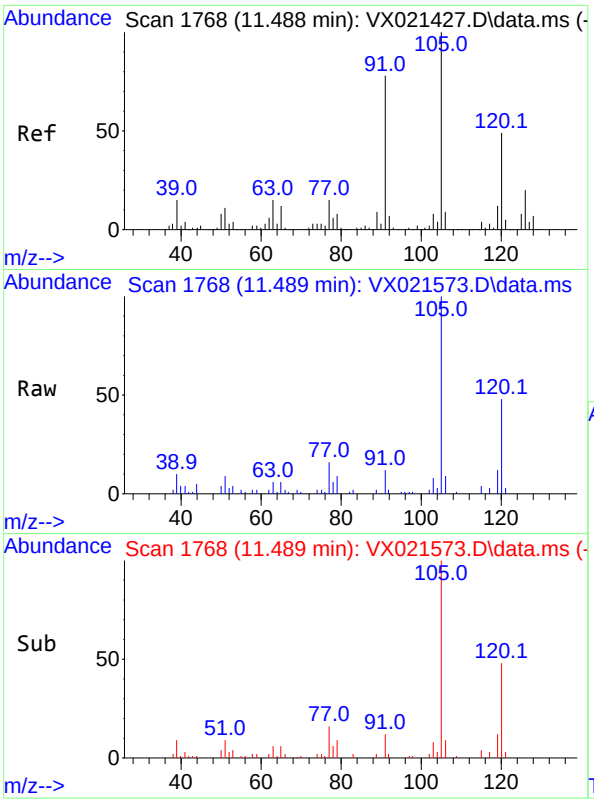
Tgt Ion: 91 Resp: 43954

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.4 | 11.5 | 34.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

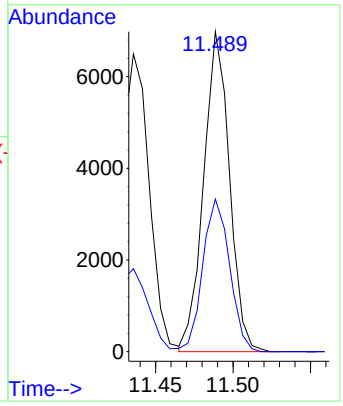
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

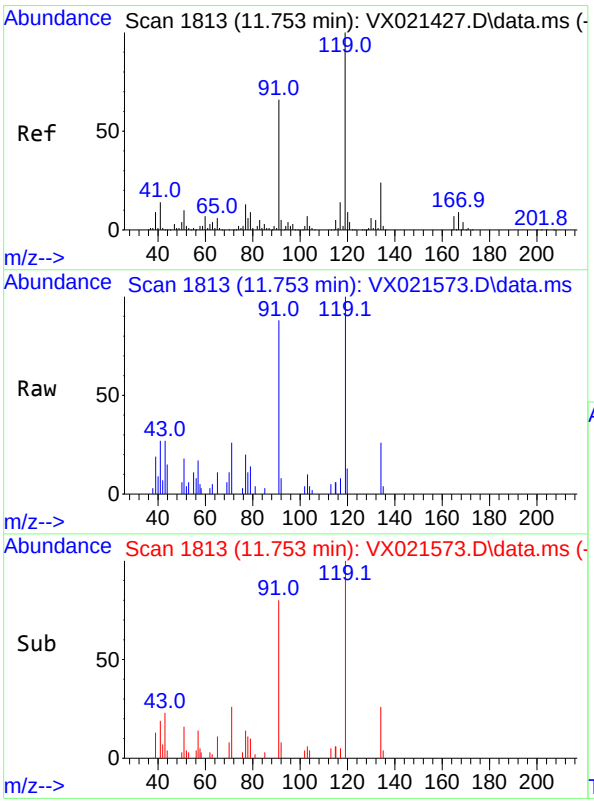



#80
1,3,5-Trimethylbenzene
Concen: 2.27 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.001 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion:105 Resp: 8097

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 49.7 | 23.8 | 71.5 |

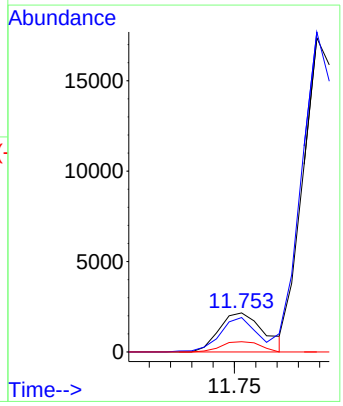



#83
tert-Butylbenzene
Concen: 0.91 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

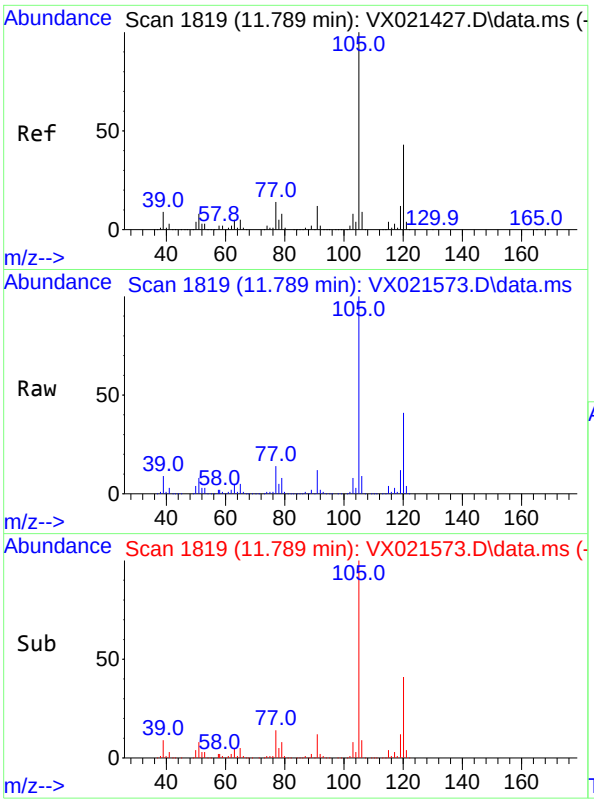
Tgt Ion:119 Resp: 3160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 71.6 | 27.9 | 83.7 |
| 134 | 22.9 | 11.3 | 33.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

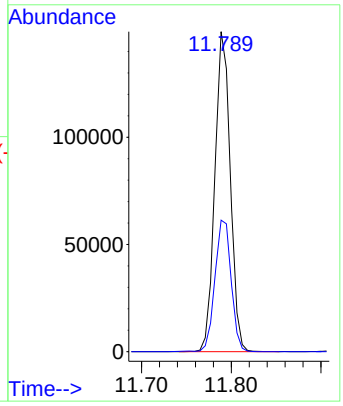
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

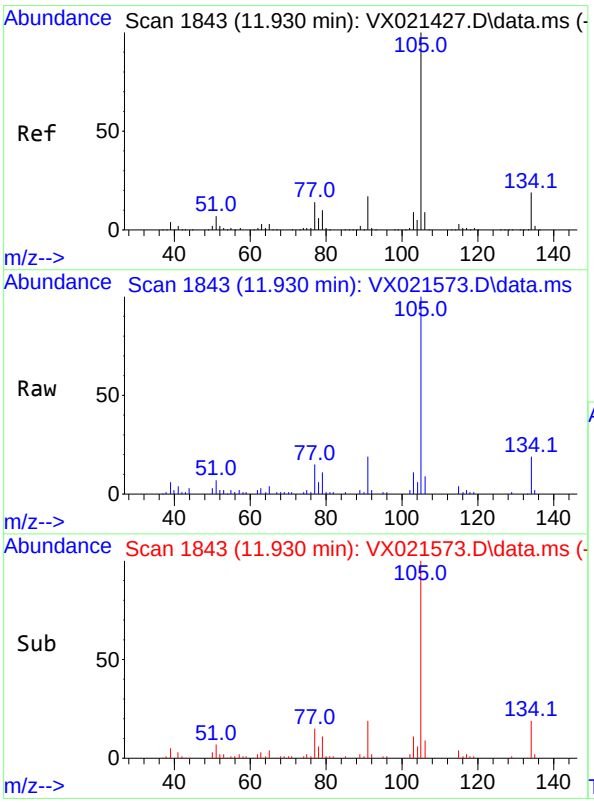



#84
1,2,4-Trimethylbenzene
Concen: 49.42 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. -0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion:105 Resp: 177928

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.4 | 22.4 | 67.3 |

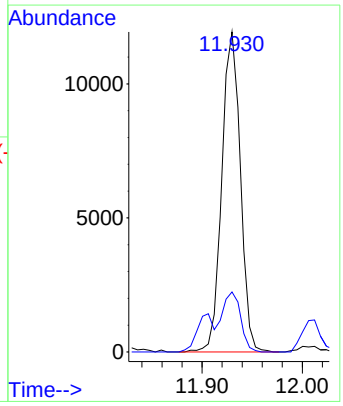



#85
sec-Butylbenzene
Concen: 3.83 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

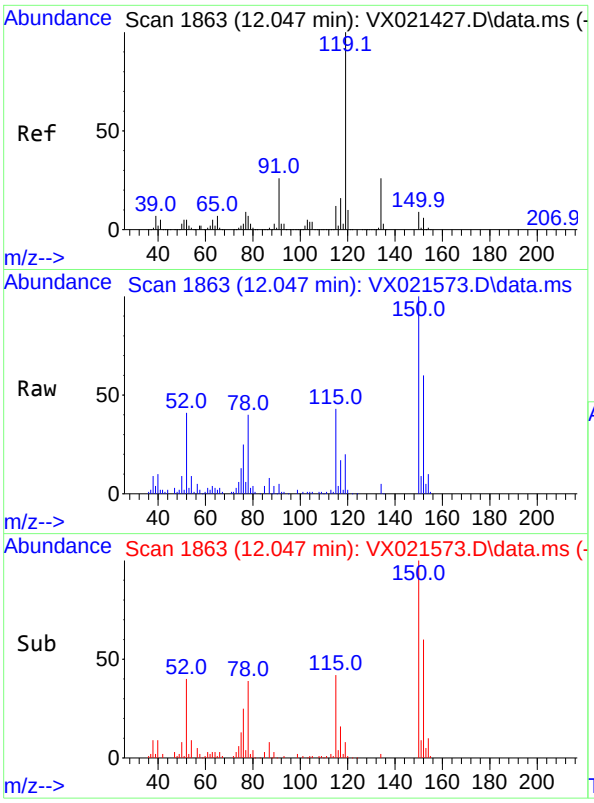
Tgt Ion:105 Resp: 15344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 18.8 | 10.0 | 29.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-3RDL

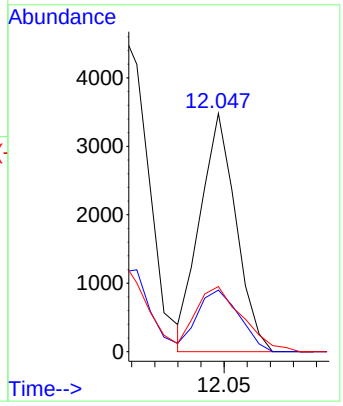
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 6:28:25 PM

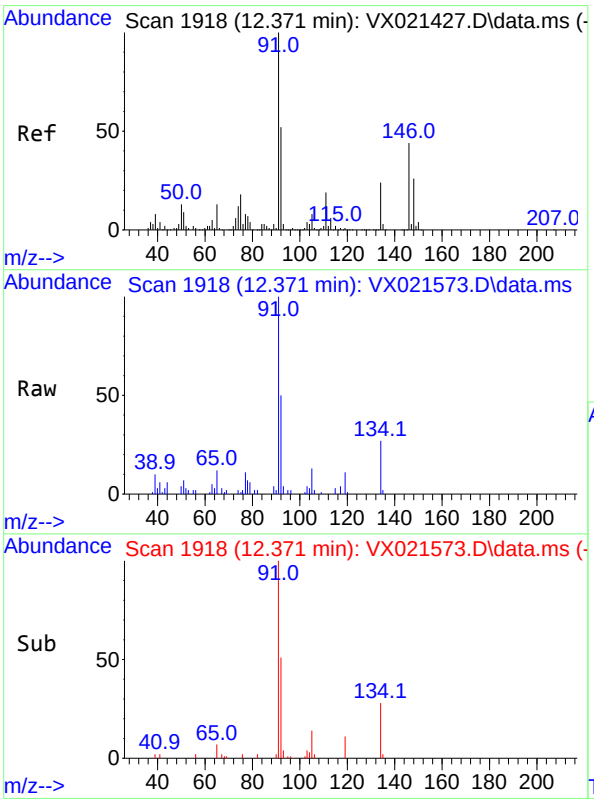



#86
p-Isopropyltoluene
Concen: 1.04 ug/l m
RT: 12.047 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion:119 Resp: 3780

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 40.8 | 12.9 | 38.7# |
| 91 | 44.6 | 11.7 | 35.0# |

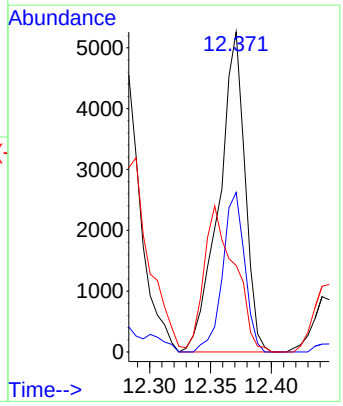



#89
n-Butylbenzene
Concen: 2.33 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021573.D
Acq: 29 Mar 2021 13:42

Tgt Ion: 91 Resp: 7801

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 42.4 | 27.4 | 82.0 |
| 134 | 53.7 | 13.2 | 39.5# |



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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-4 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-15 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021574.D | 20 | | 03/29/21 14:05 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 20.0 | U | 4.60 | 20.0 | ug/L |
| 74-87-3 | Chloromethane | 20.0 | U | 4.00 | 20.0 | ug/L |
| 75-01-4 | Vinyl Chloride | 20.0 | U | 3.90 | 20.0 | ug/L |
| 74-83-9 | Bromomethane | 100 | U | 17.3 | 100 | ug/L |
| 75-00-3 | Chloroethane | 20.0 | U | 7.00 | 20.0 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 20.0 | U | 5.00 | 20.0 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 20.0 | U | 4.30 | 20.0 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 20.0 | U | 5.20 | 20.0 | ug/L |
| 67-64-1 | Acetone | 100 | U | 32.2 | 100 | ug/L |
| 75-15-0 | Carbon Disulfide | 20.0 | U | 5.00 | 20.0 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 20.0 | U | 4.40 | 20.0 | ug/L |
| 79-20-9 | Methyl Acetate | 20.0 | U | 9.40 | 20.0 | ug/L |
| 75-09-2 | Methylene Chloride | 20.0 | U | 3.60 | 20.0 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 20.0 | U | 3.80 | 20.0 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 20.0 | U | 4.20 | 20.0 | ug/L |
| 110-82-7 | Cyclohexane | 100 | U | 26.1 | 100 | ug/L |
| 78-93-3 | 2-Butanone | 100 | U | 17.9 | 100 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 20.0 | U | 5.50 | 20.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 20.0 | U | 4.40 | 20.0 | ug/L |
| 74-97-5 | Bromochloromethane | 20.0 | U | 5.20 | 20.0 | ug/L |
| 67-66-3 | Chloroform | 20.0 | U | 5.30 | 20.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 20.0 | U | 3.90 | 20.0 | ug/L |
| 108-87-2 | Methylcyclohexane | 20.0 | U | 2.80 | 20.0 | ug/L |
| 71-43-2 | Benzene | 20.0 | U | 3.60 | 20.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 20.0 | U | 5.00 | 20.0 | ug/L |
| 79-01-6 | Trichloroethene | 20.0 | U | 3.50 | 20.0 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 20.0 | U | 3.40 | 20.0 | ug/L |
| 75-27-4 | Bromodichloromethane | 20.0 | U | 4.00 | 20.0 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 100 | U | 17.3 | 100 | ug/L |
| 108-88-3 | Toluene | 20.0 | U | 4.30 | 20.0 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 20.0 | U | 3.60 | 20.0 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 20.0 | U | 3.30 | 20.0 | ug/L |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-4 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-15 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021574.D | 20 | | 03/29/21 14:05 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 20.0 | U | 4.80 | 20.0 | ug/L |
| 591-78-6 | 2-Hexanone | 100 | U | 18.4 | 100 | ug/L |
| 124-48-1 | Dibromochloromethane | 20.0 | U | 3.50 | 20.0 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 20.0 | U | 3.30 | 20.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 20.0 | U | 3.30 | 20.0 | ug/L |
| 108-90-7 | Chlorobenzene | 20.0 | U | 3.30 | 20.0 | ug/L |
| 100-41-4 | Ethyl Benzene | 110 | | 3.60 | 20.0 | ug/L |
| 1330-20-7 | Total Xylenes | 68.8 | | 10.2 | 60.0 | ug/L |
| 100-42-5 | Styrene | 20.0 | U | 3.30 | 20.0 | ug/L |
| 75-25-2 | Bromoform | 20.0 | U | 3.80 | 20.0 | ug/L |
| 98-82-8 | Isopropylbenzene | 100 | | 4.60 | 20.0 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20.0 | U | 5.90 | 20.0 | ug/L |
| 103-65-1 | n-propylbenzene | 170 | | 4.80 | 20.0 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 39.0 | | 4.90 | 20.0 | ug/L |
| 98-06-6 | tert-Butylbenzene | 16.0 | J | 5.20 | 20.0 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1600 | | 4.00 | 20.0 | ug/L |
| 135-98-8 | sec-Butylbenzene | 61.4 | | 4.50 | 20.0 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 20.0 | U | 3.90 | 20.0 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 20.0 | U | 3.90 | 20.0 | ug/L |
| 104-51-8 | n-Butylbenzene | 40.4 | | 3.80 | 20.0 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 20.0 | U | 3.80 | 20.0 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 20.0 | U | 9.50 | 20.0 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 20.0 | U | 6.10 | 20.0 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 20.0 | U | 6.90 | 20.0 | ug/L |
| 123-91-1 | 1,4-Dioxane | 2000 | U | 140 | 2000 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 51.1 | | 78 - 117 | 102% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.2 | | 75 - 124 | 100% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 50.2 | | 92 - 112 | 100% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 56.1 | | 83 - 123 | 112% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 62600 | 5.623 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 114000 | 6.829 | | | |

Raw Data: **VX021574.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-4 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-15 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021574.D | 20 | | 03/29/21 14:05 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 118000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 58100 | 12.059 | | | |
| **TENTATIVE IDENTIFIED COMPOUNDS** | | | | | | |
| 179601-23-1 | m/p-Xylenes | 68.8 | J | | 10.3 | ug/L |
| 000611-14-3 | Benzene, 1-ethyl-2-methyl- | 100 | J | | 11.7 | ug/L |
| 99-87-6 | p-Isopropyltoluene | 16.0 | J | | 12.0 | ug/L |
| 000526-73-8 | Benzene, 1,2,3-trimethyl- | 950 | J | | 12.1 | ug/L |
| 000496-11-7 | Indane | 350 | J | | 12.3 | ug/L |
| 000527-84-4 | o-Cymene | 110 | J | | 12.6 | ug/L |
| 000934-80-5 | Benzene, 4-ethyl-1,2-dimethyl- | 170 | J | | 12.7 | ug/L |
| 000824-90-8 | 1-Phenyl-1-butene | 220 | J | | 12.7 | ug/L |
| 000095-93-2 | Benzene, 1,2,4,5-tetramethyl- | 110 | J | | 13.0 | ug/L |
| 000934-10-1 | 3-Phenylbut-1-ene | 150 | J | | 13.3 | ug/L |
| 91-20-3 | Naphthalene | 100 | J | | 13.8 | ug/L |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
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: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM

Quant Time: Mar 30 03:27:24 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.623 | 168 | 62597 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 114338 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 118030 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 58057 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 53166 | 51.05 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 102.10% | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 40807 | 50.24 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.48% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 145276 | 50.20 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 100.40% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 63160 | 56.13 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 112.26% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 67) Ethyl Benzene | 10.235 | 91 | 24267 | 5.61 | ug/l | | 100 |
| 68) m/p-Xylenes | 10.341 | 106 | 5299 | 3.44 | ug/l | | 91 |
| 73) Isopropylbenzene | 11.000 | 105 | 20719 | 5.08 | ug/l | | 98 |
| 78) n-propylbenzene | 11.341 | 91 | 41572 | 8.63 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 11.488 | 105 | 6790 | 1.95 | ug/l | | 99 |
| 83) tert-Butylbenzene | 11.753 | 119 | 2725 | 0.80 | ug/l | | 80 |
| 84) 1,2,4-Trimethylbenzene | 11.788 | 105 | 274528 | 78.14 | ug/l | | 97 |
| 85) sec-Butylbenzene | 11.930 | 105 | 12010 | 3.07 | ug/l | | 91 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 2850m | 0.80 | ug/l | | |
| 89) n-Butylbenzene | 12.371 | 91 | 6586 | 2.02 | ug/l | # | 71 |
| 95) Naphthalene | 13.818 | 128 | 19299 | 5.10 | ug/l | | 99 |

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

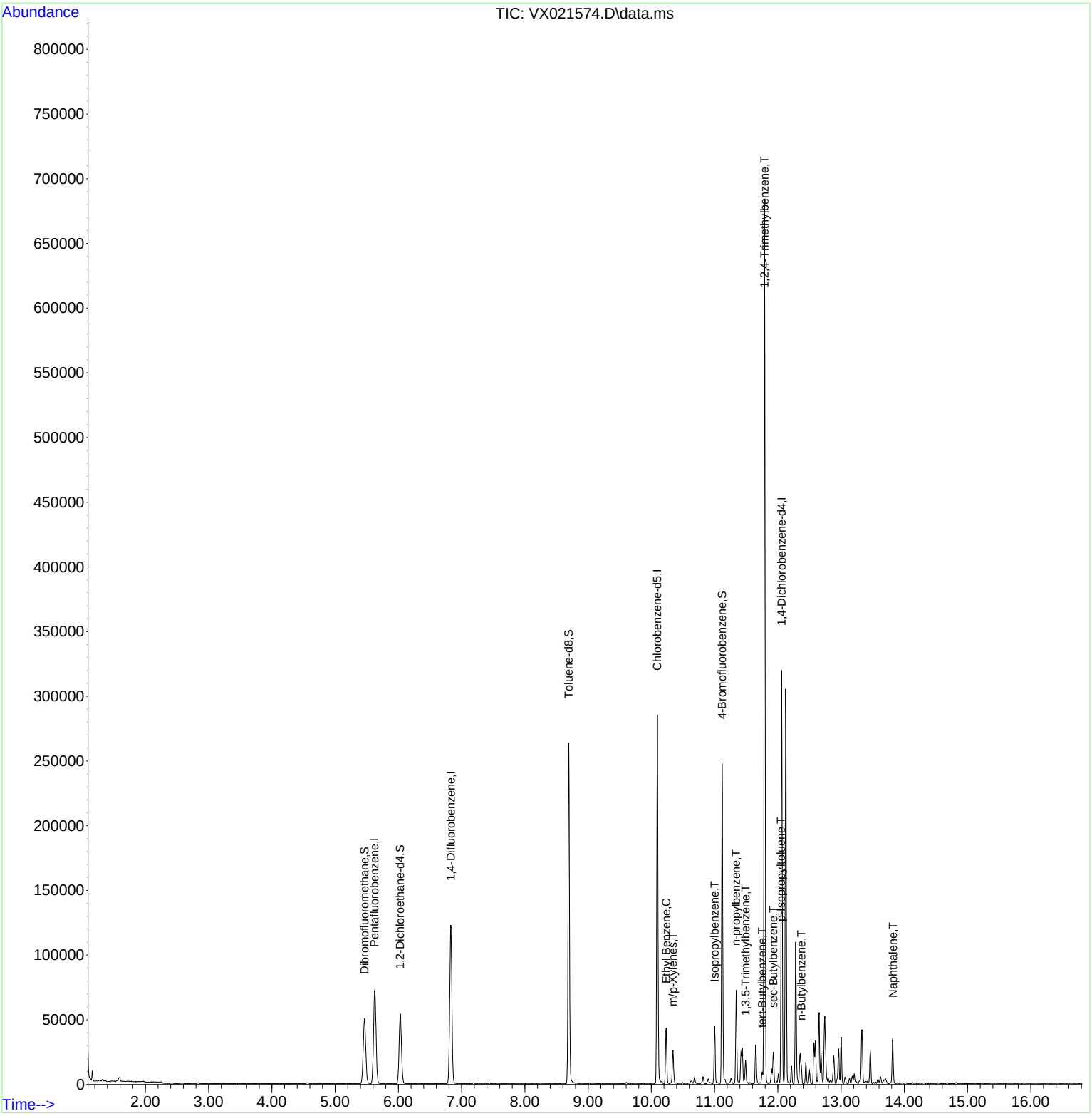
Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 30 03:27:24 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

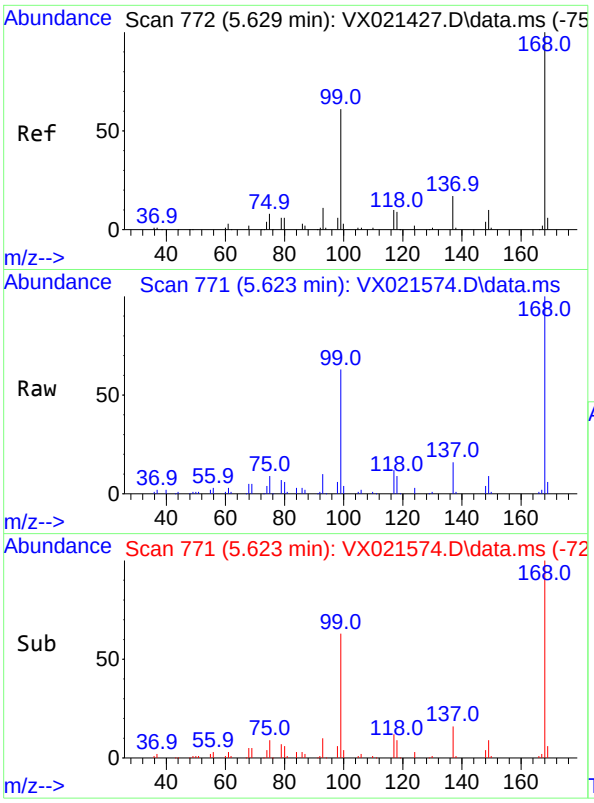
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

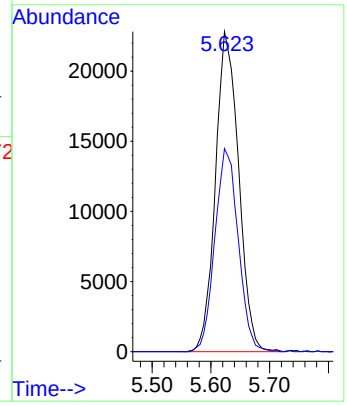
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM

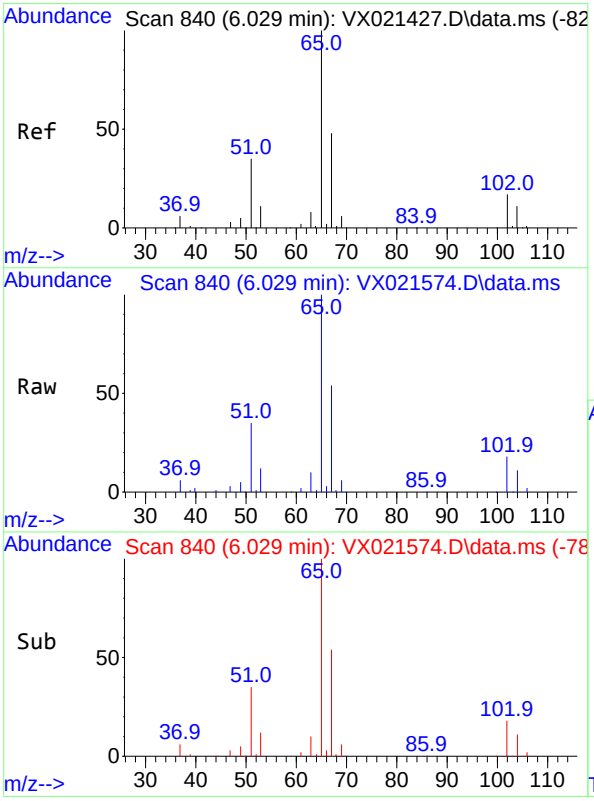



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.623 min Scan# 771
Delta R.T. -0.006 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

Tgt Ion:168 Resp: 62597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 63.5 | 45.8 | 68.6 |

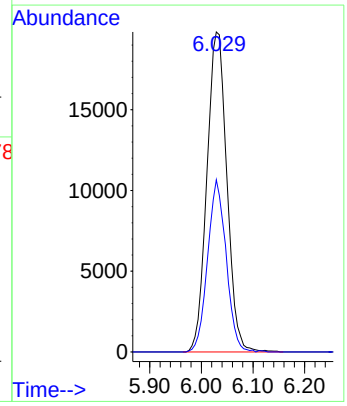



#33
1,2-Dichloroethane-d4
Concen: 51.05 ug/l
RT: 6.029 min Scan# 840
Delta R.T. -0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

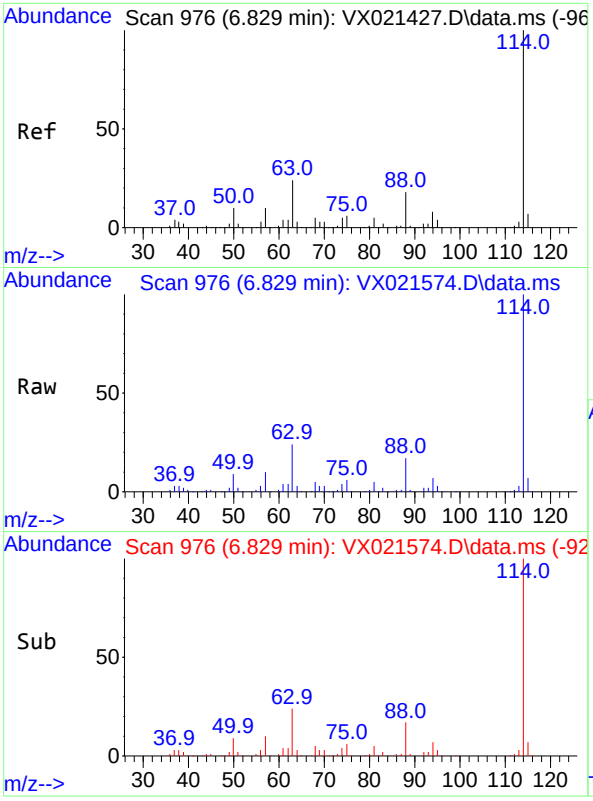
Tgt Ion: 65 Resp: 53166

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.9 | 0.0 | 105.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

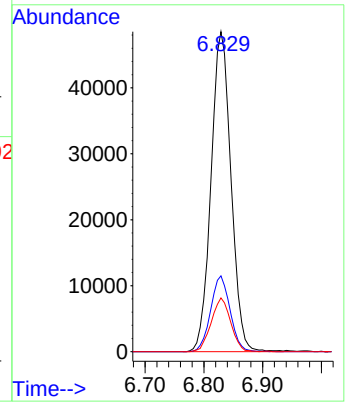
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM

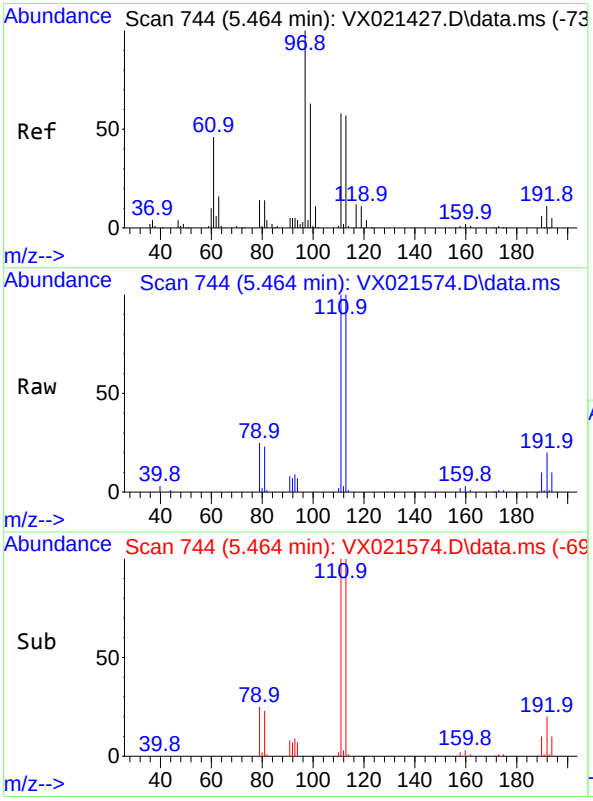



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. -0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

Tgt Ion:114 Resp: 114338

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.7 | 0.0 | 40.8 |
| 88 | 16.8 | 0.0 | 32.8 |

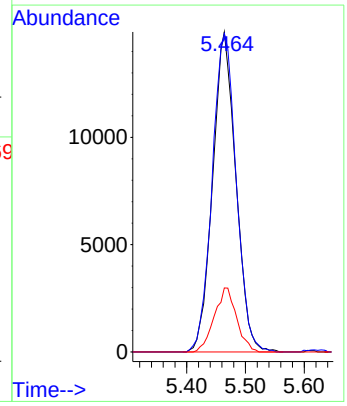



#35
Dibromofluoromethane
Concen: 50.24 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

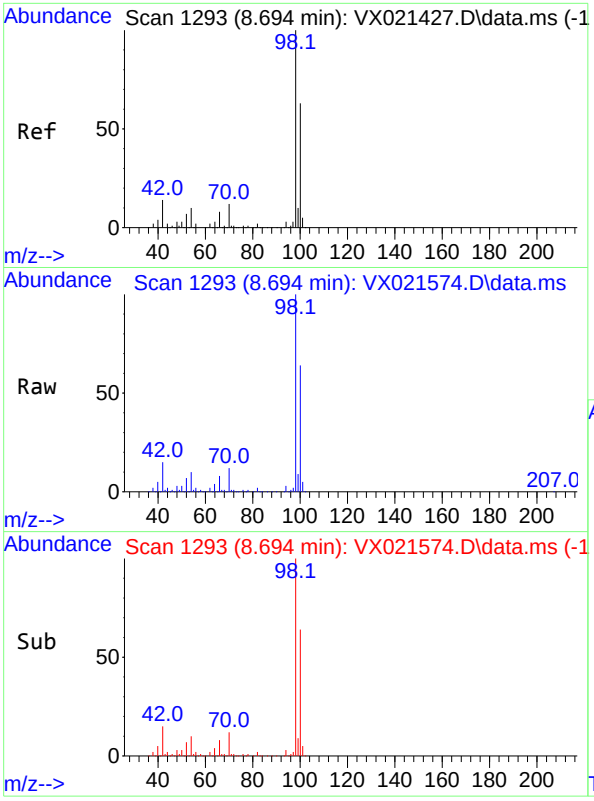
Tgt Ion:113 Resp: 40807

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.0 | 81.9 | 122.9 |
| 192 | 19.2 | 16.7 | 25.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

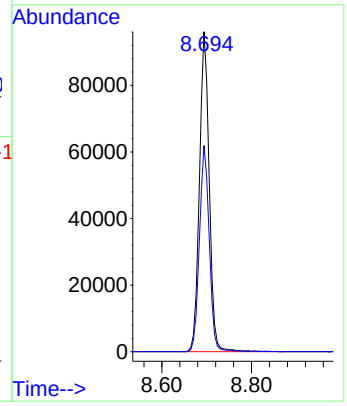
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM

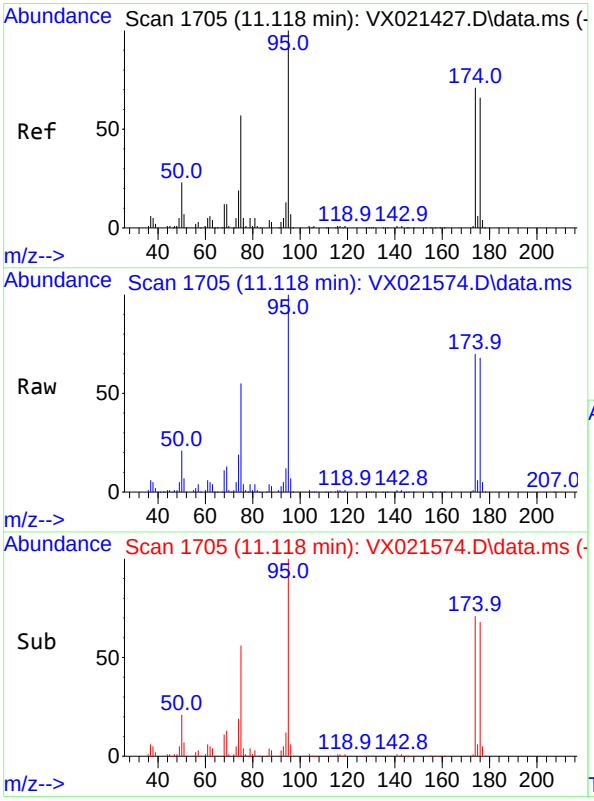



#50
Toluene-d8
Concen: 50.20 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. -0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

Tgt Ion: 98 Resp: 145276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.8 | 51.9 | 77.9 |

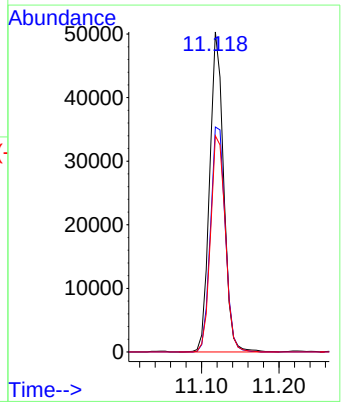



#62
4-Bromofluorobenzene
Concen: 56.13 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

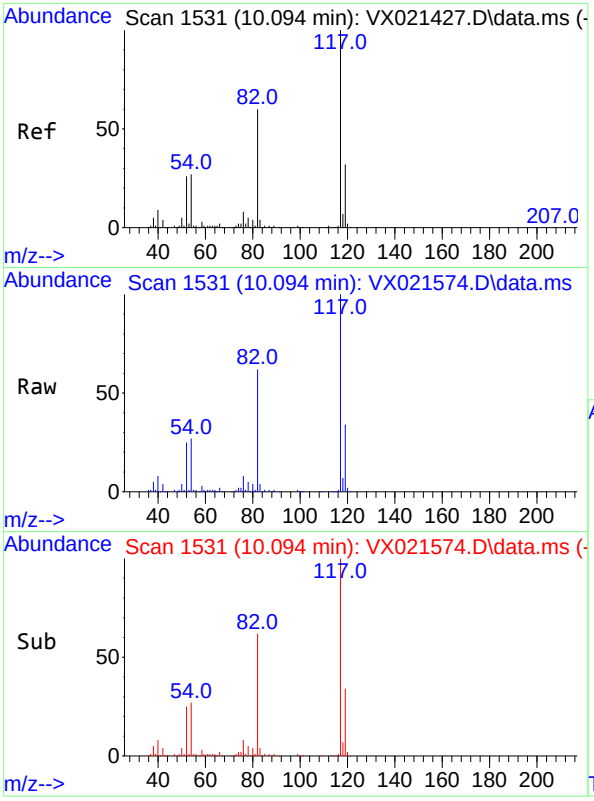
Tgt Ion: 95 Resp: 63160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.5 | 0.0 | 154.6 |
| 176 | 71.3 | 0.0 | 155.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

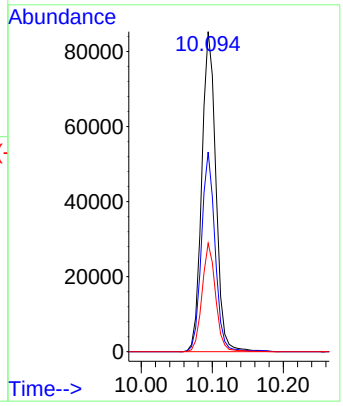
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM

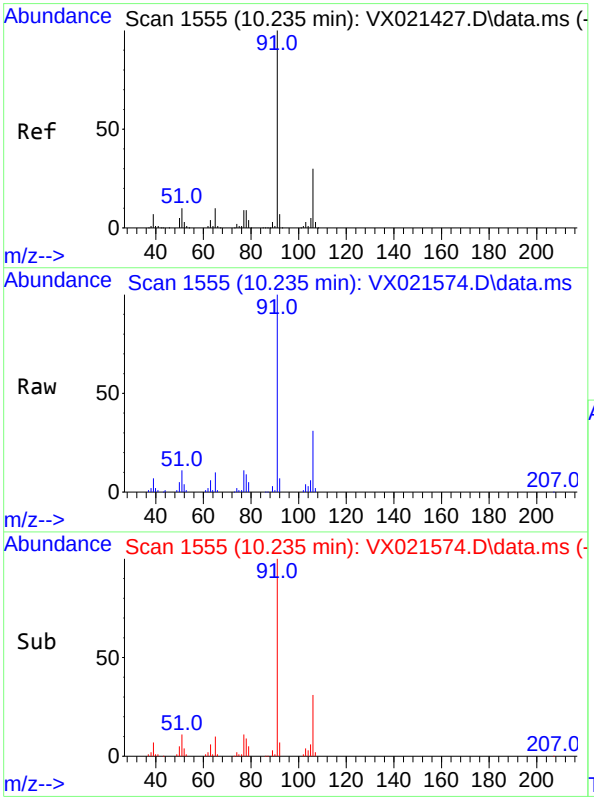



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

Tgt Ion:117 Resp: 118030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 62.4 | 47.4 | 71.2 |
| 119 | 33.9 | 26.6 | 39.8 |

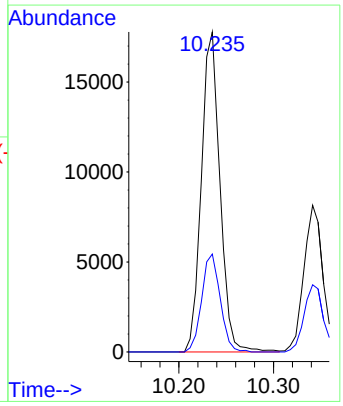



#67
Ethyl Benzene
Concen: 5.61 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

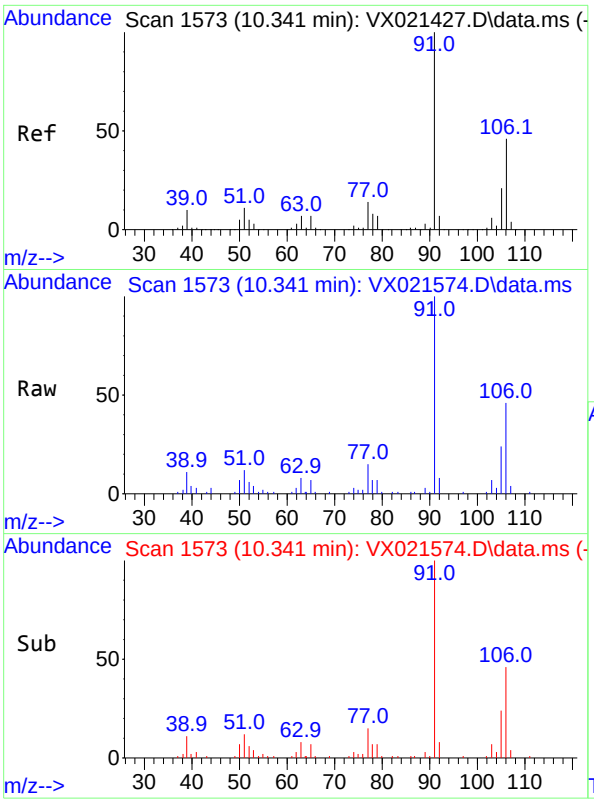
Tgt Ion: 91 Resp: 24267

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.6 | 24.6 | 37.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

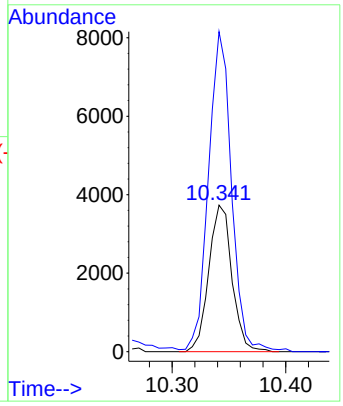
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM

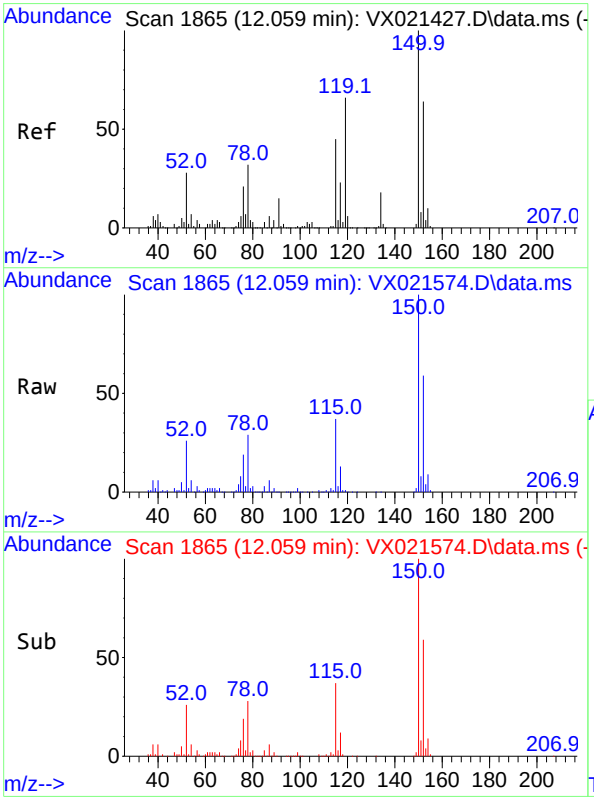



#68
m/p-Xylenes
Concen: 3.44 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

Tgt Ion:106 Resp: 5299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 217.1 | 162.8 | 244.2 |

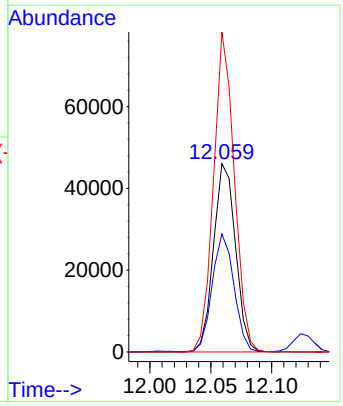



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

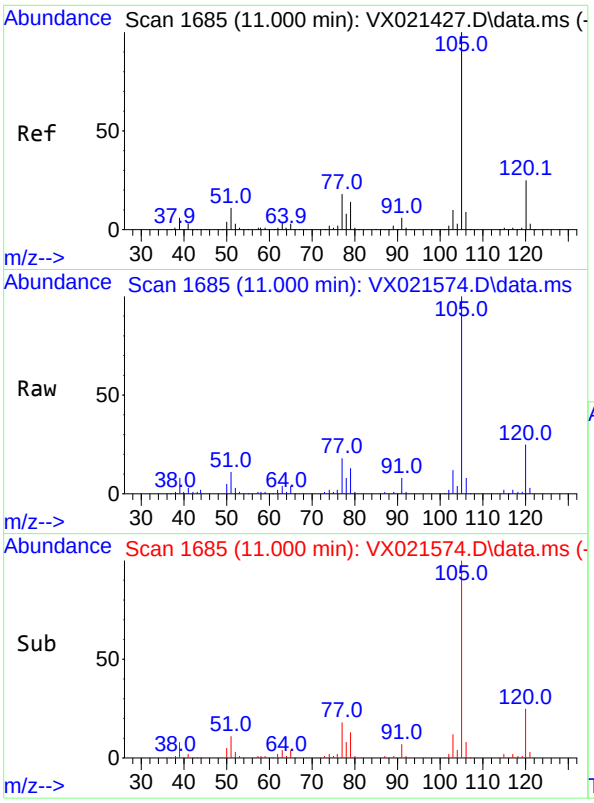
Tgt Ion:152 Resp: 58057

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 62.0 | 41.1 | 123.3 |
| 150 | 160.0 | 0.0 | 349.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

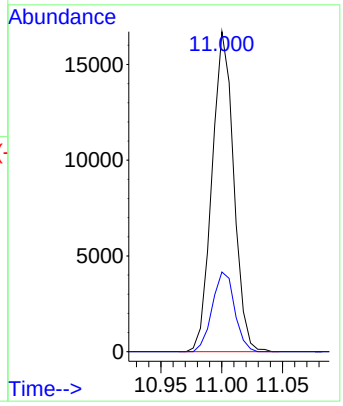
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM

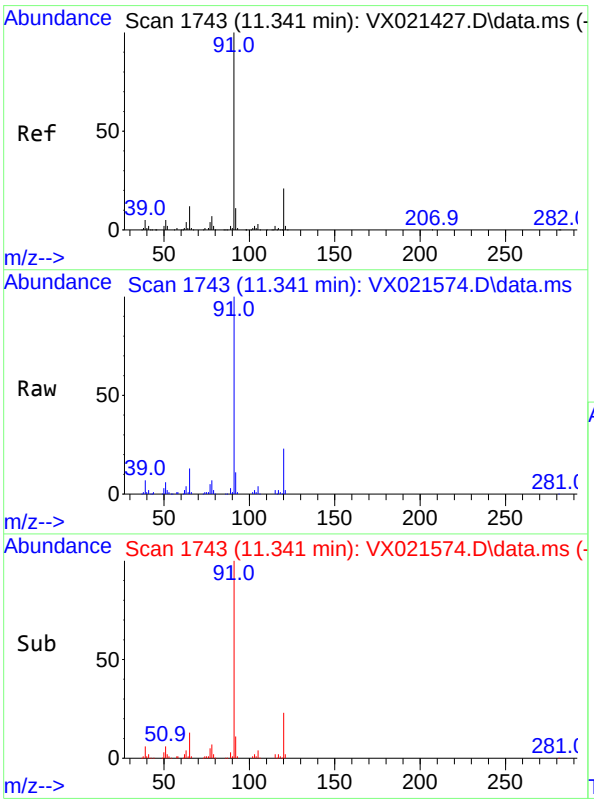



#73
Isopropylbenzene
Concen: 5.08 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

Tgt Ion:105 Resp: 20719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.6 | 13.2 | 39.6 |

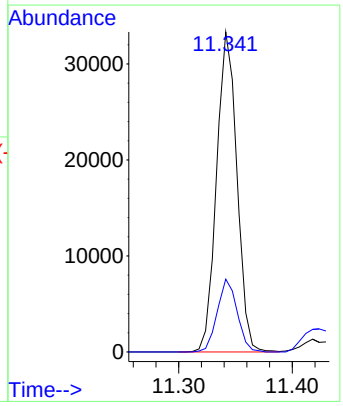



#78
n-propylbenzene
Concen: 8.63 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

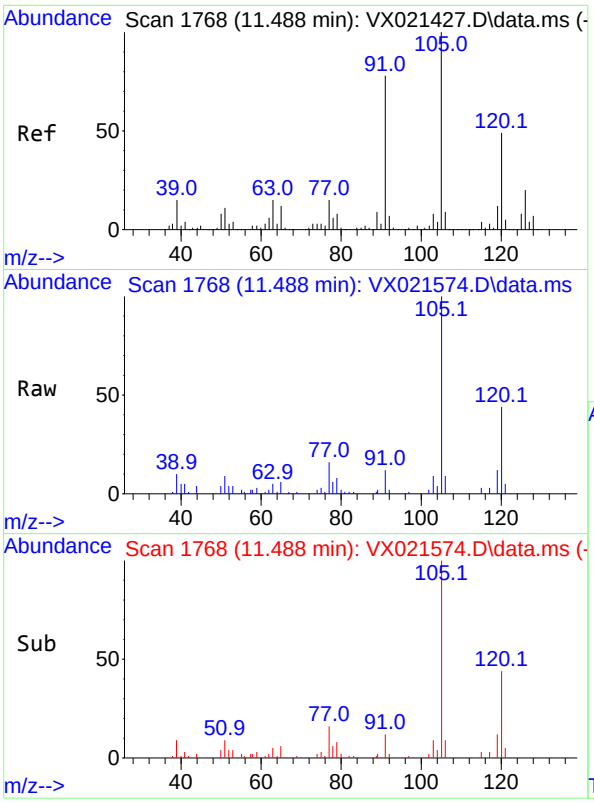
Tgt Ion: 91 Resp: 41572

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.3 | 11.5 | 34.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

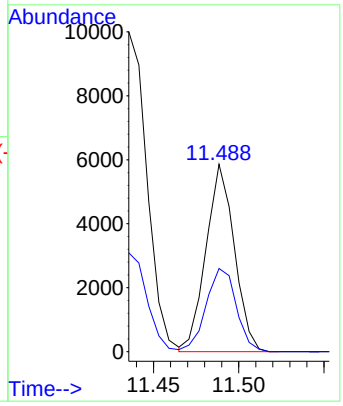
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM

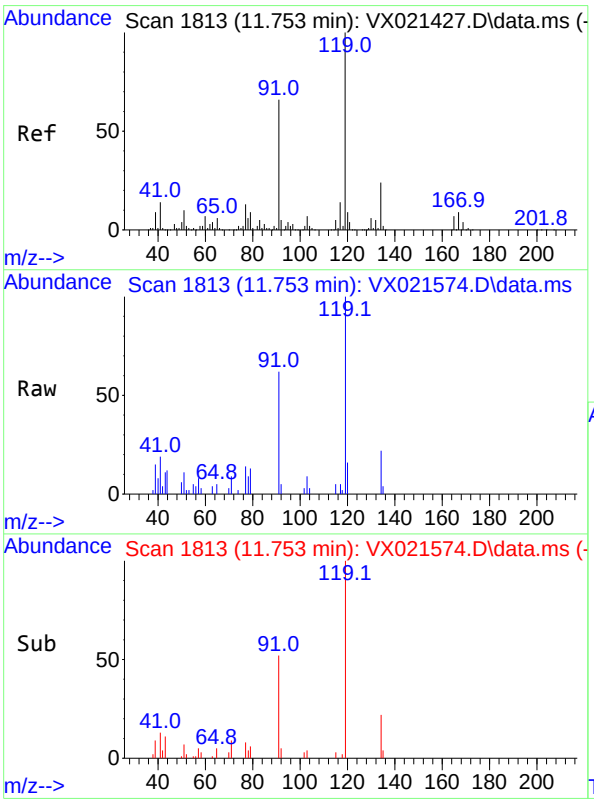



#80
1,3,5-Trimethylbenzene
Concen: 1.95 ug/l
RT: 11.488 min Scan# 1768
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

Tgt Ion:105 Resp: 6790

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.1 | 23.8 | 71.5 |

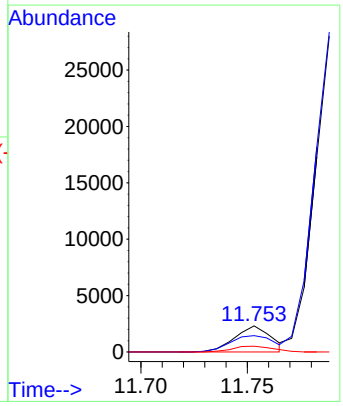



#83
tert-Butylbenzene
Concen: 0.80 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

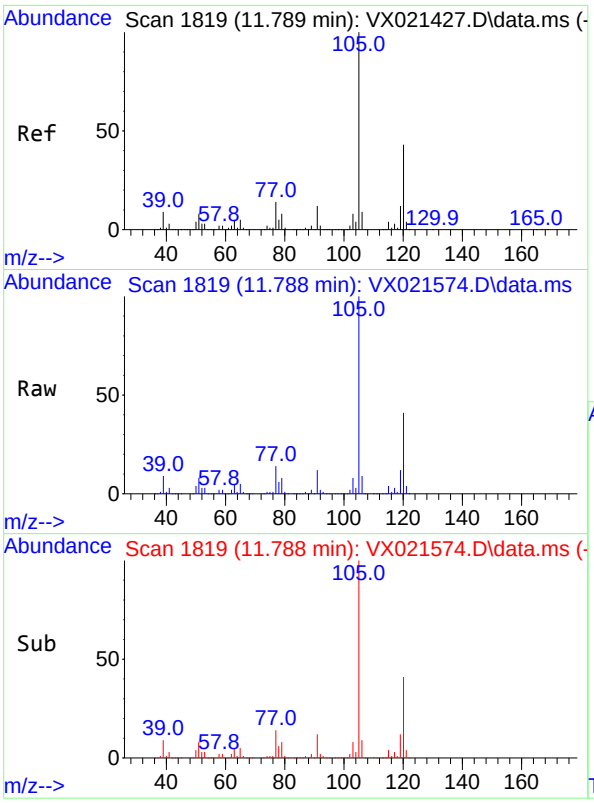
Tgt Ion:119 Resp: 2725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 74.9 | 27.9 | 83.7 |
| 134 | 25.0 | 11.3 | 33.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

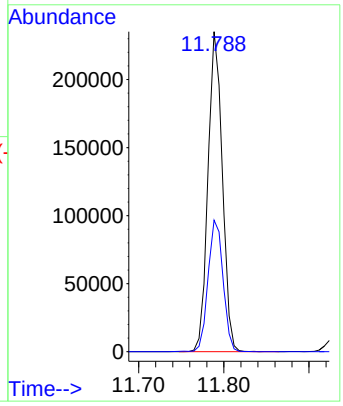
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM

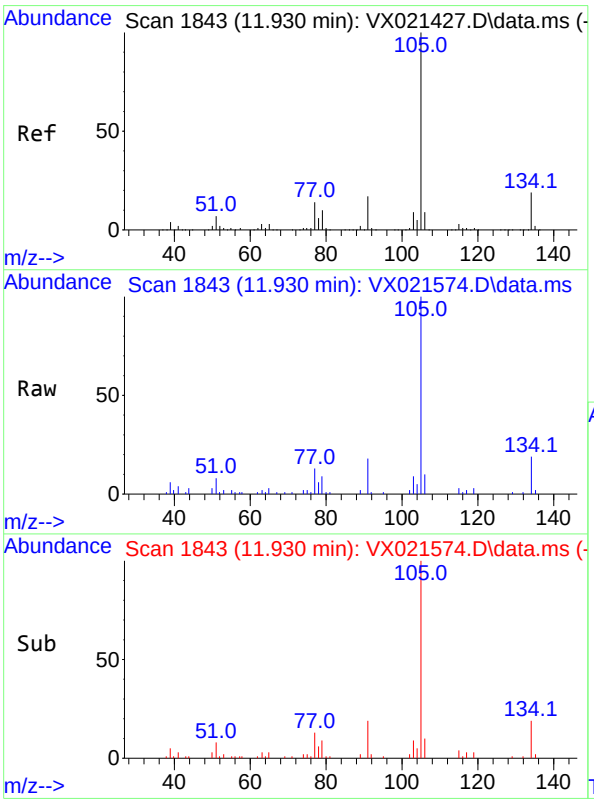



#84
1,2,4-Trimethylbenzene
Concen: 78.14 ug/l
RT: 11.788 min Scan# 1819
Delta R.T. -0.001 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

Tgt Ion:105 Resp: 274528

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.1 | 22.4 | 67.3 |

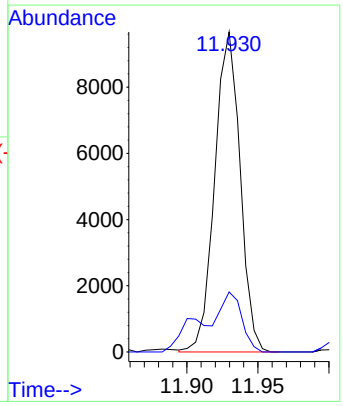



#85
sec-Butylbenzene
Concen: 3.07 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

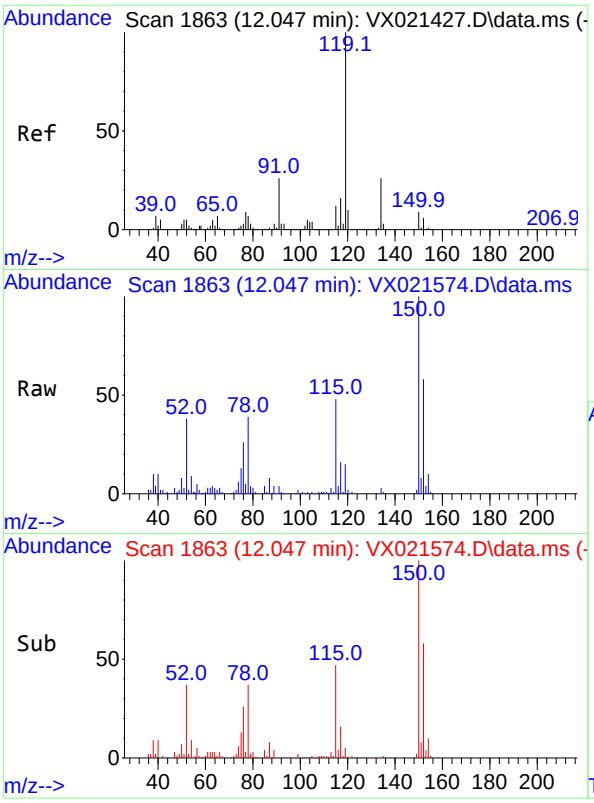
Tgt Ion:105 Resp: 12010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 15.9 | 10.0 | 29.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

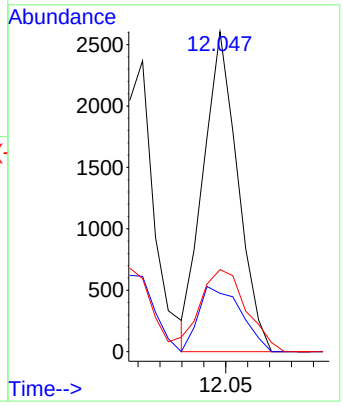
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM

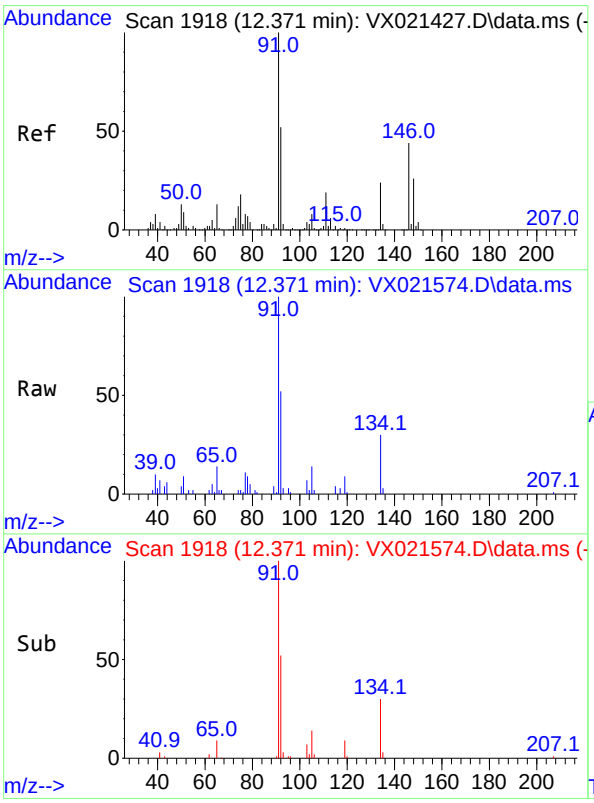



#86
p-Isopropyltoluene
Concen: 0.80 ug/l m
RT: 12.047 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

Tgt Ion:119 Resp: 2850

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 54.5 | 12.9 | 38.7# |
| 91 | 51.2 | 11.7 | 35.0# |

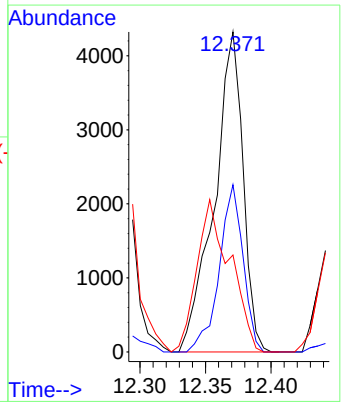



#89
n-Butylbenzene
Concen: 2.02 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. -0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

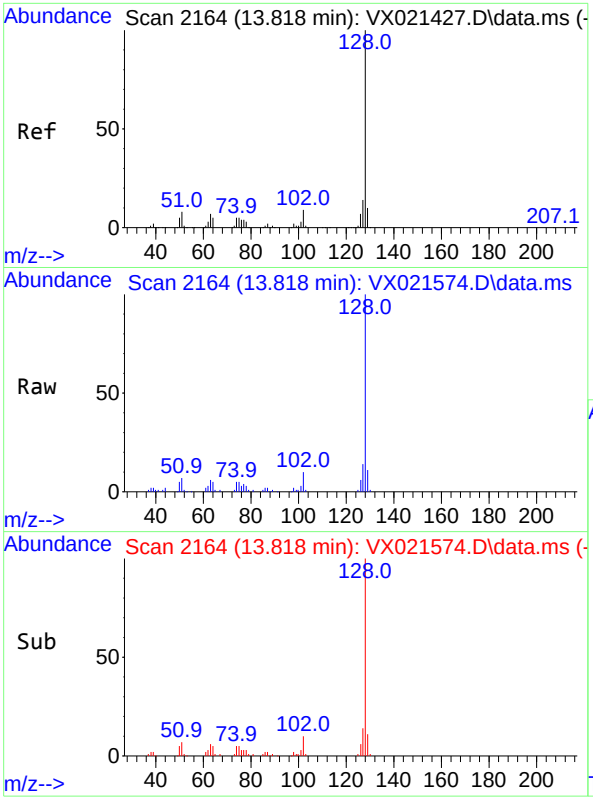
Tgt Ion: 91 Resp: 6586

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 43.3 | 27.4 | 82.0 |
| 134 | 55.0 | 13.2 | 39.5# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

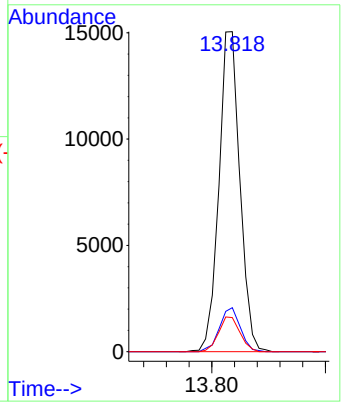
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 12:06:54 PM




#95
Naphthalene
Concen: 5.10 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021574.D
Acq: 29 Mar 2021 14:05

Tgt Ion:128 Resp: 19299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.7 | 10.3 | 15.5 |
| 129 | 11.1 | 8.8 | 13.2 |



LSC Area Percent Report

Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

Signal : TIC: VX021574.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.464 | 732 | 744 | 756 | rBV2 | 50475 | 140945 | 17.63% | 3.065% |
| 2 | 5.623 | 759 | 771 | 784 | rBV2 | 71409 | 199371 | 24.93% | 4.336% |
| 3 | 6.029 | 829 | 840 | 853 | rBV | 54079 | 141462 | 17.69% | 3.077% |
| 4 | 6.829 | 966 | 976 | 987 | rBV | 122593 | 287708 | 35.98% | 6.257% |
| 5 | 8.694 | 1286 | 1293 | 1311 | rBV | 263671 | 405649 | 50.73% | 8.822% |
| 6 | 10.094 | 1525 | 1531 | 1541 | rBV | 285099 | 386685 | 48.35% | 8.410% |
| 7 | 10.235 | 1549 | 1555 | 1564 | rBV | 43214 | 59765 | 7.47% | 1.300% |
| 8 | 10.341 | 1564 | 1573 | 1580 | rBV | 25587 | 37801 | 4.73% | 0.822% |
| 9 | 11.000 | 1679 | 1685 | 1690 | rBV | 44366 | 55732 | 6.97% | 1.212% |
| 10 | 11.118 | 1700 | 1705 | 1711 | rBV | 247229 | 315553 | 39.46% | 6.863% |
| 11 | 11.341 | 1737 | 1743 | 1751 | rBV | 72259 | 90329 | 11.30% | 1.965% |
| 12 | 11.418 | 1751 | 1756 | 1757 | rBV | 23903 | 27343 | 3.42% | 0.595% |
| 13 | 11.435 | 1757 | 1759 | 1763 | rVV | 27149 | 32628 | 4.08% | 0.710% |
| 14 | 11.488 | 1763 | 1768 | 1773 | rVB | 17267 | 21354 | 2.67% | 0.464% |
| 15 | 11.653 | 1791 | 1796 | 1803 | rBV | 29935 | 41075 | 5.14% | 0.893% |
| 16 | 11.753 | 1808 | 1813 | 1815 | rVV | 8584 | 12839 | 1.61% | 0.279% |
| 17 | 11.788 | 1815 | 1819 | 1830 | rVB | 683544 | 799686 | 100.00% | 17.392% |
| 18 | 11.900 | 1830 | 1838 | 1840 | rBV | 11205 | 15690 | 1.96% | 0.341% |
| 19 | 11.930 | 1840 | 1843 | 1848 | rVB | 24039 | 29400 | 3.68% | 0.639% |
| 20 | 12.059 | 1860 | 1865 | 1871 | rVV | 318553 | 392708 | 49.11% | 8.541% |
| 21 | 12.124 | 1871 | 1876 | 1885 | rVB | 304760 | 371990 | 46.52% | 8.090% |
| 22 | 12.218 | 1885 | 1892 | 1897 | rVB | 13337 | 17695 | 2.21% | 0.385% |
| 23 | 12.283 | 1897 | 1903 | 1910 | rBV | 109418 | 137783 | 17.23% | 2.997% |
| 24 | 12.353 | 1910 | 1915 | 1923 | rVB2 | 23116 | 44864 | 5.61% | 0.976% |
| 25 | 12.441 | 1925 | 1930 | 1936 | rBV | 16699 | 20434 | 2.56% | 0.444% |
| 26 | 12.500 | 1936 | 1940 | 1947 | rVB | 9759 | 11662 | 1.46% | 0.254% |
| 27 | 12.571 | 1947 | 1952 | 1954 | rBV | 31589 | 44252 | 5.53% | 0.962% |
| 28 | 12.594 | 1954 | 1956 | 1960 | rVB | 31430 | 30298 | 3.79% | 0.659% |
| 29 | 12.653 | 1960 | 1966 | 1969 | rBV | 53339 | 67129 | 8.39% | 1.460% |
| 30 | 12.683 | 1969 | 1971 | 1976 | rVB | 22233 | 23905 | 2.99% | 0.520% |
| 31 | 12.742 | 1976 | 1981 | 1988 | rBV2 | 50895 | 85828 | 10.73% | 1.867% |
| 32 | 12.883 | 2000 | 2005 | 2010 | rVB2 | 21427 | 30069 | 3.76% | 0.654% |
| 33 | 12.959 | 2010 | 2018 | 2022 | rVV | 26959 | 38685 | 4.84% | 0.841% |
| 34 | 13.000 | 2022 | 2025 | 2031 | rVV | 35921 | 41800 | 5.23% | 0.909% |
| 35 | 13.330 | 2076 | 2081 | 2087 | rVB2 | 41040 | 59896 | 7.49% | 1.303% |
| 36 | 13.459 | 2098 | 2103 | 2108 | rVB | 25951 | 33274 | 4.16% | 0.724% |

Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 37 | 13.812 | 2157 | 2163 | 2171 | rVB | 33509 | 44679 | 5.59% | 0.972% |

Sum of corrected areas: 4597966

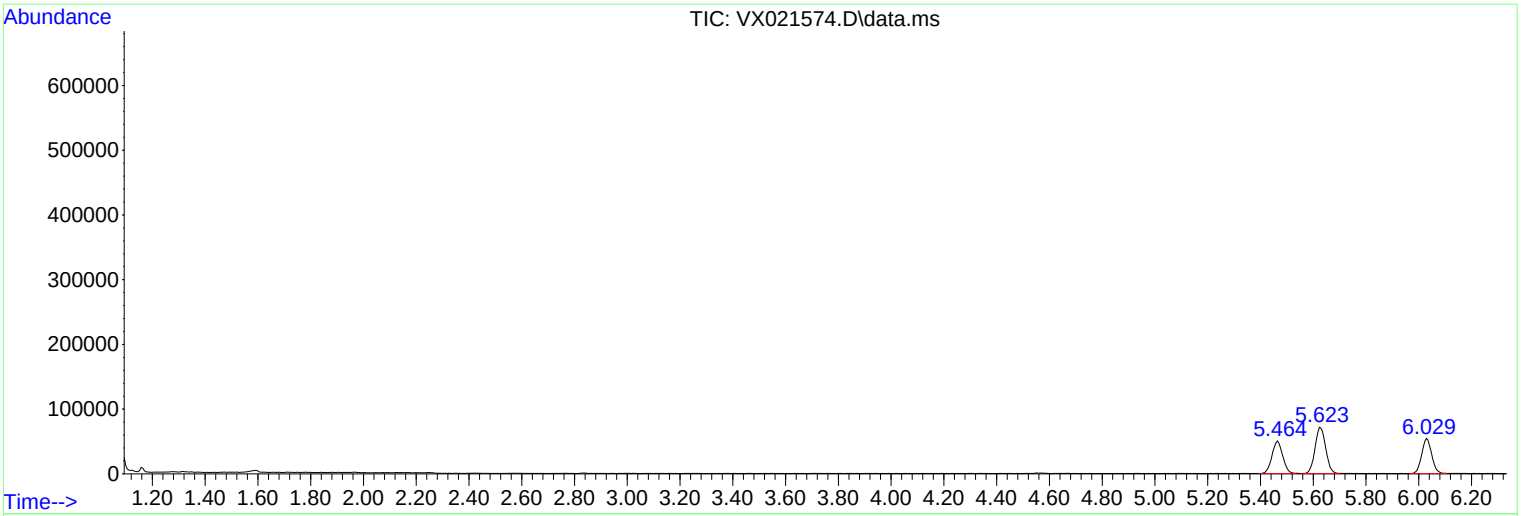
Sample Results: **VX021574.D**

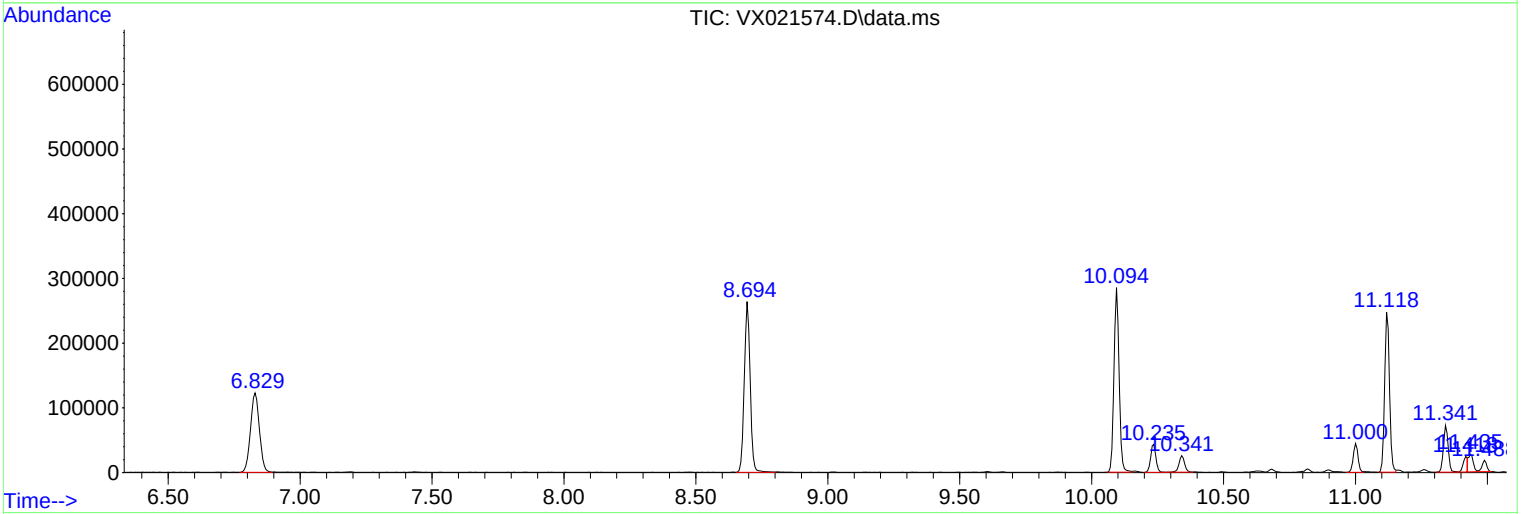
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

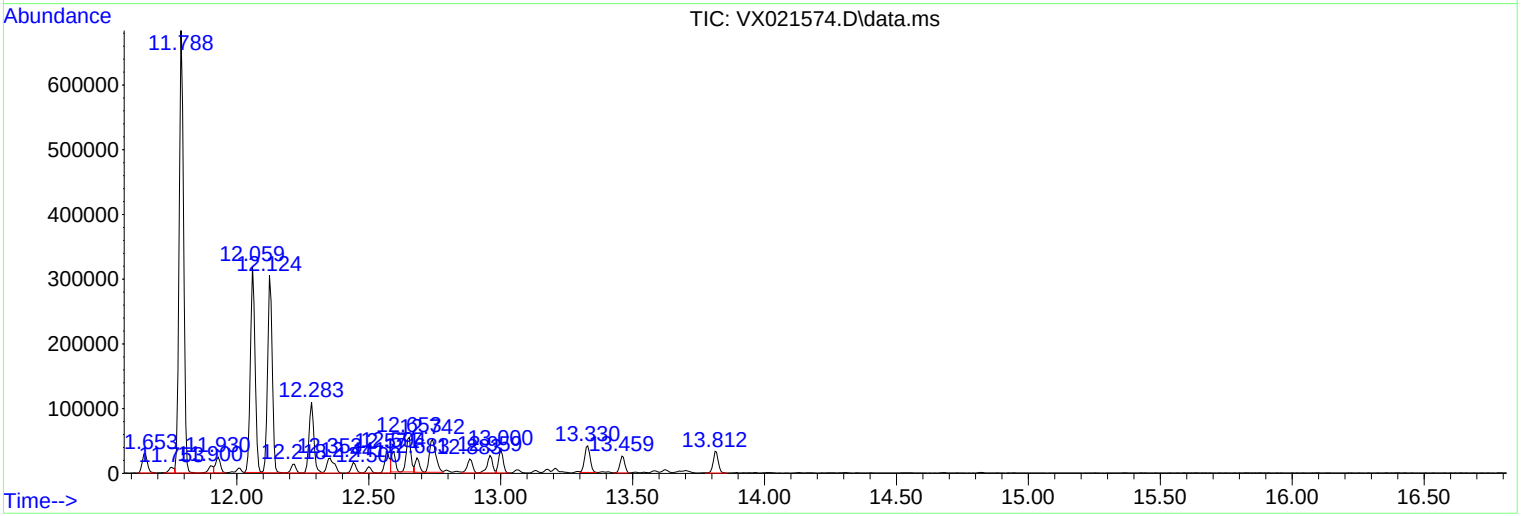
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P



Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

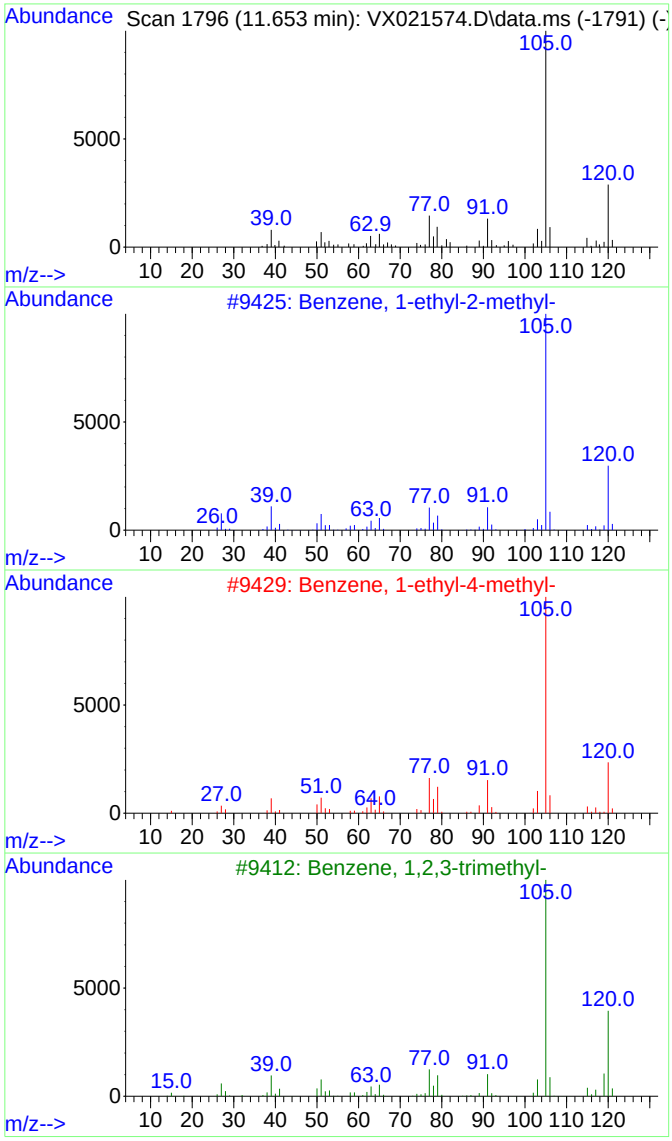
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

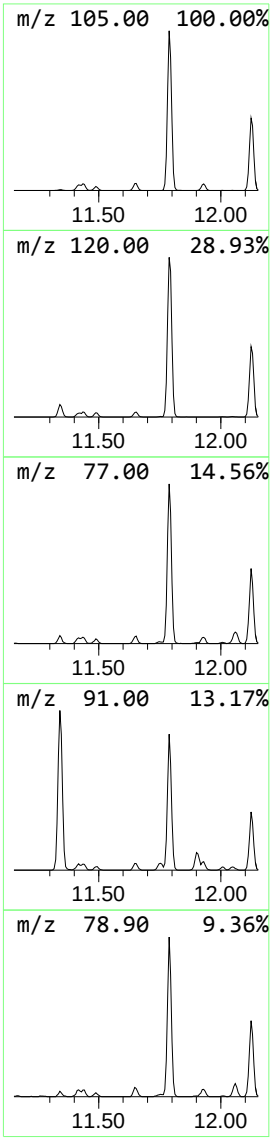
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 1 Benzene, 1-ethyl-2-methyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.653 | 5.23 ug/l | 41075 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 95 |
| 2 | Benzene, 1-ethyl-4-methyl- | 120 | C9H12 | 000622-96-8 | 91 |
| 3 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 91 |
| 4 | Mesitylene | 120 | C9H12 | 000108-67-8 | 91 |
| 5 | Benzene, 1-ethyl-3-methyl- | 120 | C9H12 | 000620-14-4 | 91 |



Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

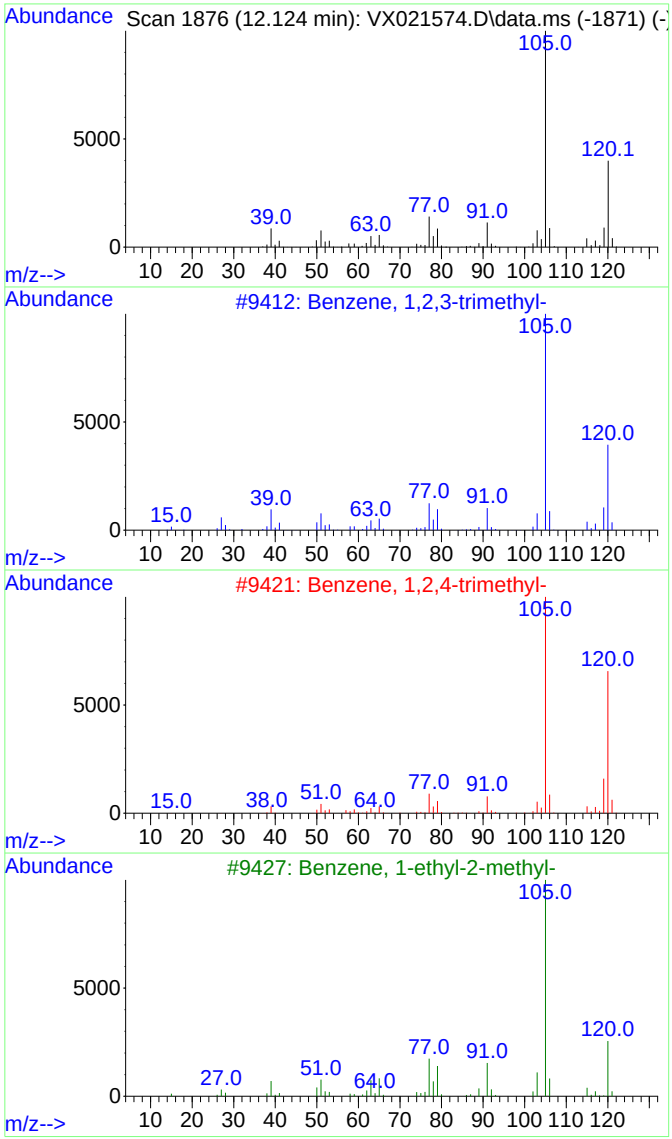
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

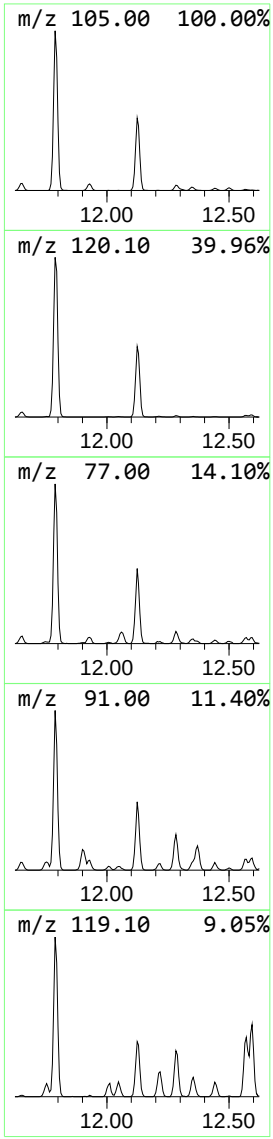
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 2 Benzene, 1,2,3-trimethyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.124 | 47.36 ug/l | 371990 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 97 |
| 2 | Benzene, 1,2,4-trimethyl- | 120 | C9H12 | 000095-63-6 | 94 |
| 3 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 93 |
| 4 | Mesitylene | 120 | C9H12 | 000108-67-8 | 91 |
| 5 | Benzene, 1-ethyl-3-methyl- | 120 | C9H12 | 000620-14-4 | 91 |



Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

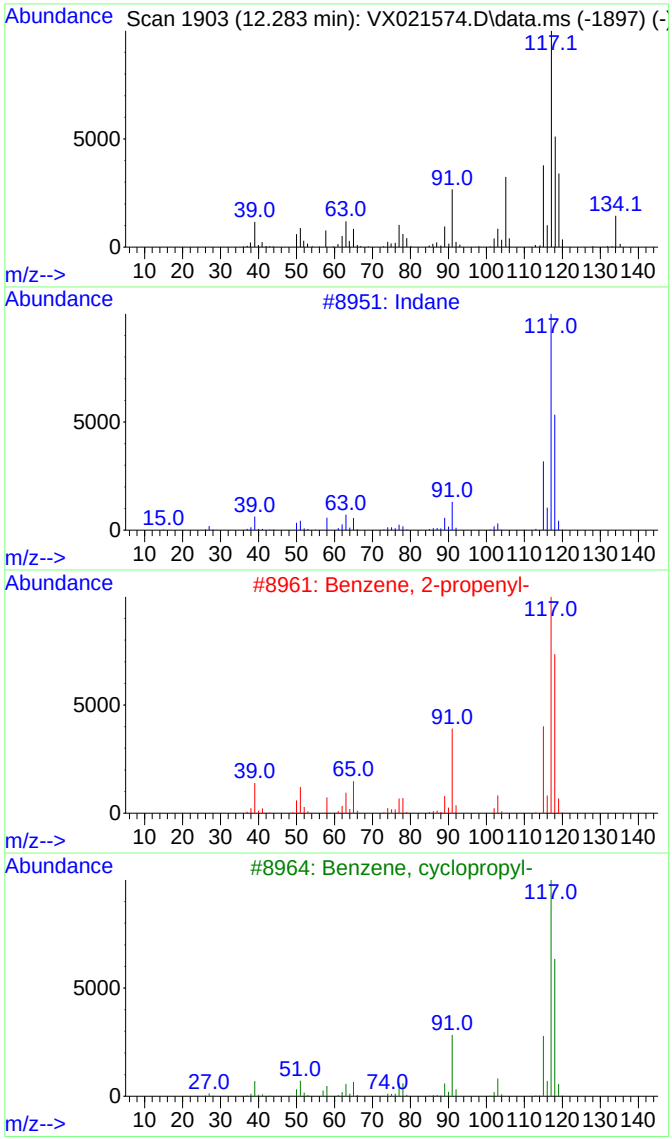
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

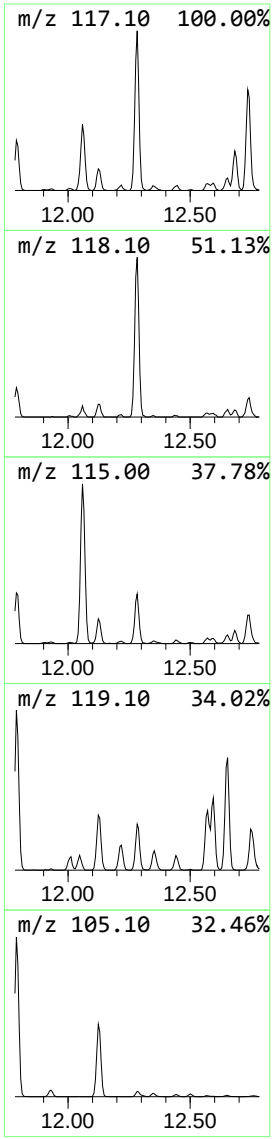
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 3 Indane Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.283 | 17.54 ug/l | 137783 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indane | 118 | C9H10 | 000496-11-7 | 92 |
| 2 | Benzene, 2-propenyl- | 118 | C9H10 | 000300-57-2 | 64 |
| 3 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 64 |
| 4 | Benzene, 1-ethenyl-2-methyl- | 118 | C9H10 | 000611-15-4 | 64 |
| 5 | Tetracyclo[3.3.1.0(2,8).0(4,6)]-... | 118 | C9H10 | 1000191-13-7 | 60 |



Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

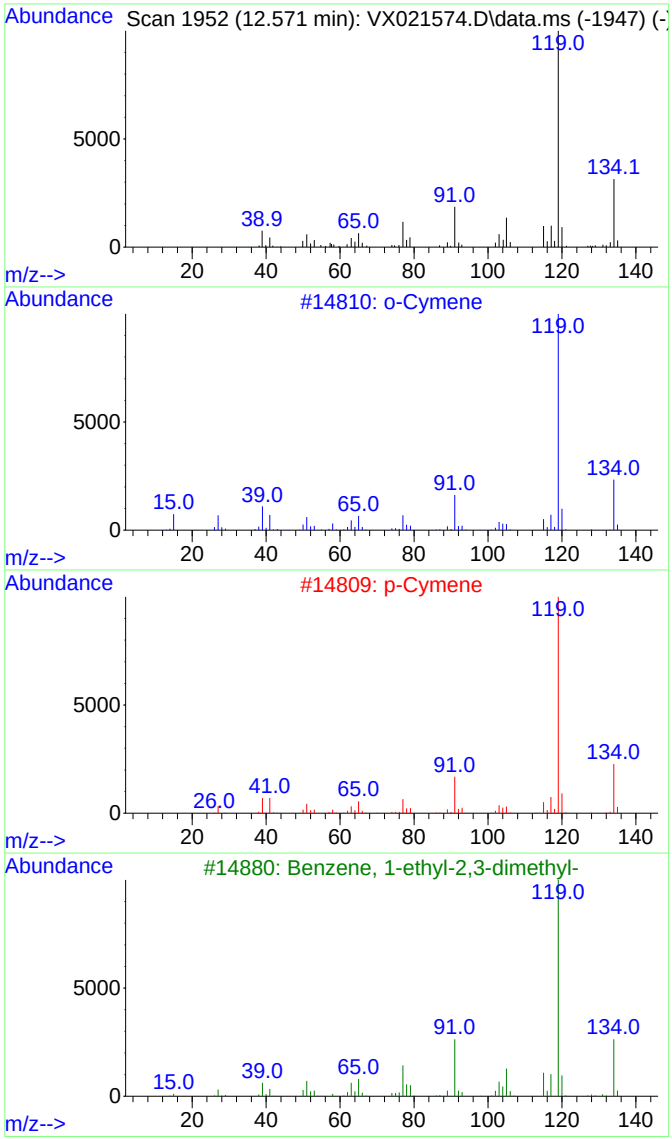
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

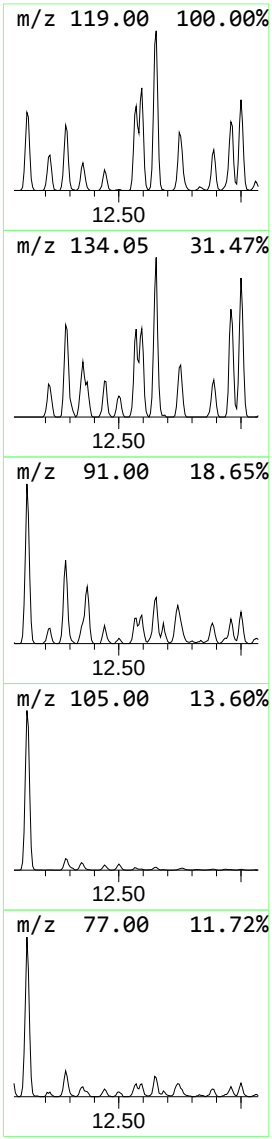
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 4 o-Cymene Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.571 | 5.63 ug/l | 44252 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | o-Cymene | 134 | C10H14 | 000527-84-4 | 97 |
| 2 | p-Cymene | 134 | C10H14 | 000099-87-6 | 97 |
| 3 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 96 |
| 4 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 96 |
| 5 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 96 |



Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

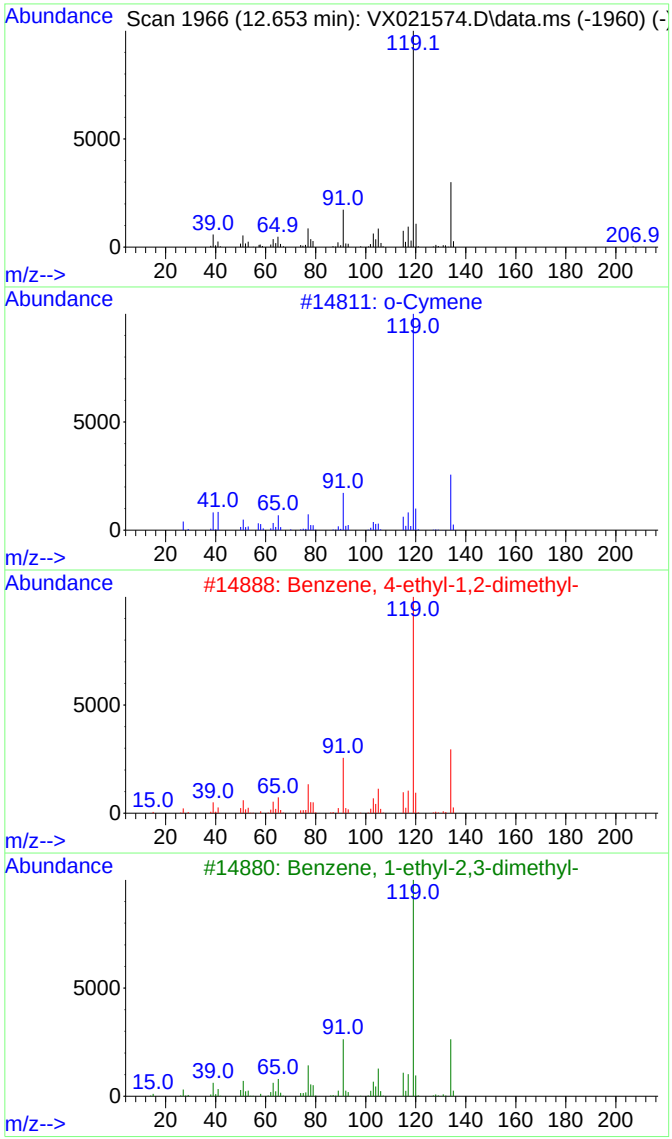
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

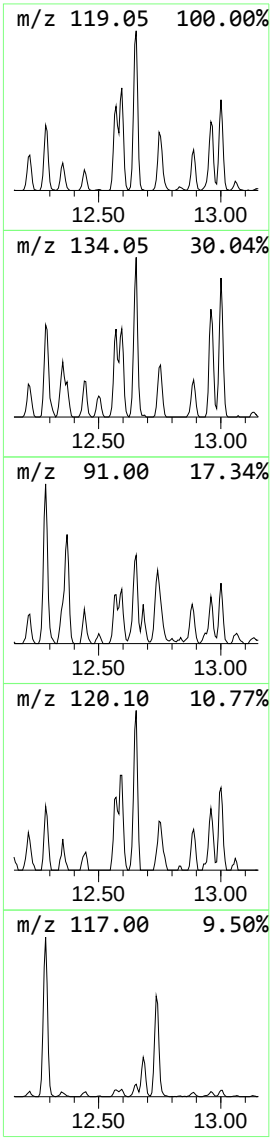
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 5 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.653 | 8.55 ug/l | 67129 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | o-Cymene | 134 | C10H14 | 000527-84-4 | 97 |
| 2 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 96 |
| 3 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 95 |
| 4 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 94 |
| 5 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 94 |



Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

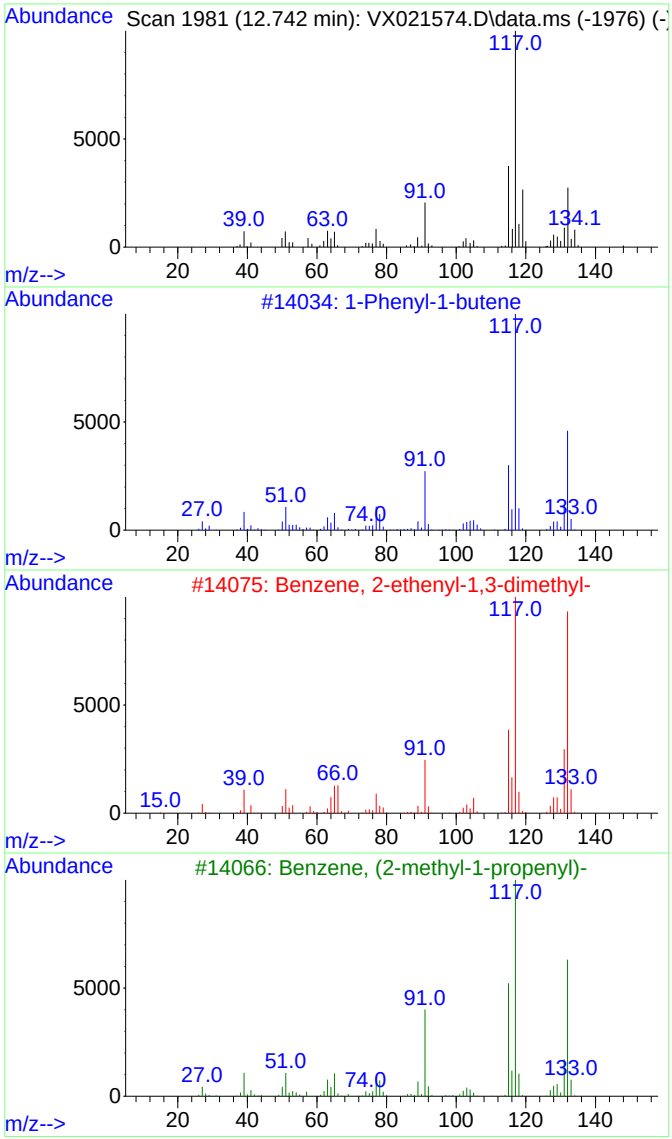
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

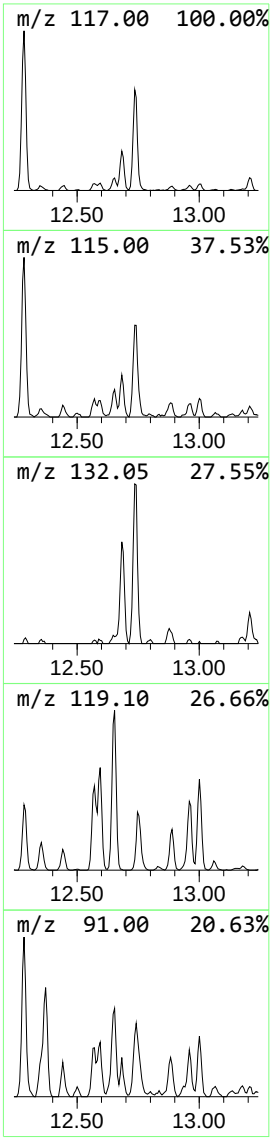
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 6 1-Phenyl-1-butene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.742 | 10.93 ug/l | 85828 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Phenyl-1-butene | 132 | C10H12 | 000824-90-8 | 81 |
| 2 | Benzene, 2-ethenyl-1,3-dimethyl- | 132 | C10H12 | 002039-90-9 | 81 |
| 3 | Benzene, (2-methyl-1-propenyl)- | 132 | C10H12 | 000768-49-0 | 81 |
| 4 | Indan, 1-methyl- | 132 | C10H12 | 000767-58-8 | 81 |
| 5 | Benzene, (2-methylcyclopropyl)- | 132 | C10H12 | 1000327-39-0 | 76 |



Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

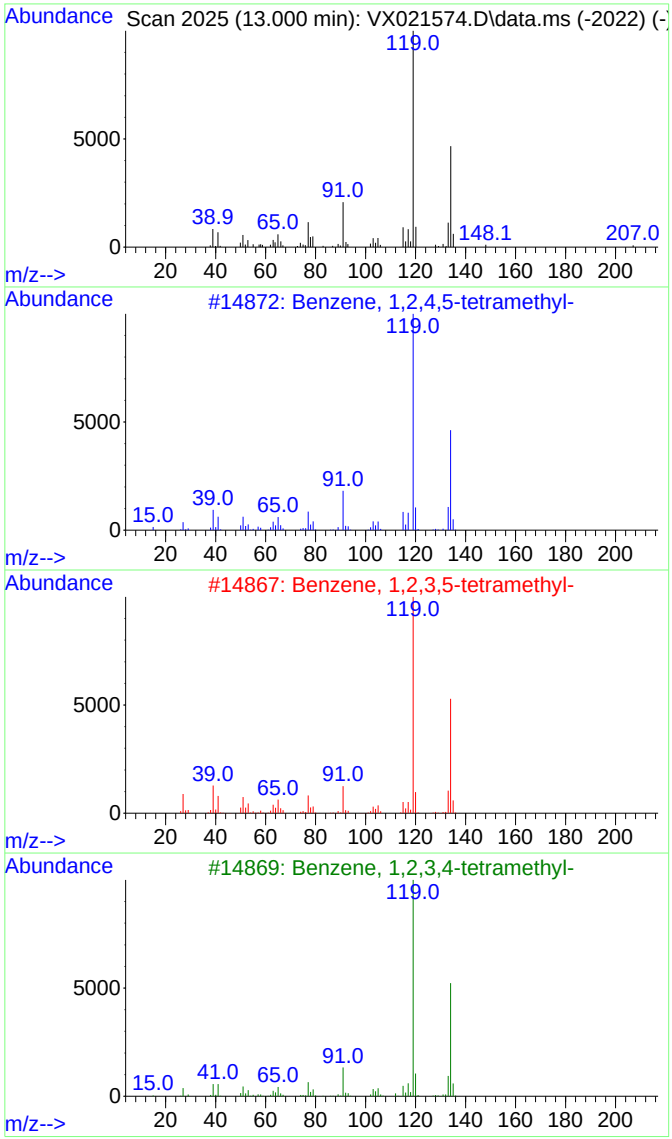
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

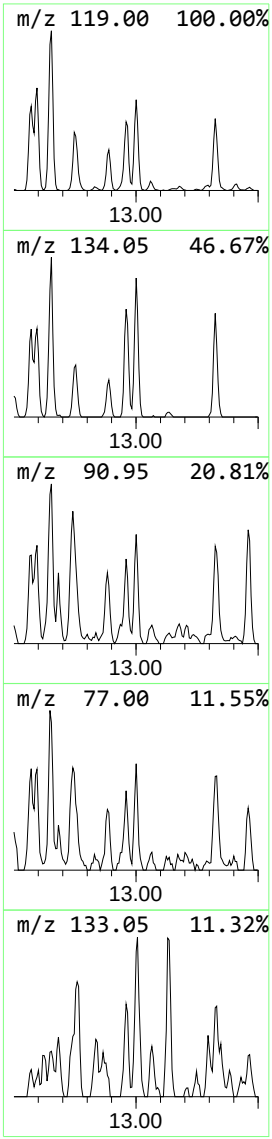
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 7 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.000 | 5.32 ug/l | 41800 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 96 |
| 2 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 95 |
| 3 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 94 |
| 4 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 94 |
| 5 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 93 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

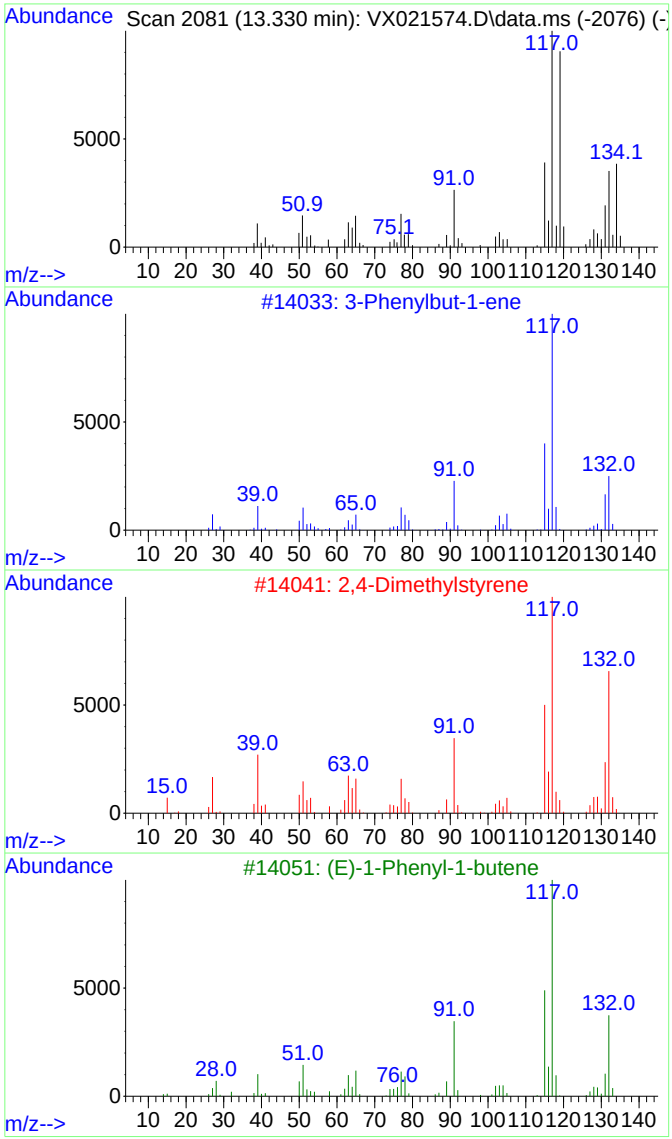
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

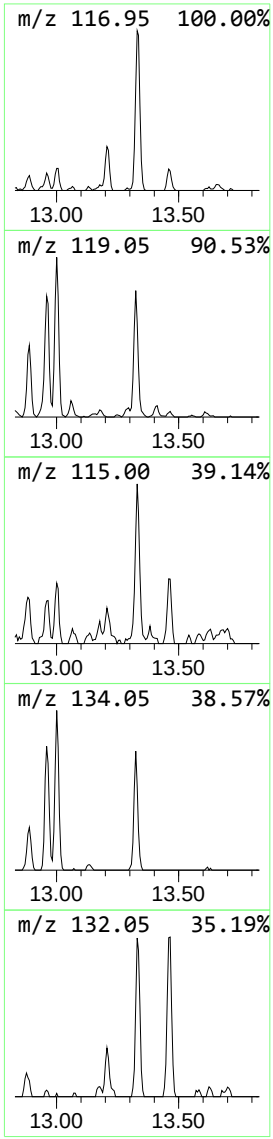
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 8 3-Phenylbut-1-ene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.330 | 7.63 ug/l | 59896 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 3-Phenylbut-1-ene | 132 | C10H12 | 000934-10-1 | 87 |
| 2 | 2,4-Dimethylstyrene | 132 | C10H12 | 002234-20-0 | 80 |
| 3 | (E)-1-Phenyl-1-butene | 132 | C10H12 | 001005-64-7 | 70 |
| 4 | Benzene, (2-methyl-1-propenyl)- | 132 | C10H12 | 000768-49-0 | 64 |
| 5 | Benzene, 2-butenyl- | 132 | C10H12 | 001560-06-1 | 64 |



Sample Results: **VX021574.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021574.D
Acq On : 29 Mar 2021 14:05
Operator : JC/MD
Sample : M1785-15 20X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-4

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Benzene, 1-ethy... | 11.653 | 5.2 | ug/l | 41075 | 4 | 12.059 | 392708 | 50.0 |
| Benzene, 1,2,3-... | 12.124 | 47.4 | ug/l | 371990 | 4 | 12.059 | 392708 | 50.0 |
| Indane | 12.283 | 17.5 | ug/l | 137783 | 4 | 12.059 | 392708 | 50.0 |
| o-Cymene | 12.571 | 5.6 | ug/l | 44252 | 4 | 12.059 | 392708 | 50.0 |
| Benzene, 4-ethy... | 12.653 | 8.6 | ug/l | 67129 | 4 | 12.059 | 392708 | 50.0 |
| 1-Phenyl-1-butene | 12.742 | 10.9 | ug/l | 85828 | 4 | 12.059 | 392708 | 50.0 |
| Benzene, 1,2,4,... | 13.000 | 5.3 | ug/l | 41800 | 4 | 12.059 | 392708 | 50.0 |
| 3-Phenylbut-1-ene | 13.330 | 7.6 | ug/l | 59896 | 4 | 12.059 | 392708 | 50.0 |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-5R | SDG No.: | M1785 |
| Lab Sample ID: | M1785-16 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021581.D | 10 | | 03/29/21 16:49 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 10.0 | U | 2.30 | 10.0 | ug/L |
| 74-87-3 | Chloromethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 75-01-4 | Vinyl Chloride | 10.0 | U | 1.90 | 10.0 | ug/L |
| 74-83-9 | Bromomethane | 50.0 | U | 8.70 | 50.0 | ug/L |
| 75-00-3 | Chloroethane | 10.0 | U | 3.50 | 10.0 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 10.0 | U | 2.50 | 10.0 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 10.0 | U | 2.10 | 10.0 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 10.0 | U | 2.60 | 10.0 | ug/L |
| 67-64-1 | Acetone | 50.0 | U | 16.1 | 50.0 | ug/L |
| 75-15-0 | Carbon Disulfide | 10.0 | U | 2.50 | 10.0 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 10.0 | U | 2.20 | 10.0 | ug/L |
| 79-20-9 | Methyl Acetate | 10.0 | U | 4.70 | 10.0 | ug/L |
| 75-09-2 | Methylene Chloride | 10.0 | U | 1.80 | 10.0 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 10.0 | U | 2.10 | 10.0 | ug/L |
| 110-82-7 | Cyclohexane | 50.0 | U | 13.0 | 50.0 | ug/L |
| 78-93-3 | 2-Butanone | 50.0 | U | 9.00 | 50.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 10.0 | U | 2.70 | 10.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 10.0 | U | 2.20 | 10.0 | ug/L |
| 74-97-5 | Bromochloromethane | 10.0 | U | 2.60 | 10.0 | ug/L |
| 67-66-3 | Chloroform | 10.0 | U | 2.70 | 10.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 108-87-2 | Methylcyclohexane | 10.0 | U | 1.40 | 10.0 | ug/L |
| 71-43-2 | Benzene | 10.0 | U | 1.80 | 10.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 10.0 | U | 2.50 | 10.0 | ug/L |
| 79-01-6 | Trichloroethene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 10.0 | U | 1.70 | 10.0 | ug/L |
| 75-27-4 | Bromodichloromethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 50.0 | U | 8.70 | 50.0 | ug/L |
| 108-88-3 | Toluene | 10.0 | U | 2.20 | 10.0 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 10.0 | U | 1.80 | 10.0 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 10.0 | U | 1.70 | 10.0 | ug/L |

Raw Data: **VX021581.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-5R | SDG No.: | M1785 |
| Lab Sample ID: | M1785-16 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021581.D | 10 | | 03/29/21 16:49 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 10.0 | U | 2.40 | 10.0 | ug/L |
| 591-78-6 | 2-Hexanone | 50.0 | U | 9.20 | 50.0 | ug/L |
| 124-48-1 | Dibromochloromethane | 10.0 | U | 1.80 | 10.0 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 10.0 | U | 1.60 | 10.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 108-90-7 | Chlorobenzene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 100-41-4 | Ethyl Benzene | 18.1 | | 1.80 | 10.0 | ug/L |
| 1330-20-7 | Total Xylenes | 115 | | 5.10 | 30.0 | ug/L |
| 100-42-5 | Styrene | 10.0 | U | 1.60 | 10.0 | ug/L |
| 75-25-2 | Bromoform | 10.0 | U | 1.90 | 10.0 | ug/L |
| 98-82-8 | Isopropylbenzene | 180 | | 2.30 | 10.0 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 10.0 | U | 2.90 | 10.0 | ug/L |
| 103-65-1 | n-propylbenzene | 360 | | 2.40 | 10.0 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 270 | | 2.50 | 10.0 | ug/L |
| 98-06-6 | tert-Butylbenzene | 31.5 | | 2.60 | 10.0 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1200 | | 2.00 | 10.0 | ug/L |
| 135-98-8 | sec-Butylbenzene | 140 | | 2.30 | 10.0 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 10.0 | U | 2.00 | 10.0 | ug/L |
| 104-51-8 | n-Butylbenzene | 130 | | 1.90 | 10.0 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 10.0 | U | 4.70 | 10.0 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10.0 | U | 3.00 | 10.0 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 10.0 | U | 3.50 | 10.0 | ug/L |
| 123-91-1 | 1,4-Dioxane | 1000 | U | 69.8 | 1000 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 52.4 | | 78 - 117 | 105% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.4 | | 75 - 124 | 101% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.2 | | 92 - 112 | 102% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 57.5 | | 83 - 123 | 115% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 59100 | 5.635 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 109000 | 6.829 | | | |

Raw Data: **VX021581.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-5R | SDG No.: | M1785 |
| Lab Sample ID: | M1785-16 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021581.D | 10 | | 03/29/21 16:49 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 114000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 57500 | 12.059 | | | |
| **TENTATIVE IDENTIFIED COMPOUNDS** | | | | | | |
| 179601-23-1 | m/p-Xylenes | 110 | J | | 10.3 | ug/L |
| 95-47-6 | o-Xylene | 5.40 | J | | 10.7 | ug/L |
| 000611-14-3 | Benzene, 1-ethyl-2-methyl- | 240 | J | | 11.4 | ug/L |
| 000526-73-8 | Benzene, 1,2,3-trimethyl- | 600 | J | | 12.1 | ug/L |
| 000622-97-9 | Benzene, 1-ethenyl-4-methyl- | 660 | J | | 12.3 | ug/L |
| 000135-01-3 | Benzene, 1,2-diethyl- | 120 | J | | 12.4 | ug/L |
| 000934-80-5 | Benzene, 4-ethyl-1,2-dimethyl- | 440 | J | | 12.7 | ug/L |
| 000824-90-8 | 1-Phenyl-1-butene | 130 | J | | 12.7 | ug/L |
| 000767-58-8 | Indan, 1-methyl- | 430 | J | | 12.7 | ug/L |
| 000095-93-2 | Benzene, 1,2,4,5-tetramethyl- | 260 | J | | 13.0 | ug/L |
| 000527-53-7 | Benzene, 1,2,3,5-tetramethyl- | 110 | J | | 13.0 | ug/L |
| 000527-84-4 | o-Cymene | 470 | J | | 13.3 | ug/L |
| 91-20-3 | Naphthalene | 6.30 | J | | 13.8 | ug/L |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
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: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

Quant Time: Mar 30 03:29:50 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.635 | 168 | 59069 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 109090 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 113700 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 57549 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 51531 | 52.43 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 104.86% | | | | |
| 35) Dibromofluoromethane | 5.458 | 113 | 39089 | 50.44 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.88% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 141273 | 51.16 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 102.32% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 61713 | 57.48 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 114.96% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 67) Ethyl Benzene | 10.235 | 91 | 7541 | 1.81 | ug/l | | 100 |
| 68) m/p-Xylenes | 10.341 | 106 | 15868 | 10.70 | ug/l | | 91 |
| 69) o-Xylene | 10.683 | 106 | 777 | 0.54 | ug/l | | 100 |
| 73) Isopropylbenzene | 11.000 | 105 | 71260 | 17.62 | ug/l | | 98 |
| 78) n-propylbenzene | 11.341 | 91 | 169749 | 35.55 | ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 92006 | 26.63 | ug/l | | 98 |
| 83) tert-Butylbenzene | 11.753 | 119 | 10605 | 3.15 | ug/l | | 81 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 405761 | 116.52 | ug/l | | 98 |
| 85) sec-Butylbenzene | 11.930 | 105 | 52653 | 13.57 | ug/l | | 80 |
| 89) n-Butylbenzene | 12.371 | 91 | 43017 | 13.29 | ug/l | # | 72 |
| 95) Naphthalene | 13.818 | 128 | 2347 | 0.63 | ug/l | # | 93 |

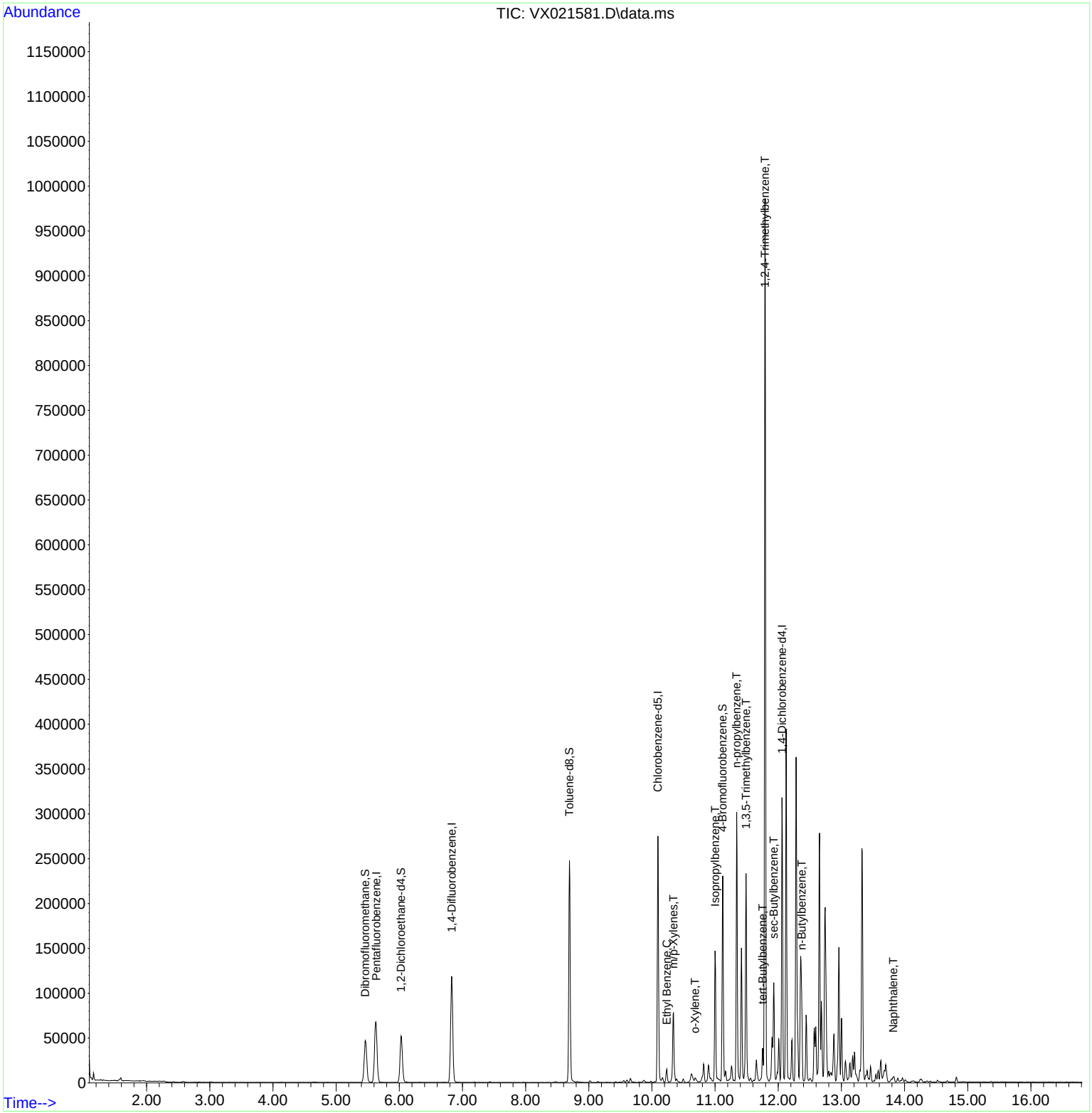
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample Results: **VX021581.D**

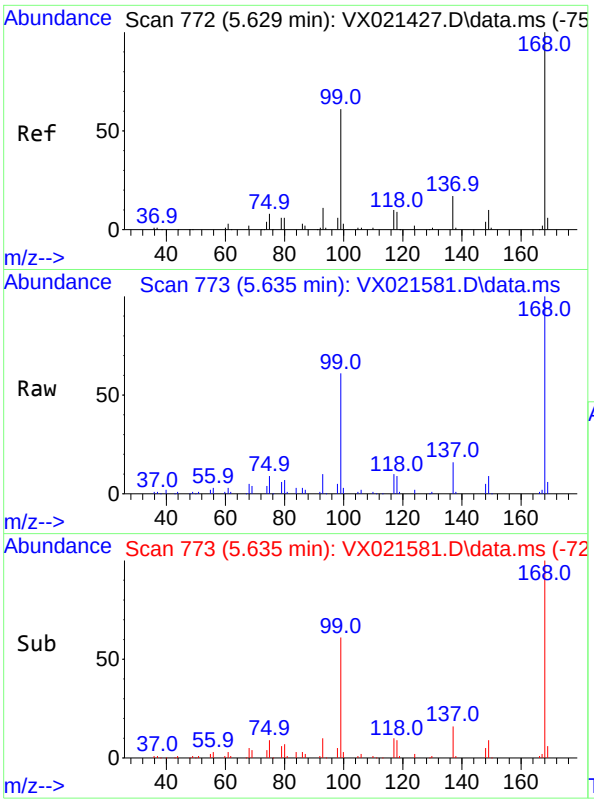
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

Quant Time: Mar 30 03:29:50 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration



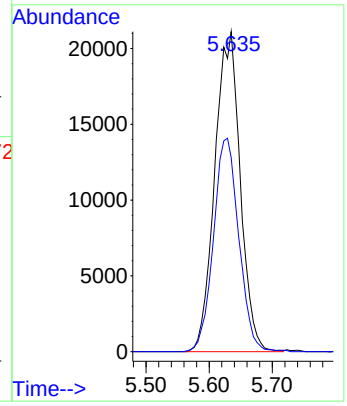
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

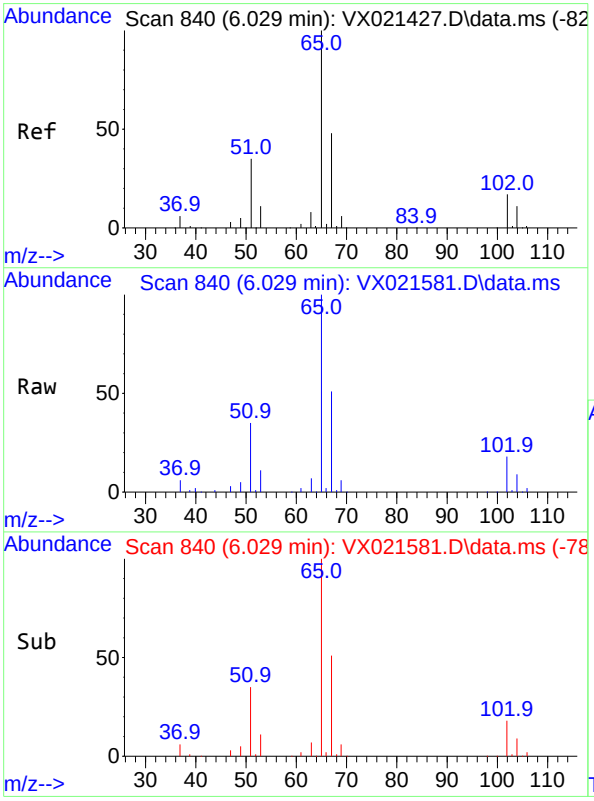



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.635 min Scan# 773
Delta R.T. 0.006 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:168 Resp: 59069

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 60.6 | 45.8 | 68.6 |

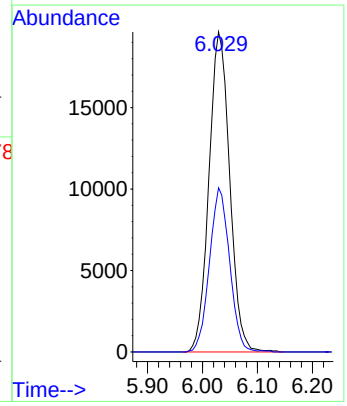


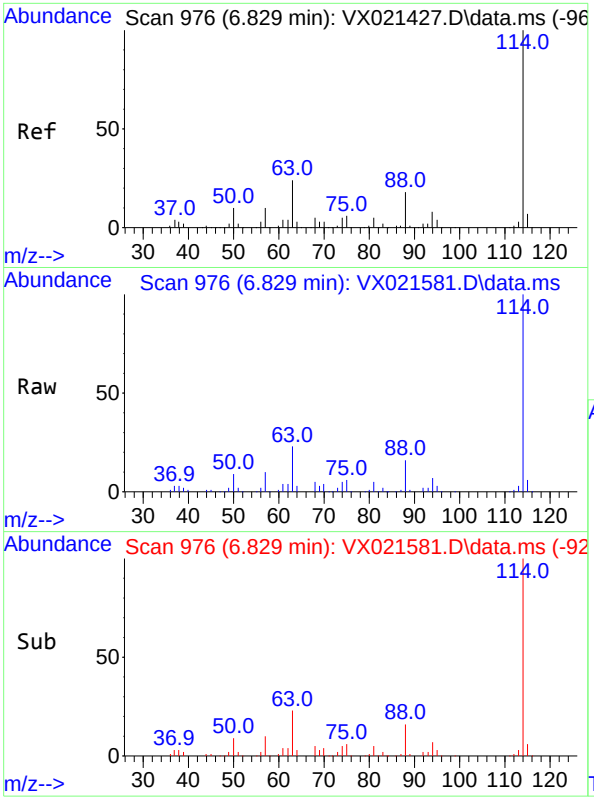

#33
1,2-Dichloroethane-d4
Concen: 52.43 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion: 65 Resp: 51531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.9 | 0.0 | 105.4 |



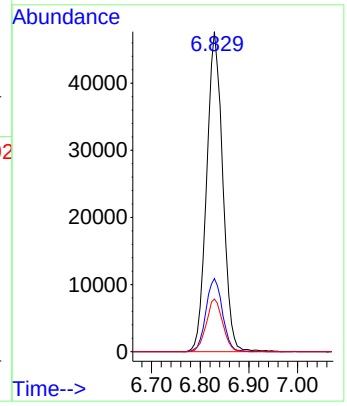
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

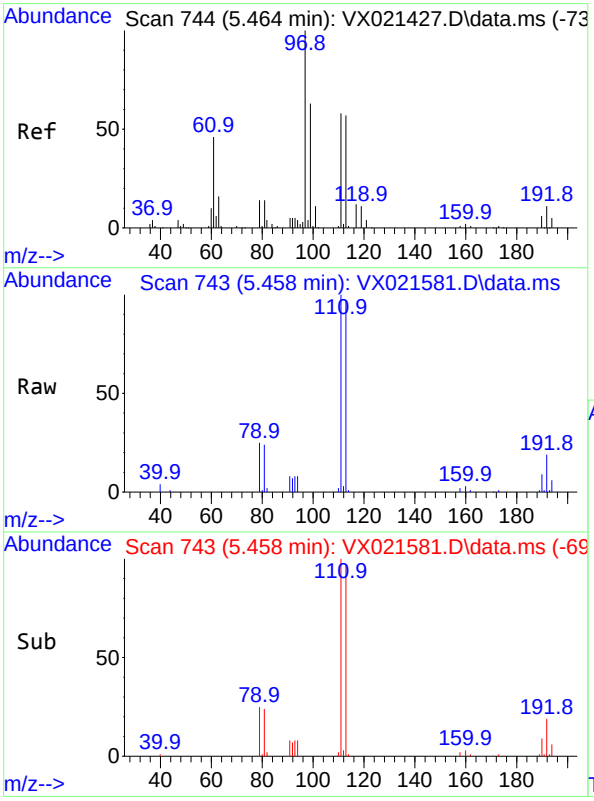



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:114 Resp: 109090

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.8 | 0.0 | 40.8 |
| 88 | 16.5 | 0.0 | 32.8 |

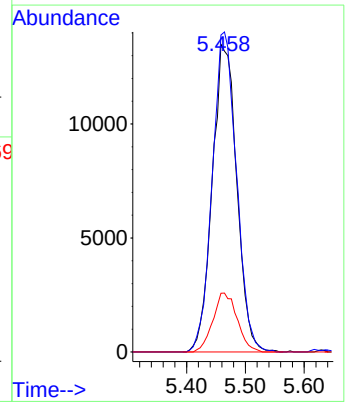


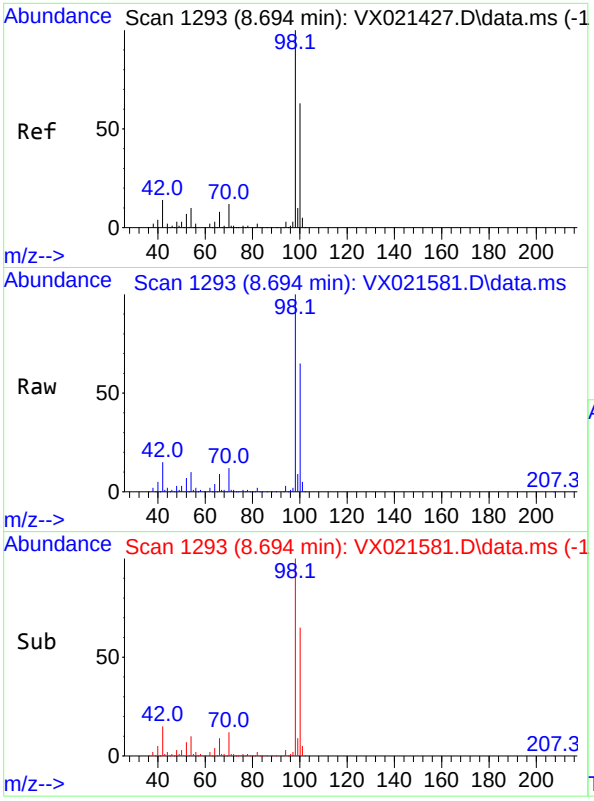

#35
Dibromofluoromethane
Concen: 50.44 ug/l
RT: 5.458 min Scan# 743
Delta R.T. -0.006 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:113 Resp: 39089

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.6 | 81.9 | 122.9 |
| 192 | 19.0 | 16.7 | 25.1 |



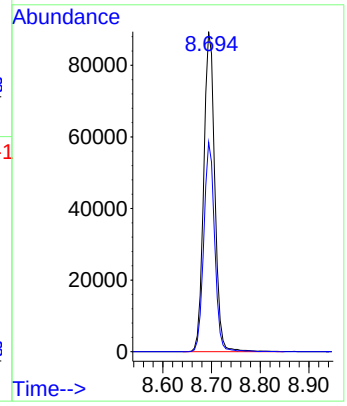
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

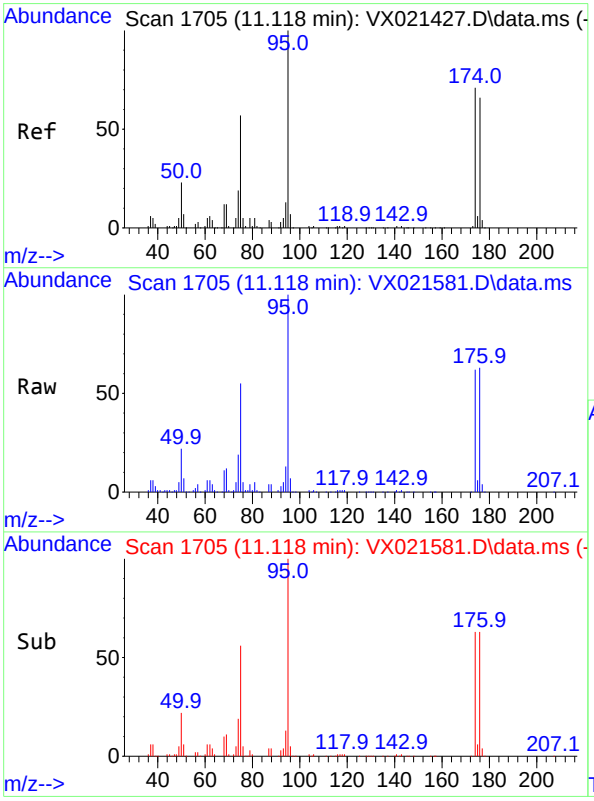



#50
Toluene-d8
Concen: 51.16 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion: 98 Resp: 141273

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.1 | 51.9 | 77.9 |

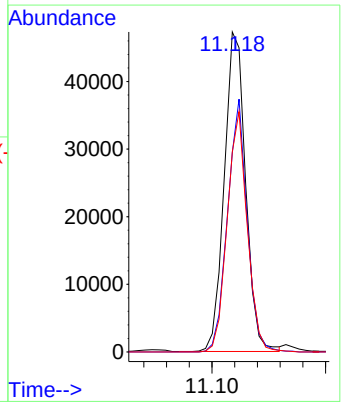


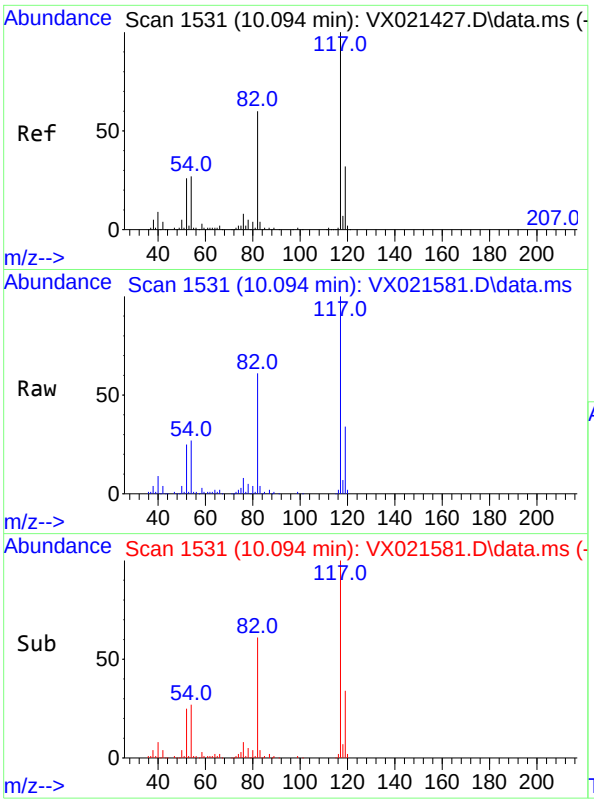

#62
4-Bromofluorobenzene
Concen: 57.48 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion: 95 Resp: 61713

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.8 | 0.0 | 154.6 |
| 176 | 70.3 | 0.0 | 155.8 |



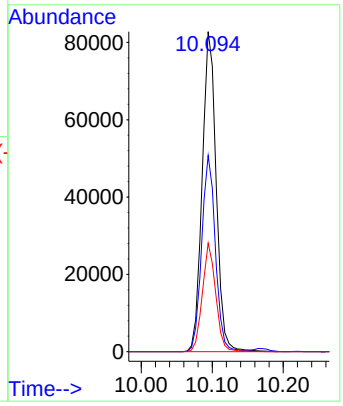
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

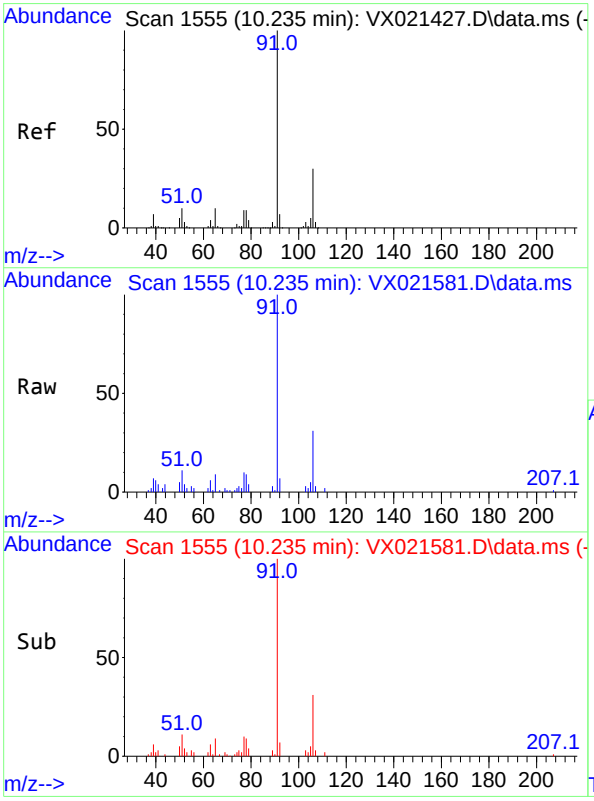



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:117 Resp: 113700

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.3 | 47.4 | 71.2 |
| 119 | 34.0 | 26.6 | 39.8 |

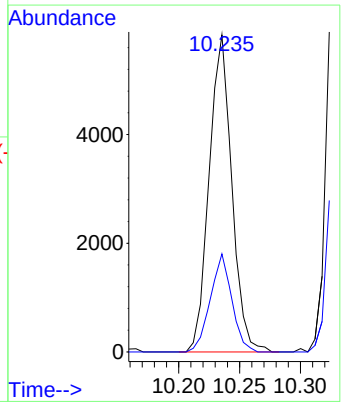


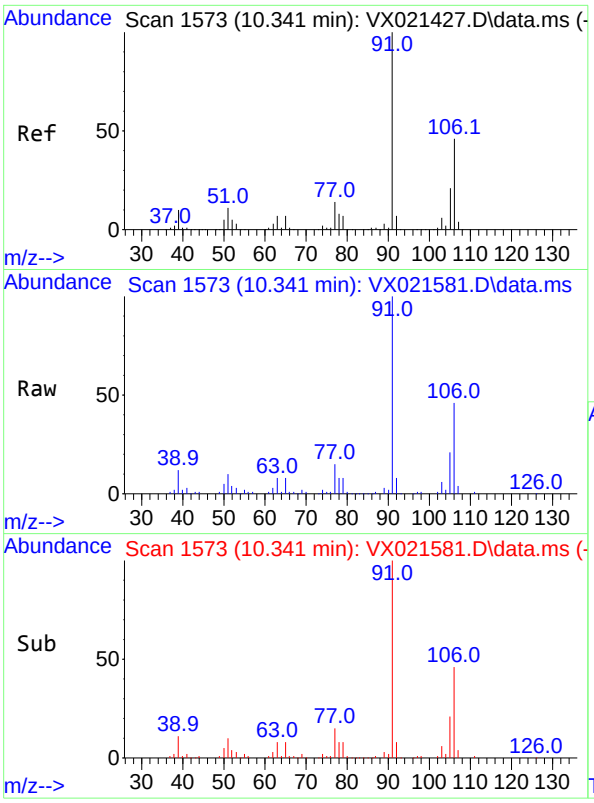

#67
Ethyl Benzene
Concen: 1.81 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion: 91 Resp: 7541

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.9 | 24.6 | 37.0 |



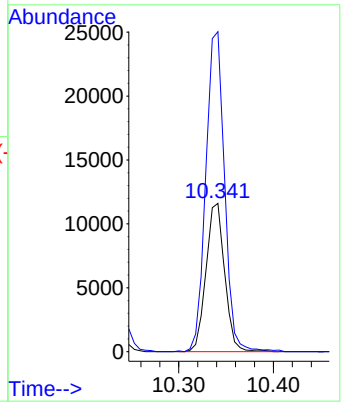
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

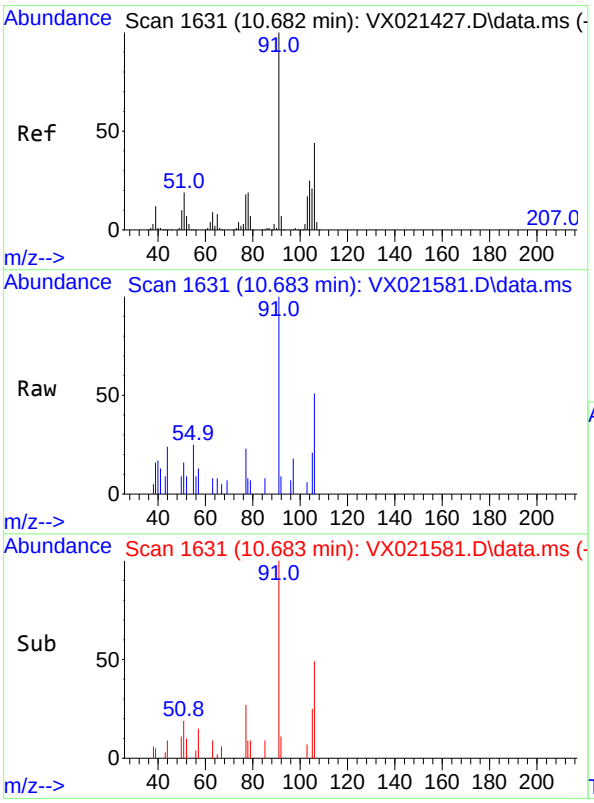



#68
m/p-Xylenes
Concen: 10.70 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:106 Resp: 15868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 216.5 | 162.8 | 244.2 |

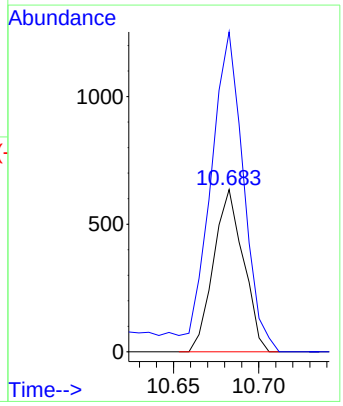


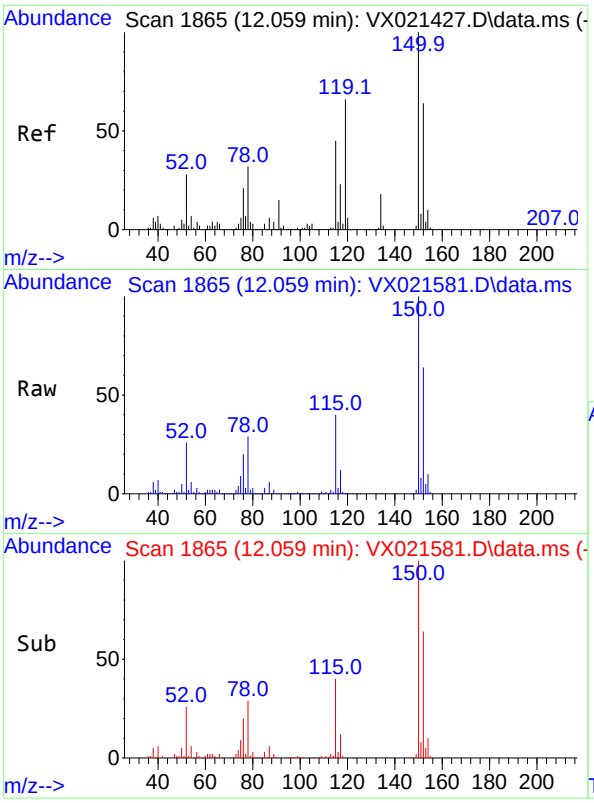

#69
o-Xylene
Concen: 0.54 ug/l
RT: 10.683 min Scan# 1631
Delta R.T. 0.001 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:106 Resp: 777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 215.3 | 108.1 | 324.2 |



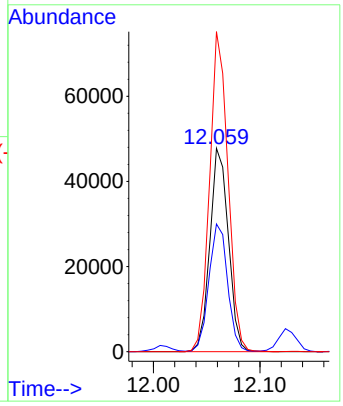
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

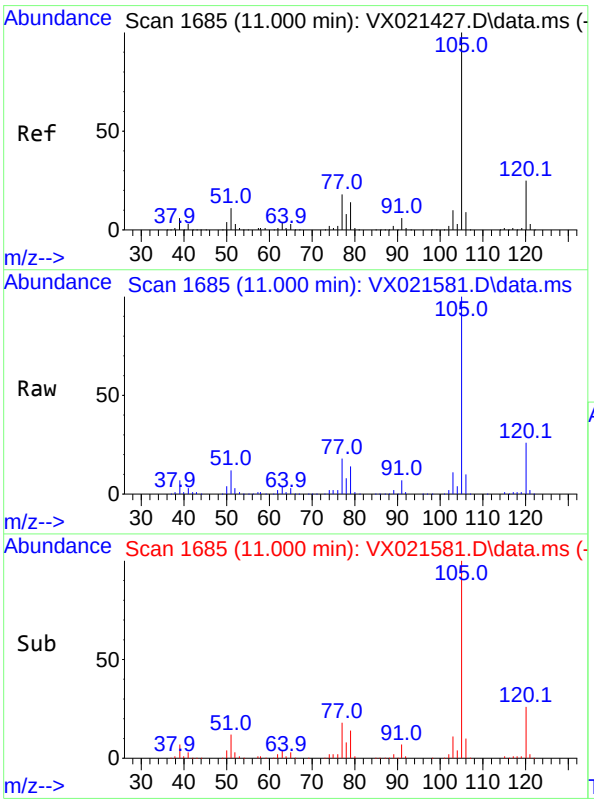



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:152 Resp: 57549

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.9 | 41.1 | 123.3 |
| 150 | 155.8 | 0.0 | 349.0 |

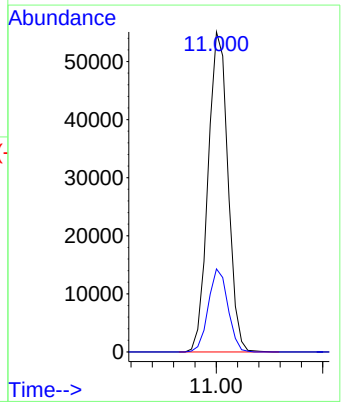


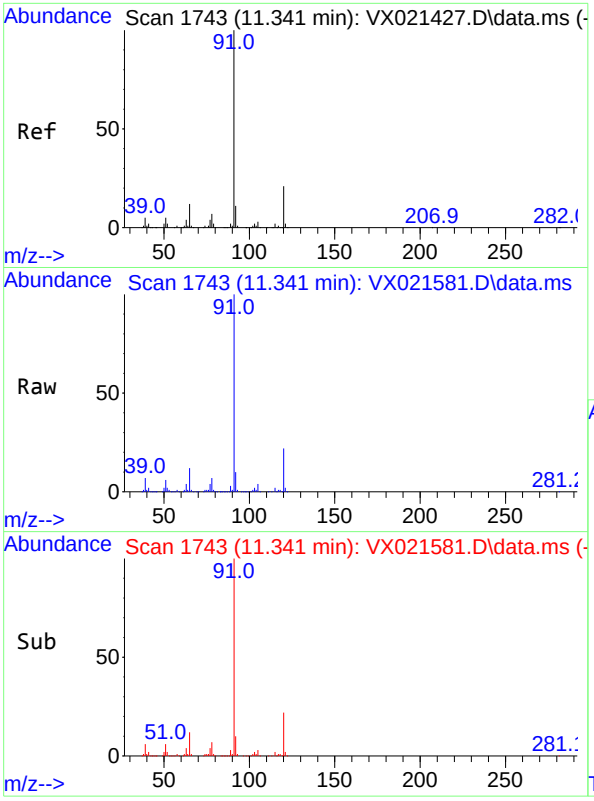

#73
Isopropylbenzene
Concen: 17.62 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:105 Resp: 71260

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.5 | 13.2 | 39.6 |



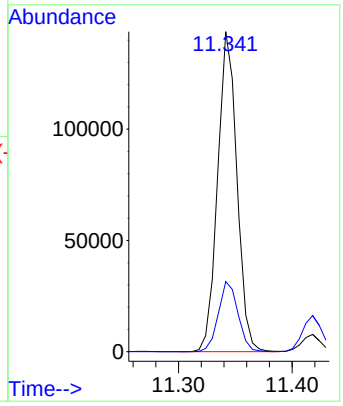
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

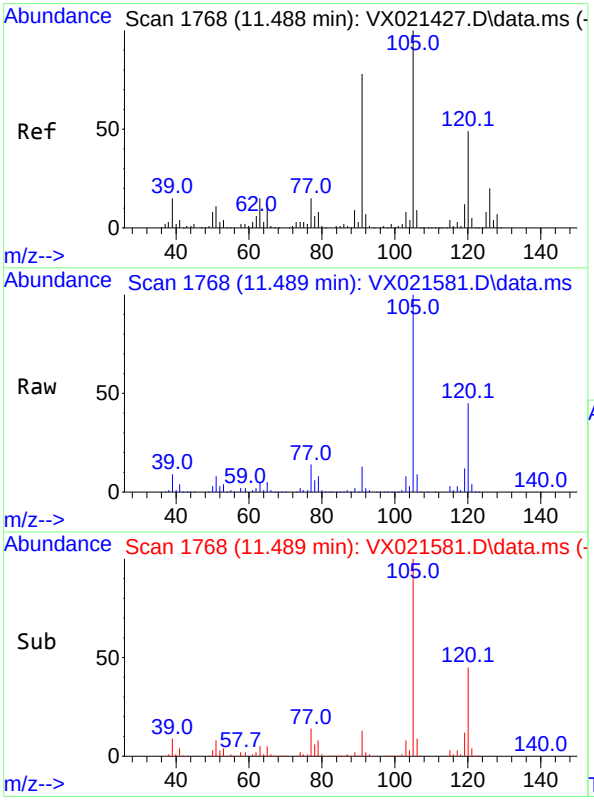



#78
n-propylbenzene
Concen: 35.55 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion: 91 Resp: 169749

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.3 | 11.5 | 34.5 |

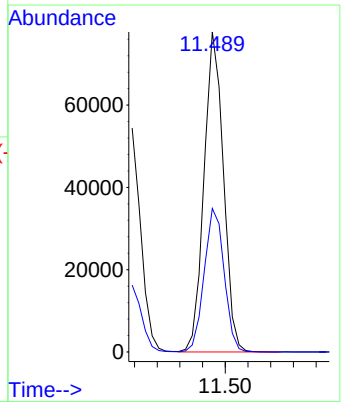


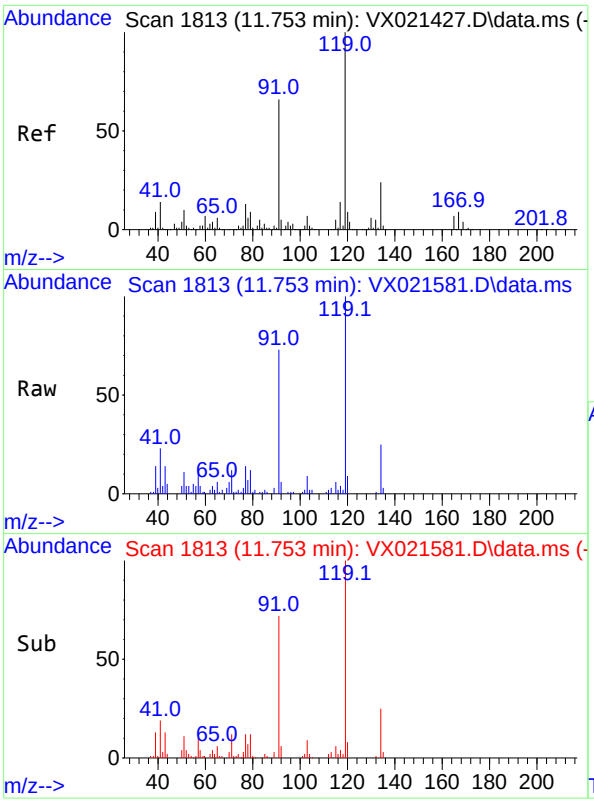

#80
1,3,5-Trimethylbenzene
Concen: 26.63 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.001 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:105 Resp: 92006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.2 | 23.8 | 71.5 |



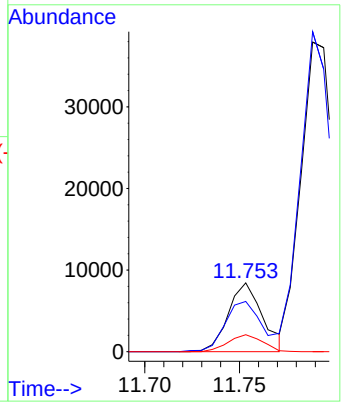
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

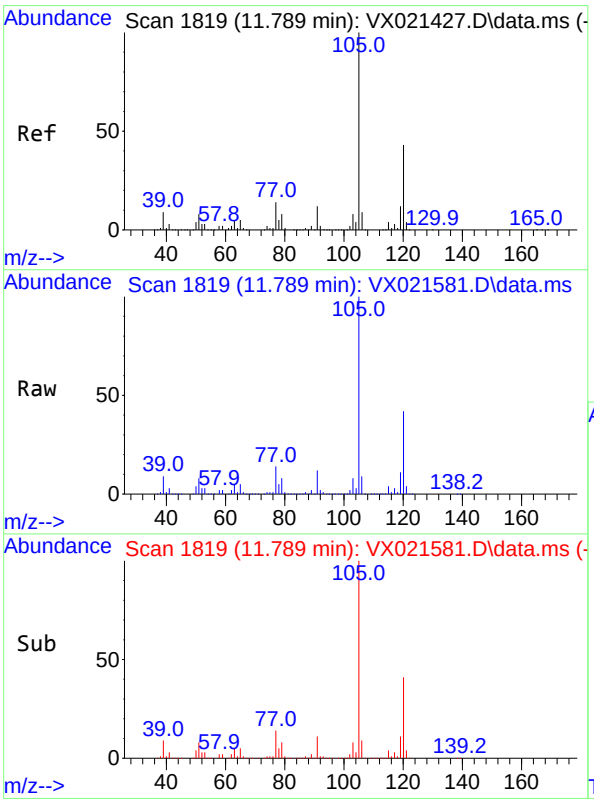



#83
tert-Butylbenzene
Concen: 3.15 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:119 Resp: 10605

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 74.4 | 27.9 | 83.7 |
| 134 | 24.7 | 11.3 | 33.9 |

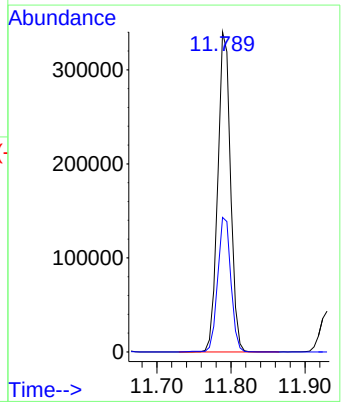


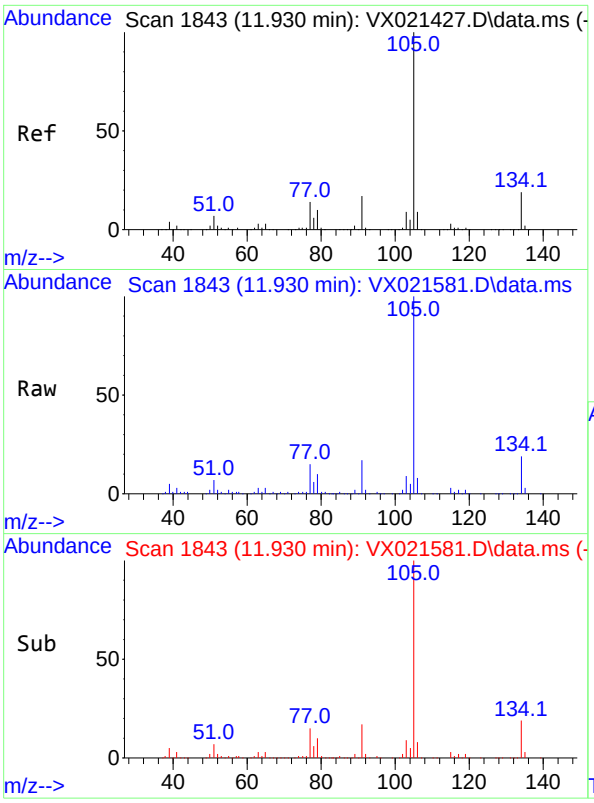

#84
1,2,4-Trimethylbenzene
Concen: 116.52 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. -0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:105 Resp: 405761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.5 | 22.4 | 67.3 |



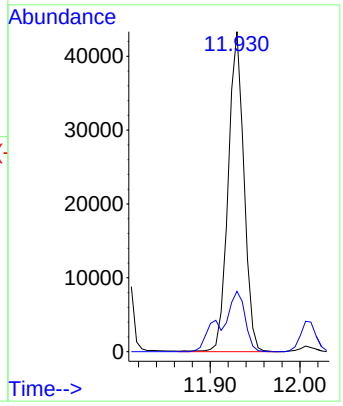
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

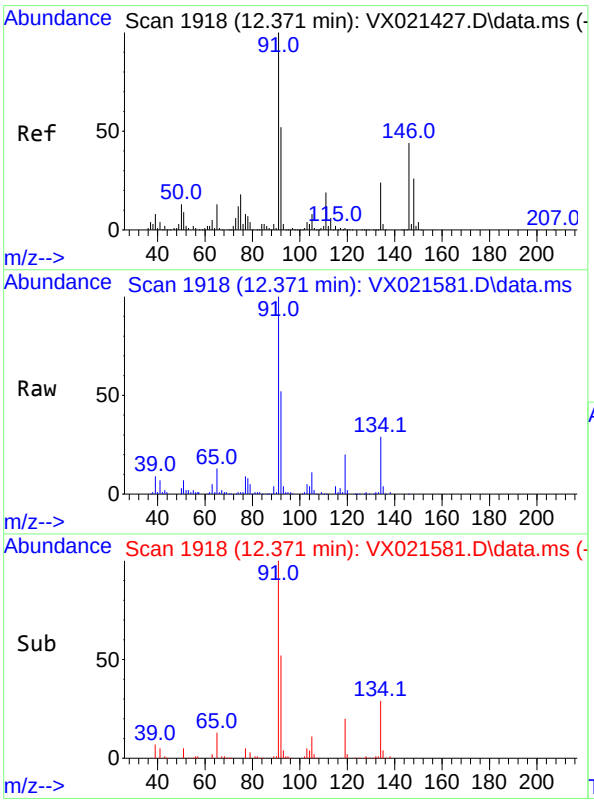



#85
sec-Butylbenzene
Concen: 13.57 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:105 Resp: 52653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 29.0 | 10.0 | 29.8 |

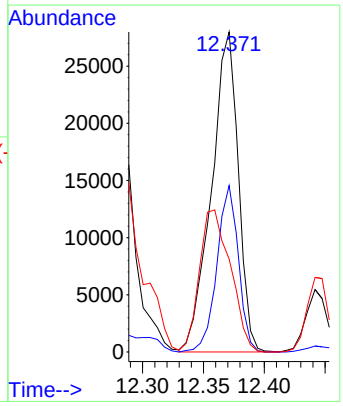


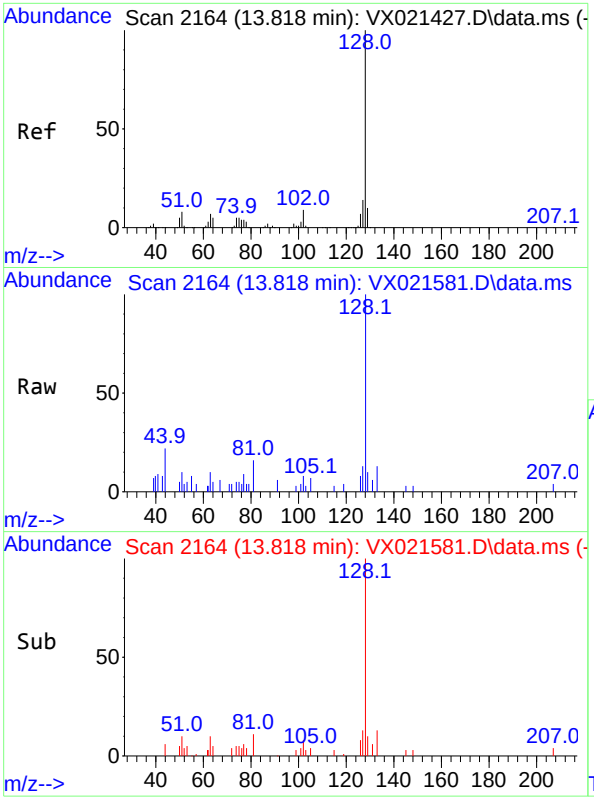

#89
n-Butylbenzene
Concen: 13.29 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion: 91 Resp: 43017

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 41.6 | 27.4 | 82.0 |
| 134 | 51.2 | 13.2 | 39.5# |



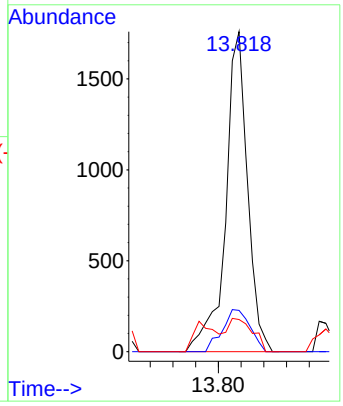
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R




#95
Naphthalene
Concen: 0.63 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021581.D
Acq: 29 Mar 2021 16:49

Tgt Ion:128 Resp: 2347

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 16.7 | 10.3 | 15.5# |
| 129 | 12.4 | 8.8 | 13.2 |



LSC Area Percent Report

Sample Results: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :** MSVOA_X
**ClientSampleId :** MW-5R

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

Signal : TIC: VX021581.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.464 | 732 | 744 | 757 | rBV | 46947 | 133909 | 11.29% | 1.612% |
| 2 | 5.629 | 762 | 772 | 783 | rVV2 | 67417 | 190303 | 16.05% | 2.291% |
| 3 | 6.029 | 830 | 840 | 852 | rBV | 51564 | 135370 | 11.42% | 1.629% |
| 4 | 6.829 | 966 | 976 | 989 | rBV | 118244 | 276206 | 23.29% | 3.324% |
| 5 | 8.694 | 1287 | 1293 | 1310 | rVB | 247169 | 392056 | 33.06% | 4.719% |
| 6 | 10.094 | 1525 | 1531 | 1540 | rBV | 274205 | 371454 | 31.32% | 4.471% |
| 7 | 10.235 | 1548 | 1555 | 1560 | rBV | 14641 | 20983 | 1.77% | 0.253% |
| 8 | 10.341 | 1561 | 1573 | 1579 | rBV | 77126 | 119752 | 10.10% | 1.441% |
| 9 | 10.624 | 1608 | 1621 | 1628 | rBV6 | 9603 | 25354 | 2.14% | 0.305% |
| 10 | 10.818 | 1644 | 1654 | 1659 | rVB2 | 19782 | 32803 | 2.77% | 0.395% |
| 11 | 10.894 | 1659 | 1667 | 1672 | rBV2 | 18465 | 31727 | 2.68% | 0.382% |
| 12 | 11.000 | 1680 | 1685 | 1690 | rBV | 145451 | 186239 | 15.71% | 2.242% |
| 13 | 11.118 | 1700 | 1705 | 1710 | rBV | 228562 | 305869 | 25.79% | 3.682% |
| 14 | 11.165 | 1710 | 1713 | 1717 | rVB2 | 10625 | 14051 | 1.18% | 0.169% |
| 15 | 11.259 | 1725 | 1729 | 1734 | rVB3 | 16053 | 23432 | 1.98% | 0.282% |
| 16 | 11.341 | 1738 | 1743 | 1751 | rBV | 299582 | 362679 | 30.58% | 4.365% |
| 17 | 11.418 | 1751 | 1756 | 1762 | rVV | 148109 | 184003 | 15.52% | 2.215% |
| 18 | 11.489 | 1762 | 1768 | 1777 | rVB | 231100 | 289474 | 24.41% | 3.484% |
| 19 | 11.653 | 1791 | 1796 | 1804 | rVB3 | 23280 | 35084 | 2.96% | 0.422% |
| 20 | 11.753 | 1808 | 1813 | 1815 | rVV | 36319 | 47300 | 3.99% | 0.569% |
| 21 | 11.789 | 1815 | 1819 | 1830 | rVB | 983967 | 1185824 | 100.00% | 14.273% |
| 22 | 11.900 | 1830 | 1838 | 1840 | rBV | 48275 | 68994 | 5.82% | 0.830% |
| 23 | 11.930 | 1840 | 1843 | 1848 | rVV | 109363 | 132738 | 11.19% | 1.598% |
| 24 | 12.006 | 1848 | 1856 | 1860 | rVV | 47429 | 67779 | 5.72% | 0.816% |
| 25 | 12.059 | 1860 | 1865 | 1871 | rVV | 315733 | 386308 | 32.58% | 4.650% |
| 26 | 12.124 | 1871 | 1876 | 1882 | rVV | 392332 | 460517 | 38.84% | 5.543% |
| 27 | 12.218 | 1886 | 1892 | 1898 | rVB | 45864 | 60496 | 5.10% | 0.728% |
| 28 | 12.283 | 1898 | 1903 | 1911 | rBV | 361147 | 510732 | 43.07% | 6.147% |
| 29 | 12.353 | 1911 | 1915 | 1924 | rVB2 | 139338 | 261404 | 22.04% | 3.146% |
| 30 | 12.442 | 1924 | 1930 | 1937 | rBV | 73694 | 91497 | 7.72% | 1.101% |
| 31 | 12.571 | 1946 | 1952 | 1954 | rBV | 59853 | 83788 | 7.07% | 1.008% |
| 32 | 12.595 | 1954 | 1956 | 1959 | rVV | 59773 | 59814 | 5.04% | 0.720% |
| 33 | 12.653 | 1959 | 1966 | 1969 | rVV | 274476 | 343572 | 28.97% | 4.135% |
| 34 | 12.683 | 1969 | 1971 | 1976 | rVV | 85509 | 96615 | 8.15% | 1.163% |
| 35 | 12.742 | 1976 | 1981 | 1988 | rVV3 | 188968 | 332568 | 28.05% | 4.003% |
| 36 | 12.883 | 1999 | 2005 | 2010 | rVB2 | 52851 | 81976 | 6.91% | 0.987% |

Sample Results: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 37 | 12.959 | 2010 | 2018 | 2022 | rBV | 149146 | 203939 | 17.20% | 2.455% |
| 38 | 13.001 | 2022 | 2025 | 2032 | rVB2 | 69985 | 84089 | 7.09% | 1.012% |
| 39 | 13.065 | 2032 | 2036 | 2042 | rBV3 | 22270 | 34874 | 2.94% | 0.420% |
| 40 | 13.136 | 2042 | 2048 | 2051 | rBV | 18853 | 24991 | 2.11% | 0.301% |
| 41 | 13.177 | 2051 | 2055 | 2057 | rBV2 | 23988 | 26560 | 2.24% | 0.320% |
| 42 | 13.206 | 2057 | 2060 | 2064 | rVB | 25072 | 27829 | 2.35% | 0.335% |
| 43 | 13.295 | 2070 | 2075 | 2076 | rBV2 | 12506 | 16071 | 1.36% | 0.193% |
| 44 | 13.324 | 2076 | 2080 | 2087 | rVB2 | 258088 | 362650 | 30.58% | 4.365% |
| 45 | 13.459 | 2100 | 2103 | 2108 | rVB | 17231 | 21950 | 1.85% | 0.264% |
| 46 | 13.583 | 2120 | 2124 | 2127 | rVV | 12141 | 16949 | 1.43% | 0.204% |
| 47 | 13.624 | 2127 | 2131 | 2135 | rVV2 | 23235 | 35619 | 3.00% | 0.429% |
| 48 | 13.677 | 2135 | 2140 | 2142 | rVV2 | 12529 | 22869 | 1.93% | 0.275% |
| 49 | 13.701 | 2142 | 2144 | 2151 | rVB2 | 18987 | 27165 | 2.29% | 0.327% |

Sum of corrected areas: 8308225

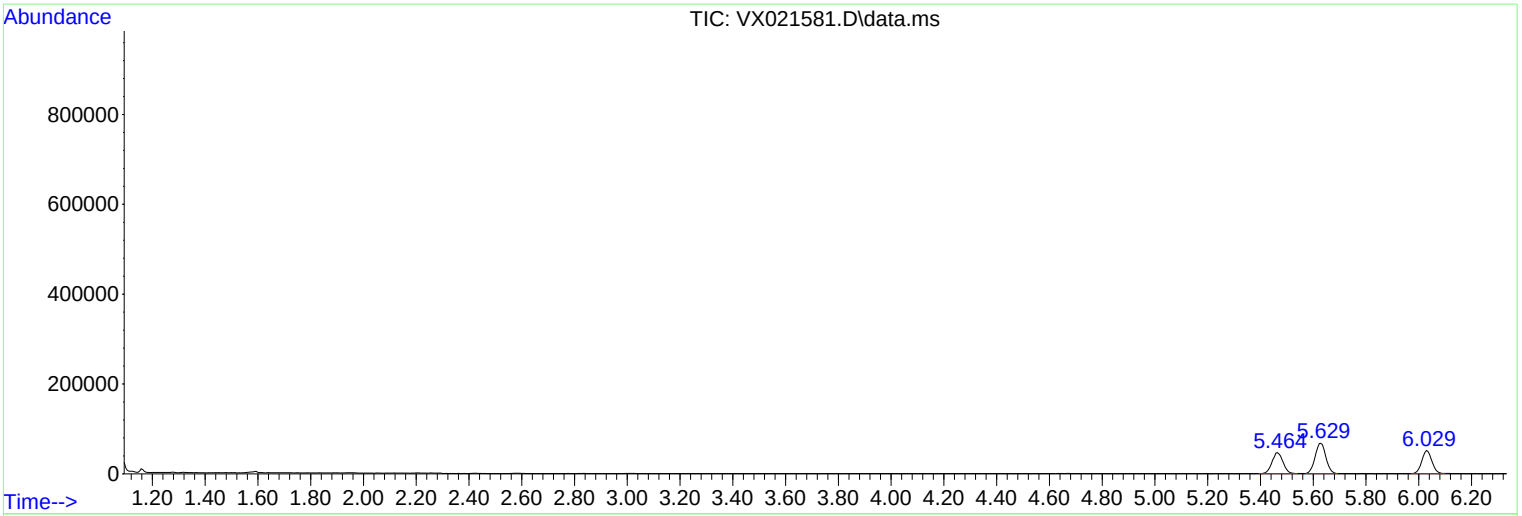
Sample Results: **VX021581.D**

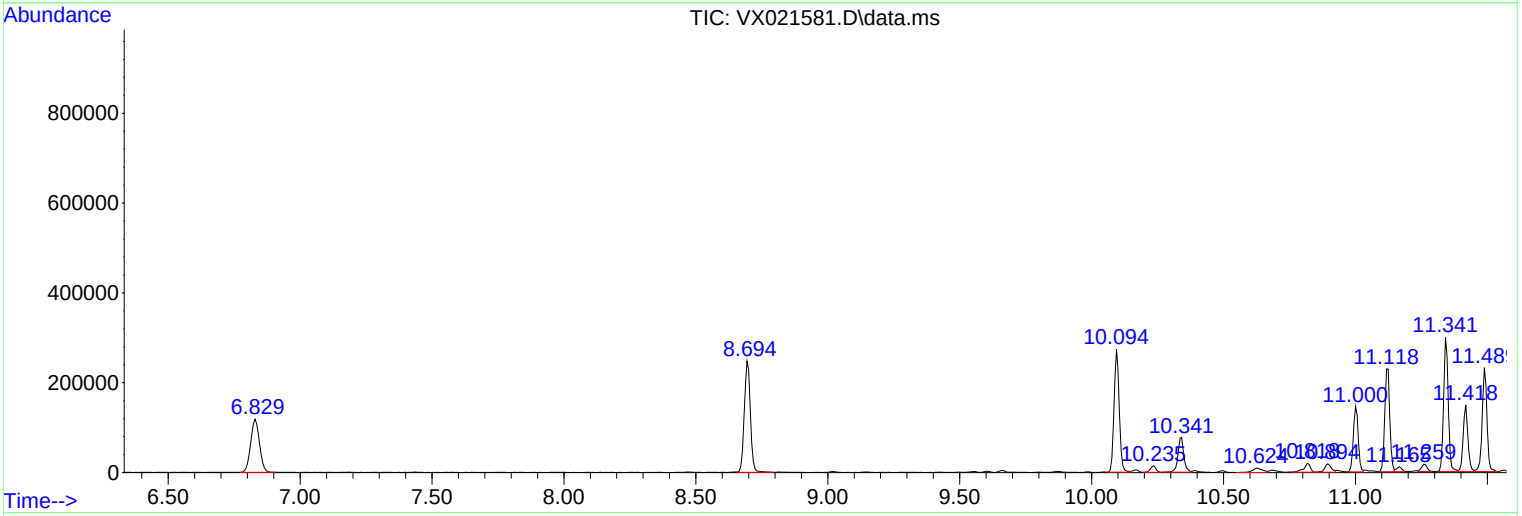
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

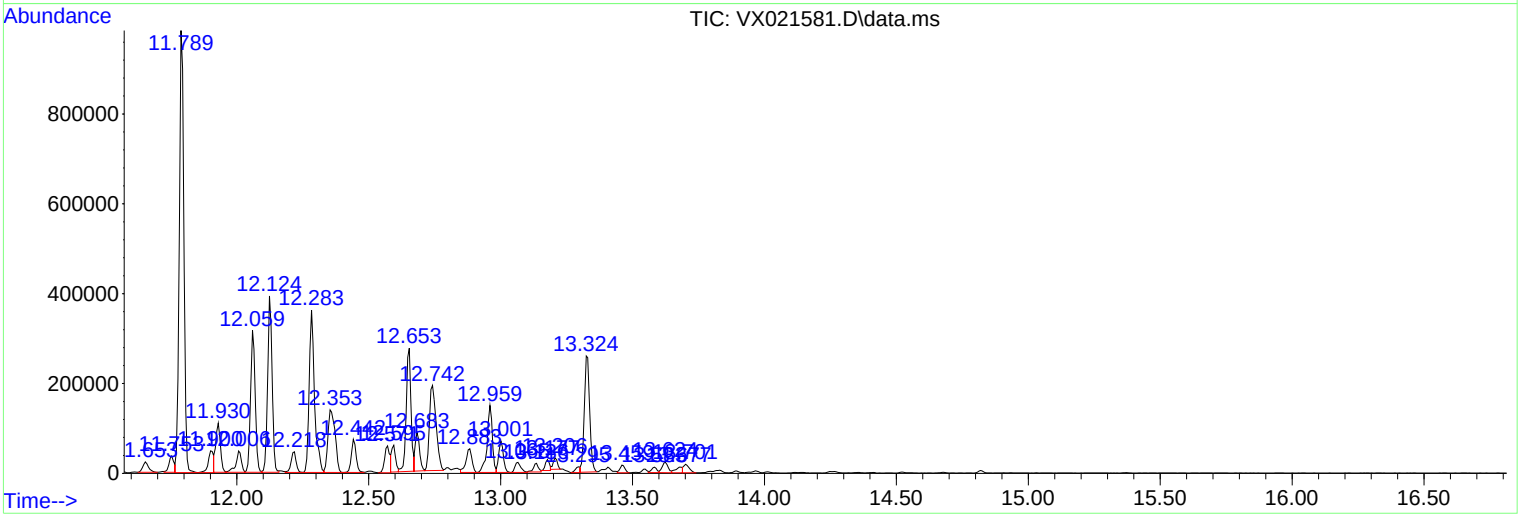
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P



Sample Results: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

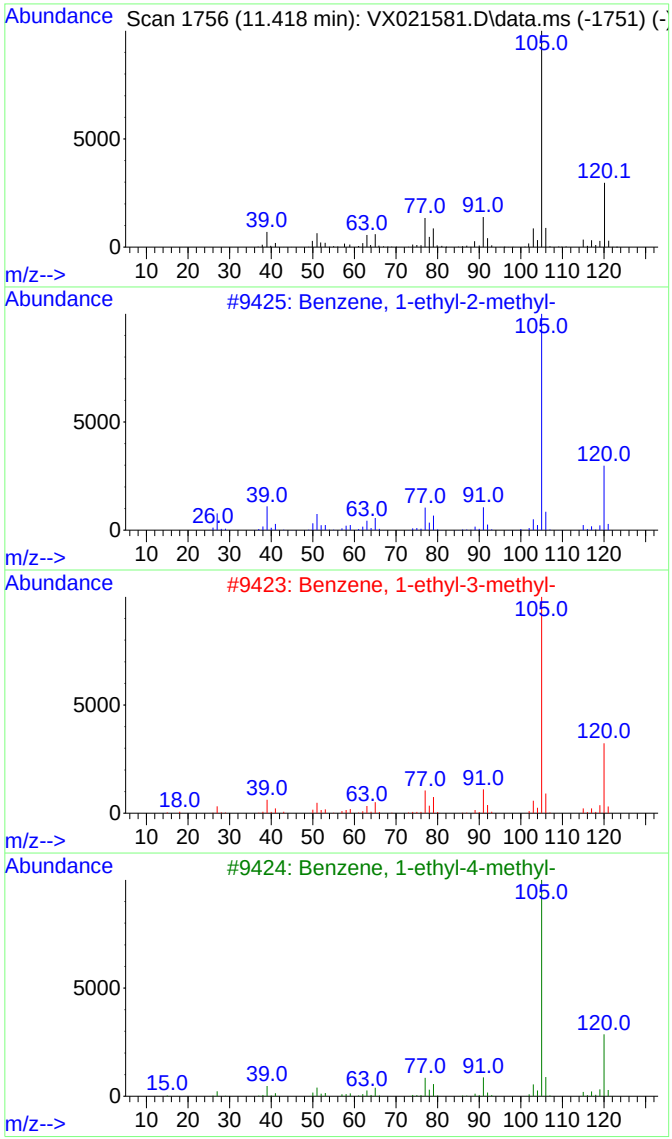
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

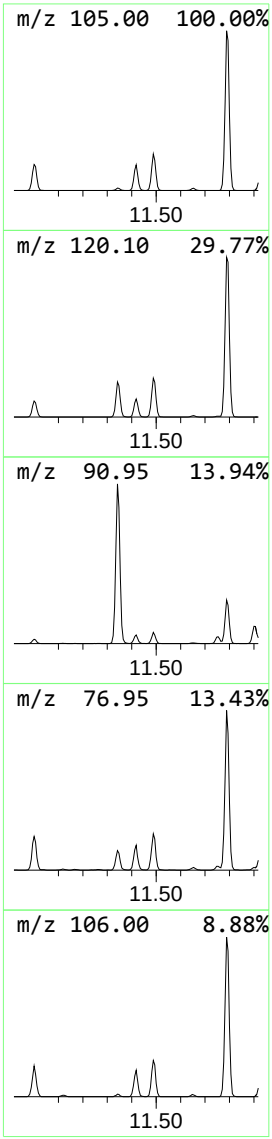
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 1 Benzene, 1-ethyl-2-methyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.418 | 23.82 ug/l | 184003 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 95 |
| 2 | Benzene, 1-ethyl-3-methyl- | 120 | C9H12 | 000620-14-4 | 94 |
| 3 | Benzene, 1-ethyl-4-methyl- | 120 | C9H12 | 000622-96-8 | 91 |
| 4 | Mesitylene | 120 | C9H12 | 000108-67-8 | 91 |
| 5 | Benzene, 1,2,4-trimethyl- | 120 | C9H12 | 000095-63-6 | 91 |



Sample Results: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

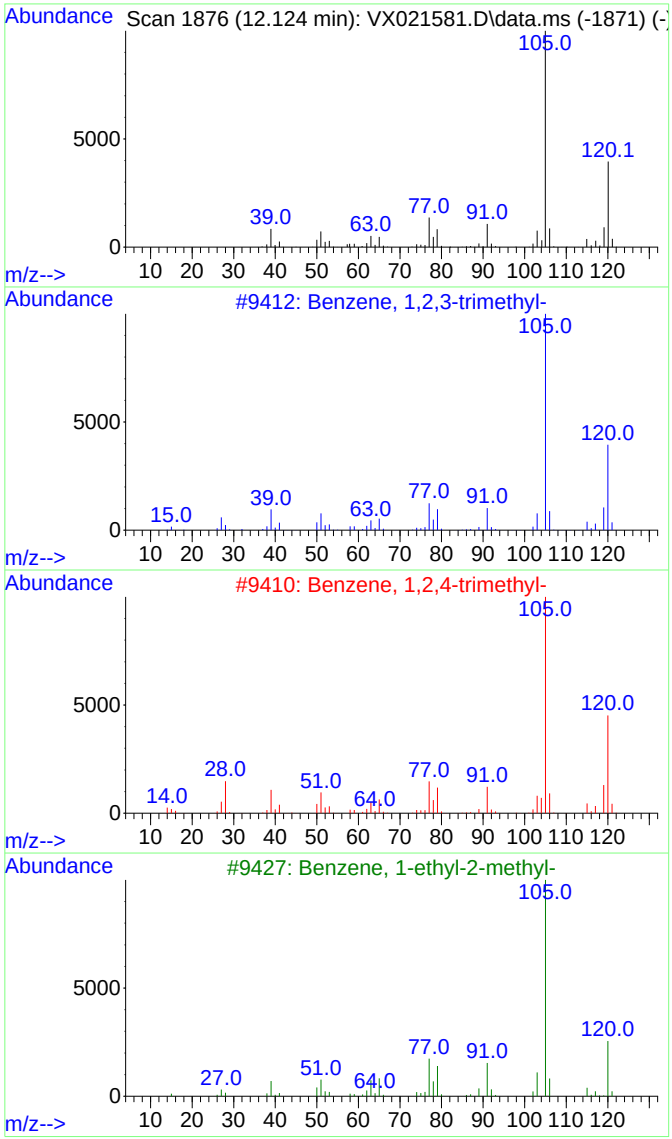
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

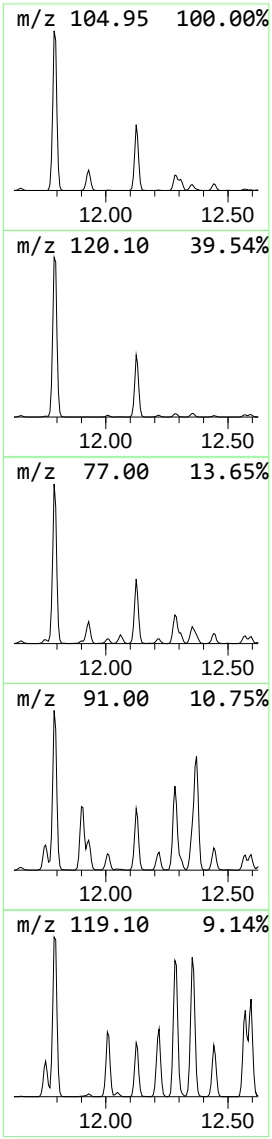
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 2 Benzene, 1,2,3-trimethyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.124 | 59.60 ug/l | 460517 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 97 |
| 2 | Benzene, 1,2,4-trimethyl- | 120 | C9H12 | 000095-63-6 | 94 |
| 3 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 93 |
| 4 | Benzene, 1-ethyl-3-methyl- | 120 | C9H12 | 000620-14-4 | 91 |
| 5 | Mesitylene | 120 | C9H12 | 000108-67-8 | 91 |



Sample Results: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

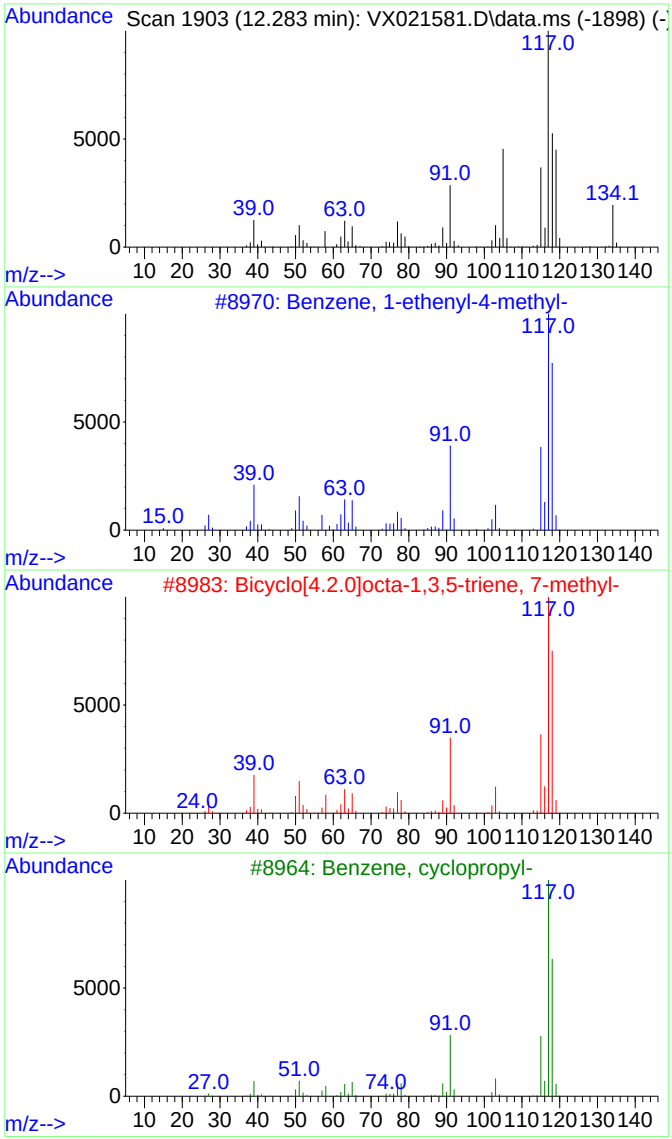
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

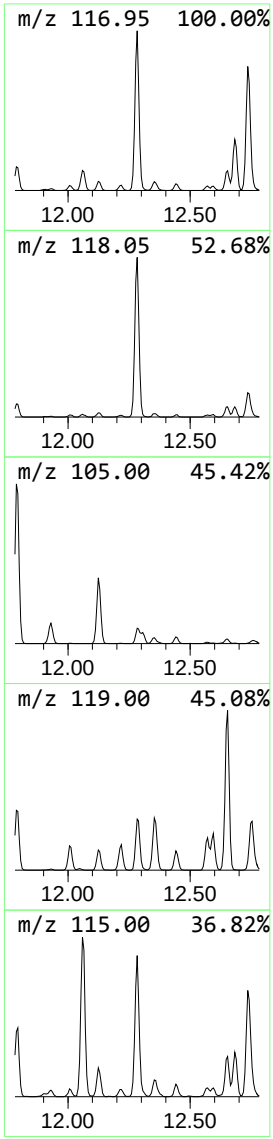
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 3 Benzene, 1-ethenyl-4-methyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.283 | 66.10 ug/l | 510732 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethenyl-4-methyl- | 118 | C9H10 | 000622-97-9 | 86 |
| 2 | Bicyclo[4.2.0]octa-1,3,5-triene,... | 118 | C9H10 | 055337-80-9 | 83 |
| 3 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 64 |
| 4 | Benzene, 1-propenyl- | 118 | C9H10 | 000637-50-3 | 64 |
| 5 | Benzene, 1-ethenyl-2-methyl- | 118 | C9H10 | 000611-15-4 | 64 |



Sample Results: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

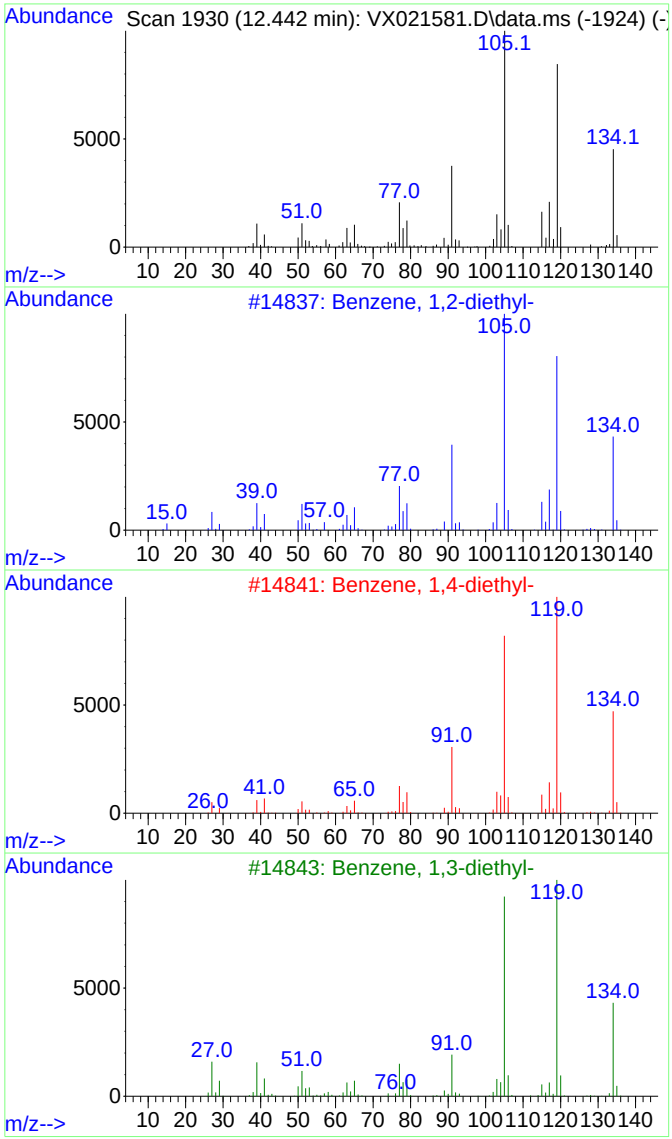
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

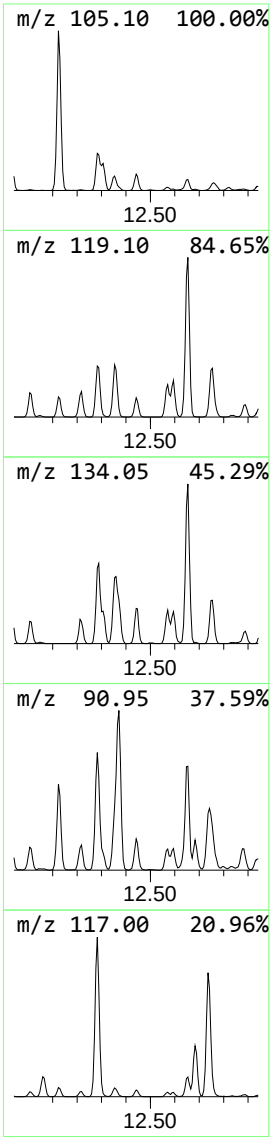
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 4 Benzene, 1,2-diethyl- Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.442 | 11.84 ug/l | 91497 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 98 |
| 2 | Benzene, 1,4-diethyl- | 134 | C10H14 | 000105-05-5 | 90 |
| 3 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 87 |
| 4 | o-Cymene | 134 | C10H14 | 000527-84-4 | 68 |
| 5 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 68 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

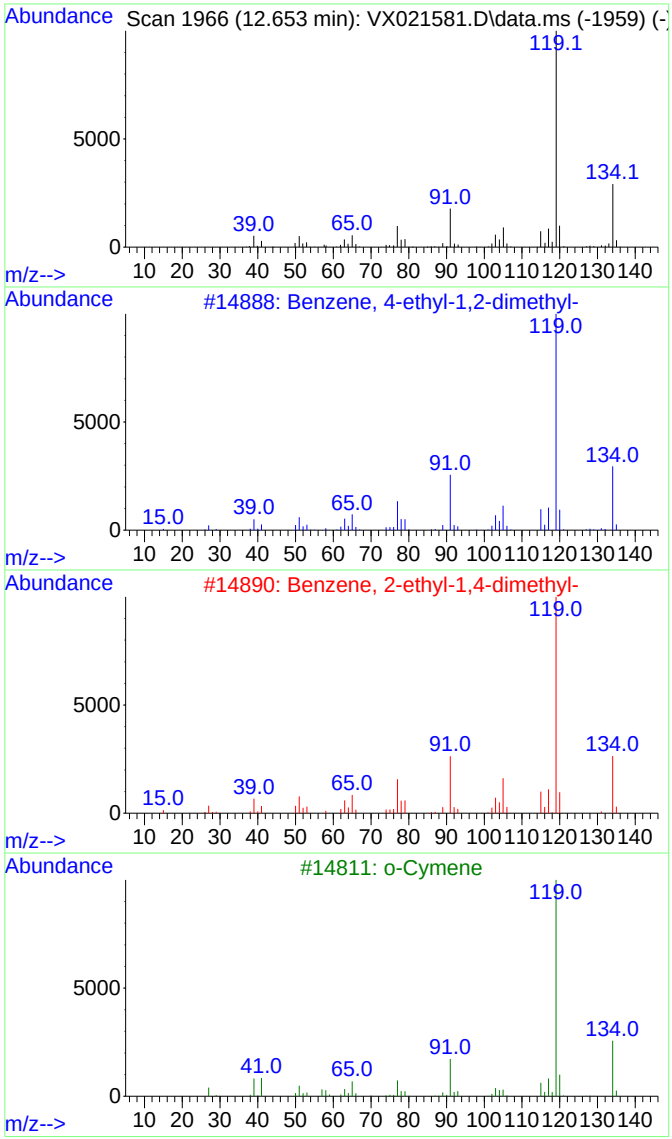
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Quant Title : SW846 8260

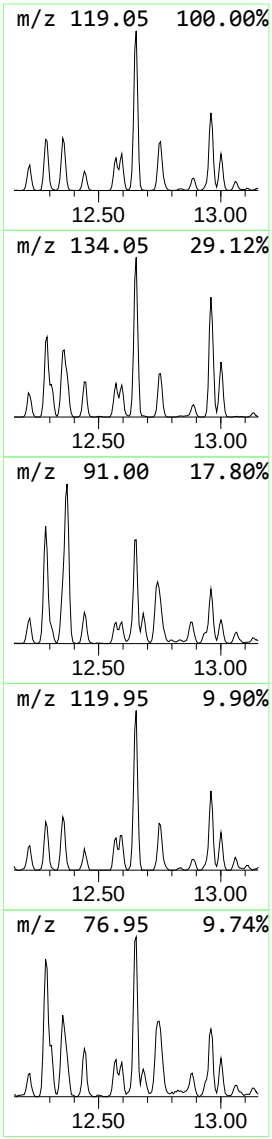
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 5 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.653 | 44.47 ug/l | 343572 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 97 |
| 2 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 96 |
| 3 | o-Cymene | 134 | C10H14 | 000527-84-4 | 95 |
| 4 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 95 |
| 5 | Benzene, 1-ethyl-2,4-dimethyl- | 134 | C10H14 | 000874-41-9 | 94 |



Sample Results: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

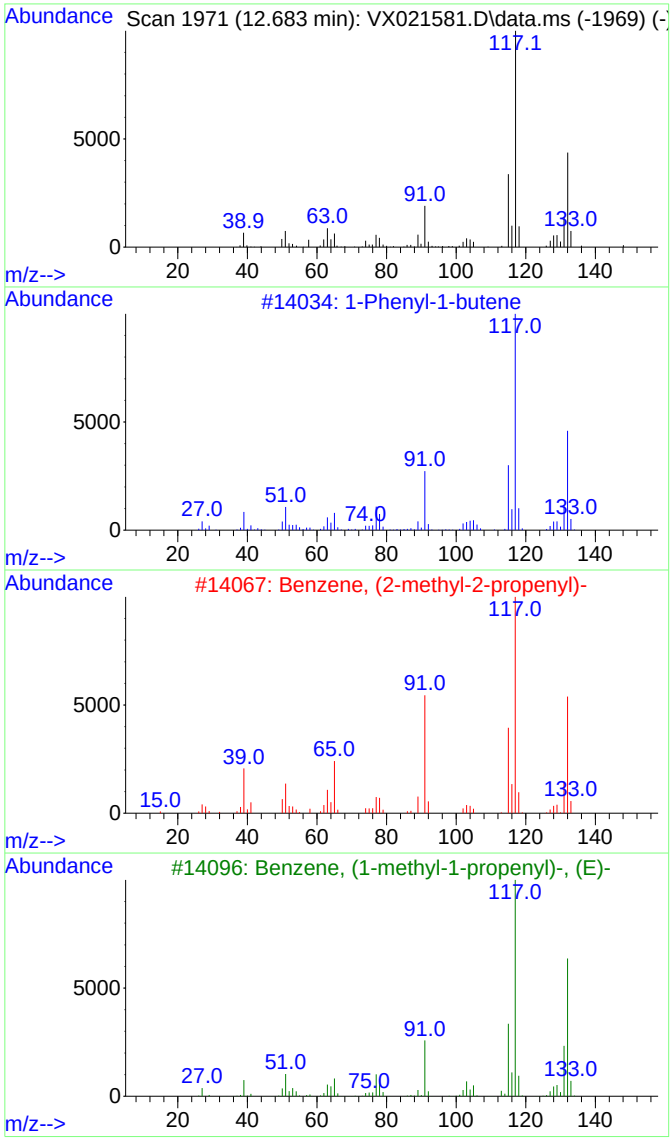
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

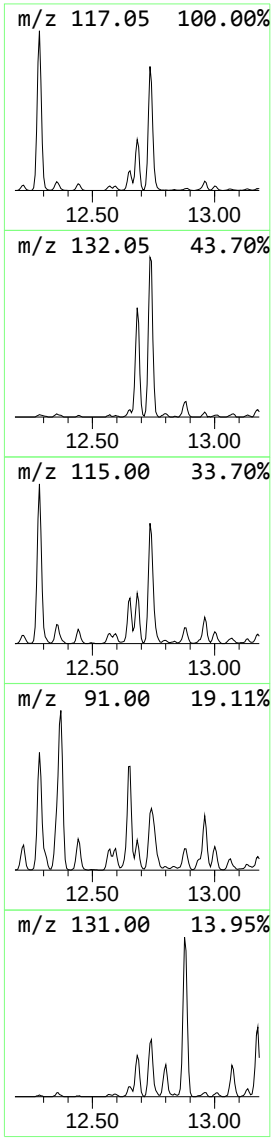
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 6 1-Phenyl-1-butene Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.683 | 12.50 ug/l | 96615 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | 1-Phenyl-1-butene | 132 | C10H12 | 000824-90-8 | 94 |
| 2 | Benzene, (2-methyl-2-propenyl)- | 132 | C10H12 | 003290-53-7 | 94 |
| 3 | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12 | 000768-00-3 | 91 |
| 4 | (E)-1-Phenyl-1-butene | 132 | C10H12 | 001005-64-7 | 91 |
| 5 | Benzene, 1-methyl-2-(2-propenyl)- | 132 | C10H12 | 001587-04-8 | 91 |



Sample Results: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

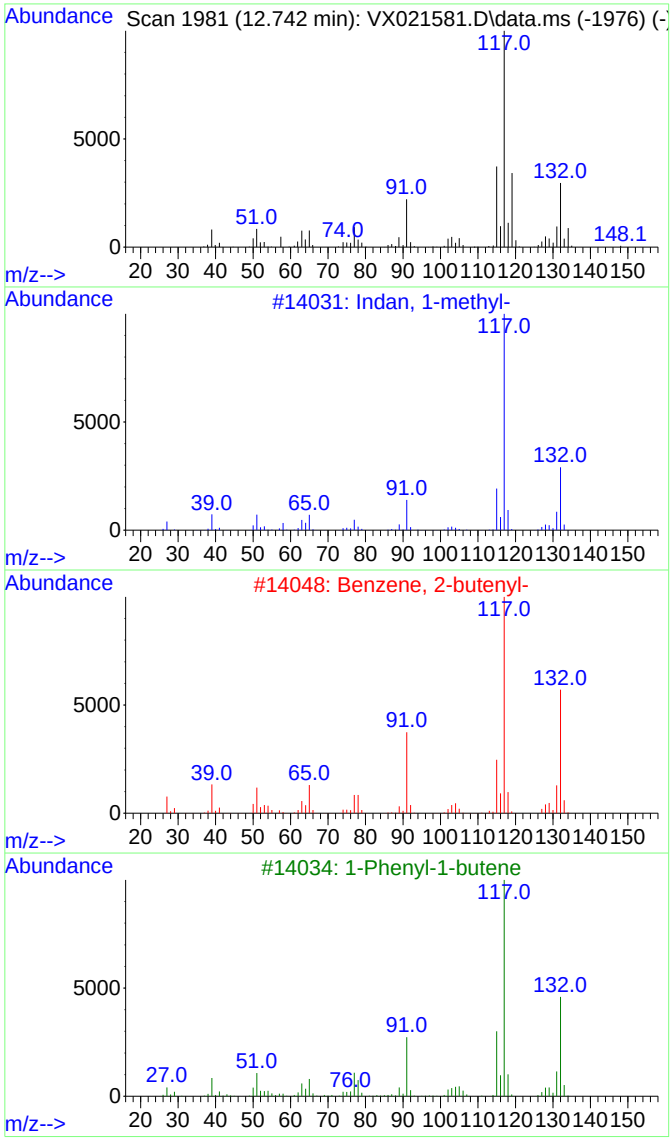
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

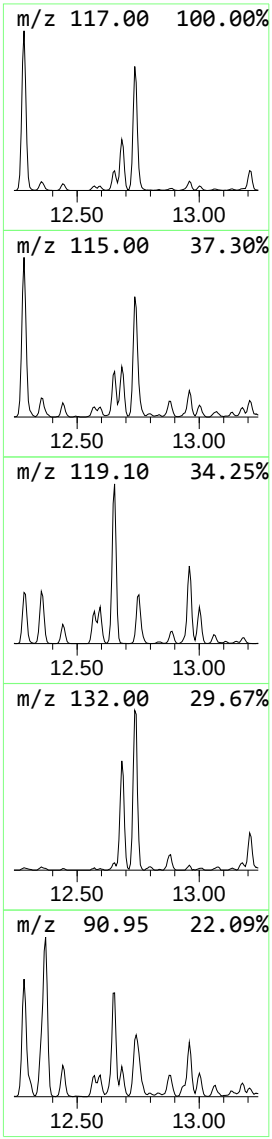
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 7 Indan, 1-methyl- Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.742 | 43.04 ug/l | 332568 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indan, 1-methyl- | 132 | C10H12 | 000767-58-8 | 87 |
| 2 | Benzene, 2-butenyl- | 132 | C10H12 | 001560-06-1 | 87 |
| 3 | 1-Phenyl-1-butene | 132 | C10H12 | 000824-90-8 | 87 |
| 4 | (E)-1-Phenyl-1-butene | 132 | C10H12 | 001005-64-7 | 87 |
| 5 | Benzene, 1-methyl-2-(2-propenyl)- | 132 | C10H12 | 001587-04-8 | 83 |



Sample Results: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

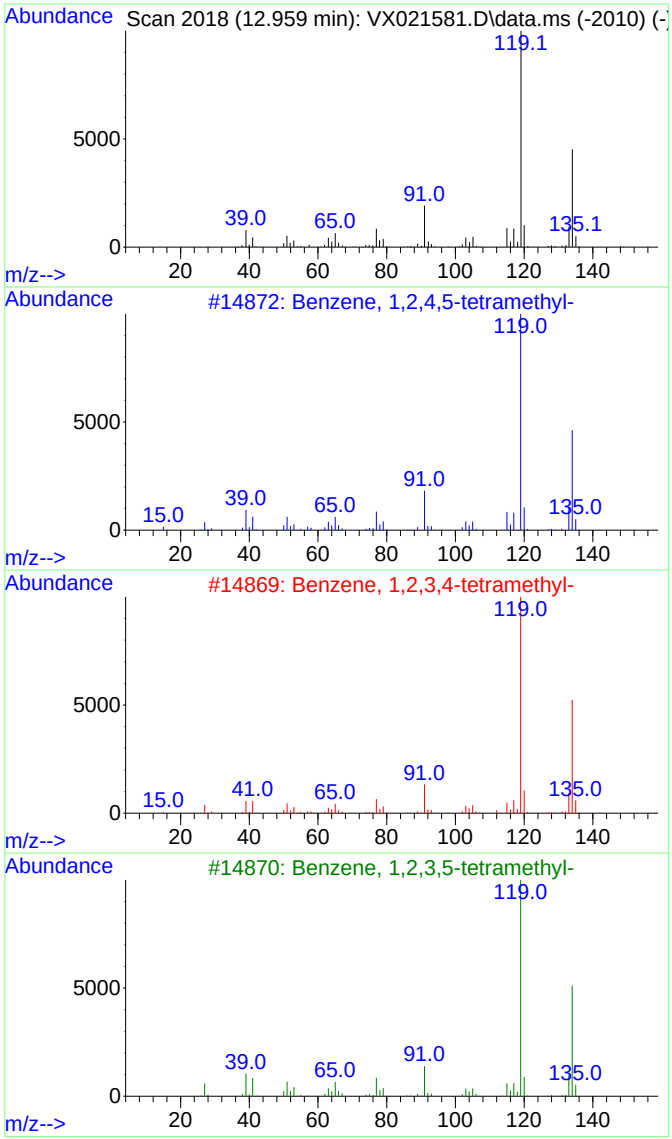
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

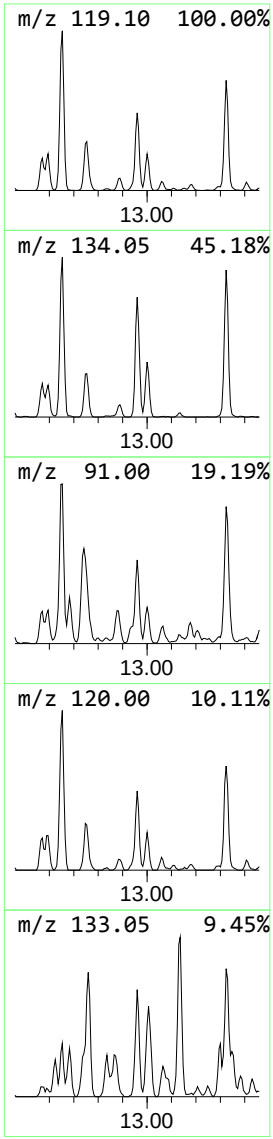
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 8 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.959 | 26.40 ug/l | 203939 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 96 |
| 2 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 3 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 94 |
| 4 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 93 |
| 5 | Benzene, 2-ethyl-1,3-dimethyl- | 134 | C10H14 | 002870-04-4 | 93 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

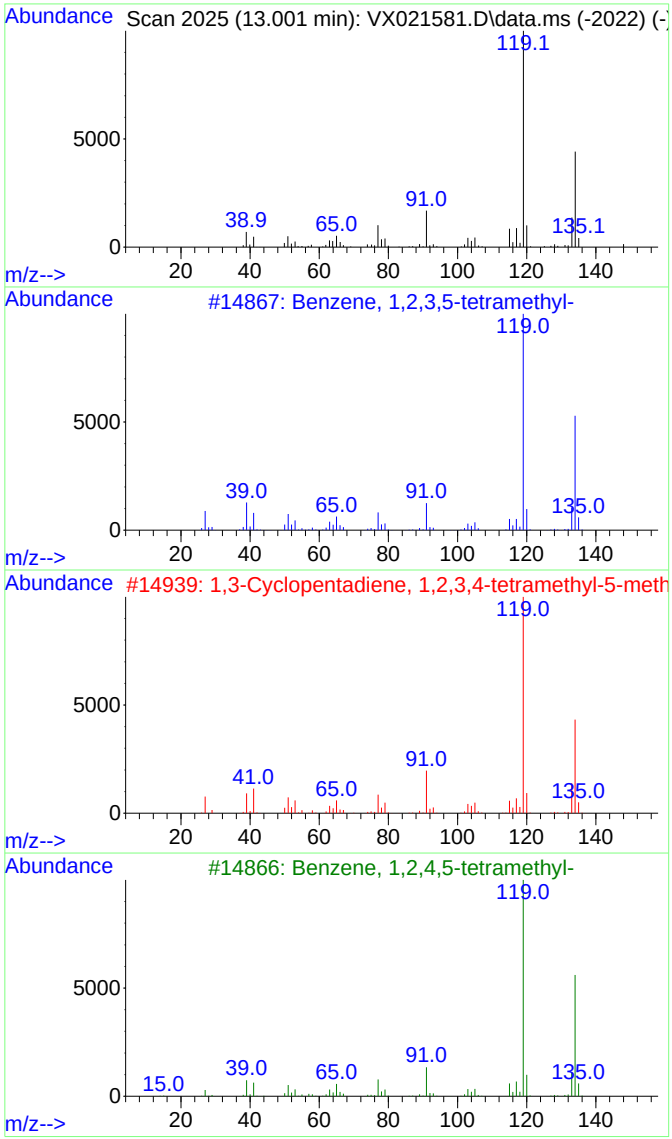
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

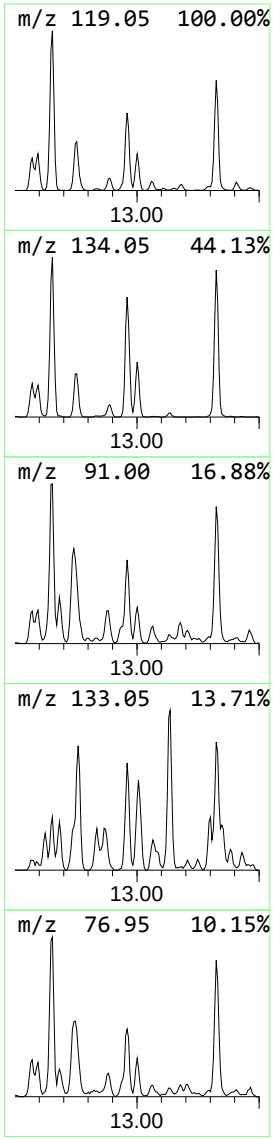
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 9 Benzene, 1,2,3,5-tetramethyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.001 | 10.88 ug/l | 84089 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 95 |
| 2 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 94 |
| 3 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 94 |
| 4 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 93 |
| 5 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 93 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

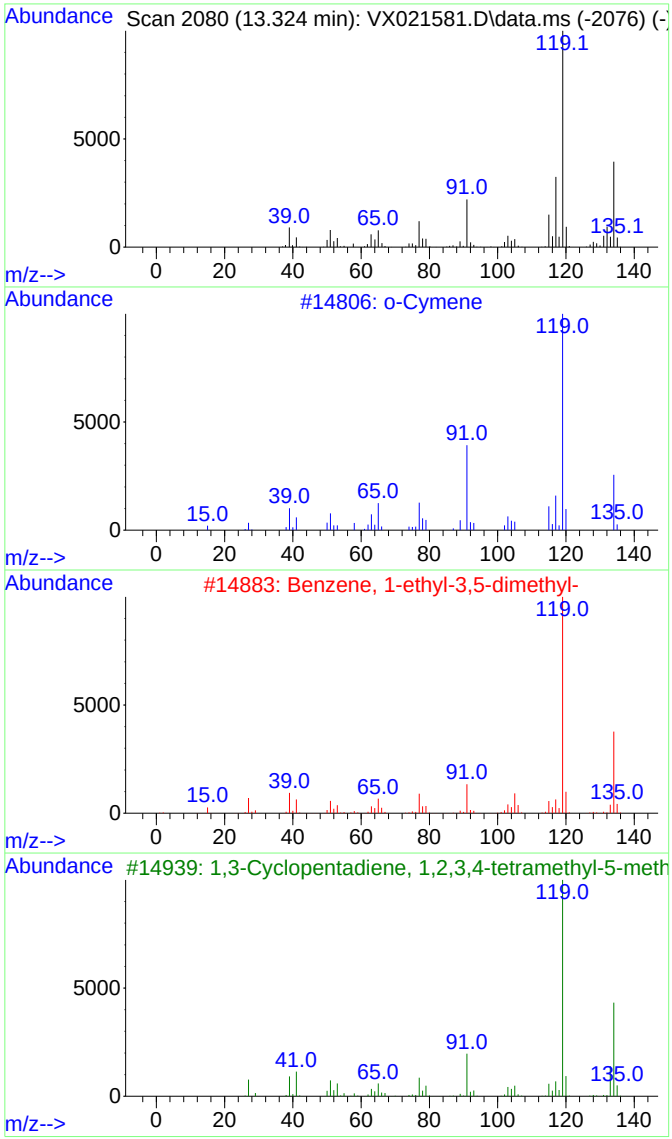
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

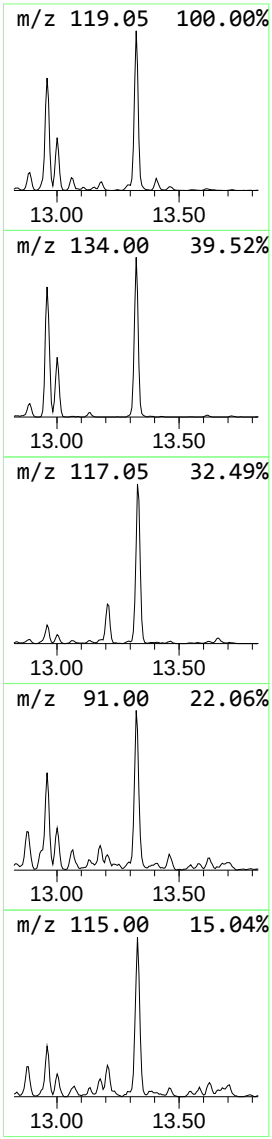
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 10 o-Cymene Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.324 | 46.94 ug/l | 362650 | 1,4-Dichlorobenzene-d4 | 12.059 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | o-Cymene | 134 | C10H14 | 000527-84-4 | 81 |
| 2 | Benzene, 1-ethyl-3,5-dimethyl- | 134 | C10H14 | 000934-74-7 | 81 |
| 3 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 81 |
| 4 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 76 |
| 5 | p-Cymene | 134 | C10H14 | 000099-87-6 | 76 |



Sample Results: **VX021581.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021581.D
Acq On : 29 Mar 2021 16:49
Operator : JC/MD
Sample : M1785-16 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 19 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-5R

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Benzene, 1-ethy... | 11.418 | 23.8 | ug/l | 184003 | 4 | 12.059 | 386308 | 50.0 |
| Benzene, 1,2,3-... | 12.124 | 59.6 | ug/l | 460517 | 4 | 12.059 | 386308 | 50.0 |
| Benzene, 1-ethe... | 12.283 | 66.1 | ug/l | 510732 | 4 | 12.059 | 386308 | 50.0 |
| Benzene, 1,2-di... | 12.442 | 11.8 | ug/l | 91497 | 4 | 12.059 | 386308 | 50.0 |
| Benzene, 4-ethy... | 12.653 | 44.5 | ug/l | 343572 | 4 | 12.059 | 386308 | 50.0 |
| 1-Phenyl-1-butene | 12.683 | 12.5 | ug/l | 96615 | 4 | 12.059 | 386308 | 50.0 |
| Indan, 1-methyl- | 12.742 | 43.0 | ug/l | 332568 | 4 | 12.059 | 386308 | 50.0 |
| Benzene, 1,2,4,... | 12.959 | 26.4 | ug/l | 203939 | 4 | 12.059 | 386308 | 50.0 |
| Benzene, 1,2,3,... | 13.001 | 10.9 | ug/l | 84089 | 4 | 12.059 | 386308 | 50.0 |
| o-Cymene | 13.324 | 46.9 | ug/l | 362650 | 4 | 12.059 | 386308 | 50.0 |

Raw Data: **VX021578.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | FD-032321 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-17 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021578.D | 10 | | 03/29/21 15:39 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 10.0 | U | 2.30 | 10.0 | ug/L |
| 74-87-3 | Chloromethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 75-01-4 | Vinyl Chloride | 10.0 | U | 1.90 | 10.0 | ug/L |
| 74-83-9 | Bromomethane | 50.0 | U | 8.70 | 50.0 | ug/L |
| 75-00-3 | Chloroethane | 10.0 | U | 3.50 | 10.0 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 10.0 | U | 2.50 | 10.0 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 10.0 | U | 2.10 | 10.0 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 10.0 | U | 2.60 | 10.0 | ug/L |
| 67-64-1 | Acetone | 50.0 | U | 16.1 | 50.0 | ug/L |
| 75-15-0 | Carbon Disulfide | 10.0 | U | 2.50 | 10.0 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 10.0 | U | 2.20 | 10.0 | ug/L |
| 79-20-9 | Methyl Acetate | 10.0 | U | 4.70 | 10.0 | ug/L |
| 75-09-2 | Methylene Chloride | 10.0 | U | 1.80 | 10.0 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 10.0 | U | 2.10 | 10.0 | ug/L |
| 110-82-7 | Cyclohexane | 50.0 | U | 13.0 | 50.0 | ug/L |
| 78-93-3 | 2-Butanone | 50.0 | U | 9.00 | 50.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 10.0 | U | 2.70 | 10.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 10.0 | U | 2.20 | 10.0 | ug/L |
| 74-97-5 | Bromochloromethane | 10.0 | U | 2.60 | 10.0 | ug/L |
| 67-66-3 | Chloroform | 10.0 | U | 2.70 | 10.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 108-87-2 | Methylcyclohexane | 10.0 | U | 1.40 | 10.0 | ug/L |
| 71-43-2 | Benzene | 10.0 | U | 1.80 | 10.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 10.0 | U | 2.50 | 10.0 | ug/L |
| 79-01-6 | Trichloroethene | 3.20 | J | 1.70 | 10.0 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 10.0 | U | 1.70 | 10.0 | ug/L |
| 75-27-4 | Bromodichloromethane | 10.0 | U | 2.00 | 10.0 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 50.0 | U | 8.70 | 50.0 | ug/L |
| 108-88-3 | Toluene | 10.0 | U | 2.20 | 10.0 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 10.0 | U | 1.80 | 10.0 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 10.0 | U | 1.70 | 10.0 | ug/L |

Raw Data: **VX021578.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | FD-032321 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-17 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021578.D | 10 | | 03/29/21 15:39 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 10.0 | U | 2.40 | 10.0 | ug/L |
| 591-78-6 | 2-Hexanone | 50.0 | U | 9.20 | 50.0 | ug/L |
| 124-48-1 | Dibromochloromethane | 10.0 | U | 1.80 | 10.0 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 10.0 | U | 1.60 | 10.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 108-90-7 | Chlorobenzene | 10.0 | U | 1.70 | 10.0 | ug/L |
| 100-41-4 | Ethyl Benzene | 20.0 | | 1.80 | 10.0 | ug/L |
| 1330-20-7 | Total Xylenes | 126 | | 5.10 | 30.0 | ug/L |
| 100-42-5 | Styrene | 10.0 | U | 1.60 | 10.0 | ug/L |
| 75-25-2 | Bromoform | 10.0 | U | 1.90 | 10.0 | ug/L |
| 98-82-8 | Isopropylbenzene | 230 | | 2.30 | 10.0 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 10.0 | U | 2.90 | 10.0 | ug/L |
| 103-65-1 | n-propylbenzene | 450 | | 2.40 | 10.0 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 320 | | 2.50 | 10.0 | ug/L |
| 98-06-6 | tert-Butylbenzene | 39.3 | | 2.60 | 10.0 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1400 | | 2.00 | 10.0 | ug/L |
| 135-98-8 | sec-Butylbenzene | 160 | | 2.30 | 10.0 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 10.0 | U | 2.00 | 10.0 | ug/L |
| 104-51-8 | n-Butylbenzene | 140 | | 1.90 | 10.0 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 10.0 | U | 1.90 | 10.0 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 10.0 | U | 4.70 | 10.0 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10.0 | U | 3.00 | 10.0 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 10.0 | U | 3.50 | 10.0 | ug/L |
| 123-91-1 | 1,4-Dioxane | 1000 | U | 69.8 | 1000 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 51.8 | | 78 - 117 | 104% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.8 | | 75 - 124 | 102% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 48.9 | | 92 - 112 | 98% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 51.5 | | 83 - 123 | 103% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 60300 | 5.629 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 110000 | 6.829 | | | |

Raw Data: **VX021578.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | FD-032321 | SDG No.: | M1785 |
| Lab Sample ID: | M1785-17 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021578.D | 10 | | 03/29/21 15:39 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 109000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 50700 | 12.065 | | | |
| **TENTATIVE IDENTIFIED COMPOUNDS** | | | | | | |
| 179601-23-1 | m/p-Xylenes | 120 | J | | 10.3 | ug/L |
| 95-47-6 | o-Xylene | 5.50 | J | | 10.7 | ug/L |
| 000620-14-4 | Benzene, 1-ethyl-3-methyl- | 300 | J | | 11.4 | ug/L |
| 000526-73-8 | Benzene, 1,2,3-trimethyl- | 720 | J | | 12.1 | ug/L |
| 000611-15-4 | Benzene, 1-ethenyl-2-methyl- | 790 | J | | 12.3 | ug/L |
| 000135-01-3 | Benzene, 1,2-diethyl- | 150 | J | | 12.4 | ug/L |
| 001758-88-9 | Benzene, 2-ethyl-1,4-dimethyl- | 120 | J | | 12.6 | ug/L |
| 000527-84-4 | o-Cymene | 490 | J | | 12.7 | ug/L |
| 001005-64-7 | (E)-1-Phenyl-1-butene | 140 | J | | 12.7 | ug/L |
| 000767-58-8 | Indan, 1-methyl- | 500 | J | | 12.7 | ug/L |
| 000527-53-7 | Benzene, 1,2,3,5-tetramethyl- | 290 | J | | 13.0 | ug/L |
| 000488-23-3 | Benzene, 1,2,3,4-tetramethyl- | 540 | J | | 13.3 | ug/L |
| 91-20-3 | Naphthalene | 7.30 | J | | 13.8 | ug/L |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
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: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

Quant Time: Mar 30 03:28:46 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 60301 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 109753 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 108566 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.065 | 152 | 50719 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 51927 | 51.75 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 103.50% | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 39637 | 50.84 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.68% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 135892 | 48.92 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 97.84% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 55599 | 51.48 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 102.96% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 44) Trichloroethene | 7.182 | 130 | 254 | 0.32 | ug/l | | 71 |
| 67) Ethyl Benzene | 10.235 | 91 | 7966 | 2.00 | ug/l | | 98 |
| 68) m/p-Xylenes | 10.341 | 106 | 17301 | 12.22 | ug/l | | 90 |
| 69) o-Xylene | 10.683 | 106 | 749 | 0.55 | ug/l | | 77 |
| 73) Isopropylbenzene | 11.000 | 105 | 82914 | 23.27 | ug/l | | 98 |
| 78) n-propylbenzene | 11.342 | 91 | 187261 | 44.50 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 97557 | 32.04 | ug/l | | 98 |
| 83) tert-Butylbenzene | 11.753 | 119 | 11658 | 3.93 | ug/l | | 85 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 414531 | 135.07 | ug/l | | 99 |
| 85) sec-Butylbenzene | 11.930 | 105 | 53076 | 15.52 | ug/l | | 81 |
| 89) n-Butylbenzene | 12.371 | 91 | 39762 | 13.94 | ug/l | # | 70 |
| 95) Naphthalene | 13.818 | 128 | 2414 | 0.73 | ug/l | # | 92 |

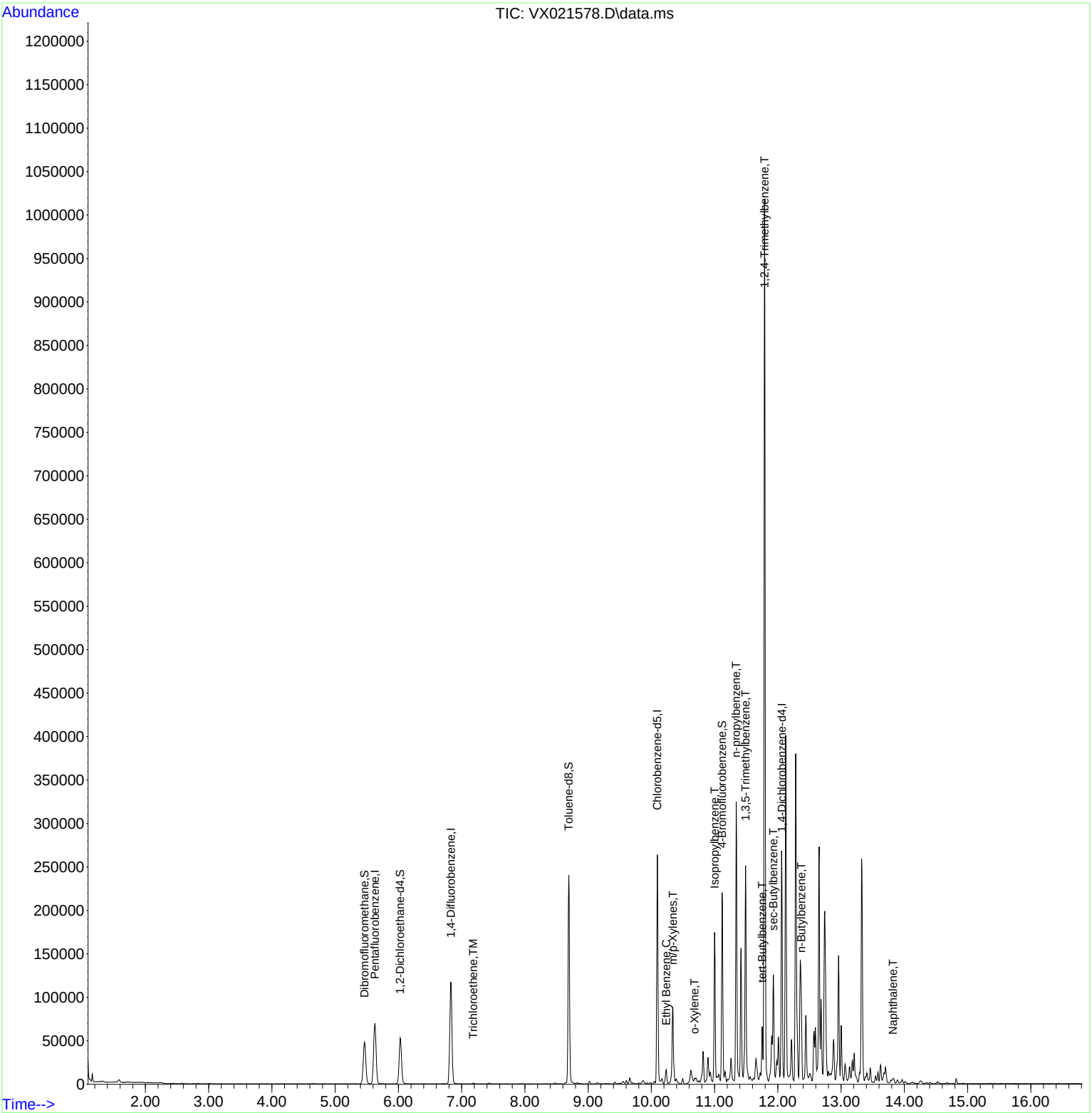
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample Results: **VX021578.D**

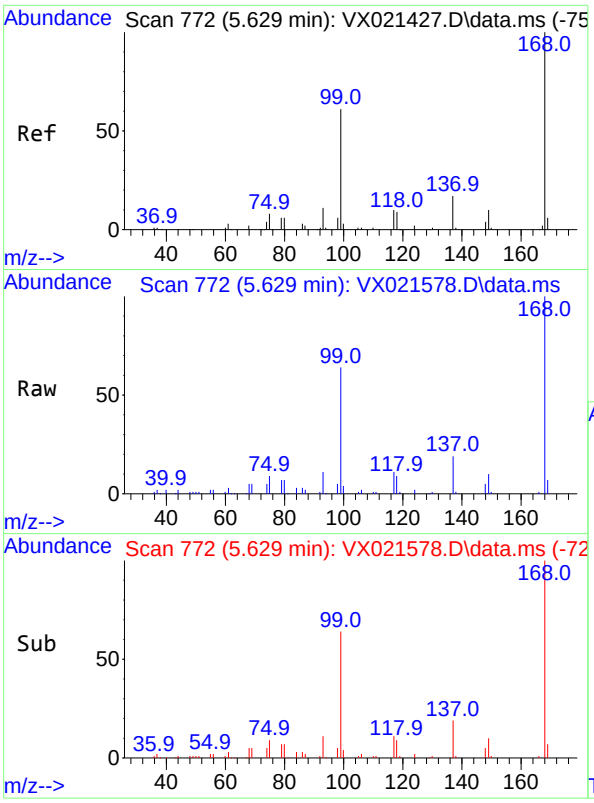
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

Quant Time: Mar 30 03:28:46 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration



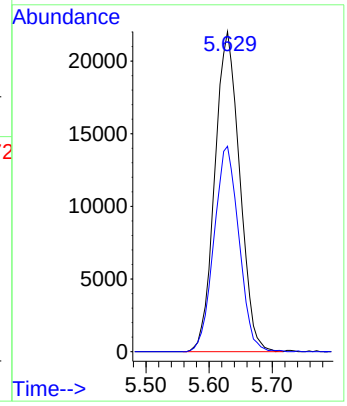
**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

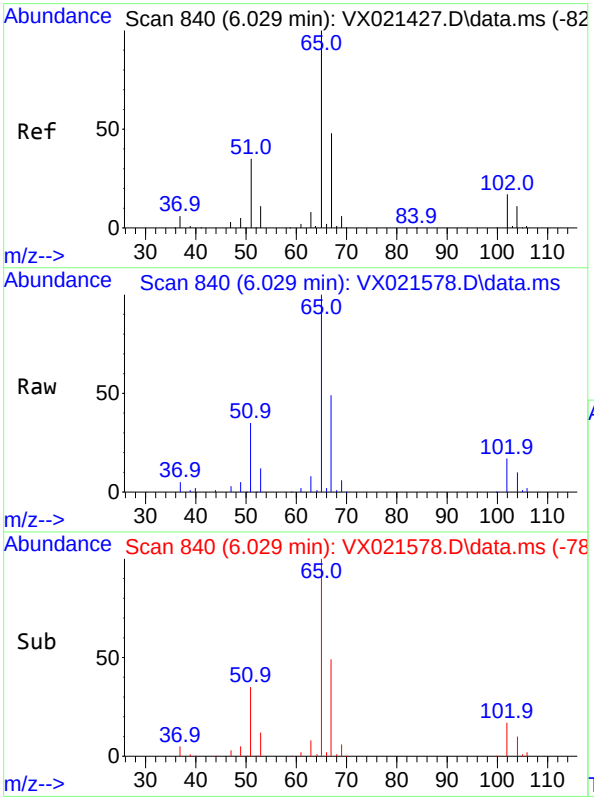



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:168 Resp: 60301

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 64.2 | 45.8 | 68.6 |

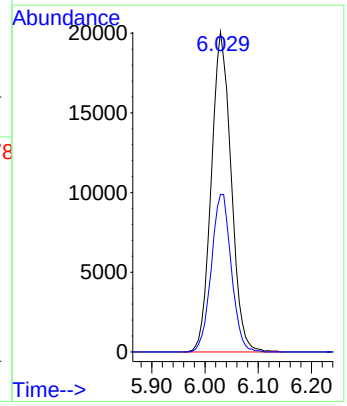


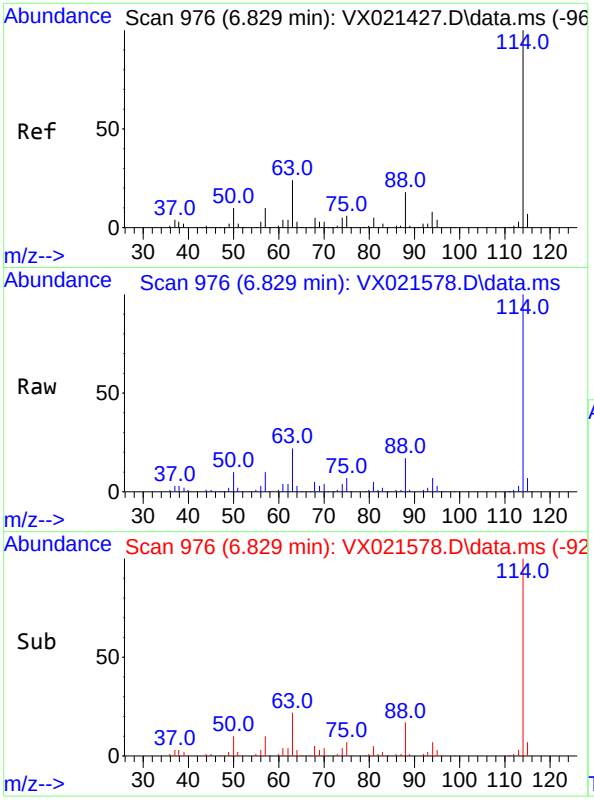

#33
1,2-Dichloroethane-d4
Concen: 51.75 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion: 65 Resp: 51927

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.7 | 0.0 | 105.4 |



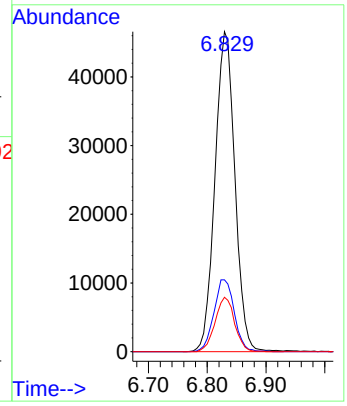
**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

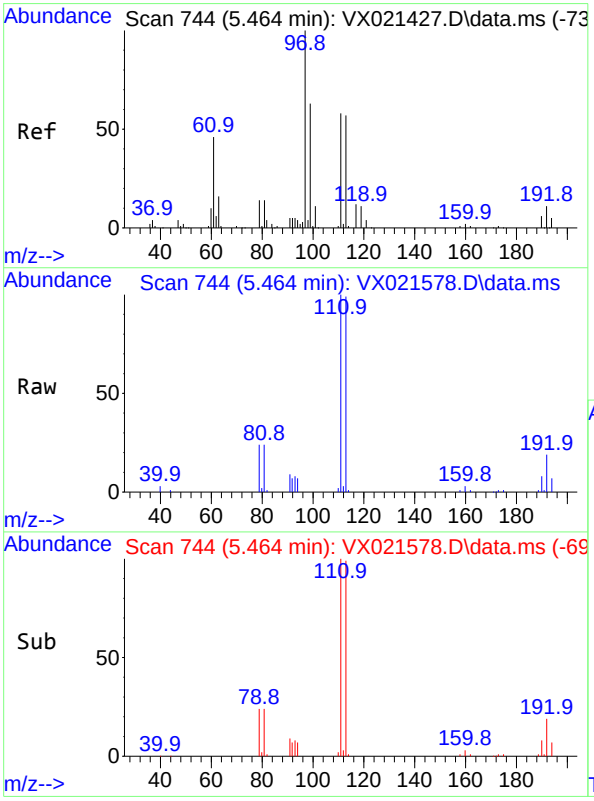



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:114 Resp: 109753

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.5 | 0.0 | 40.8 |
| 88 | 17.0 | 0.0 | 32.8 |

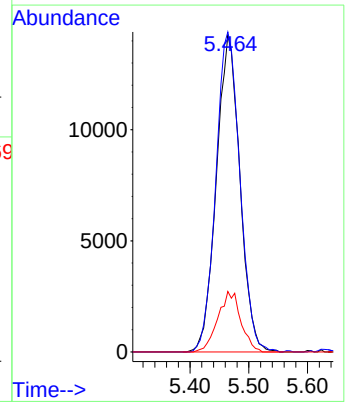


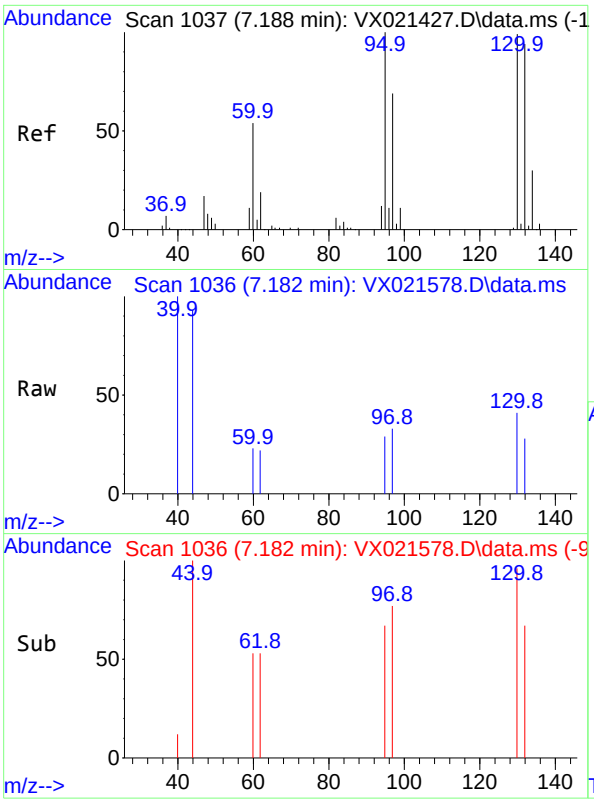

#35
Dibromofluoromethane
Concen: 50.84 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:113 Resp: 39637

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.0 | 81.9 | 122.9 |
| 192 | 18.6 | 16.7 | 25.1 |



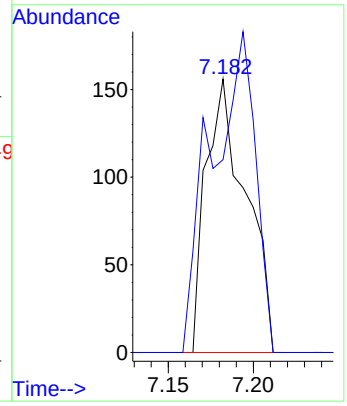
**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

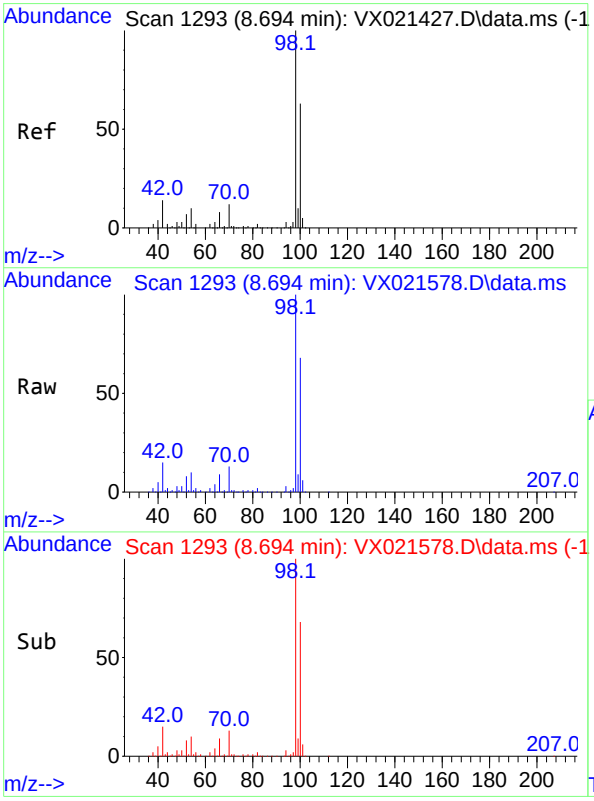



#44
Trichloroethene
Concen: 0.32 ug/l
RT: 7.182 min Scan# 1036
Delta R.T. -0.006 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:130 Resp: 254

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 70.5 | 0.0 | 198.0 |

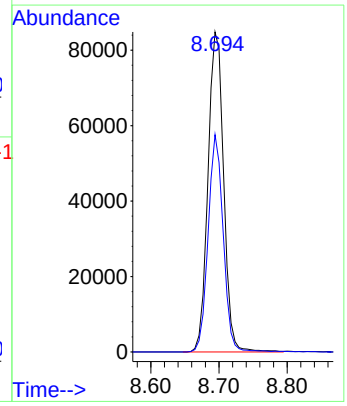


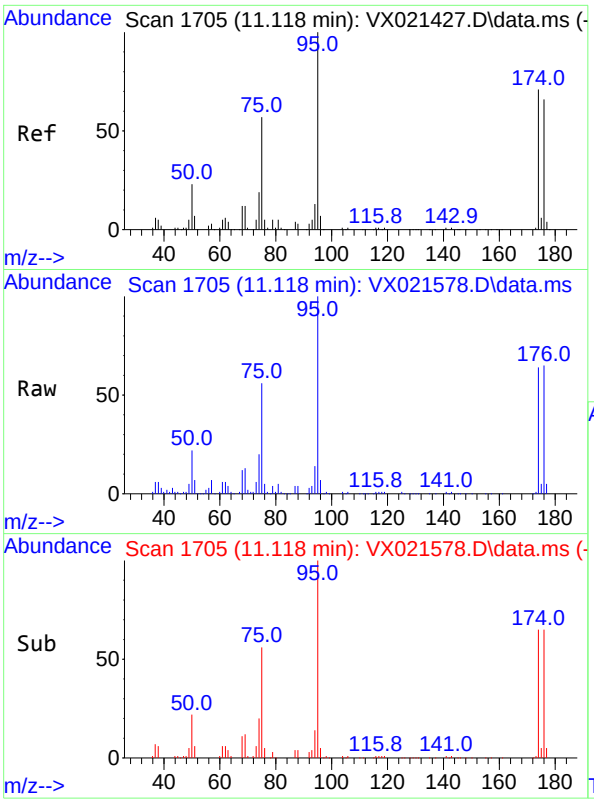

#50
Toluene-d8
Concen: 48.92 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion: 98 Resp: 135892

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.5 | 51.9 | 77.9 |



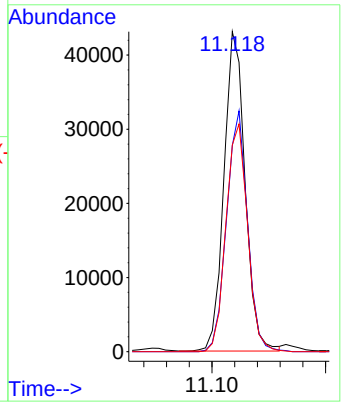
**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

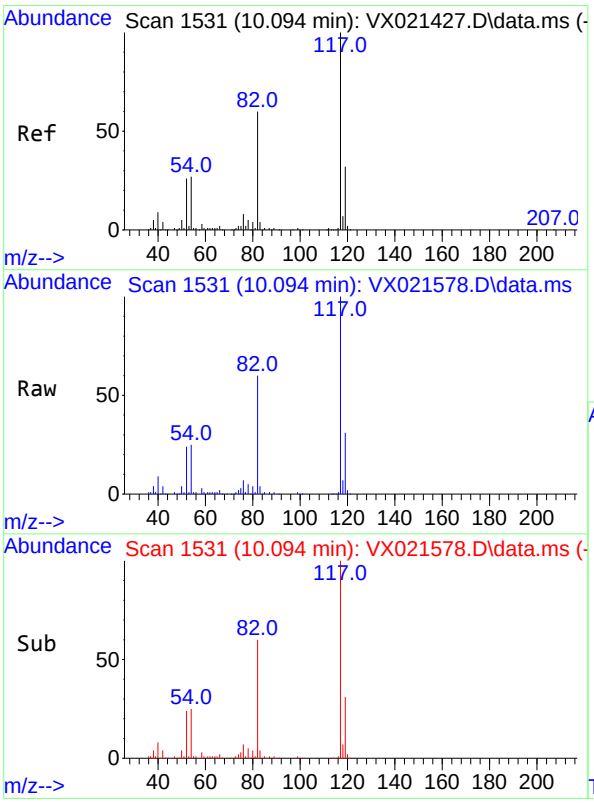



#62
4-Bromofluorobenzene
Concen: 51.48 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion: 95 Resp: 55599

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.5 | 0.0 | 154.6 |
| 176 | 72.8 | 0.0 | 155.8 |

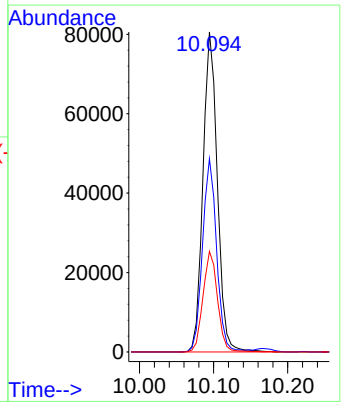


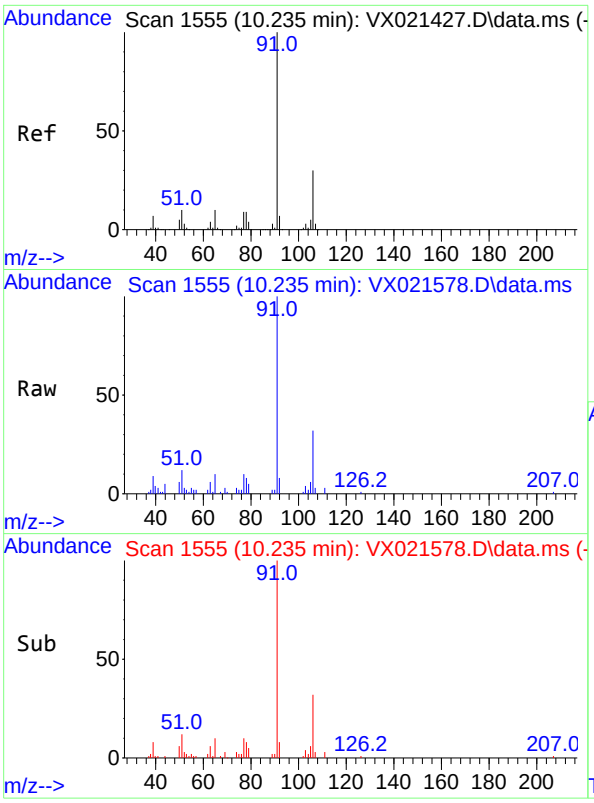

#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:117 Resp: 108566

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.4 | 47.4 | 71.2 |
| 119 | 31.4 | 26.6 | 39.8 |



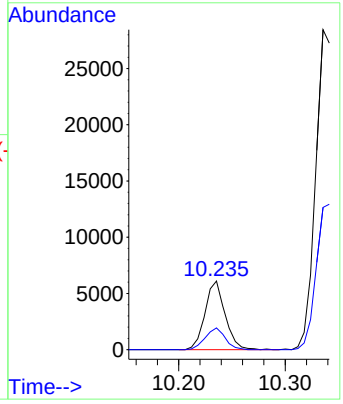
**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

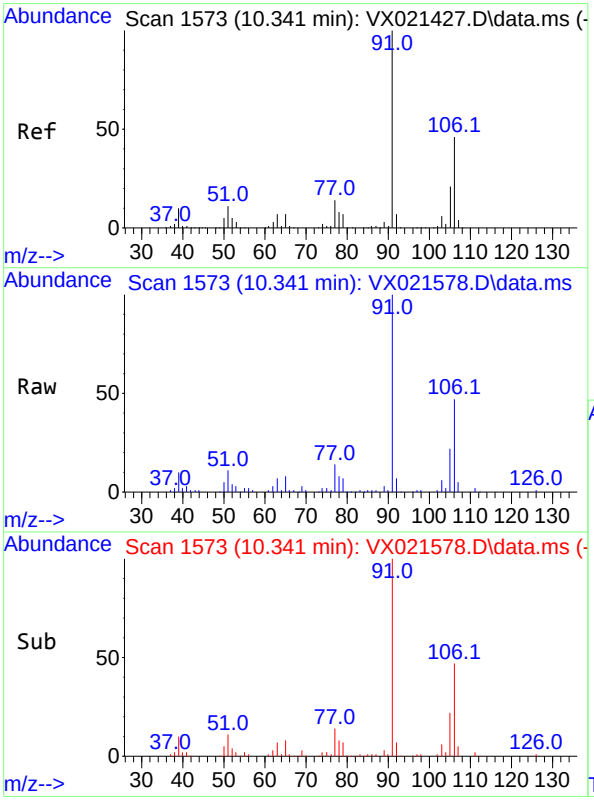



#67
Ethyl Benzene
Concen: 2.00 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion: 91 Resp: 7966

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.7 | 24.6 | 37.0 |

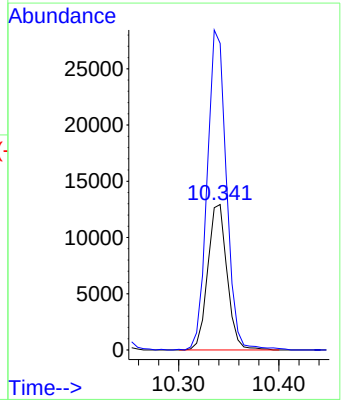


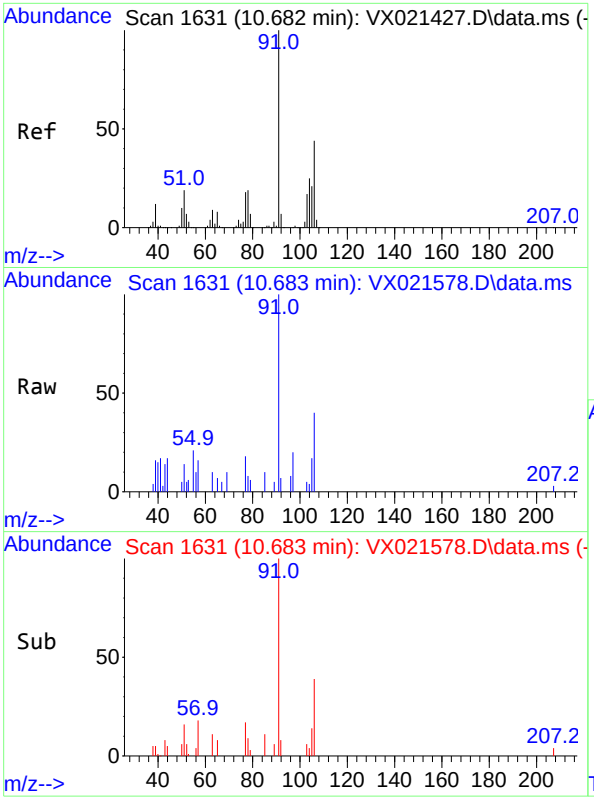

#68
m/p-Xylenes
Concen: 12.22 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:106 Resp: 17301

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 218.5 | 162.8 | 244.2 |



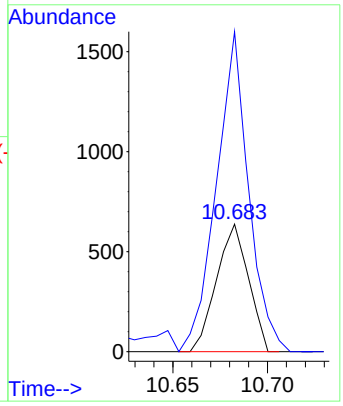
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MSVOA_X
**ClientSampleId :**
FD-032321

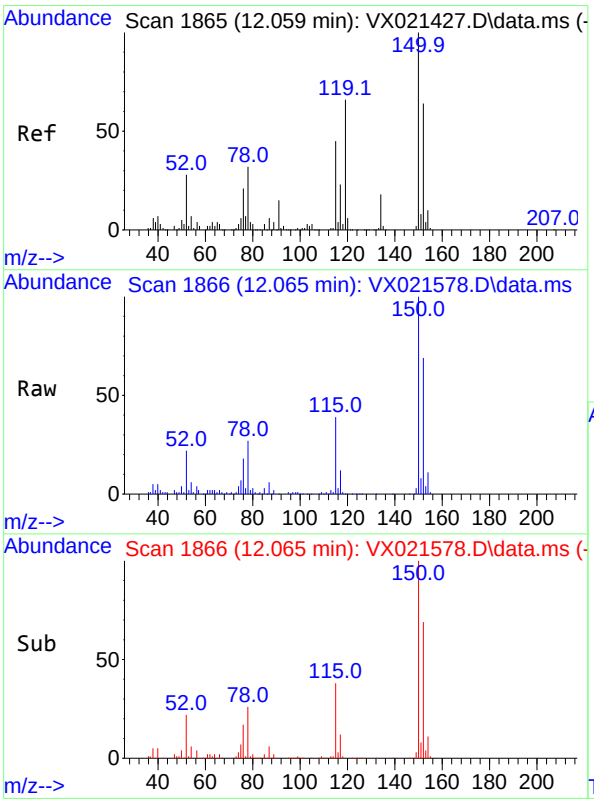



#69
o-Xylene
Concen: 0.55 ug/l
RT: 10.683 min Scan# 1631
Delta R.T. 0.001 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:106 Resp: 749

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 252.7 | 108.1 | 324.2 |

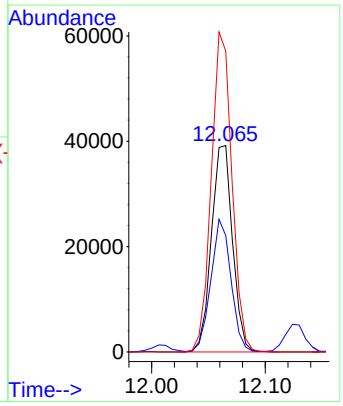


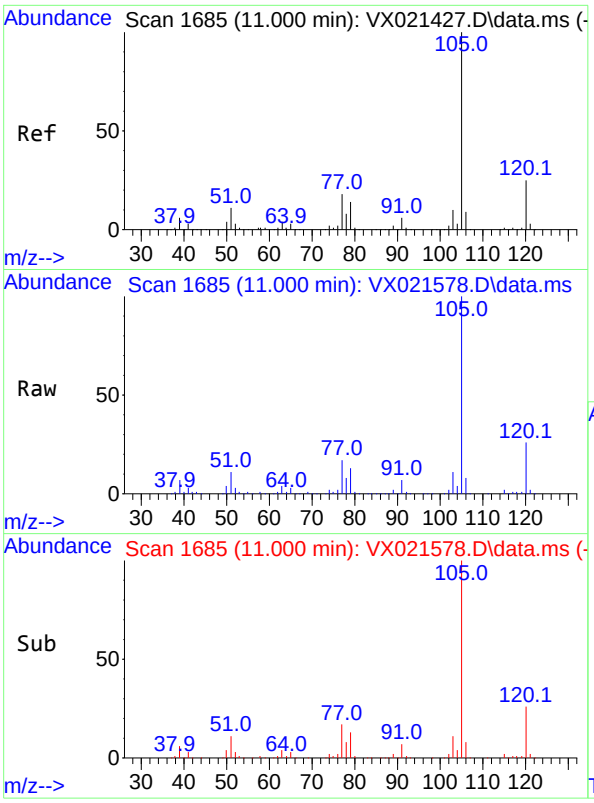

#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.065 min Scan# 1866
Delta R.T. 0.006 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:152 Resp: 50719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.9 | 41.1 | 123.3 |
| 150 | 151.4 | 0.0 | 349.0 |



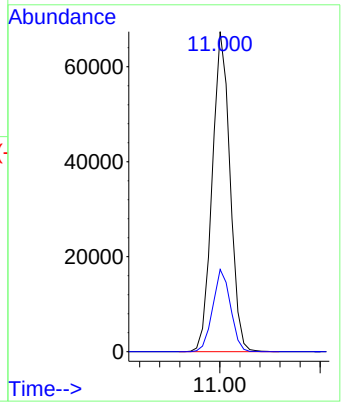
**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

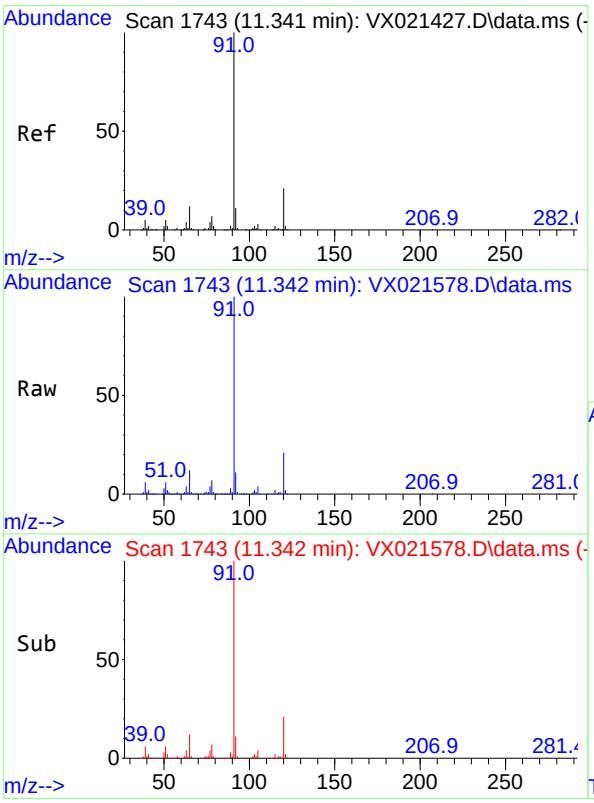



#73
Isopropylbenzene
Concen: 23.27 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:105 Resp: 82914

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.6 | 13.2 | 39.6 |

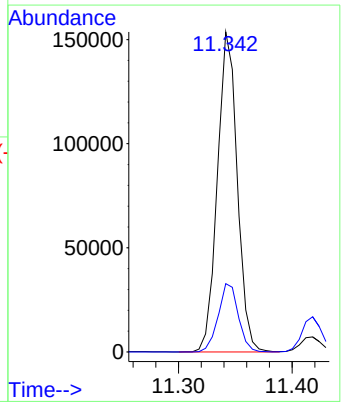


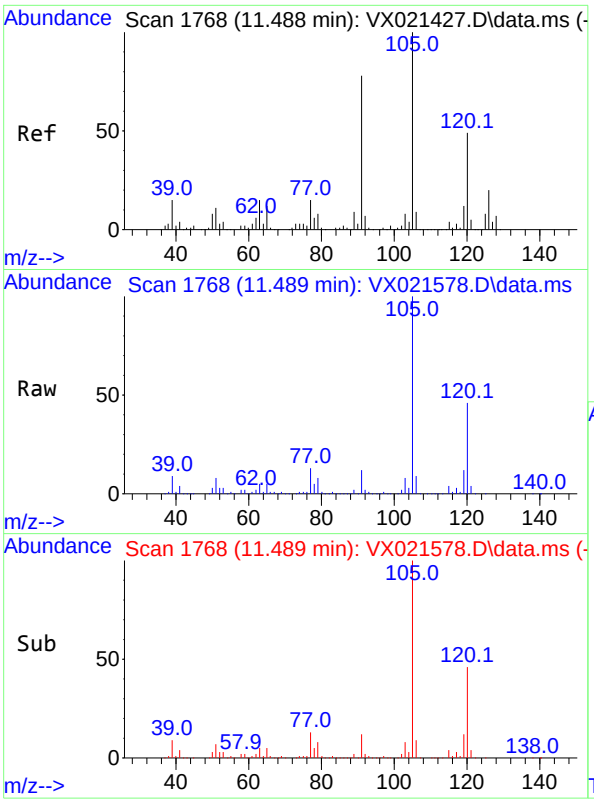

#78
n-propylbenzene
Concen: 44.50 ug/l
RT: 11.342 min Scan# 1743
Delta R.T. 0.001 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion: 91 Resp: 187261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.6 | 11.5 | 34.5 |



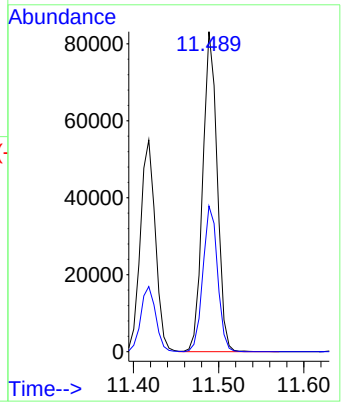
**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

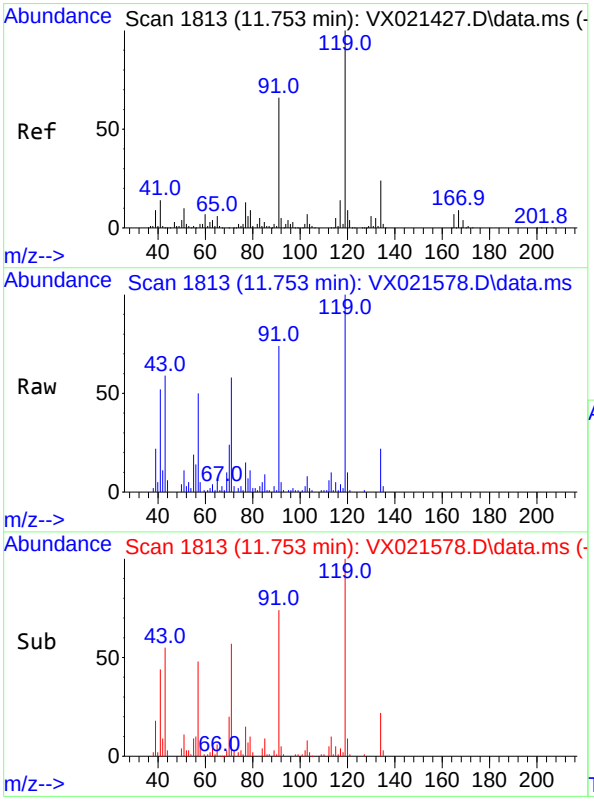



#80
1,3,5-Trimethylbenzene
Concen: 32.04 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.001 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:105 Resp: 97557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.2 | 23.8 | 71.5 |

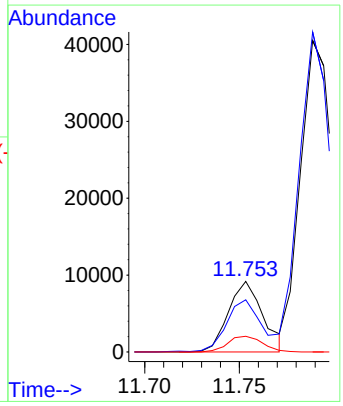


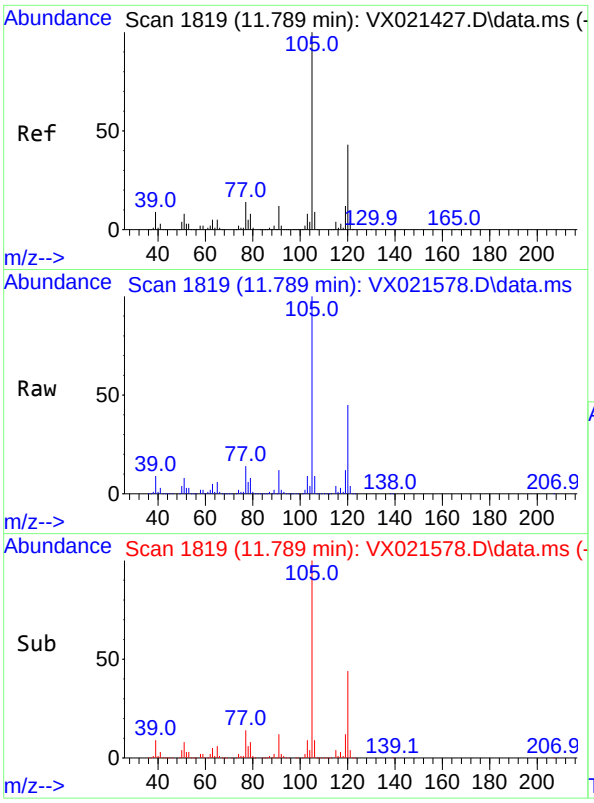

#83
tert-Butylbenzene
Concen: 3.93 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:119 Resp: 11658

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 71.3 | 27.9 | 83.7 |
| 134 | 22.4 | 11.3 | 33.9 |



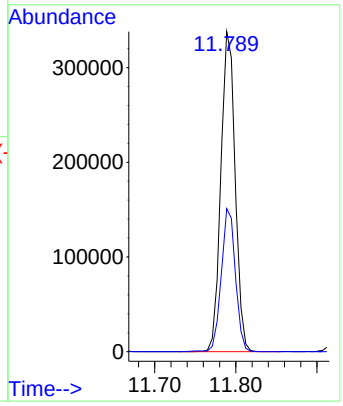
**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

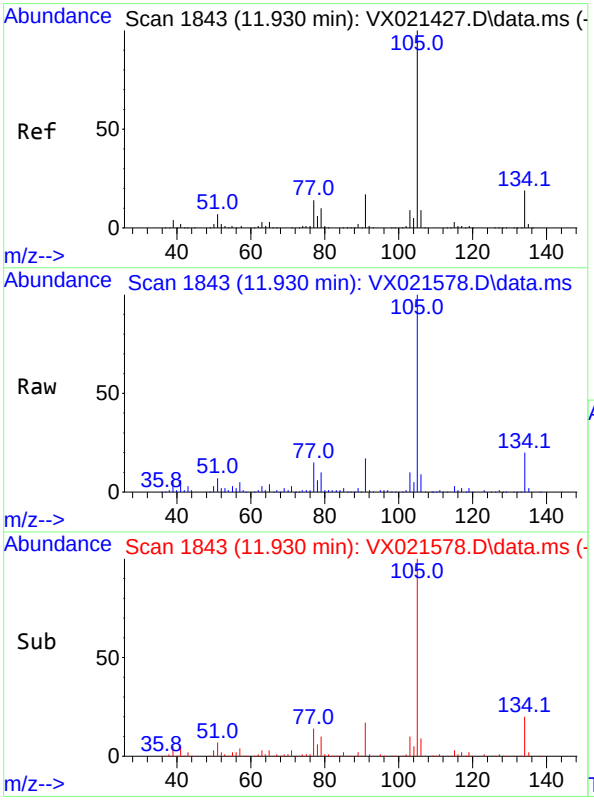



#84
1,2,4-Trimethylbenzene
Concen: 135.07 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. -0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:105 Resp: 414531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.2 | 22.4 | 67.3 |

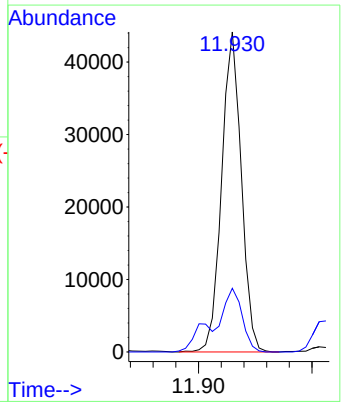


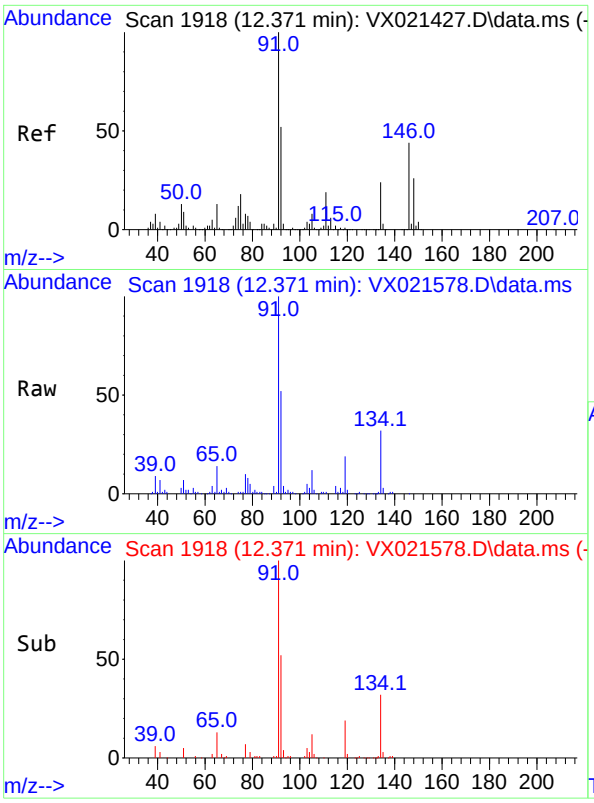

#85
sec-Butylbenzene
Concen: 15.52 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:105 Resp: 53076

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 28.5 | 10.0 | 29.8 |



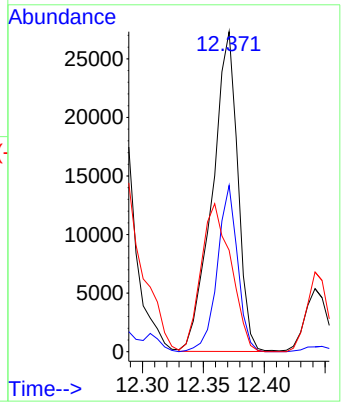
**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

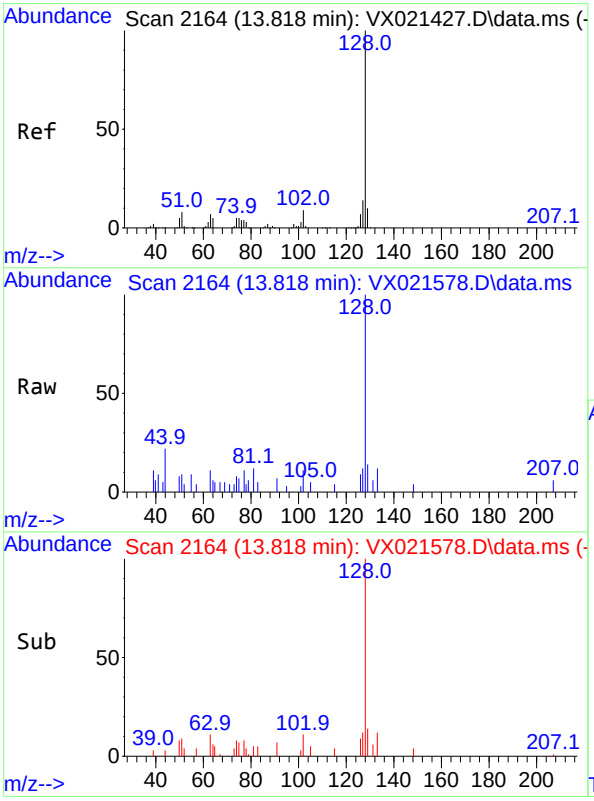



#89
n-Butylbenzene
Concen: 13.94 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion: 91 Resp: 39762

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 41.4 | 27.4 | 82.0 |
| 134 | 54.4 | 13.2 | 39.5# |

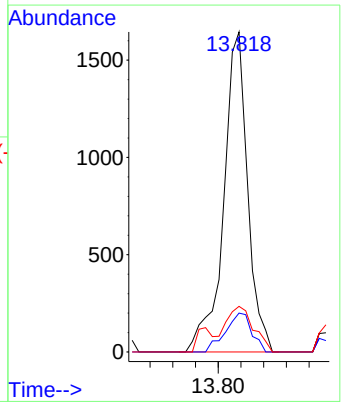



#95
Naphthalene
Concen: 0.73 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021578.D
Acq: 29 Mar 2021 15:39

Tgt Ion:128 Resp: 2414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.3 | 10.3 | 15.5 |
| 129 | 17.0 | 8.8 | 13.2# |



LSC Area Percent Report

Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :** MSVOA_X
**ClientSampleId :** FD-032321

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

Signal : TIC: VX021578.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.464 | 733 | 744 | 756 | rBV | 47847 | 135177 | 10.84% | 1.584% |
| 2 | 5.629 | 759 | 772 | 785 | rBV | 69612 | 192018 | 15.40% | 2.250% |
| 3 | 6.029 | 830 | 840 | 851 | rBV | 52511 | 136452 | 10.95% | 1.599% |
| 4 | 6.829 | 965 | 976 | 990 | rBV2 | 117142 | 276502 | 22.18% | 3.240% |
| 5 | 8.694 | 1286 | 1293 | 1308 | rVB | 239818 | 380763 | 30.54% | 4.461% |
| 6 | 10.094 | 1525 | 1531 | 1539 | rBV | 262390 | 350932 | 28.15% | 4.112% |
| 7 | 10.235 | 1548 | 1555 | 1560 | rBV | 16025 | 24129 | 1.94% | 0.283% |
| 8 | 10.336 | 1560 | 1572 | 1579 | rBV | 88349 | 141616 | 11.36% | 1.659% |
| 9 | 10.624 | 1613 | 1621 | 1628 | rBV3 | 14756 | 32290 | 2.59% | 0.378% |
| 10 | 10.818 | 1646 | 1654 | 1659 | rBV2 | 35707 | 53604 | 4.30% | 0.628% |
| 11 | 10.894 | 1659 | 1667 | 1671 | rBV3 | 28538 | 46207 | 3.71% | 0.541% |
| 12 | 10.930 | 1671 | 1673 | 1679 | rVB2 | 10839 | 13839 | 1.11% | 0.162% |
| 13 | 11.000 | 1679 | 1685 | 1690 | rBV | 171386 | 217139 | 17.42% | 2.544% |
| 14 | 11.118 | 1700 | 1705 | 1710 | rBV | 216375 | 283920 | 22.78% | 3.327% |
| 15 | 11.165 | 1710 | 1713 | 1717 | rVB2 | 11615 | 15408 | 1.24% | 0.181% |
| 16 | 11.259 | 1721 | 1729 | 1737 | rVB3 | 25918 | 39762 | 3.19% | 0.466% |
| 17 | 11.342 | 1738 | 1743 | 1751 | rBV | 320963 | 400673 | 32.14% | 4.694% |
| 18 | 11.418 | 1751 | 1756 | 1761 | rVV | 151255 | 196887 | 15.79% | 2.307% |
| 19 | 11.489 | 1761 | 1768 | 1777 | rVB | 245936 | 327397 | 26.26% | 3.836% |
| 20 | 11.653 | 1791 | 1796 | 1803 | rVB4 | 23823 | 44286 | 3.55% | 0.519% |
| 21 | 11.753 | 1809 | 1813 | 1815 | rVV | 60638 | 74026 | 5.94% | 0.867% |
| 22 | 11.789 | 1815 | 1819 | 1829 | rVB | 1014841 | 1246629 | 100.00% | 14.606% |
| 23 | 11.900 | 1829 | 1838 | 1840 | rBV | 52011 | 80481 | 6.46% | 0.943% |
| 24 | 11.930 | 1840 | 1843 | 1848 | rVV | 119707 | 146080 | 11.72% | 1.712% |
| 25 | 11.983 | 1848 | 1852 | 1853 | rVV | 20118 | 23303 | 1.87% | 0.273% |
| 26 | 12.006 | 1853 | 1856 | 1860 | rVV | 47937 | 62022 | 4.98% | 0.727% |
| 27 | 12.059 | 1860 | 1865 | 1871 | rVV | 261605 | 333503 | 26.75% | 3.907% |
| 28 | 12.124 | 1871 | 1876 | 1883 | rVV | 394309 | 479419 | 38.46% | 5.617% |
| 29 | 12.218 | 1887 | 1892 | 1898 | rVB | 47122 | 66872 | 5.36% | 0.783% |
| 30 | 12.283 | 1898 | 1903 | 1911 | rBV | 376401 | 527221 | 42.29% | 6.177% |
| 31 | 12.353 | 1911 | 1915 | 1923 | rVB3 | 137887 | 254364 | 20.40% | 2.980% |
| 32 | 12.442 | 1925 | 1930 | 1937 | rBV | 72947 | 96733 | 7.76% | 1.133% |
| 33 | 12.506 | 1937 | 1941 | 1947 | rVB6 | 8443 | 17119 | 1.37% | 0.201% |
| 34 | 12.571 | 1947 | 1952 | 1954 | rBV | 57327 | 80746 | 6.48% | 0.946% |
| 35 | 12.595 | 1954 | 1956 | 1959 | rVV | 56524 | 58124 | 4.66% | 0.681% |
| 36 | 12.653 | 1961 | 1966 | 1969 | rVV | 264024 | 324473 | 26.03% | 3.802% |

Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 37 | 12.683 | 1969 | 1971 | 1976 | rVV | 88621 | 96665 | 7.75% | 1.133% |
| 38 | 12.742 | 1976 | 1981 | 1989 | rVB3 | 189526 | 335255 | 26.89% | 3.928% |
| 39 | 12.883 | 1998 | 2005 | 2009 | rVB2 | 46568 | 79111 | 6.35% | 0.927% |
| 40 | 12.959 | 2009 | 2018 | 2022 | rBV | 142939 | 195637 | 15.69% | 2.292% |
| 41 | 13.001 | 2022 | 2025 | 2032 | rVB2 | 63484 | 78762 | 6.32% | 0.923% |
| 42 | 13.065 | 2032 | 2036 | 2041 | rVB3 | 18837 | 28573 | 2.29% | 0.335% |
| 43 | 13.136 | 2041 | 2048 | 2051 | rBV | 15899 | 22499 | 1.80% | 0.264% |
| 44 | 13.177 | 2051 | 2055 | 2057 | rBV2 | 21184 | 23464 | 1.88% | 0.275% |
| 45 | 13.206 | 2057 | 2060 | 2064 | rVB | 26319 | 27369 | 2.20% | 0.321% |
| 46 | 13.295 | 2070 | 2075 | 2076 | rBV2 | 11582 | 13993 | 1.12% | 0.164% |
| 47 | 13.324 | 2076 | 2080 | 2087 | rVB2 | 255547 | 361843 | 29.03% | 4.239% |
| 48 | 13.459 | 2099 | 2103 | 2109 | rVB | 16459 | 22682 | 1.82% | 0.266% |
| 49 | 13.624 | 2127 | 2131 | 2135 | rVV2 | 18909 | 27179 | 2.18% | 0.318% |
| 50 | 13.677 | 2135 | 2140 | 2142 | rVV2 | 10618 | 17360 | 1.39% | 0.203% |
| 51 | 13.701 | 2142 | 2144 | 2152 | rVB2 | 17670 | 24543 | 1.97% | 0.288% |

Sum of corrected areas: 8535051

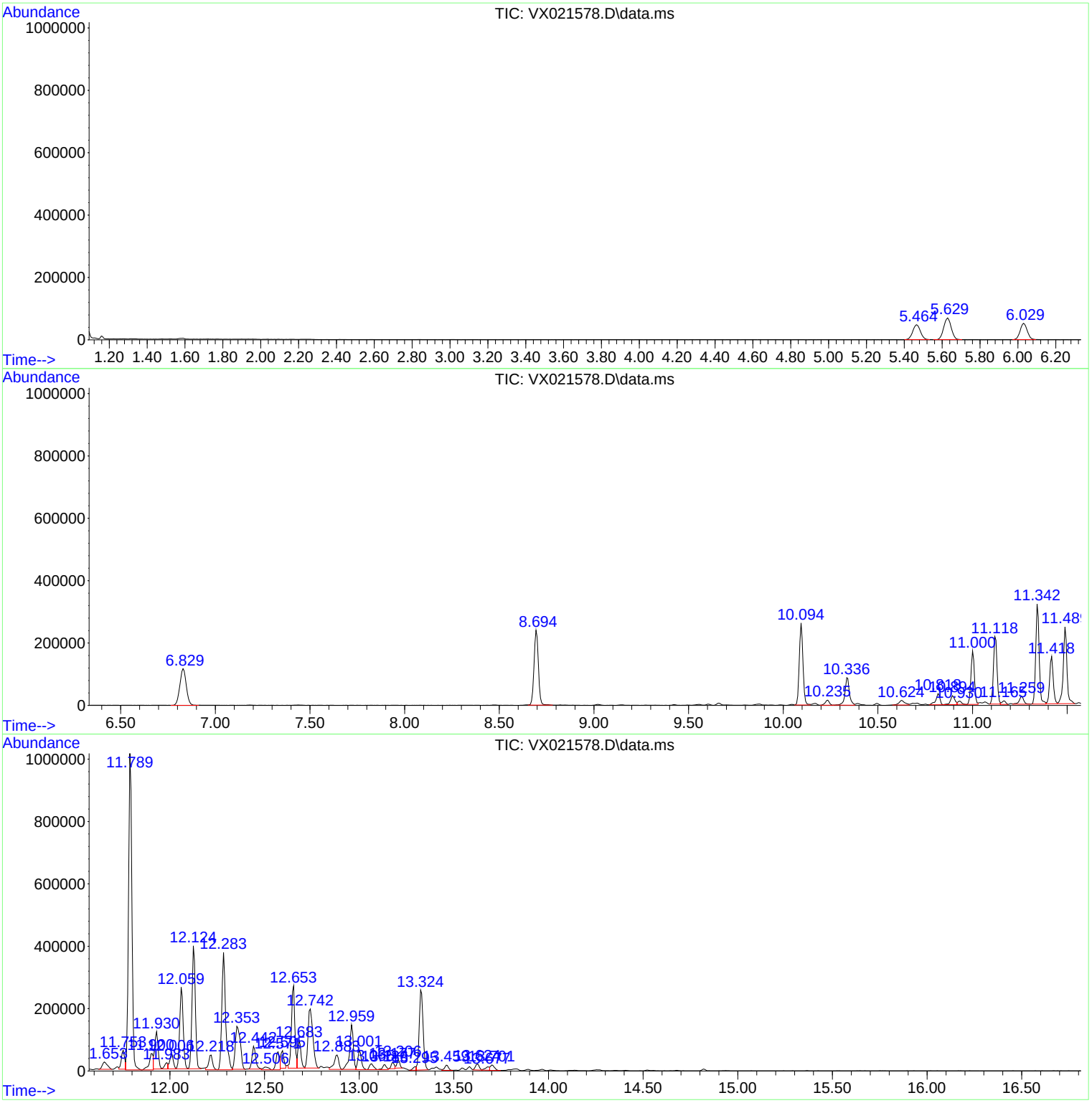
Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P



Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

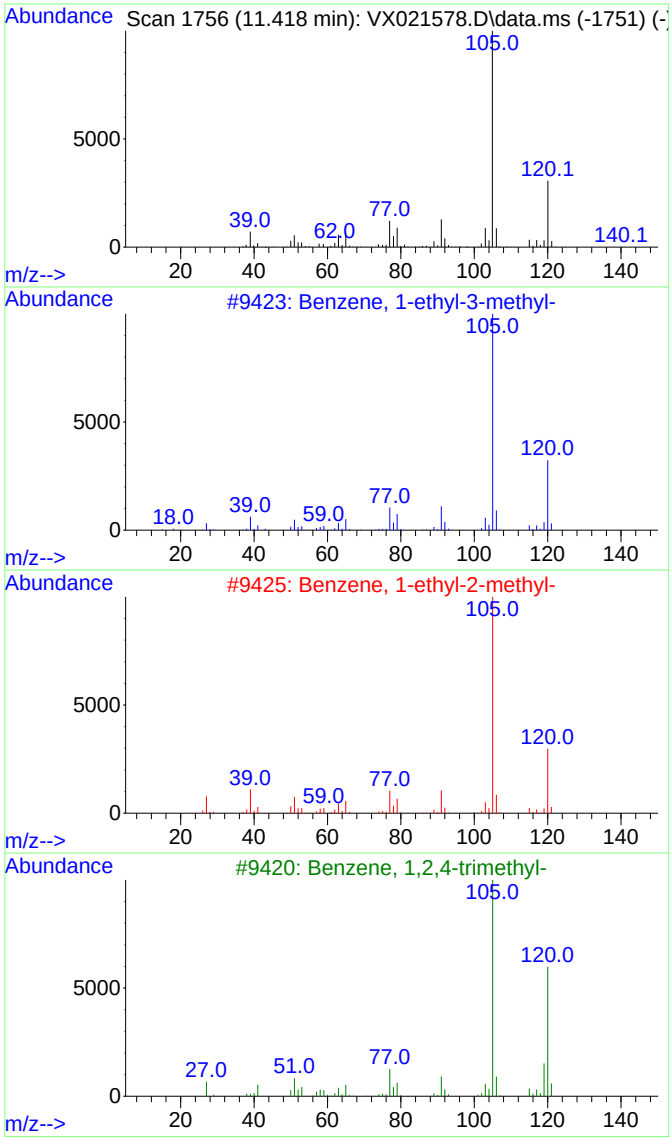
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

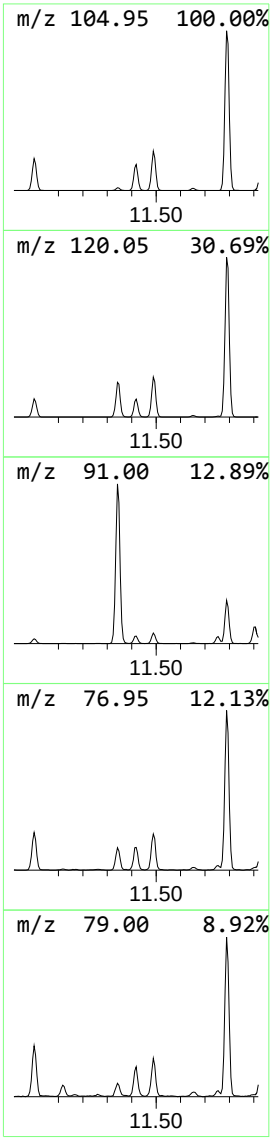
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 1 Benzene, 1-ethyl-3-methyl- Concentration Rank 6

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 11.418 | 29.52 ug/l | 196887 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethyl-3-methyl- | 120 | C9H12 | 000620-14-4 | 97 |
| 2 | Benzene, 1-ethyl-2-methyl- | 120 | C9H12 | 000611-14-3 | 95 |
| 3 | Benzene, 1,2,4-trimethyl- | 120 | C9H12 | 000095-63-6 | 91 |
| 4 | Benzene, 1-ethyl-4-methyl- | 120 | C9H12 | 000622-96-8 | 90 |
| 5 | Mesitylene | 120 | C9H12 | 000108-67-8 | 90 |



Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

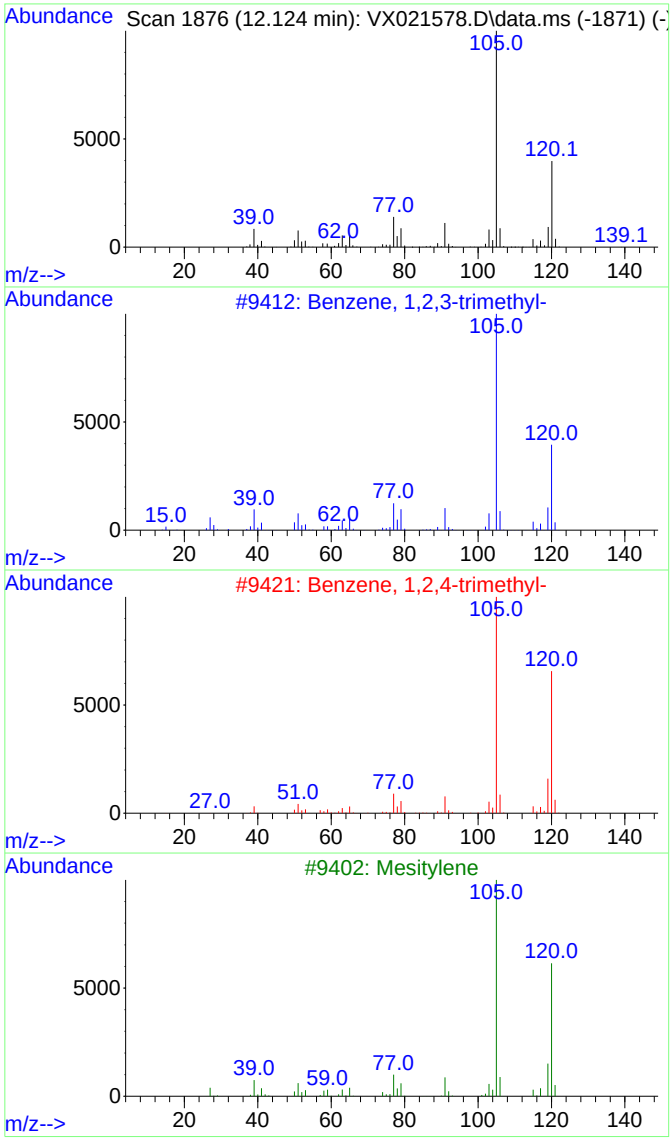
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

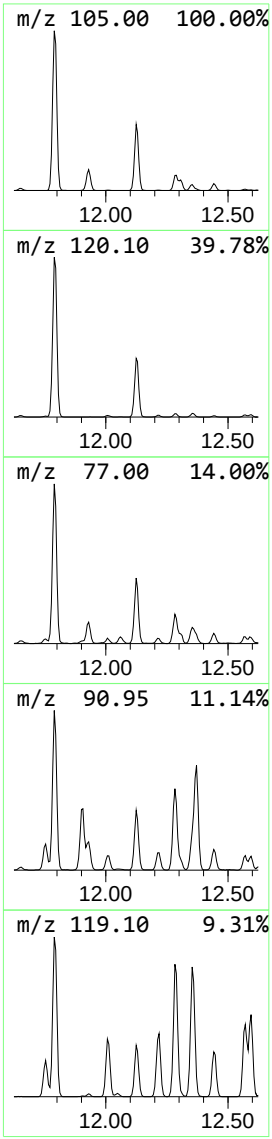
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 2 Benzene, 1,2,3-trimethyl- Concentration Rank 2

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.124 | 71.88 ug/l | 479419 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3-trimethyl- | 120 | C9H12 | 000526-73-8 | 97 |
| 2 | Benzene, 1,2,4-trimethyl- | 120 | C9H12 | 000095-63-6 | 94 |
| 3 | Mesitylene | 120 | C9H12 | 000108-67-8 | 91 |
| 4 | Benzene, 1-ethyl-3-methyl- | 120 | C9H12 | 000620-14-4 | 90 |
| 5 | Benzene, 1-ethyl-4-methyl- | 120 | C9H12 | 000622-96-8 | 90 |



Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

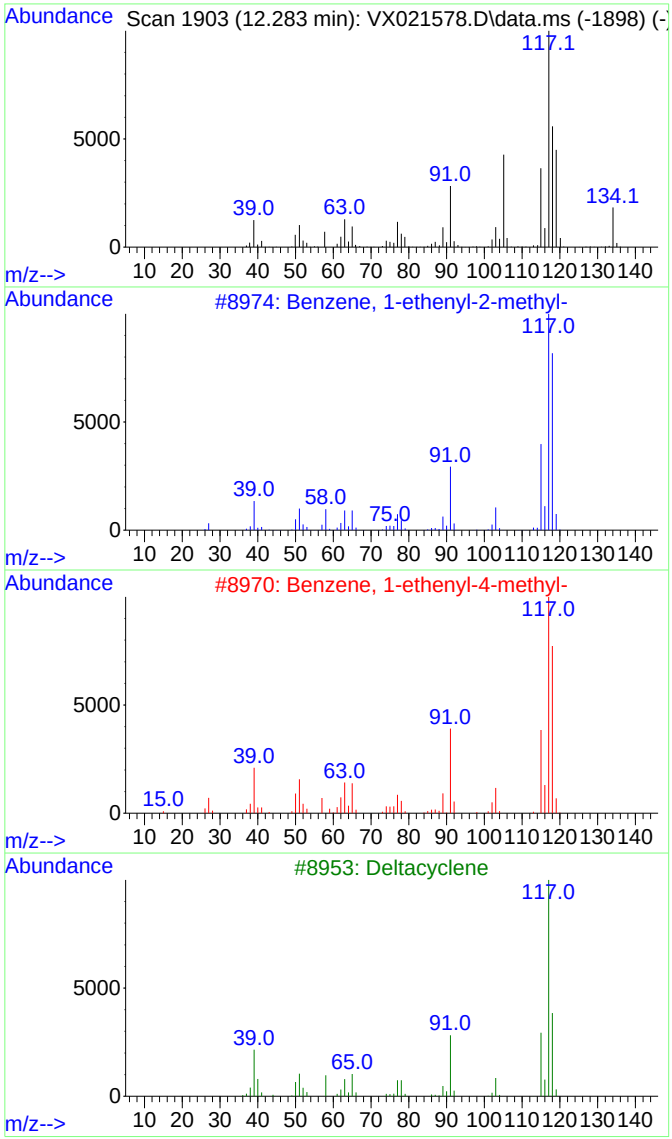
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

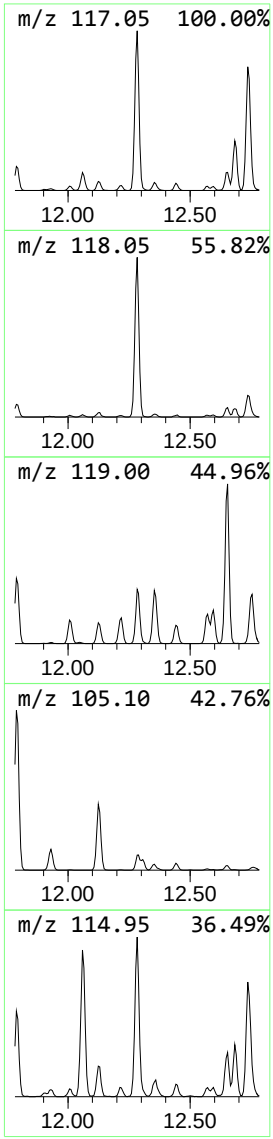
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 3 Benzene, 1-ethenyl-2-methyl- Concentration Rank 1

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.283 | 79.04 ug/l | 527221 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1-ethenyl-2-methyl- | 118 | C9H10 | 000611-15-4 | 92 |
| 2 | Benzene, 1-ethenyl-4-methyl- | 118 | C9H10 | 000622-97-9 | 86 |
| 3 | Deltacyclene | 118 | C9H10 | 007785-10-6 | 64 |
| 4 | Benzene, 1-propenyl- | 118 | C9H10 | 000637-50-3 | 64 |
| 5 | Benzene, cyclopropyl- | 118 | C9H10 | 000873-49-4 | 64 |



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

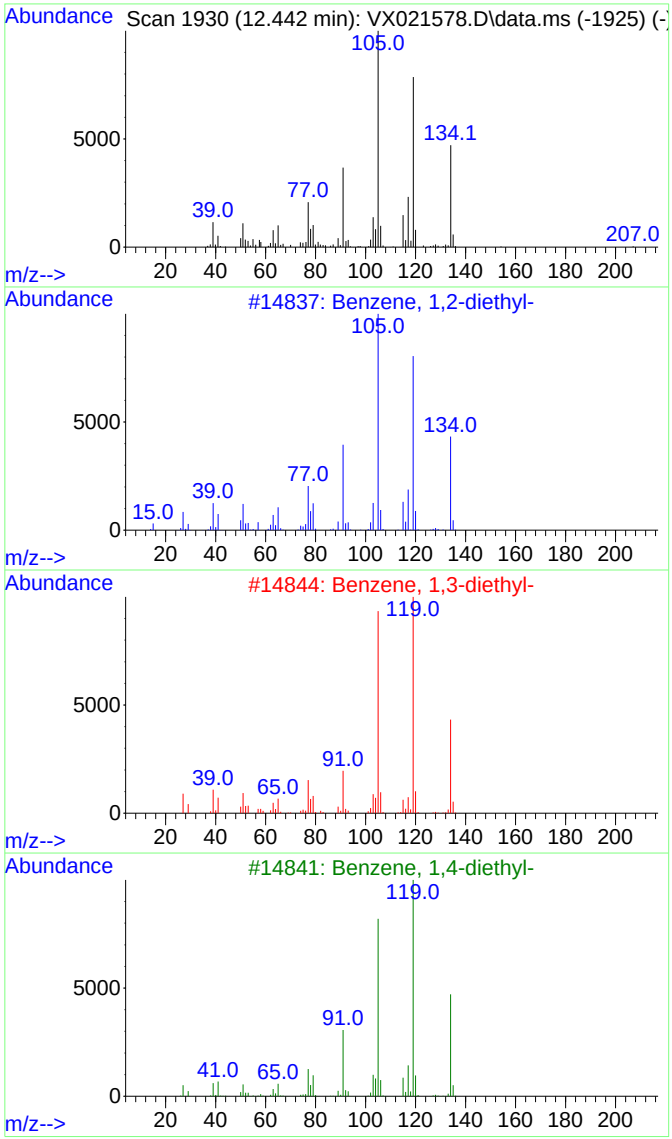
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

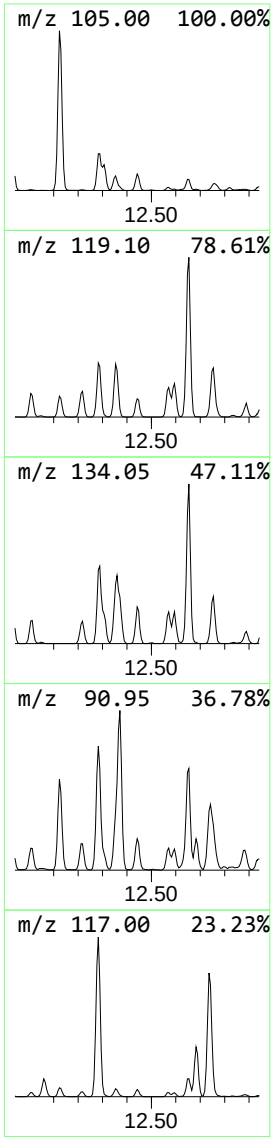
**********

Peak Number 4 Benzene, 1,2-diethyl- Concentration Rank 8

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.442 | 14.50 ug/l | 96733 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2-diethyl- | 134 | C10H14 | 000135-01-3 | 98 |
| 2 | Benzene, 1,3-diethyl- | 134 | C10H14 | 000141-93-5 | 87 |
| 3 | Benzene, 1,4-diethyl- | 134 | C10H14 | 000105-05-5 | 81 |
| 4 | o-Cymene | 134 | C10H14 | 000527-84-4 | 68 |
| 5 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 62 |



Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

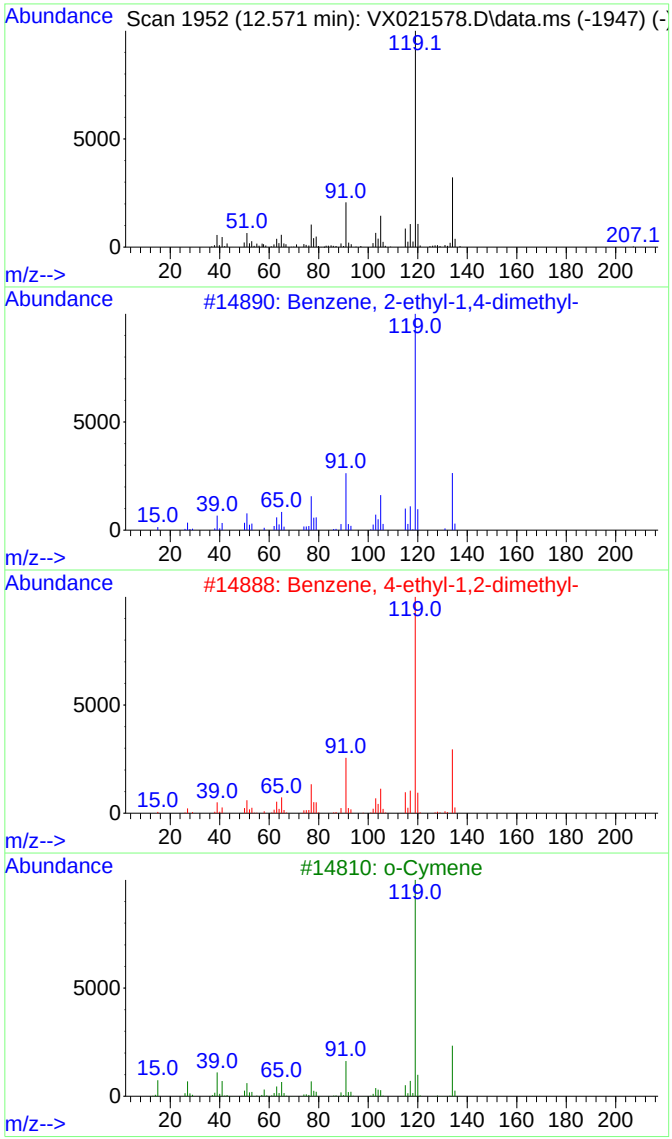
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

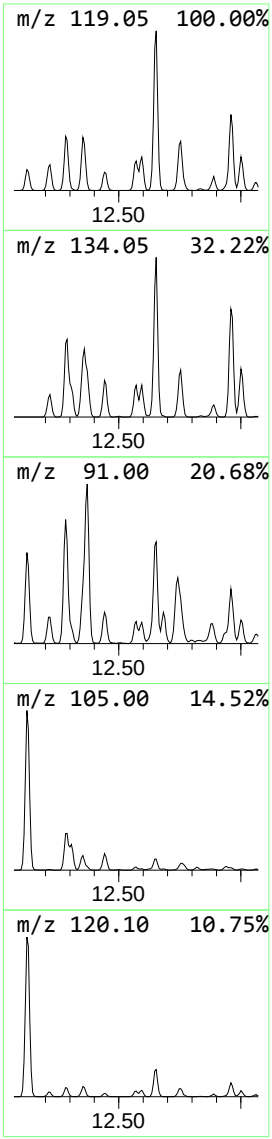
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 5 Benzene, 2-ethyl-1,4-dimethyl- Concentration Rank 10

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.571 | 12.11 ug/l | 80746 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 96 |
| 2 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 96 |
| 3 | o-Cymene | 134 | C10H14 | 000527-84-4 | 95 |
| 4 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 95 |
| 5 | p-Cymene | 134 | C10H14 | 000099-87-6 | 95 |



Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

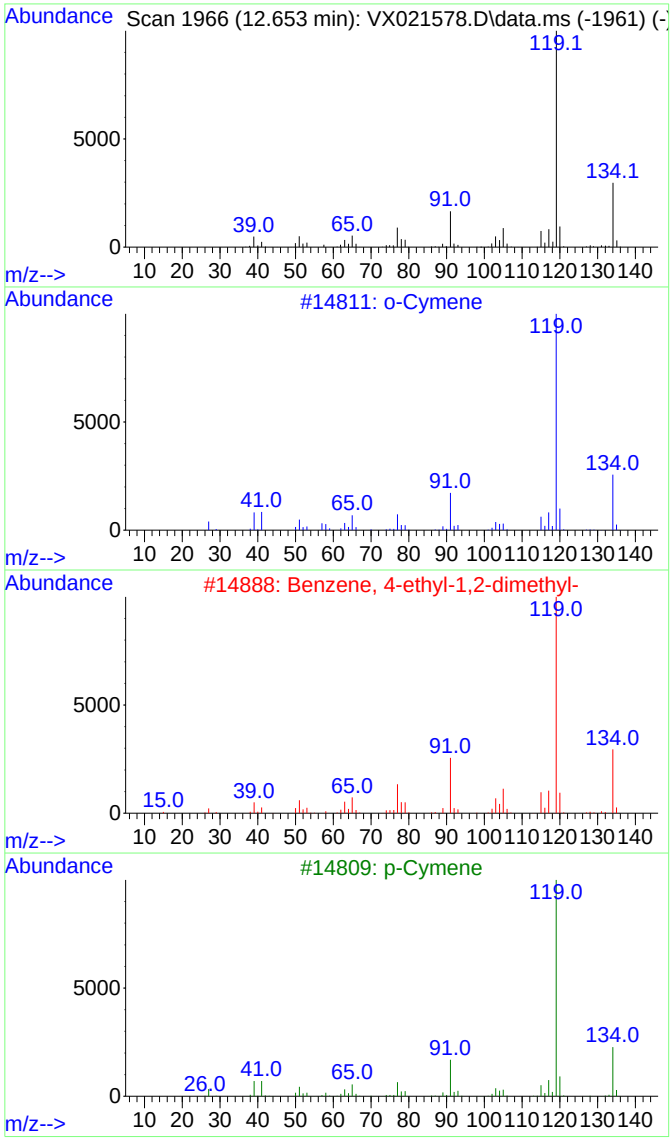
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

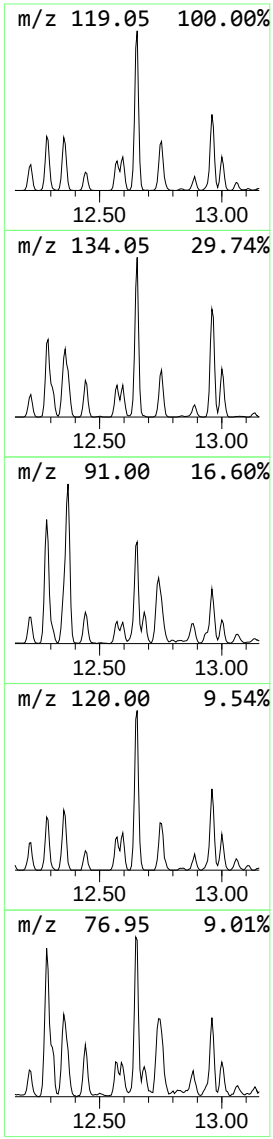
**********

Peak Number 6 o-Cymene Concentration Rank 5

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.653 | 48.65 ug/l | 324473 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | o-Cymene | 134 | C10H14 | 000527-84-4 | 97 |
| 2 | Benzene, 4-ethyl-1,2-dimethyl- | 134 | C10H14 | 000934-80-5 | 95 |
| 3 | p-Cymene | 134 | C10H14 | 000099-87-6 | 95 |
| 4 | Benzene, 1-ethyl-2,3-dimethyl- | 134 | C10H14 | 000933-98-2 | 95 |
| 5 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 95 |



Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

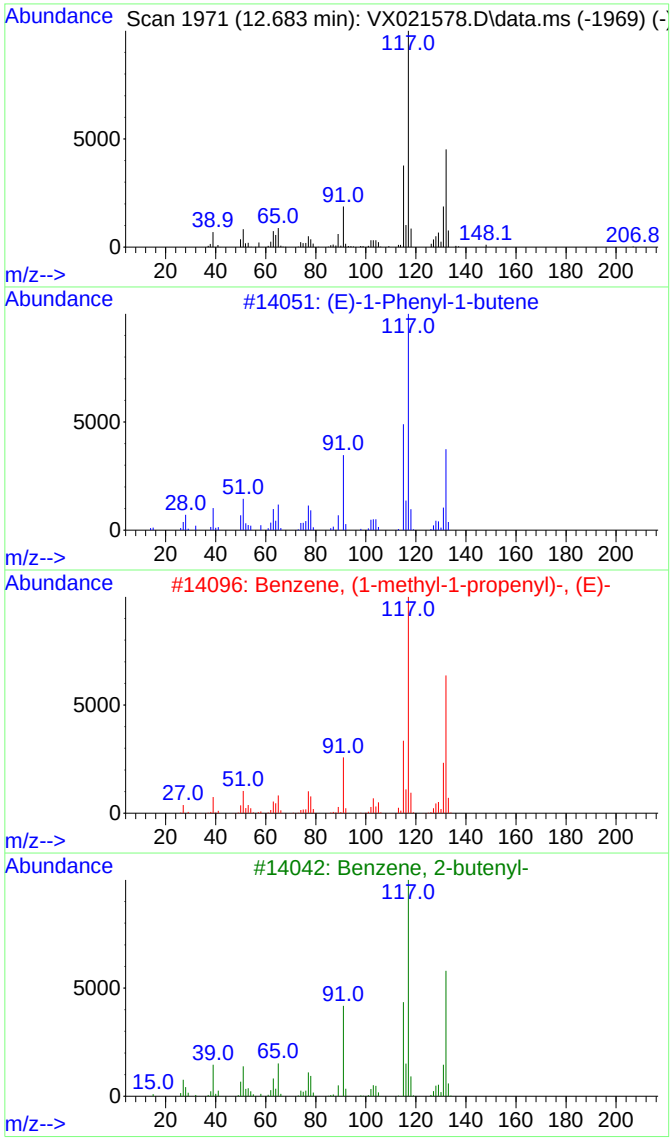
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Quant Title : SW846 8260

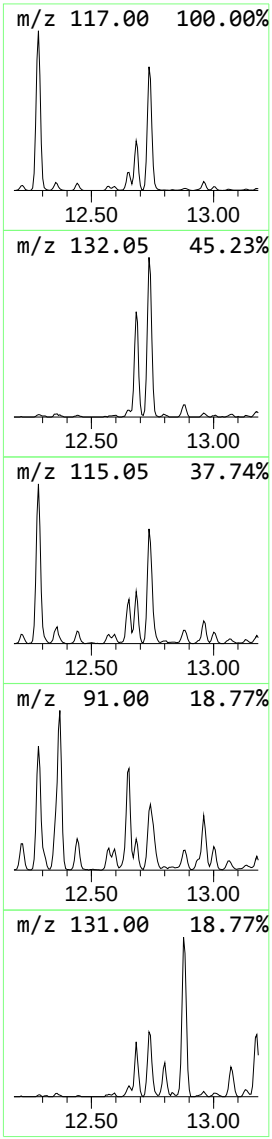
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 7 (E)-1-Phenyl-1-butene Concentration Rank 9

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.683 | 14.49 ug/l | 96665 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | (E)-1-Phenyl-1-butene | 132 | C10H12 | 001005-64-7 | 95 |
| 2 | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12 | 000768-00-3 | 94 |
| 3 | Benzene, 2-butenyl- | 132 | C10H12 | 001560-06-1 | 91 |
| 4 | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12 | 000767-99-7 | 91 |
| 5 | Benzene, (2-methyl-1-propenyl)- | 132 | C10H12 | 000768-49-0 | 91 |



Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

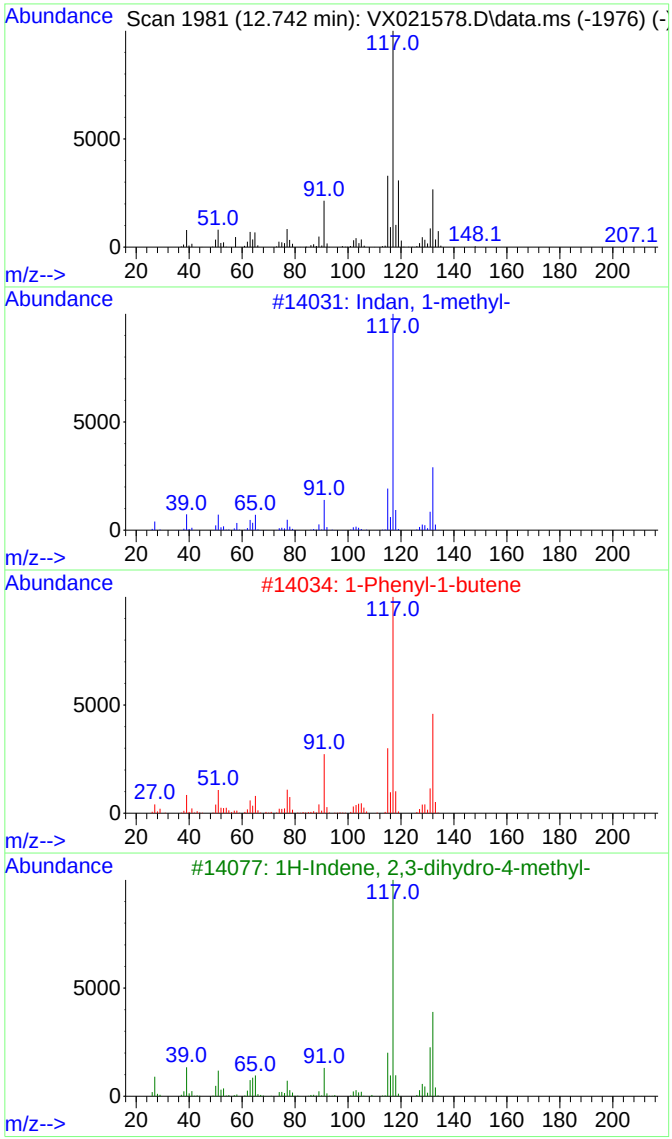
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Quant Title : SW846 8260

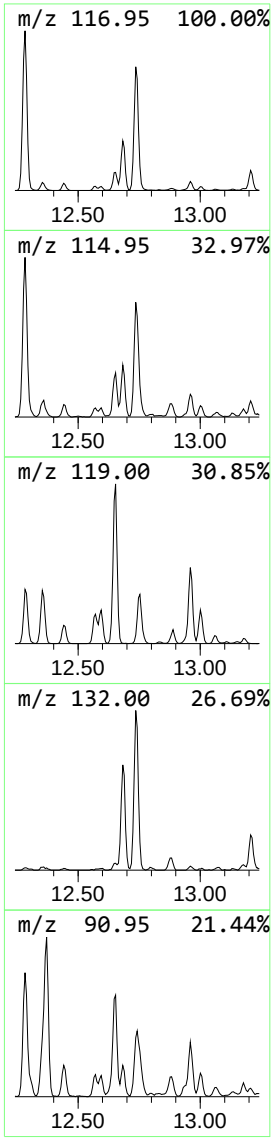
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 8 Indan, 1-methyl- Concentration Rank 4

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.742 | 50.26 ug/l | 335255 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Indan, 1-methyl- | 132 | C10H12 | 000767-58-8 | 87 |
| 2 | 1-Phenyl-1-butene | 132 | C10H12 | 000824-90-8 | 87 |
| 3 | 1H-Indene, 2,3-dihydro-4-methyl- | 132 | C10H12 | 000824-22-6 | 83 |
| 4 | Benzene, 1-methyl-2-(2-propenyl)- | 132 | C10H12 | 001587-04-8 | 83 |
| 5 | Benzene, (2-methyl-1-propenyl)- | 132 | C10H12 | 000768-49-0 | 83 |



Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

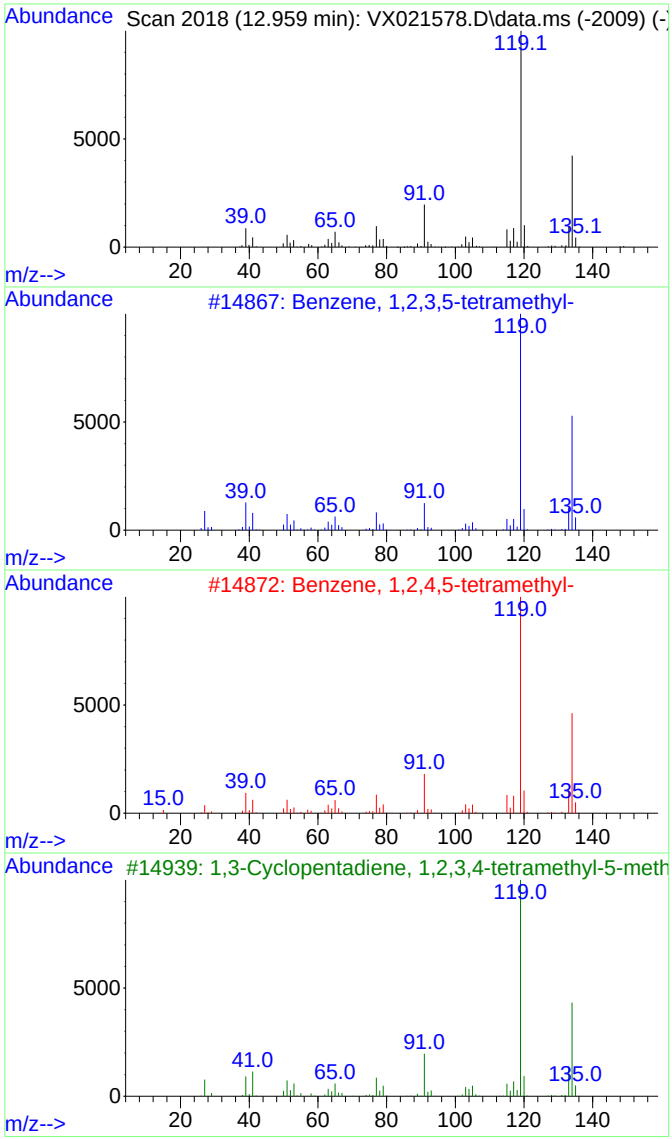
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

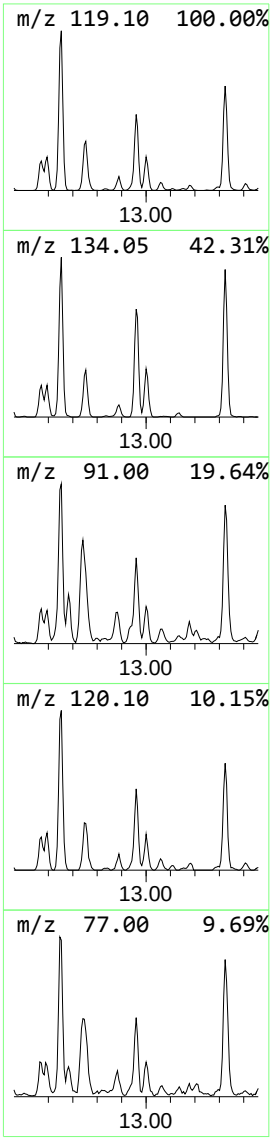
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 9 Benzene, 1,2,3,5-tetramethyl- Concentration Rank 7

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 12.959 | 29.33 ug/l | 195637 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3,5-tetramethyl- | 134 | C10H14 | 000527-53-7 | 96 |
| 2 | Benzene, 1,2,4,5-tetramethyl- | 134 | C10H14 | 000095-93-2 | 96 |
| 3 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 95 |
| 4 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 95 |
| 5 | o-Cymene | 134 | C10H14 | 000527-84-4 | 95 |



Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

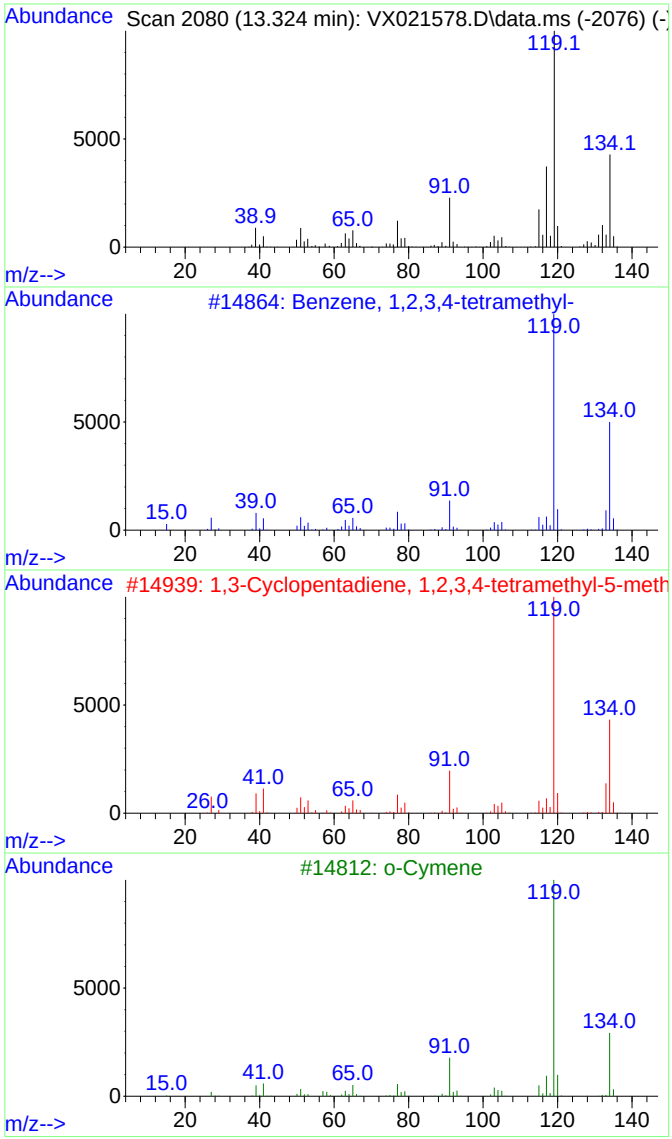
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Quant Title : SW846 8260

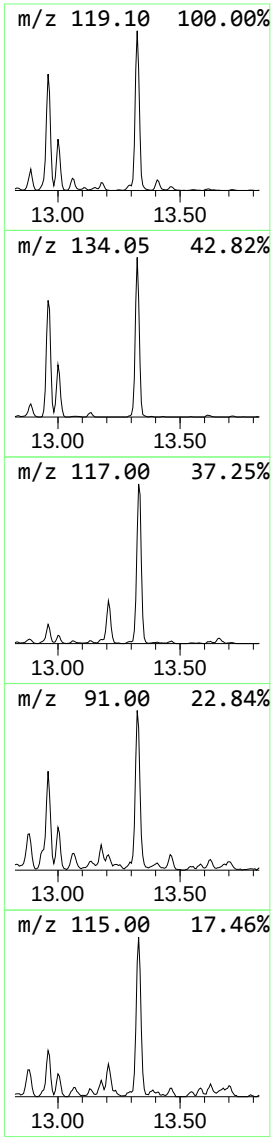
TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

**********
Peak Number 10 Benzene, 1,2,3,4-tetramethyl- Concentration Rank 3

| R.T. | EstConc | Area | Relative to ISTD | R.T. |
|---|---|---|---|---|
| 13.324 | 54.25 ug/l | 361843 | 1,4-Dichlorobenzene-d4 | 12.065 |

| Hit# of 5 | Tentative ID | MW | MolForm | CAS# | Qual |
|---|---|---|---|---|---|
| 1 | Benzene, 1,2,3,4-tetramethyl- | 134 | C10H14 | 000488-23-3 | 81 |
| 2 | 1,3-Cyclopentadiene, 1,2,3,4-tet... | 134 | C10H14 | 076089-59-3 | 81 |
| 3 | o-Cymene | 134 | C10H14 | 000527-84-4 | 81 |
| 4 | Benzene, 2-ethyl-1,4-dimethyl- | 134 | C10H14 | 001758-88-9 | 81 |
| 5 | Benzene, 1-methyl-3-(1-methyleth... | 134 | C10H14 | 000535-77-3 | 81 |



Sample Results: **VX021578.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021578.D
Acq On : 29 Mar 2021 15:39
Operator : JC/MD
Sample : M1785-17 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 16 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
FD-032321

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

| | | | | | --Internal Standard--- | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
| Benzene, 1-ethy... | 11.418 | 29.5 | ug/l | 196887 | 4 | 12.065 | 333503 | 50.0 |
| Benzene, 1,2,3-... | 12.124 | 71.9 | ug/l | 479419 | 4 | 12.065 | 333503 | 50.0 |
| Benzene, 1-ethe... | 12.283 | 79.0 | ug/l | 527221 | 4 | 12.065 | 333503 | 50.0 |
| Benzene, 1,2-di... | 12.442 | 14.5 | ug/l | 96733 | 4 | 12.065 | 333503 | 50.0 |
| Benzene, 2-ethy... | 12.571 | 12.1 | ug/l | 80746 | 4 | 12.065 | 333503 | 50.0 |
| o-Cymene | 12.653 | 48.6 | ug/l | 324473 | 4 | 12.065 | 333503 | 50.0 |
| (E)-1-Phenyl-1-... | 12.683 | 14.5 | ug/l | 96665 | 4 | 12.065 | 333503 | 50.0 |
| Indan, 1-methyl- | 12.742 | 50.3 | ug/l | 335255 | 4 | 12.065 | 333503 | 50.0 |
| Benzene, 1,2,3,... | 12.959 | 29.3 | ug/l | 195637 | 4 | 12.065 | 333503 | 50.0 |
| Benzene, 1,2,3,... | 13.324 | 54.3 | ug/l | 361843 | 4 | 12.065 | 333503 | 50.0 |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | TRIP-BLANK | SDG No.: | M1785 |
| Lab Sample ID: | M1785-18 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021576.D | 1 | | 03/29/21 14:52 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 1.00 | U | 0.23 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 1.00 | U | 0.20 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 1.00 | U | 0.19 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 5.00 | U | 0.87 | 5.00 | ug/L |
| 75-00-3 | Chloroethane | 1.00 | U | 0.35 | 1.00 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 1.00 | U | 0.25 | 1.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 1.00 | U | 0.21 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 1.00 | U | 0.26 | 1.00 | ug/L |
| 67-64-1 | Acetone | 4.50 | J | 1.60 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 1.00 | U | 0.25 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 1.00 | U | 0.22 | 1.00 | ug/L |
| 79-20-9 | Methyl Acetate | 1.00 | U | 0.47 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 1.00 | U | 0.18 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 1.00 | U | 0.19 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 1.00 | U | 0.21 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 5.00 | U | 1.30 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 5.00 | U | 0.90 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 1.00 | U | 0.27 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 1.00 | U | 0.22 | 1.00 | ug/L |
| 74-97-5 | Bromochloromethane | 1.00 | U | 0.26 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 1.00 | U | 0.27 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 1.00 | U | 0.20 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 1.00 | U | 0.14 | 1.00 | ug/L |
| 71-43-2 | Benzene | 1.00 | U | 0.18 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 1.00 | U | 0.25 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 1.00 | U | 0.17 | 1.00 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 1.00 | U | 0.17 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 1.00 | U | 0.20 | 1.00 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.00 | U | 0.87 | 5.00 | ug/L |
| 108-88-3 | Toluene | 1.00 | U | 0.22 | 1.00 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 1.00 | U | 0.18 | 1.00 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.00 | U | 0.17 | 1.00 | ug/L |

Raw Data: **VX021576.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | TRIP-BLANK | SDG No.: | M1785 |
| Lab Sample ID: | M1785-18 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021576.D | 1 | | 03/29/21 14:52 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 1.00 | U | 0.24 | 1.00 | ug/L |
| 591-78-6 | 2-Hexanone | 5.00 | U | 0.92 | 5.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 1.00 | U | 0.18 | 1.00 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 1.00 | U | 0.16 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 1.00 | U | 0.17 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 1.00 | U | 0.17 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 1.00 | U | 0.18 | 1.00 | ug/L |
| 1330-20-7 | Total Xylenes | 3.00 | U | 0.51 | 3.00 | ug/L |
| 100-42-5 | Styrene | 1.00 | U | 0.16 | 1.00 | ug/L |
| 75-25-2 | Bromoform | 1.00 | U | 0.19 | 1.00 | ug/L |
| 98-82-8 | Isopropylbenzene | 1.00 | U | 0.23 | 1.00 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.00 | U | 0.29 | 1.00 | ug/L |
| 103-65-1 | n-propylbenzene | 1.00 | U | 0.24 | 1.00 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.00 | U | 0.25 | 1.00 | ug/L |
| 98-06-6 | tert-Butylbenzene | 1.00 | U | 0.26 | 1.00 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.00 | U | 0.20 | 1.00 | ug/L |
| 135-98-8 | sec-Butylbenzene | 1.00 | U | 0.23 | 1.00 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 1.00 | U | 0.19 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 1.00 | U | 0.20 | 1.00 | ug/L |
| 104-51-8 | n-Butylbenzene | 1.00 | U | 0.19 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 1.00 | U | 0.19 | 1.00 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 1.00 | U | 0.47 | 1.00 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1.00 | U | 0.30 | 1.00 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1.00 | U | 0.35 | 1.00 | ug/L |
| 123-91-1 | 1,4-Dioxane | 100 | U | 7.00 | 100 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 51.7 | | 78 - 117 | 103% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 51.1 | | 75 - 124 | 102% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 50.4 | | 92 - 112 | 101% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 53.1 | | 83 - 123 | 106% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 59000 | 5.629 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 108000 | 6.829 | | | |

Raw Data: **VX021576.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | TRIP-BLANK | SDG No.: | M1785 |
| Lab Sample ID: | M1785-18 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021576.D | 1 | | 03/29/21 14:52 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 114000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 47900 | 12.059 | | | |

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: **VX021576.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021576.D
Acq On : 29 Mar 2021 14:52
Operator : JC/MD
Sample : M1785-18
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK

Quant Time: Mar 30 03:28:09 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 59024 | 50.00 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 107931 | 50.00 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 113630 | 50.00 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 47890 | 50.00 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 50784 | 51.71 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 103.42% | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 39159 | 51.08 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 102.16% | | | |
| 50) Toluene-d8 | 8.694 | 98 | 137630 | 50.38 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 100.76% | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 56413 | 53.11 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 106.22% | | | |
| Target Compounds | | | | | | Qvalue |
| 16) Acetone | 2.423 | 43 | 1680 | 4.52 | ug/l | # 77 |

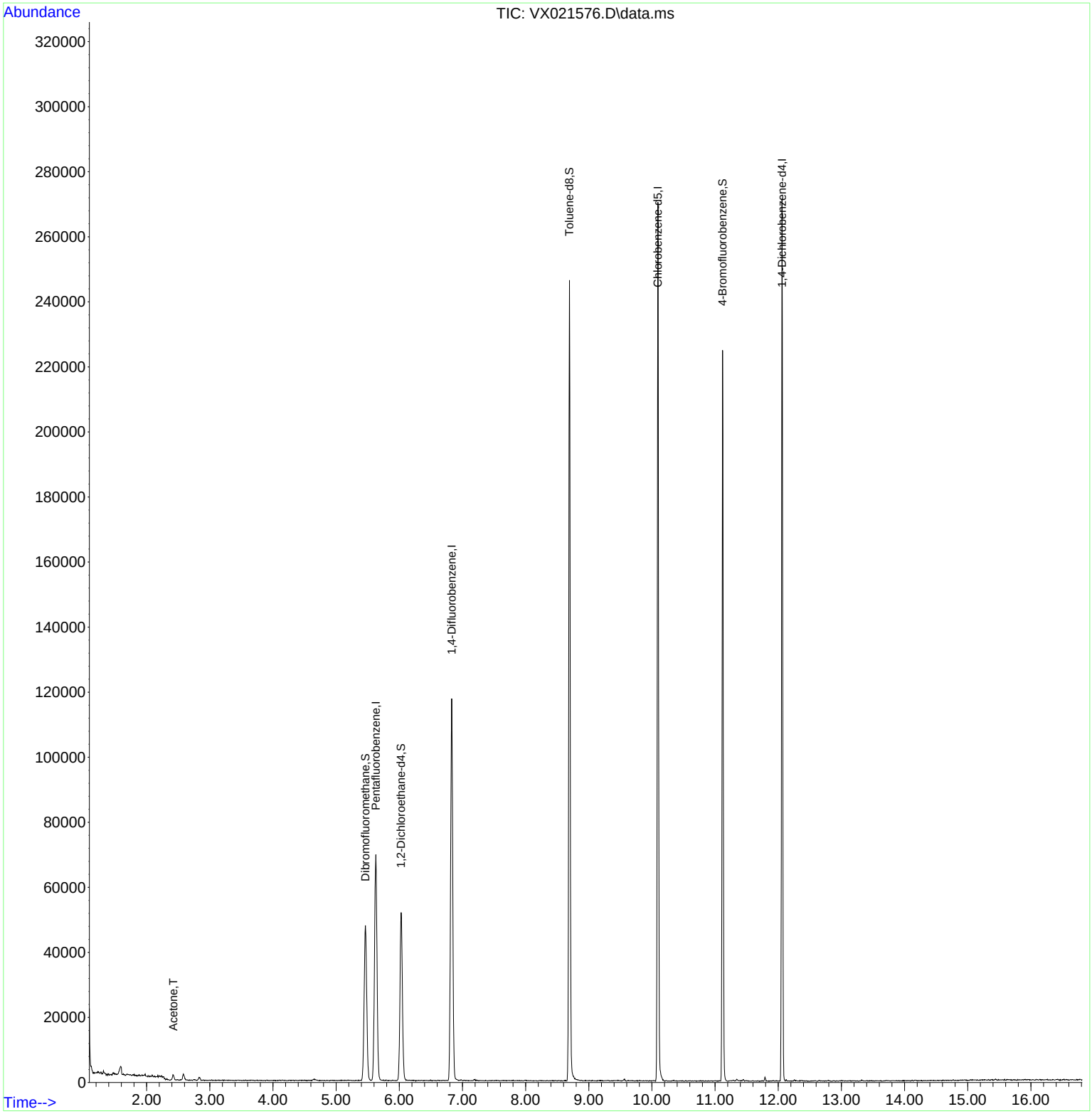
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample Results: **VX021576.D**

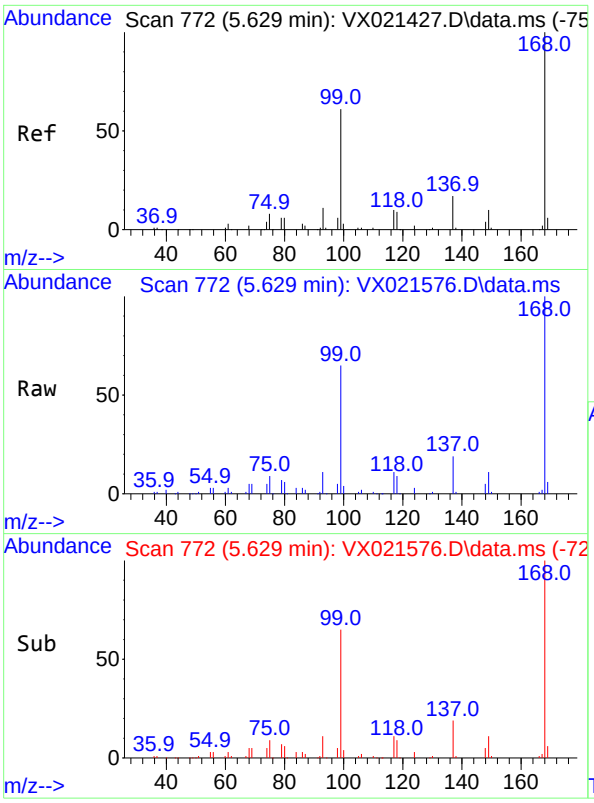
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021576.D
Acq On : 29 Mar 2021 14:52
Operator : JC/MD
Sample : M1785-18
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK

Quant Time: Mar 30 03:28:09 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration



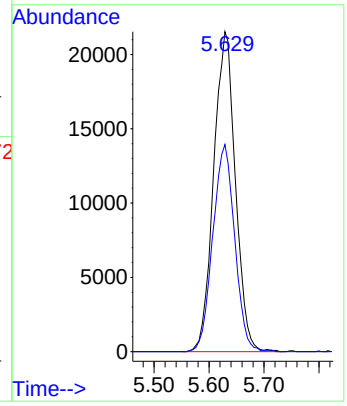
**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK

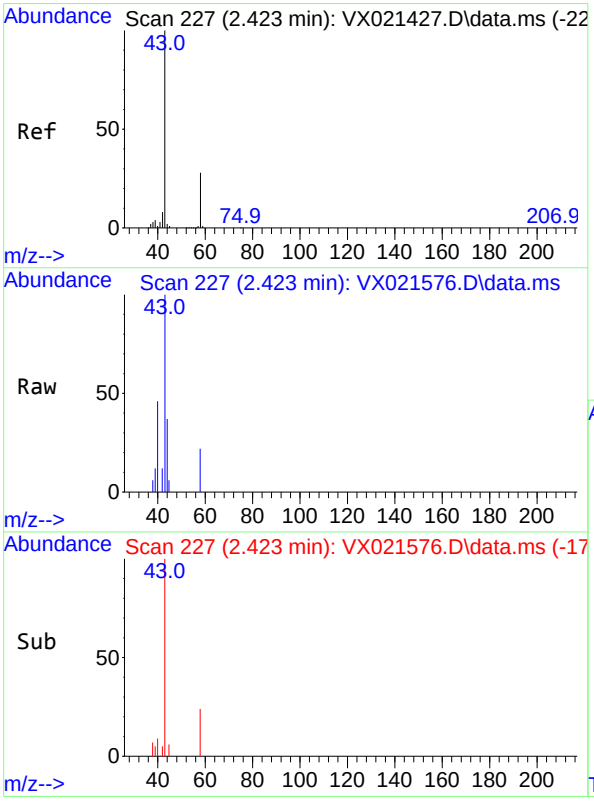



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. -0.000 min
Lab File: VX021576.D
Acq: 29 Mar 2021 14:52

Tgt Ion:168 Resp: 59024

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 64.7 | 45.8 | 68.6 |

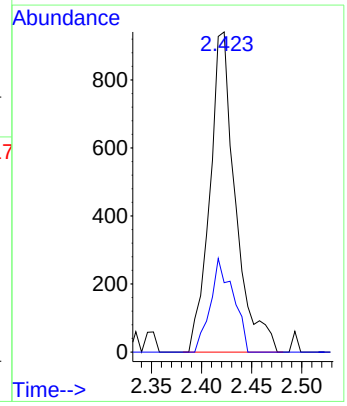


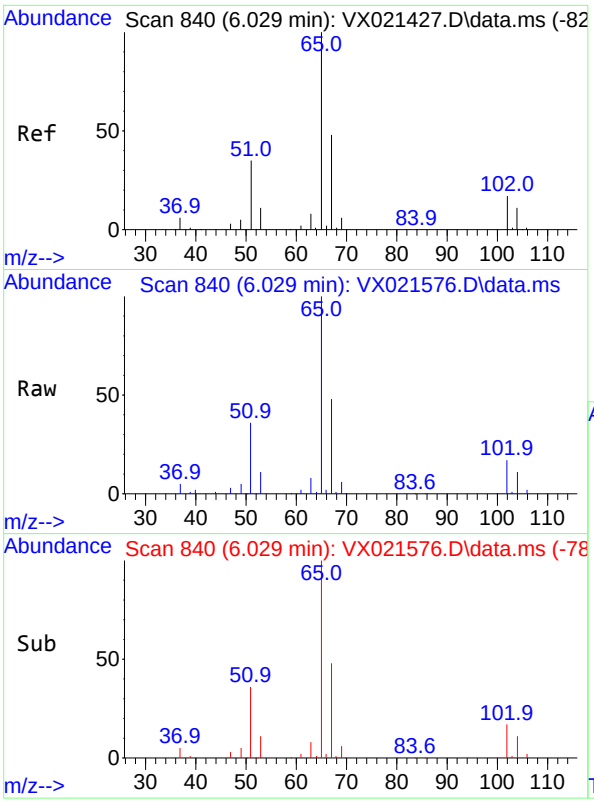

#16
Acetone
Concen: 4.52 ug/l
RT: 2.423 min Scan# 227
Delta R.T. -0.000 min
Lab File: VX021576.D
Acq: 29 Mar 2021 14:52

Tgt Ion: 43 Resp: 1680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 21.7 | 27.8 | 41.8# |



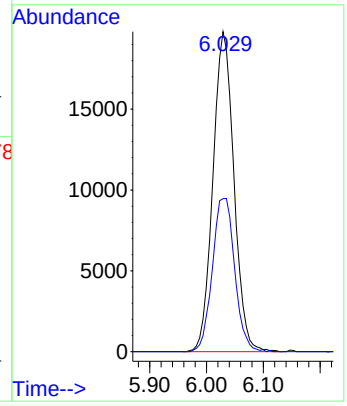
**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK

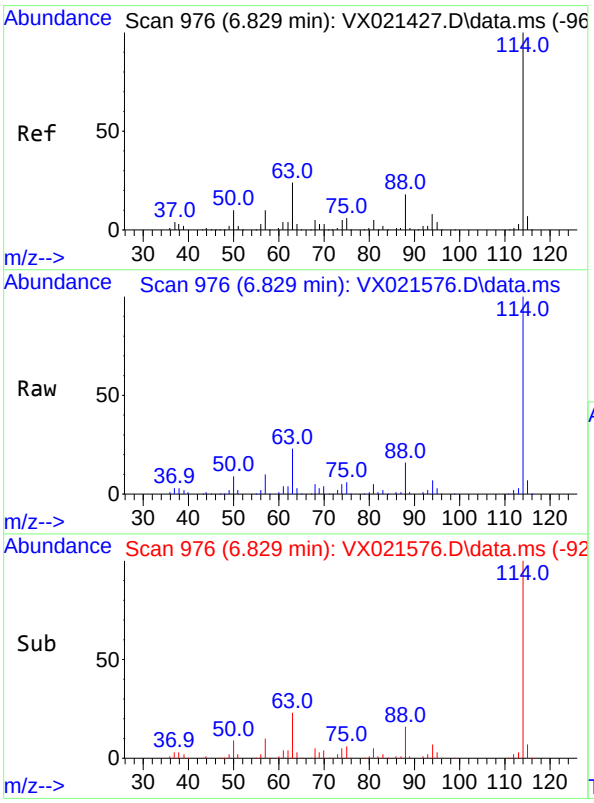



#33
1,2-Dichloroethane-d4
Concen: 51.71 ug/l
RT: 6.029 min Scan# 840
Delta R.T. -0.000 min
Lab File: VX021576.D
Acq: 29 Mar 2021 14:52

Tgt Ion: 65 Resp: 50784

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.9 | 0.0 | 105.4 |

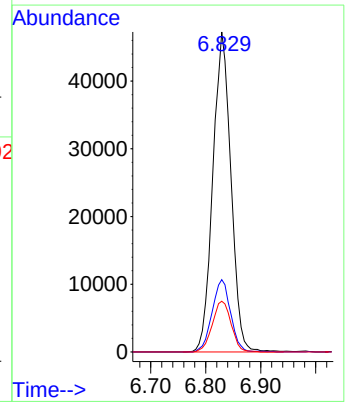


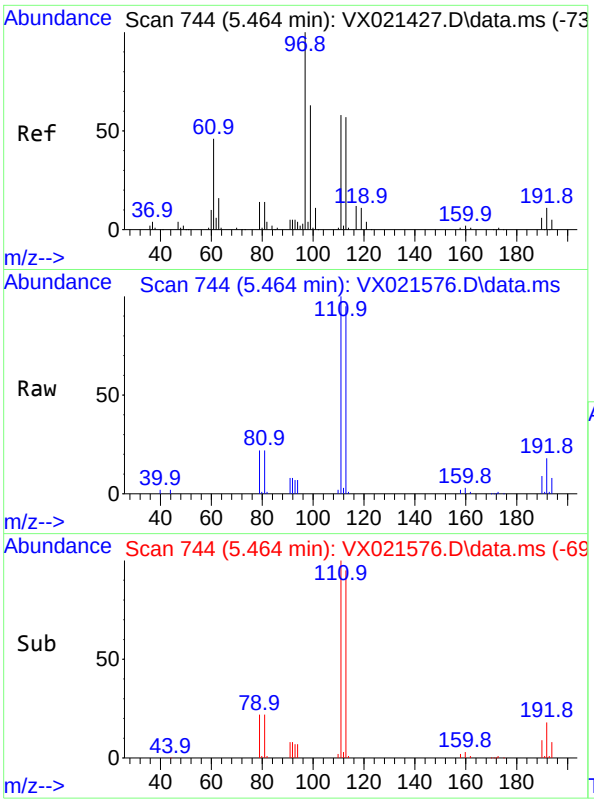

#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021576.D
Acq: 29 Mar 2021 14:52

Tgt Ion:114 Resp: 107931

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.6 | 0.0 | 40.8 |
| 88 | 15.9 | 0.0 | 32.8 |



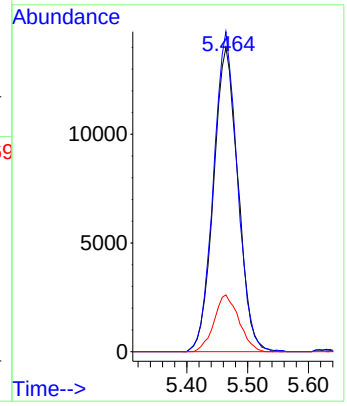
**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK

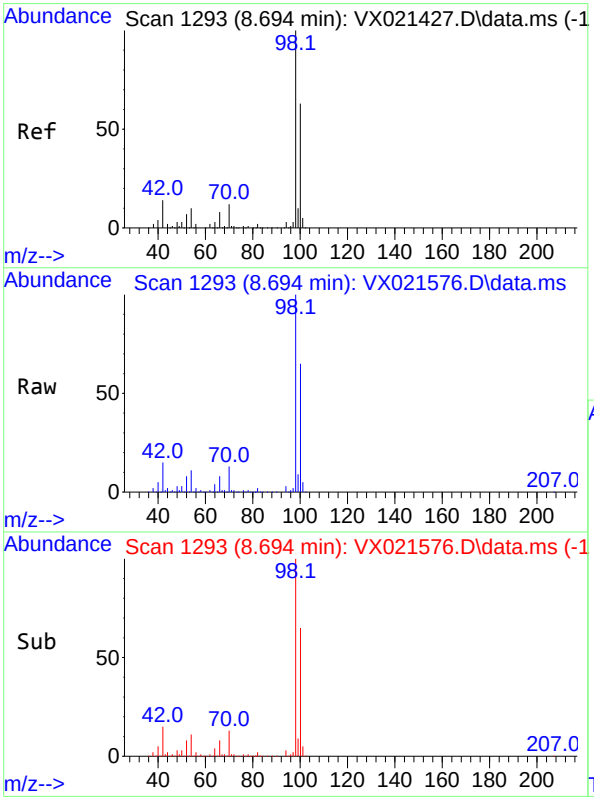



#35
Dibromofluoromethane
Concen: 51.08 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021576.D
Acq: 29 Mar 2021 14:52

Tgt Ion:113 Resp: 39159

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.7 | 81.9 | 122.9 |
| 192 | 18.9 | 16.7 | 25.1 |

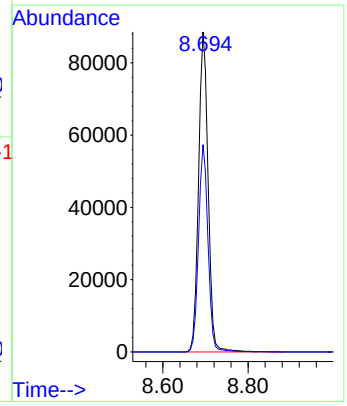


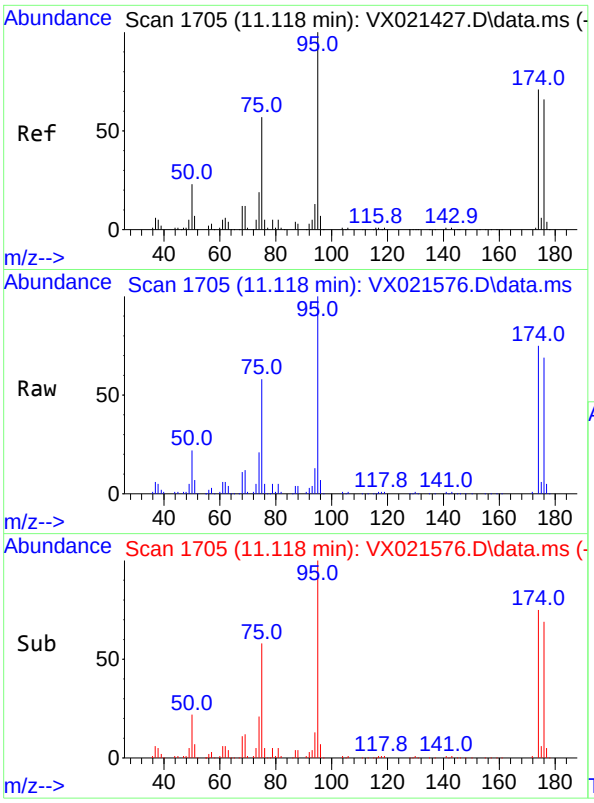

#50
Toluene-d8
Concen: 50.38 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021576.D
Acq: 29 Mar 2021 14:52

Tgt Ion: 98 Resp: 137630

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.1 | 51.9 | 77.9 |



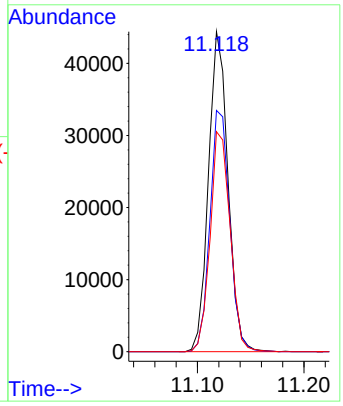
**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK

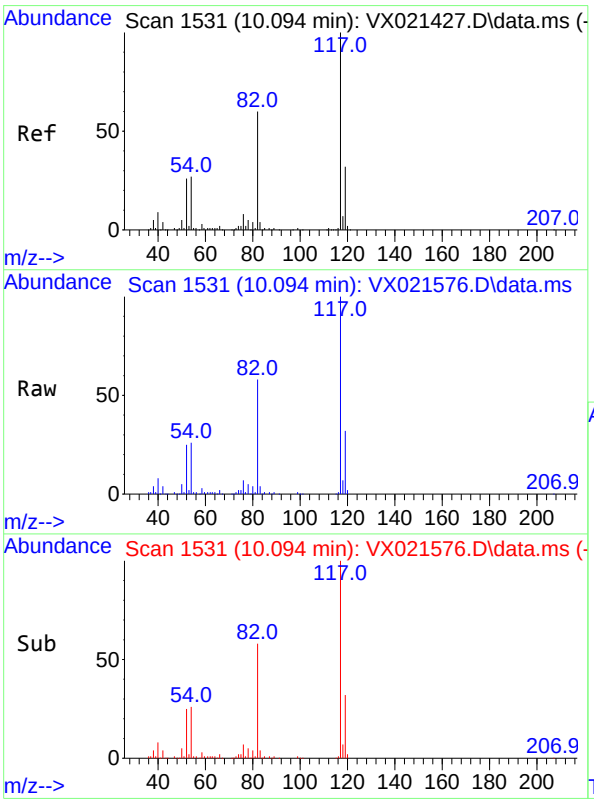



#62
4-Bromofluorobenzene
Concen: 53.11 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021576.D
Acq: 29 Mar 2021 14:52

Tgt Ion: 95 Resp: 56413

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.7 | 0.0 | 154.6 |
| 176 | 70.7 | 0.0 | 155.8 |

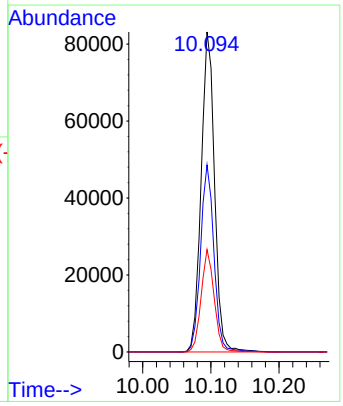


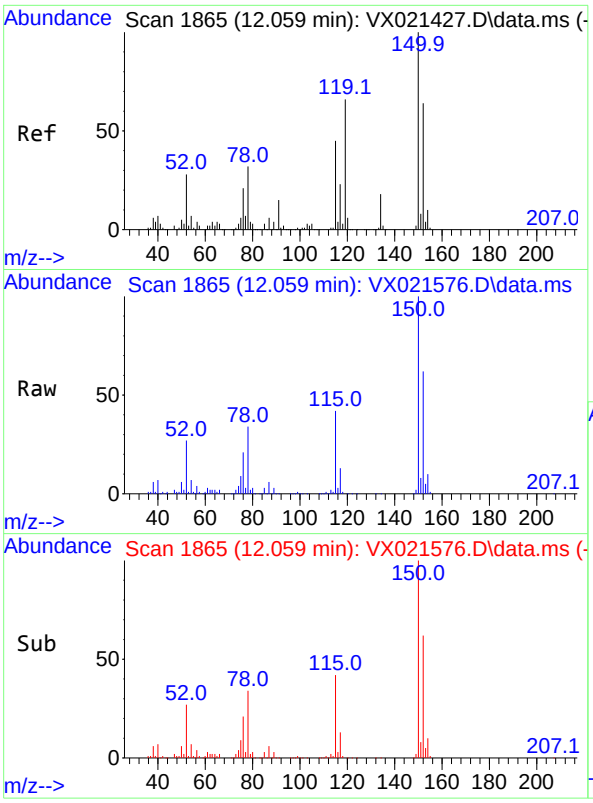

#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021576.D
Acq: 29 Mar 2021 14:52

Tgt Ion:117 Resp: 113630

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.4 | 47.4 | 71.2 |
| 119 | 32.0 | 26.6 | 39.8 |



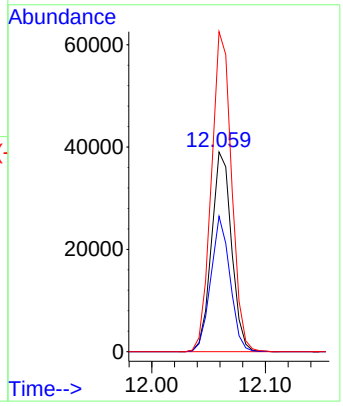
**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK




#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021576.D
Acq: 29 Mar 2021 14:52

Tgt Ion:152 Resp: 47890

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 65.0 | 41.1 | 123.3 |
| 150 | 161.2 | 0.0 | 349.0 |



LSC Area Percent Report

Sample Results: **VX021576.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021576.D
Acq On : 29 Mar 2021 14:52
Operator : JC/MD
Sample : M1785-18
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

Signal : TIC: VX021576.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.587 | 78 | 85 | 90 | rVB5 | 2534 | 5506 | 1.43% | 0.261% |
| 2 | 5.464 | 733 | 744 | 757 | rBV | 47723 | 134412 | 35.00% | 6.378% |
| 3 | 5.629 | 760 | 772 | 789 | rVB2 | 69411 | 190682 | 49.65% | 9.048% |
| 4 | 6.029 | 828 | 840 | 853 | rBV | 51709 | 136011 | 35.41% | 6.454% |
| 5 | 6.829 | 966 | 976 | 994 | rBB | 117417 | 272839 | 71.04% | 12.946% |
| 6 | 8.694 | 1286 | 1293 | 1311 | rBV | 246216 | 384068 | 100.00% | 18.224% |
| 7 | 10.094 | 1525 | 1531 | 1548 | rBV | 270247 | 368978 | 96.07% | 17.508% |
| 8 | 11.118 | 1699 | 1705 | 1718 | rVB | 224675 | 285388 | 74.31% | 13.541% |
| 9 | 12.059 | 1860 | 1865 | 1874 | rVB | 271252 | 329630 | 85.83% | 15.641% |

Sum of corrected areas: 2107514

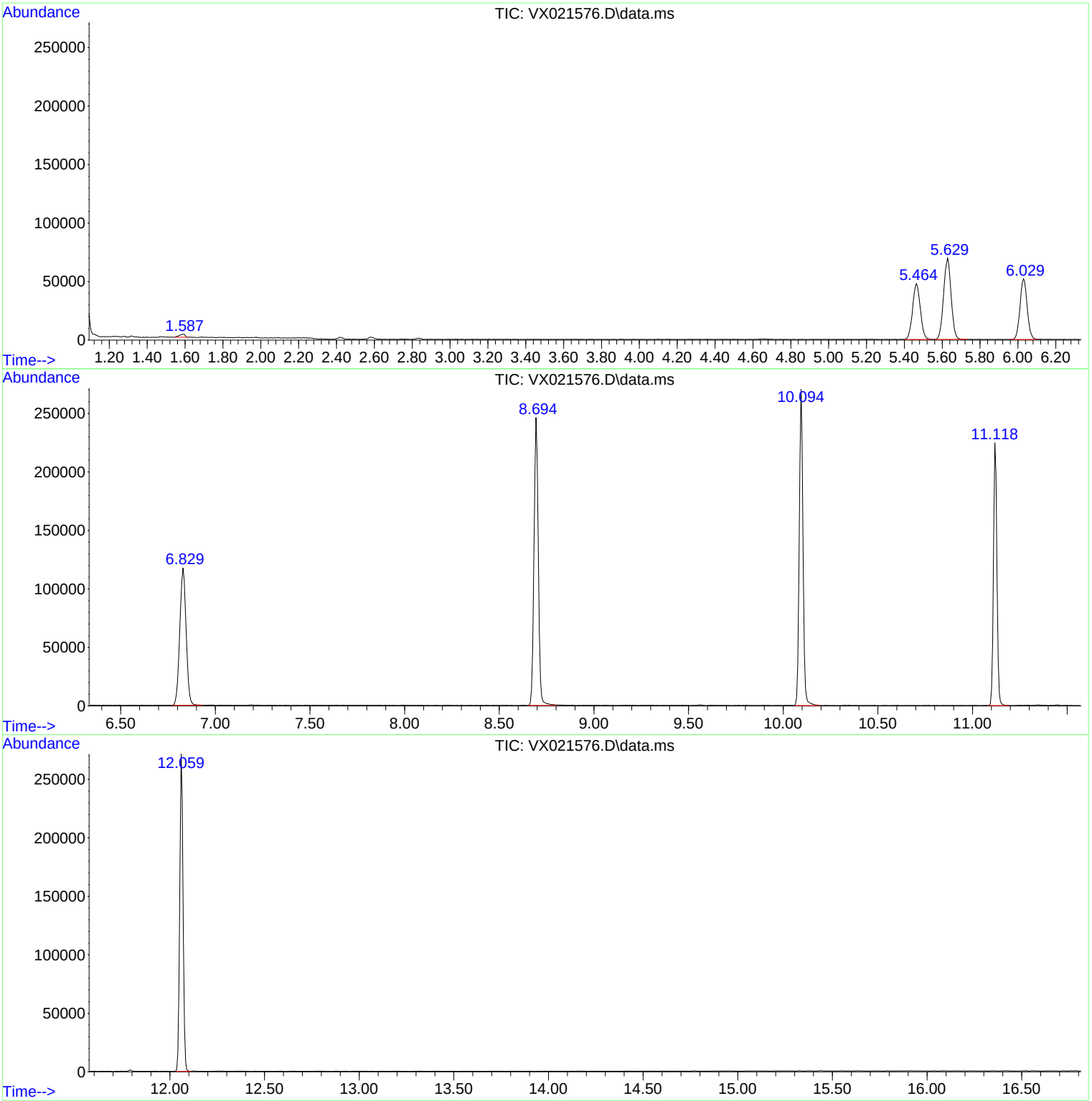
Sample Results: **VX021576.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021576.D
Acq On : 29 Mar 2021 14:52
Operator : JC/MD
Sample : M1785-18
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Sample Results: **VX021576.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021576.D
Acq On : 29 Mar 2021 14:52
Operator : JC/MD
Sample : M1785-18
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
**********

Tentatively Identified Compound (LSC) summary

Sample Results: **VX021576.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021576.D
Acq On : 29 Mar 2021 14:52
Operator : JC/MD
Sample : M1785-18
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 14 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
TRIP-BLANK

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

| | | | | | Internal Standard | | |
|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |

CHEMTECH

# CALIBRATION SUMMARY

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

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHAZ02

Lab Code: CHEM Case No.: M1785 SAS No.: M1785 SDG No.: M1785

Instrument ID: MSVOA_X Calibration Date(s): 03/24/2021 03/24/2021

Heated Purge: (Y/N) N Calibration Time(s): 10:04 11:58

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF001 = VX021424.D RRF005 = VX021425.D RRF020 = VX021426.D
RRF050 = VX021427.D RRF100 = VX021428.D RRF150 = VX021429.D

| COMPOUND | RRF001 | RRF005 | RRF020 | RRF050 | RRF100 | RRF150 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.557 | 0.560 | 0.518 | 0.554 | 0.574 | 0.534 | 0.550 | 3.7 |
| Chloromethane | 0.967 | 0.763 | 0.596 | 0.611 | 0.640 | 0.631 | 0.702 | 20.4 |
| Vinyl Chloride | 0.515 | 0.581 | 0.532 | 0.572 | 0.599 | 0.574 | 0.562 | 5.7 |
| Bromomethane | | 0.249 | 0.229 | 0.220 | 0.220 | 0.213 | 0.226 | 6.1 |
| Chloroethane | 0.359 | 0.388 | 0.335 | 0.358 | 0.369 | 0.330 | 0.357 | 6.1 |
| Trichlorofluoromethane | 0.840 | 1.007 | 0.872 | 0.940 | 0.941 | 0.886 | 0.914 | 6.6 |
| 1,1,2-Trichlorotrifluoroethane | 0.509 | 0.542 | 0.492 | 0.511 | 0.529 | 0.505 | 0.515 | 3.5 |
| 1,1-Dichloroethene | 0.544 | 0.528 | 0.465 | 0.483 | 0.511 | 0.494 | 0.504 | 5.8 |
| Acetone | 0.337 | 0.319 | 0.281 | 0.307 | 0.319 | 0.325 | 0.315 | 6 |
| Carbon Disulfide | 1.764 | 1.372 | 1.249 | 1.353 | 1.392 | 1.359 | 1.415 | 12.6 |
| Methyl tert-butyl Ether | 1.705 | 1.924 | 1.752 | 1.905 | 1.993 | 2.010 | 1.882 | 6.7 |
| Methyl Acetate | 0.781 | 0.868 | 0.860 | 0.943 | 0.989 | 1.012 | 0.909 | 9.7 |
| Methylene Chloride | 0.662 | 0.641 | 0.551 | 0.596 | 0.612 | 0.620 | 0.614 | 6.2 |
| trans-1,2-Dichloroethene | 0.548 | 0.580 | 0.508 | 0.551 | 0.573 | 0.560 | 0.553 | 4.6 |
| 1,1-Dichloroethane | 0.984 | 1.146 | 0.999 | 1.079 | 1.117 | 1.102 | 1.071 | 6.1 |
| Cyclohexane | | 0.911 | 0.850 | 0.938 | 0.959 | 0.916 | 0.915 | 4.5 |
| 2-Butanone | 0.435 | 0.501 | 0.437 | 0.479 | 0.501 | 0.509 | 0.477 | 7 |
| Carbon Tetrachloride | 0.477 | 0.560 | 0.486 | 0.546 | 0.555 | 0.534 | 0.526 | 6.8 |
| cis-1,2-Dichloroethene | 0.612 | 0.660 | 0.590 | 0.644 | 0.675 | 0.675 | 0.643 | 5.5 |
| Bromochloromethane | 0.564 | 0.611 | 0.494 | 0.505 | 0.521 | 0.522 | 0.536 | 8.1 |
| Chloroform | 1.004 | 1.192 | 1.065 | 1.149 | 1.182 | 1.192 | 1.131 | 6.9 |
| 1,1,1-Trichloroethane | 0.909 | 1.051 | 0.942 | 1.023 | 1.054 | 1.031 | 1.002 | 6.1 |
| Methylcyclohexane | 0.519 | 0.545 | 0.493 | 0.571 | 0.576 | 0.555 | 0.543 | 5.9 |
| Benzene | 1.276 | 1.456 | 1.268 | 1.437 | 1.458 | 1.451 | 1.391 | 6.7 |
| 1,2-Dichloroethane | 0.540 | 0.646 | 0.557 | 0.619 | 0.625 | 0.632 | 0.603 | 7.2 |
| Trichloroethene | 0.366 | 0.374 | 0.335 | 0.371 | 0.379 | 0.378 | 0.367 | 4.5 |
| 1,2-Dichloropropane | 0.341 | 0.392 | 0.345 | 0.392 | 0.394 | 0.397 | 0.377 | 7 |
| Bromodichloromethane | 0.494 | 0.570 | 0.514 | 0.581 | 0.594 | 0.600 | 0.559 | 7.9 |
| 4-Methyl-2-Pentanone | 0.461 | 0.568 | 0.534 | 0.597 | 0.618 | 0.617 | 0.566 | 10.7 |
| Toluene | 0.732 | 0.847 | 0.810 | 0.906 | 0.925 | 0.935 | 0.859 | 9.2 |
| t-1,3-Dichloropropene | 0.465 | 0.533 | 0.501 | 0.599 | 0.637 | 0.652 | 0.564 | 13.5 |
| cis-1,3-Dichloropropene | 0.493 | 0.592 | 0.544 | 0.639 | 0.661 | 0.674 | 0.601 | 11.8 |
| 1,1,2-Trichloroethane | 0.304 | 0.366 | 0.347 | 0.379 | 0.391 | 0.390 | 0.363 | 9.1 |

* 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.

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

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHAZ02

Lab Code: CHEM Case No.: M1785 SAS No.: M1785 SDG No.: M1785

Instrument ID: MSVOA_X Calibration Date(s): 03/24/2021 03/24/2021

Heated Purge: (Y/N) N Calibration Time(s): 10:04 11:58

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF001 = VX021424.D RRF005 = VX021425.D RRF020 = VX021426.D
RRF050 = VX021427.D RRF100 = VX021428.D RRF150 = VX021429.D

| COMPOUND | RRF001 | RRF005 | RRF020 | RRF050 | RRF100 | RRF150 | $\overline{RRF}$ | % RSD |
|---|---|---|---|---|---|---|---|---|
| 2-Hexanone | 0.353 | 0.415 | 0.398 | 0.449 | 0.466 | 0.468 | 0.425 | 10.5 |
| Dibromochloromethane | 0.339 | 0.390 | 0.378 | 0.433 | 0.453 | 0.444 | 0.406 | 10.9 |
| 1,2-Dibromoethane | 0.341 | 0.380 | 0.357 | 0.413 | 0.424 | 0.422 | 0.390 | 9.1 |
| Tetrachloroethene | 0.307 | 0.362 | 0.316 | 0.345 | 0.336 | 0.342 | 0.335 | 6 |
| Chlorobenzene | 0.909 | 1.053 | 0.910 | 1.029 | 1.075 | 1.052 | 1.004 | 7.5 |
| Ethyl Benzene | 1.628 | 1.851 | 1.703 | 1.900 | 1.989 | 1.914 | 1.831 | 7.5 |
| m/p-Xylenes | 0.543 | 0.662 | 0.613 | 0.686 | 0.720 | 0.690 | 0.652 | 9.9 |
| o-Xylene | 0.532 | 0.634 | 0.596 | 0.660 | 0.691 | 0.679 | 0.632 | 9.4 |
| Styrene | 0.935 | 1.038 | 1.013 | 1.133 | 1.213 | 1.187 | 1.086 | 10 |
| Bromoform | 0.287 | 0.298 | 0.286 | 0.325 | 0.341 | 0.339 | 0.313 | 8.1 |
| Isopropylbenzene | 3.009 | 3.659 | 3.259 | 3.757 | 3.772 | 3.624 | 3.513 | 8.8 |
| 1,1,2,2-Tetrachloroethane | 1.158 | 1.299 | 1.206 | 1.260 | 1.261 | 1.264 | 1.241 | 4.1 |
| n-propylbenzene | 3.779 | 4.157 | 3.843 | 4.384 | 4.445 | 4.285 | 4.149 | 6.7 |
| 1,3,5-Trimethylbenzene | 2.534 | 3.094 | 2.805 | 3.212 | 3.238 | 3.125 | 3.001 | 9.2 |
| tert-Butylbenzene | 2.647 | 2.902 | 2.687 | 3.064 | 3.184 | 3.050 | 2.922 | 7.4 |
| 1,2,4-Trimethylbenzene | 2.493 | 3.118 | 2.872 | 3.225 | 3.272 | 3.173 | 3.026 | 9.8 |
| sec-Butylbenzene | 2.843 | 3.402 | 3.141 | 3.632 | 3.681 | 3.525 | 3.371 | 9.6 |
| 1,3-Dichlorobenzene | 1.495 | 1.609 | 1.412 | 1.595 | 1.660 | 1.638 | 1.568 | 6.1 |
| 1,4-Dichlorobenzene | 1.740 | 1.648 | 1.463 | 1.606 | 1.616 | 1.660 | 1.622 | 5.6 |
| n-Butylbenzene | 2.388 | 2.745 | 2.531 | 3.021 | 3.110 | 3.072 | 2.811 | 10.8 |
| 1,2-Dichlorobenzene | 1.414 | 1.587 | 1.427 | 1.537 | 1.591 | 1.592 | 1.525 | 5.5 |
| 1,2-Dibromo-3-Chloropropane | 0.207 | 0.307 | 0.263 | 0.301 | 0.316 | 0.325 | 0.286 | 15.5 |
| 1,2,4-Trichlorobenzene | 0.949 | 0.929 | 0.823 | 1.028 | 1.116 | 1.152 | 0.999 | 12.4 |
| 1,2,3-Trichlorobenzene | 0.976 | 0.936 | 0.905 | 1.028 | 1.064 | 1.083 | 0.999 | 7.1 |
| 1,2-Dichloroethane-d4 | | 0.893 | 0.772 | 0.781 | 0.837 | 0.877 | 0.832 | 6.6 |
| Dibromofluoromethane | | 0.377 | 0.320 | 0.337 | 0.364 | 0.378 | 0.355 | 7.2 |
| Toluene-d8 | | 1.249 | 1.150 | 1.242 | 1.315 | 1.372 | 1.266 | 6.6 |
| 4-Bromofluorobenzene | | 0.479 | 0.441 | 0.476 | 0.521 | 0.544 | 0.492 | 8.2 |
| 1,4-Dioxane | 7.461 | 9.583 | 7.975 | 9.059 | 9.261 | 9.367 | 8.784 | 9.8 |

* 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_X

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X032421W.M
Title : SW846 8260
Last Update : Wed Mar 24 12:25:26 2021
Response Via : Initial Calibration

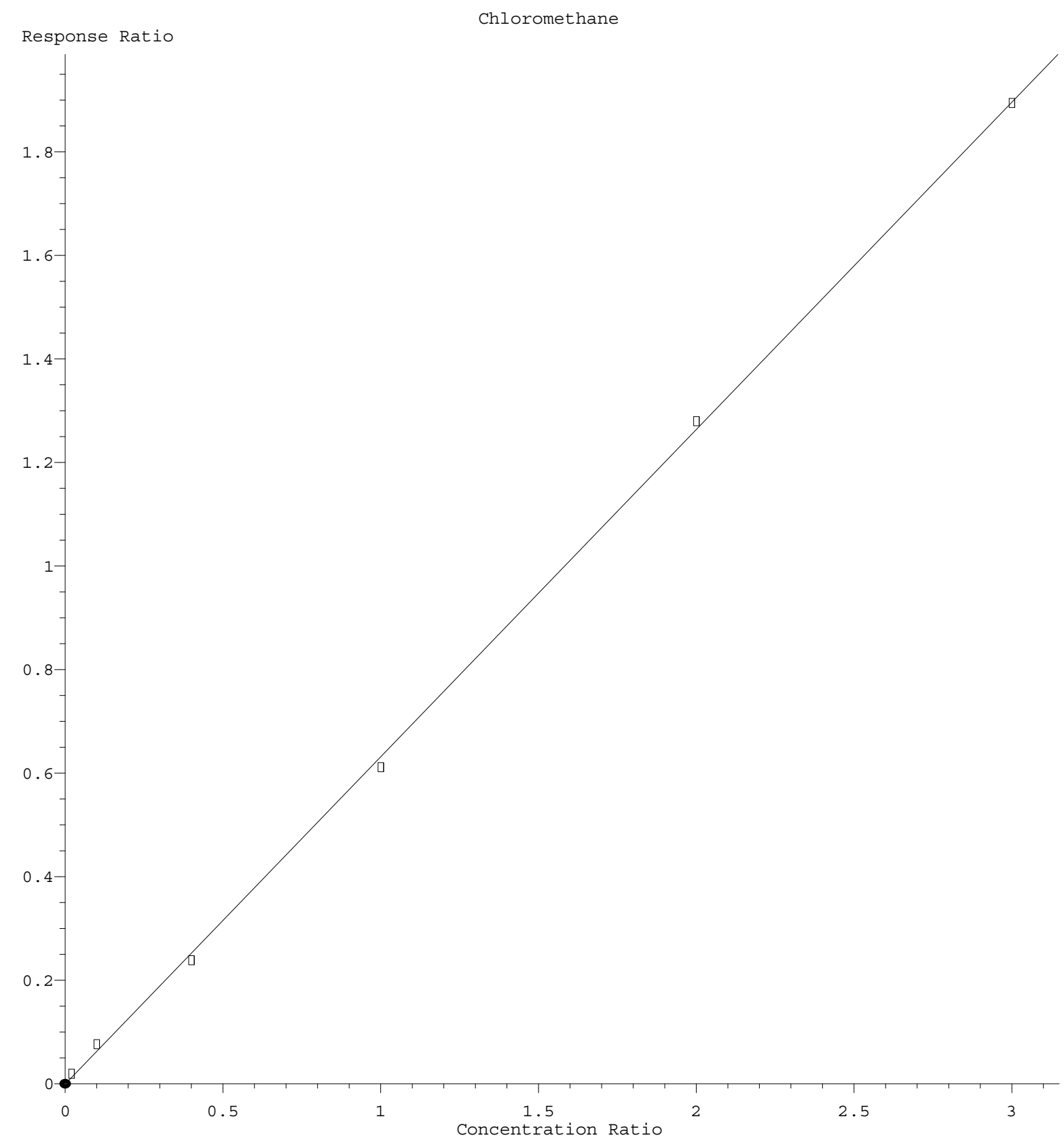
Calibration Files
1 =VX021424.D 5 =VX021425.D 20 =VX021426.D 50 =VX021427.D 100 =VX021428.D 150 =VX021429.D

| | | Compound | 1 | 5 | 20 | 50 | 100 | 150 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Pentafluorobenzene | ----------ISTD---------- | | | | | | | |
| 2) | T | Dichlorodifluo... | 0.557 | 0.560 | 0.518 | 0.554 | 0.574 | 0.534 | 0.550 | 3.66 |
| 3) | P | Chloromethane | 0.967 | 0.763 | 0.596 | 0.611 | 0.640 | 0.631 | 0.702 | 20.40 |
| 4) | C | Vinyl Chloride | 0.515 | 0.581 | 0.532 | 0.572 | 0.599 | 0.574 | 0.562 | 5.68# |
| 5) | T | Bromomethane | | 0.249 | 0.229 | 0.220 | 0.220 | 0.213 | 0.226 | 6.11 |
| 6) | T | Chloroethane | 0.359 | 0.388 | 0.335 | 0.358 | 0.369 | 0.330 | 0.357 | 6.13 |
| 7) | T | Trichlorofluor... | 0.840 | 1.007 | 0.872 | 0.940 | 0.941 | 0.886 | 0.914 | 6.58 |
| 8) | T | Diethyl Ether | 0.308 | 0.342 | 0.296 | 0.314 | 0.318 | 0.327 | 0.317 | 4.98 |
| 9) | T | 1,1,2-Trichlor... | 0.509 | 0.542 | 0.492 | 0.511 | 0.529 | 0.505 | 0.515 | 3.47 |
| 10) | T | Methyl Iodide | | 0.281 | 0.294 | 0.363 | 0.417 | 0.454 | 0.362 | 20.83 |
| 11) | T | Tert butyl alc... | | 0.142 | 0.123 | 0.133 | 0.143 | 0.147 | 0.138 | 7.09 |
| 12) | CM | 1,1-Dichloroet... | 0.544 | 0.528 | 0.465 | 0.483 | 0.511 | 0.494 | 0.504 | 5.77# |
| 13) | T | Acrolein | | 0.114 | 0.063 | 0.067 | 0.067 | 0.072 | 0.077 | 28.03 |
| 14) | T | Allyl chloride | 1.066 | 1.073 | 0.917 | 1.016 | 1.049 | 1.015 | 1.023 | 5.62 |
| 15) | T | Acrylonitrile | 0.295 | 0.343 | 0.302 | 0.332 | 0.340 | 0.349 | 0.327 | 7.00 |
| 16) | T | Acetone | 0.337 | 0.319 | 0.281 | 0.307 | 0.319 | 0.325 | 0.315 | 6.01 |
| 17) | T | Carbon Disulfide | 1.764 | 1.372 | 1.249 | 1.353 | 1.392 | 1.359 | 1.415 | 12.58 |
| 18) | T | Methyl Acetate | 0.781 | 0.868 | 0.860 | 0.943 | 0.989 | 1.012 | 0.909 | 9.69 |
| 19) | T | Methyl tert-bu... | 1.705 | 1.924 | 1.752 | 1.905 | 1.993 | 2.010 | 1.882 | 6.69 |
| 20) | T | Methylene Chlo... | 0.662 | 0.641 | 0.551 | 0.596 | 0.612 | 0.620 | 0.614 | 6.22 |
| 21) | T | trans-1,2-Dich... | 0.548 | 0.580 | 0.508 | 0.551 | 0.573 | 0.560 | 0.553 | 4.59 |
| 22) | T | Diisopropyl ether | 1.789 | 2.083 | 1.843 | 2.023 | 2.090 | 2.095 | 1.987 | 6.85 |
| 23) | T | Vinyl Acetate | 1.415 | 1.733 | 1.560 | 1.733 | 1.809 | 1.834 | 1.681 | 9.62 |
| 24) | P | 1,1-Dichloroet... | 0.984 | 1.146 | 0.999 | 1.079 | 1.117 | 1.102 | 1.071 | 6.14 |
| 25) | T | 2-Butanone | 0.435 | 0.501 | 0.437 | 0.479 | 0.501 | 0.509 | 0.477 | 6.97 |
| 26) | T | 2,2-Dichloropr... | 0.902 | 0.962 | 0.848 | 0.944 | 0.963 | 0.949 | 0.928 | 4.88 |
| 27) | T | cis-1,2-Dichlo... | 0.612 | 0.660 | 0.590 | 0.644 | 0.675 | 0.675 | 0.643 | 5.48 |
| 28) | T | Bromochloromet... | 0.564 | 0.611 | 0.494 | 0.505 | 0.521 | 0.522 | 0.536 | 8.13 |
| 29) | T | Tetrahydrofuran | 0.277 | 0.327 | 0.285 | 0.310 | 0.323 | 0.332 | 0.309 | 7.44 |
| 30) | C | Chloroform | 1.004 | 1.192 | 1.065 | 1.149 | 1.182 | 1.192 | 1.131 | 6.94# |
| 31) | T | Cyclohexane | | 0.911 | 0.850 | 0.938 | 0.959 | 0.916 | 0.915 | 4.50 |
| 32) | T | 1,1,1-Trichlor... | 0.909 | 1.051 | 0.942 | 1.023 | 1.054 | 1.031 | 1.002 | 6.09 |
| 33) | S | 1,2-Dichloroet... | | 0.893 | 0.772 | 0.781 | 0.837 | 0.877 | 0.832 | 6.58 |
| 34) | I | 1,4-Difluorobenzene | ----------ISTD---------- | | | | | | | |
| 35) | S | Dibromofluorom... | | 0.377 | 0.320 | 0.337 | 0.364 | 0.378 | 0.355 | 7.22 |
| 36) | T | 1,1-Dichloropr... | 0.494 | 0.504 | 0.446 | 0.495 | 0.509 | 0.491 | 0.490 | 4.61 |
| 37) | T | Ethyl Acetate | 0.571 | 0.608 | 0.496 | 0.554 | 0.579 | 0.592 | 0.566 | 6.92 |
| 38) | T | Carbon Tetrach... | 0.477 | 0.560 | 0.486 | 0.546 | 0.555 | 0.534 | 0.526 | 6.80 |
| 39) | T | Methylcyclohexane | 0.519 | 0.545 | 0.493 | 0.571 | 0.576 | 0.555 | 0.543 | 5.90 |
| 40) | TM | Benzene | 1.276 | 1.456 | 1.268 | 1.437 | 1.458 | 1.451 | 1.391 | 6.65 |
| 41) | T | Methacrylonitrile | 0.342 | 0.333 | 0.292 | 0.329 | 0.337 | 0.338 | 0.329 | 5.63 |
| 42) | TM | 1,2-Dichloroet... | 0.540 | 0.646 | 0.557 | 0.619 | 0.625 | 0.632 | 0.603 | 7.21 |
| 43) | T | Isopropyl Acetate | 0.824 | 0.934 | 0.825 | 0.948 | 0.983 | 1.006 | 0.920 | 8.50 |
| 44) | TM | Trichloroethene | 0.366 | 0.374 | 0.335 | 0.371 | 0.379 | 0.378 | 0.367 | 4.49 |
| 45) | C | 1,2-Dichloropr... | 0.341 | 0.392 | 0.345 | 0.392 | 0.394 | 0.397 | 0.377 | 7.01# |
| 46) | T | Dibromomethane | 0.253 | 0.290 | 0.246 | 0.284 | 0.285 | 0.290 | 0.275 | 7.16 |
| 47) | T | Bromodichlorom... | 0.494 | 0.570 | 0.514 | 0.581 | 0.594 | 0.600 | 0.559 | 7.89 |
| 48) | T | Methyl methacr... | 0.436 | 0.481 | 0.443 | 0.513 | 0.531 | 0.540 | 0.491 | 9.05 |
| 49) | T | 1,4-Dioxane | 0.007 | 0.010 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 | 9.77 |
| 50) | S | Toluene-d8 | | 1.249 | 1.150 | 1.242 | 1.315 | 1.372 | 1.266 | 6.62 |
| 51) | T | 4-Methyl-2-Pen... | 0.461 | 0.568 | 0.534 | 0.597 | 0.618 | 0.617 | 0.566 | 10.70 |
| 52) | CM | Toluene | 0.732 | 0.847 | 0.810 | 0.906 | 0.925 | 0.935 | 0.859 | 9.17# |
| 53) | T | t-1,3-Dichloro... | 0.465 | 0.533 | 0.501 | 0.599 | 0.637 | 0.652 | 0.564 | 13.51 |
| 54) | T | cis-1,3-Dichlo... | 0.493 | 0.592 | 0.544 | 0.639 | 0.661 | 0.674 | 0.601 | 11.82 |
| 55) | T | 1,1,2-Trichlor... | 0.304 | 0.366 | 0.347 | 0.379 | 0.391 | 0.390 | 0.363 | 9.08 |
| 56) | T | Ethyl methacry... | 0.412 | 0.518 | 0.501 | 0.596 | 0.626 | 0.633 | 0.548 | 15.75 |

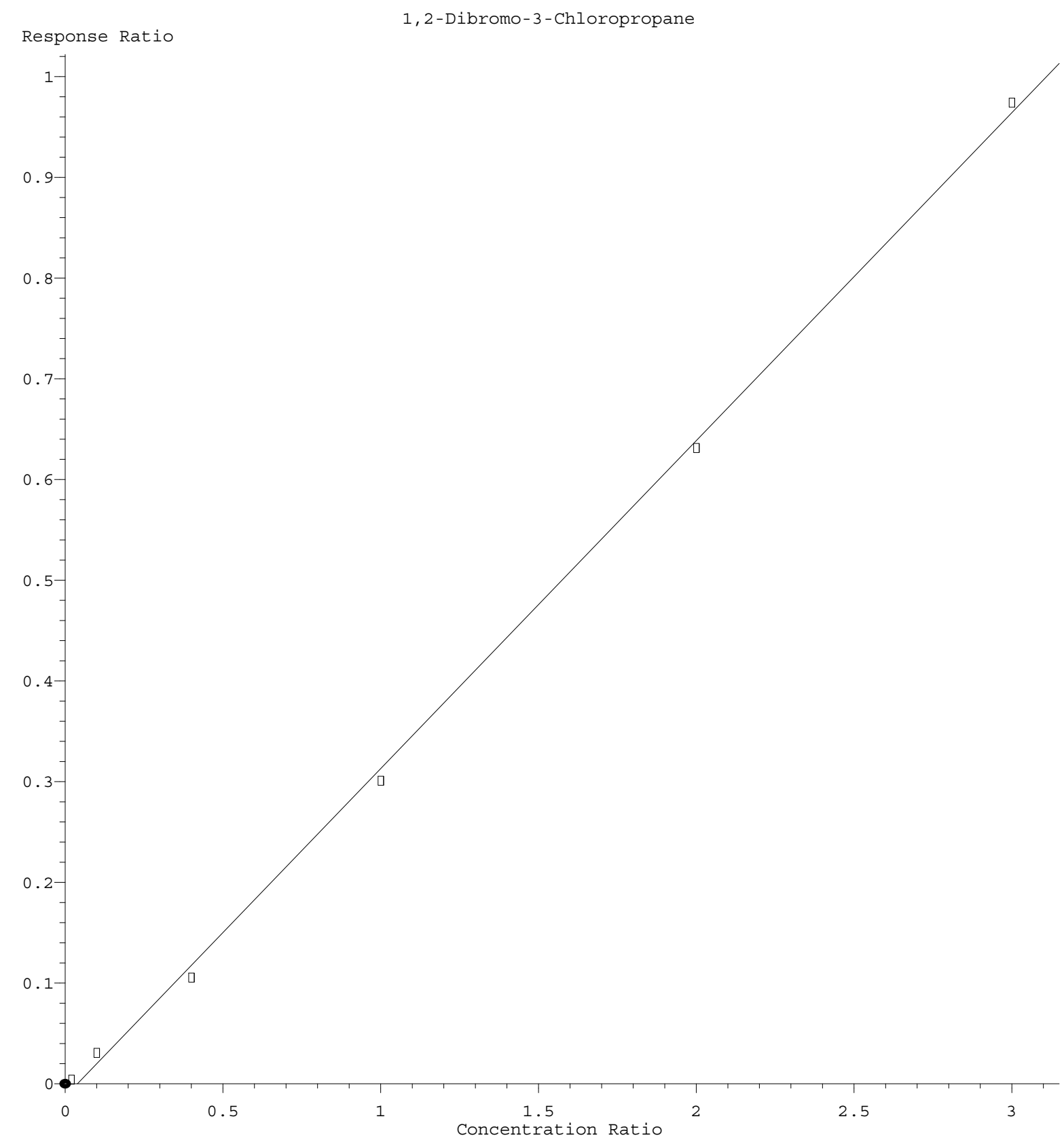
Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
Method File : 82X032421W.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57) | T | 1,3-Dichloropr... | 0.552 | 0.623 | 0.574 | 0.649 | 0.660 | 0.666 | 0.621 | 7.68 |
| 58) | T | 2-Chloroethyl ... | 0.280 | 0.284 | 0.280 | 0.326 | 0.335 | 0.335 | 0.307 | 9.14 |
| 59) | T | 2-Hexanone | 0.353 | 0.415 | 0.398 | 0.449 | 0.466 | 0.468 | 0.425 | 10.54 |
| 60) | T | Dibromochlorom... | 0.339 | 0.390 | 0.378 | 0.433 | 0.453 | 0.444 | 0.406 | 10.91 |
| 61) | T | 1,2-Dibromoethane | 0.341 | 0.380 | 0.357 | 0.413 | 0.424 | 0.422 | 0.390 | 9.09 |
| 62) | S | 4-Bromofluorob... | | 0.479 | 0.441 | 0.476 | 0.521 | 0.544 | 0.492 | 8.23 |
| 63) | I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | |
| 64) | T | Tetrachloroethene | 0.307 | 0.362 | 0.316 | 0.345 | 0.336 | 0.342 | 0.335 | 6.01 |
| 65) | PM | Chlorobenzene | 0.909 | 1.053 | 0.910 | 1.029 | 1.075 | 1.052 | 1.004 | 7.47 |
| 66) | T | 1,1,1,2-Tetrac... | 0.356 | 0.381 | 0.347 | 0.399 | 0.418 | 0.409 | 0.385 | 7.50 |
| 67) | C | Ethyl Benzene | 1.628 | 1.851 | 1.703 | 1.900 | 1.989 | 1.914 | 1.831 | 7.51# |
| 68) | T | m/p-Xylenes | 0.543 | 0.662 | 0.613 | 0.686 | 0.720 | 0.690 | 0.652 | 9.87 |
| 69) | T | o-Xylene | 0.532 | 0.634 | 0.596 | 0.660 | 0.691 | 0.679 | 0.632 | 9.43 |
| 70) | T | Styrene | 0.935 | 1.038 | 1.013 | 1.133 | 1.213 | 1.187 | 1.086 | 10.02 |
| 71) | P | Bromoform | 0.287 | 0.298 | 0.286 | 0.325 | 0.341 | 0.339 | 0.313 | 8.12 |
| 72) | I | 1,4-Dichlorobenzen... | ----------ISTD---------- | | | | | | | |
| 73) | T | Isopropylbenzene | 3.009 | 3.659 | 3.259 | 3.756 | 3.772 | 3.624 | 3.513 | 8.81 |
| 74) | T | N-amyl acetate | 1.585 | 1.713 | 1.530 | 1.745 | 1.794 | 1.833 | 1.700 | 7.01 |
| 75) | P | 1,1,2,2-Tetrac... | 1.158 | 1.299 | 1.206 | 1.260 | 1.261 | 1.264 | 1.241 | 4.08 |
| 76) | T | 1,2,3-Trichlor... | 1.008 | 1.237 | 1.117 | 1.240 | 1.199 | 1.183 | 1.164 | 7.60 |
| 77) | T | Bromobenzene | 0.866 | 0.881 | 0.776 | 0.905 | 0.906 | 0.891 | 0.871 | 5.61 |
| 78) | T | n-propylbenzene | 3.779 | 4.157 | 3.843 | 4.384 | 4.445 | 4.285 | 4.149 | 6.75 |
| 79) | T | 2-Chlorotoluene | 2.303 | 2.647 | 2.349 | 2.639 | 2.619 | 2.544 | 2.517 | 6.08 |
| 80) | T | 1,3,5-Trimethy... | 2.534 | 3.094 | 2.805 | 3.212 | 3.238 | 3.125 | 3.001 | 9.19 |
| 81) | T | trans-1,4-Dich... | | 0.329 | 0.325 | 0.397 | 0.418 | 0.440 | 0.382 | 13.71 |
| 82) | T | 4-Chlorotoluene | 2.721 | 3.118 | 2.769 | 3.126 | 3.141 | 3.053 | 2.988 | 6.41 |
| 83) | T | tert-Butylbenzene | 2.647 | 2.902 | 2.687 | 3.064 | 3.184 | 3.050 | 2.922 | 7.45 |
| 84) | T | 1,2,4-Trimethy... | 2.493 | 3.118 | 2.872 | 3.225 | 3.272 | 3.173 | 3.026 | 9.79 |
| 85) | T | sec-Butylbenzene | 2.843 | 3.402 | 3.141 | 3.632 | 3.681 | 3.525 | 3.371 | 9.57 |
| 86) | T | p-Isopropyltol... | 2.515 | 3.012 | 2.919 | 3.367 | 3.358 | 3.239 | 3.068 | 10.65 |
| 87) | T | 1,3-Dichlorobe... | 1.495 | 1.609 | 1.412 | 1.595 | 1.660 | 1.638 | 1.568 | 6.08 |
| 88) | T | 1,4-Dichlorobe... | 1.740 | 1.648 | 1.463 | 1.606 | 1.616 | 1.660 | 1.622 | 5.62 |
| 89) | T | n-Butylbenzene | 2.388 | 2.745 | 2.531 | 3.021 | 3.110 | 3.072 | 2.811 | 10.82 |
| 90) | T | Hexachloroethane | 0.492 | 0.539 | 0.500 | 0.574 | 0.610 | 0.607 | 0.554 | 9.33 |
| 91) | T | 1,2-Dichlorobe... | 1.414 | 1.587 | 1.427 | 1.537 | 1.591 | 1.592 | 1.525 | 5.45 |
| 92) | T | 1,2-Dibromo-3-... | 0.207 | 0.307 | 0.263 | 0.301 | 0.316 | 0.325 | 0.286 | 15.48 |
| 93) | T | 1,2,4-Trichlor... | 0.949 | 0.929 | 0.823 | 1.028 | 1.116 | 1.152 | 0.999 | 12.38 |
| 94) | T | Hexachlorobuta... | 0.497 | 0.457 | 0.390 | 0.455 | 0.461 | 0.448 | 0.451 | 7.64 |
| 95) | T | Naphthalene | 2.684 | 3.119 | 2.916 | 3.468 | 3.669 | 3.700 | 3.259 | 12.82 |
| 96) | T | 1,2,3-Trichlor... | 0.976 | 0.936 | 0.905 | 1.028 | 1.064 | 1.083 | 0.999 | 7.14 |

(#) = Out of Range




Response = 6.323e-001 * Amt - 5.327e-004
Coef of Det (r^2) = 0.999617  Curve Fit: Linear
Method Name:  Z:\voasrv\HPCHEM1\MSVOA X\Method\82X032421W.M
Calibration Table Last Updated: Wed Mar 24 12:25:26 2021




Response = 3.256e-001 * Amt - 1.282e-002
Coef of Det (r^2) = 0.999108  Curve Fit: Linear
Method Name:  Z:\voasrv\HPCHEM1\MSVOA X\Method\82X032421W.M
Calibration Table Last Updated: Wed Mar 24 12:25:26 2021

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021424.D
Acq On : 24 Mar 2021 10:04
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

Quant Time: Mar 24 11:40:53 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.623 | 168 | 91534 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.823 | 114 | 151113 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 139670 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 67239 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 0.000 | 65 | 0d | 0.00 | ug/l | | |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = | 0.00%# | | | |
| 35) Dibromofluoromethane | 0.000 | 113 | 0d | 0.00 | ug/l | | |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 0.00%# | | | |
| 50) Toluene-d8 | 0.000 | 98 | 0d | 0.00 | ug/l | | |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = | 0.00%# | | | |
| 62) 4-Bromofluorobenzene | 0.000 | 95 | 0d | 0.00 | ug/l | | |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = | 0.00%# | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.187 | 85 | 1019 | 0.95 | ug/l | | 90 |
| 3) Chloromethane | 1.311 | 50 | 1771 | 0.87 | ug/l | | 99 |
| 4) Vinyl Chloride | 1.393 | 62 | 942 | 0.86 | ug/l | # | 75 |
| 6) Chloroethane | 1.705 | 64 | 658 | 0.98 | ug/l | # | 81 |
| 7) Trichlorofluoromethane | 1.911 | 101 | 1537 | 0.92 | ug/l | | 89 |
| 8) Diethyl Ether | 2.170 | 74 | 563 | 0.96 | ug/l | | 62 |
| 9) 1,1,2-Trichlorotrifluo... | 2.370 | 101 | 932 | 0.98 | ug/l | | 94 |
| 12) 1,1-Dichloroethene | 2.346 | 96 | 995 | 1.08 | ug/l | | 92 |
| 14) Allyl chloride | 2.705 | 41 | 1952 | 1.03 | ug/l | # | 91 |
| 15) Acrylonitrile | 3.111 | 53 | 2701 | 4.61 | ug/l | | 95 |
| 16) Acetone | 2.423 | 43 | 3081 | 5.56 | ug/l | # | 82 |
| 17) Carbon Disulfide | 2.546 | 76 | 3229 | 1.13 | ug/l | # | 93 |
| 18) Methyl Acetate | 2.746 | 43 | 1429 | 0.92 | ug/l | # | 88 |
| 19) Methyl tert-butyl Ether | 3.164 | 73 | 3122 | 0.90 | ug/l | | 93 |
| 20) Methylene Chloride | 2.829 | 84 | 1211 | 1.07 | ug/l | # | 68 |
| 21) trans-1,2-Dichloroethene | 3.135 | 96 | 1003 | 0.97 | ug/l | | 96 |
| 22) Diisopropyl ether | 3.823 | 45 | 3275 | 0.90 | ug/l | # | 90 |
| 23) Vinyl Acetate | 3.782 | 43 | 12954 | 4.09 | ug/l | | 95 |
| 24) 1,1-Dichloroethane | 3.664 | 63 | 1801 | 0.91 | ug/l | # | 94 |
| 25) 2-Butanone | 4.635 | 43 | 3985 | 4.71 | ug/l | | 94 |
| 26) 2,2-Dichloropropane | 4.547 | 77 | 1651 | 0.96 | ug/l | # | 75 |
| 27) cis-1,2-Dichloroethene | 4.552 | 96 | 1120 | 0.94 | ug/l | | 89 |
| 28) Bromochloromethane | 4.982 | 49 | 1032 | 1.11 | ug/l | # | 79 |
| 29) Tetrahydrofuran | 5.094 | 42 | 2537 | 4.55 | ug/l | # | 82 |
| 30) Chloroform | 5.176 | 83 | 1838 | 0.89 | ug/l | | 96 |
| 32) 1,1,1-Trichloroethane | 5.453 | 97 | 1665 | 0.91 | ug/l | # | 46 |
| 36) 1,1-Dichloropropene | 5.758 | 75 | 1493 | 0.99 | ug/l | # | 76 |
| 37) Ethyl Acetate | 4.788 | 43 | 1726 | 0.99 | ug/l | # | 79 |
| 38) Carbon Tetrachloride | 5.747 | 117 | 1443 | 0.91 | ug/l | # | 92 |
| 39) Methylcyclohexane | 7.435 | 83 | 1568 | 0.93 | ug/l | # | 83 |
| 40) Benzene | 6.106 | 78 | 3856 | 0.92 | ug/l | | 96 |
| 41) Methacrylonitrile | 5.005 | 41 | 1034 | 1.02 | ug/l | # | 78 |
| 42) 1,2-Dichloroethane | 6.153 | 62 | 1633 | 0.90 | ug/l | | 76 |
| 43) Isopropyl Acetate | 6.406 | 43 | 2489 | 0.87 | ug/l | | 92 |
| 44) Trichloroethene | 7.182 | 130 | 1106 | 1.00 | ug/l | | 97 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 1031 | 0.91 | ug/l | | 90 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021424.D
Acq On : 24 Mar 2021 10:04
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

Quant Time: Mar 24 11:40:53 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 46) Dibromomethane | 7.641 | 93 | 766 | 0.93 | ug/l | | 88 |
| 47) Bromodichloromethane | 7.870 | 83 | 1494 | 0.90 | ug/l | | 87 |
| 48) Methyl methacrylate | 7.747 | 41 | 1318 | 0.86 | ug/l | # | 76 |
| 49) 1,4-Dioxane | 7.712 | 88 | 451 | 15.86 | ug/l | # | 60 |
| 51) 4-Methyl-2-Pentanone | 8.618 | 43 | 6965 | 4.12 | ug/l | | 88 |
| 52) Toluene | 8.759 | 92 | 2213 | 0.85 | ug/l | | 88 |
| 53) t-1,3-Dichloropropene | 9.018 | 75 | 1404 | 0.80 | ug/l | # | 86 |
| 54) cis-1,3-Dichloropropene | 8.406 | 75 | 1491 | 0.80 | ug/l | # | 85 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 920 | 0.86 | ug/l | # | 85 |
| 56) Ethyl methacrylate | 9.159 | 69 | 1246 | 0.73 | ug/l | # | 51 |
| 57) 1,3-Dichloropropane | 9.347 | 76 | 1667 | 0.90 | ug/l | | 95 |
| 58) 2-Chloroethyl Vinyl ether | 8.288 | 63 | 4226 | 4.50 | ug/l | | 98 |
| 59) 2-Hexanone | 9.471 | 43 | 5338 | 4.22 | ug/l | | 82 |
| 60) Dibromochloromethane | 9.565 | 129 | 1026 | 0.85 | ug/l | | 97 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 1032 | 0.88 | ug/l | | 98 |
| 64) Tetrachloroethene | 9.312 | 164 | 858 | 0.83 | ug/l | # | 78 |
| 65) Chlorobenzene | 10.118 | 112 | 2538 | 0.88 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 10.200 | 131 | 994 | 0.93 | ug/l | # | 66 |
| 67) Ethyl Benzene | 10.236 | 91 | 4548 | 0.86 | ug/l | | 93 |
| 68) m/p-Xylenes | 10.341 | 106 | 3034 | 1.60 | ug/l | | 86 |
| 69) o-Xylene | 10.683 | 106 | 1485 | 0.81 | ug/l | | 81 |
| 70) Styrene | 10.694 | 104 | 2611 | 0.84 | ug/l | | 95 |
| 71) Bromoform | 10.841 | 173 | 802 | 0.93 | ug/l | # | 90 |
| 73) Isopropylbenzene | 11.000 | 105 | 4046 | 0.81 | ug/l | | 96 |
| 74) N-amyl acetate | 10.883 | 43 | 2131 | 0.86 | ug/l | # | 85 |
| 75) 1,1,2,2-Tetrachloroethane | 11.247 | 83 | 1557 | 0.94 | ug/l | | 91 |
| 76) 1,2,3-Trichloropropane | 11.277 | 75 | 1356m | 0.85 | ug/l | | |
| 77) Bromobenzene | 11.236 | 156 | 1165 | 0.98 | ug/l | | 99 |
| 78) n-propylbenzene | 11.342 | 91 | 5082 | 0.88 | ug/l | | 93 |
| 79) 2-Chlorotoluene | 11.406 | 91 | 3097 | 0.88 | ug/l | | 96 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 3408 | 0.81 | ug/l | | 98 |
| 82) 4-Chlorotoluene | 11.495 | 91 | 3659 | 0.88 | ug/l | | 99 |
| 83) tert-Butylbenzene | 11.753 | 119 | 3559 | 0.89 | ug/l | | 91 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 3352 | 0.78 | ug/l | | 98 |
| 85) sec-Butylbenzene | 11.930 | 105 | 3823 | 0.81 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 12.048 | 119 | 3382 | 0.78 | ug/l | # | 86 |
| 87) 1,3-Dichlorobenzene | 12.006 | 146 | 2011 | 0.93 | ug/l | | 97 |
| 88) 1,4-Dichlorobenzene | 12.077 | 146 | 2340m | 1.07 | ug/l | | |
| 89) n-Butylbenzene | 12.371 | 91 | 3212 | 0.81 | ug/l | | 99 |
| 90) Hexachloroethane | 12.577 | 117 | 662 | 0.98 | ug/l | | 79 |
| 91) 1,2-Dichlorobenzene | 12.377 | 146 | 1902 | 0.91 | ug/l | | 96 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 278 | 0.66 | ug/l | | 91 |
| 93) 1,2,4-Trichlorobenzene | 13.624 | 180 | 1276 | 0.93 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 13.765 | 225 | 668 | 1.15 | ug/l | | 97 |
| 95) Naphthalene | 13.818 | 128 | 3610 | 0.77 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 14.001 | 180 | 1313 | 0.96 | ug/l | | 96 |

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

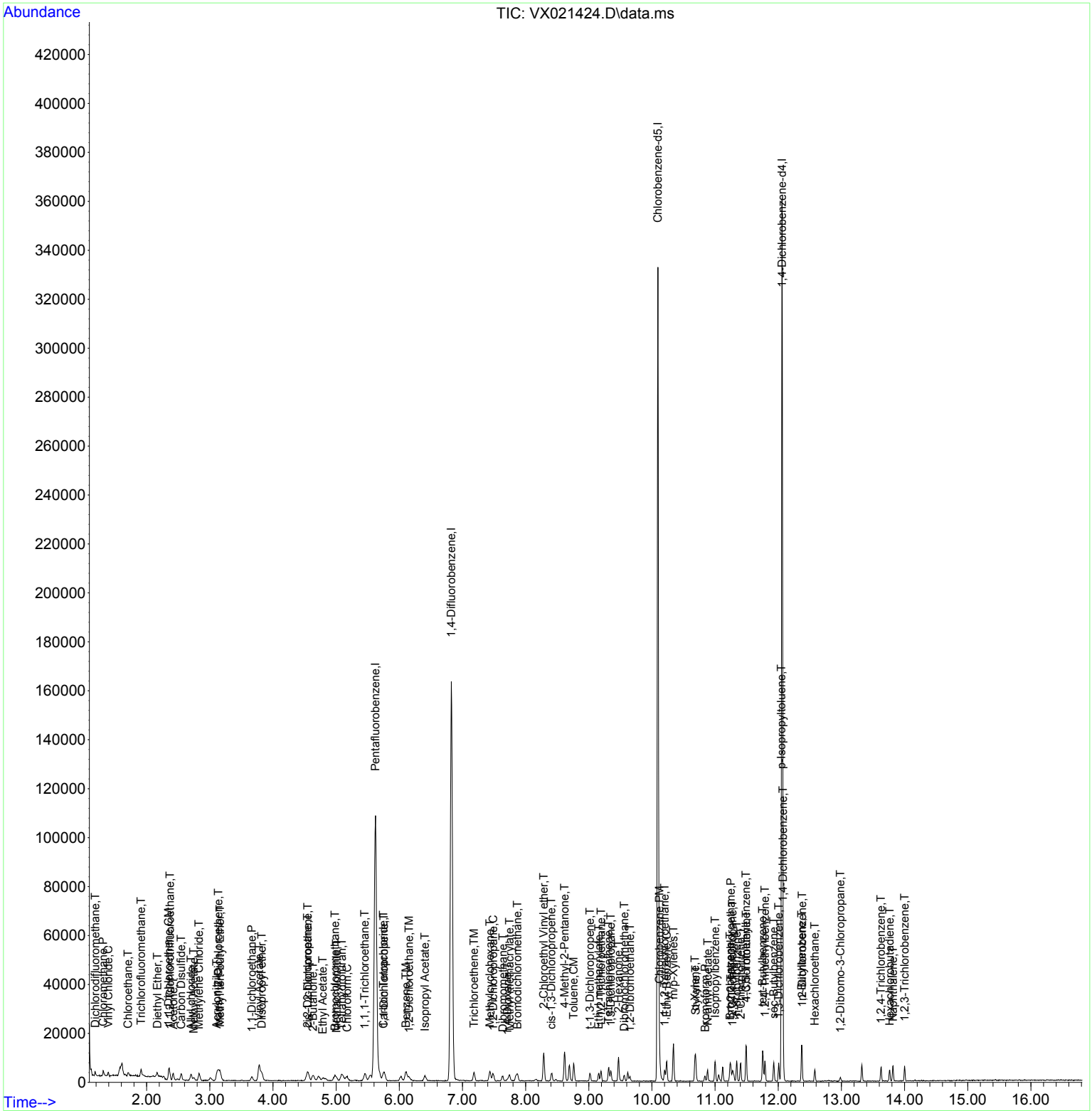
ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021424.D
Acq On : 24 Mar 2021 10:04
Operator : JC/MD
Sample : VSTDICC001
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 24 11:40:53 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

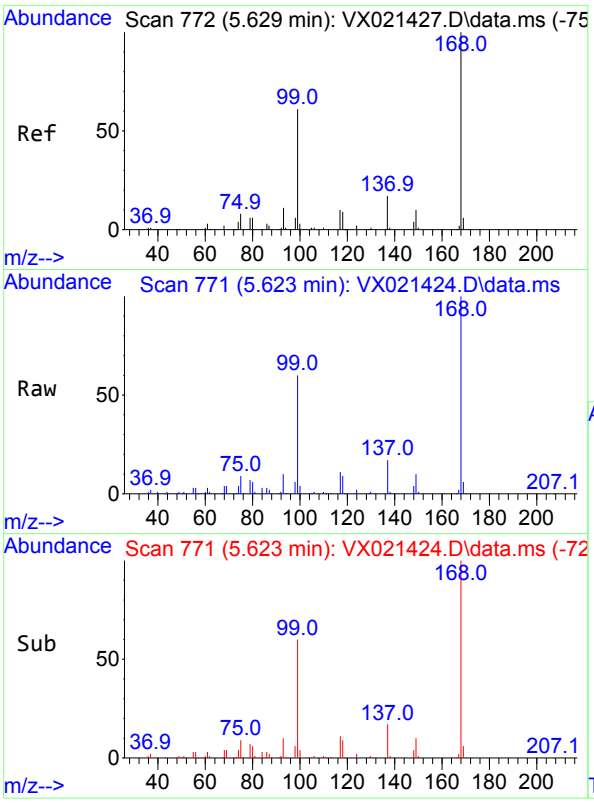
**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

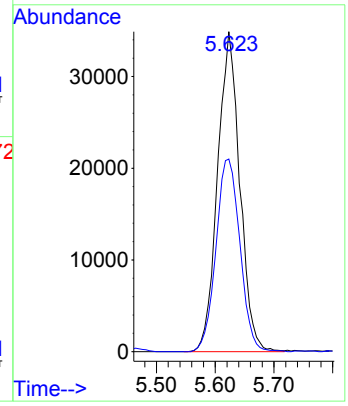
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

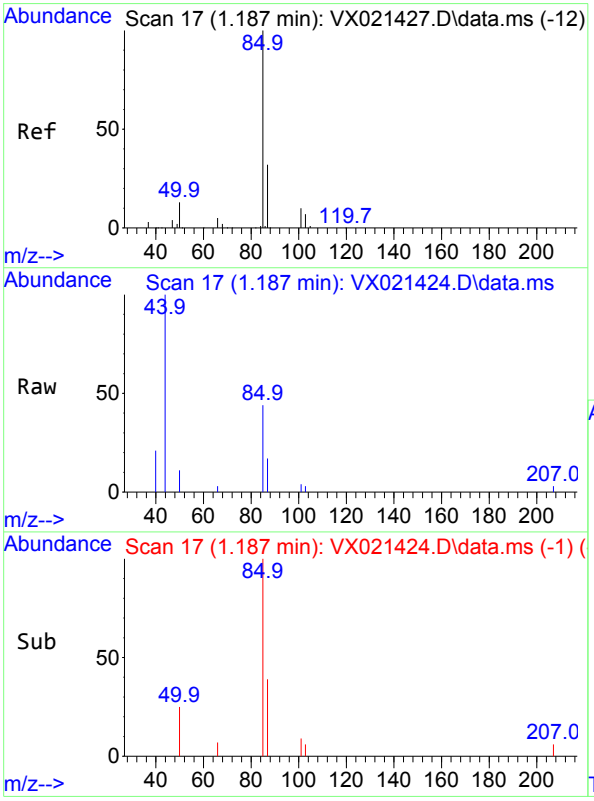



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.623 min Scan# 771
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:168 Resp: 91534

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 60.2 | 45.8 | 68.6 |

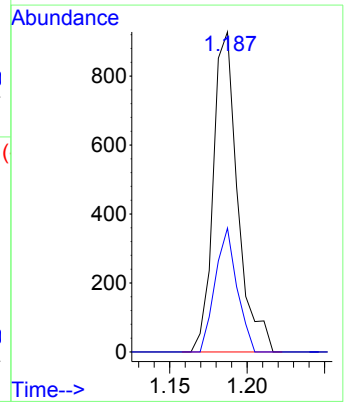



#2
Dichlorodifluoromethane
Concen: 0.95 ug/l
RT: 1.187 min Scan# 17
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

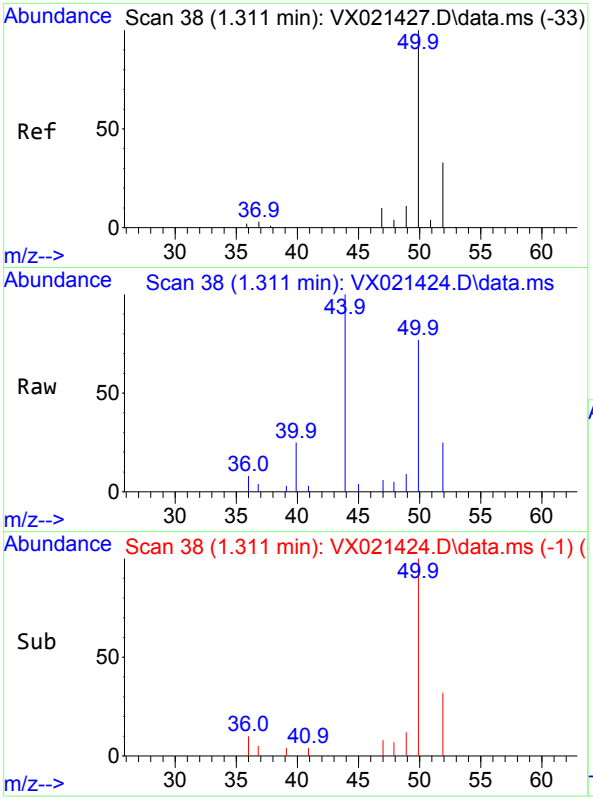
Tgt Ion: 85 Resp: 1019

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 38.7 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

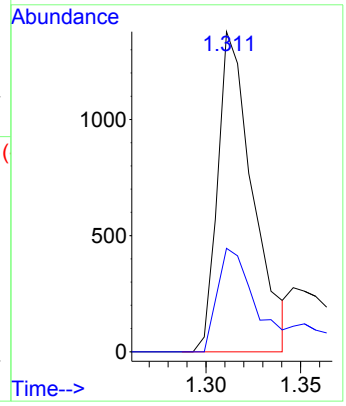
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

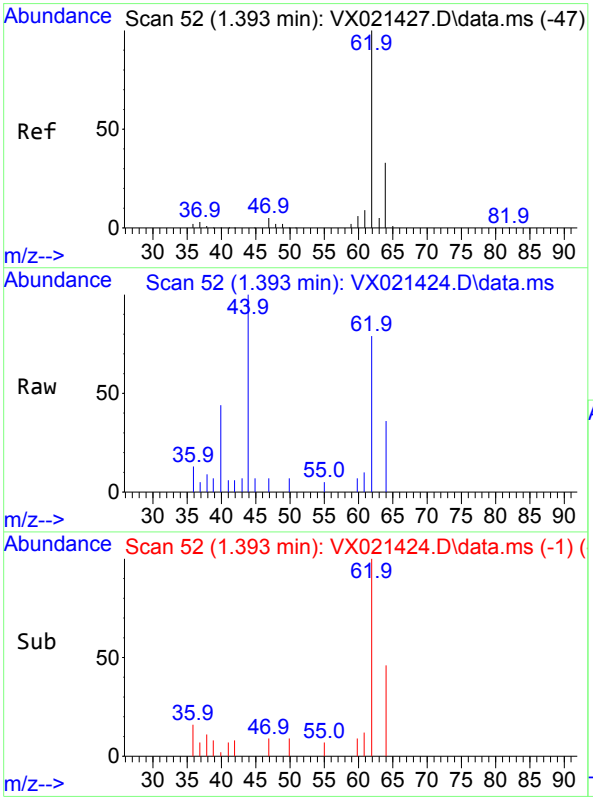



#3
Chloromethane
Concen: 0.87 ug/l
RT: 1.311 min Scan# 38
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 50 Resp: 1771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.3 | 26.4 | 39.6 |

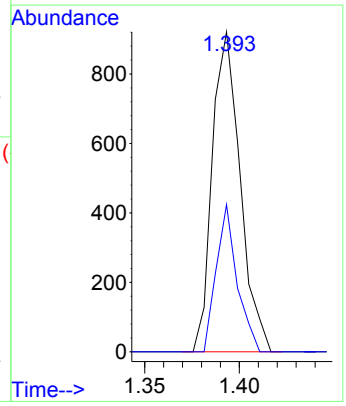



#4
Vinyl Chloride
Concen: 0.86 ug/l
RT: 1.393 min Scan# 52
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

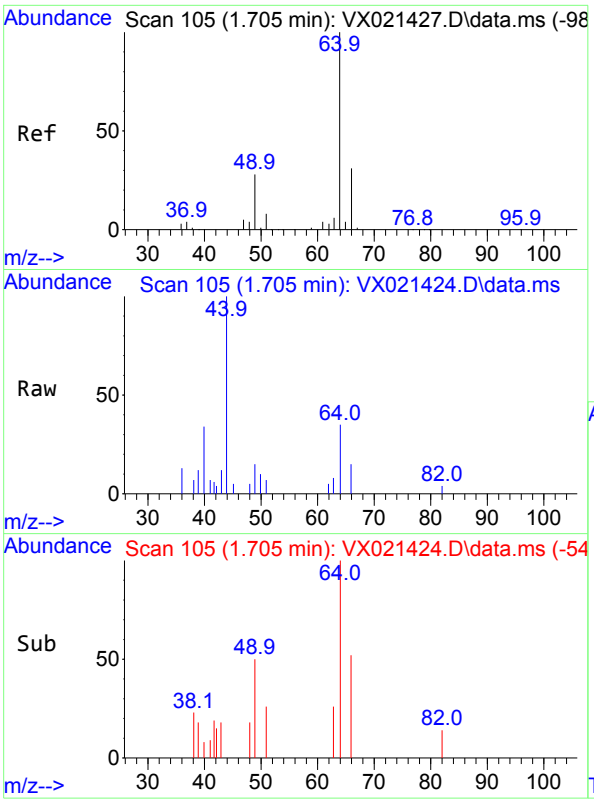
Tgt Ion: 62 Resp: 942

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 46.0 | 25.7 | 38.5# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

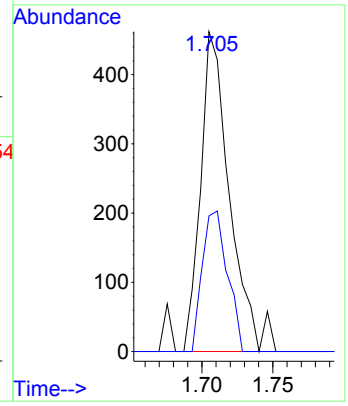
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

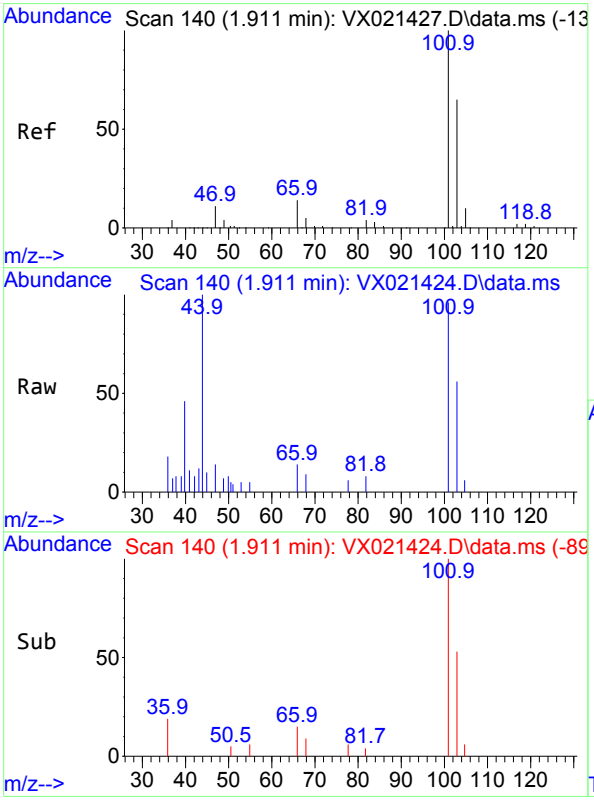



#6
Chloroethane
Concen: 0.98 ug/l
RT: 1.705 min Scan# 105
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 64 Resp: 658

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 42.4 | 25.4 | 38.0# |

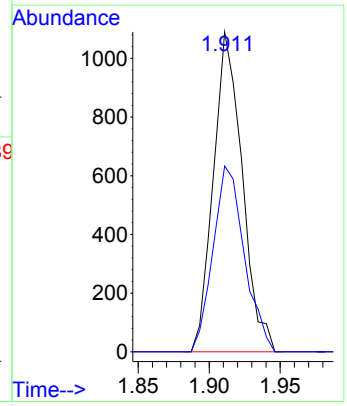



#7
Trichlorofluoromethane
Concen: 0.92 ug/l
RT: 1.911 min Scan# 140
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

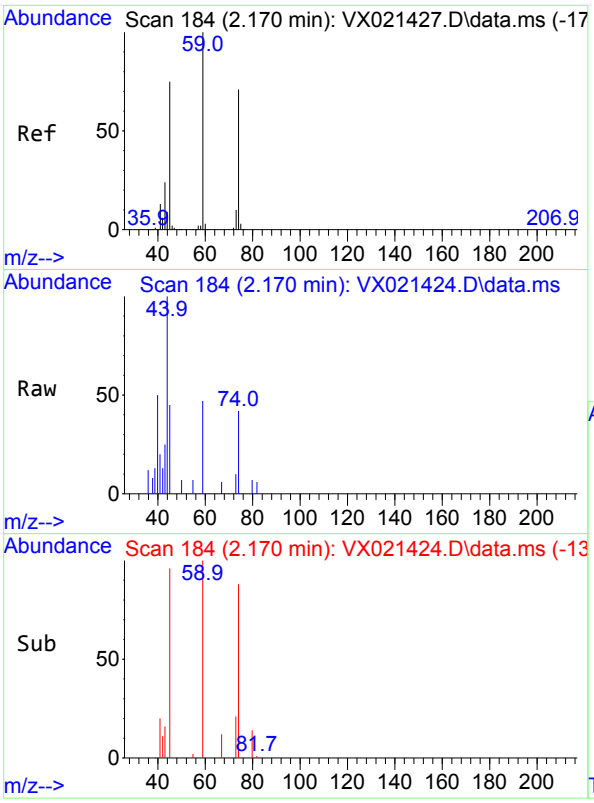
Tgt Ion:101 Resp: 1537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 58.1 | 53.2 | 79.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

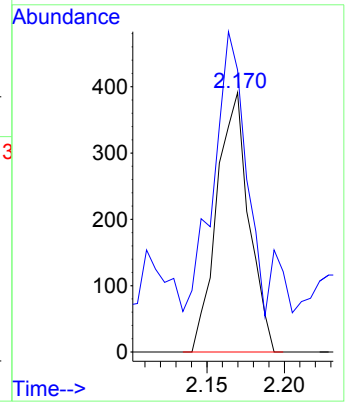
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

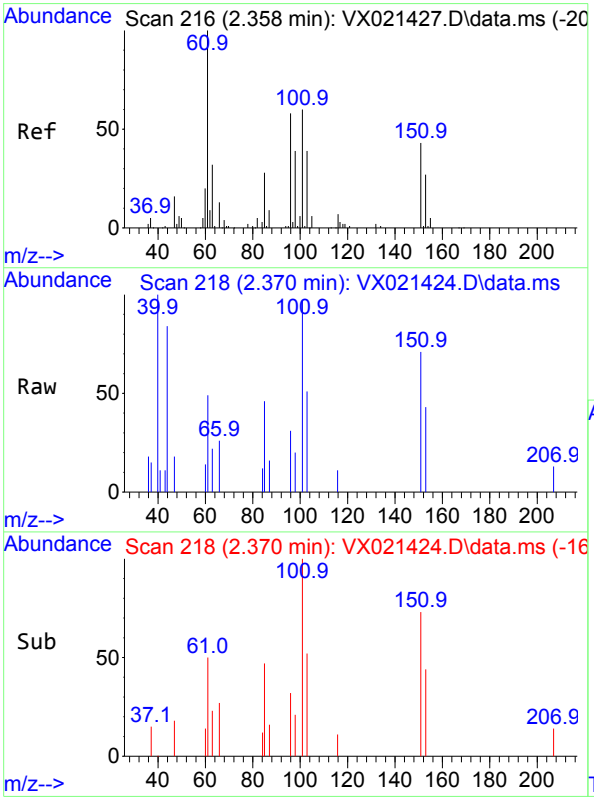



#8
Diethyl Ether
Concen: 0.96 ug/l
RT: 2.170 min Scan# 184
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 74 Resp: 563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 124.7 | 44.5 | 133.5 |

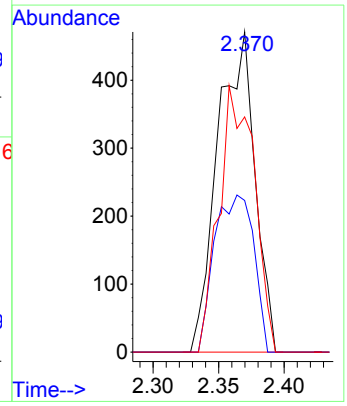



#9
1,1,2-Trichlorotrifluoroethane
Concen: 0.98 ug/l
RT: 2.370 min Scan# 218
Delta R.T. 0.012 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

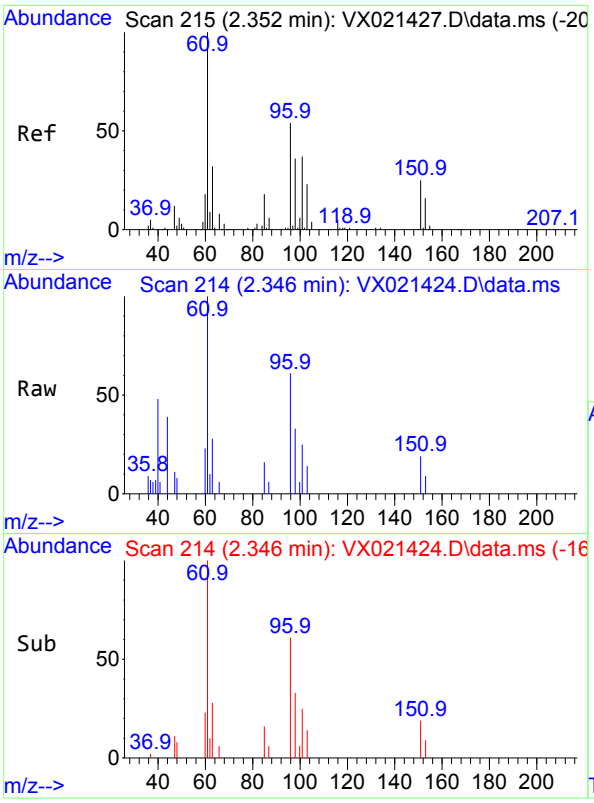
Tgt Ion:101 Resp: 932

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 51.7 | 34.9 | 52.3 |
| 151 | 78.8 | 61.4 | 92.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

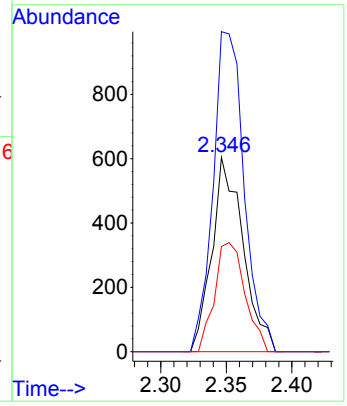
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

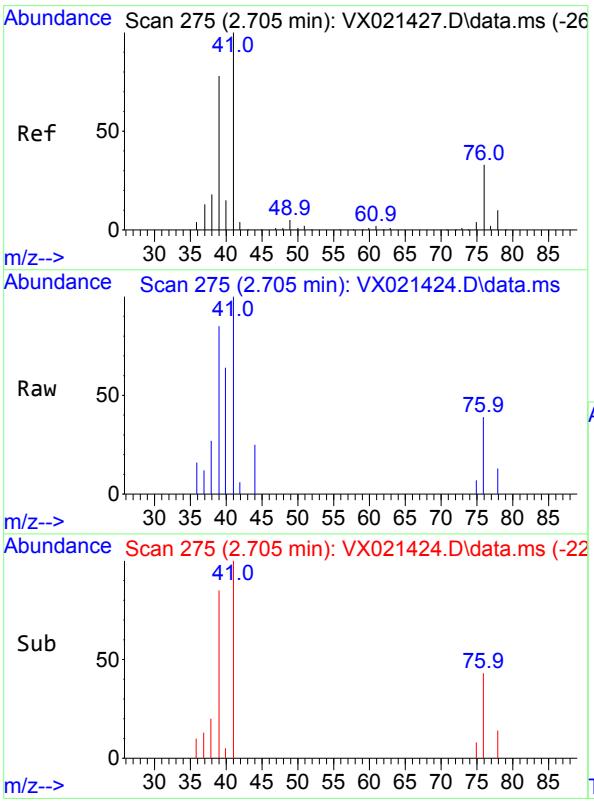



#12
1,1-Dichloroethene
Concen: 1.08 ug/l
RT: 2.346 min Scan# 214
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 96 Resp: 995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 164.7 | 124.6 | 187.0 |
| 98 | 54.1 | 50.6 | 76.0 |

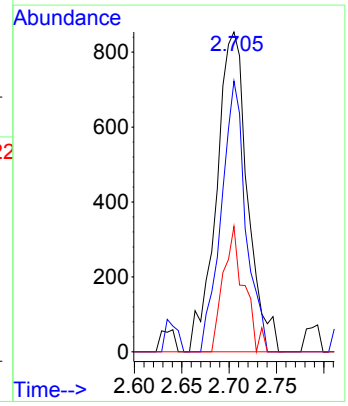



#14
Allyl chloride
Concen: 1.03 ug/l
RT: 2.705 min Scan# 275
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

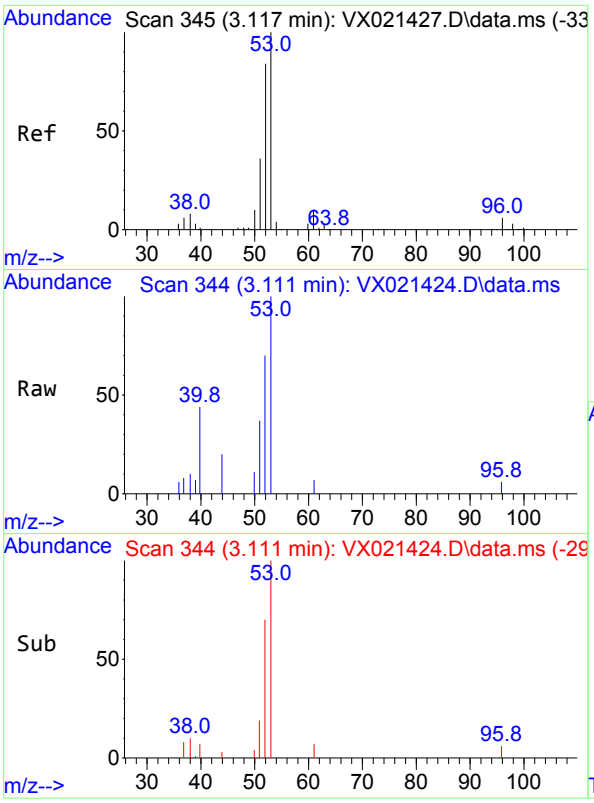
Tgt Ion: 41 Resp: 1952

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 67.0 | 51.6 | 77.4 |
| 76 | 26.3 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

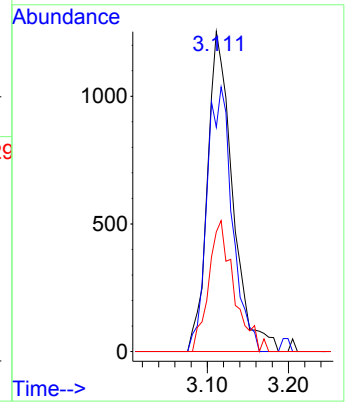
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

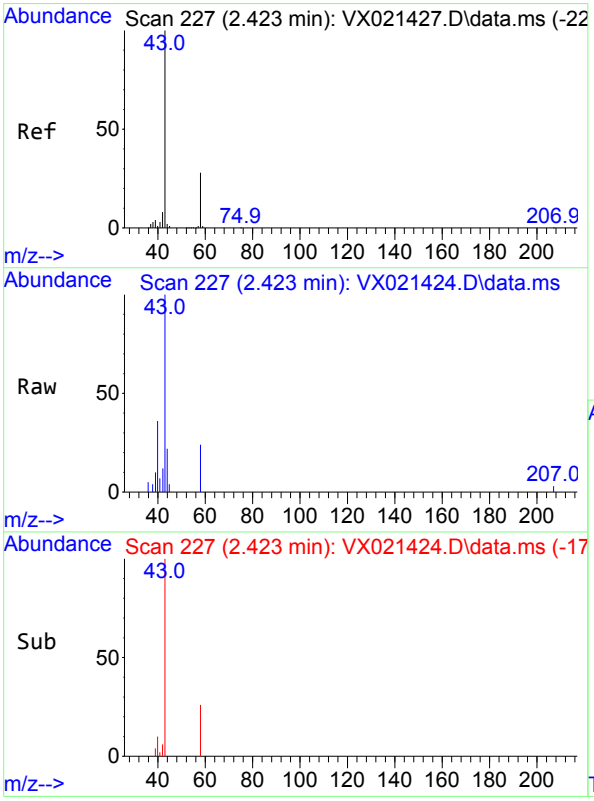



#15
Acrylonitrile
Concen: 4.61 ug/l
RT: 3.111 min Scan# 344
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 53 Resp: 2701

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.3 | 65.3 | 97.9 |
| 51 | 41.3 | 28.2 | 42.2 |

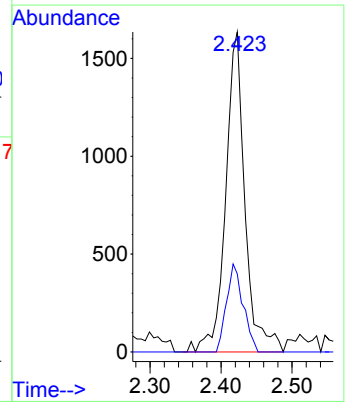



#16
Acetone
Concen: 5.56 ug/l
RT: 2.423 min Scan# 227
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

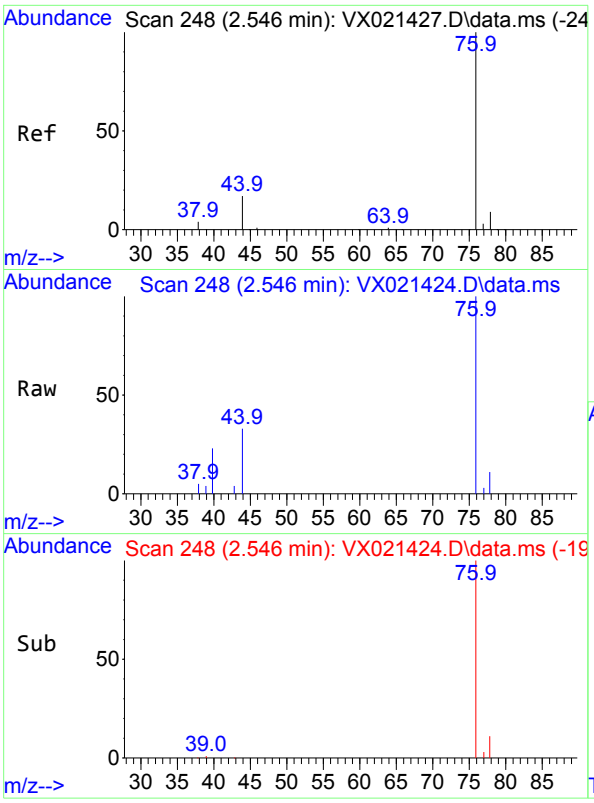
Tgt Ion: 43 Resp: 3081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 24.4 | 27.8 | 41.8# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

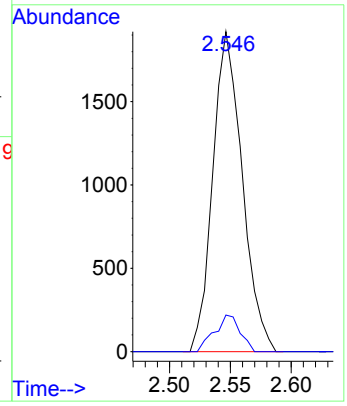
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

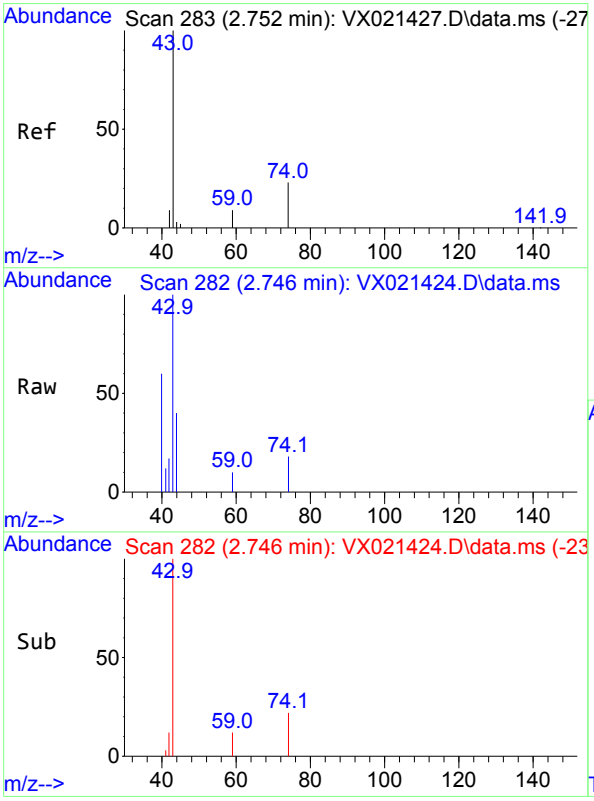



#17
Carbon Disulfide
Concen: 1.13 ug/l
RT: 2.546 min Scan# 248
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 76 Resp: 3229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 11.5 | 7.2 | 10.8# |

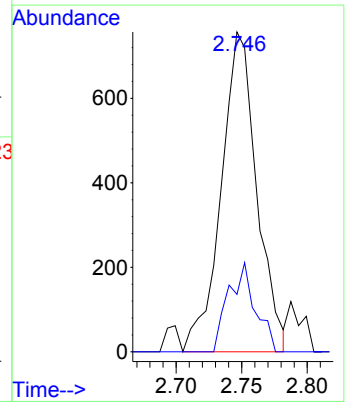



#18
Methyl Acetate
Concen: 0.92 ug/l
RT: 2.746 min Scan# 282
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

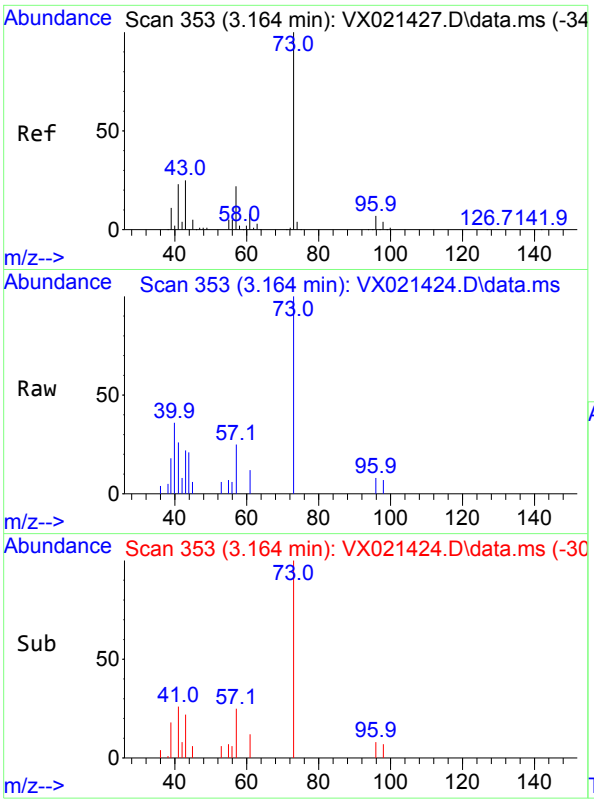
Tgt Ion: 43 Resp: 1429

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 21.0 | 21.9 | 32.9# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

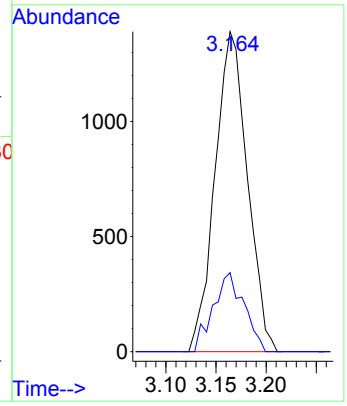
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

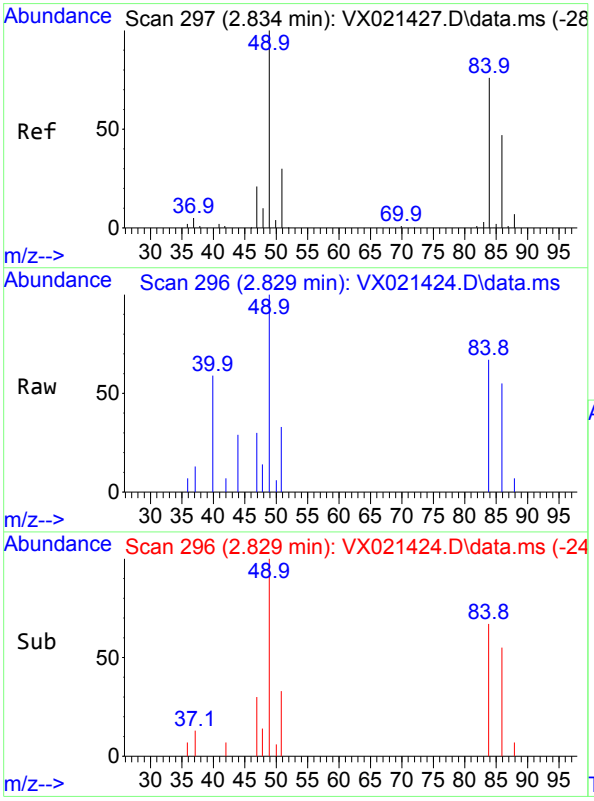



#19
Methyl tert-butyl Ether
Concen: 0.90 ug/l
RT: 3.164 min Scan# 353
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 73 Resp: 3122

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 24.7 | 17.1 | 25.7 |

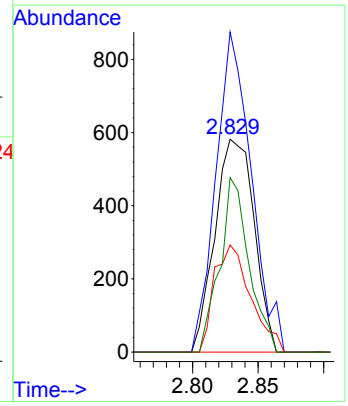



#20
Methylene Chloride
Concen: 1.07 ug/l
RT: 2.829 min Scan# 296
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

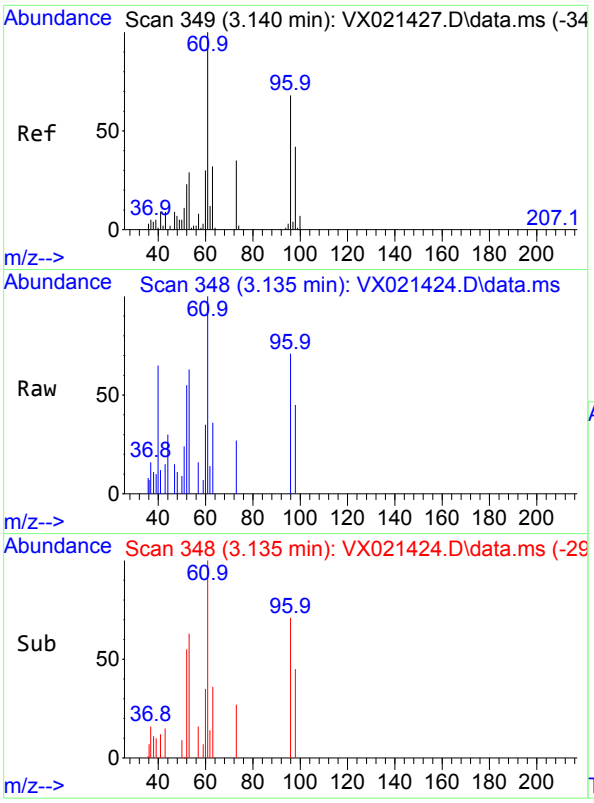
Tgt Ion: 84 Resp: 1211

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 150.3 | 88.6 | 132.8# |
| 51 | 50.3 | 27.0 | 40.6# |
| 86 | 82.0 | 50.3 | 75.5# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

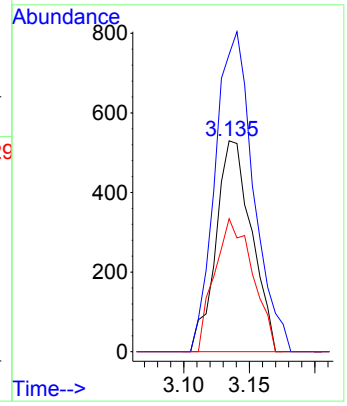
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

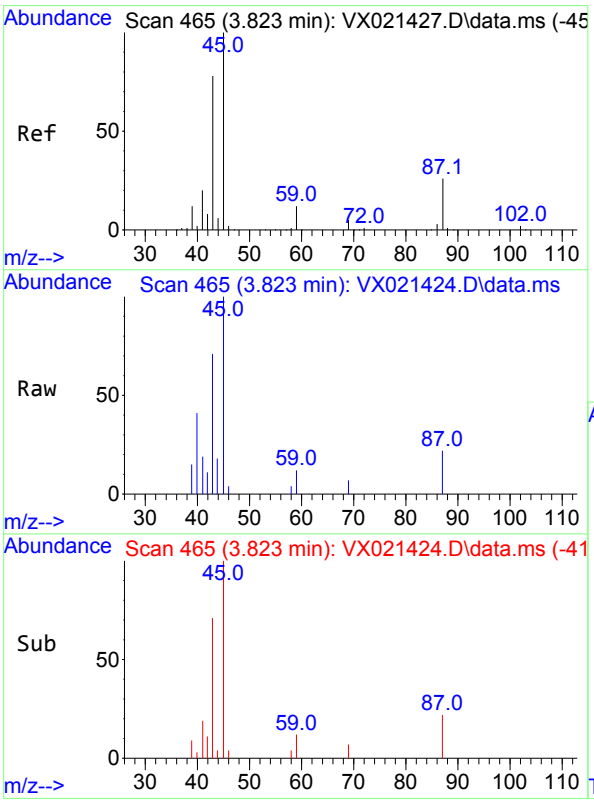



#21
trans-1,2-Dichloroethene
Concen: 0.97 ug/l
RT: 3.135 min Scan# 348
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 96 Resp: 1003

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 140.9 | 107.7 | 161.5 |
| 98 | 63.0 | 50.4 | 75.6 |

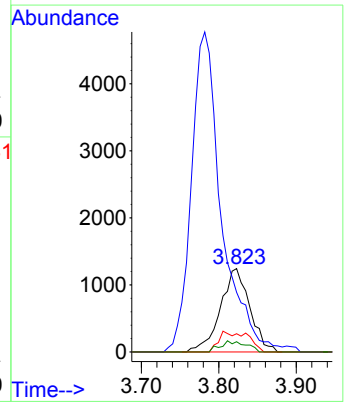



#22
Diisopropyl ether
Concen: 0.90 ug/l
RT: 3.823 min Scan# 465
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

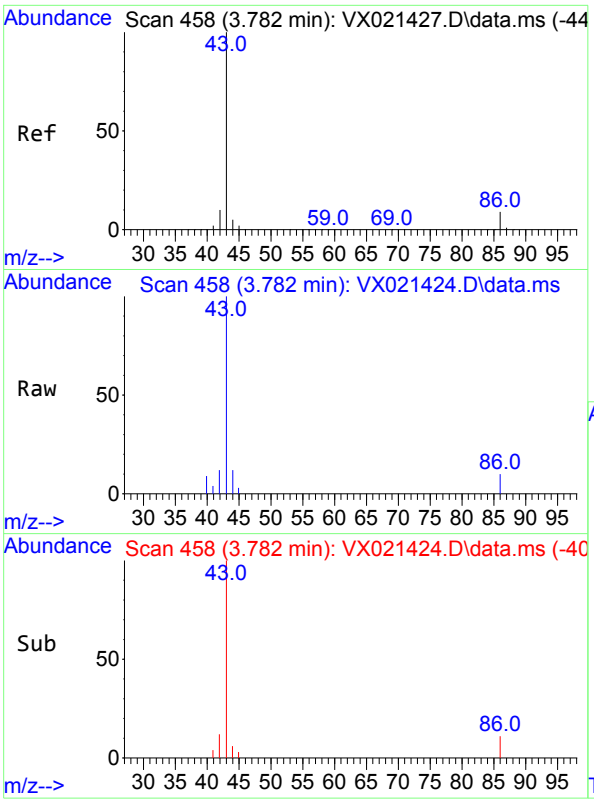
Tgt Ion: 45 Resp: 3275

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 65.5 | 58.0 | 87.0 |
| 87 | 21.9 | 25.4 | 38.0# |
| 59 | 12.4 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

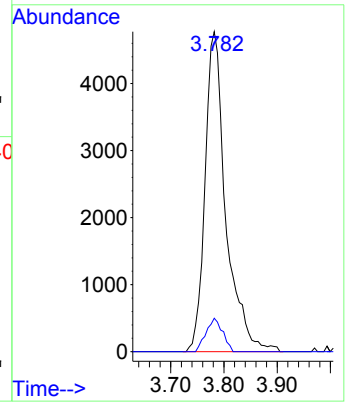
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

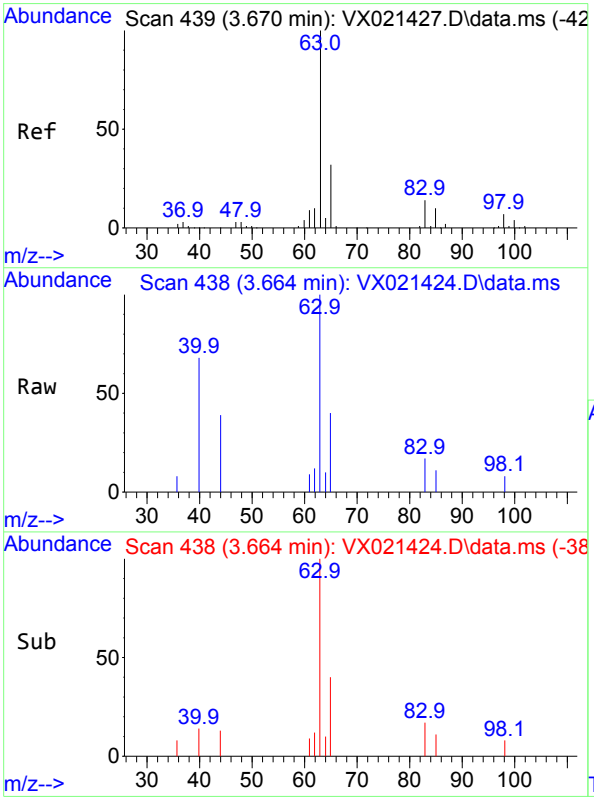



#23
Vinyl Acetate
Concen: 4.09 ug/l
RT: 3.782 min Scan# 458
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 43 Resp: 12954

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 10.5 | 9.9 | 14.9 |

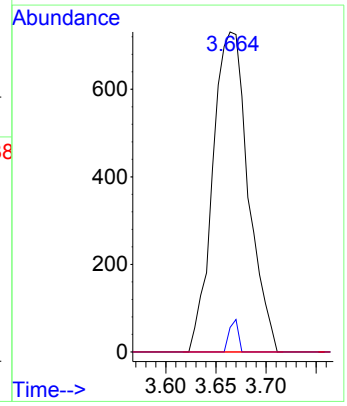



#24
1,1-Dichloroethane
Concen: 0.91 ug/l
RT: 3.664 min Scan# 438
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

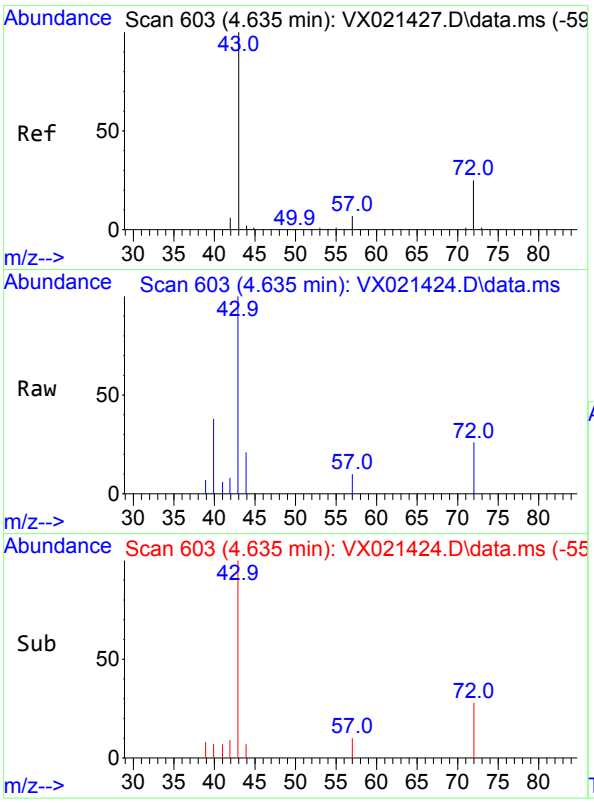
Tgt Ion: 63 Resp: 1801

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.7 | 3.8 | 11.2 |
| 100 | 0.0 | 2.5 | 7.5# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

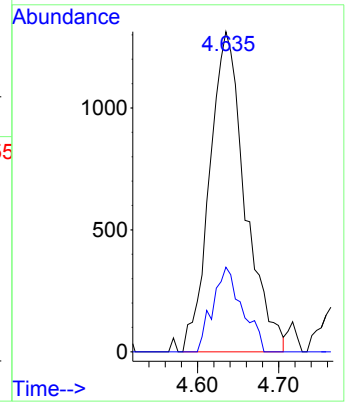
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

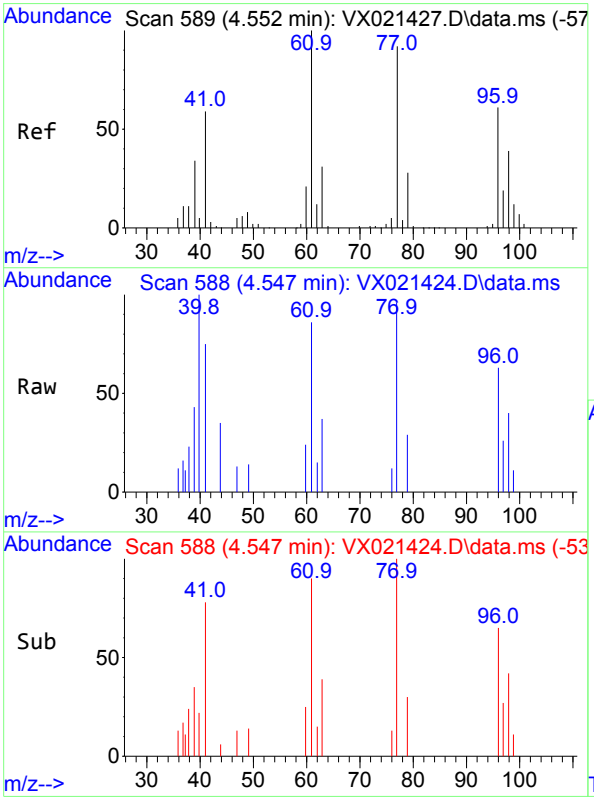



#25
2-Butanone
Concen: 4.71 ug/l
RT: 4.635 min Scan# 603
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 43 Resp: 3985

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 26.4 | 23.7 | 35.5 |

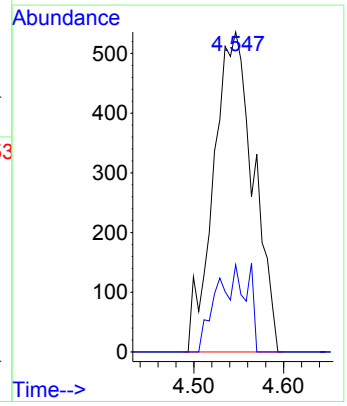



#26
2,2-Dichloropropane
Concen: 0.96 ug/l
RT: 4.547 min Scan# 588
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

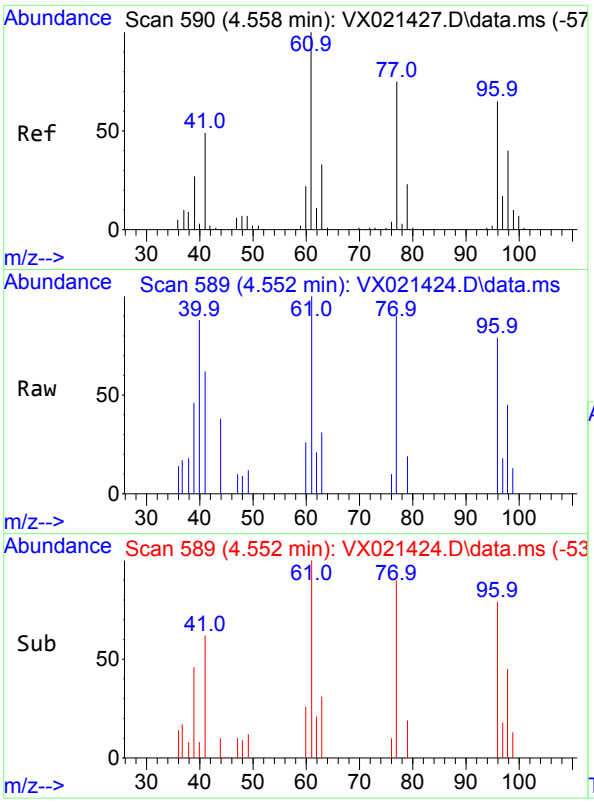
Tgt Ion: 77 Resp: 1651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 11.0 | 11.7 | 35.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

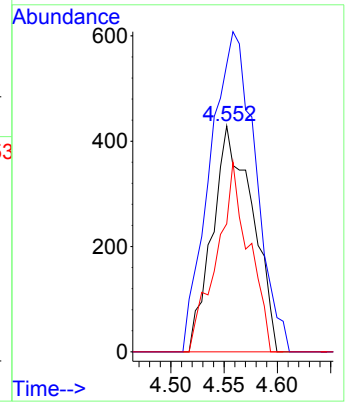
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

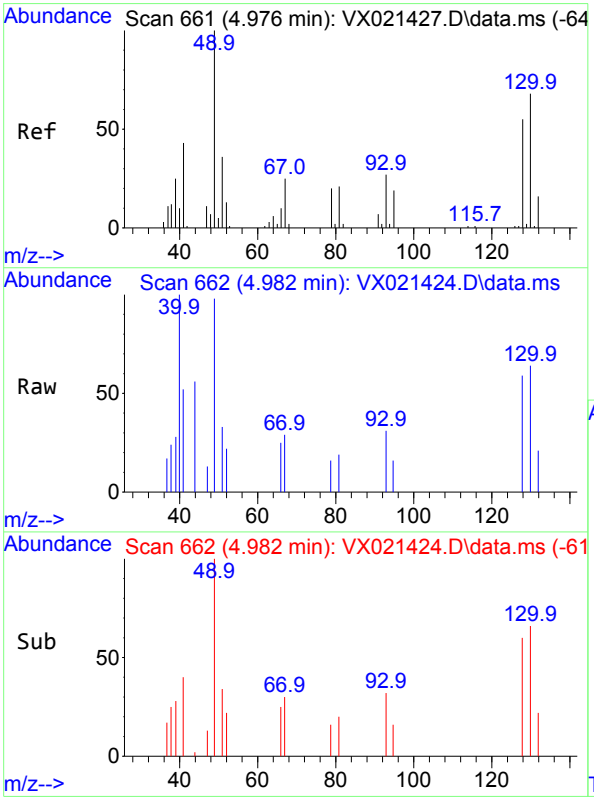



#27
cis-1,2-Dichloroethene
Concen: 0.94 ug/l
RT: 4.552 min Scan# 589
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 96 Resp: 1120

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 161.3 | 0.0 | 285.6 |
| 98 | 67.5 | 0.0 | 129.6 |

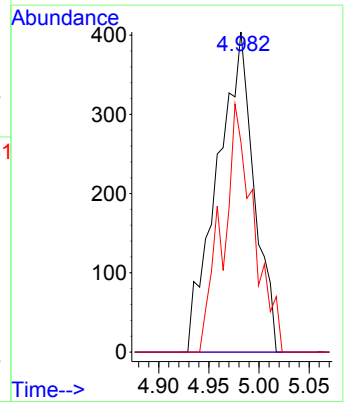



#28
Bromochloromethane
Concen: 1.11 ug/l
RT: 4.982 min Scan# 662
Delta R.T. 0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

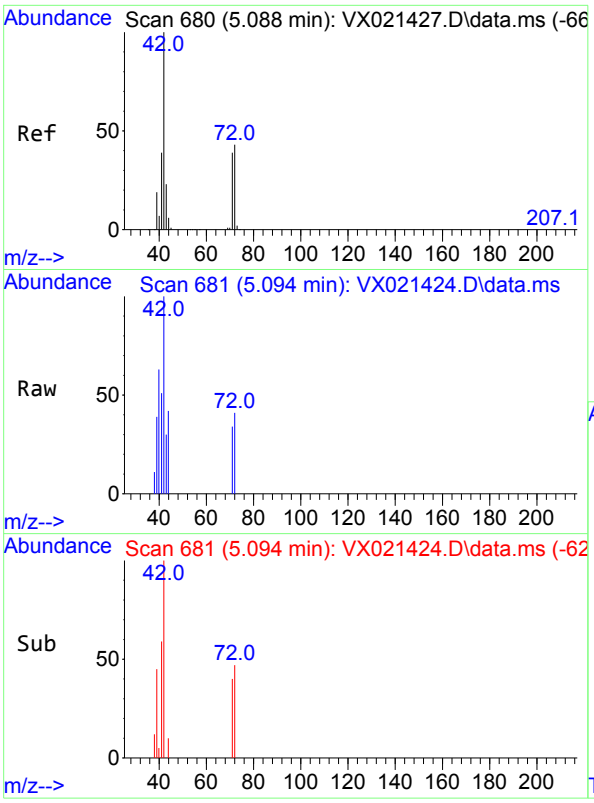
Tgt Ion: 49 Resp: 1032

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.0 | 0.0 | 4.0 |
| 130 | 65.6 | 68.2 | 102.2# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

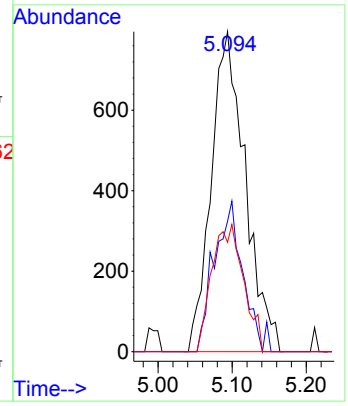
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

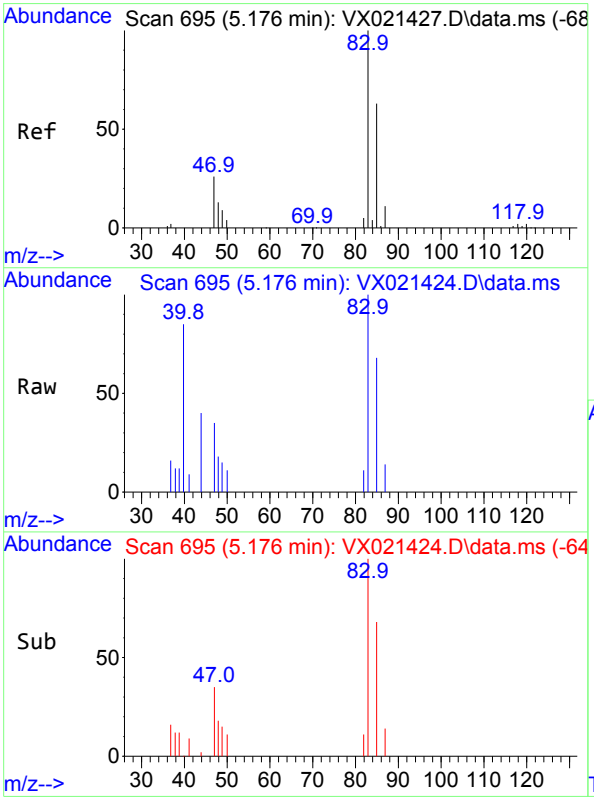



#29
Tetrahydrofuran
Concen: 4.55 ug/l
RT: 5.094 min Scan# 681
Delta R.T. 0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 42 Resp: 2537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 38.6 | 41.7 | 62.5# |
| 71 | 36.9 | 38.4 | 57.6# |

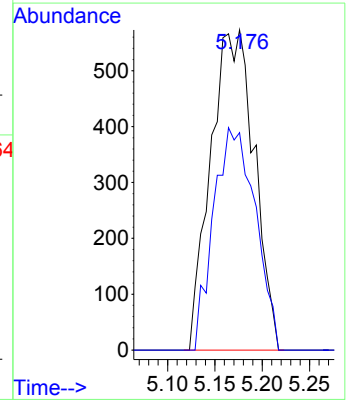



#30
Chloroform
Concen: 0.89 ug/l
RT: 5.176 min Scan# 695
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

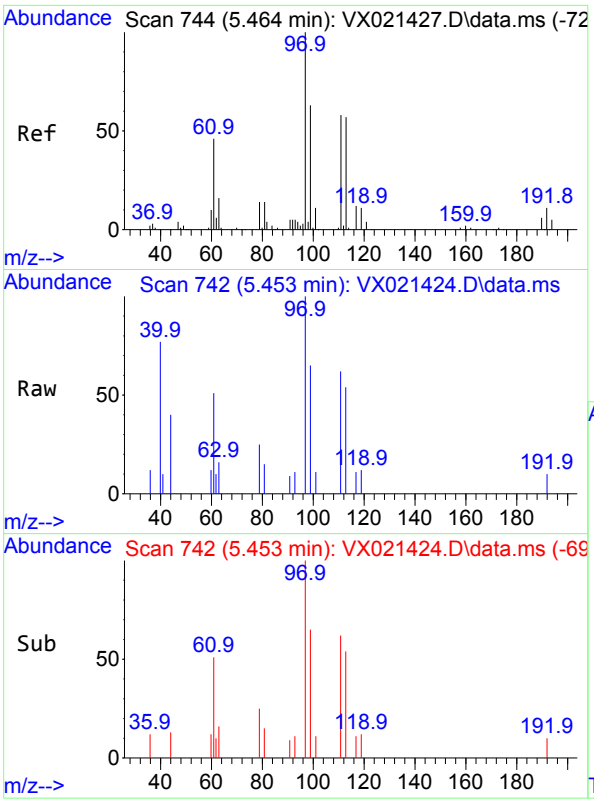
Tgt Ion: 83 Resp: 1838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 67.9 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

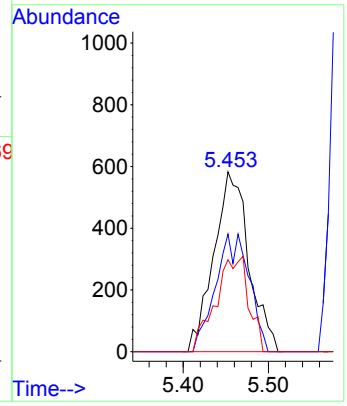
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

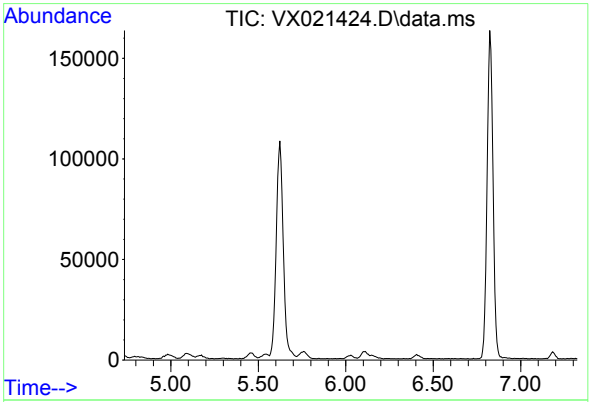



#32
1,1,1-Trichloroethane
Concen: 0.91 ug/l
RT: 5.453 min Scan# 742
Delta R.T. -0.012 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 97 Resp: 1665

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 0.0 | 51.5 | 77.3# |
| 61 | 49.9 | 34.2 | 51.4 |



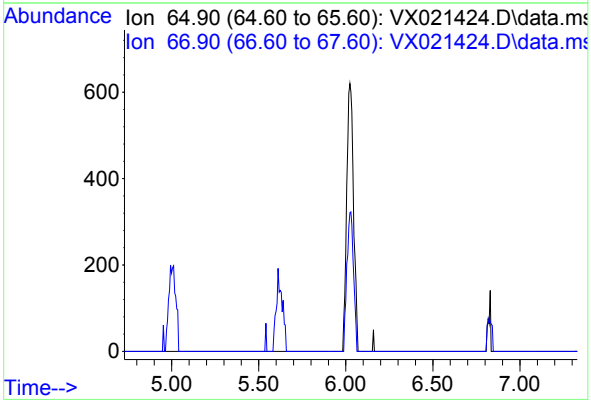




#33
1,2-Dichloroethane-d4
Concen: 0.00 ug/l
Expected RT: 6.03 min

Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

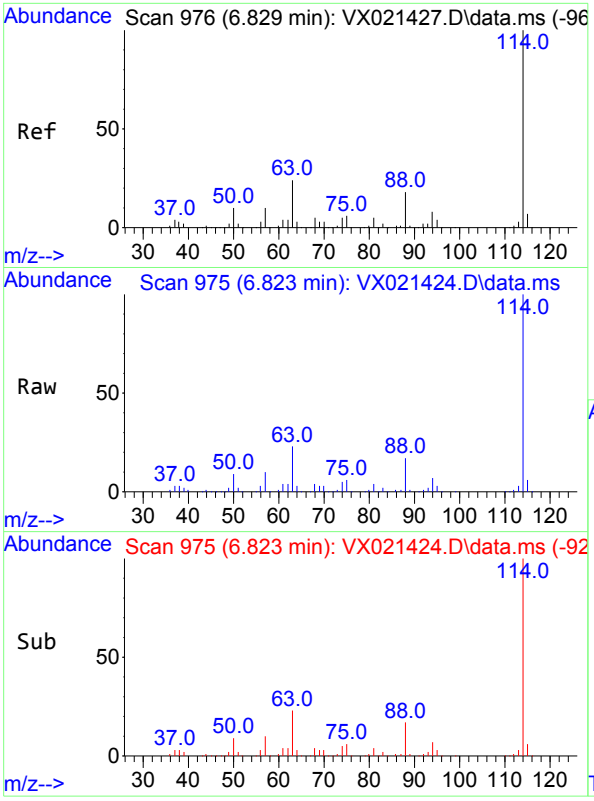
Tgt Ion: 65

| Sig | Exp Ratio |
|---|---|
| 65 | 100 |
| 67 | 52.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

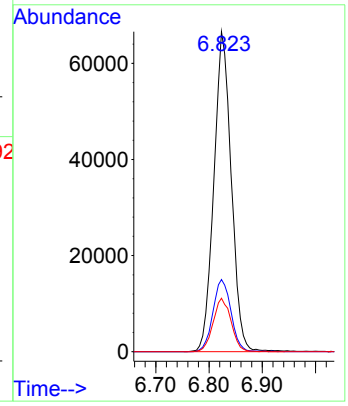
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

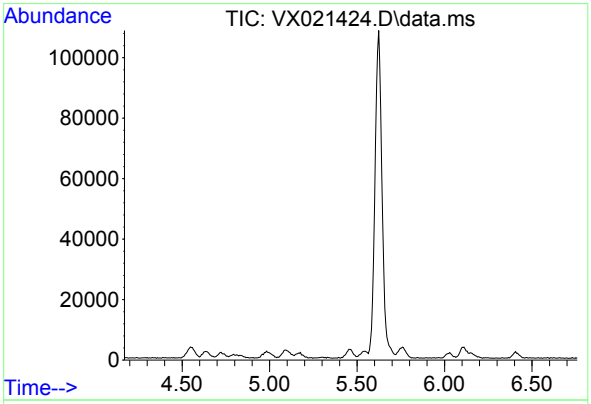



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.823 min Scan# 975
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:114 Resp: 151113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.5 | 0.0 | 40.8 |
| 88 | 16.7 | 0.0 | 32.8 |



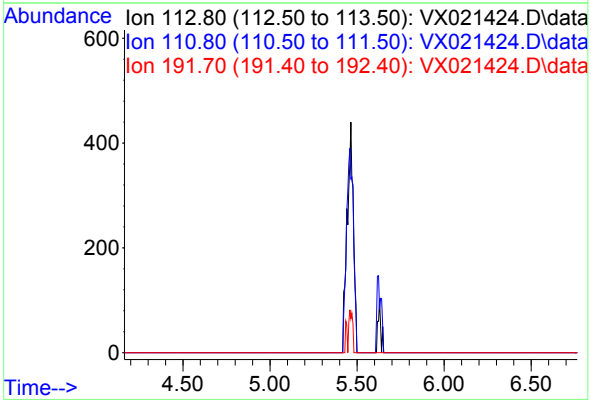




#35
Dibromofluoromethane
Concen: 0.00 ug/l
Expected RT: 5.46 min

Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

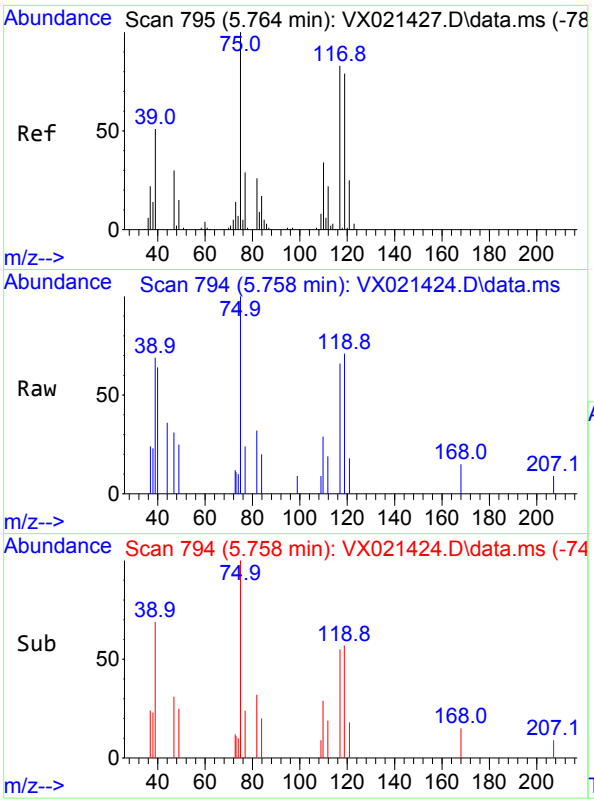
Tgt Ion: 113

| Sig | Exp Ratio |
|---|---|
| 113 | 100 |
| 111 | 102.4 |
| 192 | 20.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

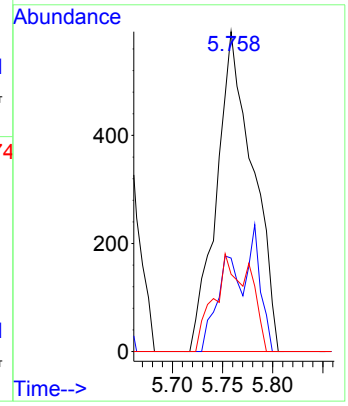
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

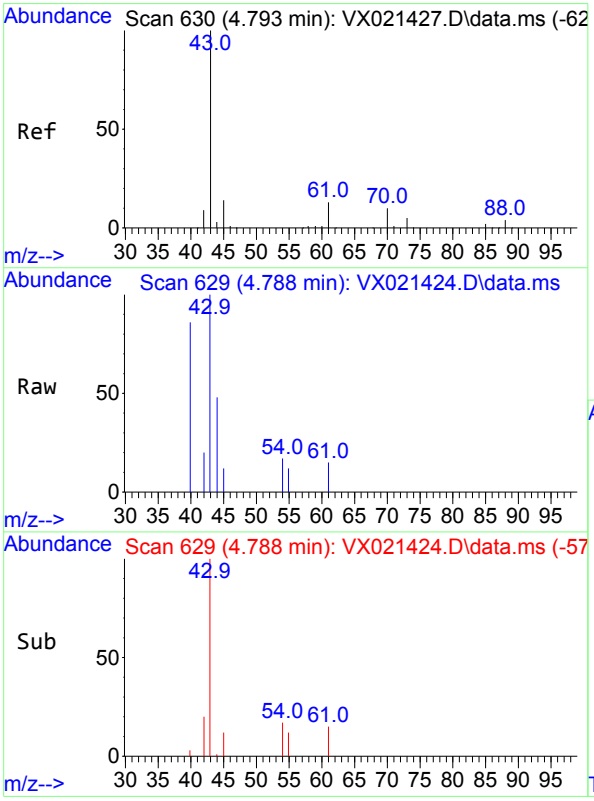



#36
1,1-Dichloropropene
Concen: 0.99 ug/l
RT: 5.758 min Scan# 794
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 75 Resp: 1493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 19.3 | 18.1 | 54.4 |
| 77 | 21.5 | 25.3 | 37.9# |

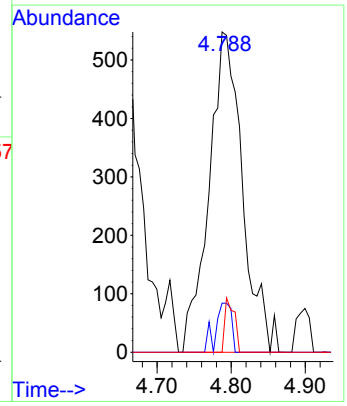



#37
Ethyl Acetate
Concen: 0.99 ug/l
RT: 4.788 min Scan# 629
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

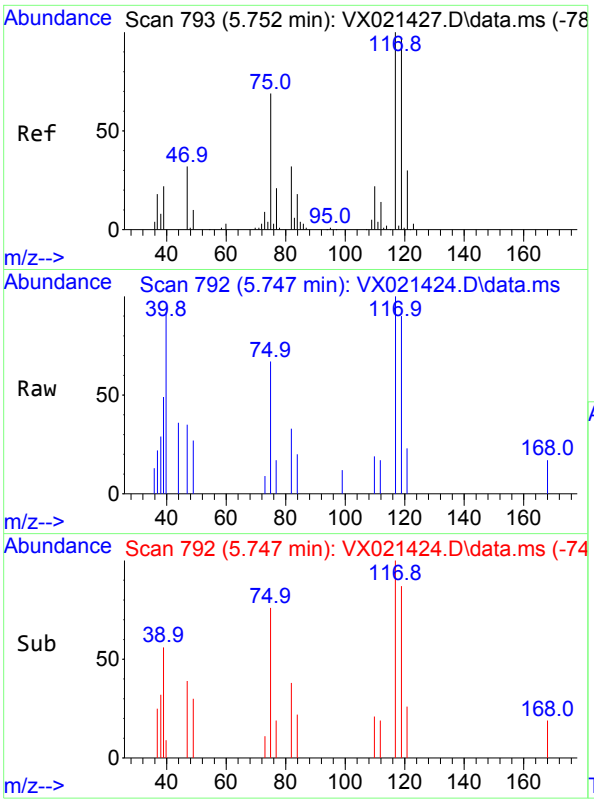
Tgt Ion: 43 Resp: 1726

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 7.2 | 12.8 | 19.2# |
| 70 | 4.8 | 10.5 | 15.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

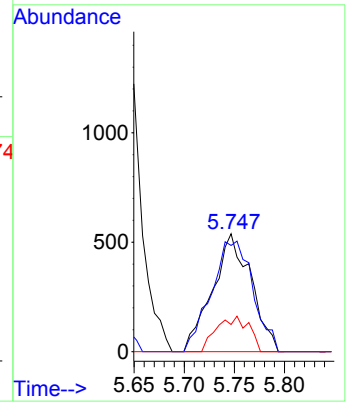
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

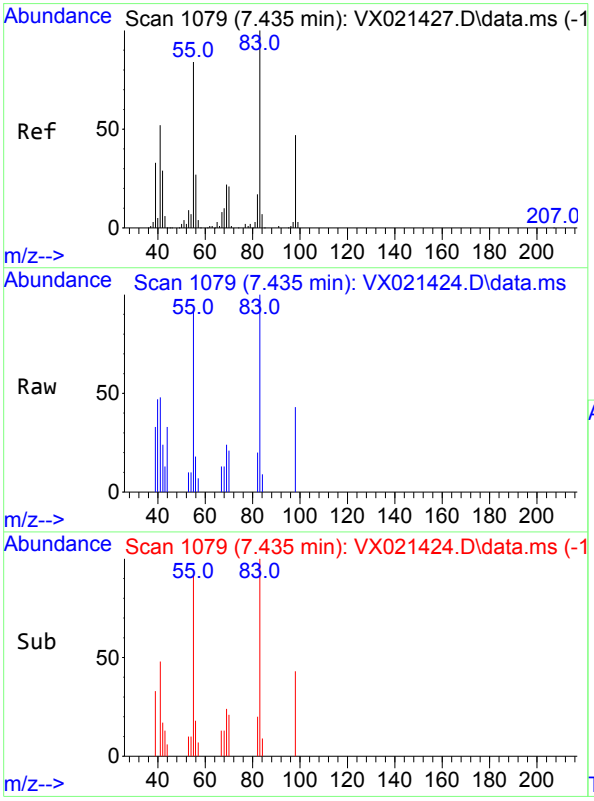



#38
Carbon Tetrachloride
Concen: 0.91 ug/l
RT: 5.747 min Scan# 792
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:117 Resp: 1443

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 90.0 | 76.2 | 114.2 |
| 121 | 23.0 | 24.8 | 37.2# |

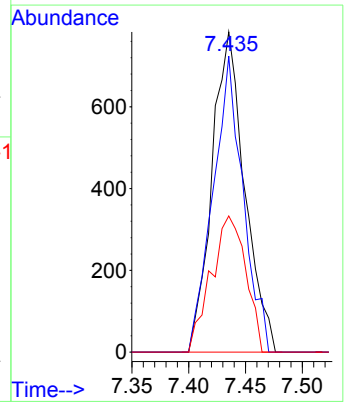



#39
Methylcyclohexane
Concen: 0.93 ug/l
RT: 7.435 min Scan# 1079
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

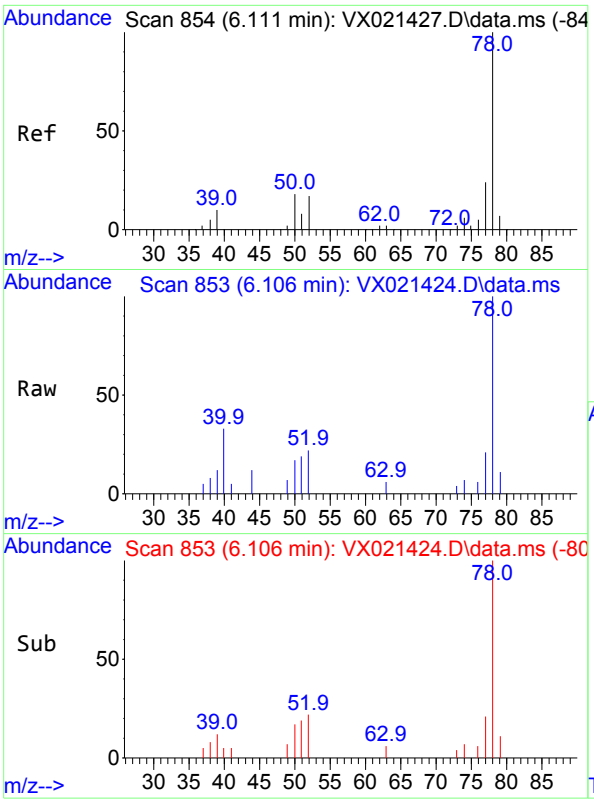
Tgt Ion: 83 Resp: 1568

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 92.5 | 58.9 | 88.3# |
| 98 | 42.5 | 38.1 | 57.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

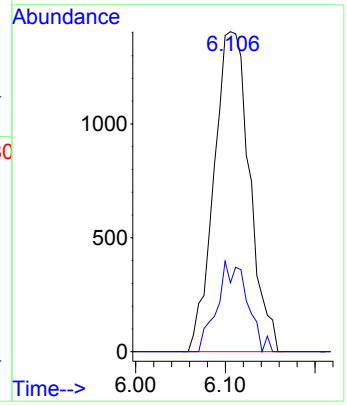
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

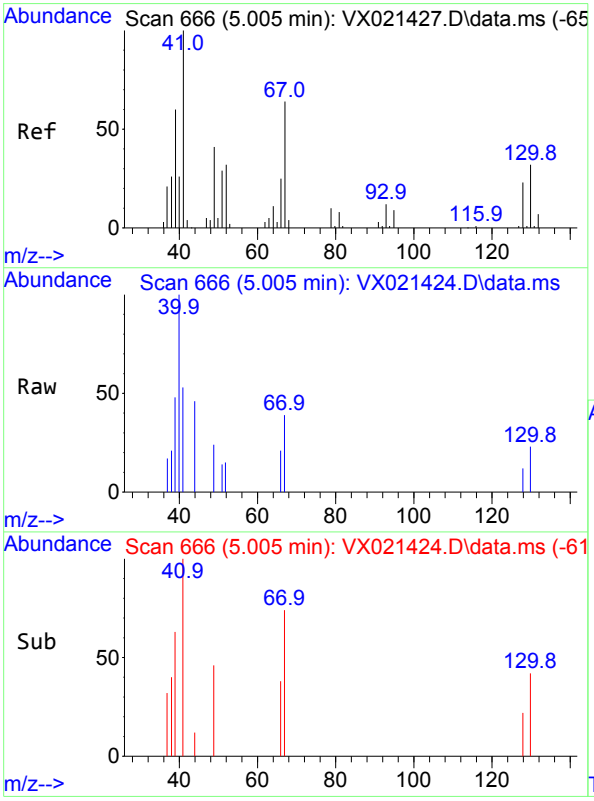



#40
Benzene
Concen: 0.92 ug/l
RT: 6.106 min Scan# 853
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 78 Resp: 3856

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 21.5 | 18.9 | 28.3 |

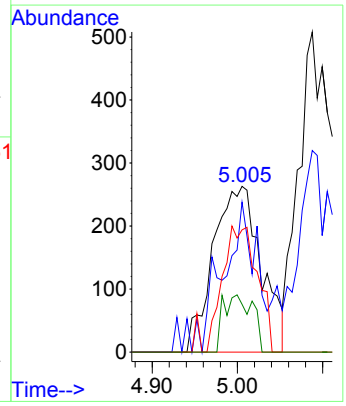



#41
Methacrylonitrile
Concen: 1.02 ug/l
RT: 5.005 min Scan# 666
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

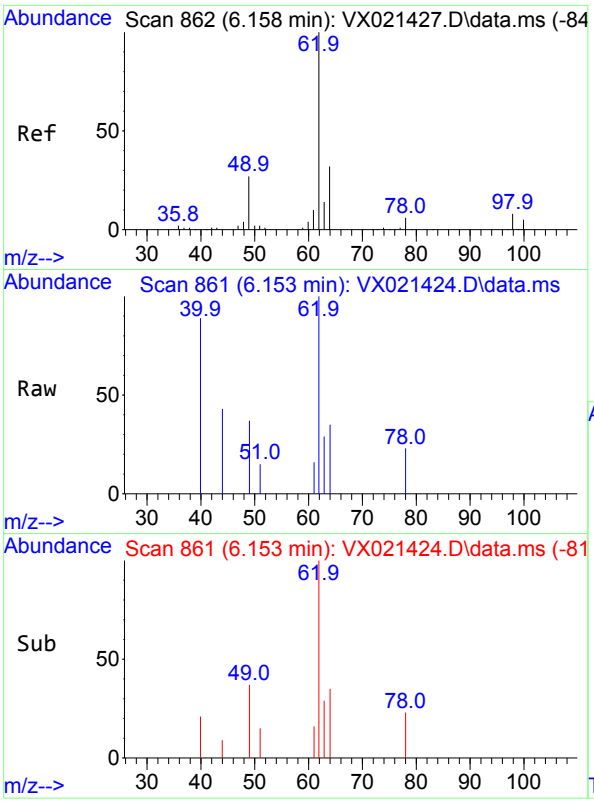
Tgt Ion: 41 Resp: 1034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 45.6 | 42.5 | 63.7 |
| 67 | 55.0 | 65.0 | 97.6# |
| 52 | 20.8 | 25.3 | 37.9# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

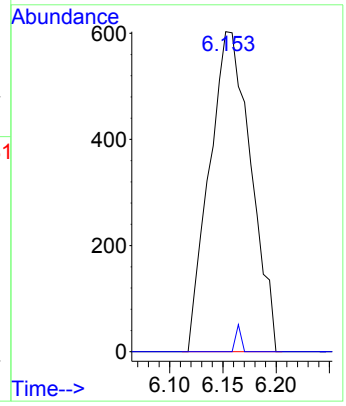
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

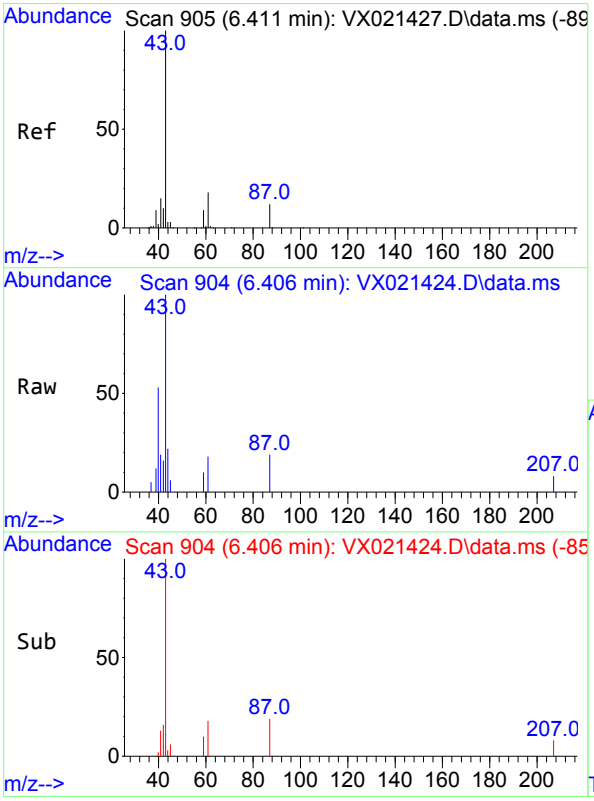



#42
1,2-Dichloroethane
Concen: 0.90 ug/l
RT: 6.153 min Scan# 861
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 62 Resp: 1633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 1.1 | 0.0 | 20.2 |

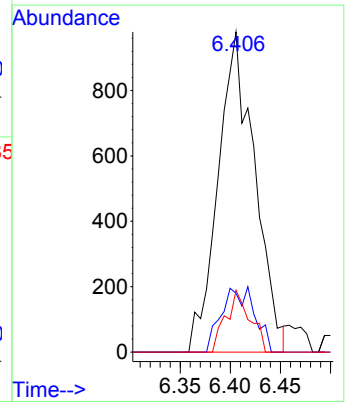



#43
Isopropyl Acetate
Concen: 0.87 ug/l
RT: 6.406 min Scan# 904
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

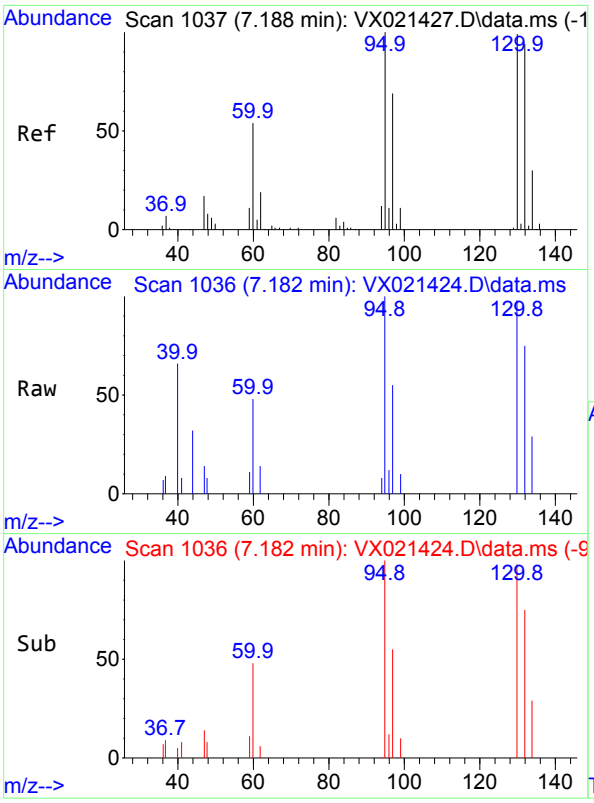
Tgt Ion: 43 Resp: 2489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.3 | 18.2 | 27.4 |
| 87 | 12.7 | 12.5 | 18.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

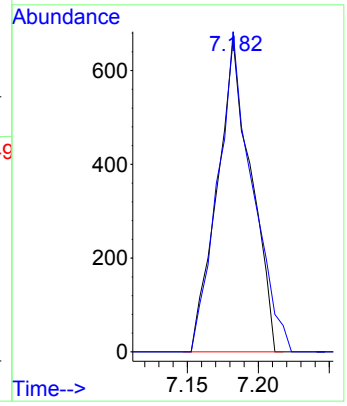
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

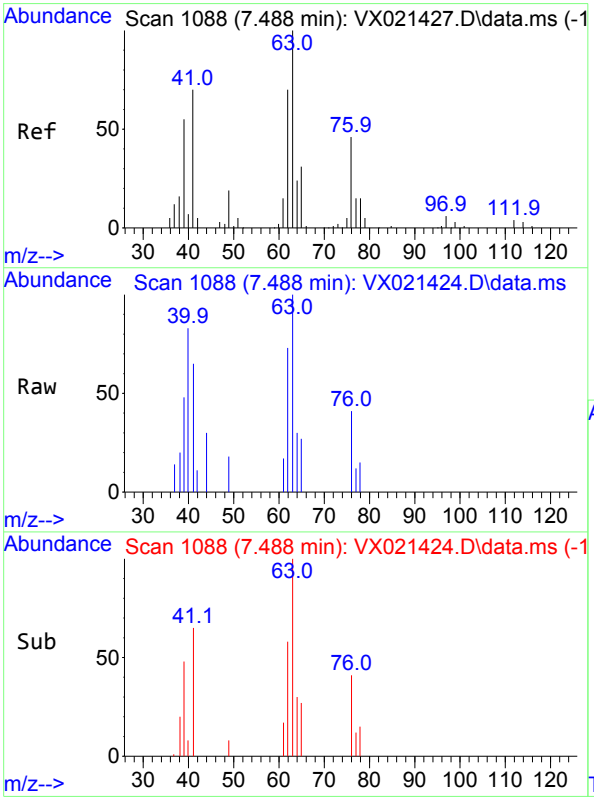



#44
Trichloroethene
Concen: 1.00 ug/l
RT: 7.182 min Scan# 1036
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:130 Resp: 1106

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 102.4 | 0.0 | 198.0 |

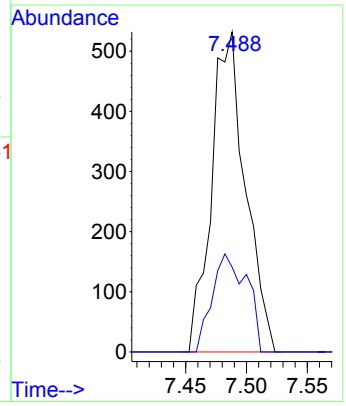



#45
1,2-Dichloropropane
Concen: 0.91 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

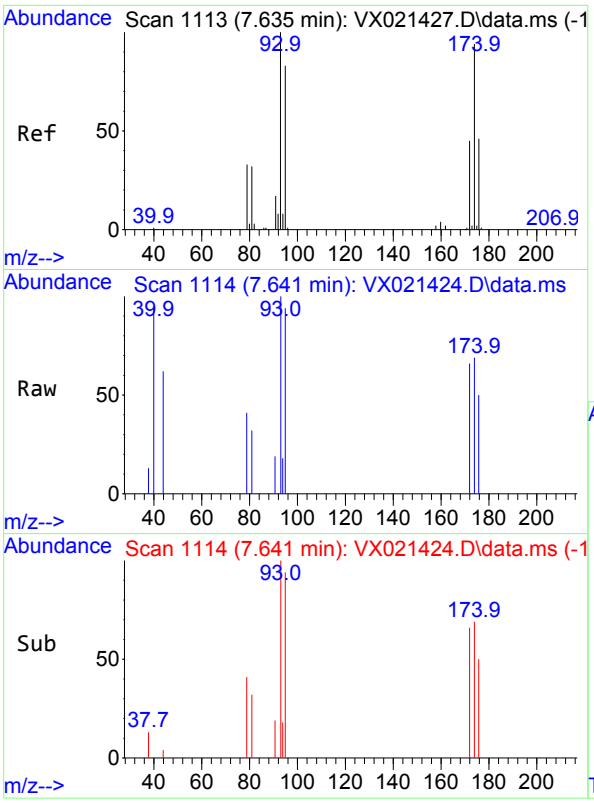
Tgt Ion: 63 Resp: 1031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 26.5 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

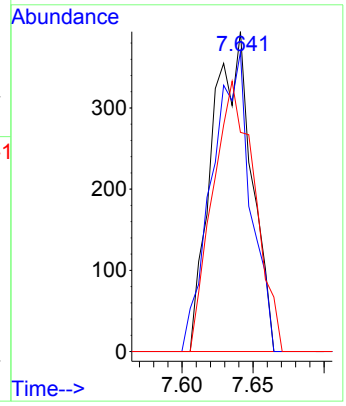
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

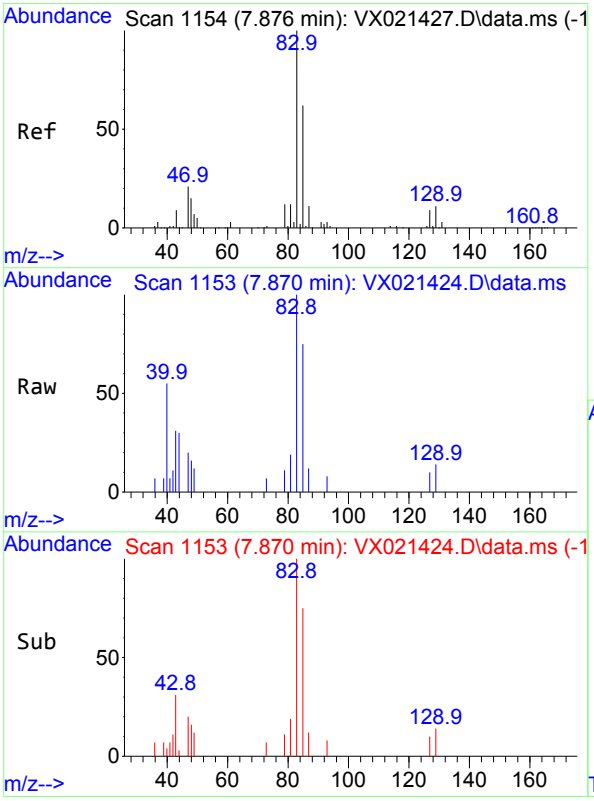



#46
Dibromomethane
Concen: 0.93 ug/l
RT: 7.641 min Scan# 1114
Delta R.T. 0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 93 Resp: 766

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 91.1 | 66.8 | 100.2 |
| 174 | 89.0 | 83.1 | 124.7 |

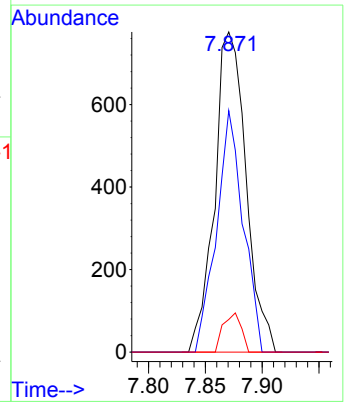



#47
Bromodichloromethane
Concen: 0.90 ug/l
RT: 7.870 min Scan# 1153
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

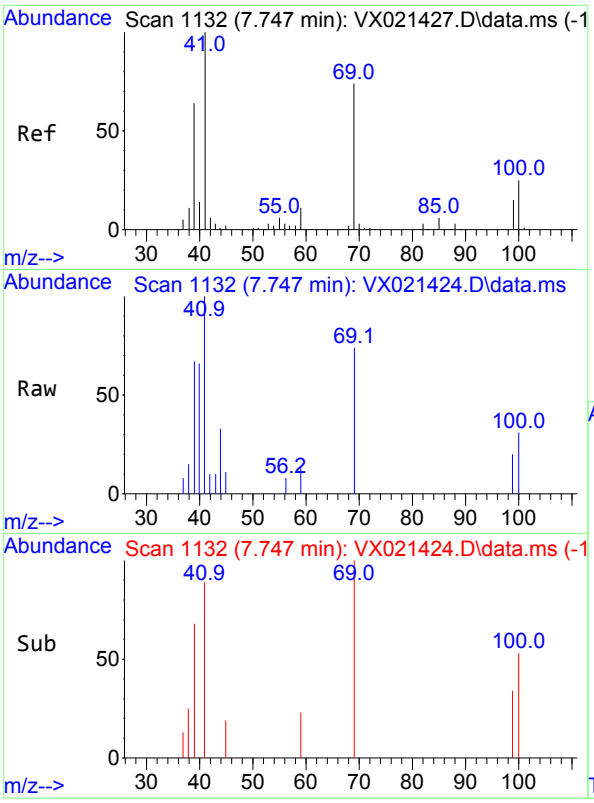
Tgt Ion: 83 Resp: 1494

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 75.4 | 51.4 | 77.0 |
| 127 | 10.2 | 6.8 | 10.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

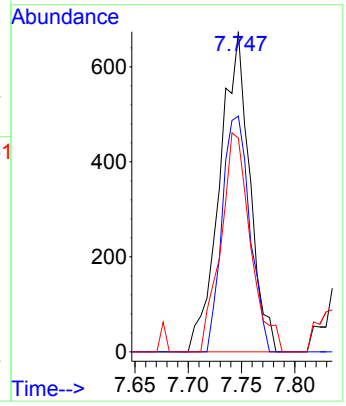
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

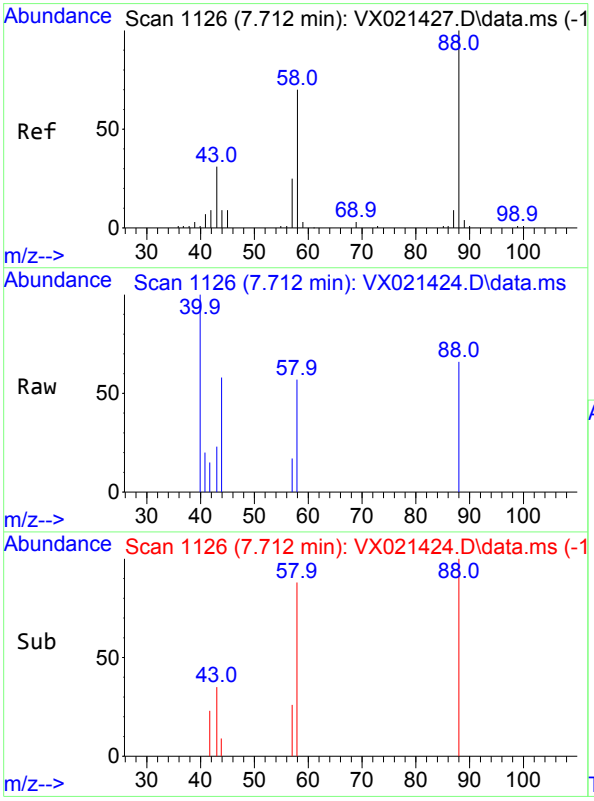



#48
Methyl methacrylate
Concen: 0.86 ug/l
RT: 7.747 min Scan# 1132
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 41 Resp: 1318

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 67.9 | 76.0 | 114.0# |
| 39 | 67.7 | 44.6 | 67.0# |

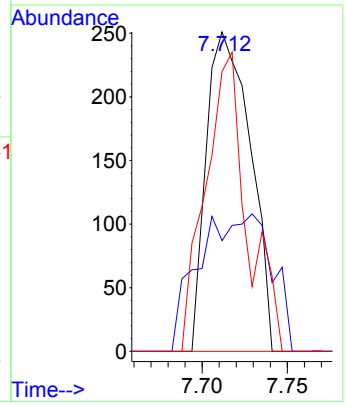



#49
1,4-Dioxane
Concen: 15.86 ug/l
RT: 7.712 min Scan# 1126
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

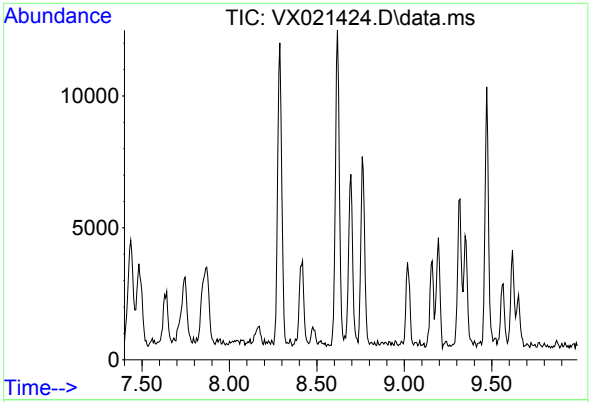
Tgt Ion: 88 Resp: 451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 70.7 | 23.2 | 34.8# |
| 58 | 88.2 | 55.0 | 82.4# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**
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3/25/2021 9:49:16 AM

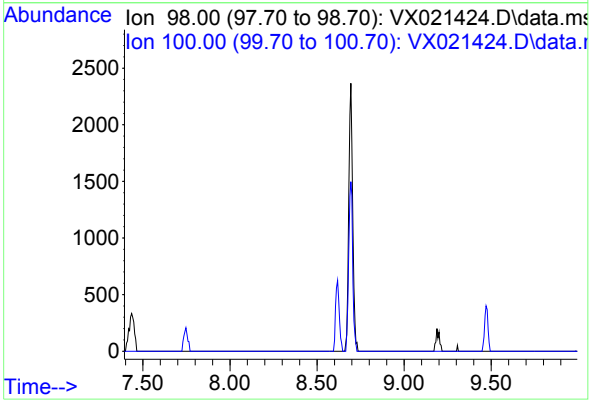


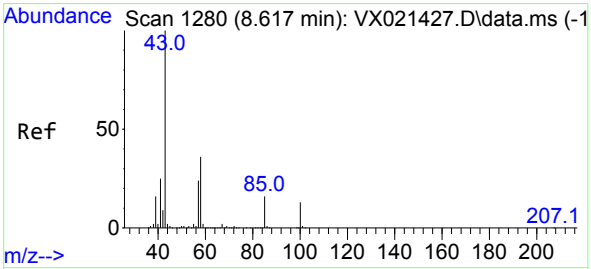

#50
Toluene-d8
Concen: 0.00 ug/l
Expected RT: 8.69 min

Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 98

| Sig | Exp Ratio |
|---|---|
| 98 | 100 |
| 100 | 64.9 |

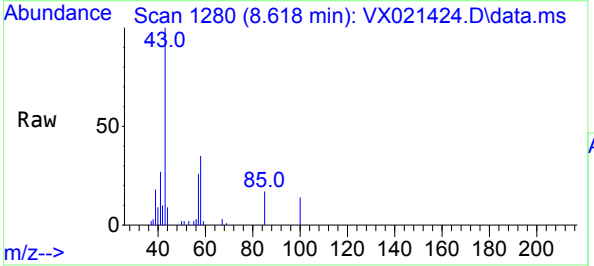


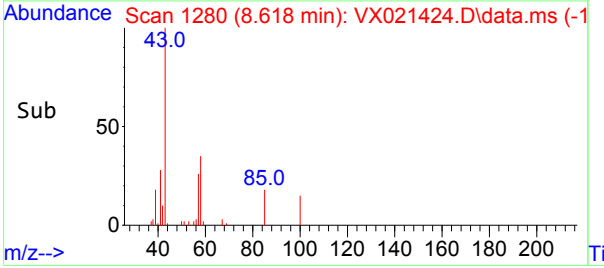



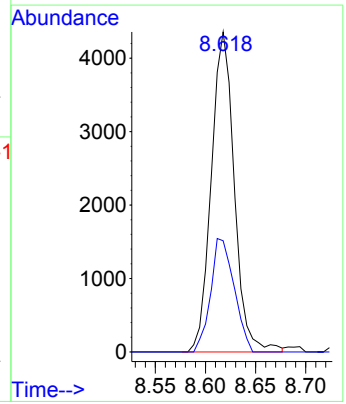

#51
4-Methyl-2-Pentanone
Concen: 4.12 ug/l
RT: 8.618 min Scan# 1280
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 43 Resp: 6965

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.1 | 35.4 | 53.0 |

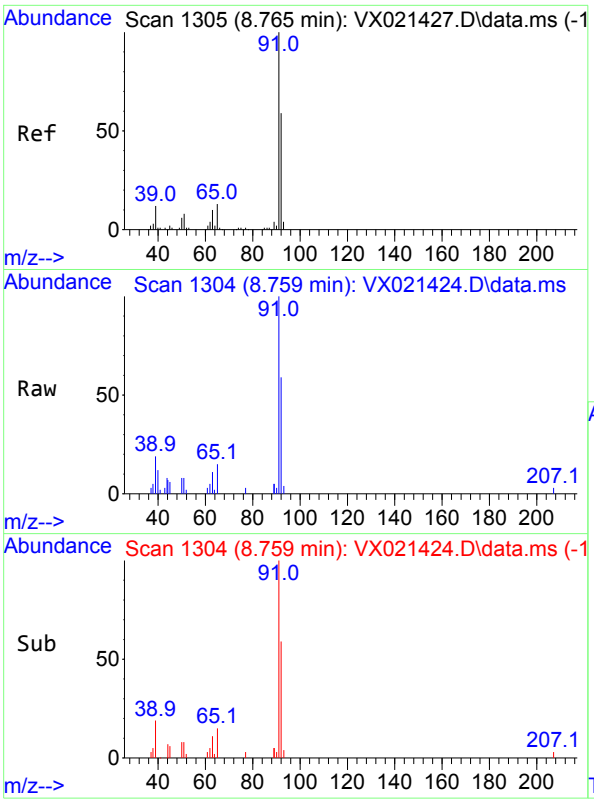


**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

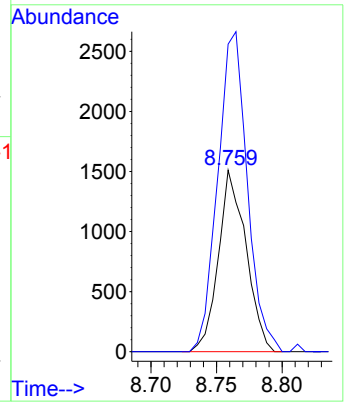
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

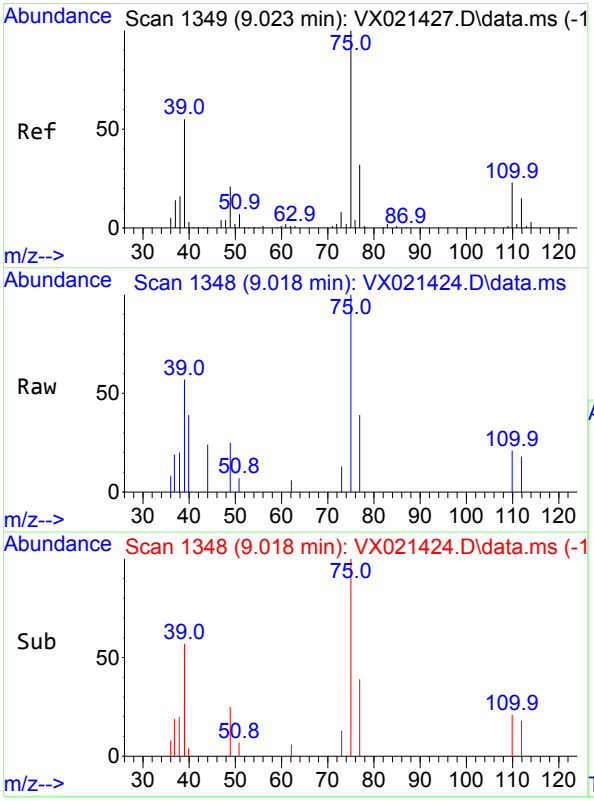



#52
Toluene
Concen: 0.85 ug/l
RT: 8.759 min Scan# 1304
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 92 Resp: 2213

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 188.4 | 137.1 | 205.7 |

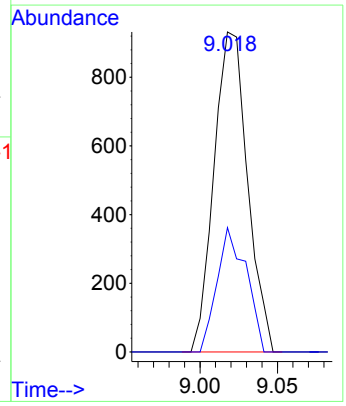



#53
t-1,3-Dichloropropene
Concen: 0.80 ug/l
RT: 9.018 min Scan# 1348
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

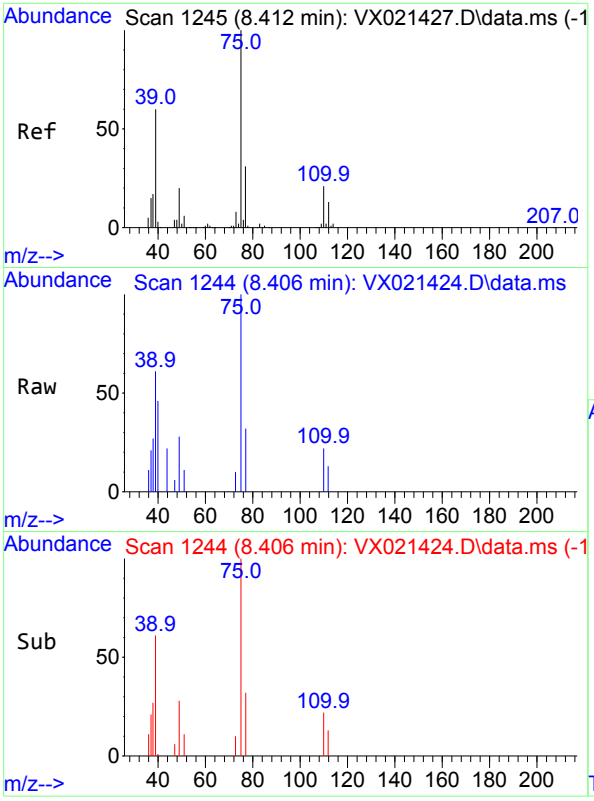
Tgt Ion: 75 Resp: 1404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 38.8 | 24.9 | 37.3# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

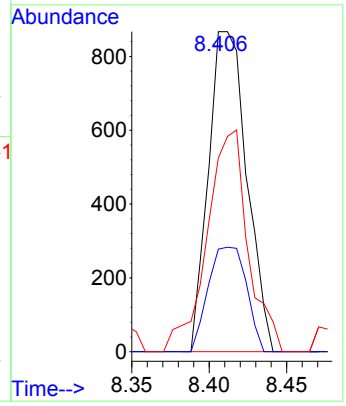
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

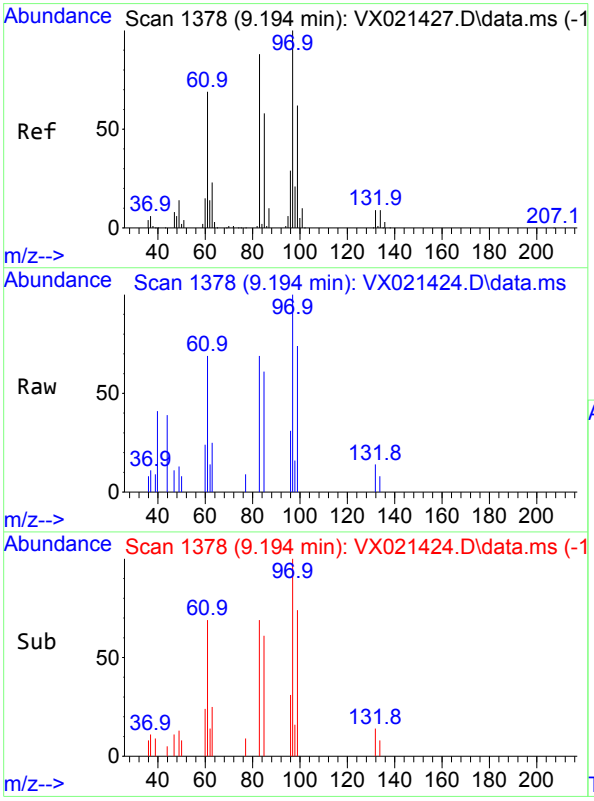



#54
cis-1,3-Dichloropropene
Concen: 0.80 ug/l
RT: 8.406 min Scan# 1244
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 75 Resp: 1491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.1 | 25.7 | 38.5 |
| 39 | 60.6 | 35.1 | 52.7# |

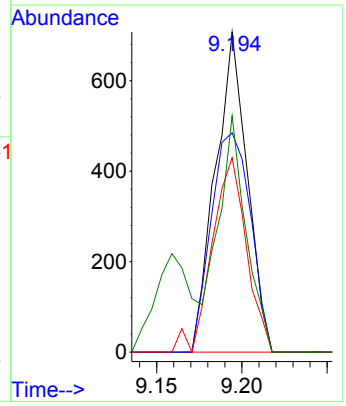



#55
1,1,2-Trichloroethane
Concen: 0.86 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

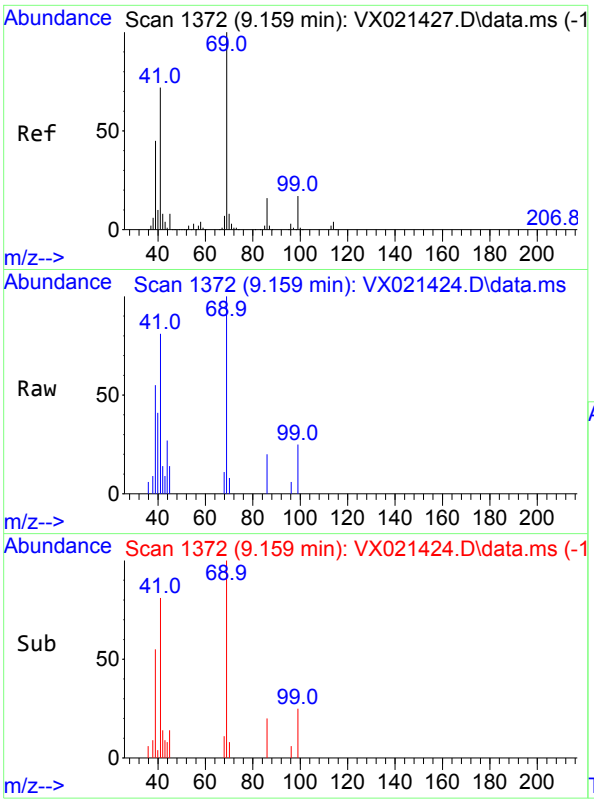
Tgt Ion: 97 Resp: 920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 68.5 | 69.3 | 103.9# |
| 85 | 60.7 | 44.3 | 66.5 |
| 99 | 73.9 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

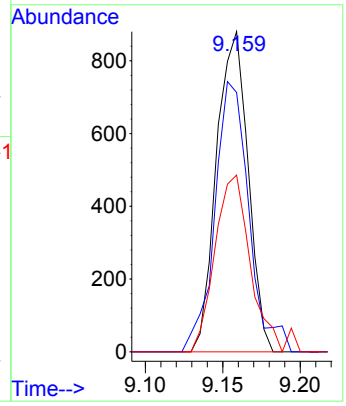
**Manual Integrations APPROVED**
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3/25/2021 9:49:16 AM

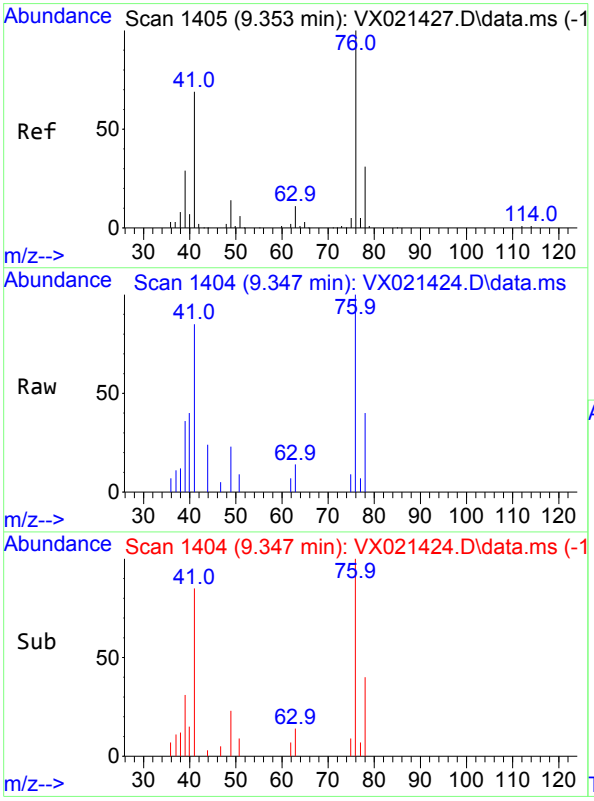



#56
Ethyl methacrylate
Concen: 0.73 ug/l
RT: 9.159 min Scan# 1372
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 69 Resp: 1246

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 91.1 | 46.8 | 70.2# |
| 39 | 63.2 | 24.7 | 37.1# |

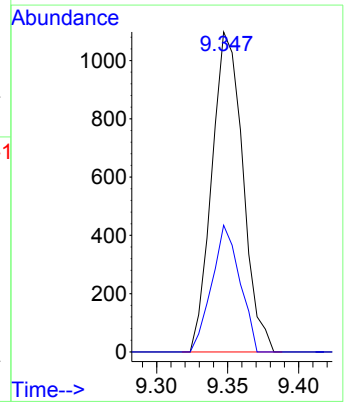



#57
1,3-Dichloropropane
Concen: 0.90 ug/l
RT: 9.347 min Scan# 1404
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

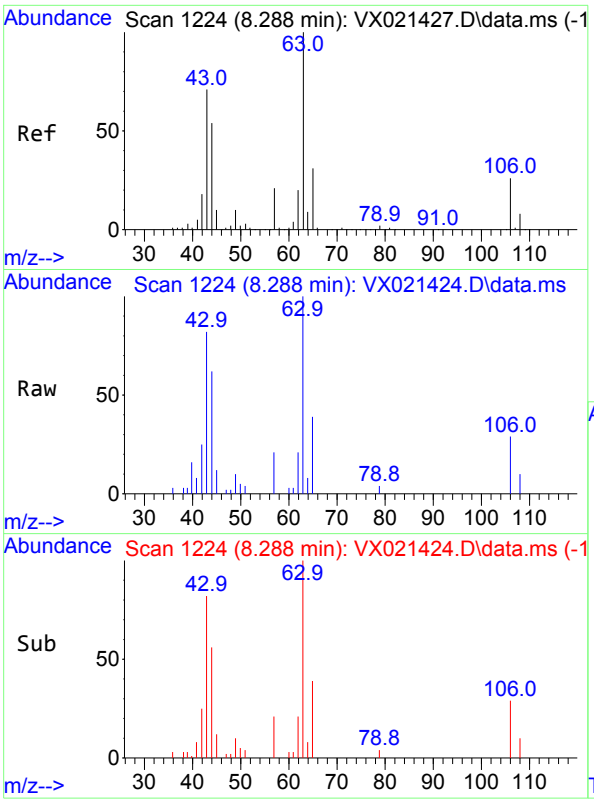
Tgt Ion: 76 Resp: 1667

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 35.8 | 26.2 | 39.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

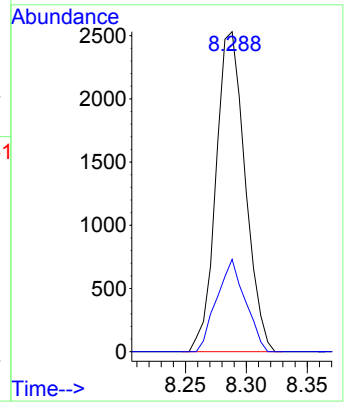
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

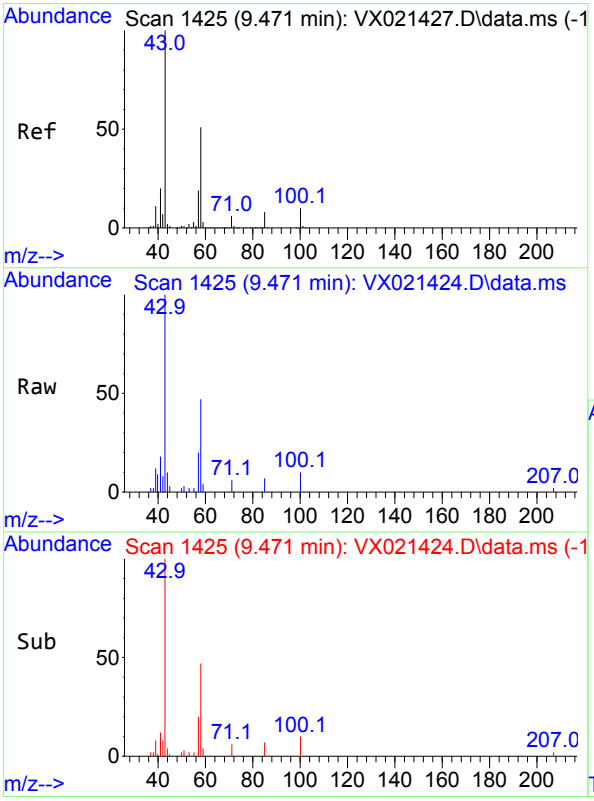



#58
2-Chloroethyl Vinyl ether
Concen: 4.50 ug/l
RT: 8.288 min Scan# 1224
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 63 Resp: 4226

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.2 | 23.5 | 35.3 |

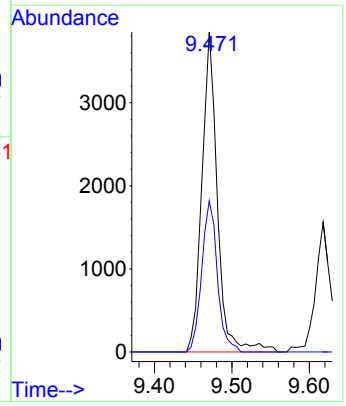



#59
2-Hexanone
Concen: 4.22 ug/l
RT: 9.471 min Scan# 1425
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

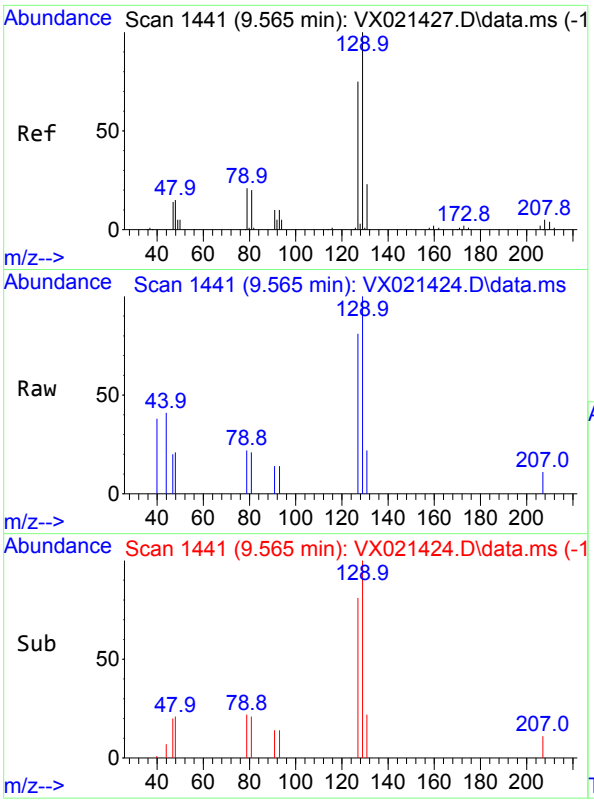
Tgt Ion: 43 Resp: 5338

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 47.8 | 30.9 | 92.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

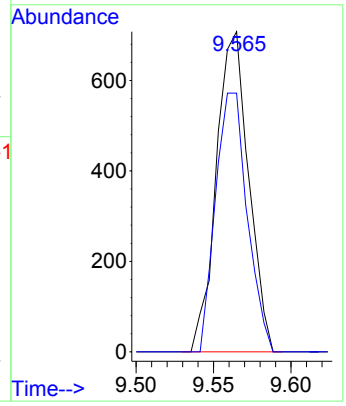
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

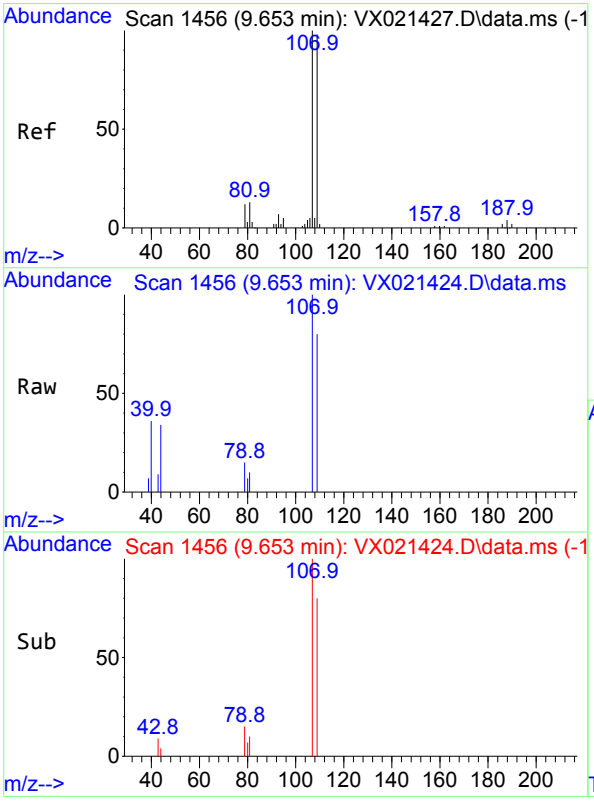



#60
Dibromochloromethane
Concen: 0.85 ug/l
RT: 9.565 min Scan# 1441
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:129 Resp: 1026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 79.3 | 38.4 | 115.2 |

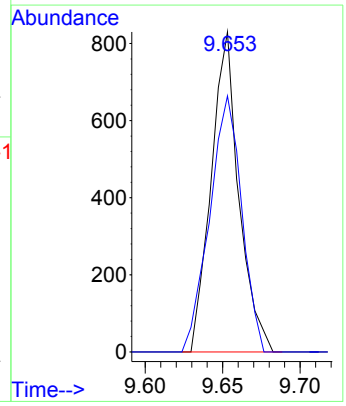



#61
1,2-Dibromoethane
Concen: 0.88 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

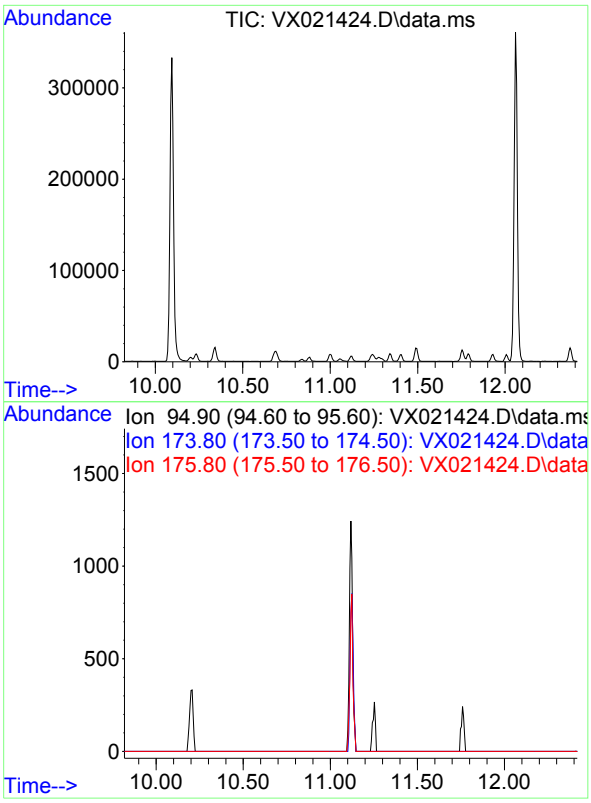
Tgt Ion:107 Resp: 1032

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 92.3 | 75.8 | 113.6 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

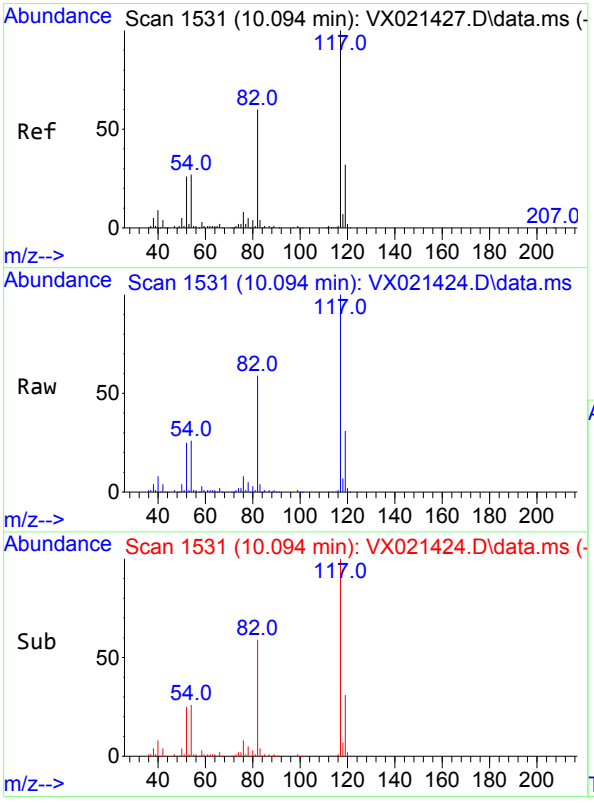



#62
4-Bromofluorobenzene
Concen: 0.00 ug/l
Expected RT: 11.12 min

Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 95

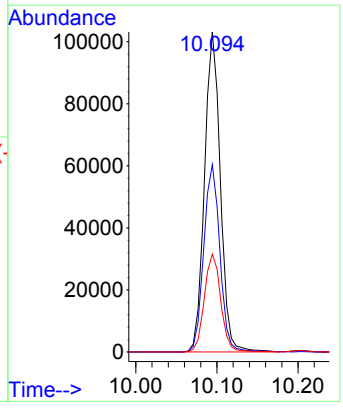
| Sig | Exp Ratio |
|---|---|
| 95 | 100 |
| 174 | 77.3 |
| 176 | 77.9 |




#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

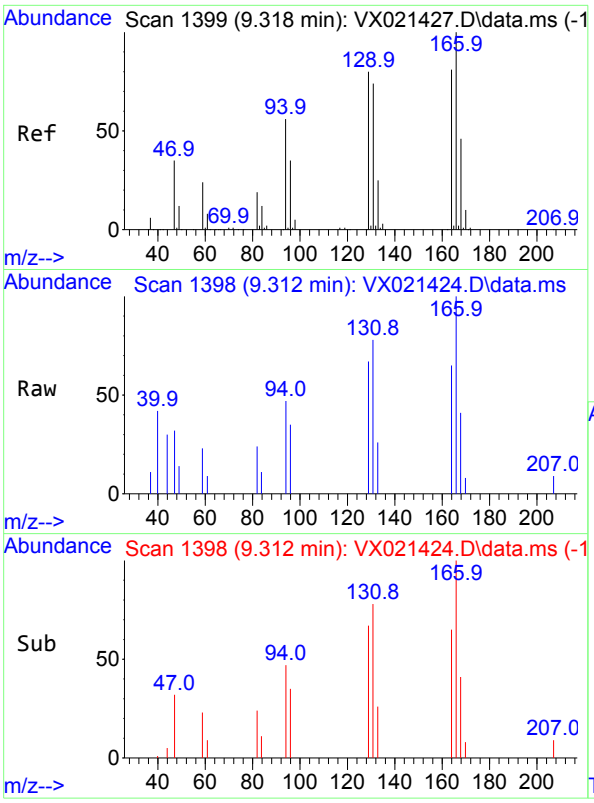
Tgt Ion:117 Resp: 139670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.5 | 47.4 | 71.2 |
| 119 | 30.6 | 26.6 | 39.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

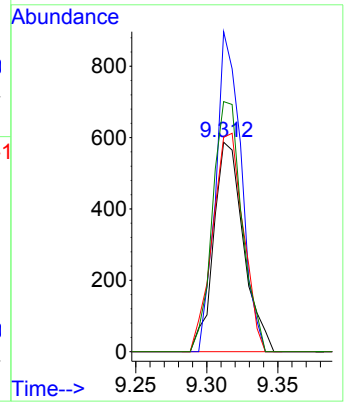
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

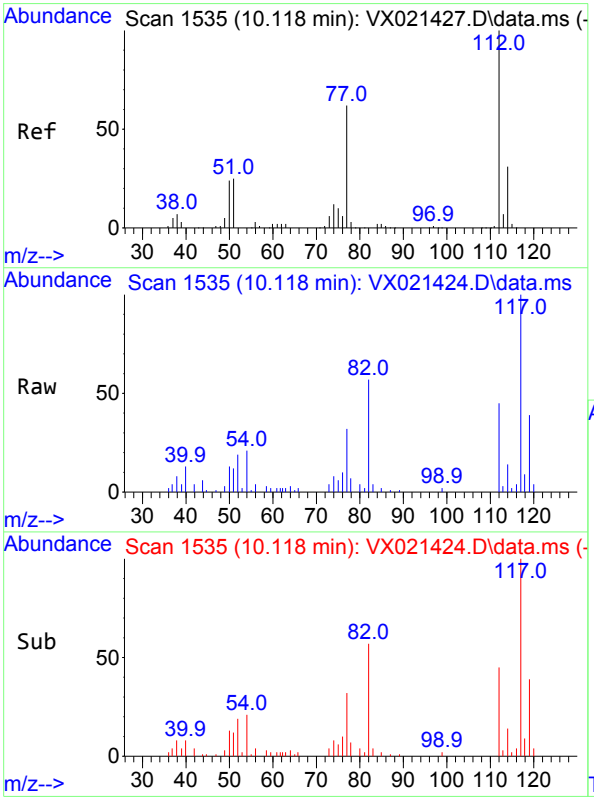



#64
Tetrachloroethene
Concen: 0.83 ug/l
RT: 9.312 min Scan# 1398
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:164 Resp: 858

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 152.8 | 103.4 | 155.2 |
| 129 | 102.4 | 70.8 | 106.2 |
| 131 | 119.4 | 72.5 | 108.7# |

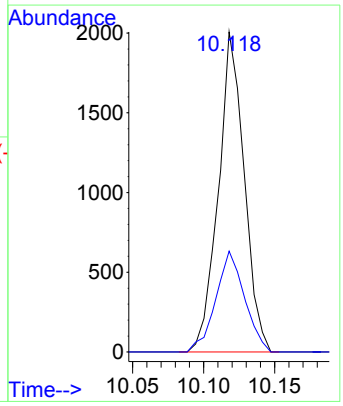



#65
Chlorobenzene
Concen: 0.88 ug/l
RT: 10.118 min Scan# 1535
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

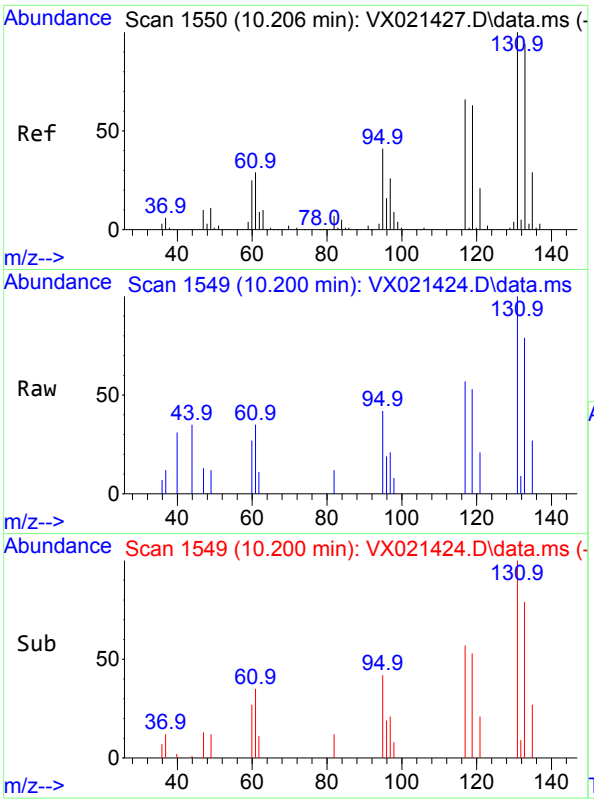
Tgt Ion:112 Resp: 2538

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.5 | 25.8 | 38.6 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

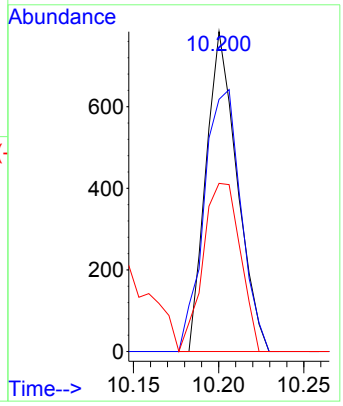
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

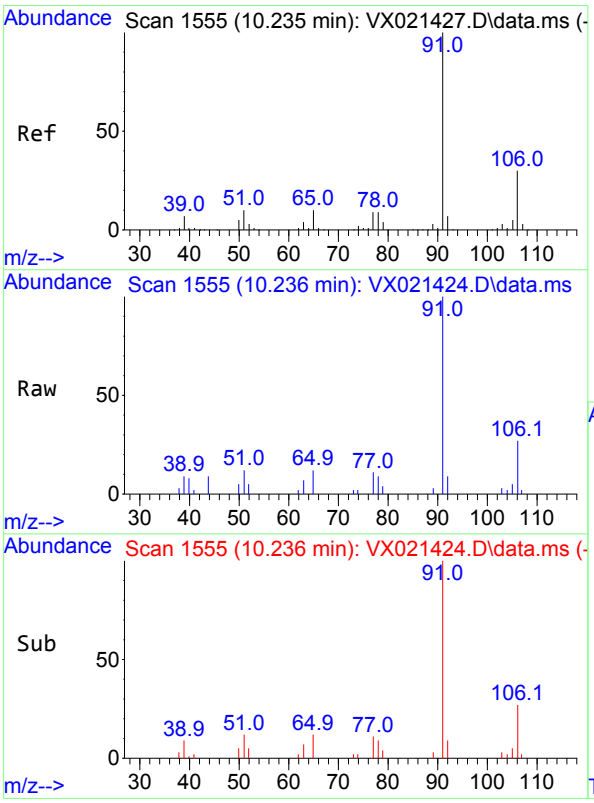



#66
1,1,1,2-Tetrachloroethane
Concen: 0.93 ug/l
RT: 10.200 min Scan# 1549
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:131 Resp: 994

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 97.3 | 47.7 | 143.1 |
| 119 | 0.0 | 32.1 | 96.5# |

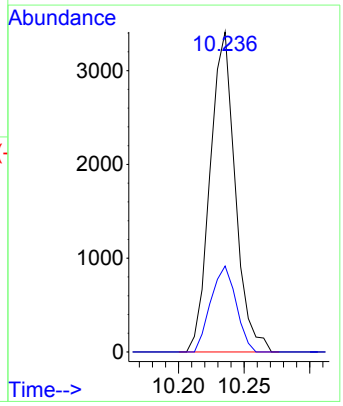



#67
Ethyl Benzene
Concen: 0.86 ug/l
RT: 10.236 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

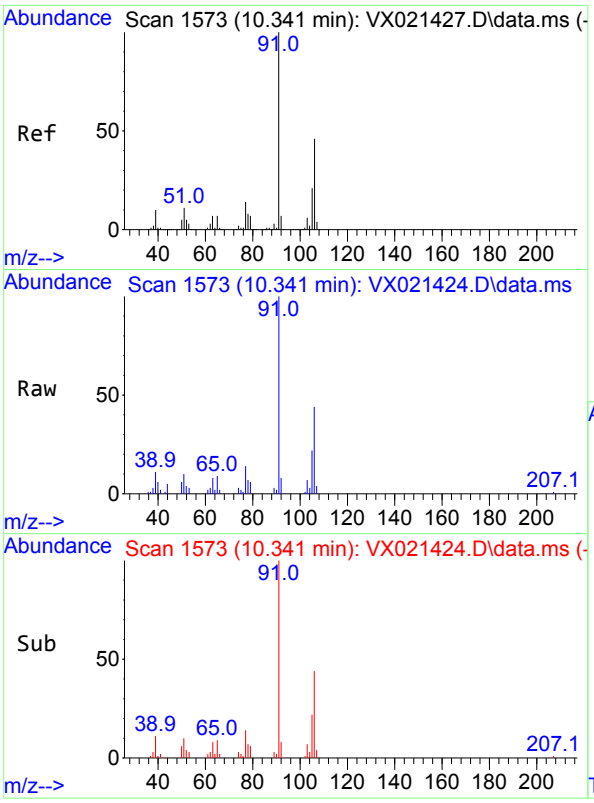
Tgt Ion: 91 Resp: 4548

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 26.9 | 24.6 | 37.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

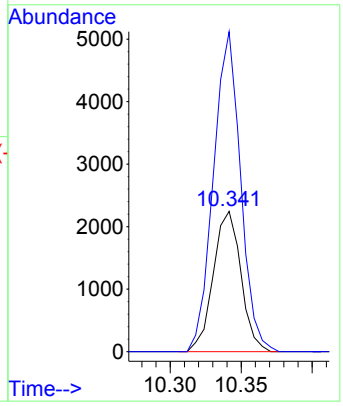
**Manual Integrations APPROVED**
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3/25/2021 9:49:16 AM

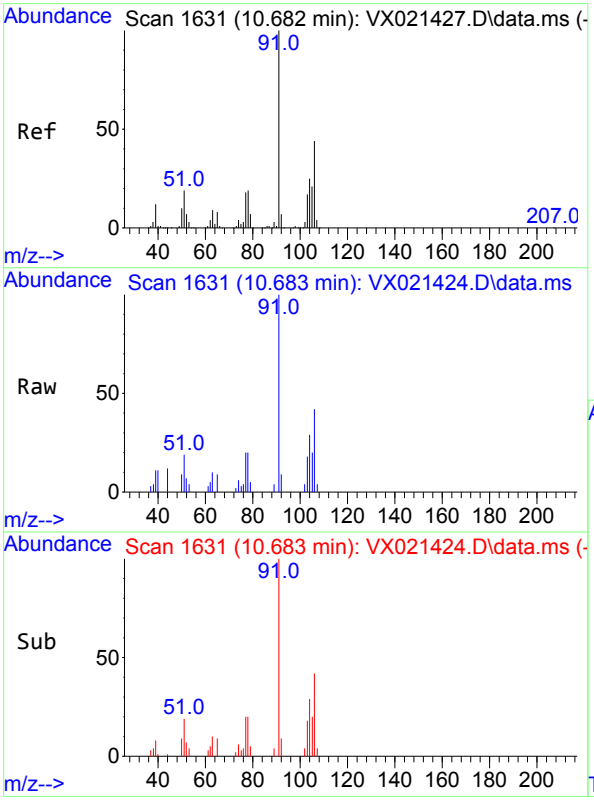



#68
m/p-Xylenes
Concen: 1.60 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:106 Resp: 3034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 224.5 | 162.8 | 244.2 |

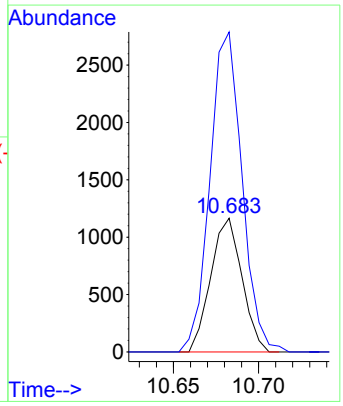



#69
o-Xylene
Concen: 0.81 ug/l
RT: 10.683 min Scan# 1631
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

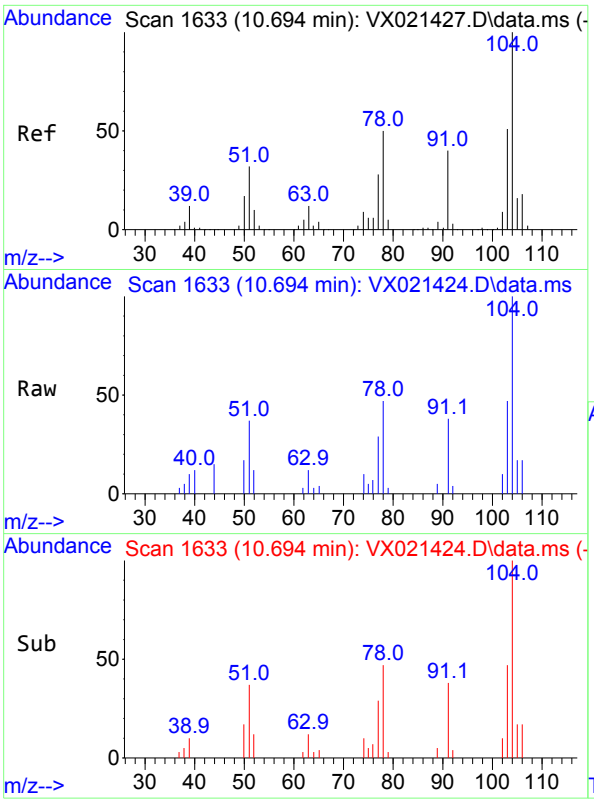
Tgt Ion:106 Resp: 1485

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 245.8 | 108.1 | 324.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

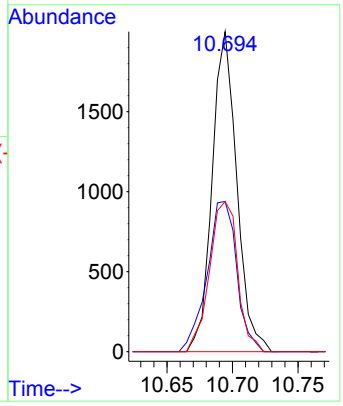
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

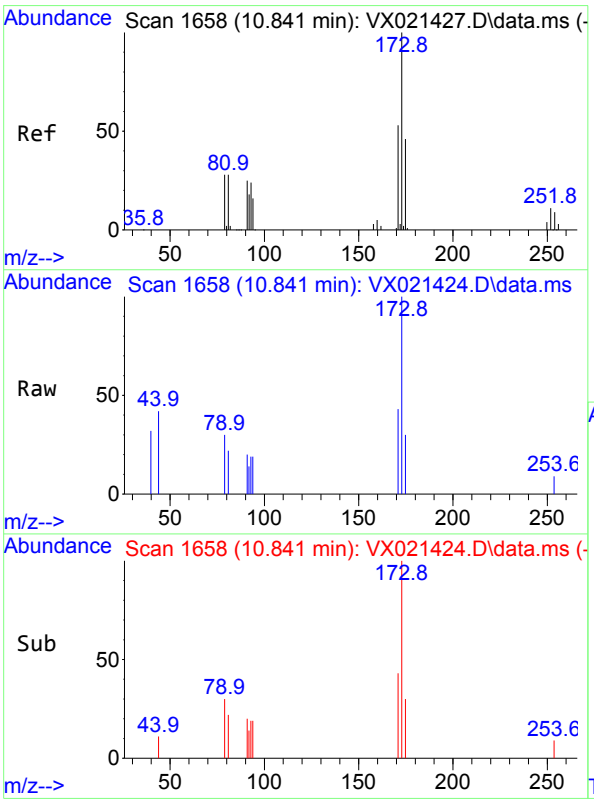



#70
Styrene
Concen: 0.84 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:104 Resp: 2611

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 56.6 | 40.0 | 60.0 |
| 103 | 53.6 | 43.4 | 65.0 |

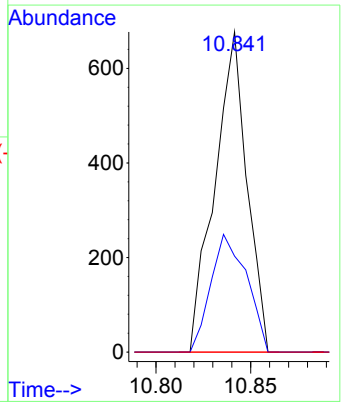



#71
Bromoform
Concen: 0.93 ug/l
RT: 10.841 min Scan# 1658
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

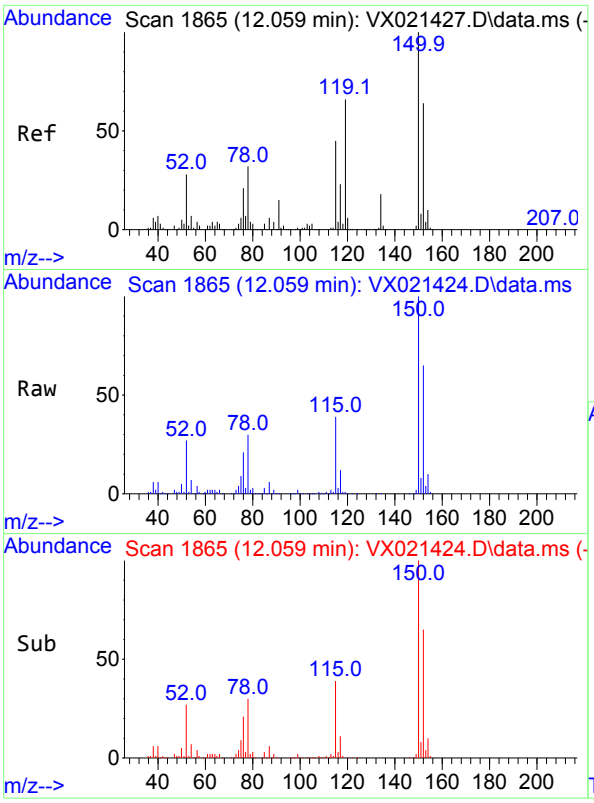
Tgt Ion:173 Resp: 802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 41.0 | 23.9 | 71.8 |
| 254 | 0.0 | 0.1 | 0.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

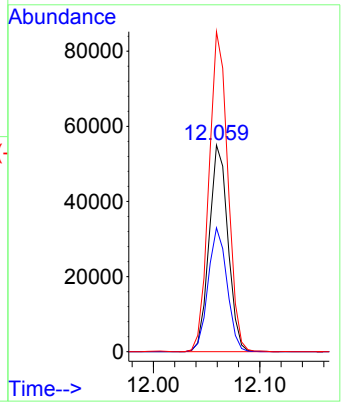
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

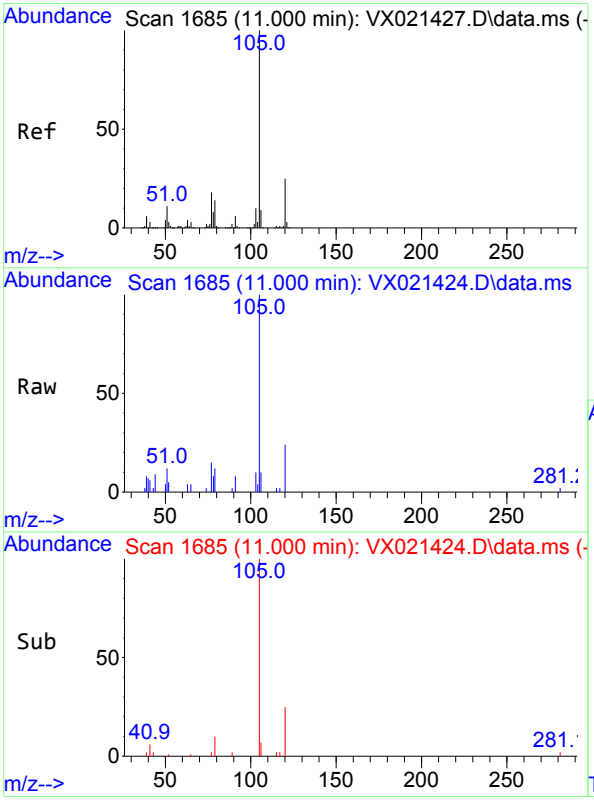



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:152 Resp: 67239

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 60.4 | 41.1 | 123.3 |
| 150 | 155.5 | 0.0 | 349.0 |

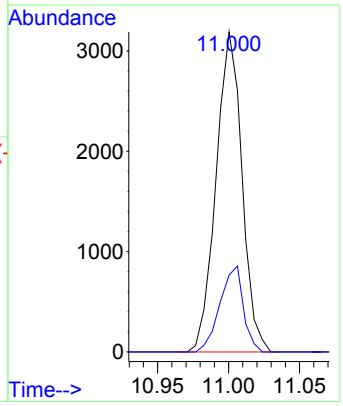



#73
Isopropylbenzene
Concen: 0.81 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

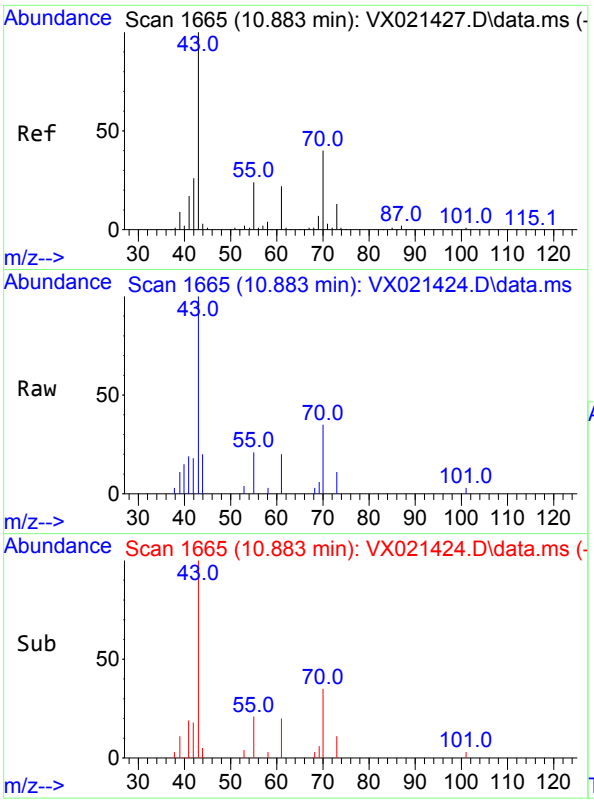
Tgt Ion:105 Resp: 4046

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 24.2 | 13.2 | 39.6 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

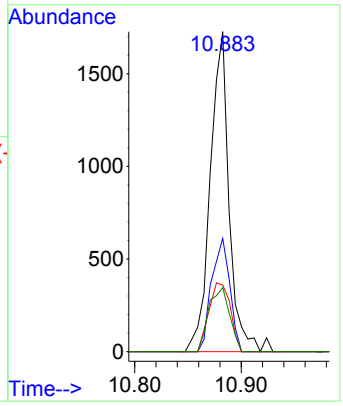
**Manual Integrations APPROVED**
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3/25/2021 9:49:16 AM

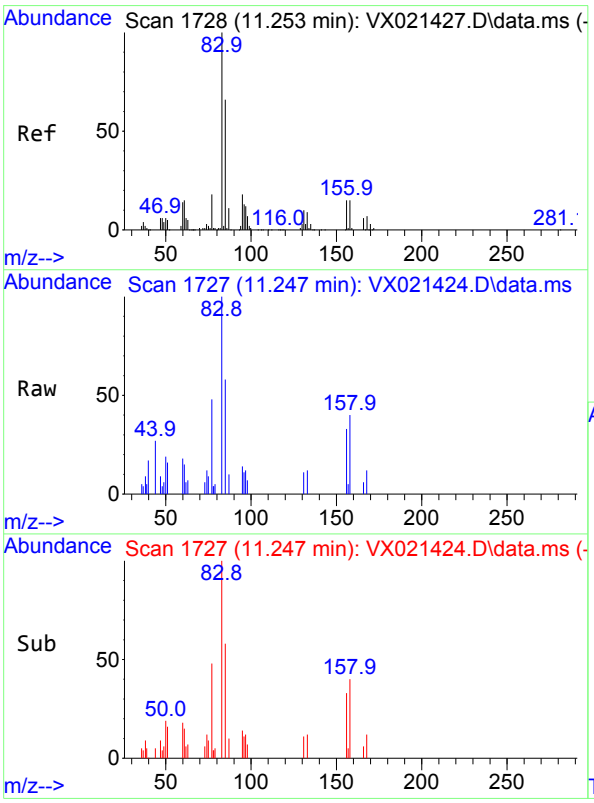



#74
N-amyl acetate
Concen: 0.86 ug/l
RT: 10.883 min Scan# 1665
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 43 Resp: 2131

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 33.9 | 39.0 | 58.6# |
| 55 | 24.3 | 21.5 | 32.3 |
| 61 | 22.0 | 22.1 | 33.1# |

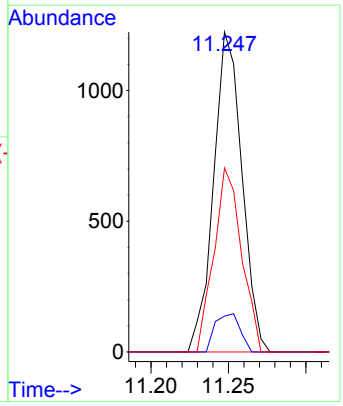



#75
1,1,2,2-Tetrachloroethane
Concen: 0.94 ug/l
RT: 11.247 min Scan# 1727
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

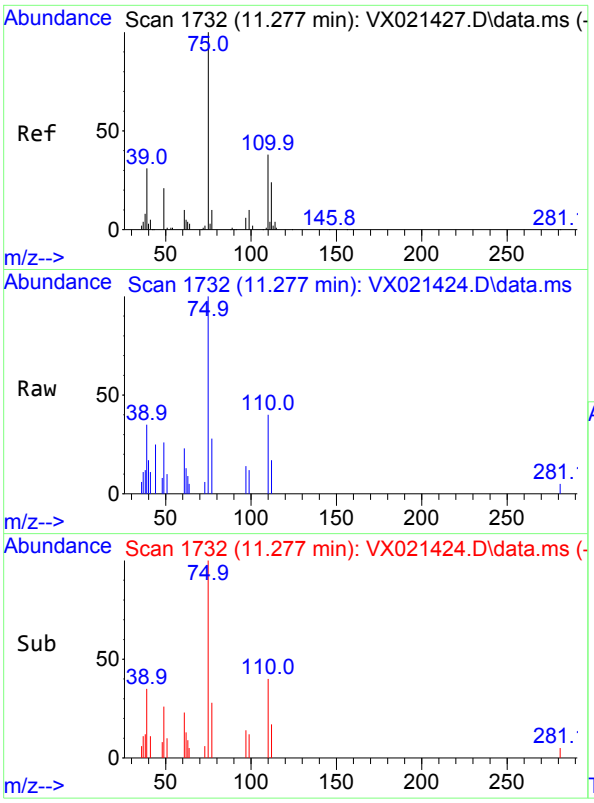
Tgt Ion: 83 Resp: 1557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.5 | 5.1 | 15.2 |
| 85 | 55.9 | 31.8 | 95.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

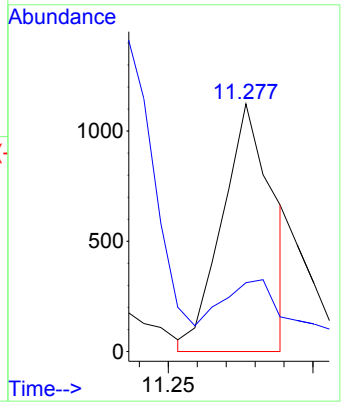
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3/25/2021 9:49:16 AM

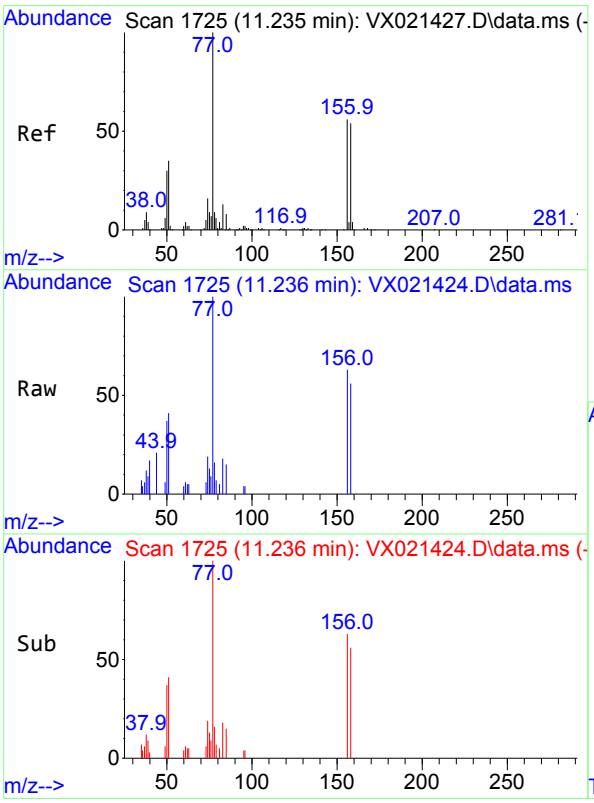



#76
1,2,3-Trichloropropane
Concen: 0.85 ug/l m
RT: 11.277 min Scan# 1732
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 75 Resp: 1356

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 42.0 | 19.1 | 57.5 |

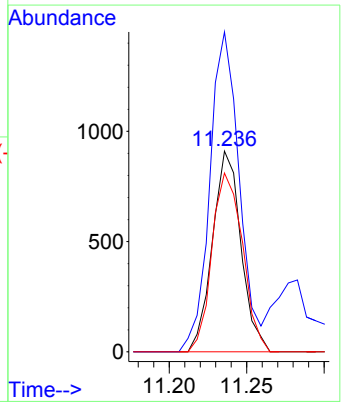



#77
Bromobenzene
Concen: 0.98 ug/l
RT: 11.236 min Scan# 1725
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

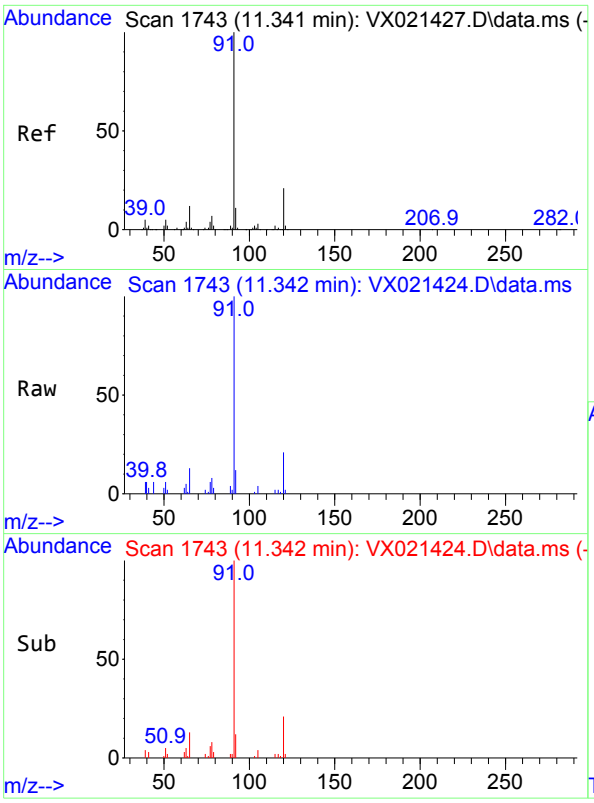
Tgt Ion:156 Resp: 1165

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 164.8 | 82.8 | 248.6 |
| 158 | 95.5 | 49.1 | 147.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

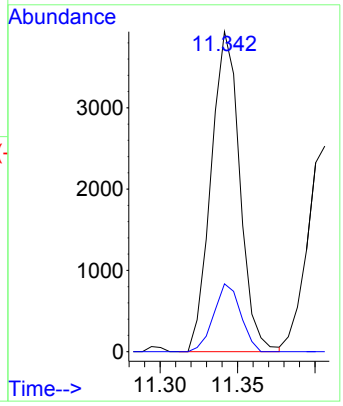
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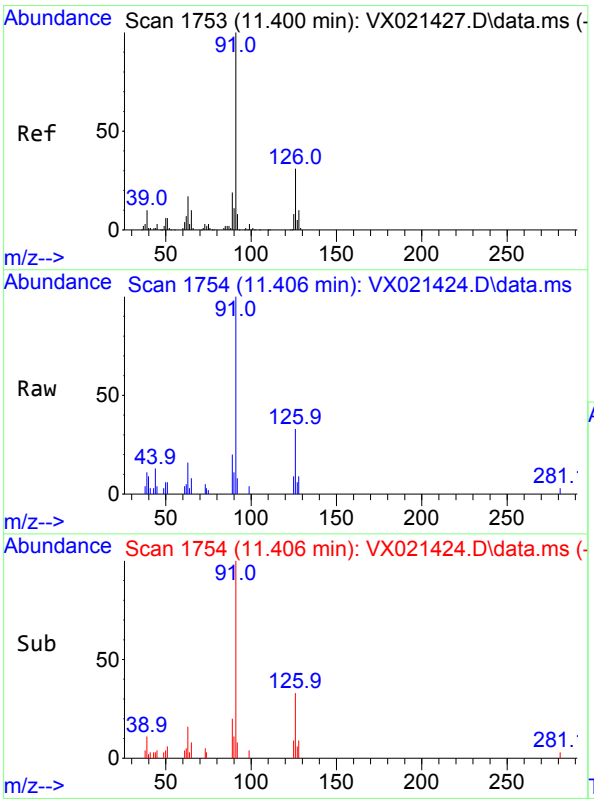



#78
n-propylbenzene
Concen: 0.88 ug/l
RT: 11.342 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 91 Resp: 5082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 19.8 | 11.5 | 34.5 |

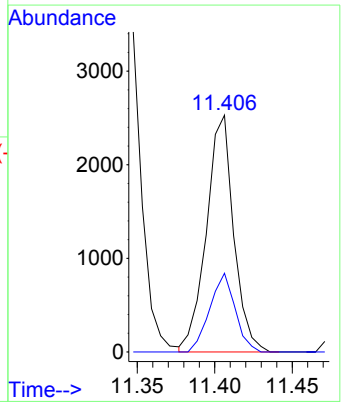



#79
2-Chlorotoluene
Concen: 0.88 ug/l
RT: 11.406 min Scan# 1754
Delta R.T. 0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

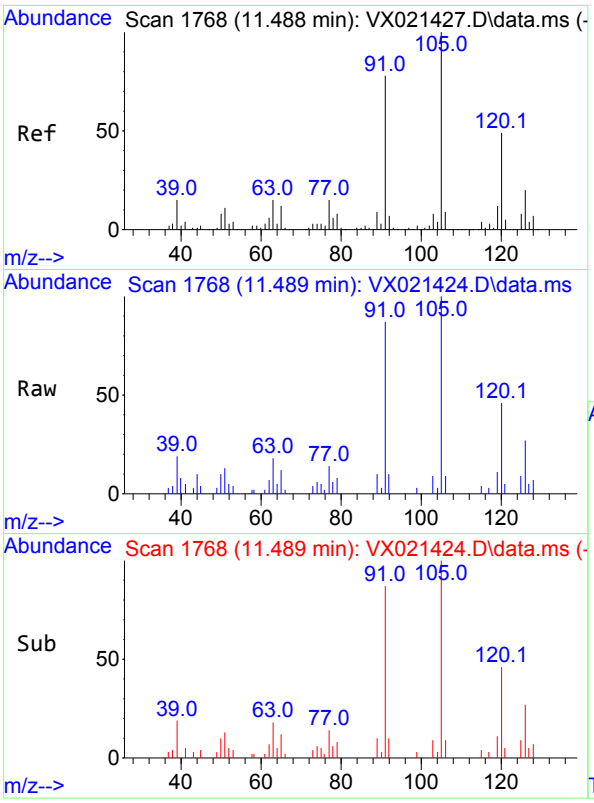
Tgt Ion: 91 Resp: 3097

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 30.9 | 16.6 | 49.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

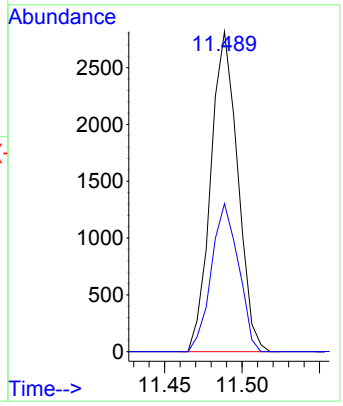
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3/25/2021 9:49:16 AM

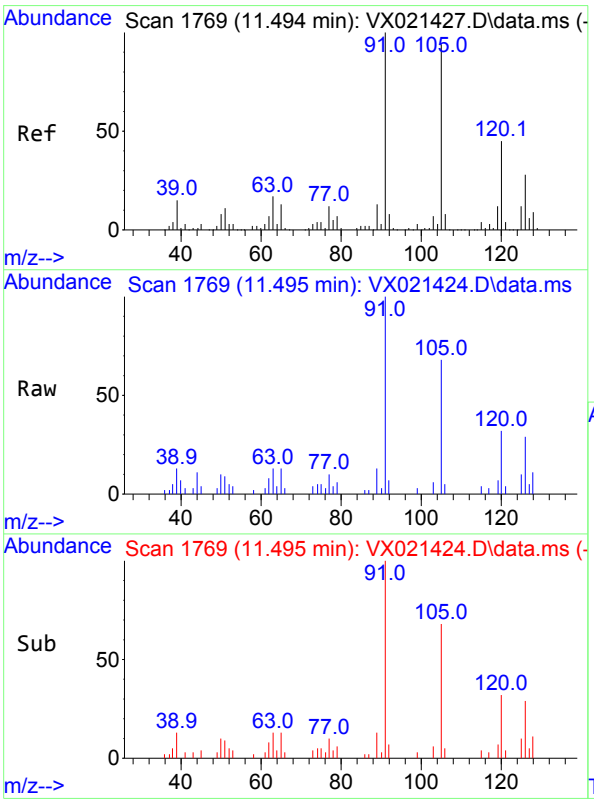



#80
1,3,5-Trimethylbenzene
Concen: 0.81 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:105 Resp: 3408

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.6 | 23.8 | 71.5 |

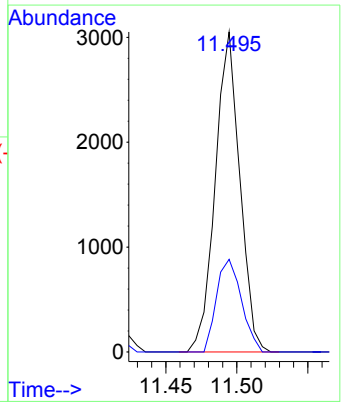



#82
4-Chlorotoluene
Concen: 0.88 ug/l
RT: 11.495 min Scan# 1769
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

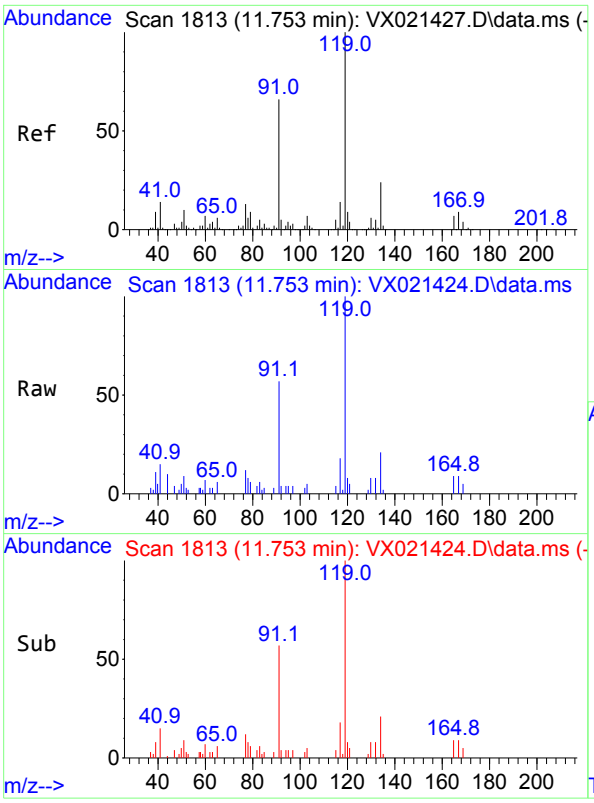
Tgt Ion: 91 Resp: 3659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 29.4 | 14.9 | 44.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

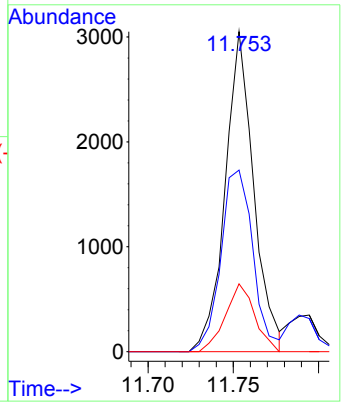
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MMDadoda
3/25/2021 9:49:16 AM

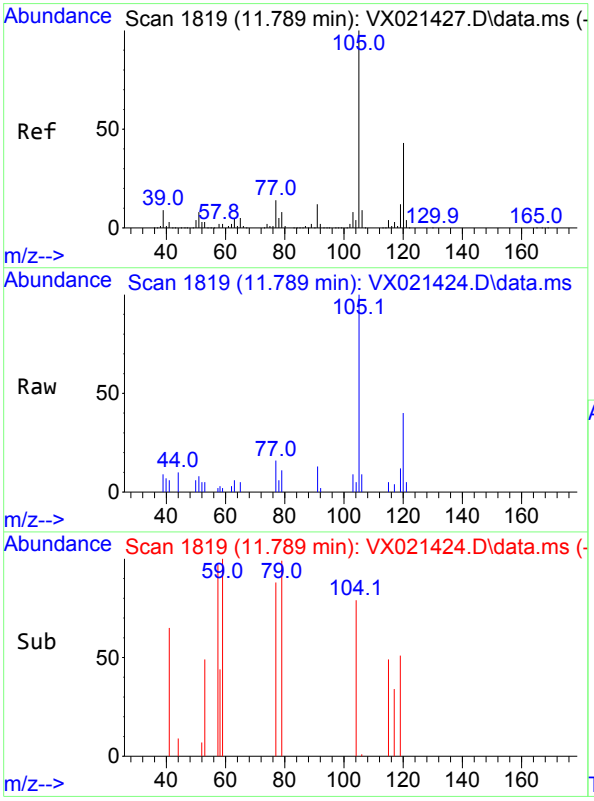



#83
tert-Butylbenzene
Concen: 0.89 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:119 Resp: 3559

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 64.1 | 27.9 | 83.7 |
| 134 | 21.7 | 11.3 | 33.9 |

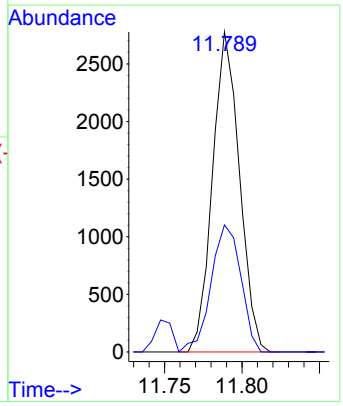



#84
1,2,4-Trimethylbenzene
Concen: 0.78 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

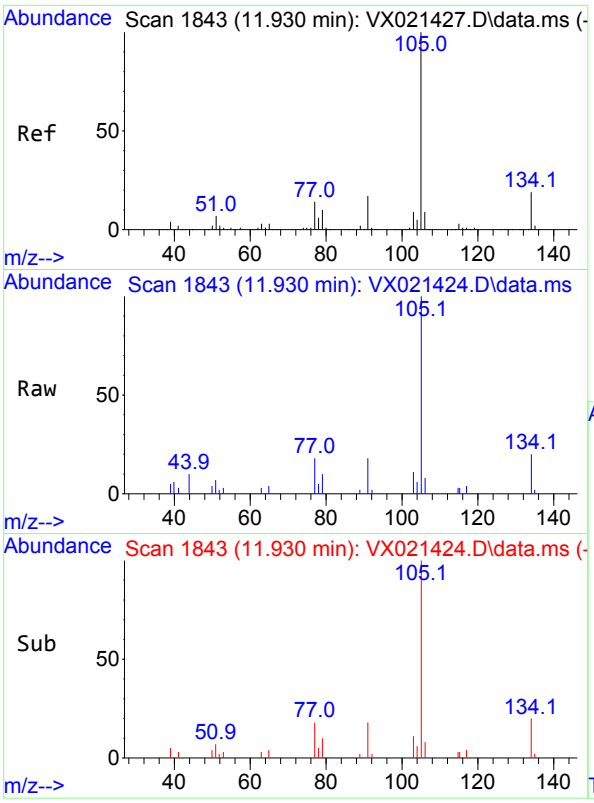
Tgt Ion:105 Resp: 3352

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.9 | 22.4 | 67.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

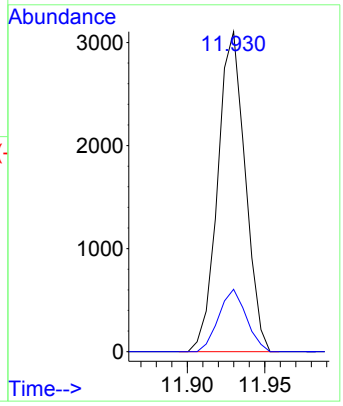
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

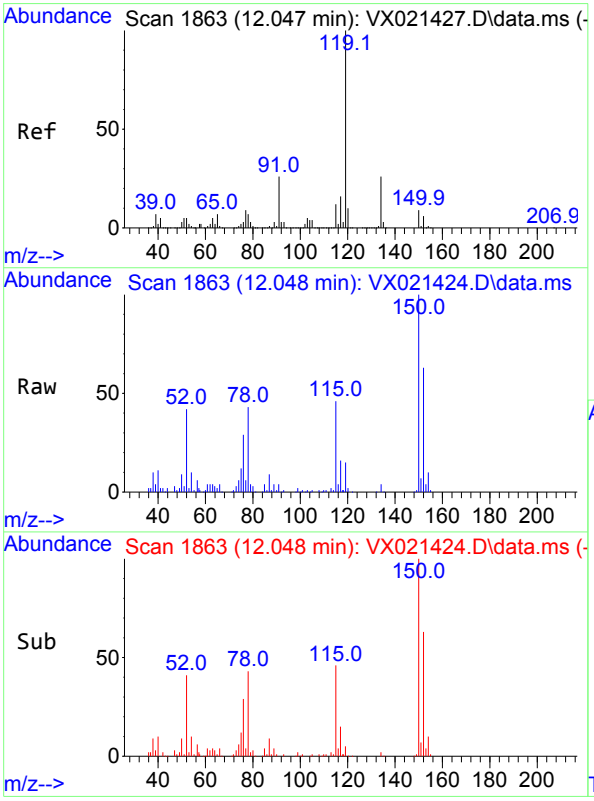



#85
sec-Butylbenzene
Concen: 0.81 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:105 Resp: 3823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.6 | 10.0 | 29.8 |

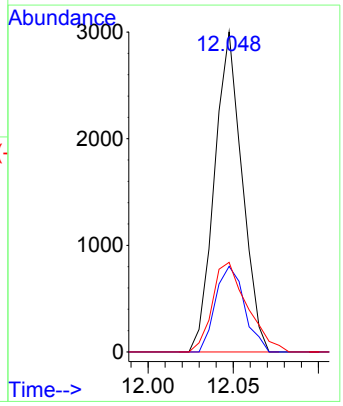



#86
p-Isopropyltoluene
Concen: 0.78 ug/l
RT: 12.048 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

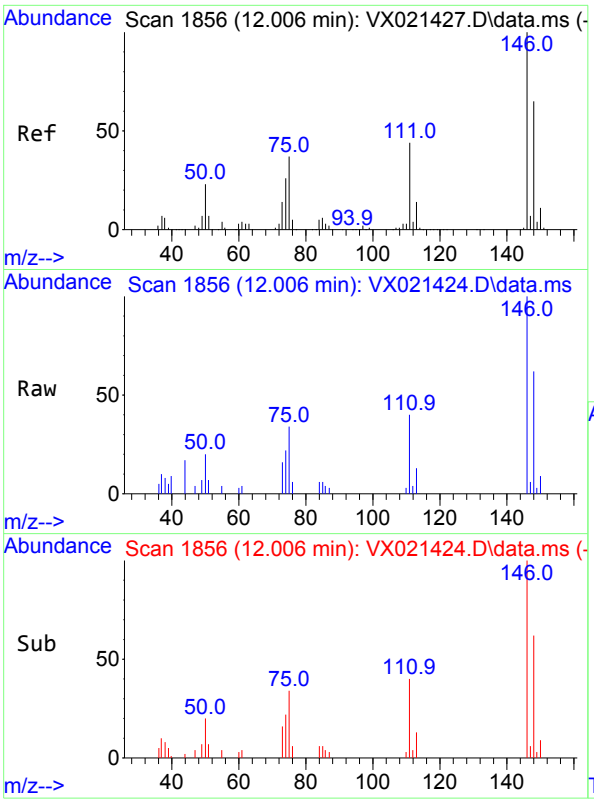
Tgt Ion:119 Resp: 3382

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 28.1 | 12.9 | 38.7 |
| 91 | 35.4 | 11.7 | 35.0# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

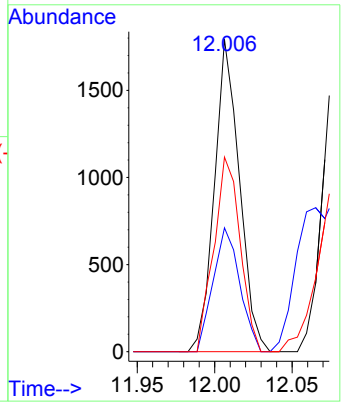
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

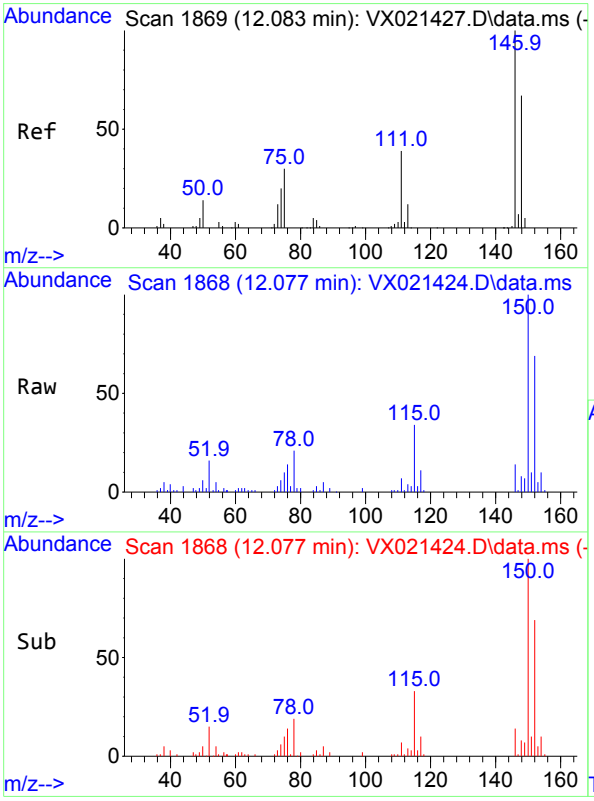



#87
1,3-Dichlorobenzene
Concen: 0.93 ug/l
RT: 12.006 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:146 Resp: 2011

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.3 | 20.2 | 60.5 |
| 148 | 65.5 | 31.9 | 95.7 |

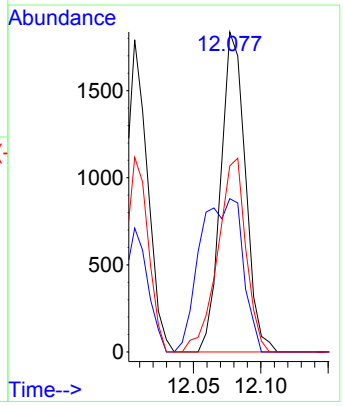



#88
1,4-Dichlorobenzene
Concen: 1.07 ug/l m
RT: 12.077 min Scan# 1868
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

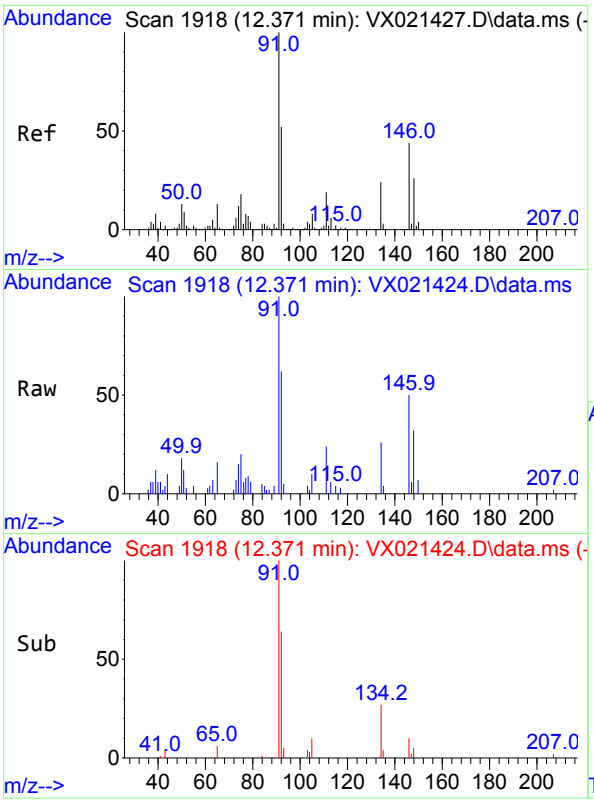
Tgt Ion:146 Resp: 2340

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 36.4 | 19.6 | 58.8 |
| 148 | 56.3 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

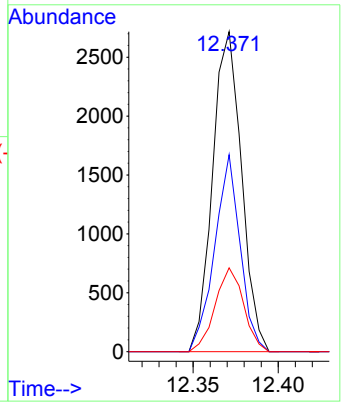
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

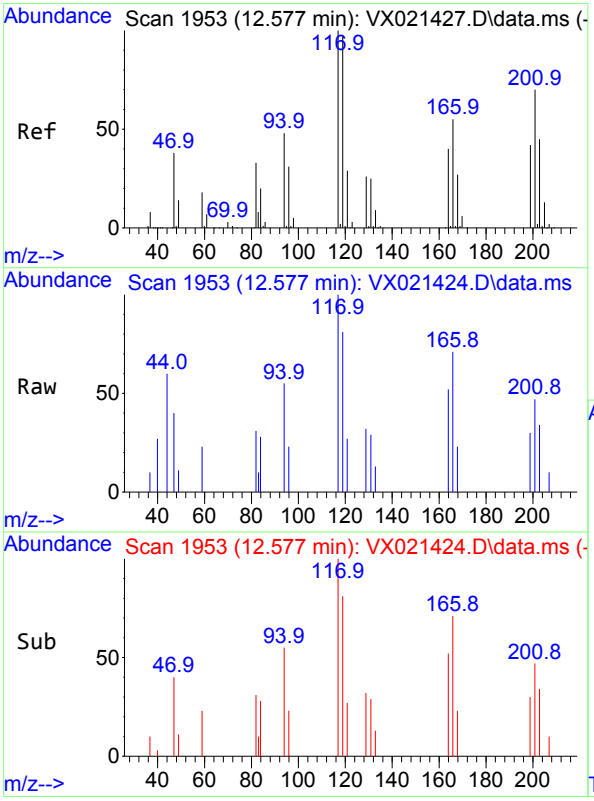



#89
n-Butylbenzene
Concen: 0.81 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion: 91 Resp: 3212

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 54.3 | 27.4 | 82.0 |
| 134 | 25.8 | 13.2 | 39.5 |

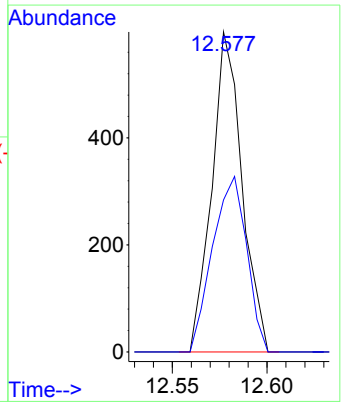



#90
Hexachloroethane
Concen: 0.98 ug/l
RT: 12.577 min Scan# 1953
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

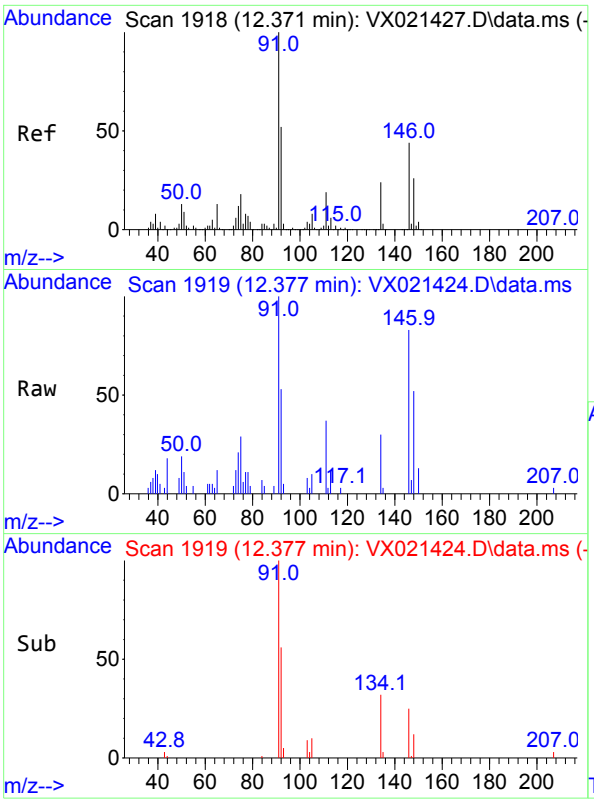
Tgt Ion:117 Resp: 662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 61.9 | 40.4 | 121.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

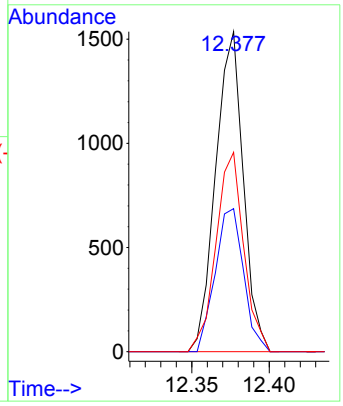
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

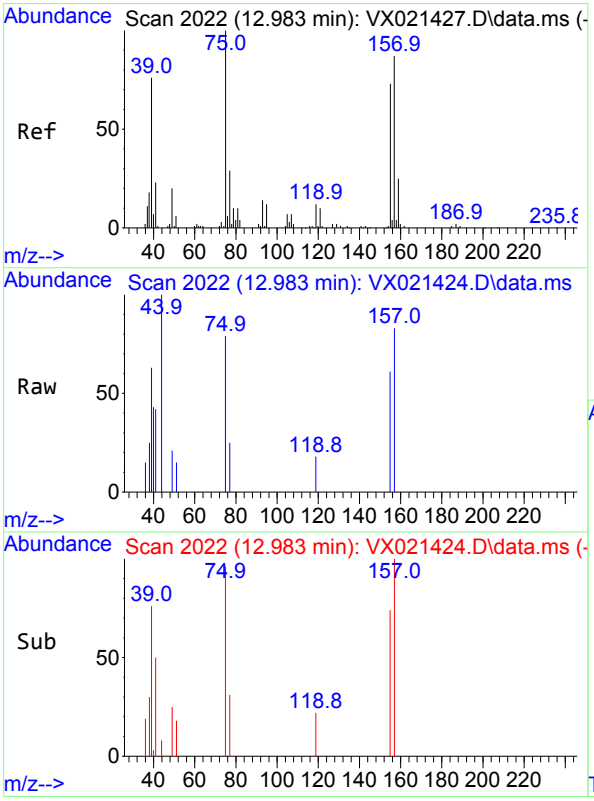



#91
1,2-Dichlorobenzene
Concen: 0.91 ug/l
RT: 12.377 min Scan# 1919
Delta R.T. 0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:146 Resp: 1902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 46.0 | 20.8 | 62.2 |
| 148 | 62.7 | 31.9 | 95.5 |

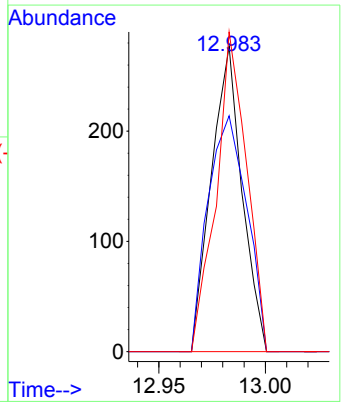



#92
1,2-Dibromo-3-Chloropropane
Concen: 0.66 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

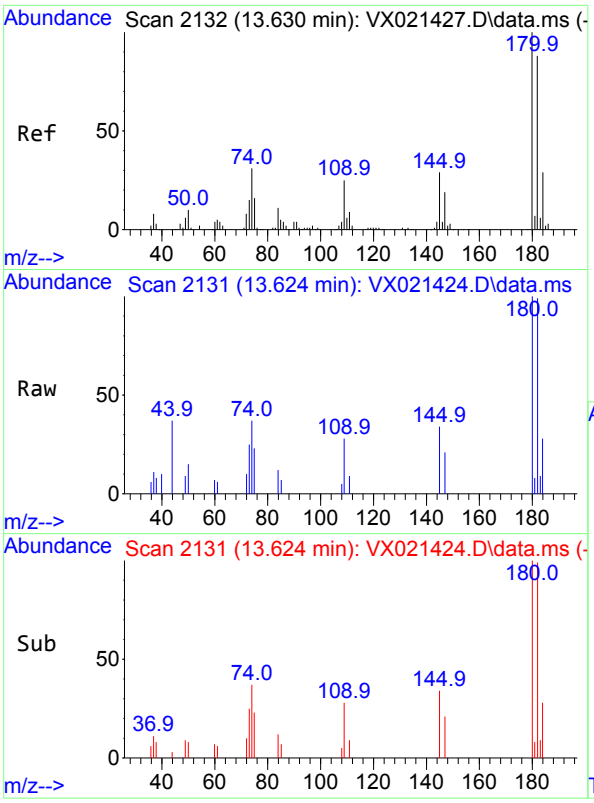
Tgt Ion: 75 Resp: 278

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 97.1 | 45.3 | 135.9 |
| 157 | 104.0 | 57.7 | 173.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

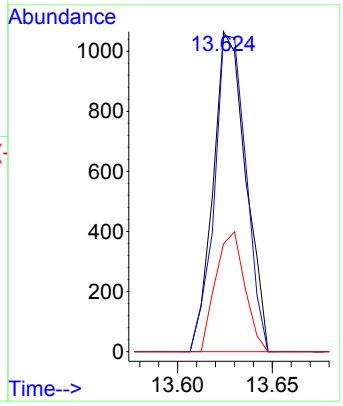
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

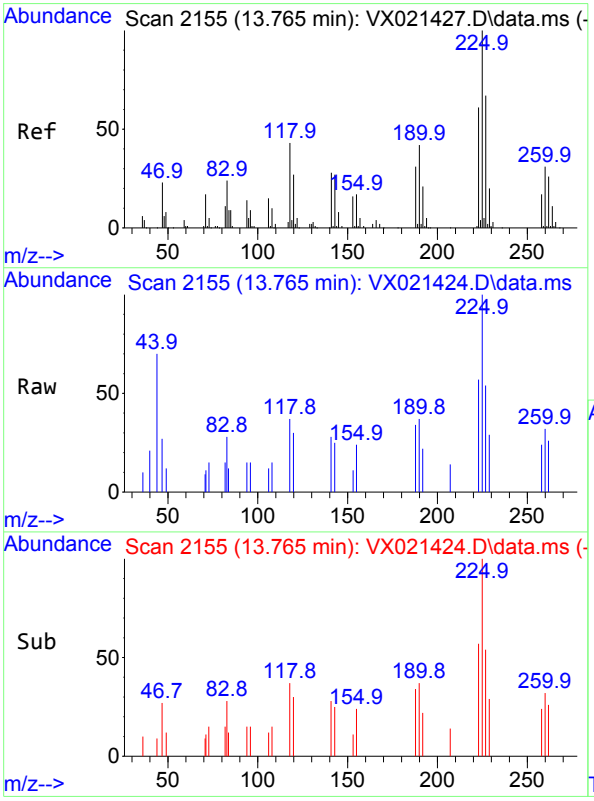



#93
1,2,4-Trichlorobenzene
Concen: 0.93 ug/l
RT: 13.624 min Scan# 2131
Delta R.T. -0.006 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:180 Resp: 1276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.8 | 47.7 | 143.1 |
| 145 | 33.4 | 15.0 | 45.0 |

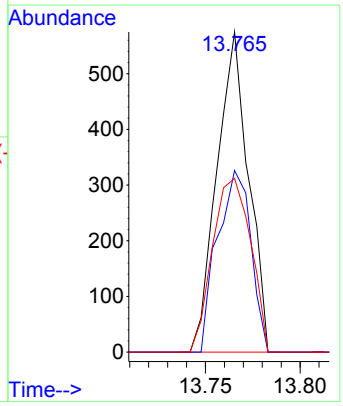



#94
Hexachlorobutadiene
Concen: 1.15 ug/l
RT: 13.765 min Scan# 2155
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

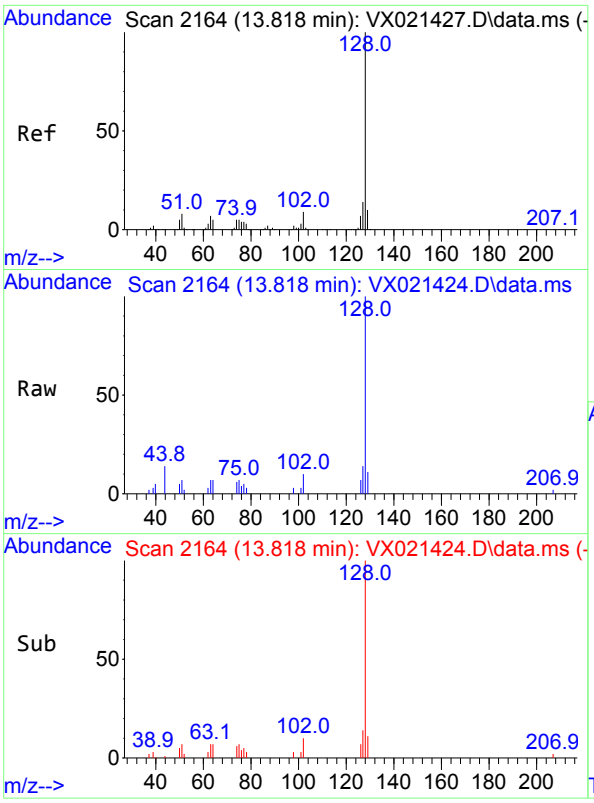
Tgt Ion:225 Resp: 668

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 59.9 | 31.1 | 93.2 |
| 227 | 65.4 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC001

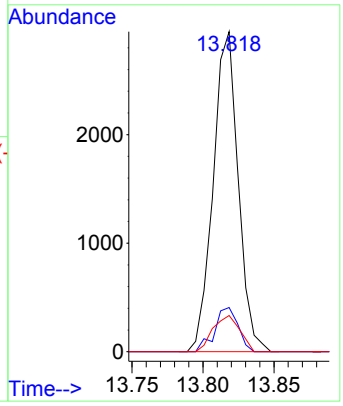
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:16 AM

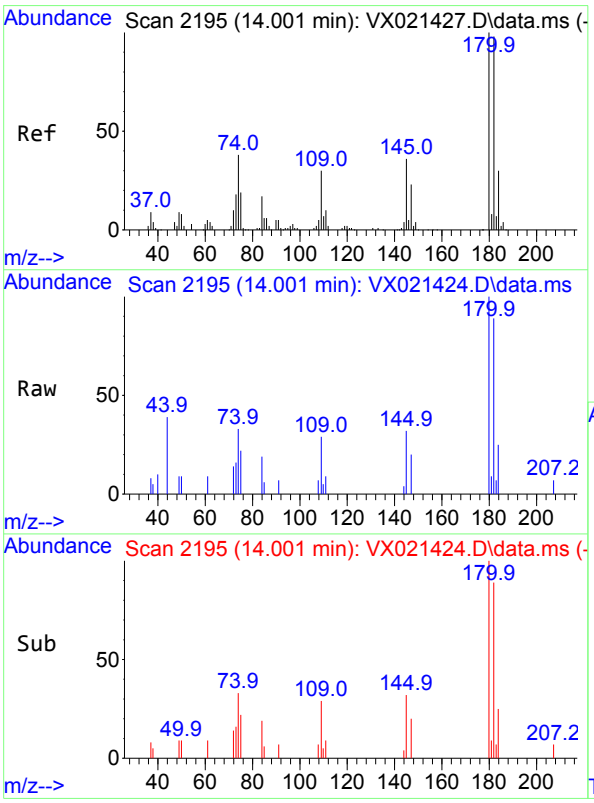



#95
Naphthalene
Concen: 0.77 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:128 Resp: 3610

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.9 | 10.3 | 15.5 |
| 129 | 12.1 | 8.8 | 13.2 |

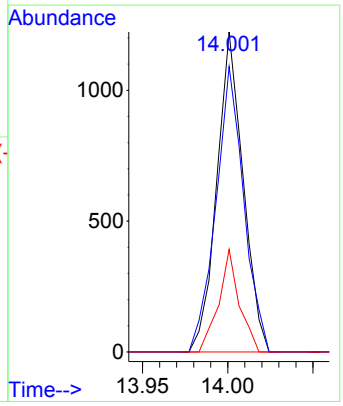



#96
1,2,3-Trichlorobenzene
Concen: 0.96 ug/l
RT: 14.001 min Scan# 2195
Delta R.T. 0.000 min
Lab File: VX021424.D
Acq: 24 Mar 2021 10:04

Tgt Ion:180 Resp: 1313

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.4 | 47.6 | 142.9 |
| 145 | 25.0 | 16.1 | 48.3 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021425.D
Acq On : 24 Mar 2021 10:26
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

Quant Time: Mar 24 11:43:03 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.623 | 168 | 74515 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 125797 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 112604 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 54644 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 6653 | 5.47 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 10.94%# | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 4745 | 5.53 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 11.06%# | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 15711 | 5.03 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 10.06%# | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 6021 | 4.99 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 9.98%# | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.187 | 85 | 4176 | 4.78 | ug/l | | 98 |
| 3) Chloromethane | 1.317 | 50 | 5688 | 3.44 | ug/l | | 98 |
| 4) Vinyl Chloride | 1.393 | 62 | 4327 | 4.85 | ug/l | | 90 |
| 5) Bromomethane | 1.623 | 94 | 1853 | 4.83 | ug/l | | 96 |
| 6) Chloroethane | 1.705 | 64 | 2894 | 5.29 | ug/l | | 92 |
| 7) Trichlorofluoromethane | 1.911 | 101 | 7501 | 5.54 | ug/l | | 97 |
| 8) Diethyl Ether | 2.170 | 74 | 2545 | 5.36 | ug/l | | 79 |
| 9) 1,1,2-Trichlorotrifluo... | 2.364 | 101 | 4040 | 5.24 | ug/l | | 94 |
| 10) Methyl Iodide | 2.487 | 142 | 2092 | 3.21 | ug/l | # | 86 |
| 11) Tert butyl alcohol | 3.023 | 59 | 5295 | 25.98 | ug/l | | 97 |
| 12) 1,1-Dichloroethene | 2.352 | 96 | 3931 | 5.24 | ug/l | | 90 |
| 13) Acrolein | 2.270 | 56 | 4264 | 34.38 | ug/l | | 100 |
| 14) Allyl chloride | 2.705 | 41 | 7998 | 5.17 | ug/l | # | 89 |
| 15) Acrylonitrile | 3.117 | 53 | 12790 | 26.83 | ug/l | | 97 |
| 16) Acetone | 2.423 | 43 | 11896 | 26.38 | ug/l | # | 85 |
| 17) Carbon Disulfide | 2.546 | 76 | 10224 | 4.41 | ug/l | | 97 |
| 18) Methyl Acetate | 2.752 | 43 | 6466 | 5.12 | ug/l | # | 88 |
| 19) Methyl tert-butyl Ether | 3.170 | 73 | 14337 | 5.09 | ug/l | | 100 |
| 20) Methylene Chloride | 2.835 | 84 | 4779 | 5.20 | ug/l | # | 88 |
| 21) trans-1,2-Dichloroethene | 3.140 | 96 | 4324 | 5.15 | ug/l | | 92 |
| 22) Diisopropyl ether | 3.823 | 45 | 15521 | 5.22 | ug/l | | 89 |
| 23) Vinyl Acetate | 3.782 | 43 | 64560 | 25.06 | ug/l | # | 92 |
| 24) 1,1-Dichloroethane | 3.670 | 63 | 8542 | 5.31 | ug/l | | 98 |
| 25) 2-Butanone | 4.635 | 43 | 18665 | 27.07 | ug/l | # | 88 |
| 26) 2,2-Dichloropropane | 4.547 | 77 | 7167 | 5.12 | ug/l | | 98 |
| 27) cis-1,2-Dichloroethene | 4.564 | 96 | 4917 | 5.09 | ug/l | | 88 |
| 28) Bromochloromethane | 4.976 | 49 | 4554 | 5.99 | ug/l | # | 79 |
| 29) Tetrahydrofuran | 5.100 | 42 | 12190 | 26.83 | ug/l | # | 84 |
| 30) Chloroform | 5.176 | 83 | 8881 | 5.30 | ug/l | | 97 |
| 31) Cyclohexane | 5.547 | 56 | 6790 | 4.68 | ug/l | | 89 |
| 32) 1,1,1-Trichloroethane | 5.464 | 97 | 7832 | 5.27 | ug/l | | 95 |
| 36) 1,1-Dichloropropene | 5.764 | 75 | 6344 | 5.03 | ug/l | | 96 |
| 37) Ethyl Acetate | 4.794 | 43 | 7648 | 5.24 | ug/l | # | 91 |
| 38) Carbon Tetrachloride | 5.758 | 117 | 7040 | 5.36 | ug/l | | 95 |
| 39) Methylcyclohexane | 7.435 | 83 | 6855 | 4.89 | ug/l | | 92 |
| 40) Benzene | 6.111 | 78 | 18322 | 5.26 | ug/l | | 100 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021425.D
Acq On : 24 Mar 2021 10:26
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

Quant Time: Mar 24 11:43:03 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 5.005 | 41 | 4189 | 4.96 | ug/l | | 88 |
| 42) 1,2-Dichloroethane | 6.158 | 62 | 8127 | 5.39 | ug/l | | 93 |
| 43) Isopropyl Acetate | 6.411 | 43 | 11744 | 4.91 | ug/l | # | 90 |
| 44) Trichloroethene | 7.188 | 130 | 4703 | 5.09 | ug/l | | 81 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 4936 | 5.26 | ug/l | | 95 |
| 46) Dibromomethane | 7.635 | 93 | 3645 | 5.29 | ug/l | | 88 |
| 47) Bromodichloromethane | 7.876 | 83 | 7172 | 5.21 | ug/l | | 95 |
| 48) Methyl methacrylate | 7.747 | 41 | 6054 | 4.74 | ug/l | # | 78 |
| 49) 1,4-Dioxane | 7.718 | 88 | 2411 | 101.83 | ug/l | # | 90 |
| 51) 4-Methyl-2-Pentanone | 8.618 | 43 | 35718 | 25.40 | ug/l | | 88 |
| 52) Toluene | 8.765 | 92 | 10654 | 4.94 | ug/l | | 96 |
| 53) t-1,3-Dichloropropene | 9.024 | 75 | 6709 | 4.60 | ug/l | | 96 |
| 54) cis-1,3-Dichloropropene | 8.412 | 75 | 7453 | 4.80 | ug/l | # | 81 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 4600 | 5.19 | ug/l | | 98 |
| 56) Ethyl methacrylate | 9.159 | 69 | 6520 | 4.60 | ug/l | # | 72 |
| 57) 1,3-Dichloropropane | 9.353 | 76 | 7840 | 5.08 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 8.288 | 63 | 17847 | 22.84 | ug/l | | 94 |
| 59) 2-Hexanone | 9.471 | 43 | 26107 | 24.82 | ug/l | | 86 |
| 60) Dibromochloromethane | 9.565 | 129 | 4909 | 4.87 | ug/l | | 97 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 4785 | 4.91 | ug/l | | 98 |
| 64) Tetrachloroethene | 9.318 | 164 | 4080 | 4.90 | ug/l | # | 89 |
| 65) Chlorobenzene | 10.118 | 112 | 11854 | 5.12 | ug/l | | 95 |
| 66) 1,1,1,2-Tetrachloroethane | 10.206 | 131 | 4291 | 4.97 | ug/l | | 95 |
| 67) Ethyl Benzene | 10.235 | 91 | 20845 | 4.89 | ug/l | | 99 |
| 68) m/p-Xylenes | 10.341 | 106 | 14901 | 9.77 | ug/l | | 90 |
| 69) o-Xylene | 10.683 | 106 | 7137 | 4.82 | ug/l | | 89 |
| 70) Styrene | 10.694 | 104 | 11683 | 4.68 | ug/l | | 93 |
| 71) Bromoform | 10.836 | 173 | 3361 | 4.83 | ug/l | # | 96 |
| 73) Isopropylbenzene | 11.000 | 105 | 19995 | 4.95 | ug/l | | 97 |
| 74) N-amyl acetate | 10.877 | 43 | 9358 | 4.63 | ug/l | # | 89 |
| 75) 1,1,2,2-Tetrachloroethane | 11.253 | 83 | 7098 | 5.29 | ug/l | | 98 |
| 76) 1,2,3-Trichloropropane | 11.277 | 75 | 6759m | 5.23 | ug/l | | |
| 77) Bromobenzene | 11.236 | 156 | 4812 | 5.00 | ug/l | | 93 |
| 78) n-propylbenzene | 11.342 | 91 | 22714 | 4.81 | ug/l | | 98 |
| 79) 2-Chlorotoluene | 11.400 | 91 | 14465 | 5.04 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 16909 | 4.95 | ug/l | | 95 |
| 81) trans-1,4-Dichloro-2-b... | 11.059 | 75 | 1800 | 3.93 | ug/l | # | 79 |
| 82) 4-Chlorotoluene | 11.494 | 91 | 17040 | 5.04 | ug/l | | 95 |
| 83) tert-Butylbenzene | 11.753 | 119 | 15859 | 4.86 | ug/l | | 92 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 17040 | 4.91 | ug/l | | 98 |
| 85) sec-Butylbenzene | 11.930 | 105 | 18590 | 4.83 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 16459 | 4.68 | ug/l | | 95 |
| 87) 1,3-Dichlorobenzene | 12.006 | 146 | 8791 | 5.02 | ug/l | | 97 |
| 88) 1,4-Dichlorobenzene | 12.077 | 146 | 9008 | 5.05 | ug/l | | 90 |
| 89) n-Butylbenzene | 12.371 | 91 | 15001 | 4.68 | ug/l | | 95 |
| 90) Hexachloroethane | 12.577 | 117 | 2943 | 5.38 | ug/l | | 88 |
| 91) 1,2-Dichlorobenzene | 12.377 | 146 | 8671 | 5.10 | ug/l | | 94 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 1675 | 4.90 | ug/l | | 76 |
| 93) 1,2,4-Trichlorobenzene | 13.630 | 180 | 5075 | 4.53 | ug/l | | 97 |
| 94) Hexachlorobutadiene | 13.765 | 225 | 2497 | 5.29 | ug/l | | 99 |
| 95) Naphthalene | 13.818 | 128 | 17046 | 4.45 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 14.001 | 180 | 5117 | 4.61 | ug/l | | 95 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021425.D
Acq On : 24 Mar 2021 10:26
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

Quant Time: Mar 24 11:43:03 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

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

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

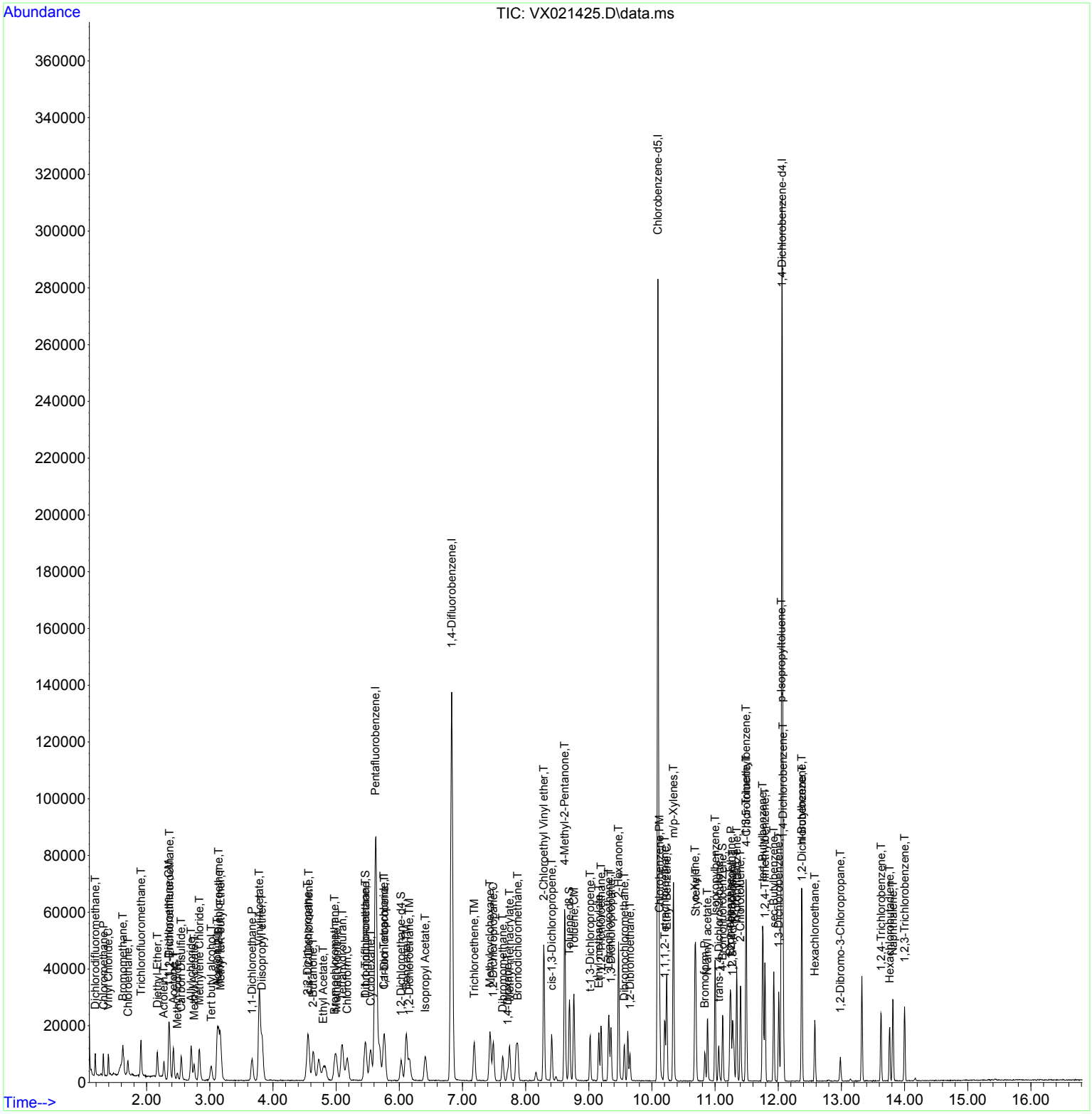
ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021425.D
Acq On : 24 Mar 2021 10:26
Operator : JC/MD
Sample : VSTDICC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 24 11:43:03 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

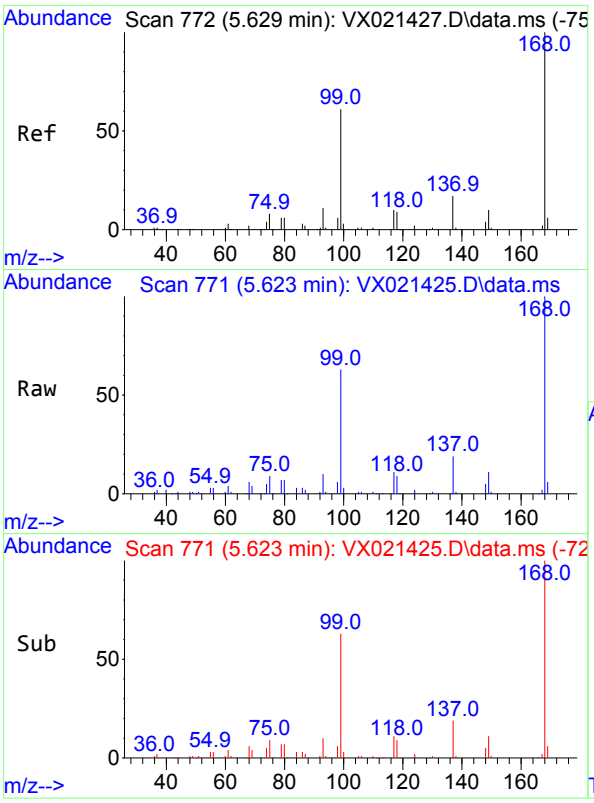
**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

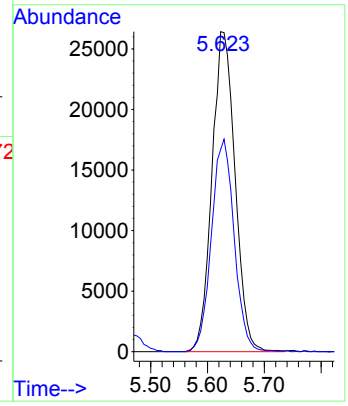
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3/25/2021 9:49:21 AM

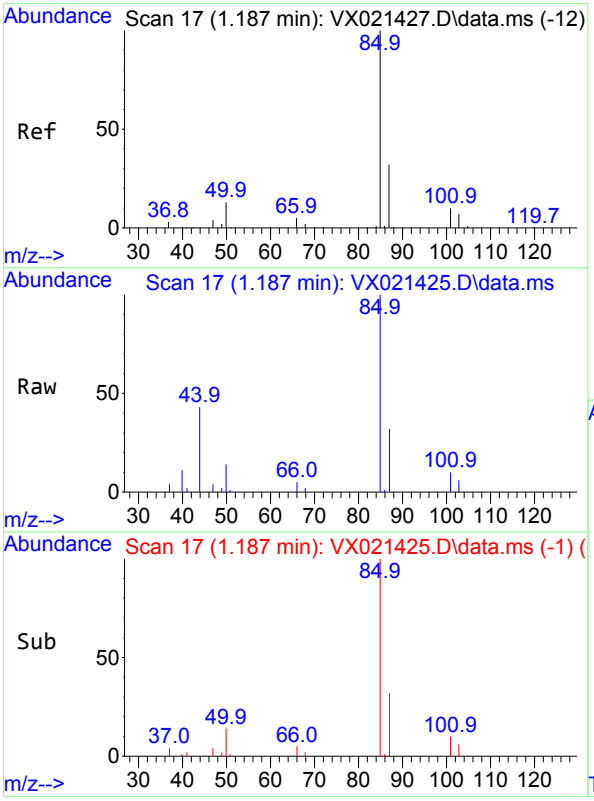



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.623 min Scan# 771
Delta R.T. -0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:168 Resp: 74515

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 63.2 | 45.8 | 68.6 |

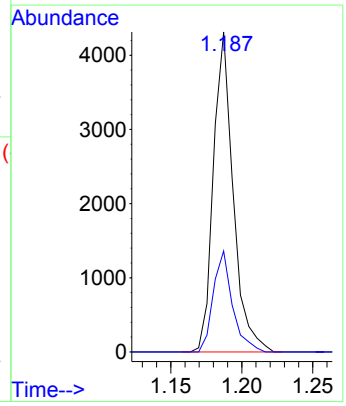



#2
Dichlorodifluoromethane
Concen: 4.78 ug/l
RT: 1.187 min Scan# 17
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

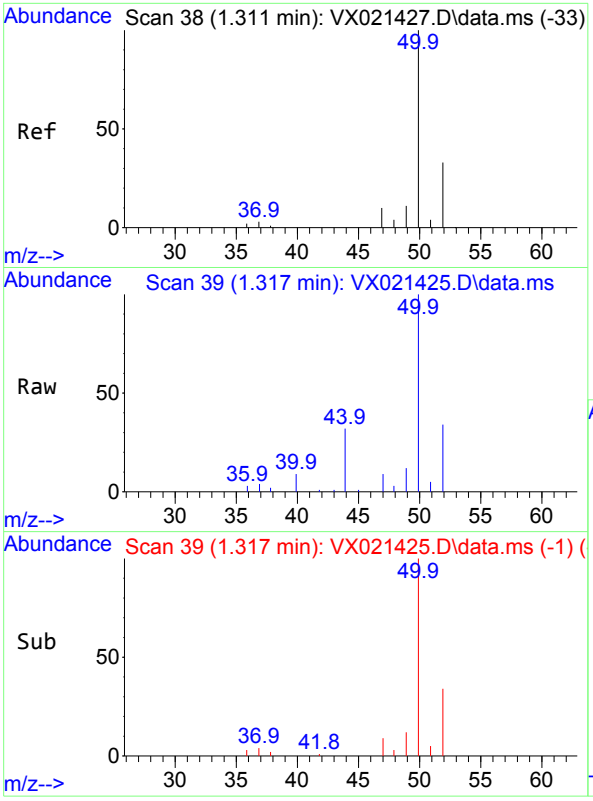
Tgt Ion: 85 Resp: 4176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.5 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

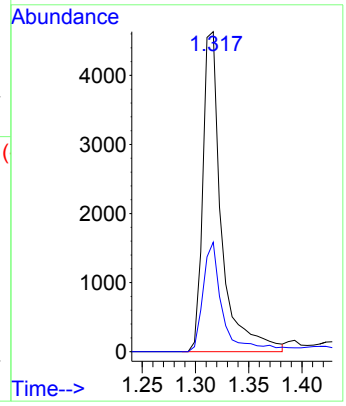
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

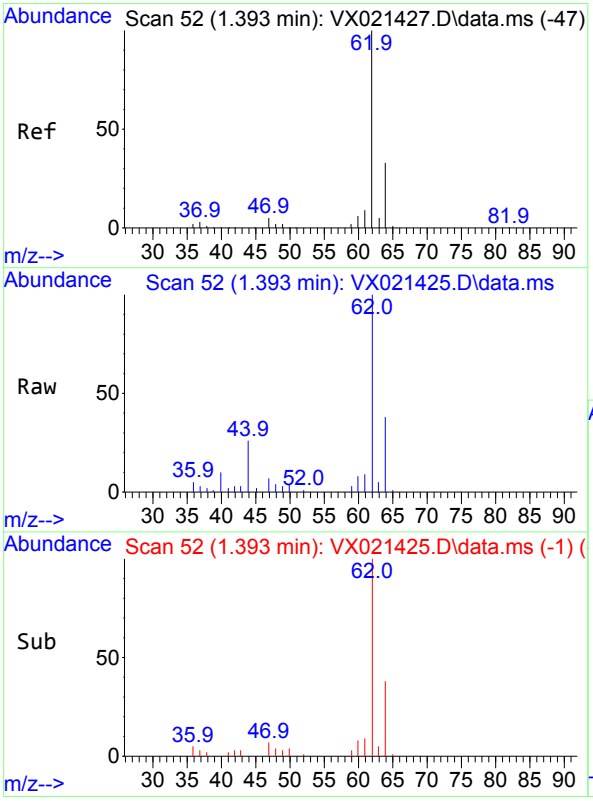



#3
Chloromethane
Concen: 3.44 ug/l
RT: 1.317 min Scan# 39
Delta R.T. 0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 50 Resp: 5688

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 34.2 | 26.4 | 39.6 |

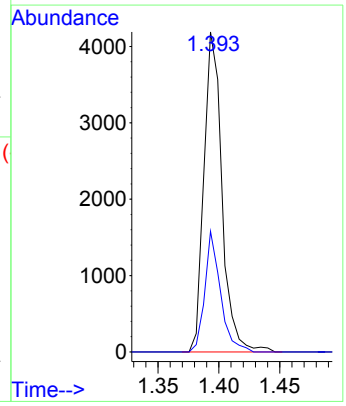



#4
Vinyl Chloride
Concen: 4.85 ug/l
RT: 1.393 min Scan# 52
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

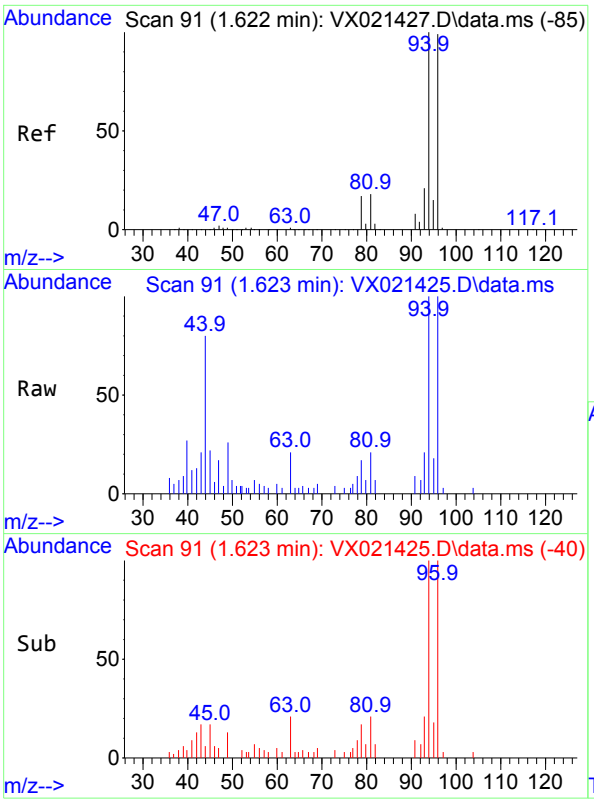
Tgt Ion: 62 Resp: 4327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 37.7 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

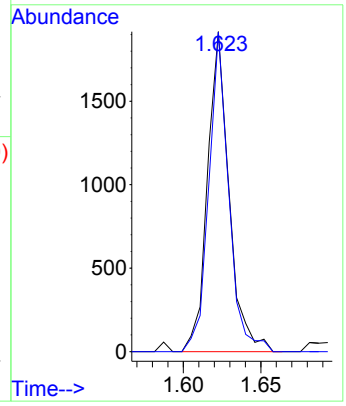
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

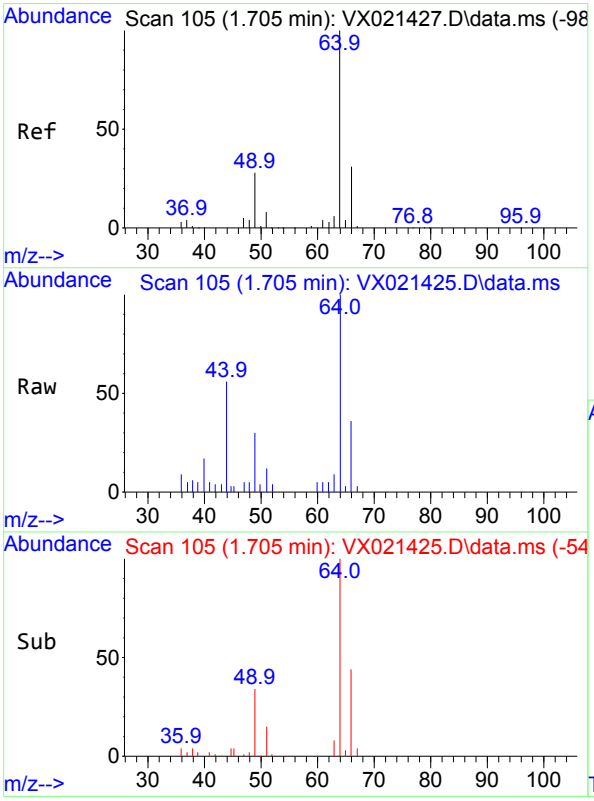



#5
Bromomethane
Concen: 4.83 ug/l
RT: 1.623 min Scan# 91
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 94 Resp: 1853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 99.7 | 76.4 | 114.6 |

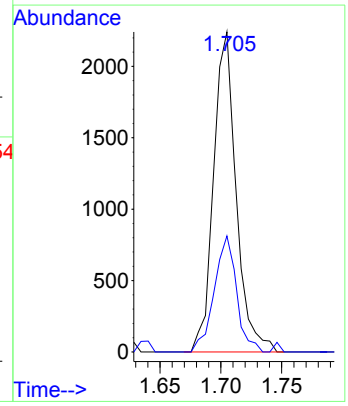



#6
Chloroethane
Concen: 5.29 ug/l
RT: 1.705 min Scan# 105
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

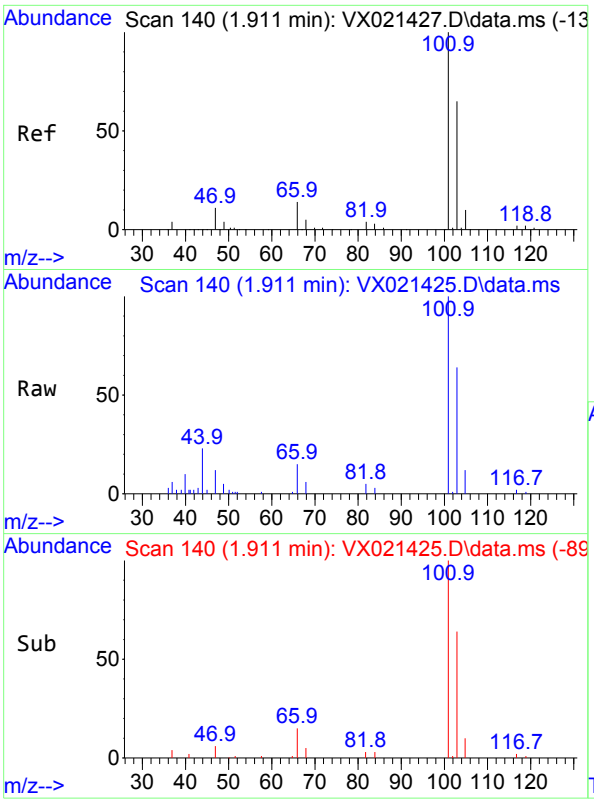
Tgt Ion: 64 Resp: 2894

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 36.2 | 25.4 | 38.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

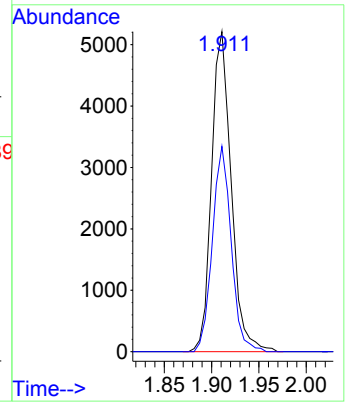
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

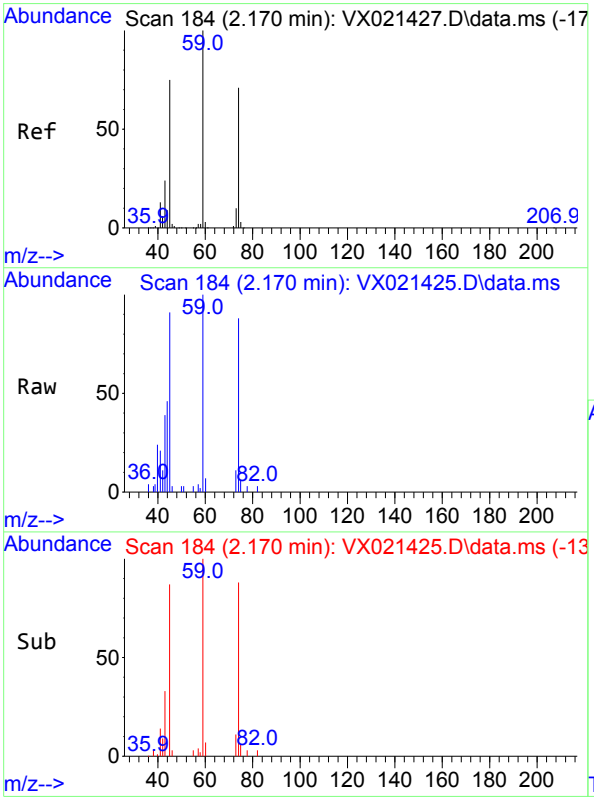



#7
Trichlorofluoromethane
Concen: 5.54 ug/l
RT: 1.911 min Scan# 140
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:101 Resp: 7501

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.1 | 53.2 | 79.8 |

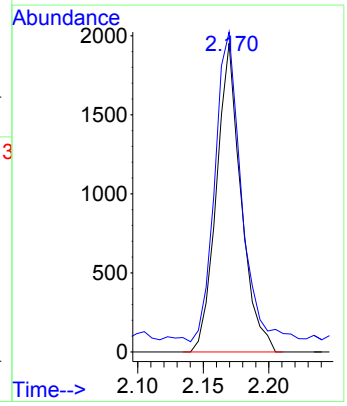



#8
Diethyl Ether
Concen: 5.36 ug/l
RT: 2.170 min Scan# 184
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

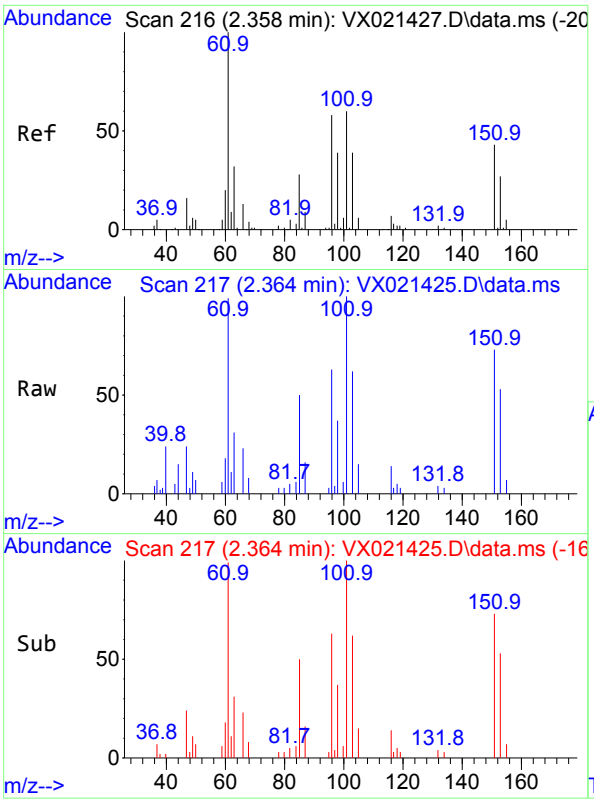
Tgt Ion: 74 Resp: 2545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 108.4 | 44.5 | 133.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

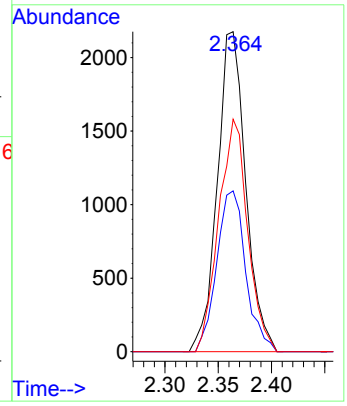
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

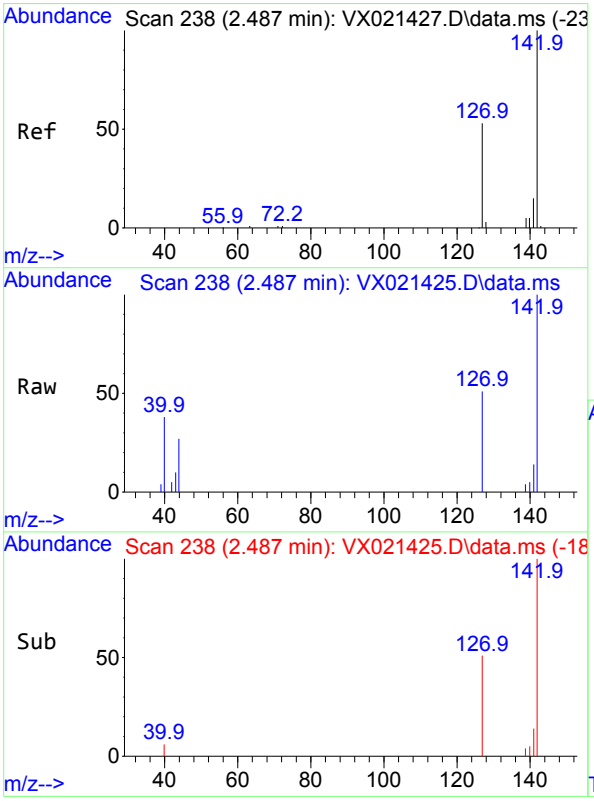



#9
1,1,2-Trichlorotrifluoroethane
Concen: 5.24 ug/l
RT: 2.364 min Scan# 217
Delta R.T. 0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:101 Resp: 4040

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 51.3 | 34.9 | 52.3 |
| 151 | 74.1 | 61.4 | 92.2 |

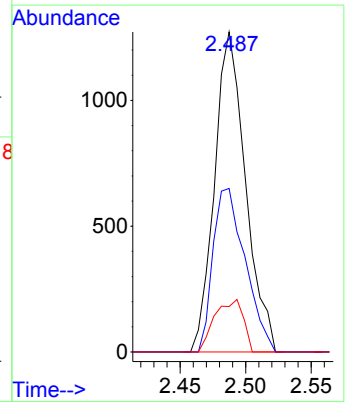



#10
Methyl Iodide
Concen: 3.21 ug/l
RT: 2.487 min Scan# 238
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

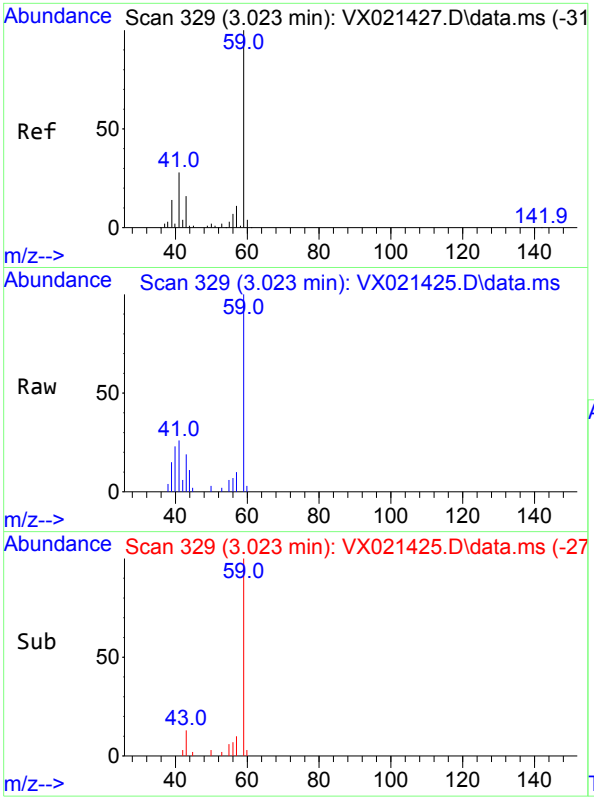
Tgt Ion:142 Resp: 2092

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 53.1 | 33.3 | 49.9# |
| 141 | 15.1 | 11.4 | 17.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

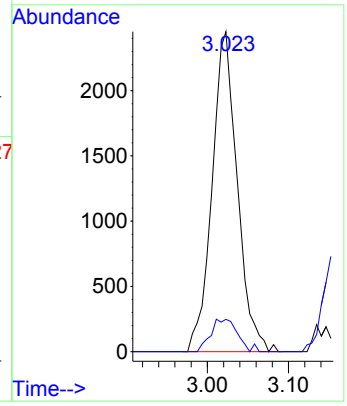
**Manual Integrations APPROVED**
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3/25/2021 9:49:21 AM

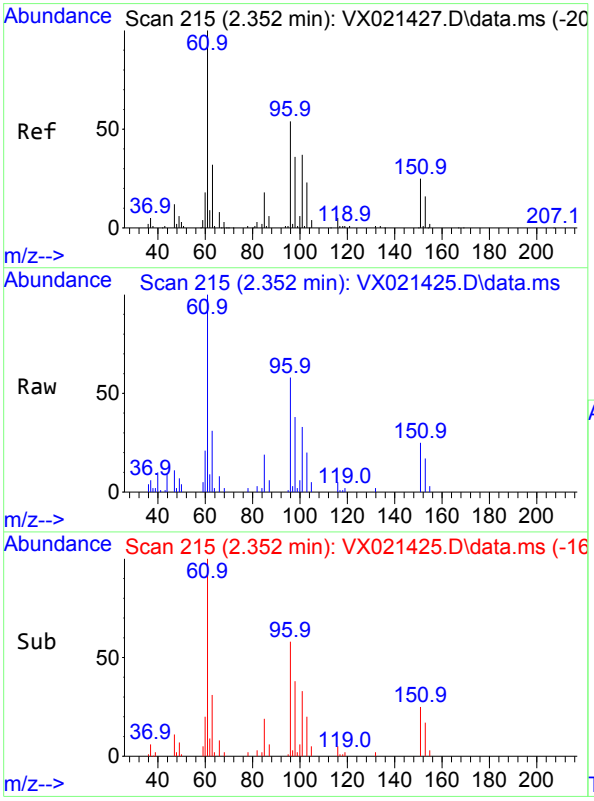



#11
Tert butyl alcohol
Concen: 25.98 ug/l
RT: 3.023 min Scan# 329
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 59 Resp: 5295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.8 | 7.8 | 11.8 |

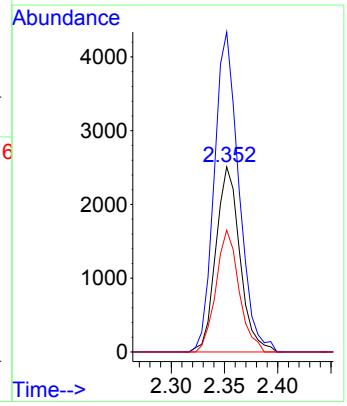



#12
1,1-Dichloroethene
Concen: 5.24 ug/l
RT: 2.352 min Scan# 215
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

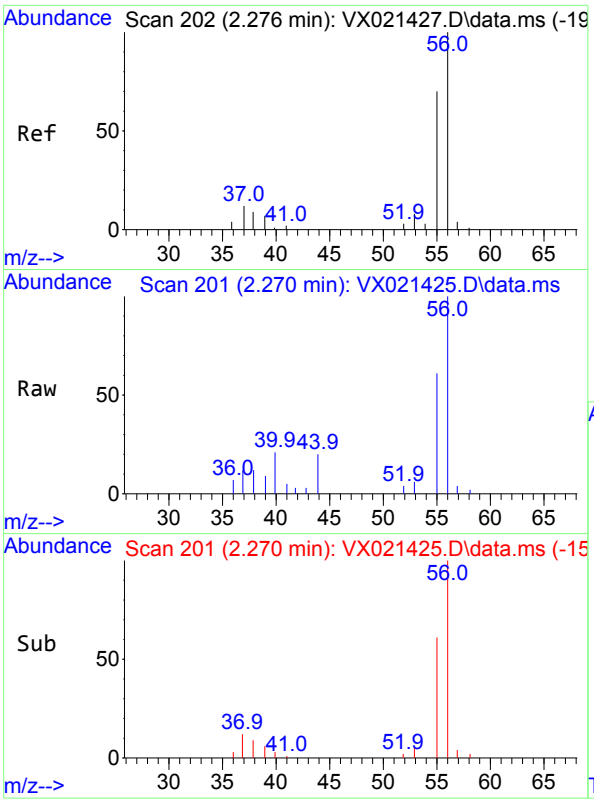
Tgt Ion: 96 Resp: 3931

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 172.9 | 124.6 | 187.0 |
| 98 | 65.8 | 50.6 | 76.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

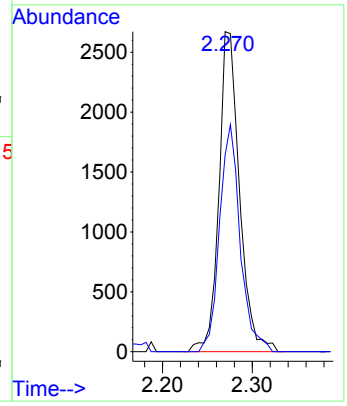
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

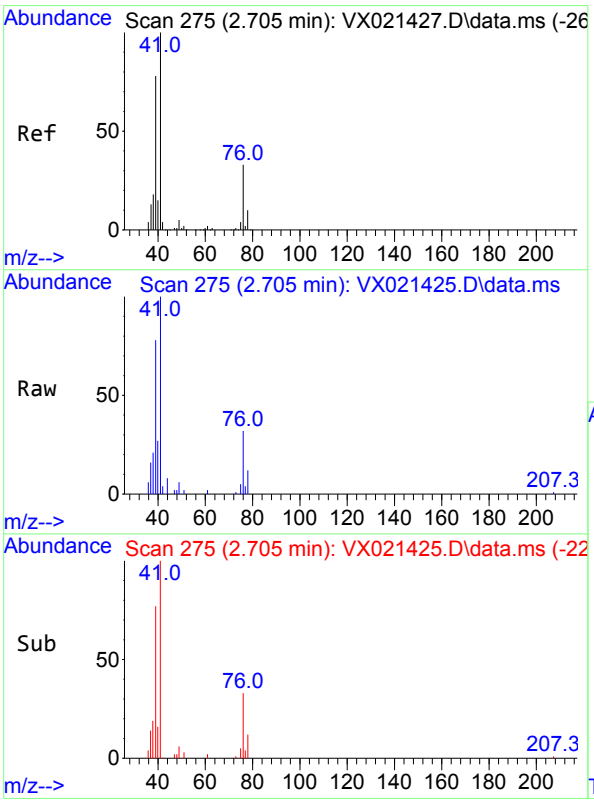



#13
Acrolein
Concen: 34.38 ug/l
RT: 2.270 min Scan# 201
Delta R.T. -0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 56 Resp: 4264

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.8 | 56.4 | 84.6 |

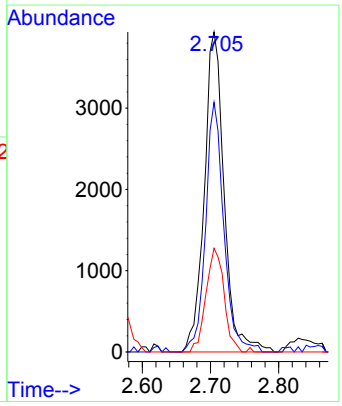



#14
Allyl chloride
Concen: 5.17 ug/l
RT: 2.705 min Scan# 275
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

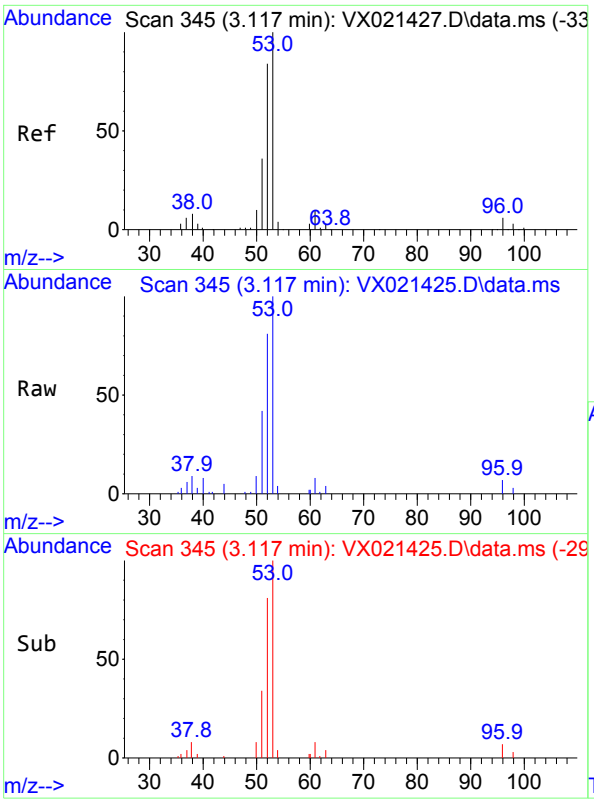
Tgt Ion: 41 Resp: 7998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 71.7 | 51.6 | 77.4 |
| 76 | 29.4 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

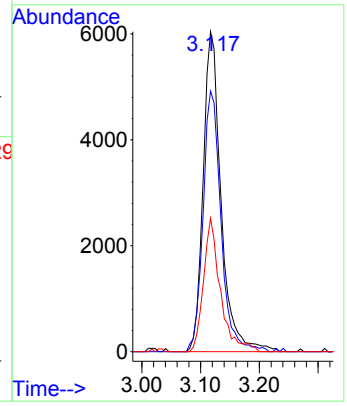
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

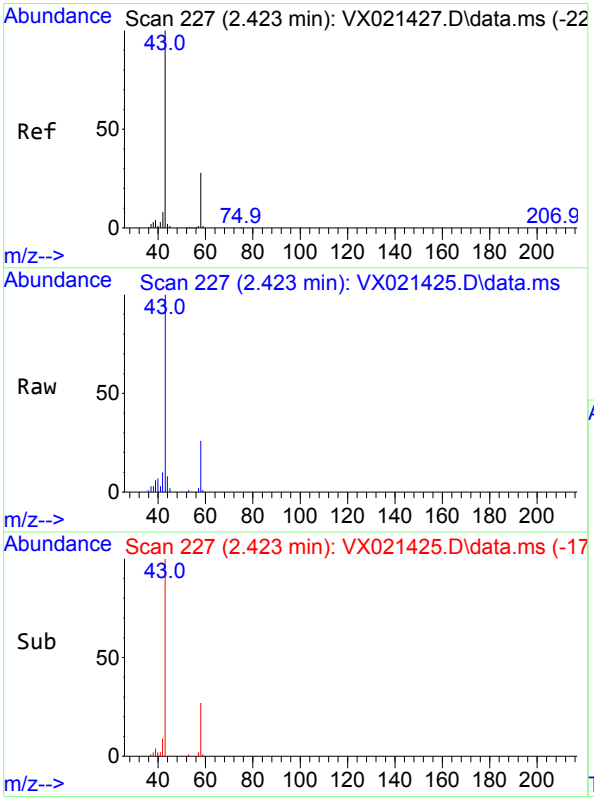



#15
Acrylonitrile
Concen: 26.83 ug/l
RT: 3.117 min Scan# 345
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 53 Resp: 12790

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.1 | 65.3 | 97.9 |
| 51 | 39.4 | 28.2 | 42.2 |

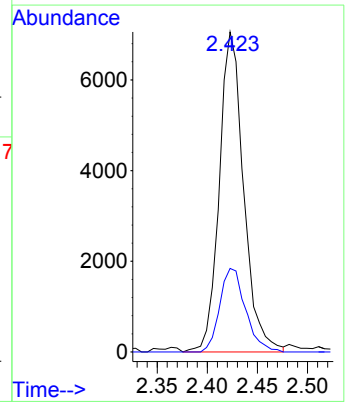



#16
Acetone
Concen: 26.38 ug/l
RT: 2.423 min Scan# 227
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

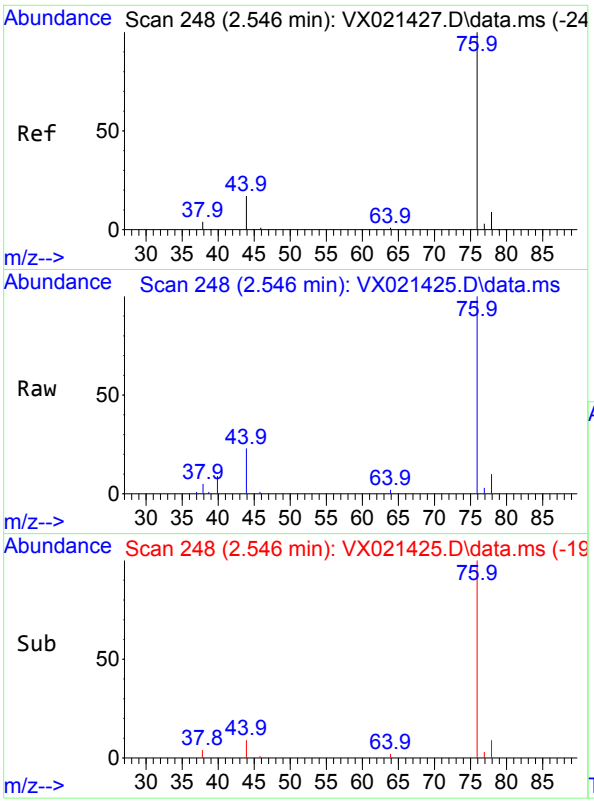
Tgt Ion: 43 Resp: 11896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 26.1 | 27.8 | 41.8# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

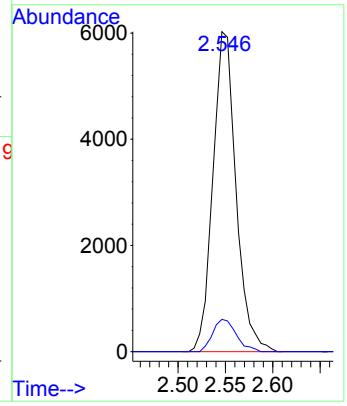
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

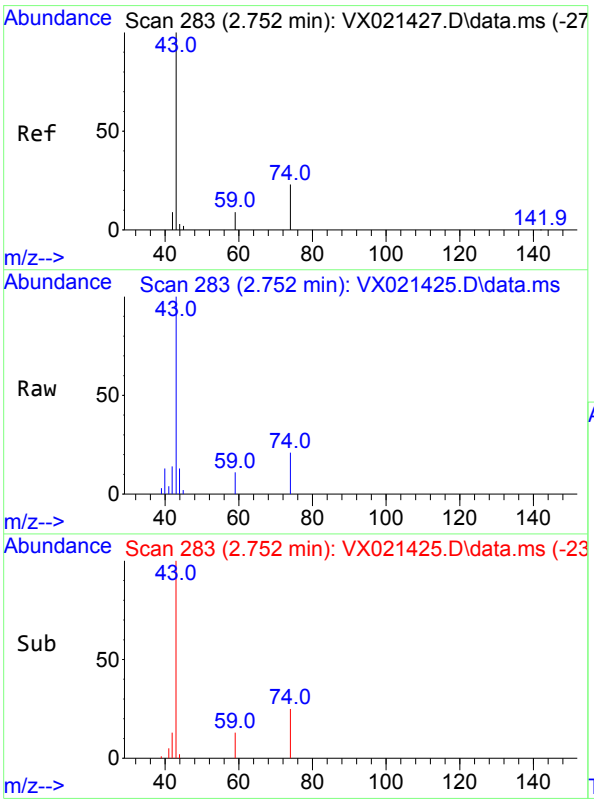



#17
Carbon Disulfide
Concen: 4.41 ug/l
RT: 2.546 min Scan# 248
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 76 Resp: 10224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 10.1 | 7.2 | 10.8 |

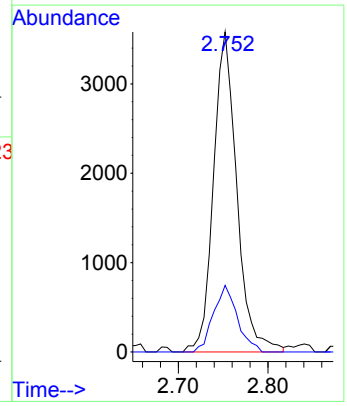



#18
Methyl Acetate
Concen: 5.12 ug/l
RT: 2.752 min Scan# 283
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

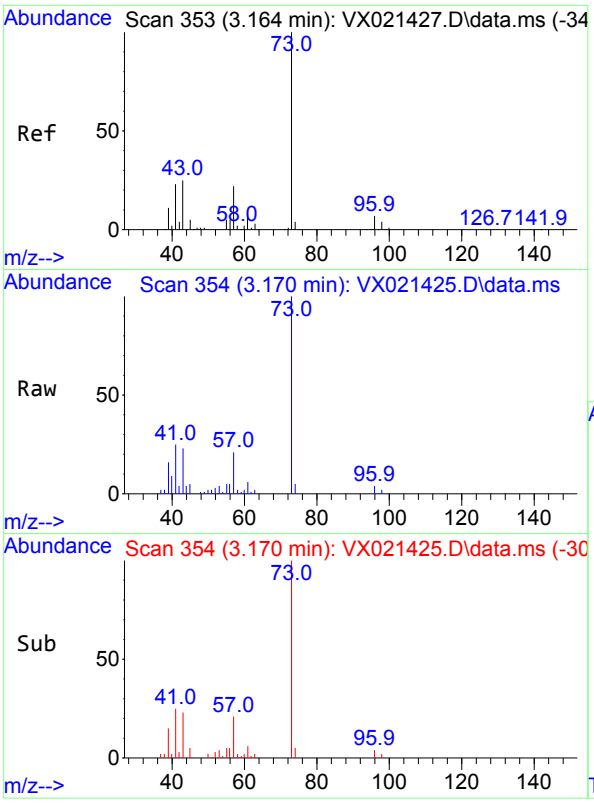
Tgt Ion: 43 Resp: 6466

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 21.4 | 21.9 | 32.9# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

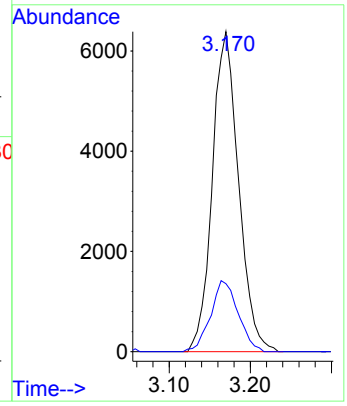
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

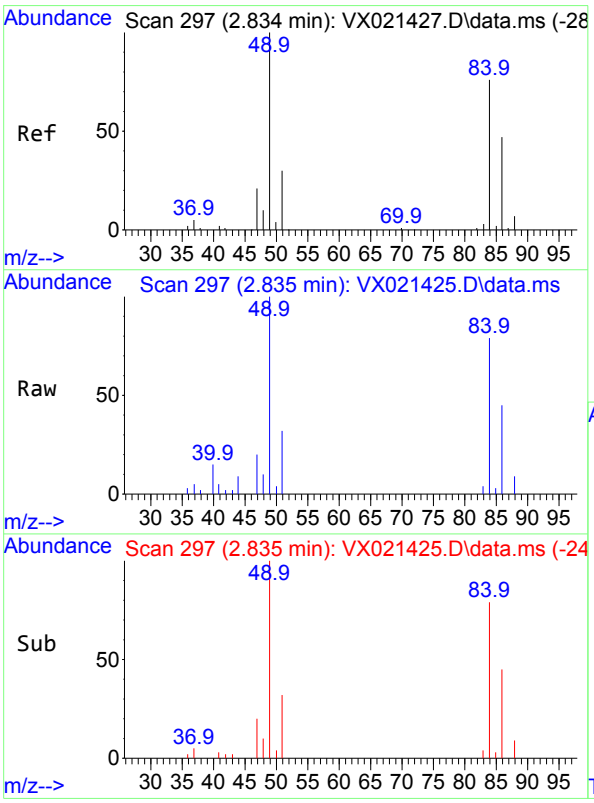



#19
Methyl tert-butyl Ether
Concen: 5.09 ug/l
RT: 3.170 min Scan# 354
Delta R.T. 0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 73 Resp: 14337

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.3 | 17.1 | 25.7 |

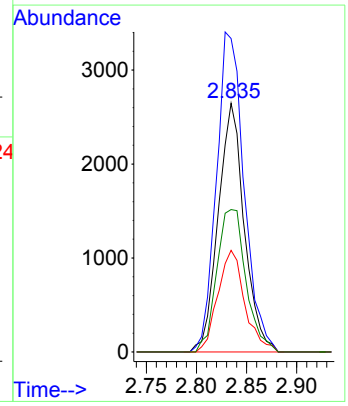



#20
Methylene Chloride
Concen: 5.20 ug/l
RT: 2.835 min Scan# 297
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

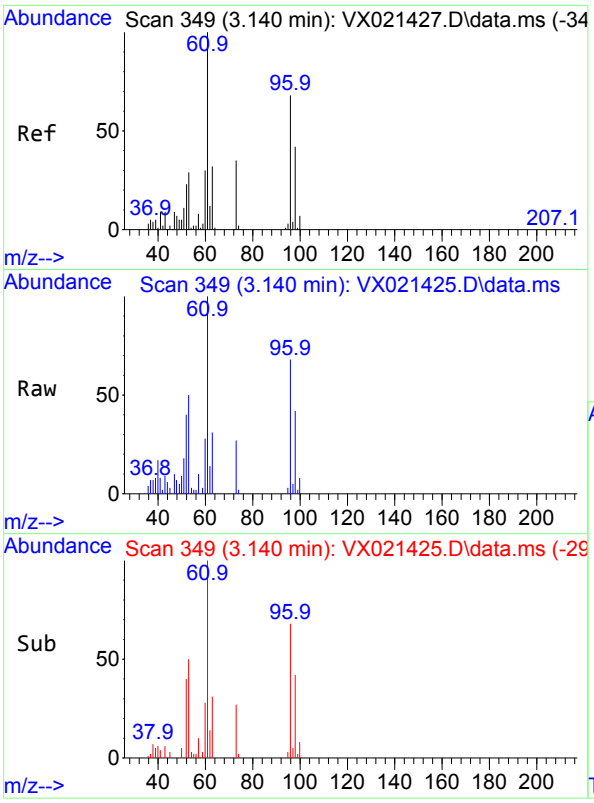
Tgt Ion: 84 Resp: 4779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 126.1 | 88.6 | 132.8 |
| 51 | 40.8 | 27.0 | 40.6# |
| 86 | 57.3 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

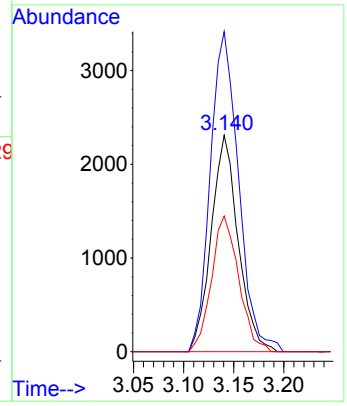
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

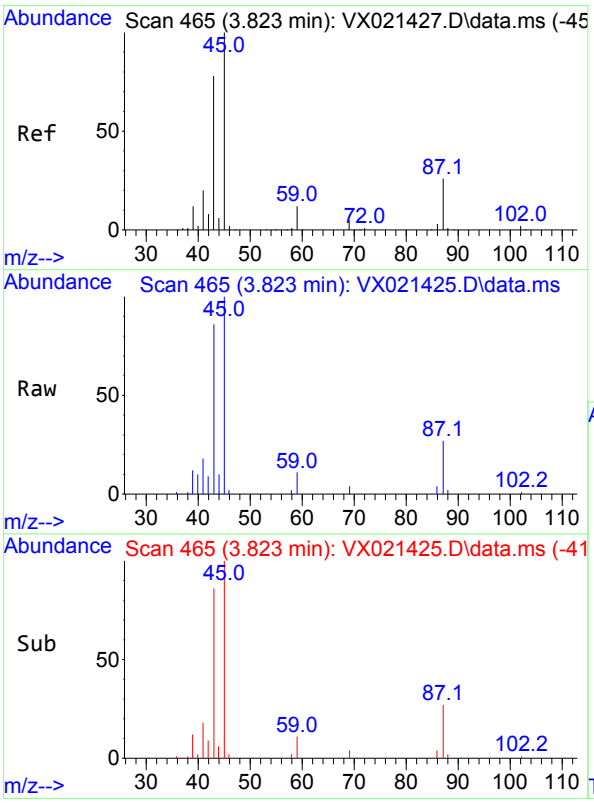



#21
trans-1,2-Dichloroethene
Concen: 5.15 ug/l
RT: 3.140 min Scan# 349
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 96 Resp: 4324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 147.9 | 107.7 | 161.5 |
| 98 | 62.8 | 50.4 | 75.6 |

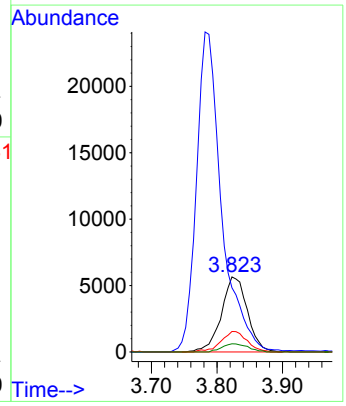



#22
Diisopropyl ether
Concen: 5.22 ug/l
RT: 3.823 min Scan# 465
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

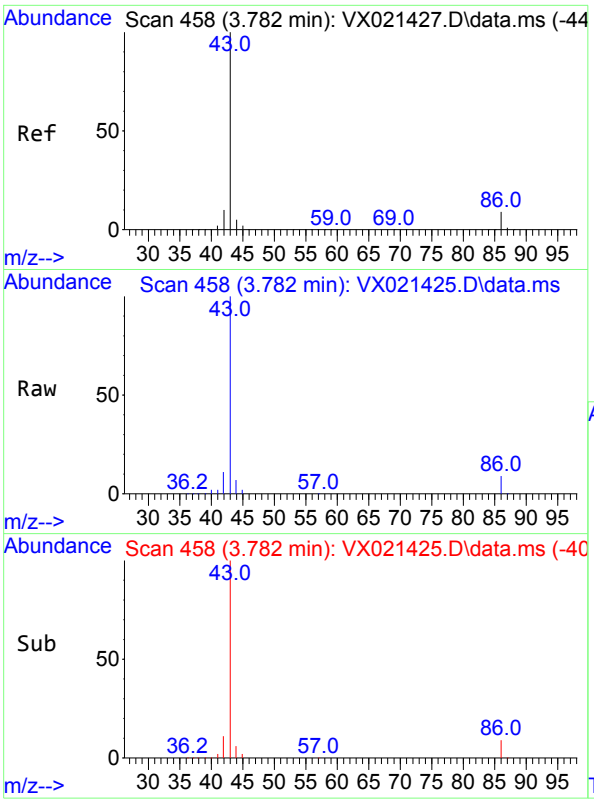
Tgt Ion: 45 Resp: 15521

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 83.9 | 58.0 | 87.0 |
| 87 | 27.2 | 25.4 | 38.0 |
| 59 | 11.0 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

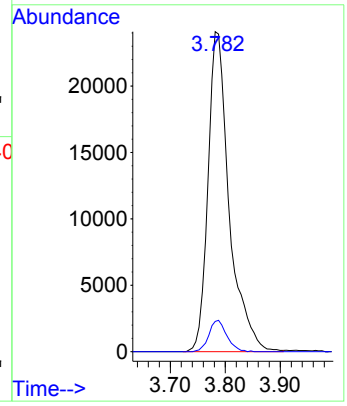
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

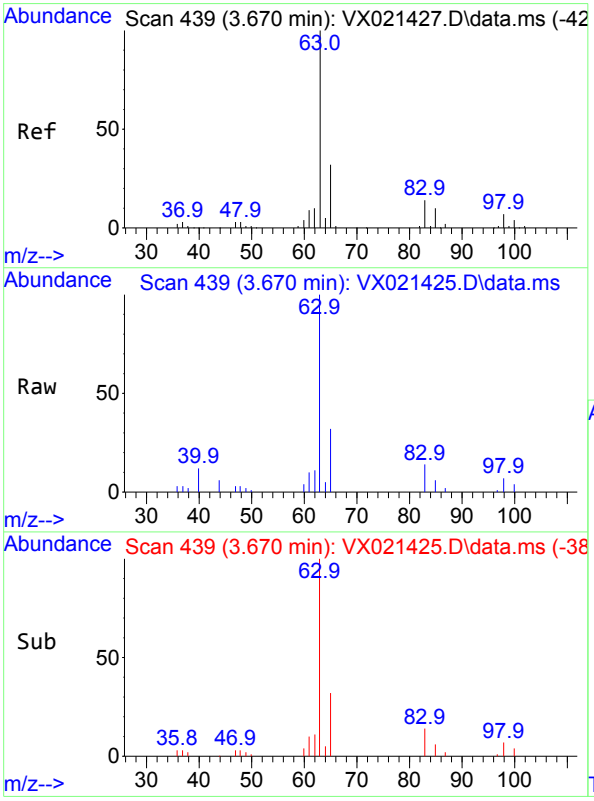



#23
Vinyl Acetate
Concen: 25.06 ug/l
RT: 3.782 min Scan# 458
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 43 Resp: 64560

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.4 | 9.9 | 14.9# |

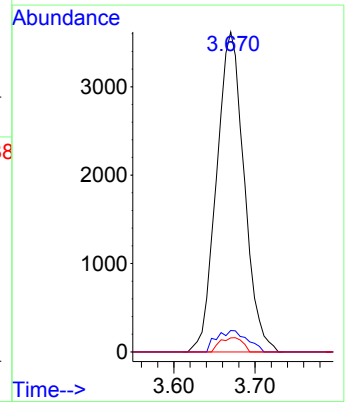



#24
1,1-Dichloroethane
Concen: 5.31 ug/l
RT: 3.670 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

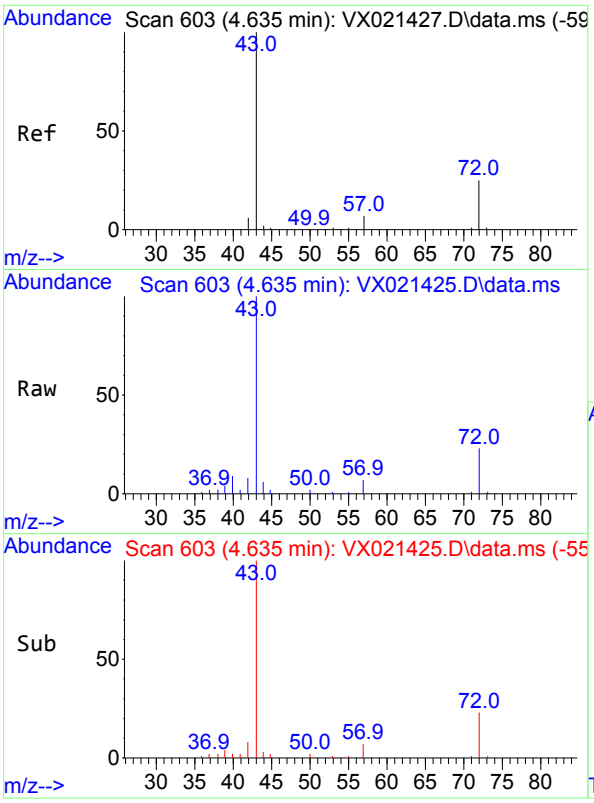
Tgt Ion: 63 Resp: 8542

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.7 | 3.8 | 11.2 |
| 100 | 4.4 | 2.5 | 7.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

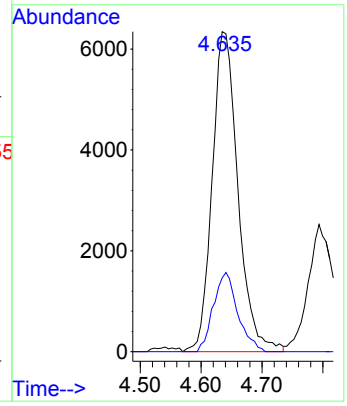
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

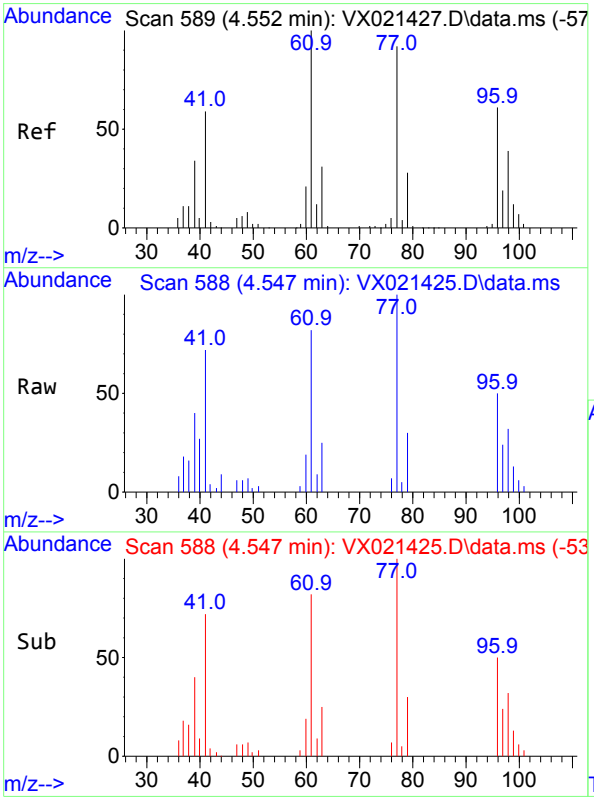



#25
2-Butanone
Concen: 27.07 ug/l
RT: 4.635 min Scan# 603
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 43 Resp: 18665

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 23.1 | 23.7 | 35.5# |

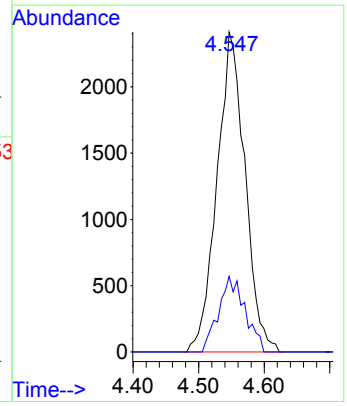



#26
2,2-Dichloropropane
Concen: 5.12 ug/l
RT: 4.547 min Scan# 588
Delta R.T. -0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

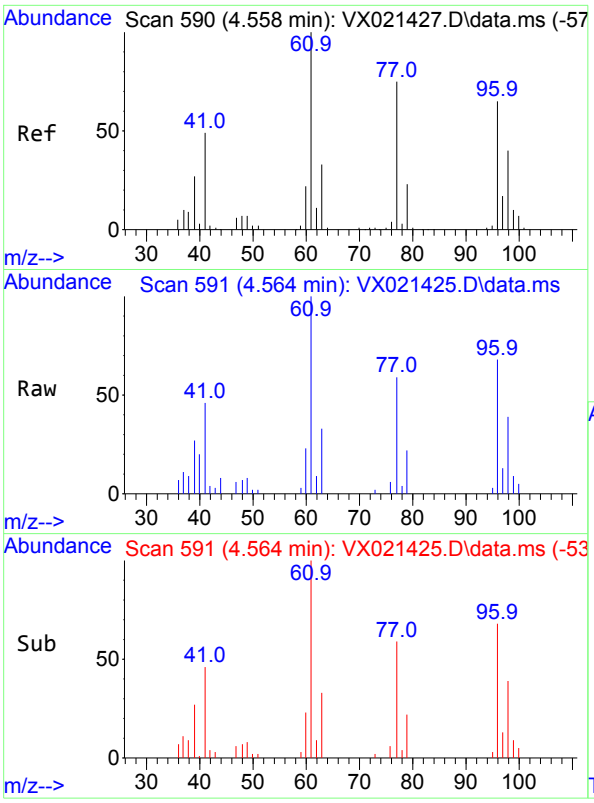
Tgt Ion: 77 Resp: 7167

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 22.2 | 11.7 | 35.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

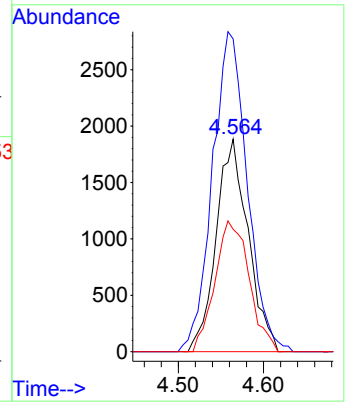
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

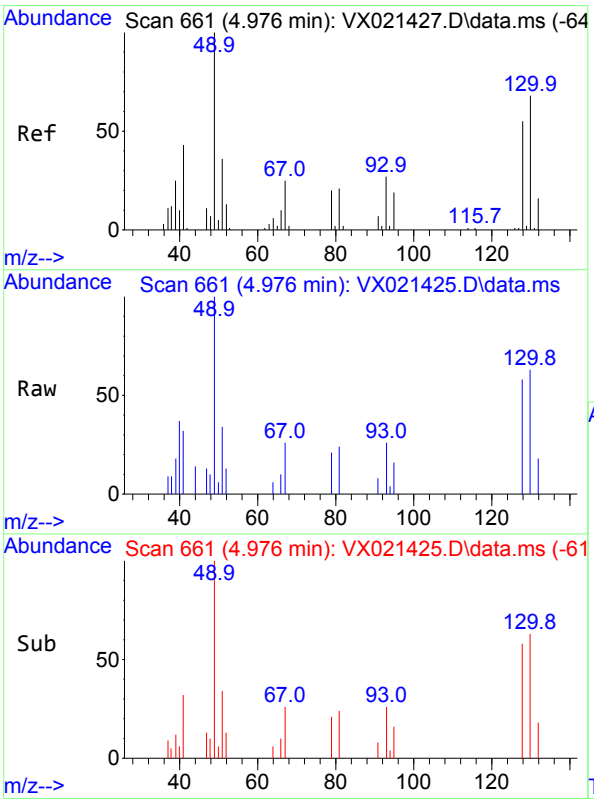



#27
cis-1,2-Dichloroethene
Concen: 5.09 ug/l
RT: 4.564 min Scan# 591
Delta R.T. 0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 96 Resp: 4917

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 163.8 | 0.0 | 285.6 |
| 98 | 65.8 | 0.0 | 129.6 |

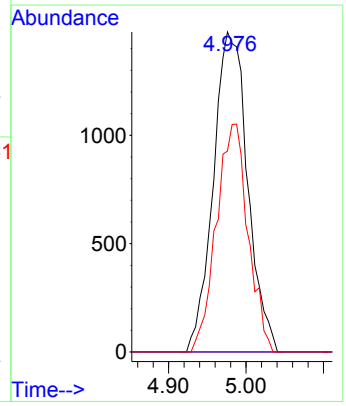



#28
Bromochloromethane
Concen: 5.99 ug/l
RT: 4.976 min Scan# 661
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

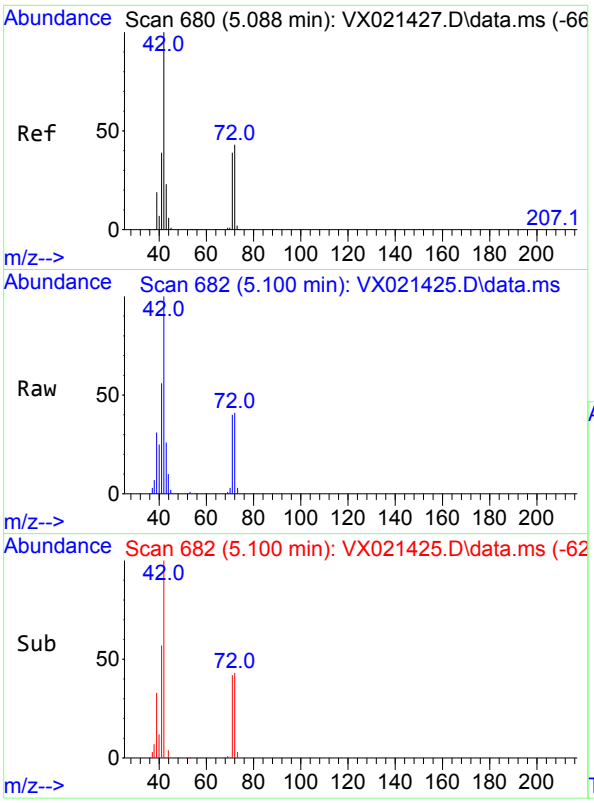
Tgt Ion: 49 Resp: 4554

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 0.0 | 0.0 | 4.0 |
| 130 | 65.7 | 68.2 | 102.2# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

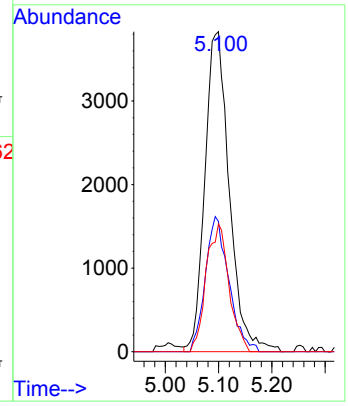
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

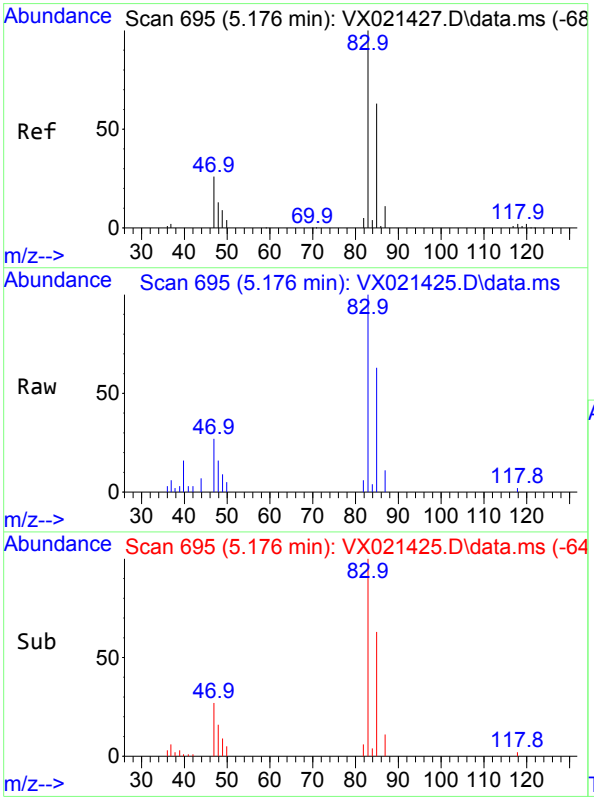



#29
Tetrahydrofuran
Concen: 26.83 ug/l
RT: 5.100 min Scan# 682
Delta R.T. 0.012 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 42 Resp: 12190

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 40.6 | 41.7 | 62.5# |
| 71 | 37.1 | 38.4 | 57.6# |

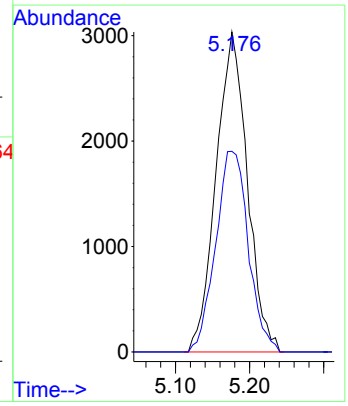



#30
Chloroform
Concen: 5.30 ug/l
RT: 5.176 min Scan# 695
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

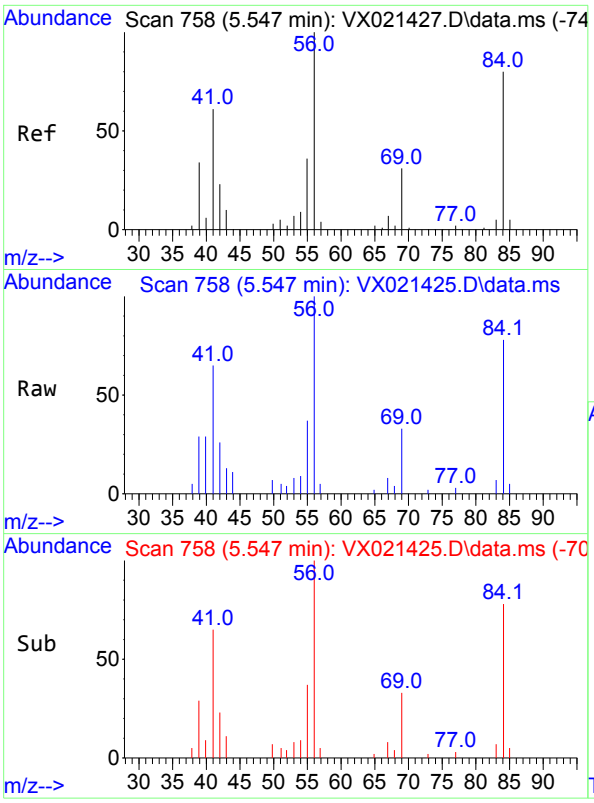
Tgt Ion: 83 Resp: 8881

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.7 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

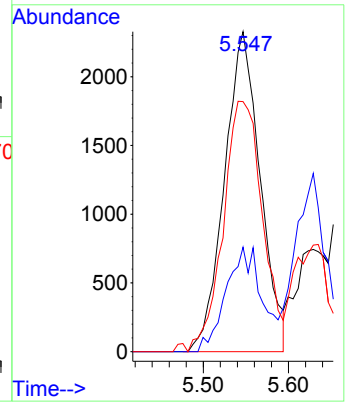
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

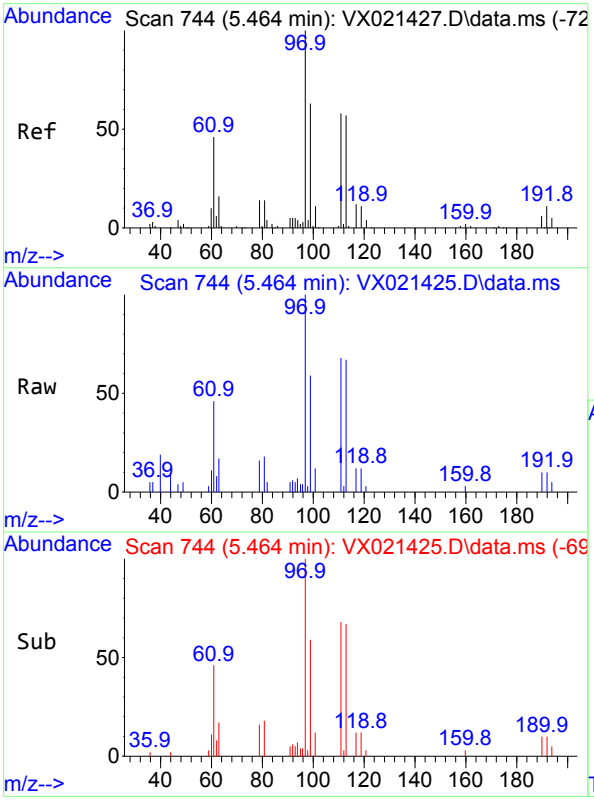



#31
Cyclohexane
Concen: 4.68 ug/l
RT: 5.547 min Scan# 758
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 56 Resp: 6790

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 32.6 | 25.3 | 37.9 |
| 84 | 75.6 | 71.4 | 107.0 |

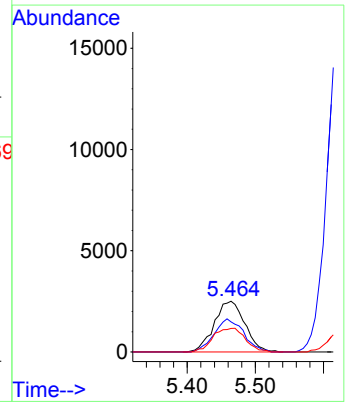



#32
1,1,1-Trichloroethane
Concen: 5.27 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

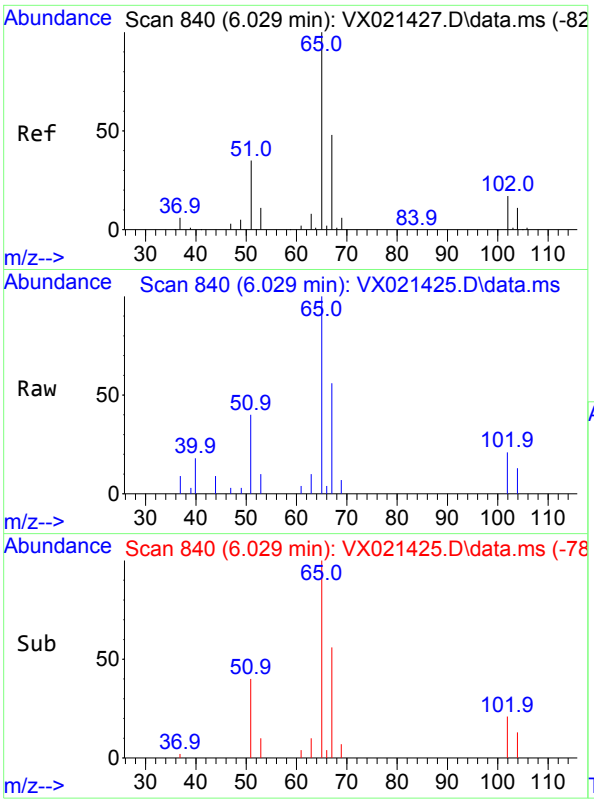
Tgt Ion: 97 Resp: 7832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 62.7 | 51.5 | 77.3 |
| 61 | 49.2 | 34.2 | 51.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

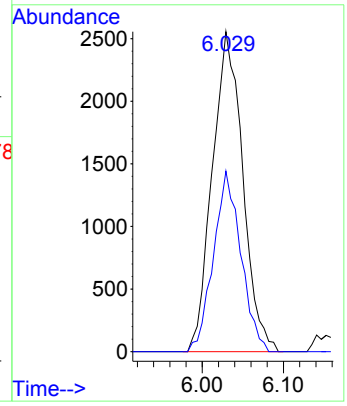
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

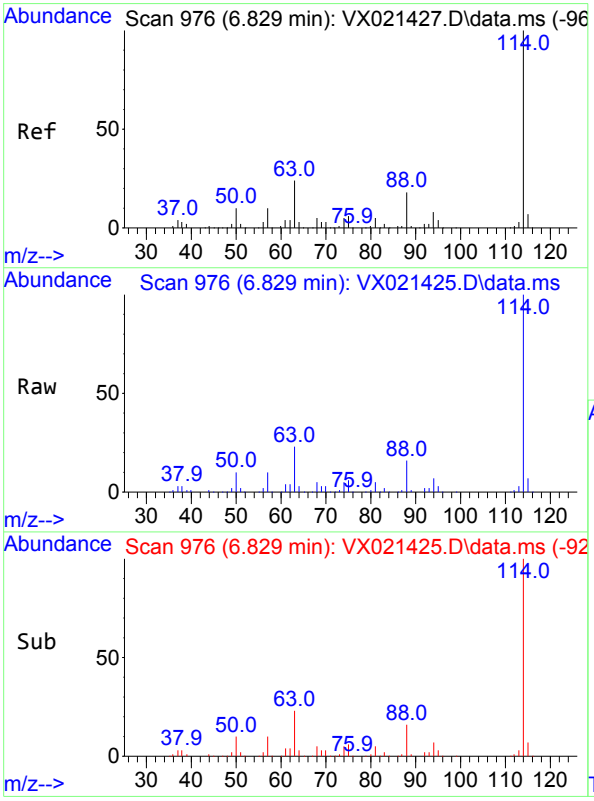



#33
1,2-Dichloroethane-d4
Concen: 5.47 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 65 Resp: 6653

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.8 | 0.0 | 105.4 |

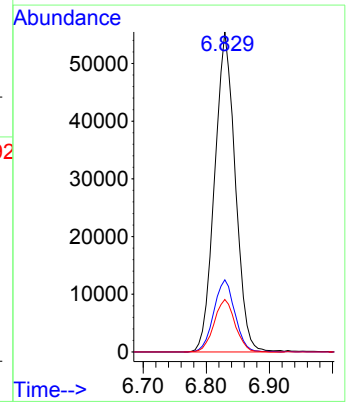



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

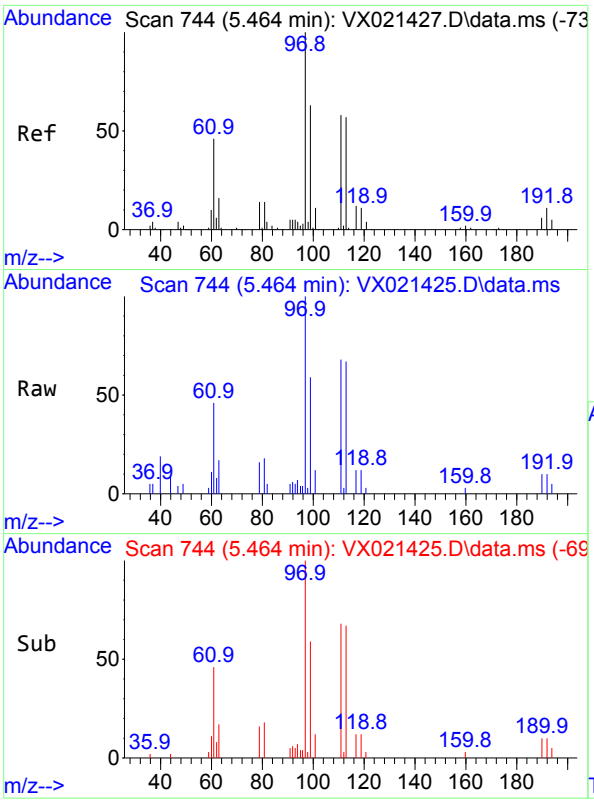
Tgt Ion:114 Resp: 125797

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.6 | 0.0 | 40.8 |
| 88 | 16.4 | 0.0 | 32.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

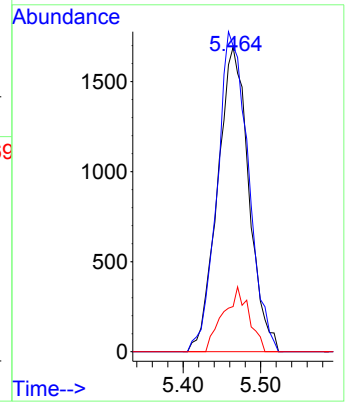
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

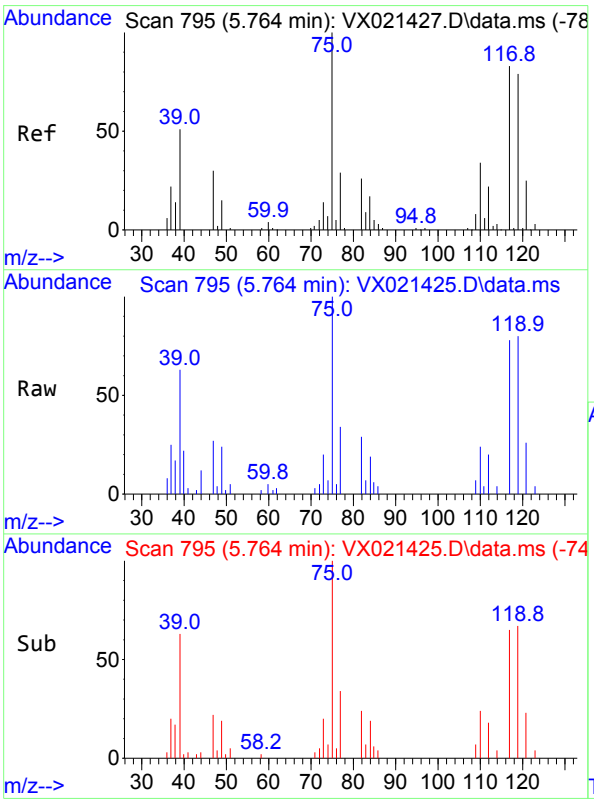



#35
Dibromofluoromethane
Concen: 5.53 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:113 Resp: 4745

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 104.6 | 81.9 | 122.9 |
| 192 | 17.5 | 16.7 | 25.1 |

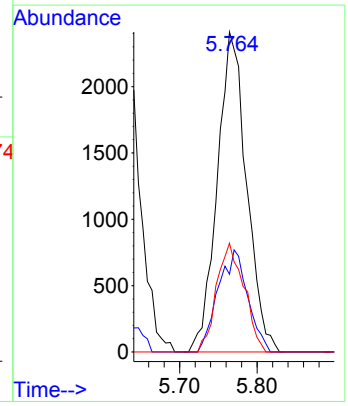



#36
1,1-Dichloropropene
Concen: 5.03 ug/l
RT: 5.764 min Scan# 795
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

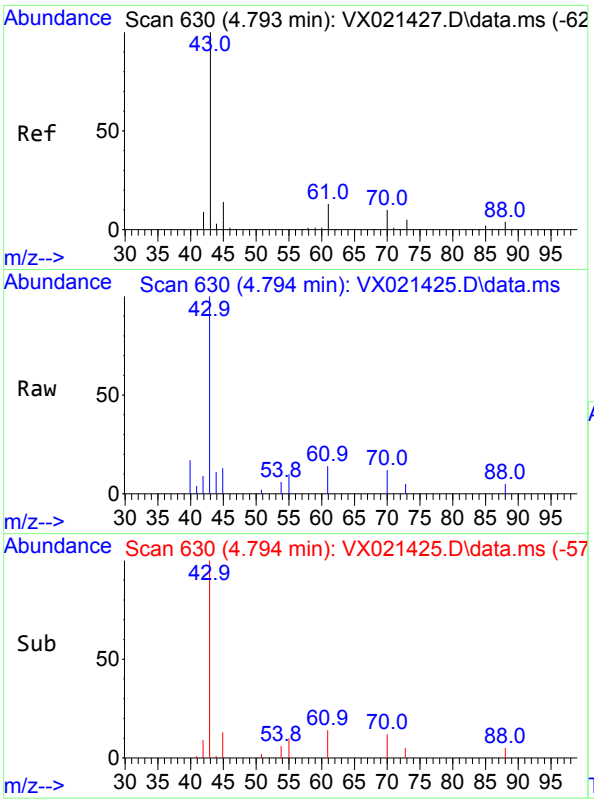
Tgt Ion: 75 Resp: 6344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 32.3 | 18.1 | 54.4 |
| 77 | 31.9 | 25.3 | 37.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

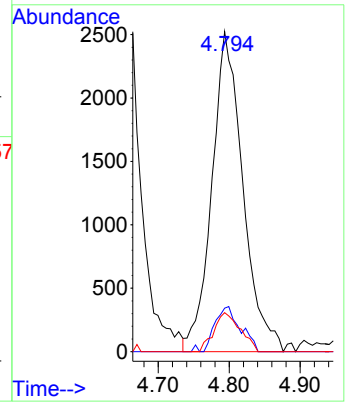
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

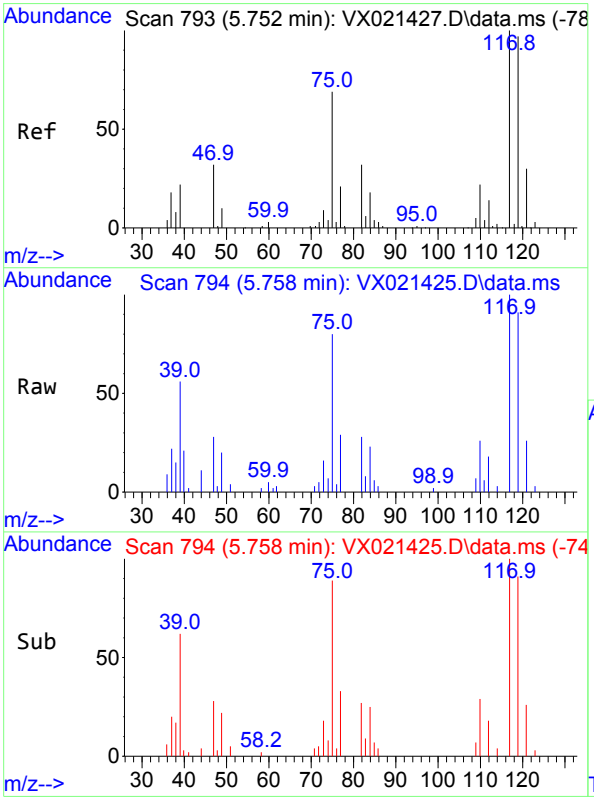



#37
Ethyl Acetate
Concen: 5.24 ug/l
RT: 4.794 min Scan# 630
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 43 Resp: 7648

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 11.5 | 12.8 | 19.2# |
| 70 | 10.4 | 10.5 | 15.7# |

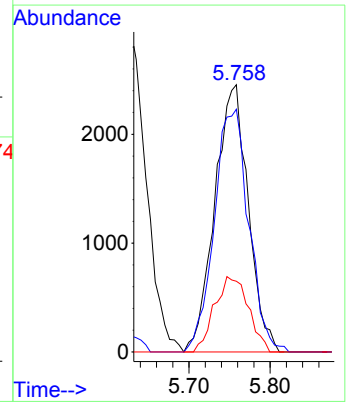



#38
Carbon Tetrachloride
Concen: 5.36 ug/l
RT: 5.758 min Scan# 794
Delta R.T. 0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

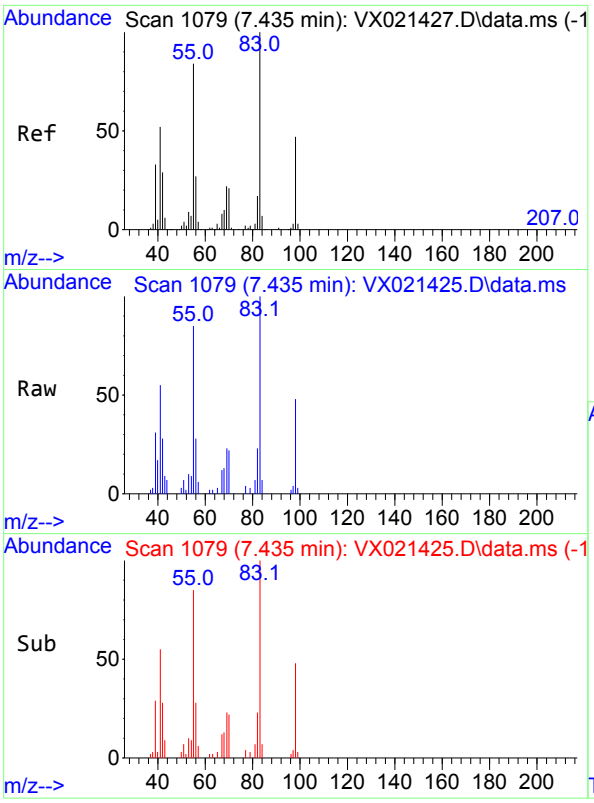
Tgt Ion:117 Resp: 7040

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 90.8 | 76.2 | 114.2 |
| 121 | 26.5 | 24.8 | 37.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

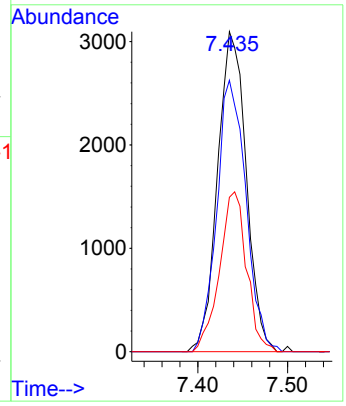
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

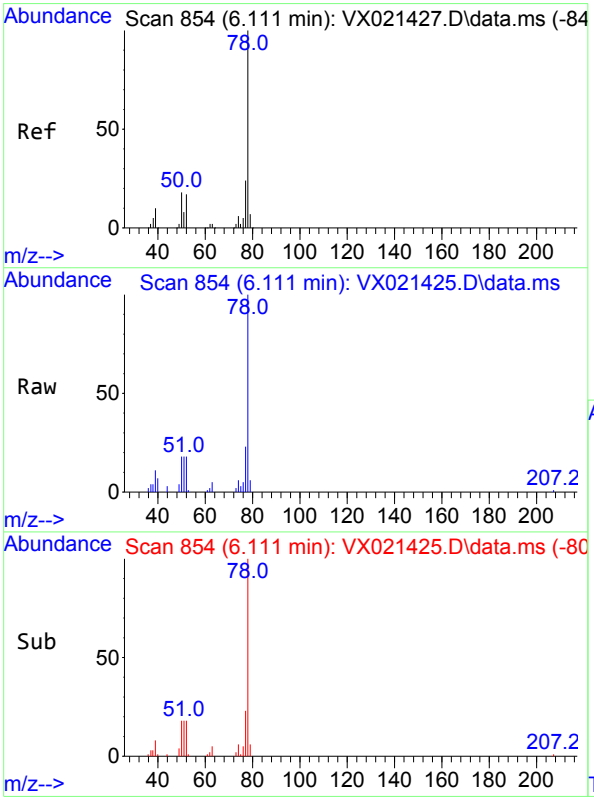



#39
Methylcyclohexane
Concen: 4.89 ug/l
RT: 7.435 min Scan# 1079
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 83 Resp: 6855

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 84.8 | 58.9 | 88.3 |
| 98 | 48.3 | 38.1 | 57.1 |

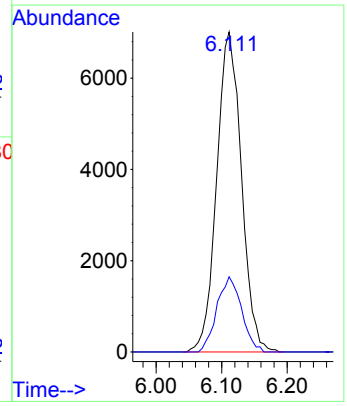



#40
Benzene
Concen: 5.26 ug/l
RT: 6.111 min Scan# 854
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

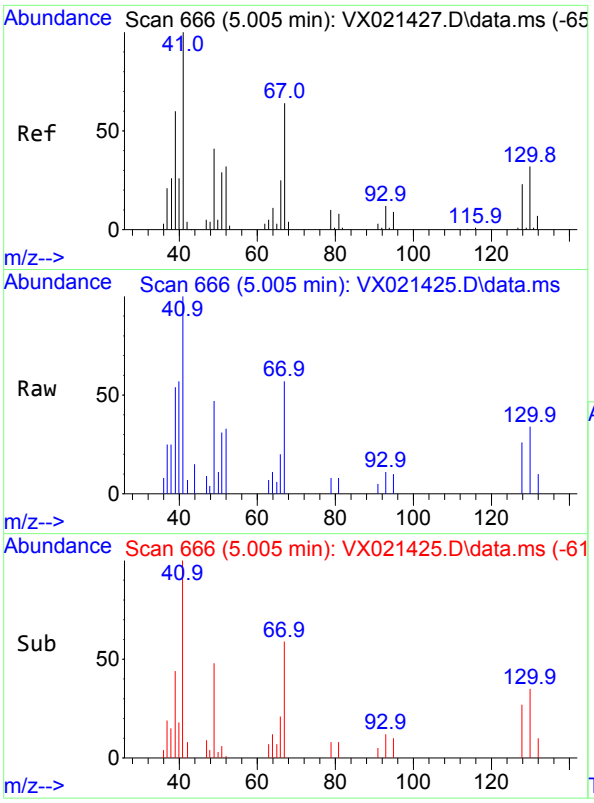
Tgt Ion: 78 Resp: 18322

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.5 | 18.9 | 28.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

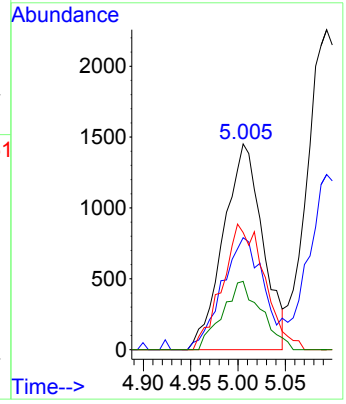
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

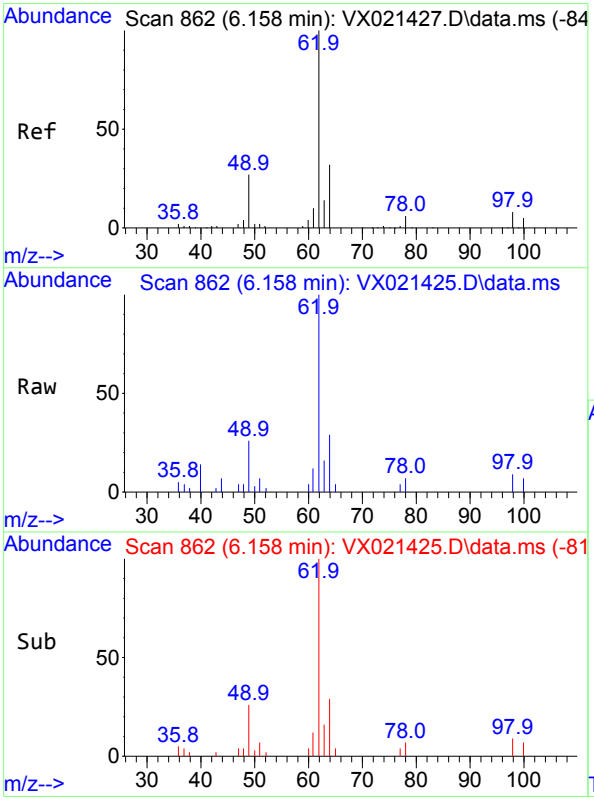



#41
Methacrylonitrile
Concen: 4.96 ug/l
RT: 5.005 min Scan# 666
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 41 Resp: 4189

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 59.8 | 42.5 | 63.7 |
| 67 | 65.5 | 65.0 | 97.6 |
| 52 | 32.8 | 25.3 | 37.9 |

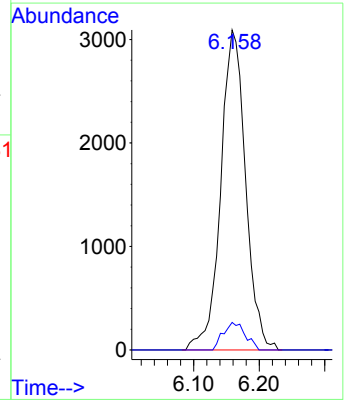



#42
1,2-Dichloroethane
Concen: 5.39 ug/l
RT: 6.158 min Scan# 862
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

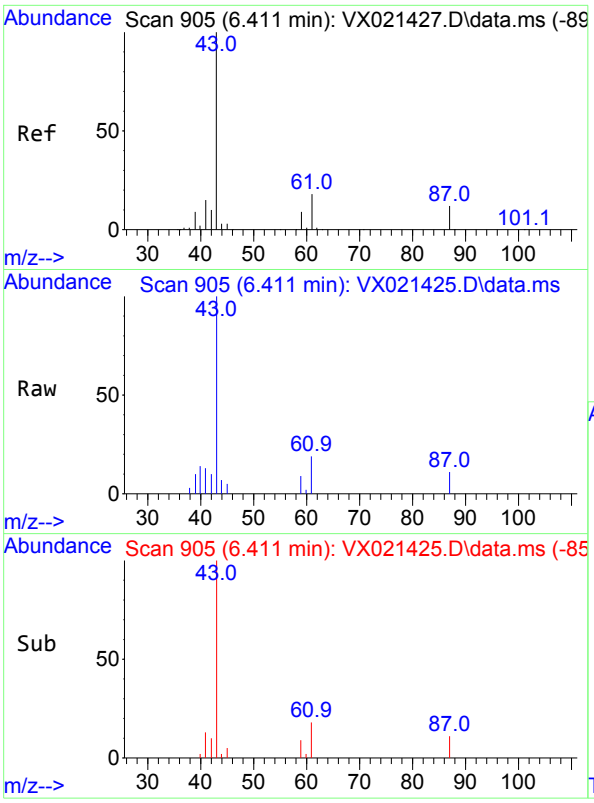
Tgt Ion: 62 Resp: 8127

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.6 | 0.0 | 20.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

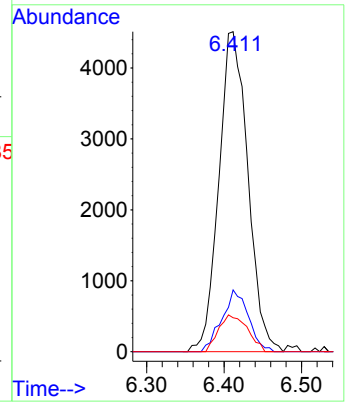
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

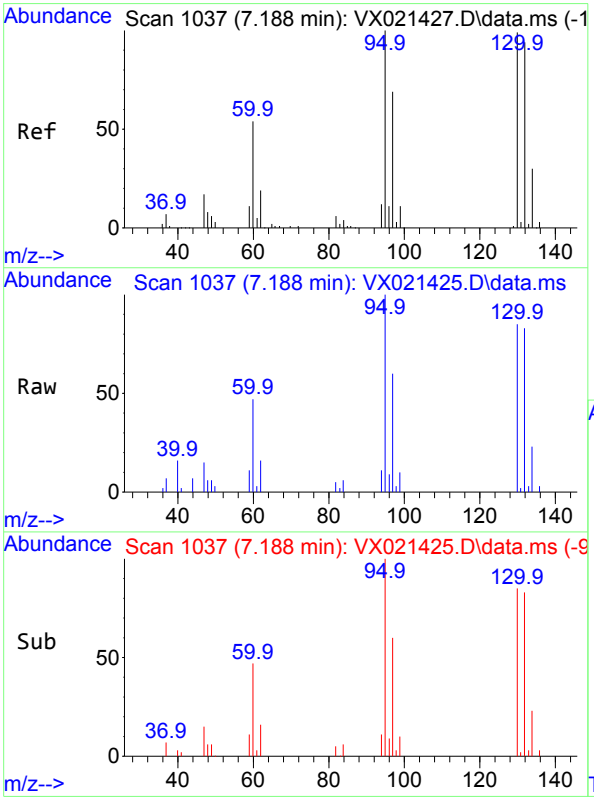



#43
Isopropyl Acetate
Concen: 4.91 ug/l
RT: 6.411 min Scan# 905
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 43 Resp: 11744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 17.6 | 18.2 | 27.4# |
| 87 | 11.4 | 12.5 | 18.7# |

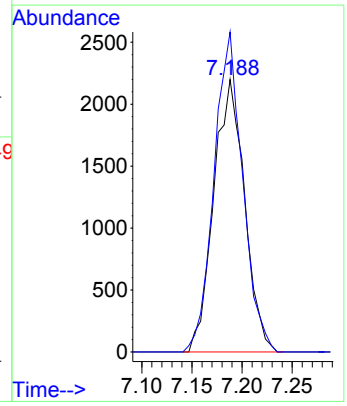



#44
Trichloroethene
Concen: 5.09 ug/l
RT: 7.188 min Scan# 1037
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

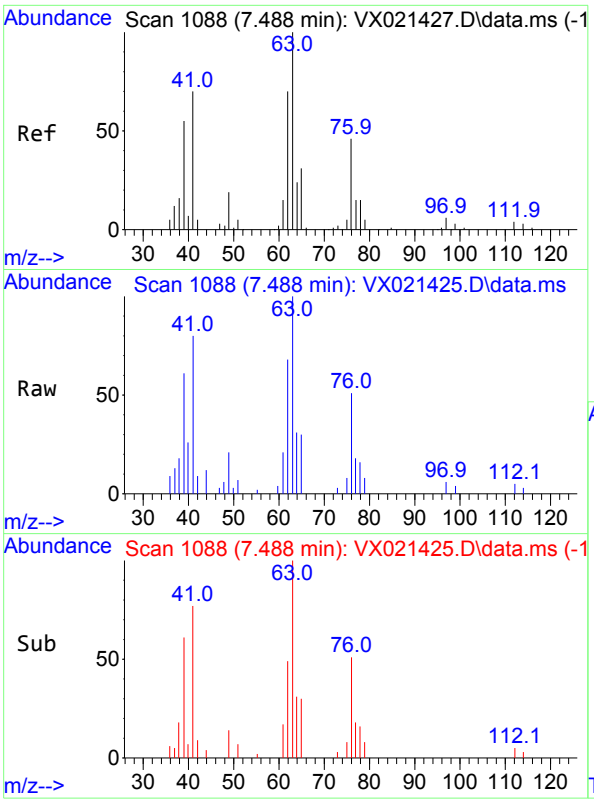
Tgt Ion:130 Resp: 4703

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 117.4 | 0.0 | 198.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

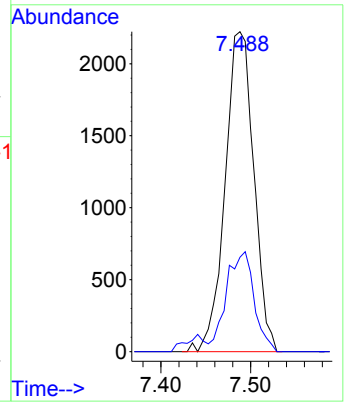
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

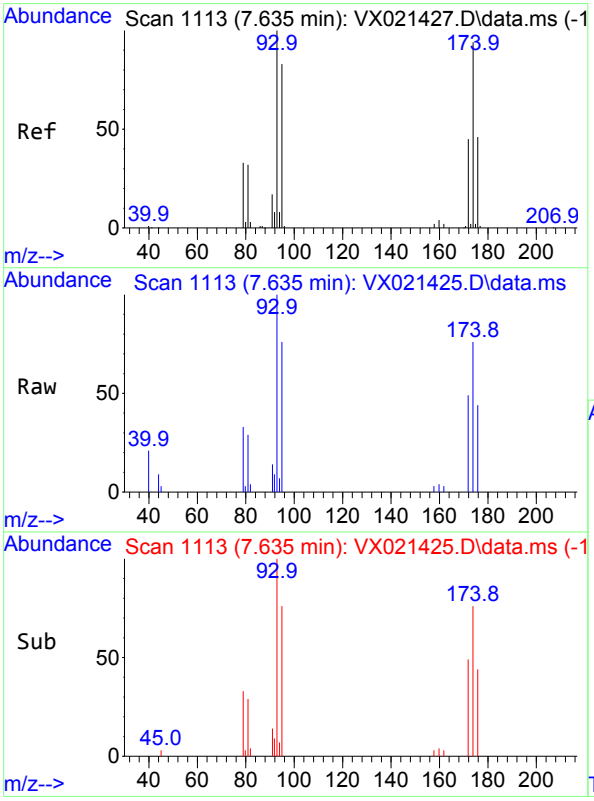



#45
1,2-Dichloropropane
Concen: 5.26 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 63 Resp: 4936

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 29.5 | 25.7 | 38.5 |

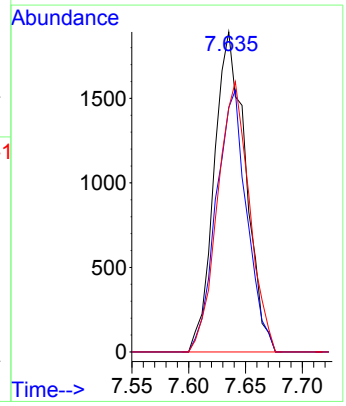



#46
Dibromomethane
Concen: 5.29 ug/l
RT: 7.635 min Scan# 1113
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

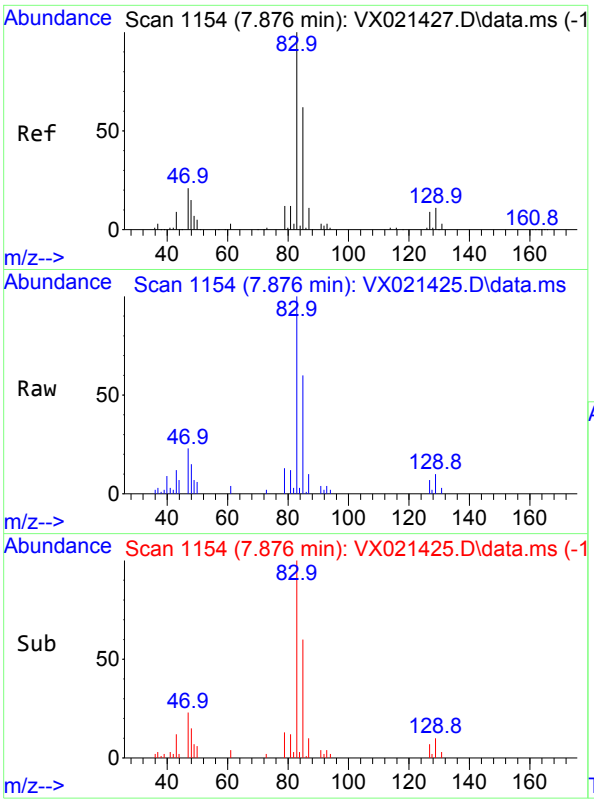
Tgt Ion: 93 Resp: 3645

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 79.9 | 66.8 | 100.2 |
| 174 | 85.2 | 83.1 | 124.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

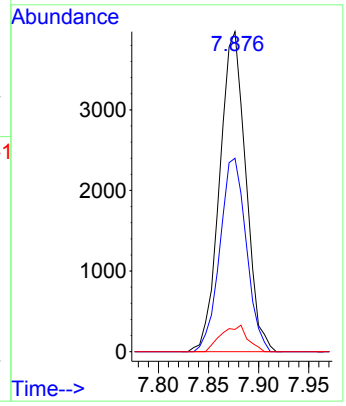
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

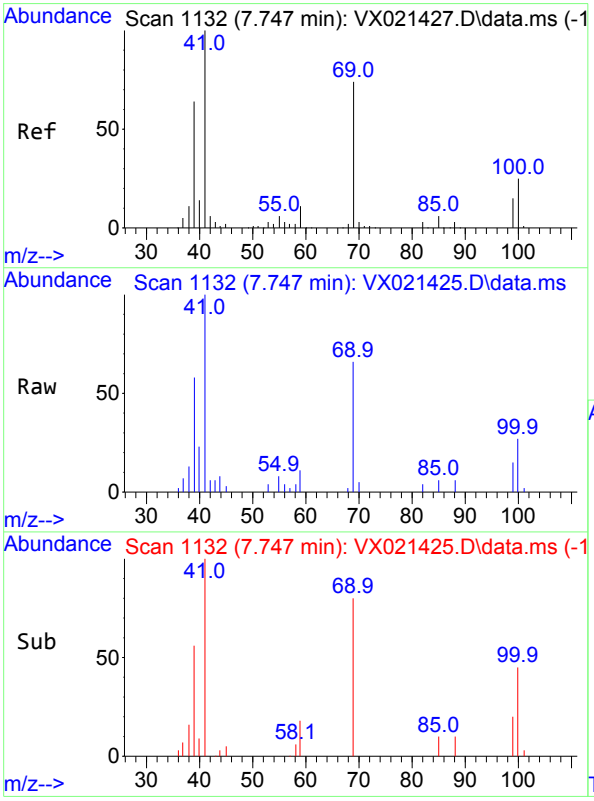



#47
Bromodichloromethane
Concen: 5.21 ug/l
RT: 7.876 min Scan# 1154
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 83 Resp: 7172

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 60.4 | 51.4 | 77.0 |
| 127 | 7.0 | 6.8 | 10.2 |

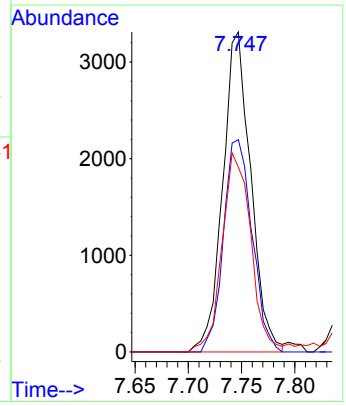



#48
Methyl methacrylate
Concen: 4.74 ug/l
RT: 7.747 min Scan# 1132
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

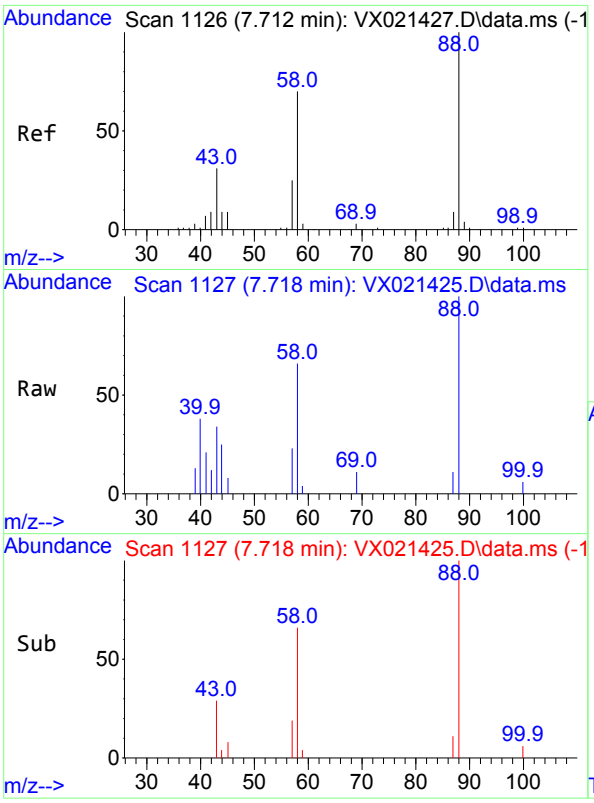
Tgt Ion: 41 Resp: 6054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 67.8 | 76.0 | 114.0# |
| 39 | 63.8 | 44.6 | 67.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

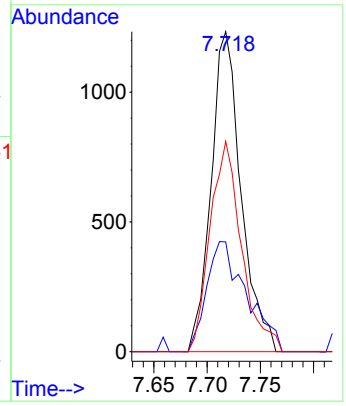
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

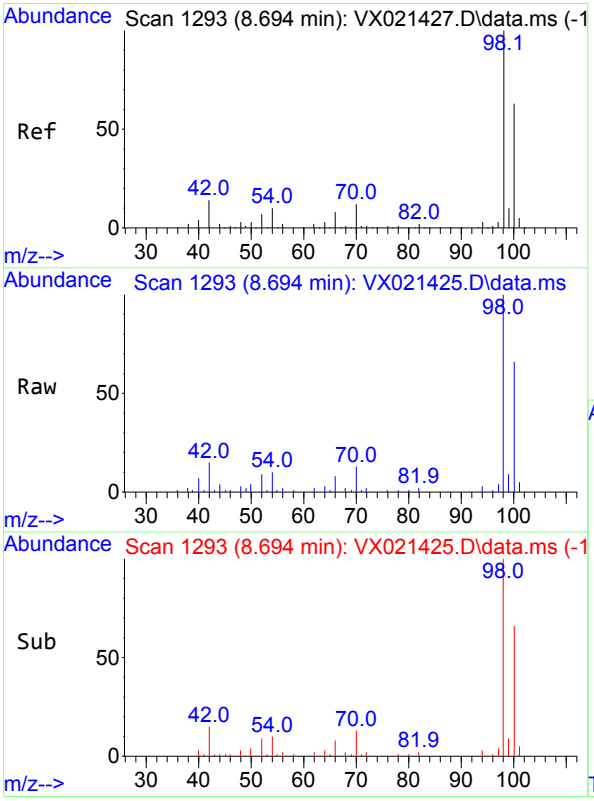



#49
1,4-Dioxane
Concen: 101.83 ug/l
RT: 7.718 min Scan# 1127
Delta R.T. 0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 88 Resp: 2411

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 45.8 | 23.2 | 34.8# |
| 58 | 69.1 | 55.0 | 82.4 |

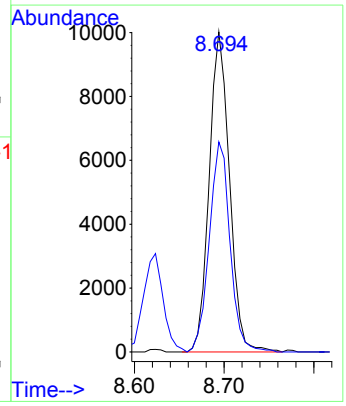



#50
Toluene-d8
Concen: 5.03 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

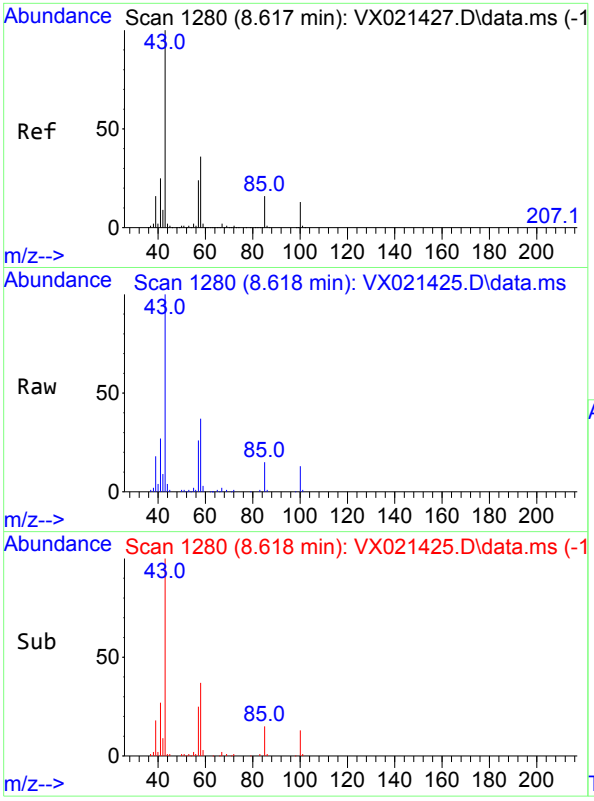
Tgt Ion: 98 Resp: 15711

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 67.3 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

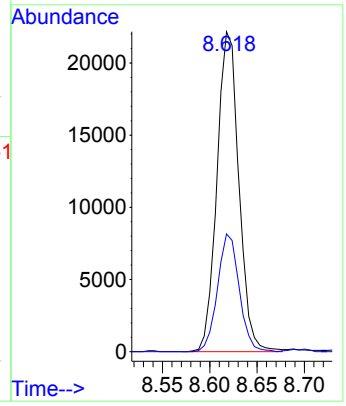
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

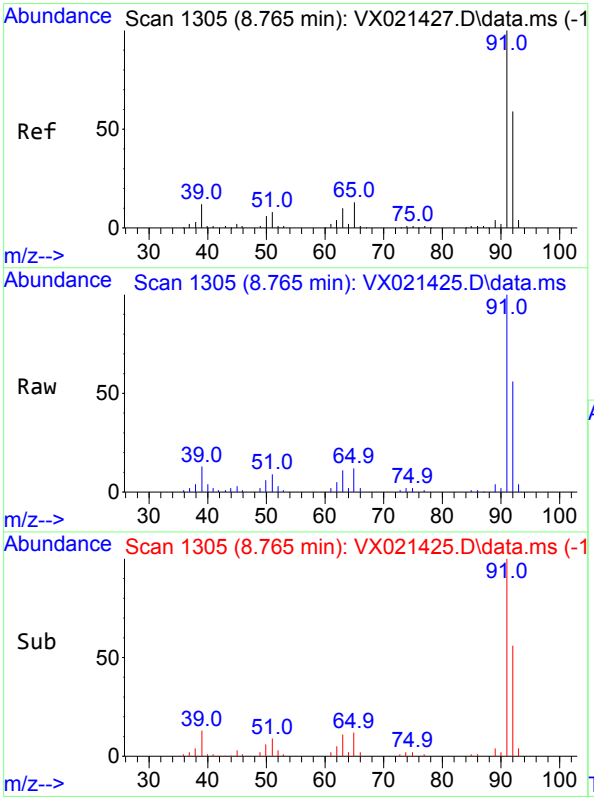



#51
4-Methyl-2-Pentanone
Concen: 25.40 ug/l
RT: 8.618 min Scan# 1280
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 43 Resp: 35718

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.3 | 35.4 | 53.0 |

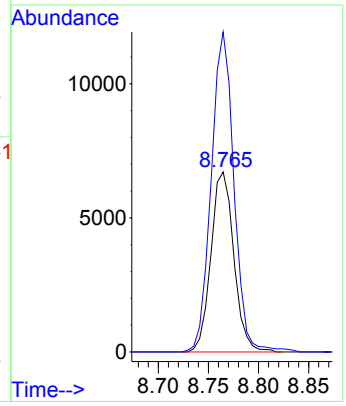



#52
Toluene
Concen: 4.94 ug/l
RT: 8.765 min Scan# 1305
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

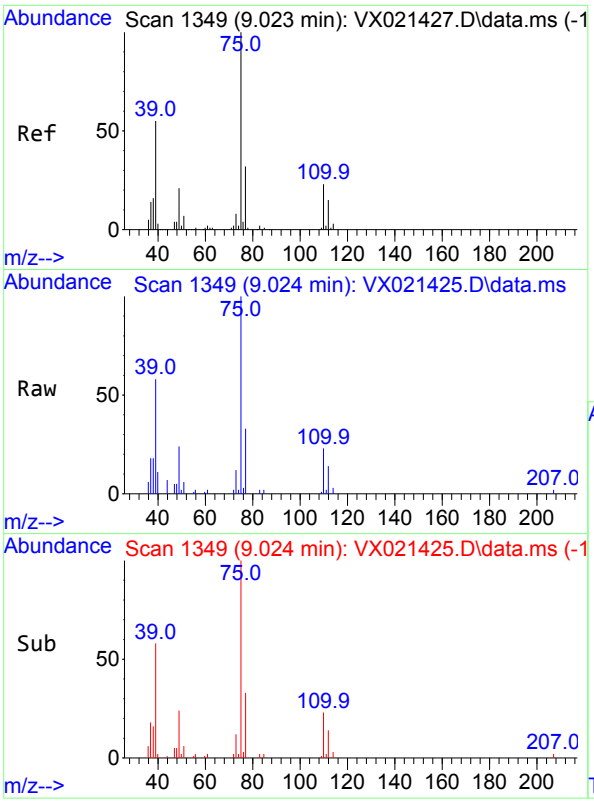
Tgt Ion: 92 Resp: 10654

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 176.4 | 137.1 | 205.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

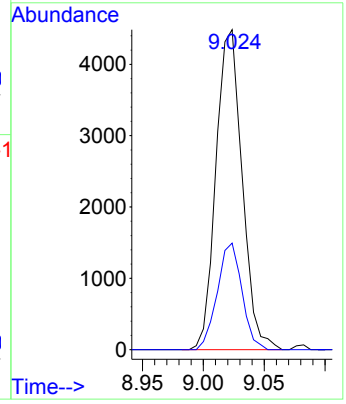
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

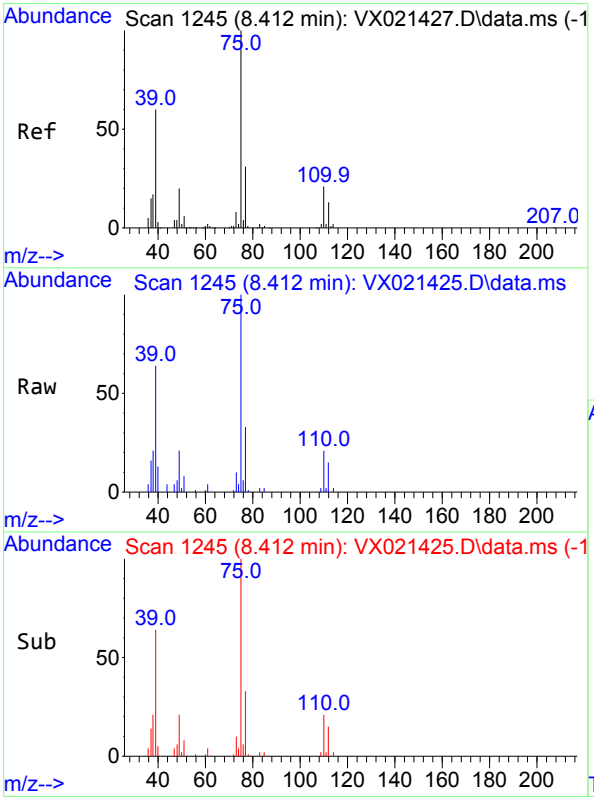



#53
t-1,3-Dichloropropene
Concen: 4.60 ug/l
RT: 9.024 min Scan# 1349
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 75 Resp: 6709

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.3 | 24.9 | 37.3 |

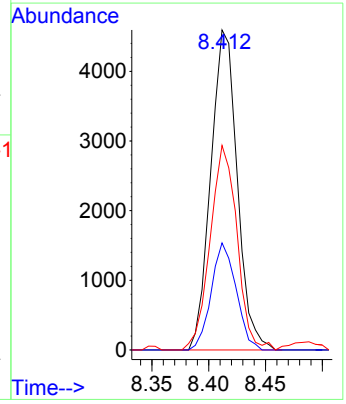



#54
cis-1,3-Dichloropropene
Concen: 4.80 ug/l
RT: 8.412 min Scan# 1245
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

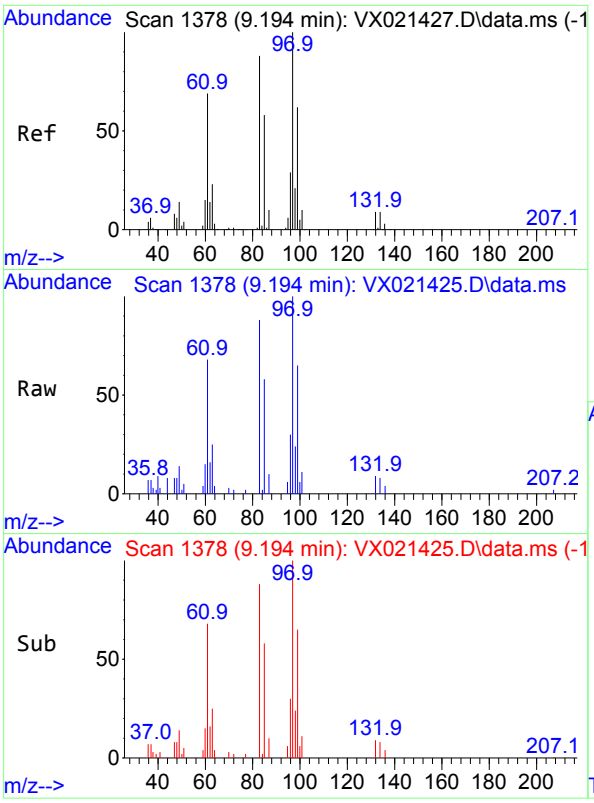
Tgt Ion: 75 Resp: 7453

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.5 | 25.7 | 38.5 |
| 39 | 63.9 | 35.1 | 52.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

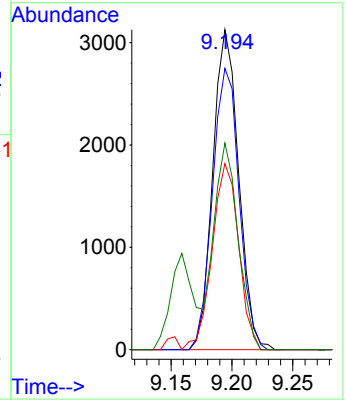
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

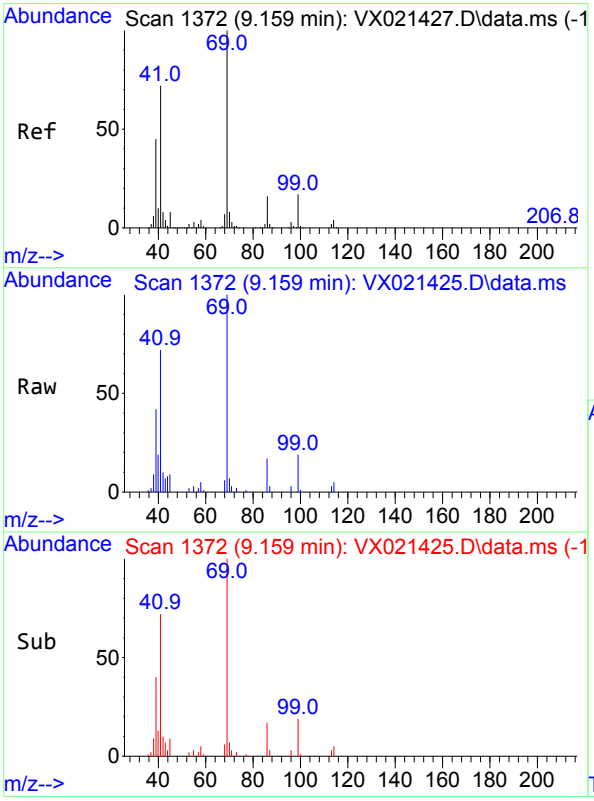



#55
1,1,2-Trichloroethane
Concen: 5.19 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 97 Resp: 4600

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.9 | 69.3 | 103.9 |
| 85 | 58.2 | 44.3 | 66.5 |
| 99 | 64.5 | 50.3 | 75.5 |

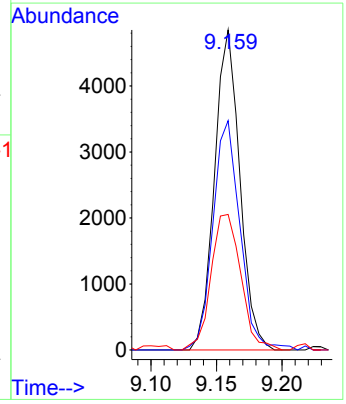



#56
Ethyl methacrylate
Concen: 4.60 ug/l
RT: 9.159 min Scan# 1372
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

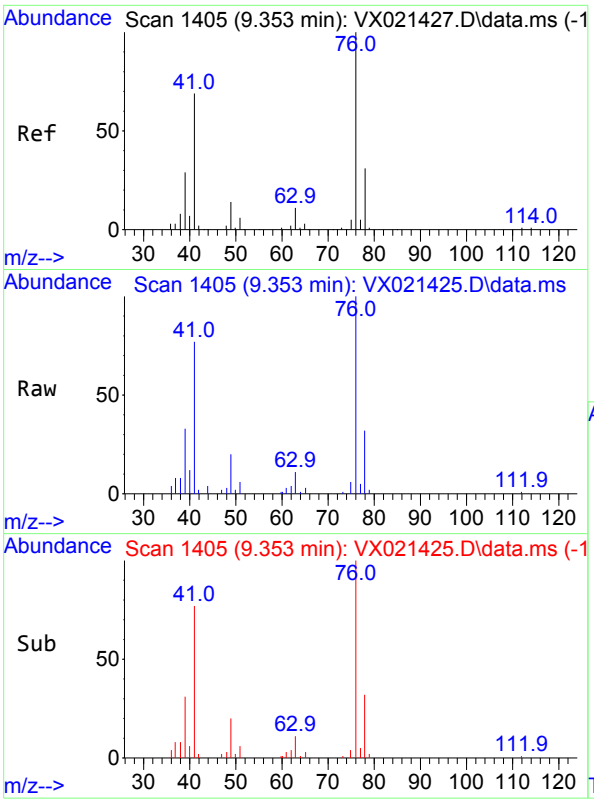
Tgt Ion: 69 Resp: 6520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 76.9 | 46.8 | 70.2# |
| 39 | 49.8 | 24.7 | 37.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

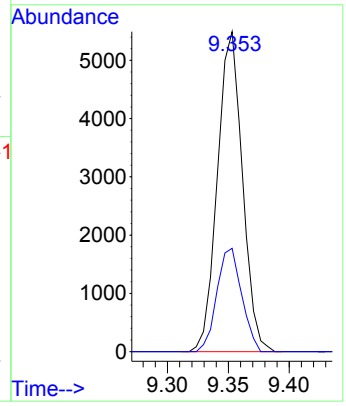
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

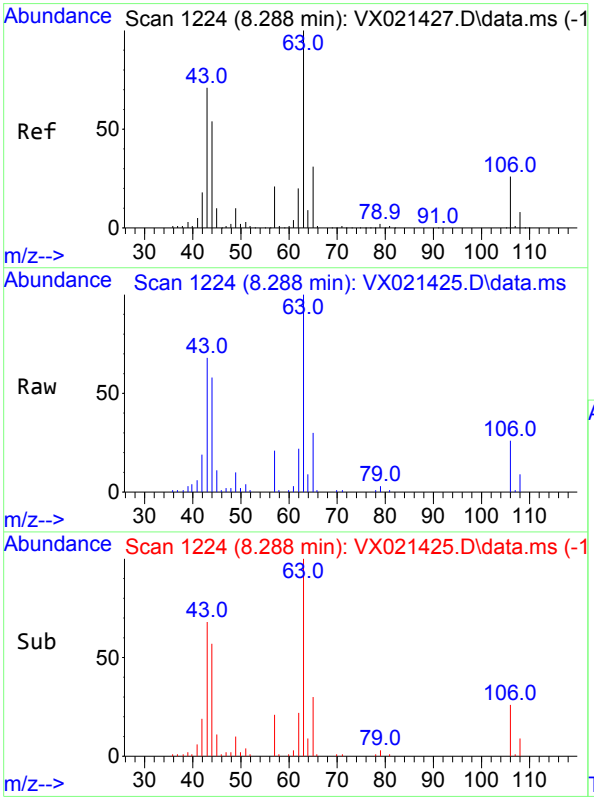



#57
1,3-Dichloropropane
Concen: 5.08 ug/l
RT: 9.353 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 76 Resp: 7840

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.0 | 26.2 | 39.2 |

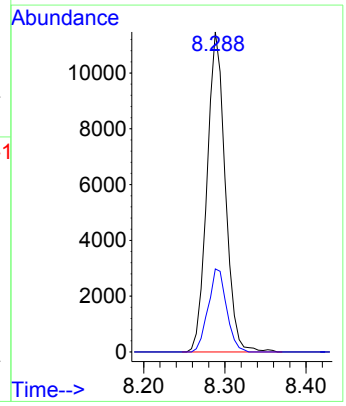



#58
2-Chloroethyl Vinyl ether
Concen: 22.84 ug/l
RT: 8.288 min Scan# 1224
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

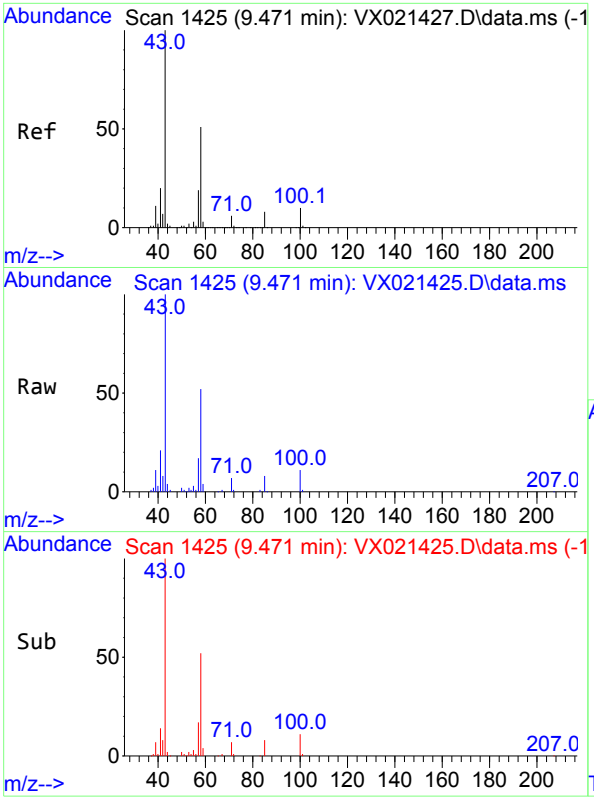
Tgt Ion: 63 Resp: 17847

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.2 | 23.5 | 35.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

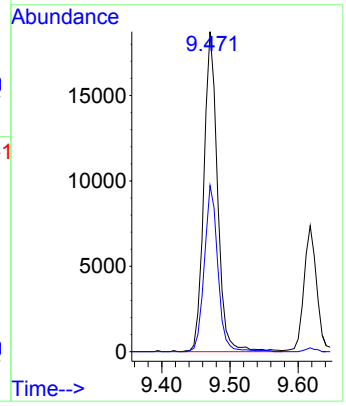
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

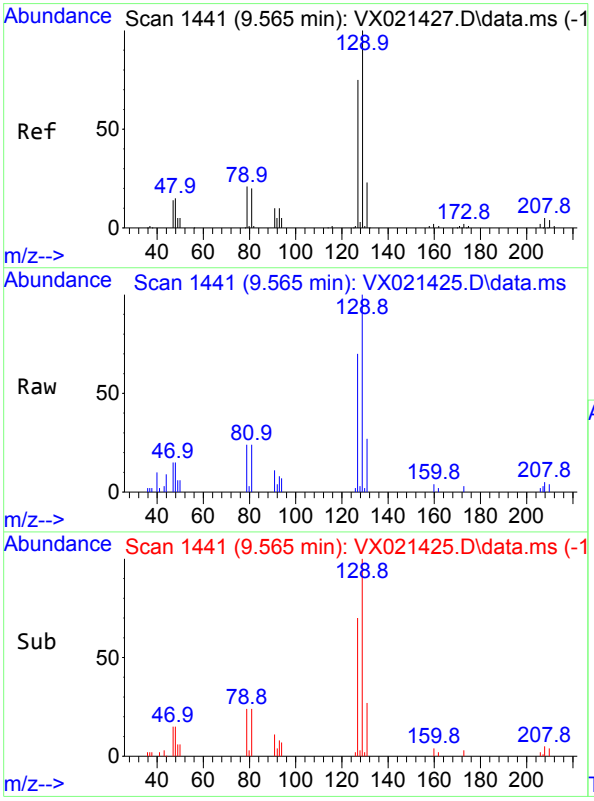



#59
2-Hexanone
Concen: 24.82 ug/l
RT: 9.471 min Scan# 1425
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 43 Resp: 26107

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 51.0 | 30.9 | 92.8 |

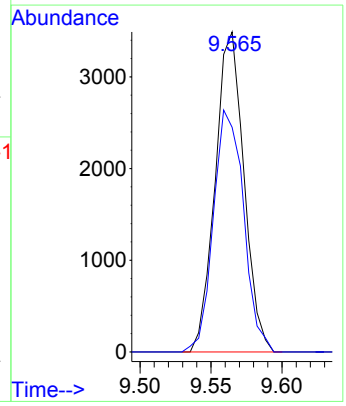



#60
Dibromochloromethane
Concen: 4.87 ug/l
RT: 9.565 min Scan# 1441
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

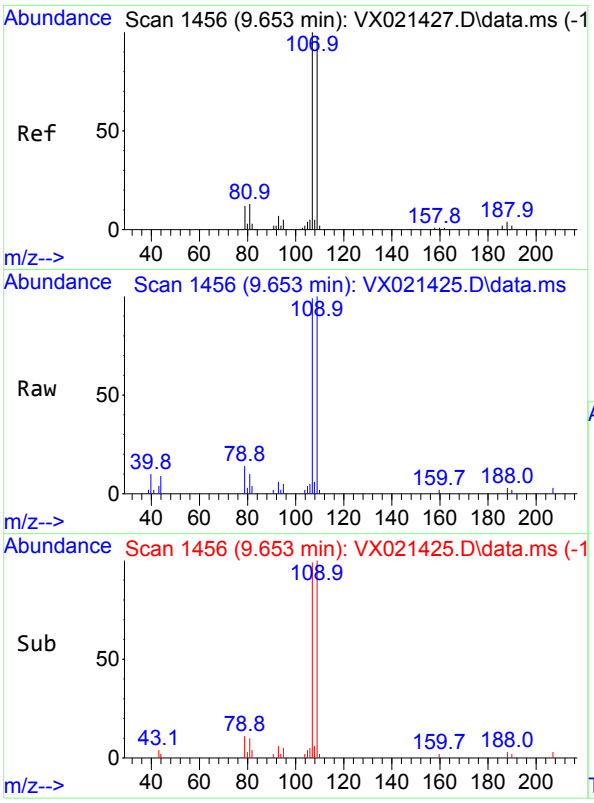
Tgt Ion:129 Resp: 4909

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 79.4 | 38.4 | 115.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

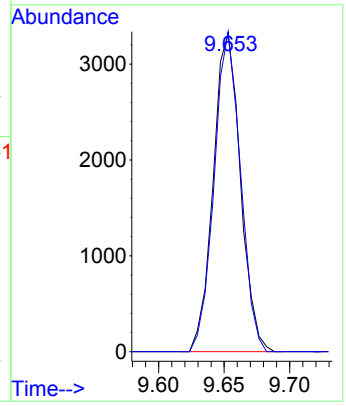
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

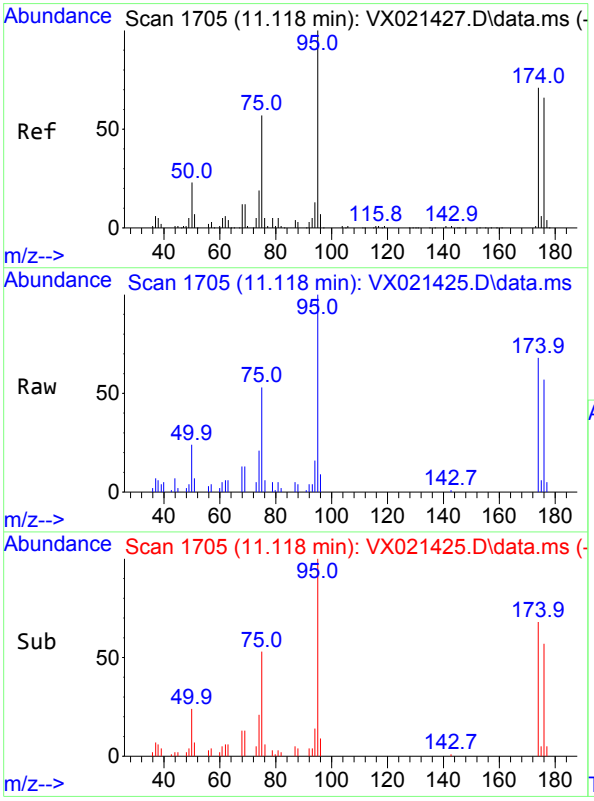



#61
1,2-Dibromoethane
Concen: 4.91 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:107 Resp: 4785

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 97.1 | 75.8 | 113.6 |

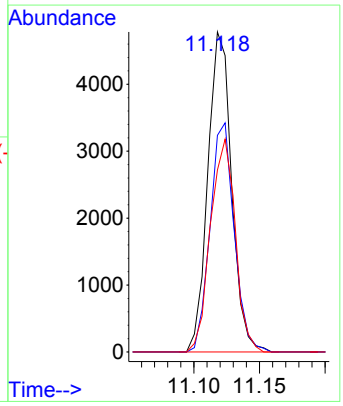



#62
4-Bromofluorobenzene
Concen: 4.99 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

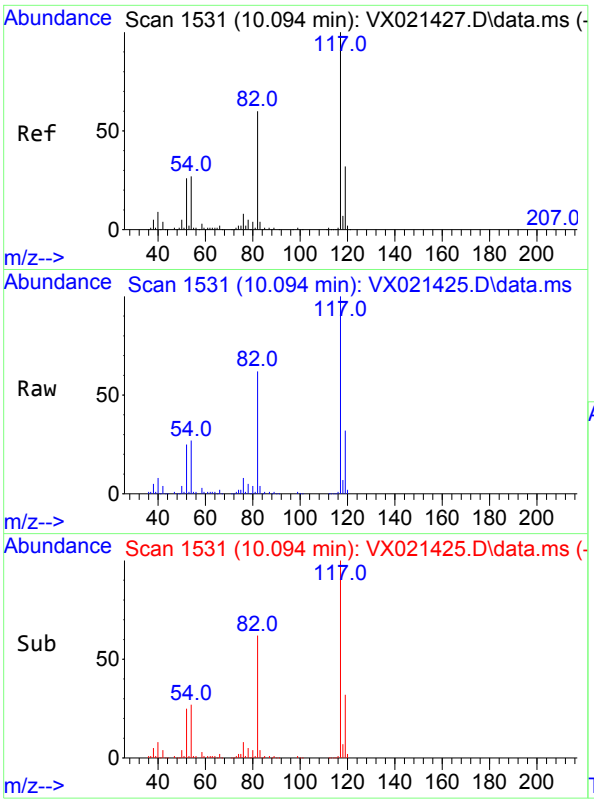
Tgt Ion: 95 Resp: 6021

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 72.6 | 0.0 | 154.6 |
| 176 | 69.4 | 0.0 | 155.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

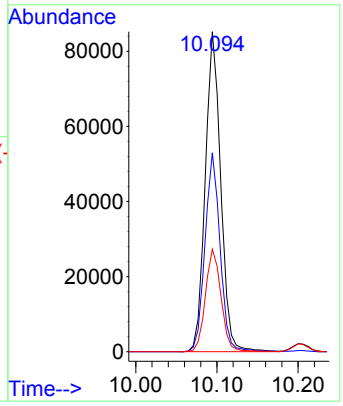
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

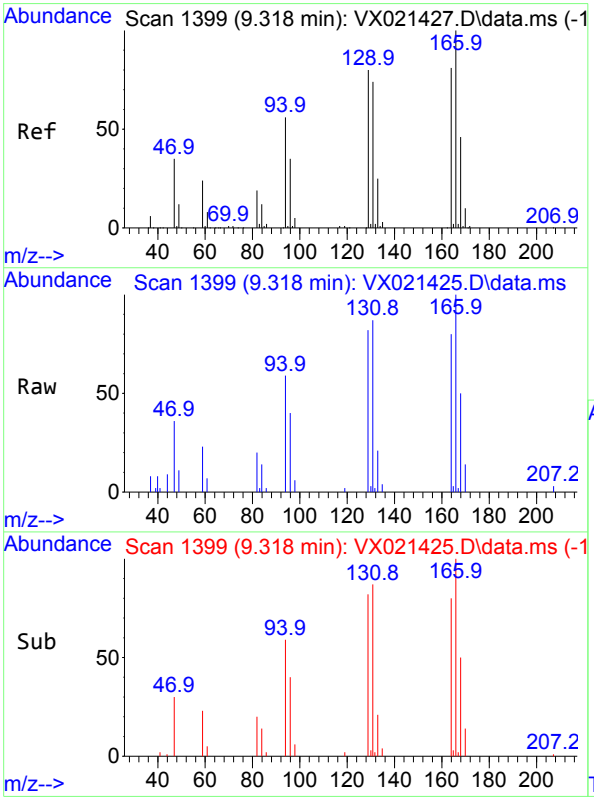



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:117 Resp: 112604

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 62.1 | 47.4 | 71.2 |
| 119 | 32.0 | 26.6 | 39.8 |

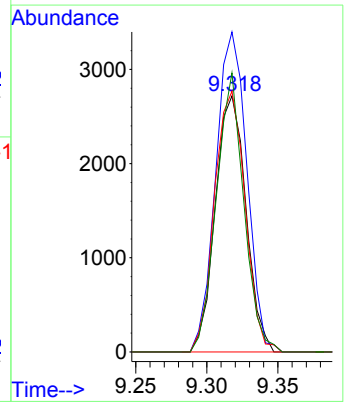



#64
Tetrachloroethene
Concen: 4.90 ug/l
RT: 9.318 min Scan# 1399
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

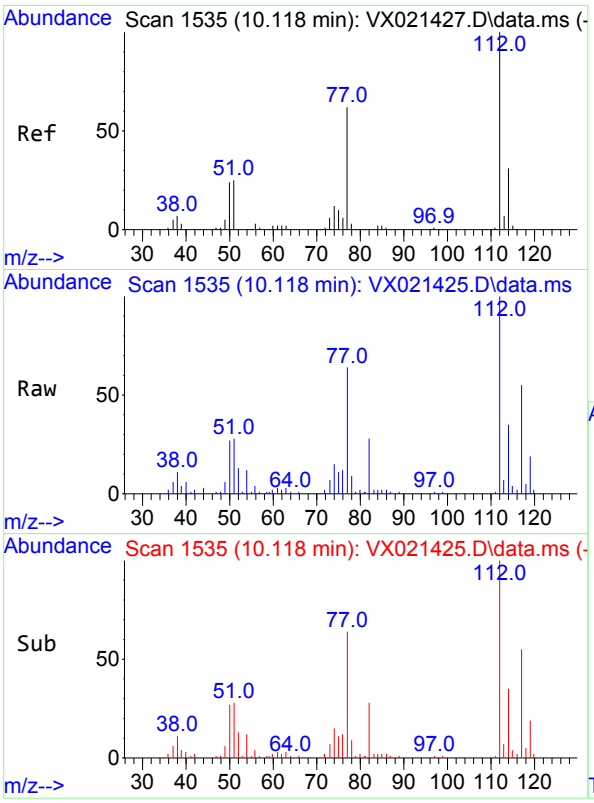
Tgt Ion:164 Resp: 4080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 125.0 | 103.4 | 155.2 |
| 129 | 101.9 | 70.8 | 106.2 |
| 131 | 109.0 | 72.5 | 108.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

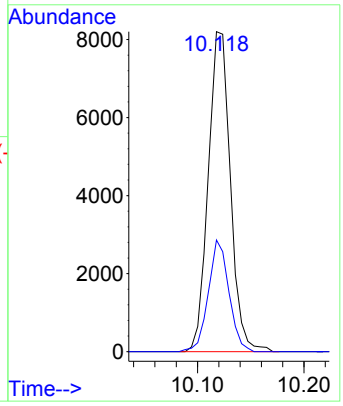
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

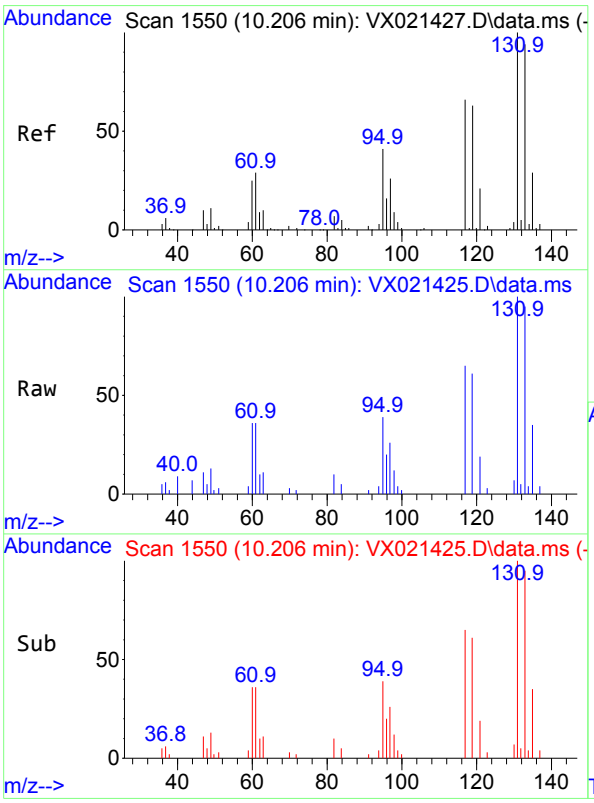



#65
Chlorobenzene
Concen: 5.12 ug/l
RT: 10.118 min Scan# 1535
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:112 Resp: 11854

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 34.9 | 25.8 | 38.6 |

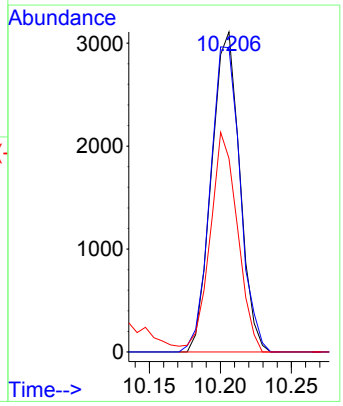



#66
1,1,1,2-Tetrachloroethane
Concen: 4.97 ug/l
RT: 10.206 min Scan# 1550
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

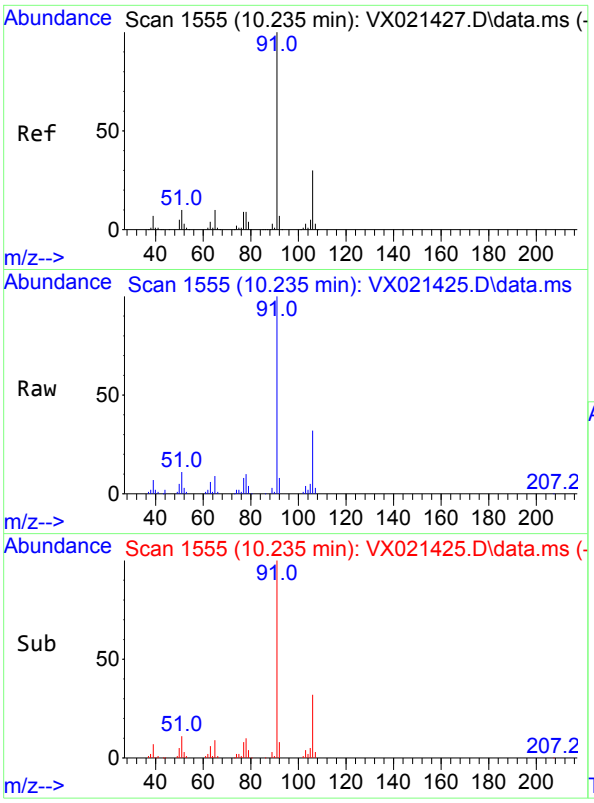
Tgt Ion:131 Resp: 4291

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 101.1 | 47.7 | 143.1 |
| 119 | 66.7 | 32.1 | 96.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

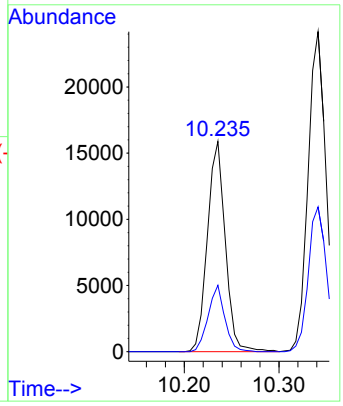
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

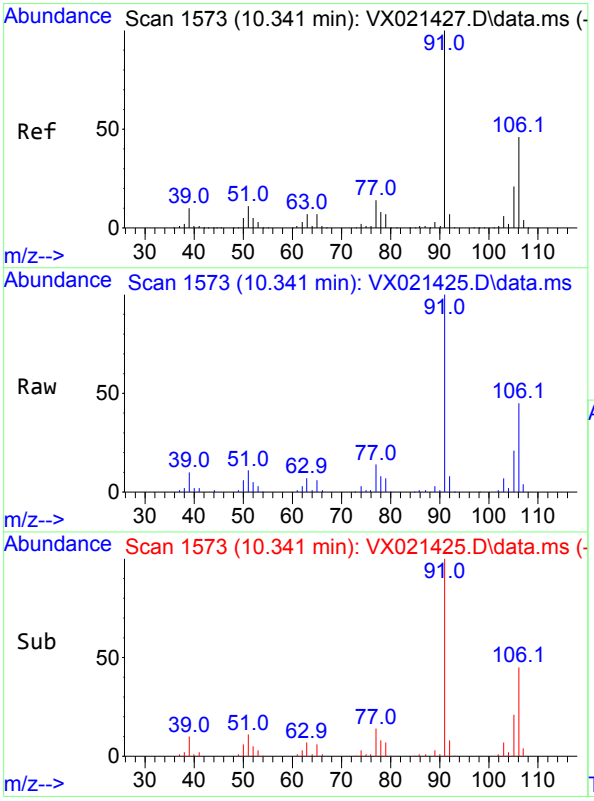



#67
Ethyl Benzene
Concen: 4.89 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 91 Resp: 20845

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.6 | 24.6 | 37.0 |

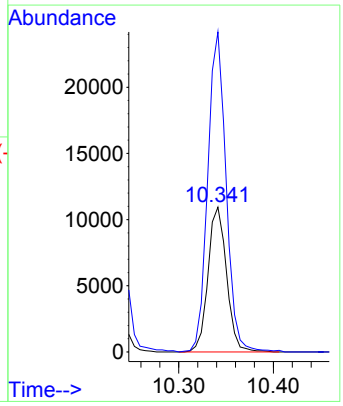



#68
m/p-Xylenes
Concen: 9.77 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

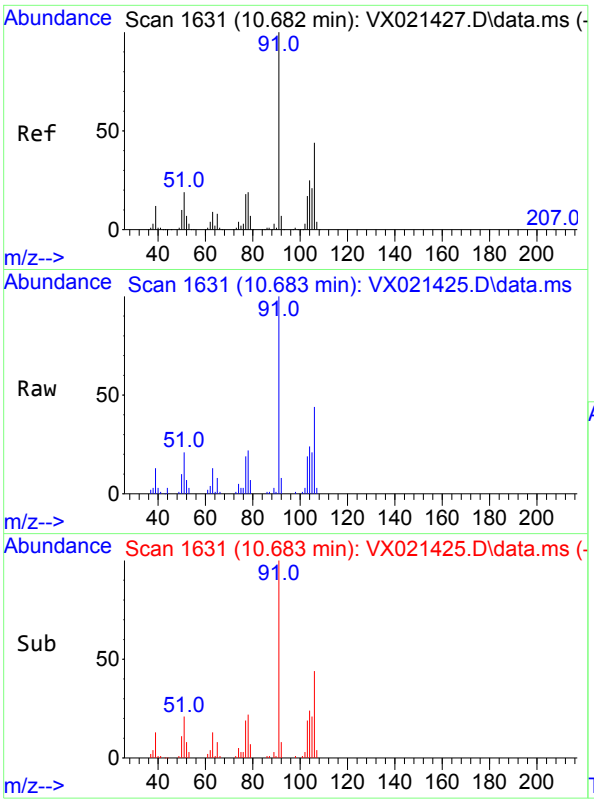
Tgt Ion:106 Resp: 14901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 218.3 | 162.8 | 244.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

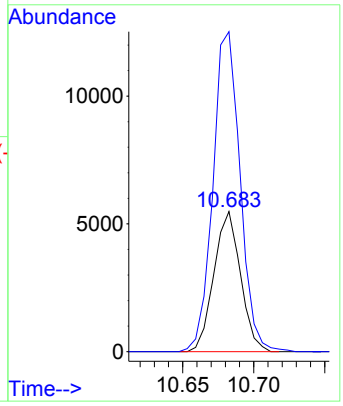
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

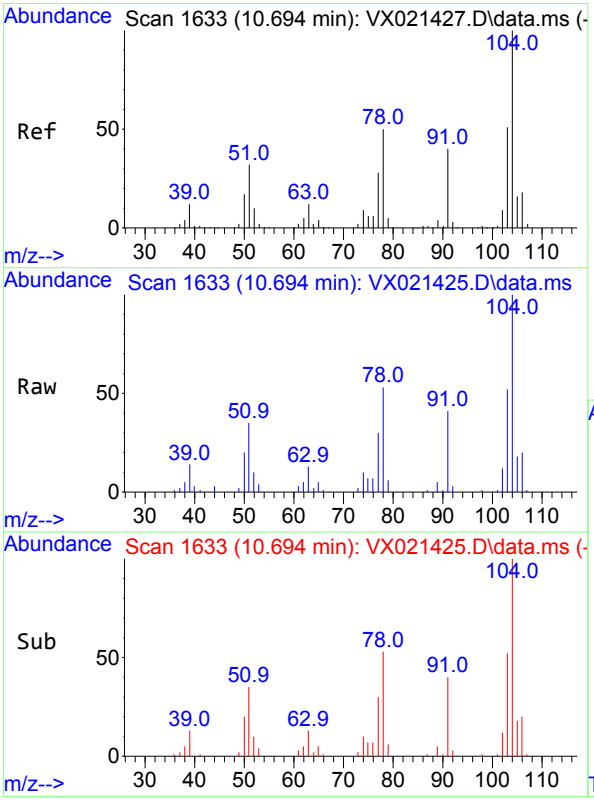



#69
o-Xylene
Concen: 4.82 ug/l
RT: 10.683 min Scan# 1631
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:106 Resp: 7137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 233.4 | 108.1 | 324.2 |

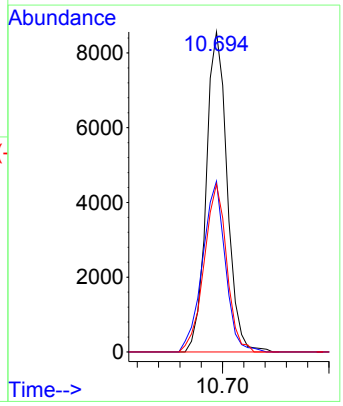



#70
Styrene
Concen: 4.68 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

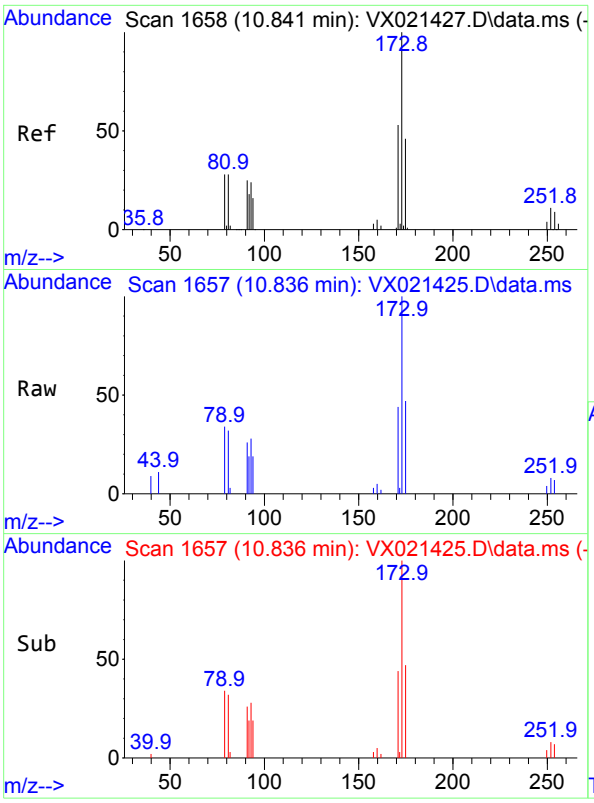
Tgt Ion:104 Resp: 11683

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 58.1 | 40.0 | 60.0 |
| 103 | 56.6 | 43.4 | 65.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

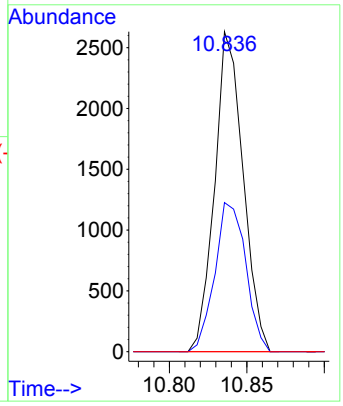
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

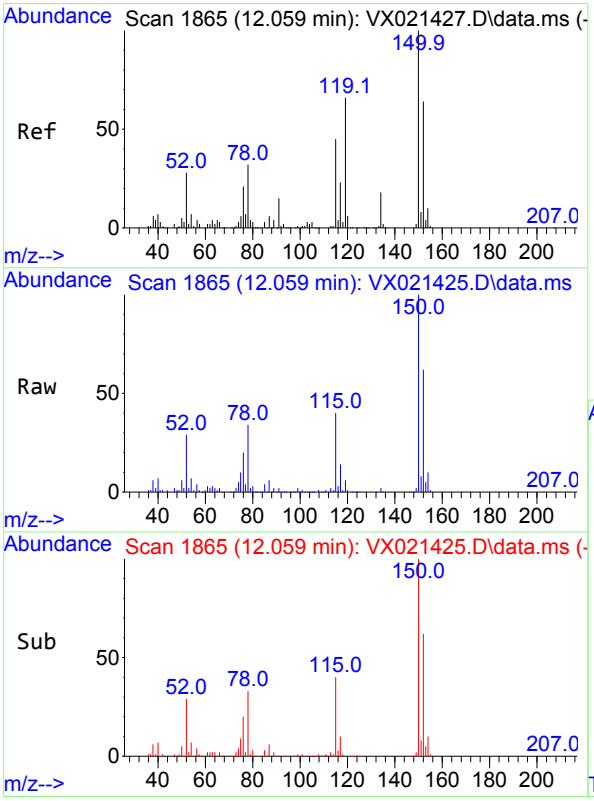



#71
Bromoform
Concen: 4.83 ug/l
RT: 10.836 min Scan# 1657
Delta R.T. -0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:173 Resp: 3361

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 50.6 | 23.9 | 71.8 |
| 254 | 0.0 | 0.1 | 0.1# |

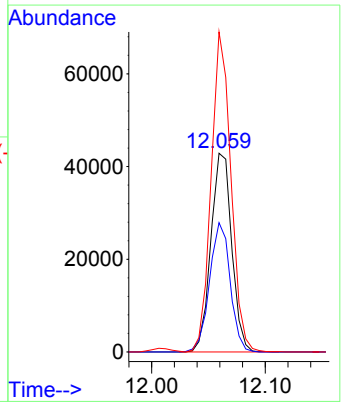



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

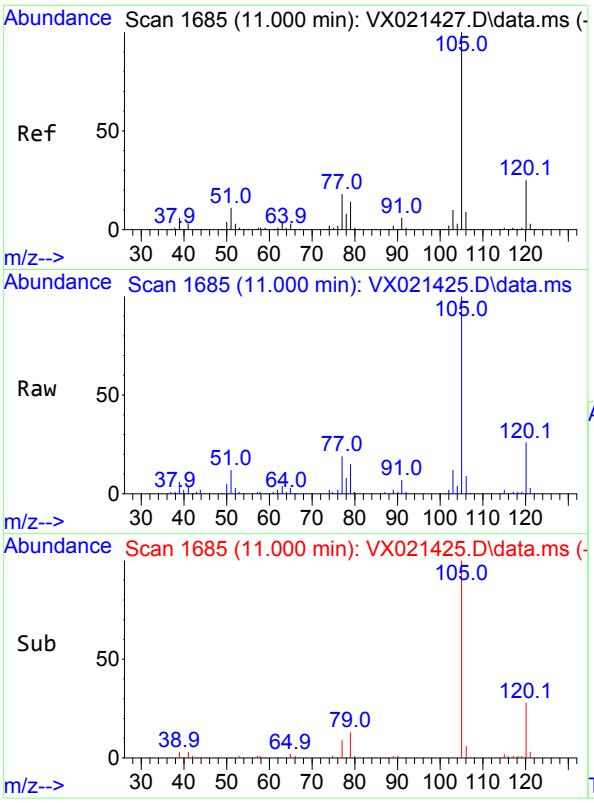
Tgt Ion:152 Resp: 54644

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 64.3 | 41.1 | 123.3 |
| 150 | 152.8 | 0.0 | 349.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

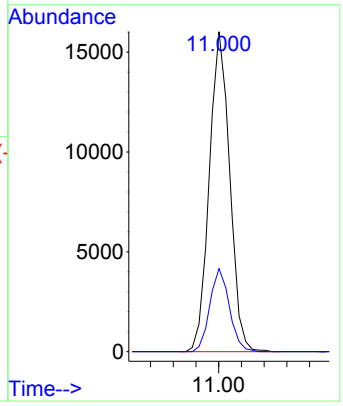
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

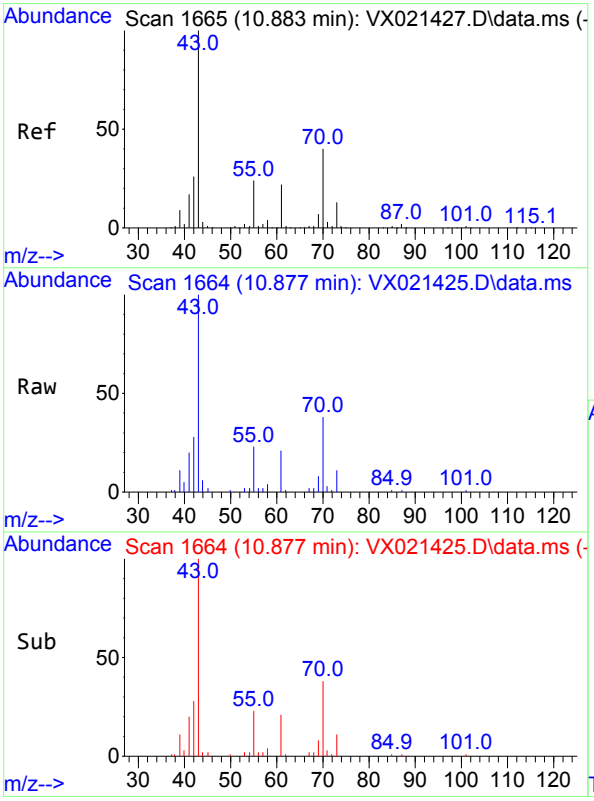



#73
Isopropylbenzene
Concen: 4.95 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:105 Resp: 19995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 24.8 | 13.2 | 39.6 |

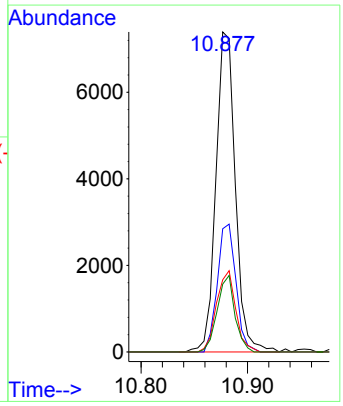



#74
N-amyl acetate
Concen: 4.63 ug/l
RT: 10.877 min Scan# 1664
Delta R.T. -0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

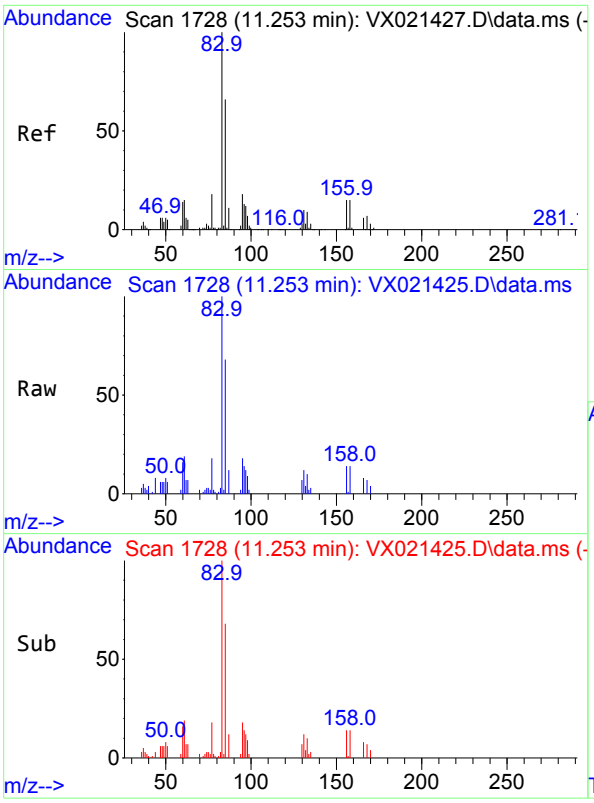
Tgt Ion: 43 Resp: 9358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 38.1 | 39.0 | 58.6# |
| 55 | 25.2 | 21.5 | 32.3 |
| 61 | 21.7 | 22.1 | 33.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

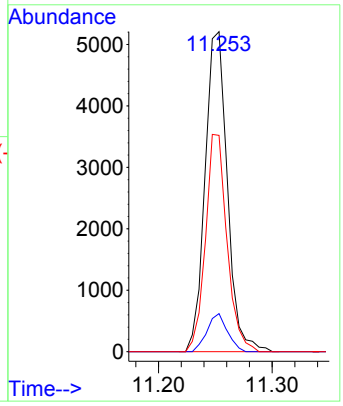
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

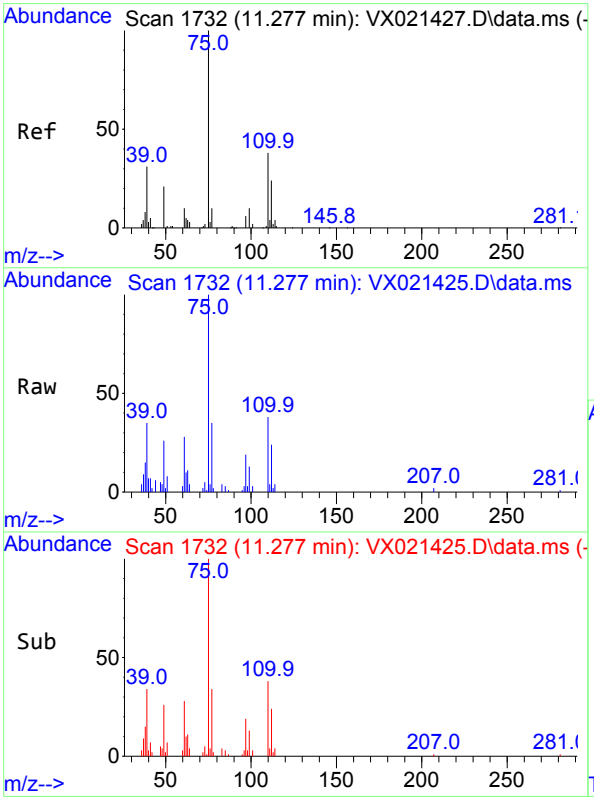



#75
1,1,2,2-Tetrachloroethane
Concen: 5.29 ug/l
RT: 11.253 min Scan# 1728
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 83 Resp: 7098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.9 | 5.1 | 15.2 |
| 85 | 65.5 | 31.8 | 95.4 |

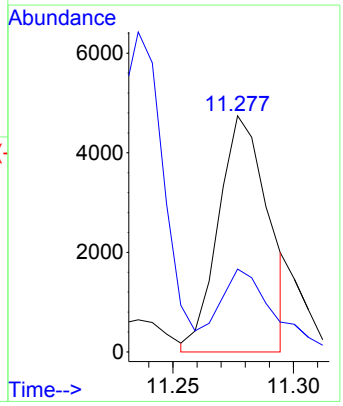



#76
1,2,3-Trichloropropane
Concen: 5.23 ug/l m
RT: 11.277 min Scan# 1732
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

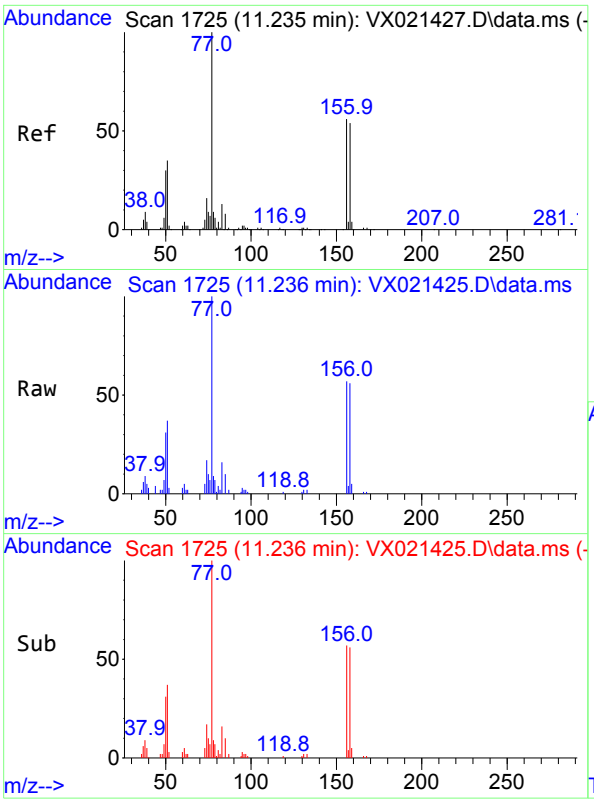
Tgt Ion: 75 Resp: 6759

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 39.0 | 19.1 | 57.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

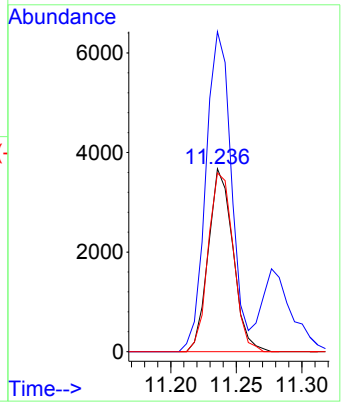
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

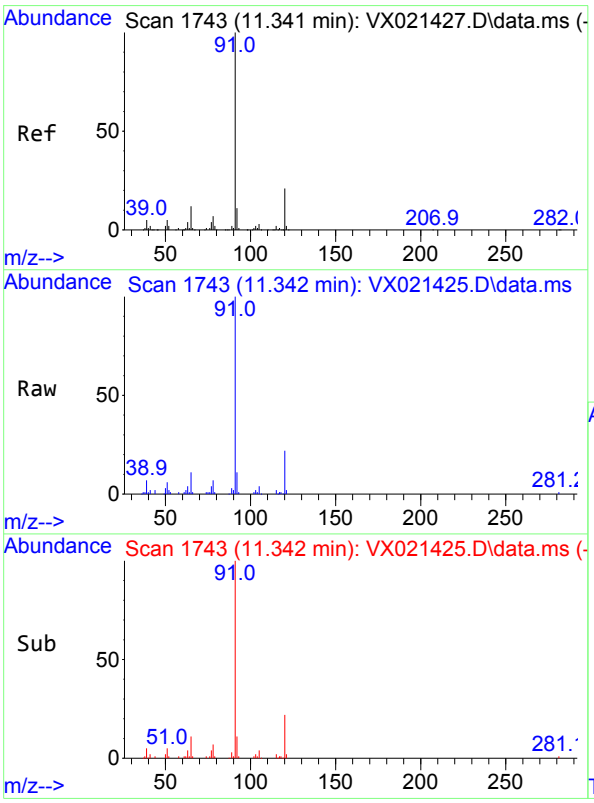



#77
Bromobenzene
Concen: 5.00 ug/l
RT: 11.236 min Scan# 1725
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:156 Resp: 4812

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 180.7 | 82.8 | 248.6 |
| 158 | 99.1 | 49.1 | 147.4 |

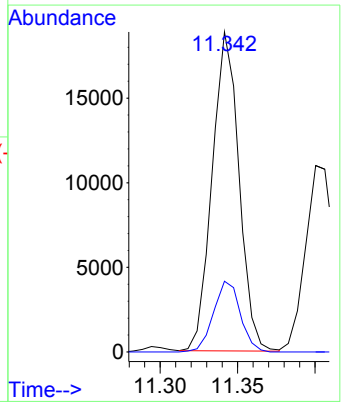



#78
n-propylbenzene
Concen: 4.81 ug/l
RT: 11.342 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

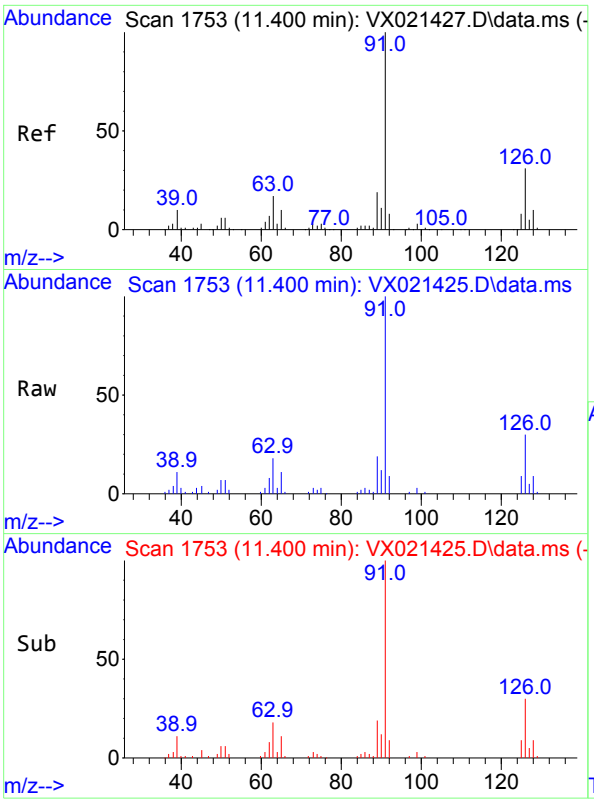
Tgt Ion: 91 Resp: 22714

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.1 | 11.5 | 34.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

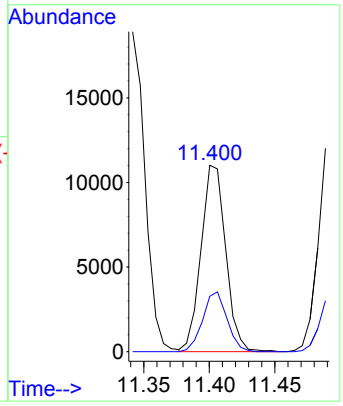
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

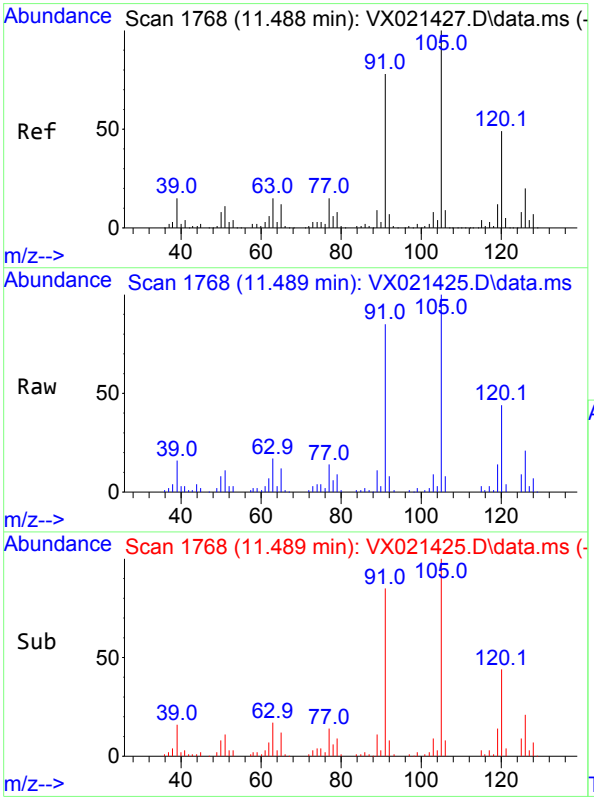



#79
2-Chlorotoluene
Concen: 5.04 ug/l
RT: 11.400 min Scan# 1753
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 91 Resp: 14465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.5 | 16.6 | 49.8 |

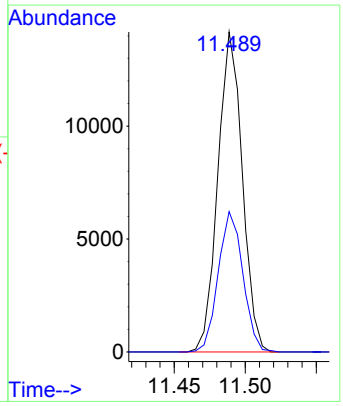



#80
1,3,5-Trimethylbenzene
Concen: 4.95 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

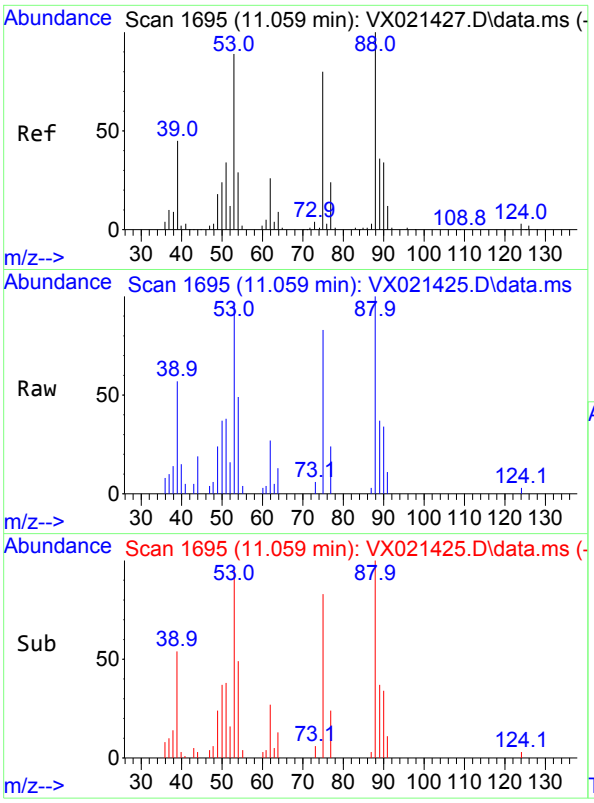
Tgt Ion:105 Resp: 16909

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.4 | 23.8 | 71.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

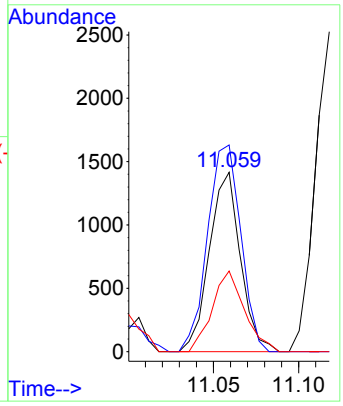
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

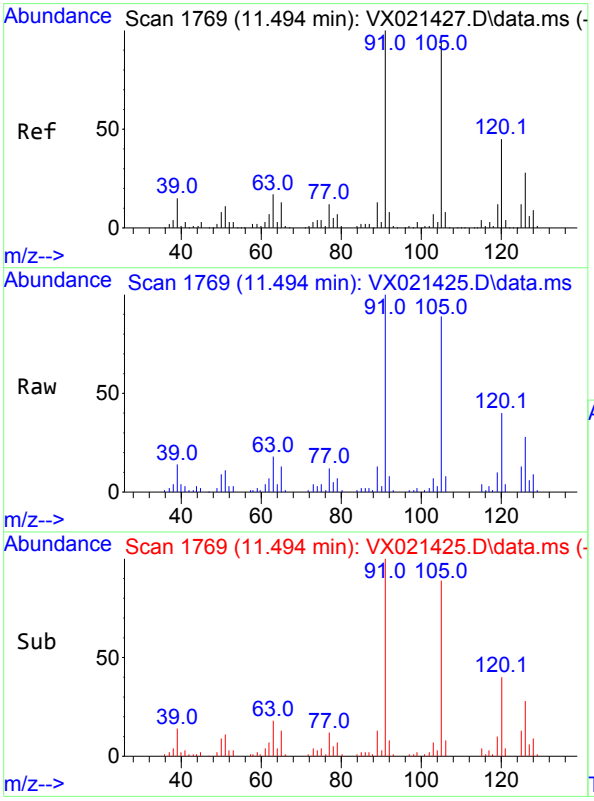



#81
trans-1,4-Dichloro-2-butene
Concen: 3.93 ug/l
RT: 11.059 min Scan# 1695
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 75 Resp: 1800

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 123.1 | 74.5 | 111.7# |
| 89 | 46.7 | 37.9 | 56.9 |

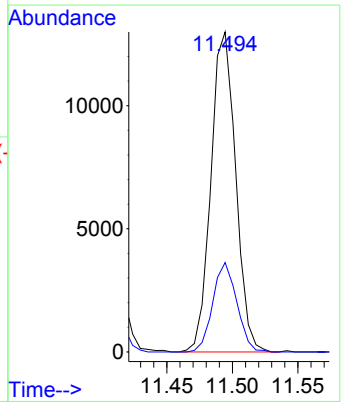



#82
4-Chlorotoluene
Concen: 5.04 ug/l
RT: 11.494 min Scan# 1769
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

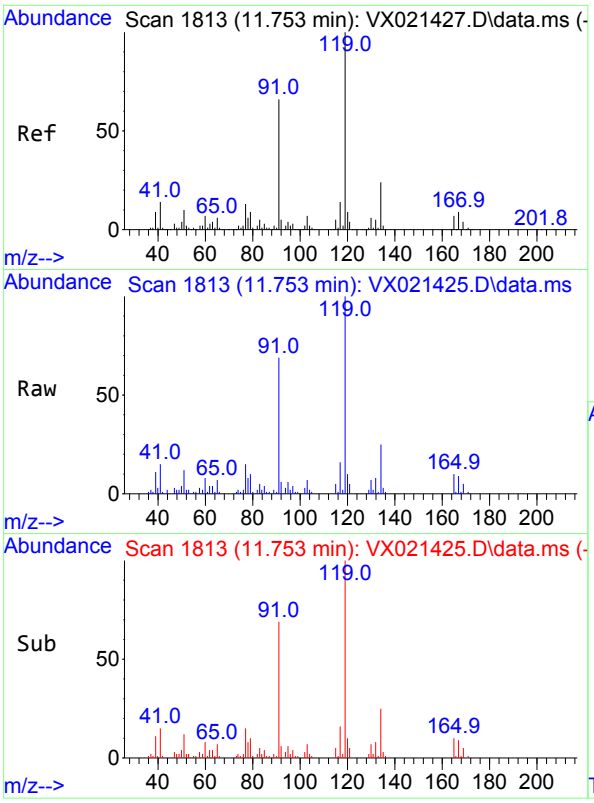
Tgt Ion: 91 Resp: 17040

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 27.2 | 14.9 | 44.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

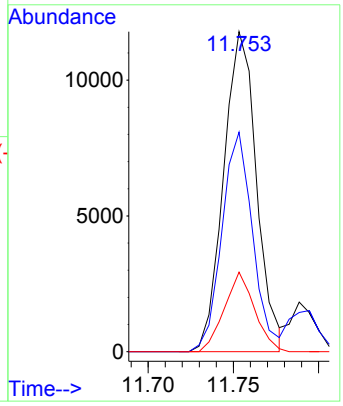
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

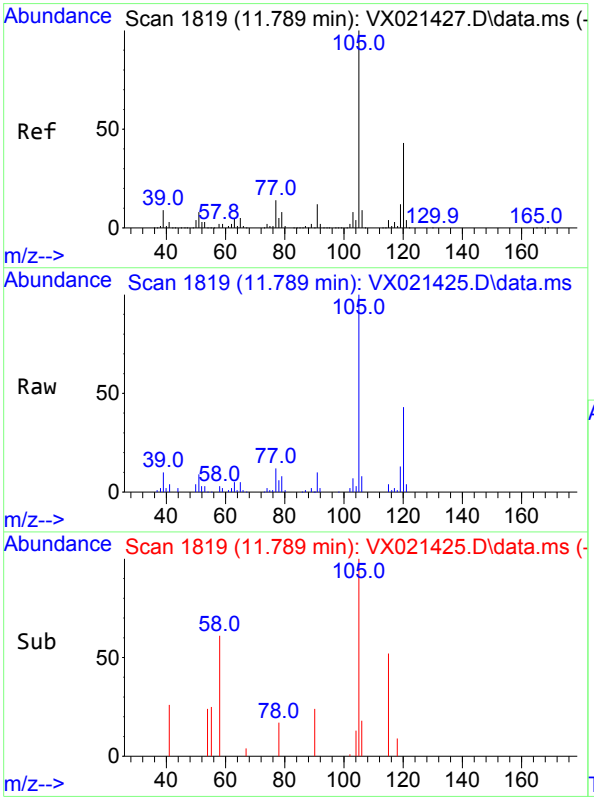



#83
tert-Butylbenzene
Concen: 4.86 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:119 Resp: 15859

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 64.2 | 27.9 | 83.7 |
| 134 | 22.8 | 11.3 | 33.9 |

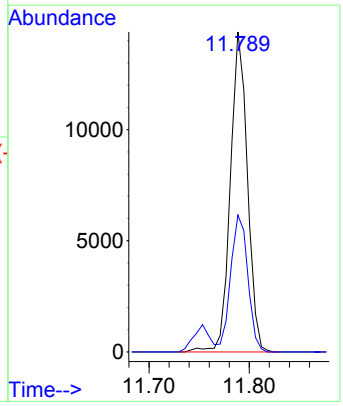



#84
1,2,4-Trimethylbenzene
Concen: 4.91 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

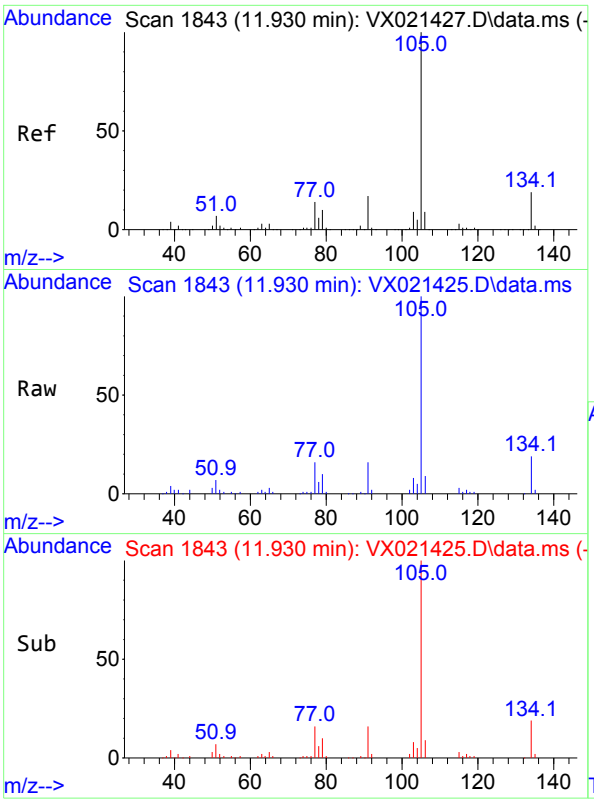
Tgt Ion:105 Resp: 17040

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.4 | 22.4 | 67.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

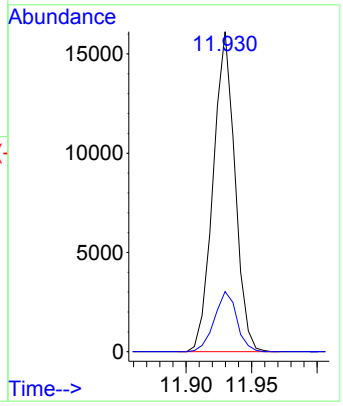
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

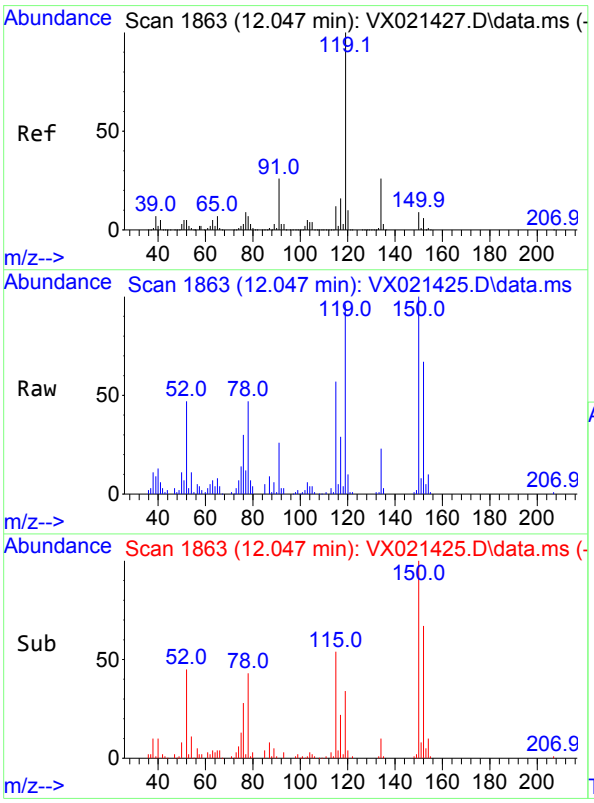



#85
sec-Butylbenzene
Concen: 4.83 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:105 Resp: 18590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 10.0 | 29.8 |

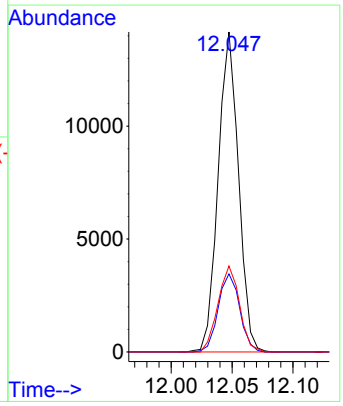



#86
p-Isopropyltoluene
Concen: 4.68 ug/l
RT: 12.047 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

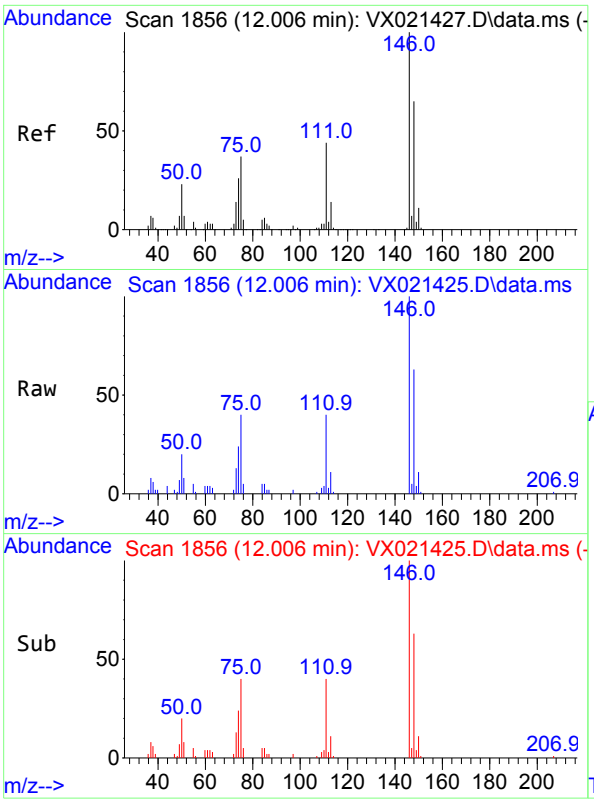
Tgt Ion:119 Resp: 16459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.7 | 12.9 | 38.7 |
| 91 | 28.4 | 11.7 | 35.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

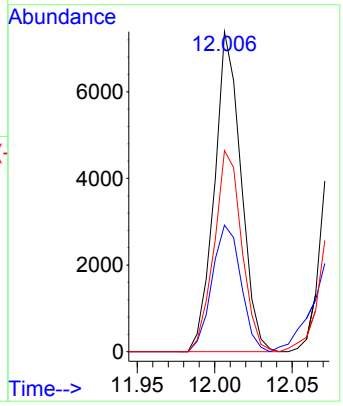
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

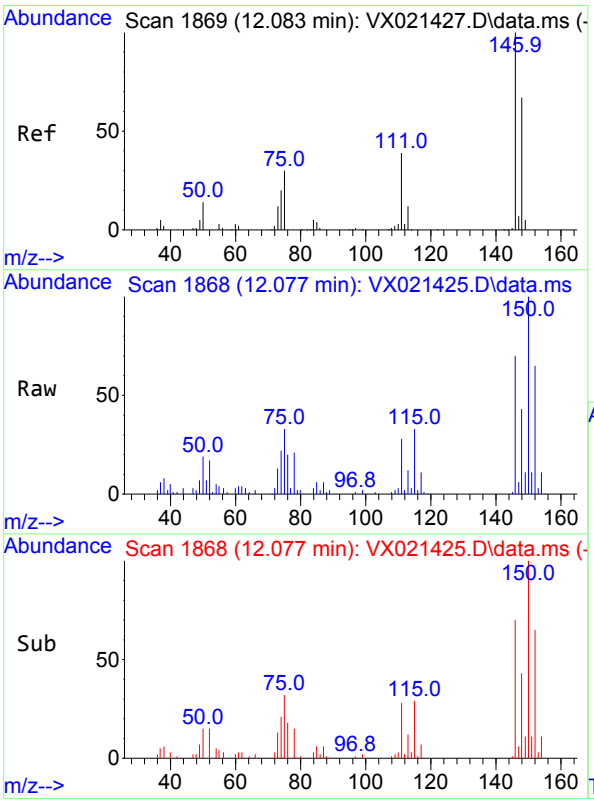



#87
1,3-Dichlorobenzene
Concen: 5.02 ug/l
RT: 12.006 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:146 Resp: 8791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.0 | 20.2 | 60.5 |
| 148 | 65.3 | 31.9 | 95.7 |

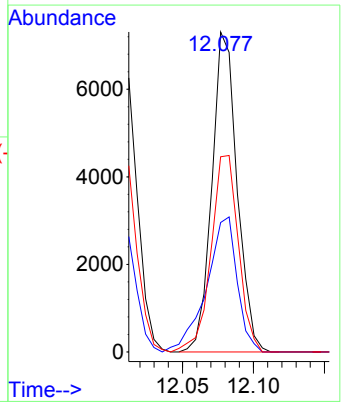



#88
1,4-Dichlorobenzene
Concen: 5.05 ug/l
RT: 12.077 min Scan# 1868
Delta R.T. -0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

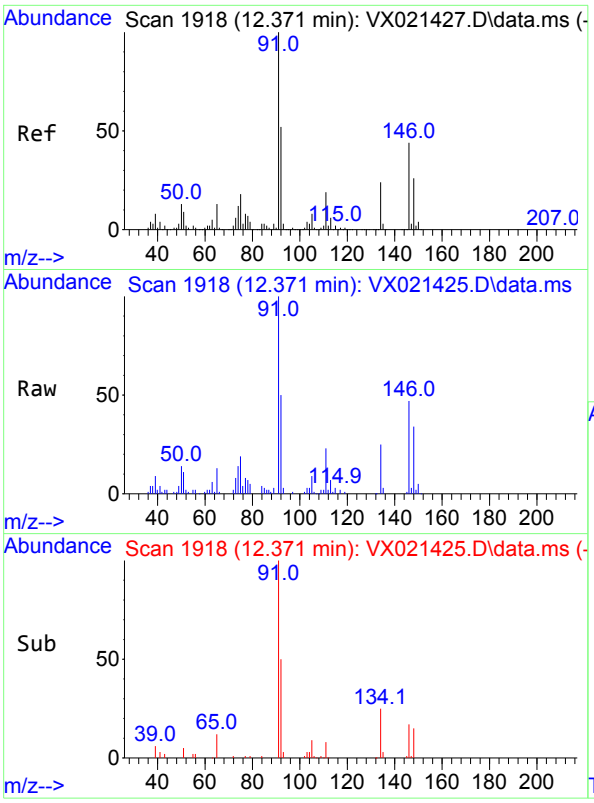
Tgt Ion:146 Resp: 9008

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 51.3 | 19.6 | 58.8 |
| 148 | 66.8 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

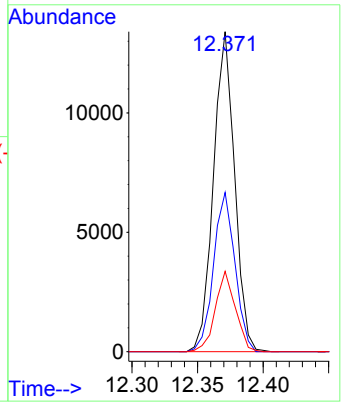
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

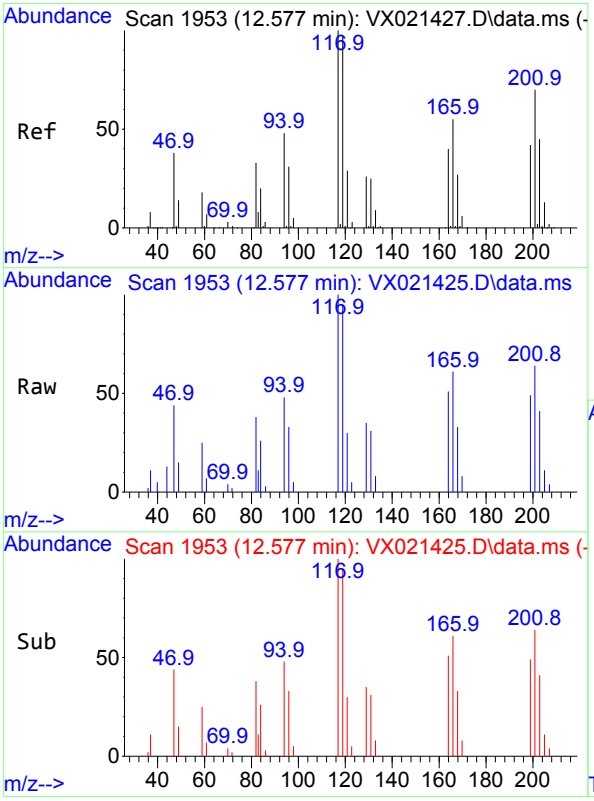



#89
n-Butylbenzene
Concen: 4.68 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion: 91 Resp: 15001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 50.5 | 27.4 | 82.0 |
| 134 | 23.9 | 13.2 | 39.5 |

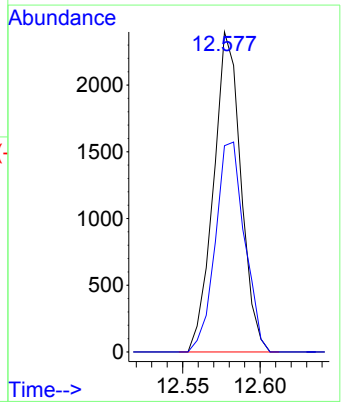



#90
Hexachloroethane
Concen: 5.38 ug/l
RT: 12.577 min Scan# 1953
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

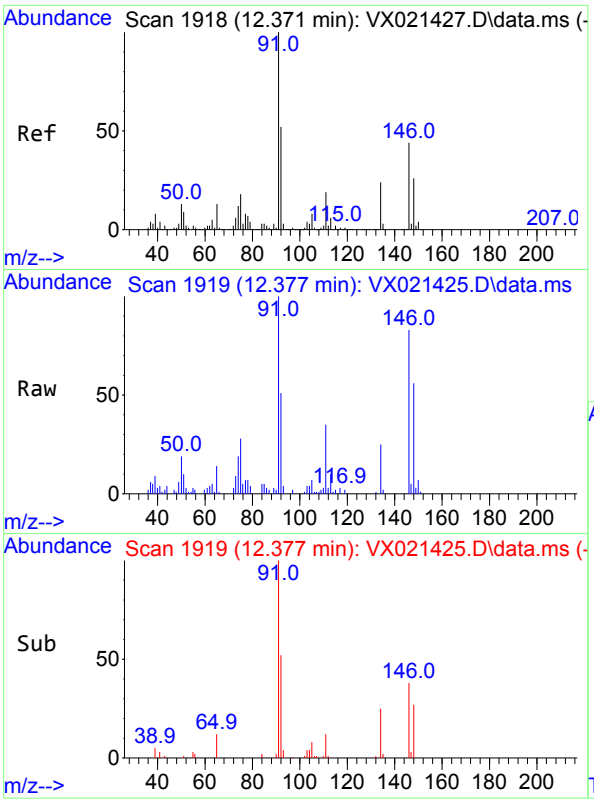
Tgt Ion:117 Resp: 2943

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 70.3 | 40.4 | 121.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

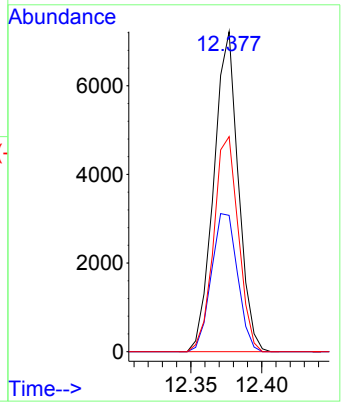
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

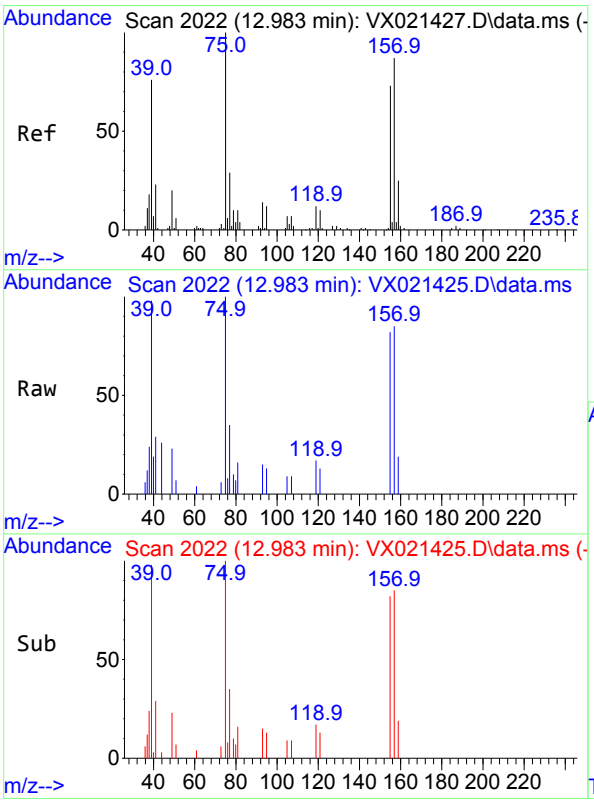



#91
1,2-Dichlorobenzene
Concen: 5.10 ug/l
RT: 12.377 min Scan# 1919
Delta R.T. 0.006 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:146 Resp: 8671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 46.0 | 20.8 | 62.2 |
| 148 | 67.6 | 31.9 | 95.5 |

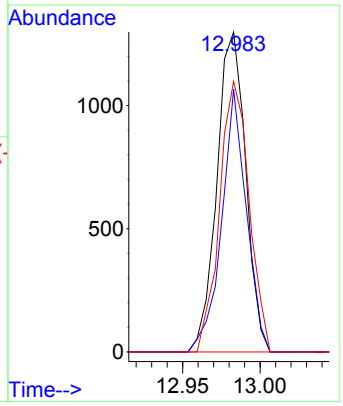



#92
1,2-Dibromo-3-Chloropropane
Concen: 4.90 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

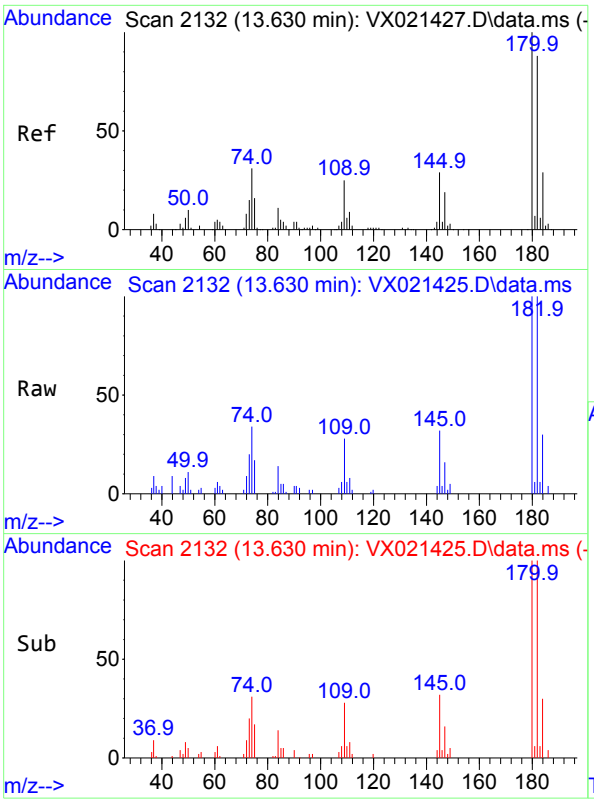
Tgt Ion: 75 Resp: 1675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 70.7 | 45.3 | 135.9 |
| 157 | 86.6 | 57.7 | 173.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

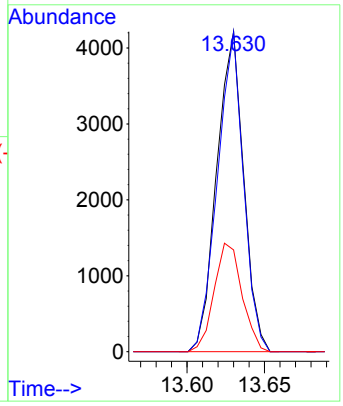
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

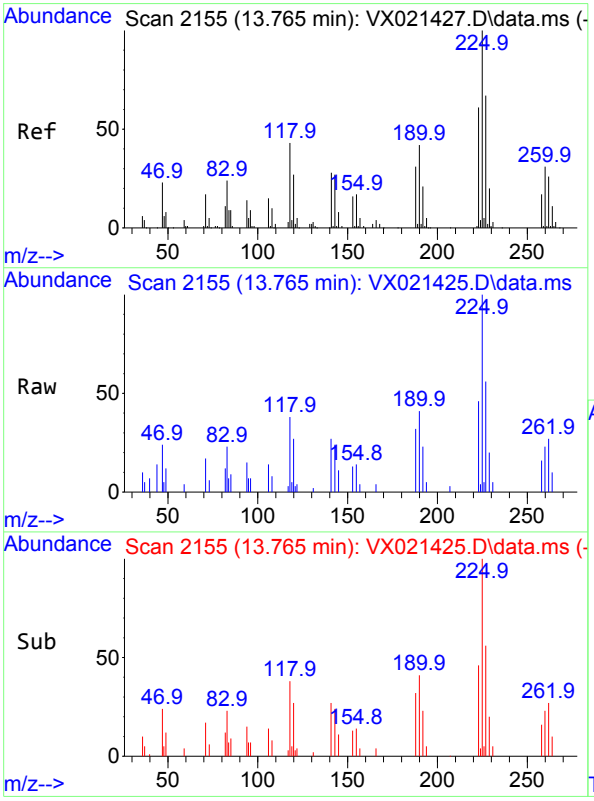



#93
1,2,4-Trichlorobenzene
Concen: 4.53 ug/l
RT: 13.630 min Scan# 2132
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:180 Resp: 5075

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.5 | 47.7 | 143.1 |
| 145 | 35.3 | 15.0 | 45.0 |

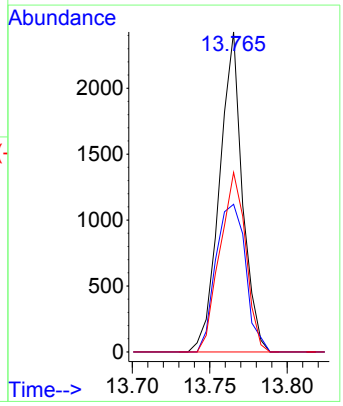



#94
Hexachlorobutadiene
Concen: 5.29 ug/l
RT: 13.765 min Scan# 2155
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

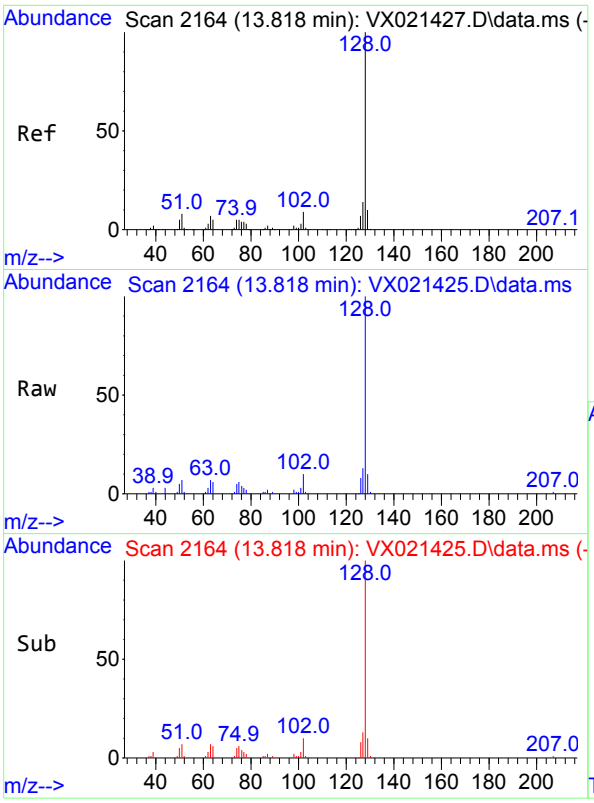
Tgt Ion:225 Resp: 2497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 60.2 | 31.1 | 93.2 |
| 227 | 63.1 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC005

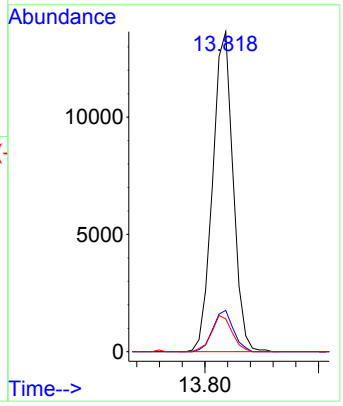
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:21 AM

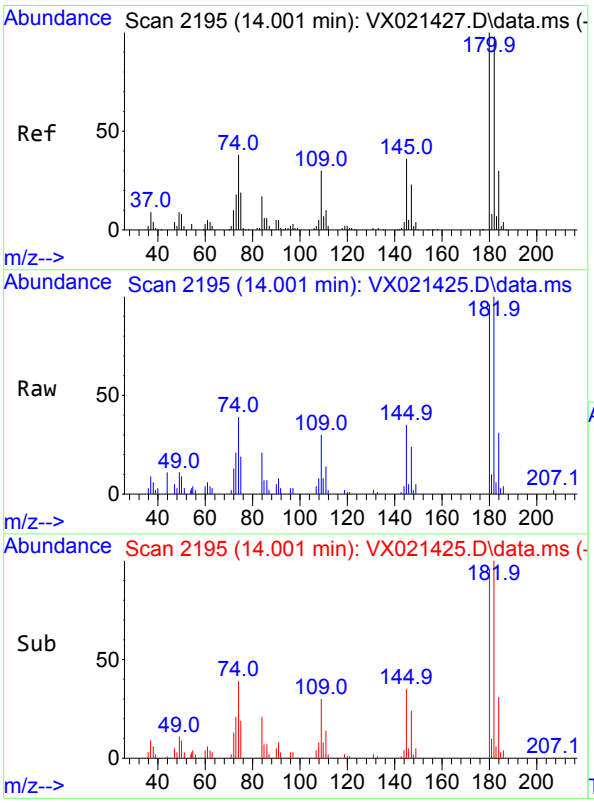



#95
Naphthalene
Concen: 4.45 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:128 Resp: 17046

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.1 | 10.3 | 15.5 |
| 129 | 11.3 | 8.8 | 13.2 |

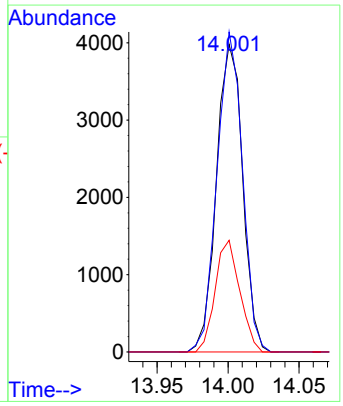



#96
1,2,3-Trichlorobenzene
Concen: 4.61 ug/l
RT: 14.001 min Scan# 2195
Delta R.T. 0.000 min
Lab File: VX021425.D
Acq: 24 Mar 2021 10:26

Tgt Ion:180 Resp: 5117

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 100.6 | 47.6 | 142.9 |
| 145 | 34.0 | 16.1 | 48.3 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021426.D
Acq On : 24 Mar 2021 10:49
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

Quant Time: Mar 24 11:43:43 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 77138 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 130062 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 122005 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 60191 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 23829 | 18.94 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 37.88%# | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 16662 | 18.79 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 37.58%# | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 59815 | 18.51 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 37.02%# | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 22955 | 18.39 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 36.78%# | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.187 | 85 | 15994 | 17.67 | ug/l | | 96 |
| 3) Chloromethane | 1.311 | 50 | 18403 | 10.75 | ug/l | | 99 |
| 4) Vinyl Chloride | 1.393 | 62 | 16430 | 17.80 | ug/l | | 98 |
| 5) Bromomethane | 1.623 | 94 | 7070 | 17.80 | ug/l | | 98 |
| 6) Chloroethane | 1.705 | 64 | 10325 | 18.23 | ug/l | | 100 |
| 7) Trichlorofluoromethane | 1.911 | 101 | 26898 | 19.19 | ug/l | | 99 |
| 8) Diethyl Ether | 2.170 | 74 | 9129 | 18.56 | ug/l | | 83 |
| 9) 1,1,2-Trichlorotrifluo... | 2.364 | 101 | 15186 | 19.03 | ug/l | | 94 |
| 10) Methyl Iodide | 2.487 | 142 | 9069 | 13.44 | ug/l | # | 87 |
| 11) Tert butyl alcohol | 3.017 | 59 | 18902 | 89.57 | ug/l | | 96 |
| 12) 1,1-Dichloroethene | 2.352 | 96 | 14351 | 18.49 | ug/l | | 86 |
| 13) Acrolein | 2.270 | 56 | 9657 | 75.21 | ug/l | | 98 |
| 14) Allyl chloride | 2.705 | 41 | 28280 | 17.67 | ug/l | # | 87 |
| 15) Acrylonitrile | 3.117 | 53 | 46522 | 94.26 | ug/l | | 98 |
| 16) Acetone | 2.423 | 43 | 43424 | 93.03 | ug/l | # | 88 |
| 17) Carbon Disulfide | 2.546 | 76 | 38537 | 16.05 | ug/l | | 100 |
| 18) Methyl Acetate | 2.746 | 43 | 26541 | 20.29 | ug/l | # | 89 |
| 19) Methyl tert-butyl Ether | 3.170 | 73 | 54065 | 18.53 | ug/l | | 100 |
| 20) Methylene Chloride | 2.835 | 84 | 17009 | 17.88 | ug/l | # | 84 |
| 21) trans-1,2-Dichloroethene | 3.140 | 96 | 15683 | 18.03 | ug/l | | 90 |
| 22) Diisopropyl ether | 3.823 | 45 | 56864 | 18.46 | ug/l | | 92 |
| 23) Vinyl Acetate | 3.782 | 43 | 240672 | 90.26 | ug/l | # | 92 |
| 24) 1,1-Dichloroethane | 3.670 | 63 | 30829 | 18.50 | ug/l | | 98 |
| 25) 2-Butanone | 4.635 | 43 | 67343 | 94.36 | ug/l | | 90 |
| 26) 2,2-Dichloropropane | 4.547 | 77 | 26154 | 18.04 | ug/l | | 98 |
| 27) cis-1,2-Dichloroethene | 4.558 | 96 | 18193 | 18.18 | ug/l | | 89 |
| 28) Bromochloromethane | 4.982 | 49 | 15247 | 19.38 | ug/l | | 83 |
| 29) Tetrahydrofuran | 5.088 | 42 | 44037 | 93.63 | ug/l | # | 85 |
| 30) Chloroform | 5.176 | 83 | 32866 | 18.94 | ug/l | | 98 |
| 31) Cyclohexane | 5.547 | 56 | 26219 | 17.44 | ug/l | | 88 |
| 32) 1,1,1-Trichloroethane | 5.458 | 97 | 29065 | 18.89 | ug/l | | 96 |
| 36) 1,1-Dichloropropene | 5.764 | 75 | 23205 | 17.79 | ug/l | | 96 |
| 37) Ethyl Acetate | 4.788 | 43 | 25793 | 17.10 | ug/l | # | 93 |
| 38) Carbon Tetrachloride | 5.753 | 117 | 25282 | 18.61 | ug/l | | 90 |
| 39) Methylcyclohexane | 7.441 | 83 | 25640 | 17.70 | ug/l | | 94 |
| 40) Benzene | 6.111 | 78 | 65987 | 18.32 | ug/l | | 97 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021426.D
Acq On : 24 Mar 2021 10:49
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

Quant Time: Mar 24 11:43:43 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 5.000 | 41 | 15185 | 17.38 | ug/l | # | 89 |
| 42) 1,2-Dichloroethane | 6.159 | 62 | 28976 | 18.59 | ug/l | | 94 |
| 43) Isopropyl Acetate | 6.412 | 43 | 42928 | 17.35 | ug/l | # | 91 |
| 44) Trichloroethene | 7.182 | 130 | 17424 | 18.23 | ug/l | | 92 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 17931 | 18.49 | ug/l | | 100 |
| 46) Dibromomethane | 7.635 | 93 | 12794 | 17.98 | ug/l | | 94 |
| 47) Bromodichloromethane | 7.871 | 83 | 26757 | 18.79 | ug/l | | 98 |
| 48) Methyl methacrylate | 7.747 | 41 | 23054 | 17.47 | ug/l | # | 82 |
| 49) 1,4-Dioxane | 7.712 | 88 | 8298 | 338.96 | ug/l | # | 83 |
| 51) 4-Methyl-2-Pentanone | 8.618 | 43 | 138866 | 95.53 | ug/l | | 88 |
| 52) Toluene | 8.765 | 92 | 42135 | 18.90 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 9.024 | 75 | 26060 | 17.30 | ug/l | | 96 |
| 54) cis-1,3-Dichloropropene | 8.412 | 75 | 28326 | 17.66 | ug/l | # | 82 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 18048 | 19.70 | ug/l | | 96 |
| 56) Ethyl methacrylate | 9.159 | 69 | 26047 | 17.76 | ug/l | # | 74 |
| 57) 1,3-Dichloropropane | 9.353 | 76 | 29873 | 18.73 | ug/l | | 100 |
| 58) 2-Chloroethyl Vinyl ether | 8.288 | 63 | 72843 | 90.16 | ug/l | | 97 |
| 59) 2-Hexanone | 9.471 | 43 | 103590 | 95.25 | ug/l | | 85 |
| 60) Dibromochloromethane | 9.565 | 129 | 19663 | 18.88 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 18559 | 18.42 | ug/l | | 98 |
| 64) Tetrachloroethene | 9.318 | 164 | 15441 | 17.11 | ug/l | | 92 |
| 65) Chlorobenzene | 10.118 | 112 | 44424 | 17.70 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 10.200 | 131 | 16925 | 18.10 | ug/l | | 98 |
| 67) Ethyl Benzene | 10.236 | 91 | 83114 | 17.98 | ug/l | | 94 |
| 68) m/p-Xylenes | 10.341 | 106 | 59799 | 36.20 | ug/l | | 93 |
| 69) o-Xylene | 10.683 | 106 | 29103 | 18.14 | ug/l | | 95 |
| 70) Styrene | 10.694 | 104 | 49432 | 18.29 | ug/l | | 96 |
| 71) Bromoform | 10.842 | 173 | 13951 | 18.51 | ug/l | # | 100 |
| 73) Isopropylbenzene | 11.000 | 105 | 78456 | 17.63 | ug/l | | 100 |
| 74) N-amyl acetate | 10.877 | 43 | 36826 | 16.54 | ug/l | # | 88 |
| 75) 1,1,2,2-Tetrachloroethane | 11.253 | 83 | 29031 | 19.64 | ug/l | | 98 |
| 76) 1,2,3-Trichloropropane | 11.277 | 75 | 26887m | 18.88 | ug/l | | |
| 77) Bromobenzene | 11.242 | 156 | 18682 | 17.63 | ug/l | | 91 |
| 78) n-propylbenzene | 11.342 | 91 | 92531 | 17.80 | ug/l | | 97 |
| 79) 2-Chlorotoluene | 11.400 | 91 | 56544 | 17.89 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 67544 | 17.96 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 11.059 | 75 | 7828 | 15.51 | ug/l | # | 81 |
| 82) 4-Chlorotoluene | 11.495 | 91 | 66662 | 17.90 | ug/l | | 97 |
| 83) tert-Butylbenzene | 11.753 | 119 | 64683 | 18.01 | ug/l | | 91 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 69157 | 18.09 | ug/l | | 97 |
| 85) sec-Butylbenzene | 11.930 | 105 | 75635 | 17.86 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 12.048 | 119 | 70268 | 18.13 | ug/l | | 96 |
| 87) 1,3-Dichlorobenzene | 12.006 | 146 | 33998 | 17.62 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 12.077 | 146 | 35229 | 17.94 | ug/l | | 98 |
| 89) n-Butylbenzene | 12.371 | 91 | 60930 | 17.25 | ug/l | | 96 |
| 90) Hexachloroethane | 12.577 | 117 | 12040 | 20.00 | ug/l | | 89 |
| 91) 1,2-Dichlorobenzene | 12.377 | 146 | 34367 | 18.36 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 6340 | 16.82 | ug/l | | 78 |
| 93) 1,2,4-Trichlorobenzene | 13.630 | 180 | 19806 | 16.04 | ug/l | | 94 |
| 94) Hexachlorobutadiene | 13.765 | 225 | 9393 | 18.06 | ug/l | | 97 |
| 95) Naphthalene | 13.818 | 128 | 70218 | 16.64 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 14.001 | 180 | 21794 | 17.83 | ug/l | | 95 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021426.D
Acq On : 24 Mar 2021 10:49
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

Quant Time: Mar 24 11:43:43 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

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

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

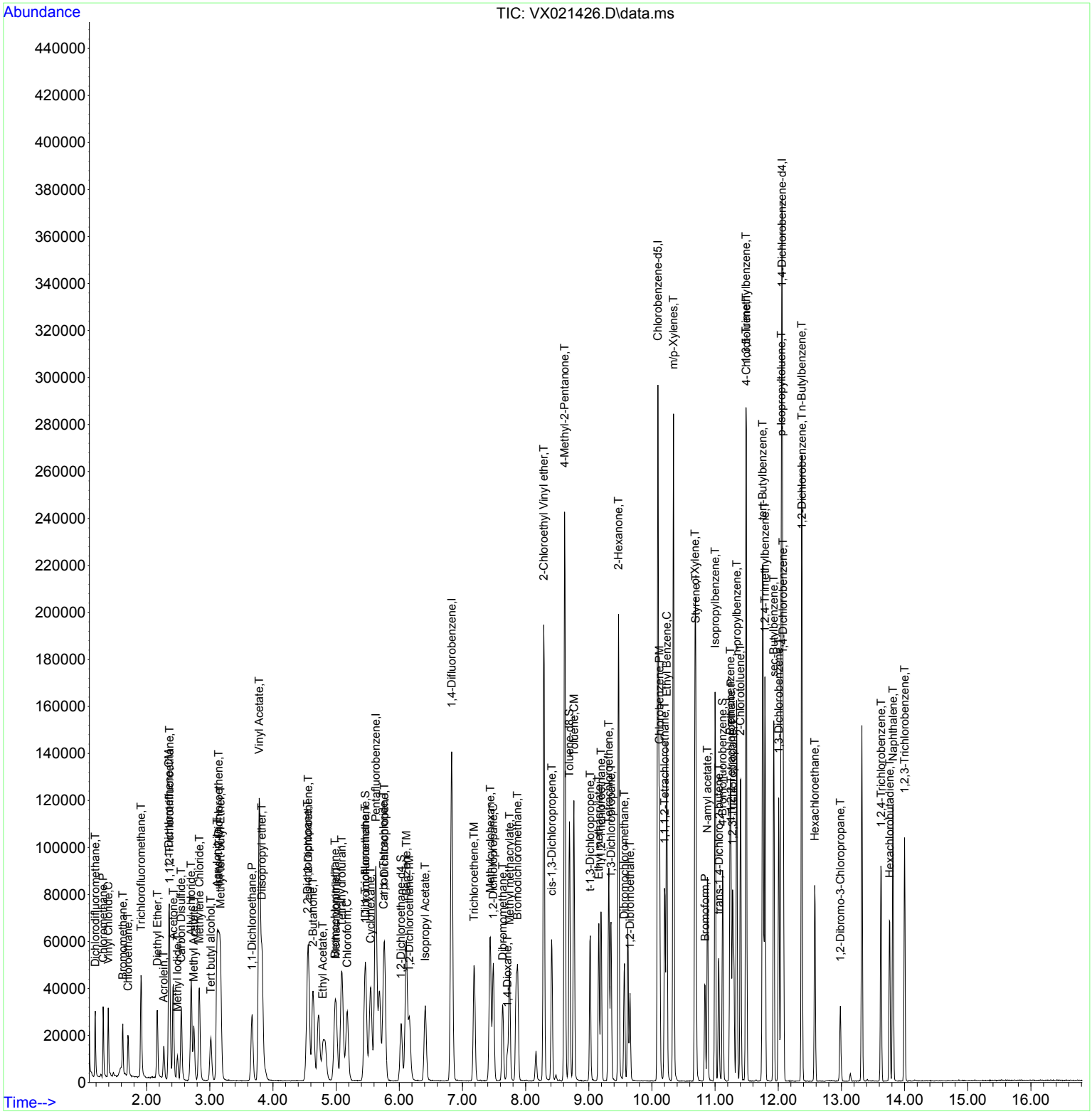
ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021426.D
Acq On : 24 Mar 2021 10:49
Operator : JC/MD
Sample : VSTDICC020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 24 11:43:43 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

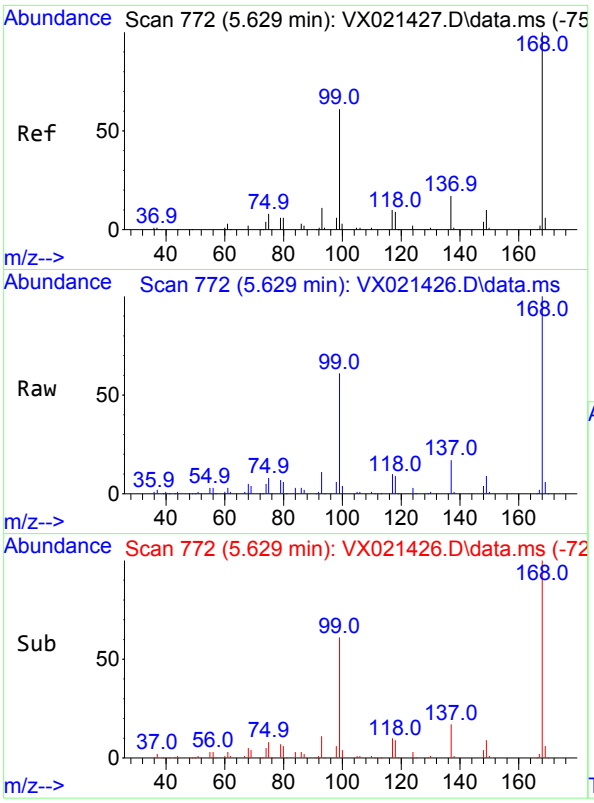
**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

**Manual Integrations APPROVED**
MMDadoda
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**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

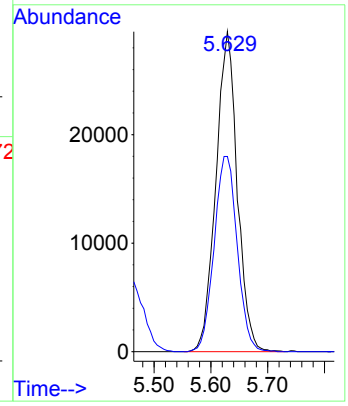
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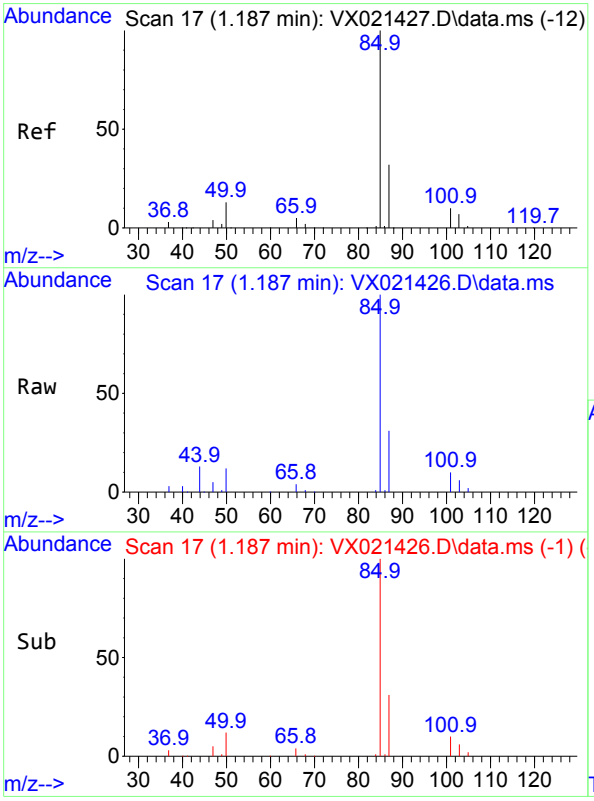



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:168 Resp: 77138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 61.0 | 45.8 | 68.6 |

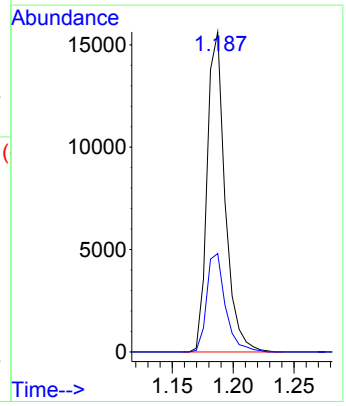



#2
Dichlorodifluoromethane
Concen: 17.67 ug/l
RT: 1.187 min Scan# 17
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

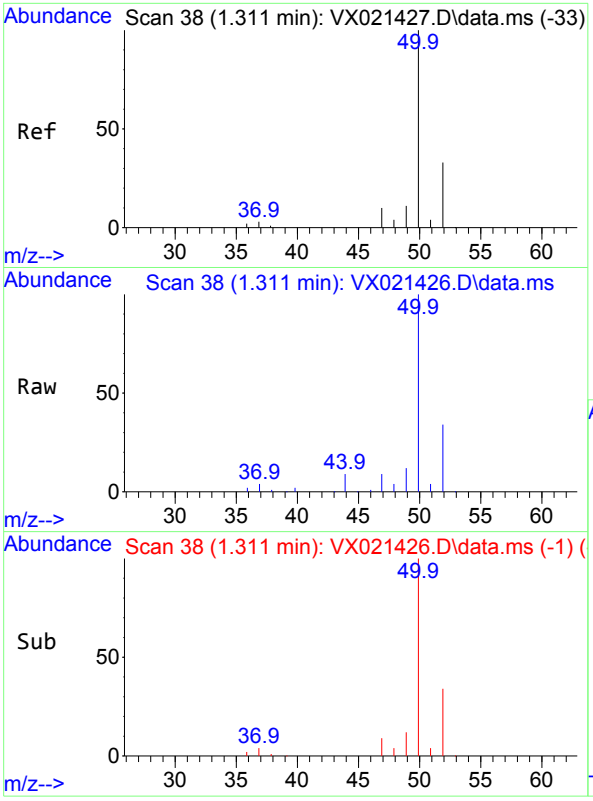
Tgt Ion: 85 Resp: 15994

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 30.8 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
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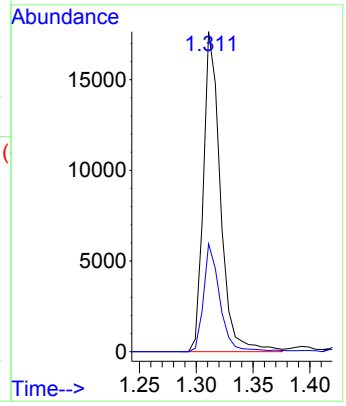
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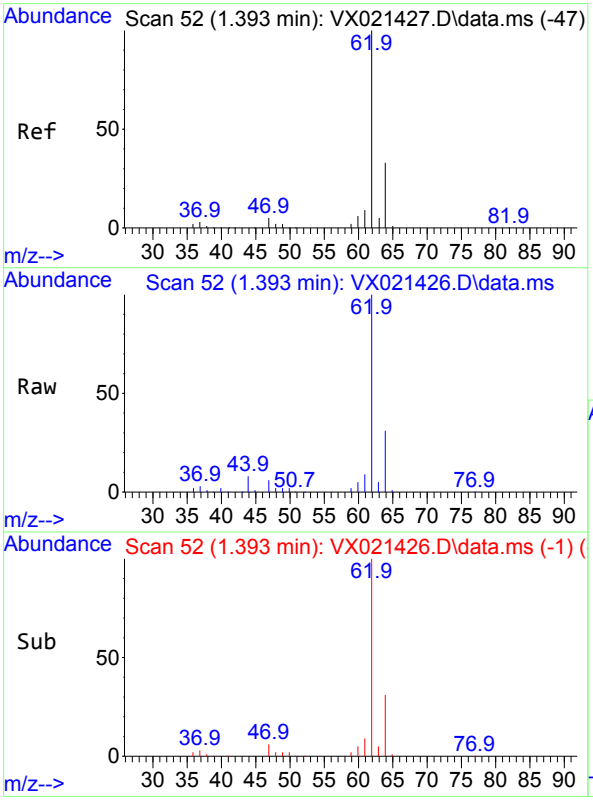



#3
Chloromethane
Concen: 10.75 ug/l
RT: 1.311 min Scan# 38
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 50 Resp: 18403

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.7 | 26.4 | 39.6 |

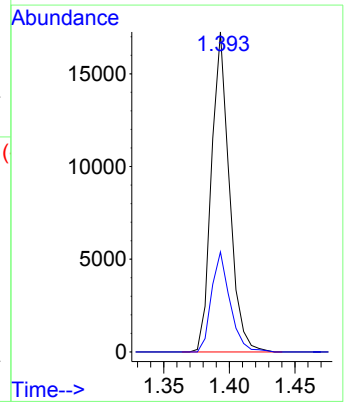



#4
Vinyl Chloride
Concen: 17.80 ug/l
RT: 1.393 min Scan# 52
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

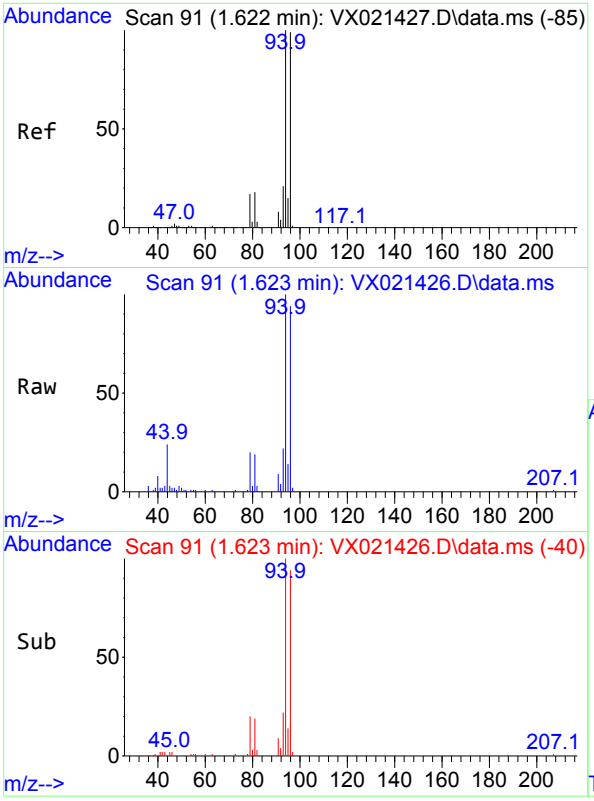
Tgt Ion: 62 Resp: 16430

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.2 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

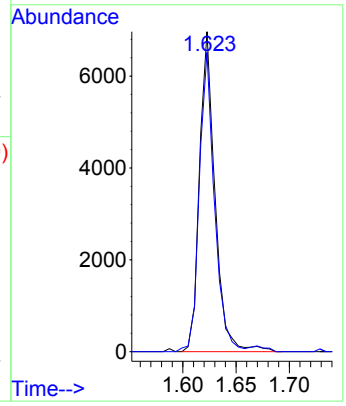
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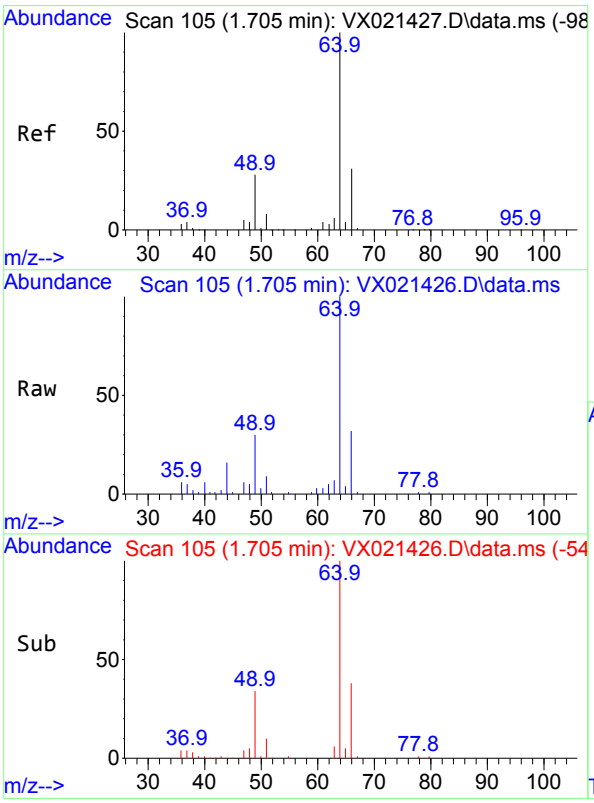



#5
Bromomethane
Concen: 17.80 ug/l
RT: 1.623 min Scan# 91
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 94 Resp: 7070

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 93.6 | 76.4 | 114.6 |

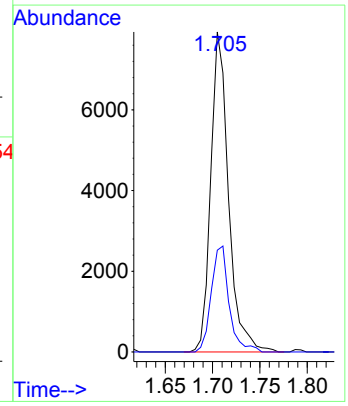



#6
Chloroethane
Concen: 18.23 ug/l
RT: 1.705 min Scan# 105
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

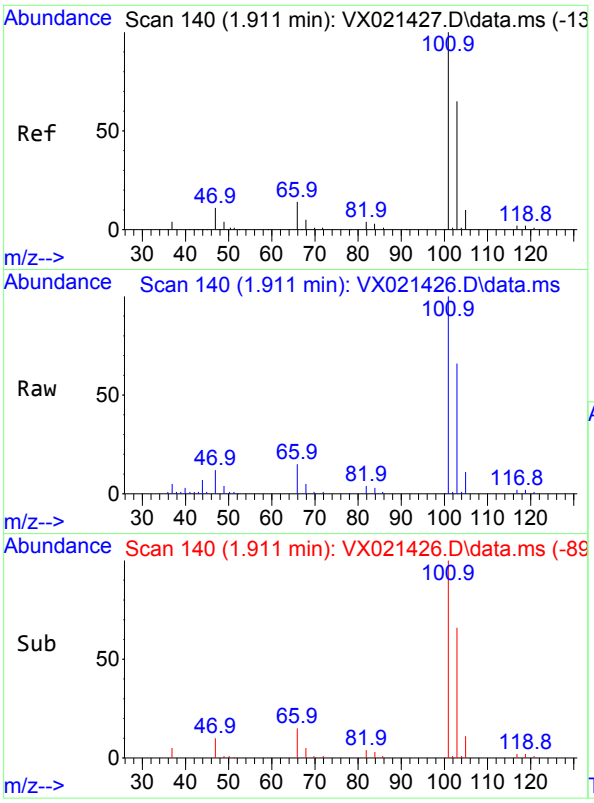
Tgt Ion: 64 Resp: 10325

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.8 | 25.4 | 38.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

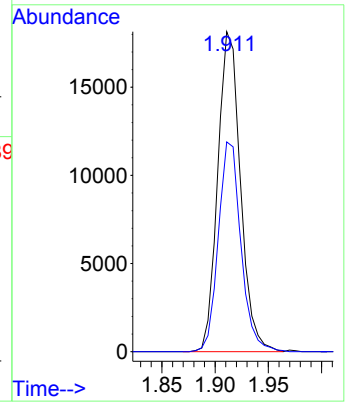
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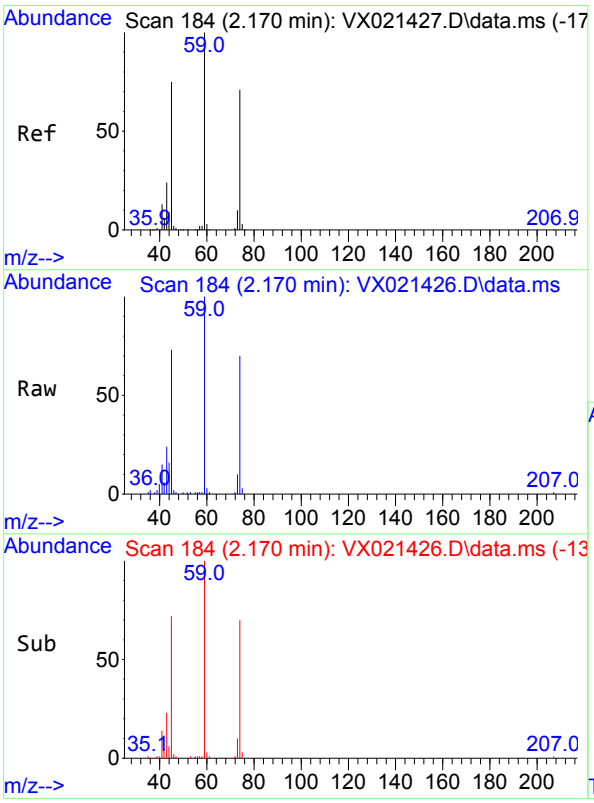



#7
Trichlorofluoromethane
Concen: 19.19 ug/l
RT: 1.911 min Scan# 140
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:101 Resp: 26898

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.6 | 53.2 | 79.8 |

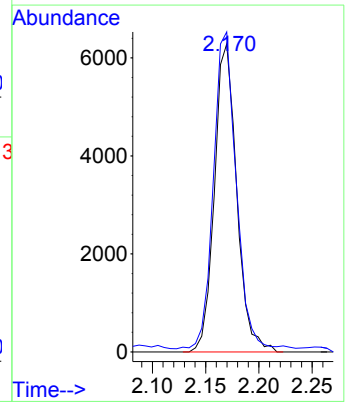



#8
Diethyl Ether
Concen: 18.56 ug/l
RT: 2.170 min Scan# 184
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

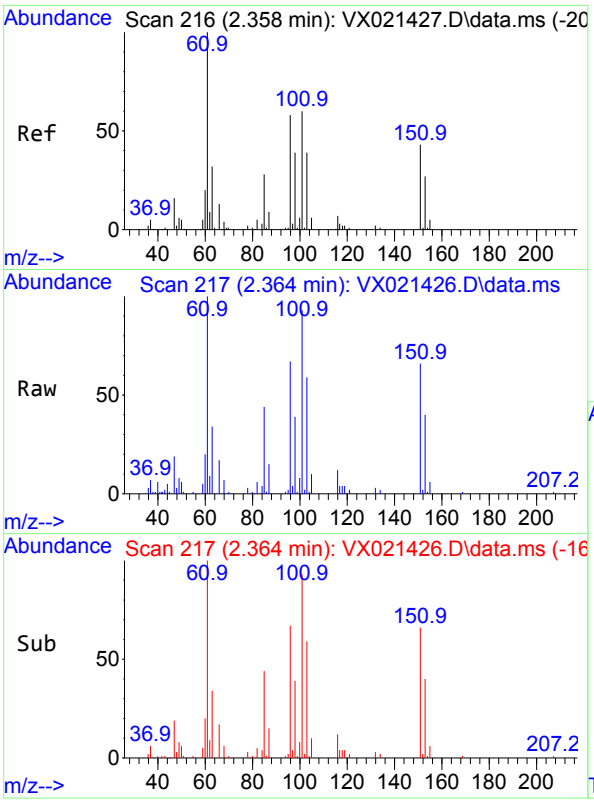
Tgt Ion: 74 Resp: 9129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 105.0 | 44.5 | 133.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

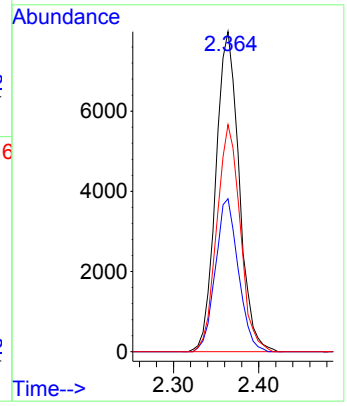
**Manual Integrations APPROVED**
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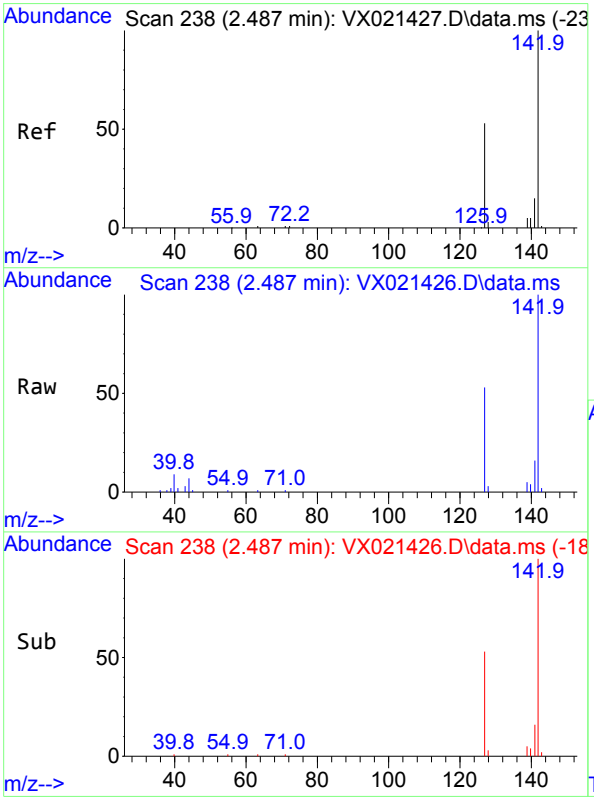



#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.03 ug/l
RT: 2.364 min Scan# 217
Delta R.T. 0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:101 Resp: 15186

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 47.1 | 34.9 | 52.3 |
| 151 | 71.3 | 61.4 | 92.2 |

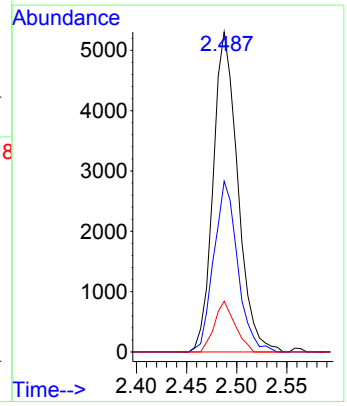



#10
Methyl Iodide
Concen: 13.44 ug/l
RT: 2.487 min Scan# 238
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

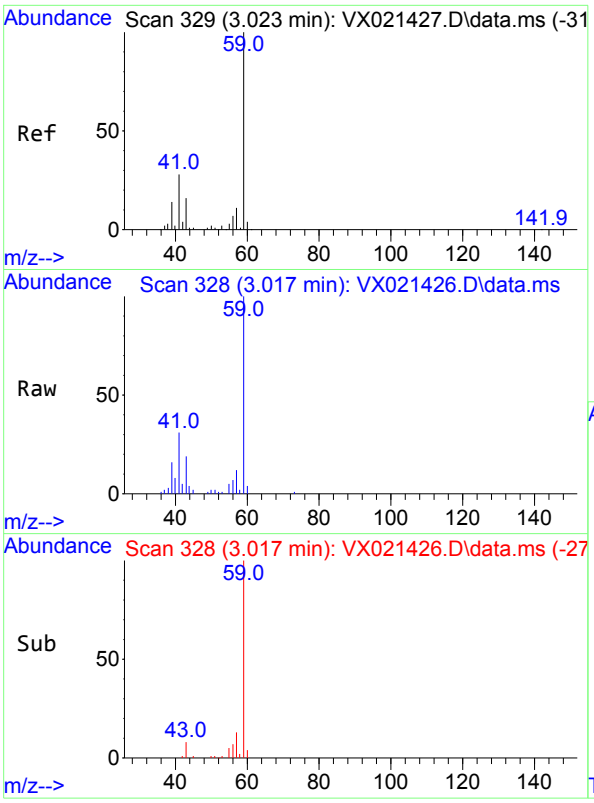
Tgt Ion:142 Resp: 9069

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 51.7 | 33.3 | 49.9# |
| 141 | 13.3 | 11.4 | 17.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

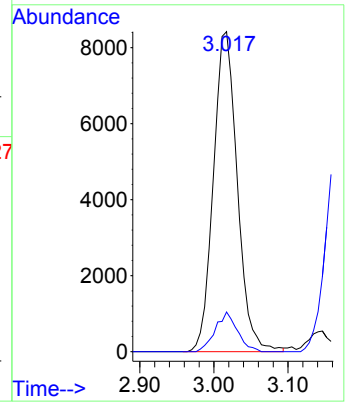
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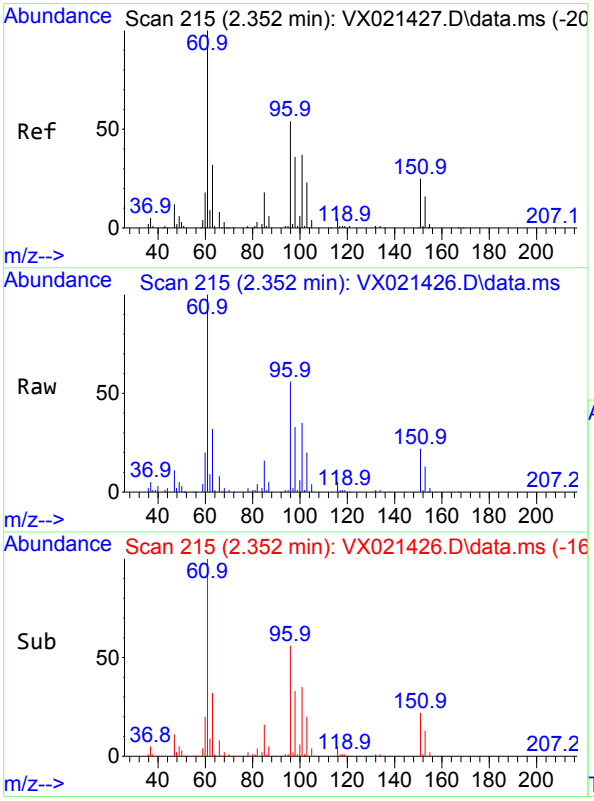



#11
Tert butyl alcohol
Concen: 89.57 ug/l
RT: 3.017 min Scan# 328
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 59 Resp: 18902

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.4 | 7.8 | 11.8 |

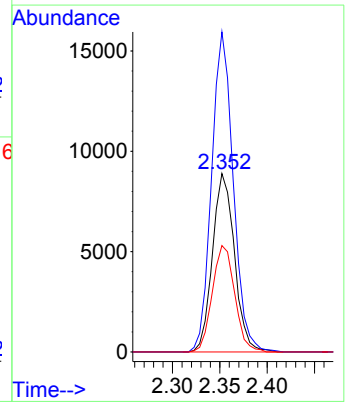



#12
1,1-Dichloroethene
Concen: 18.49 ug/l
RT: 2.352 min Scan# 215
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

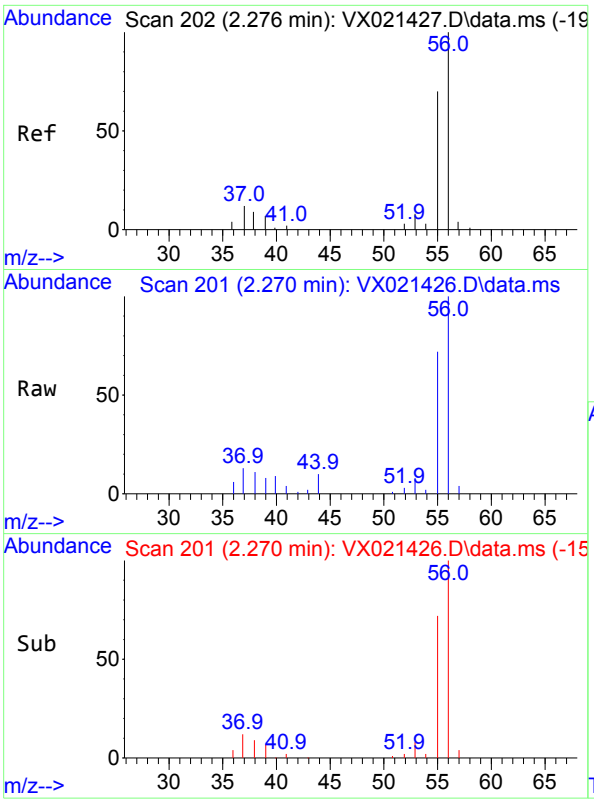
Tgt Ion: 96 Resp: 14351

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 179.4 | 124.6 | 187.0 |
| 98 | 59.7 | 50.6 | 76.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

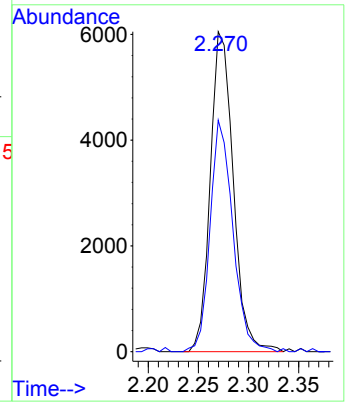
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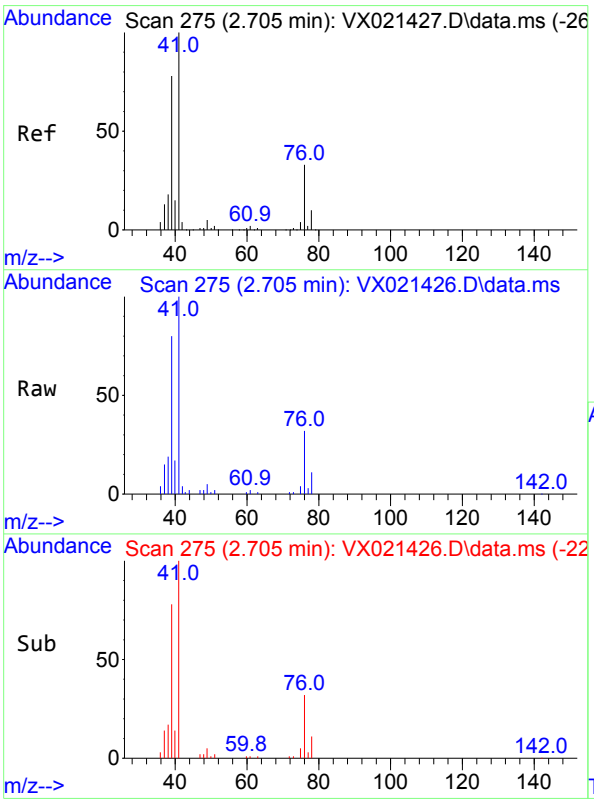



#13
Acrolein
Concen: 75.21 ug/l
RT: 2.270 min Scan# 201
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 56 Resp: 9657

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.9 | 56.4 | 84.6 |

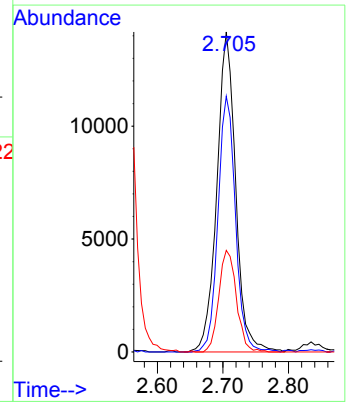



#14
Allyl chloride
Concen: 17.67 ug/l
RT: 2.705 min Scan# 275
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

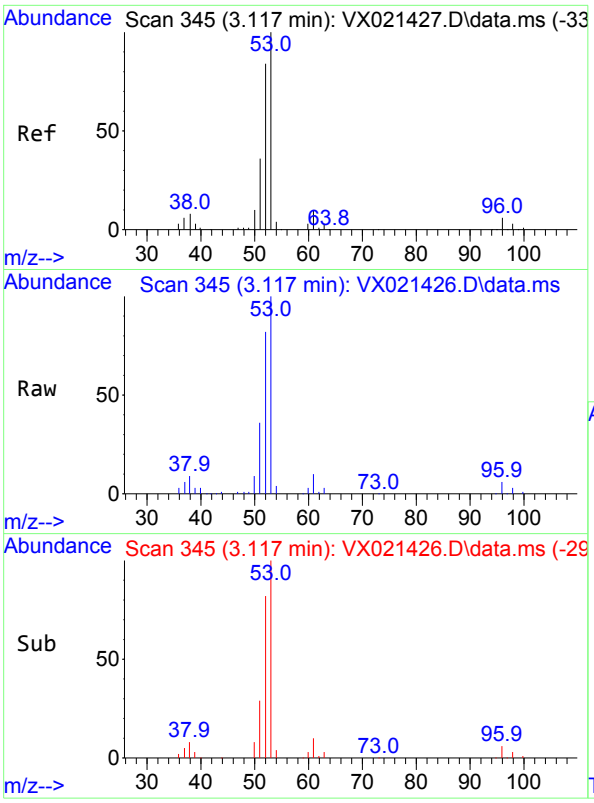
Tgt Ion: 41 Resp: 28280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 74.2 | 51.6 | 77.4 |
| 76 | 29.7 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
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VSTDICC020

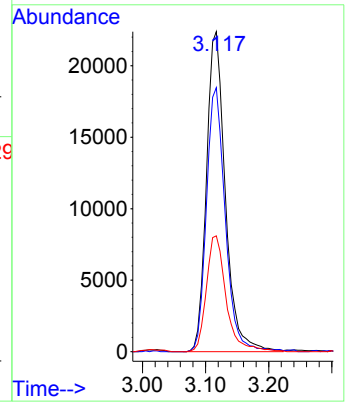
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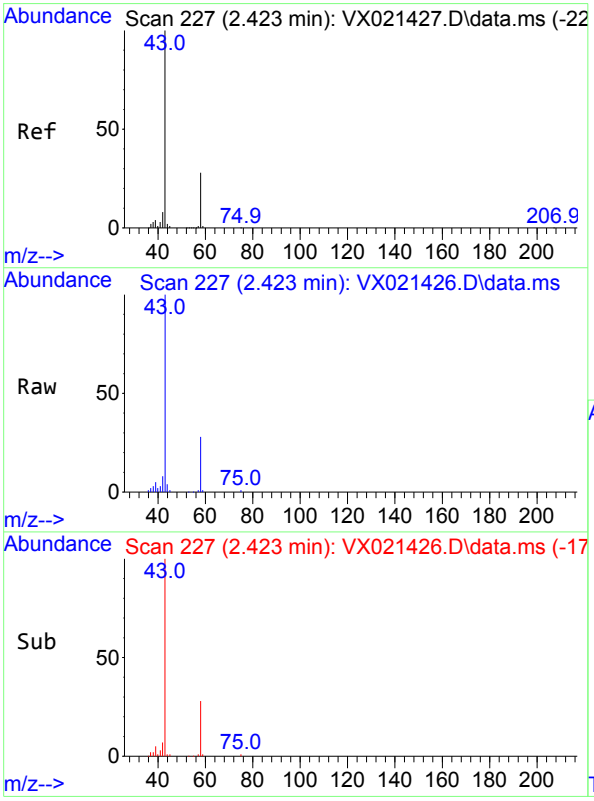



#15
Acrylonitrile
Concen: 94.26 ug/l
RT: 3.117 min Scan# 345
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 53 Resp: 46522

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.5 | 65.3 | 97.9 |
| 51 | 37.9 | 28.2 | 42.2 |

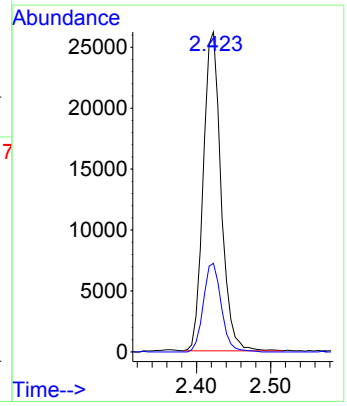



#16
Acetone
Concen: 93.03 ug/l
RT: 2.423 min Scan# 227
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

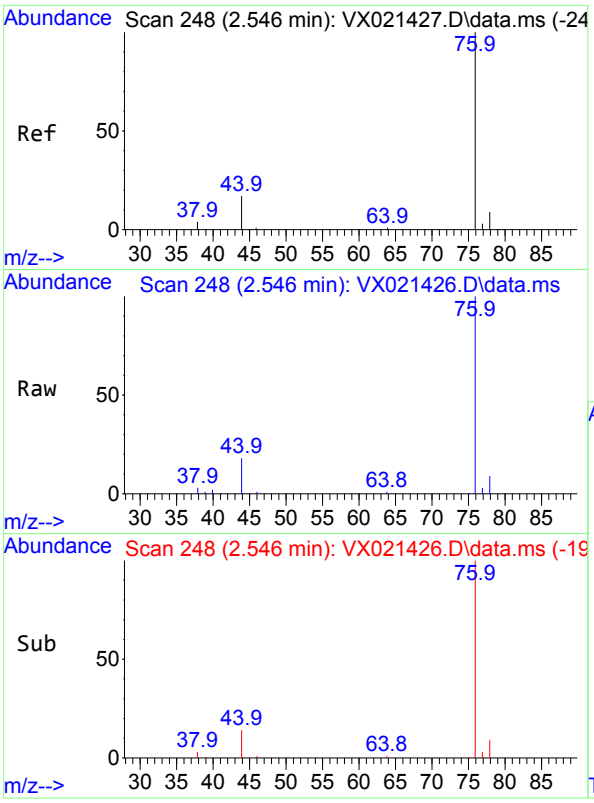
Tgt Ion: 43 Resp: 43424

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.8 | 27.8 | 41.8# |



**Instrument :**
MSVOA_X
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VSTDICC020

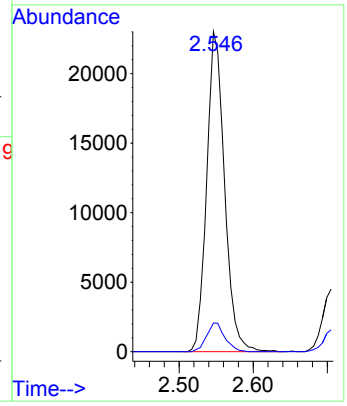
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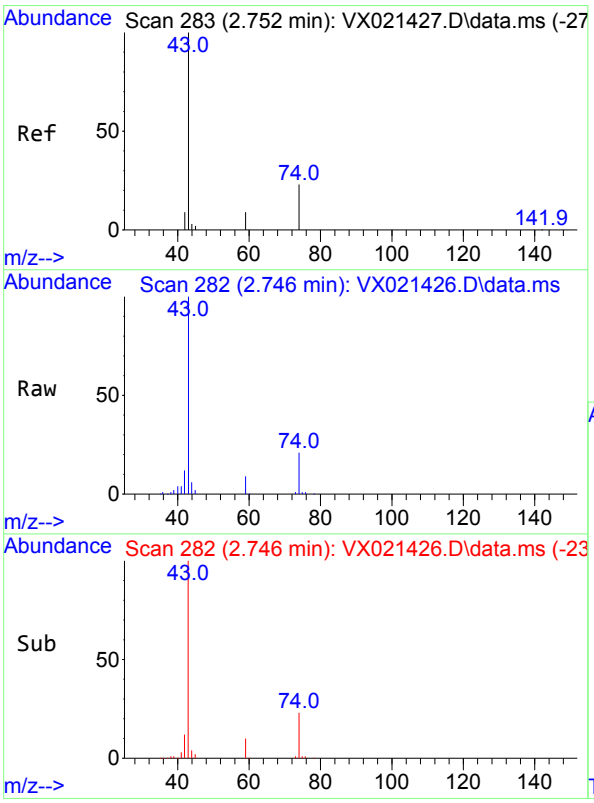



#17
Carbon Disulfide
Concen: 16.05 ug/l
RT: 2.546 min Scan# 248
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 76 Resp: 38537

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.9 | 7.2 | 10.8 |

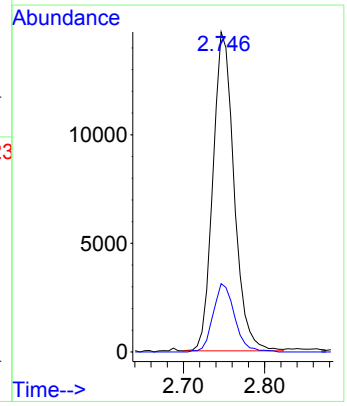



#18
Methyl Acetate
Concen: 20.29 ug/l
RT: 2.746 min Scan# 282
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

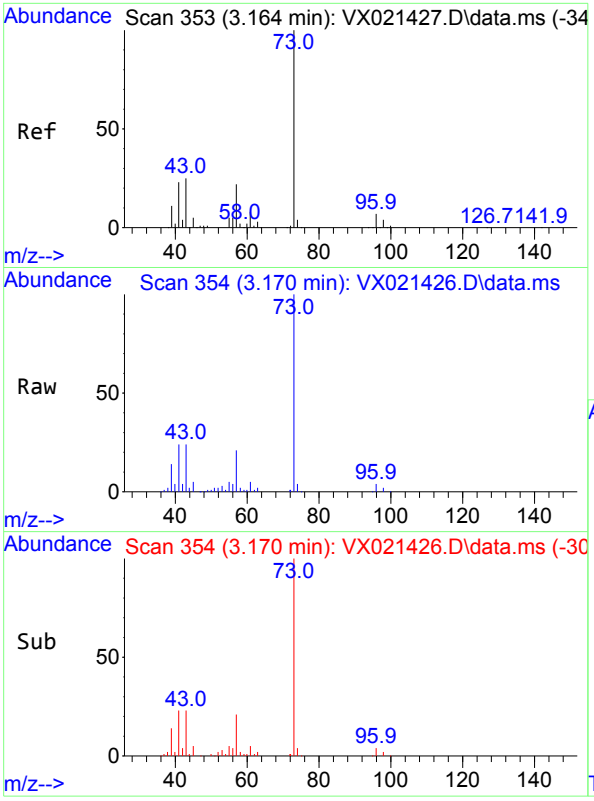
Tgt Ion: 43 Resp: 26541

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 21.9 | 21.9 | 32.9# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

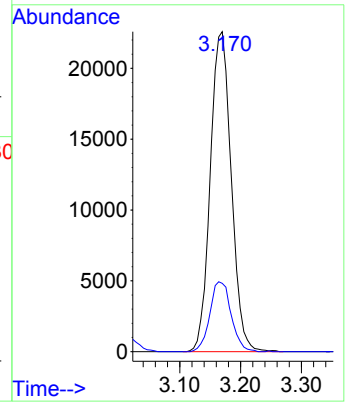
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

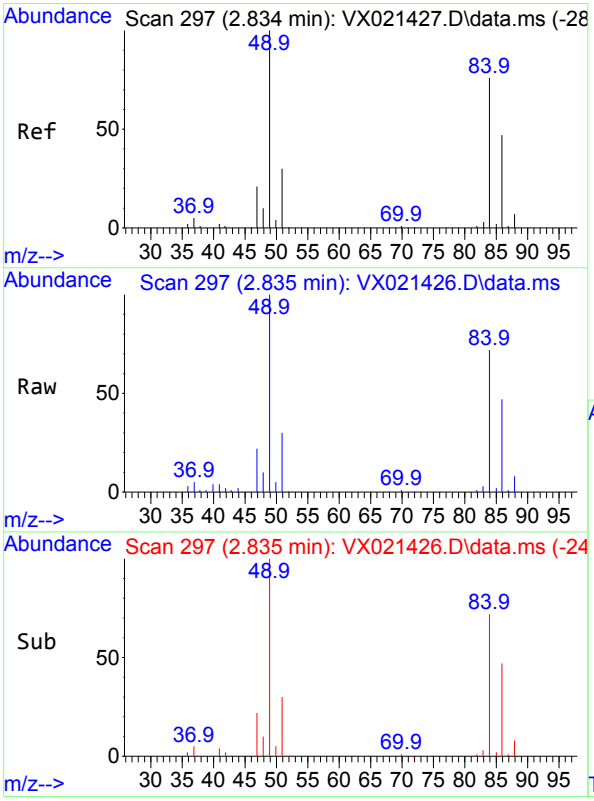



#19
Methyl tert-butyl Ether
Concen: 18.53 ug/l
RT: 3.170 min Scan# 354
Delta R.T. 0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 73 Resp: 54065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.4 | 17.1 | 25.7 |

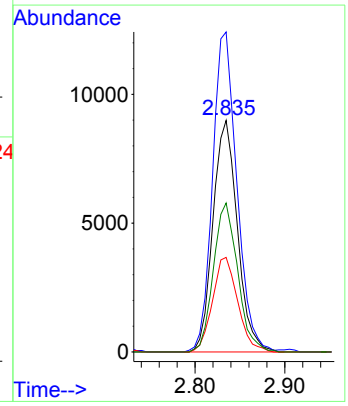



#20
Methylene Chloride
Concen: 17.88 ug/l
RT: 2.835 min Scan# 297
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

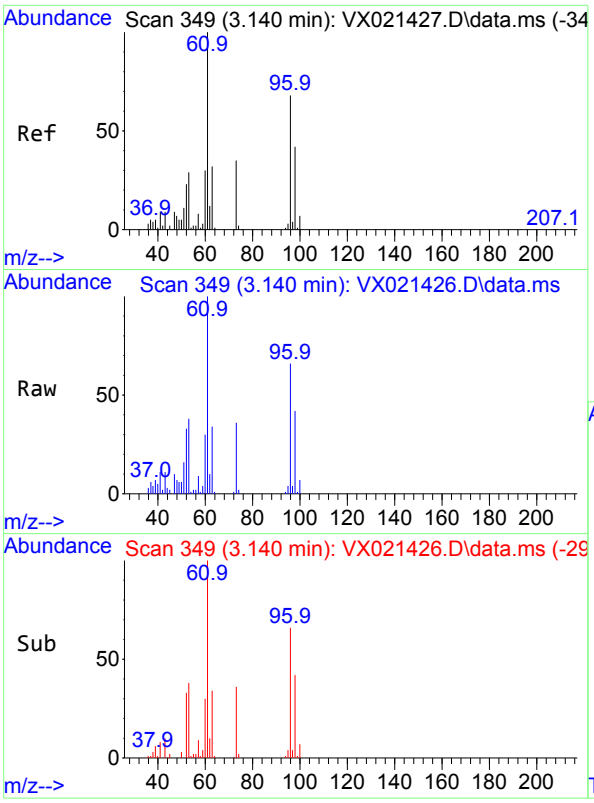
Tgt Ion: 84 Resp: 17009

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 138.2 | 88.6 | 132.8# |
| 51 | 40.9 | 27.0 | 40.6# |
| 86 | 64.3 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

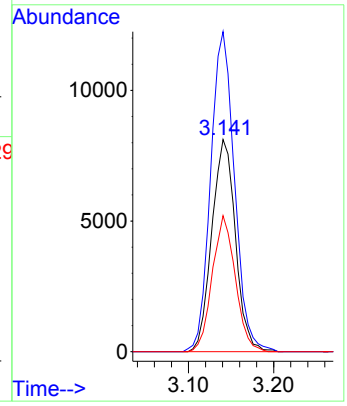
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

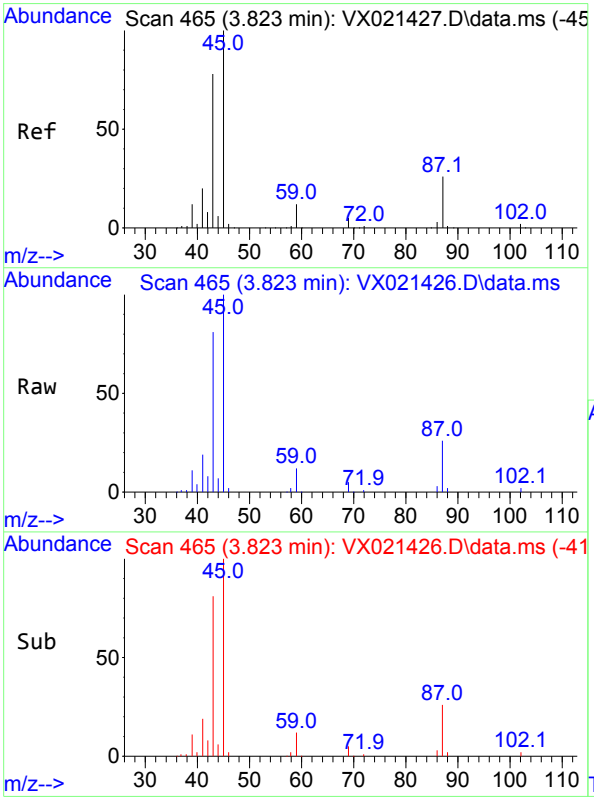



#21
trans-1,2-Dichloroethene
Concen: 18.03 ug/l
RT: 3.140 min Scan# 349
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 96 Resp: 15683

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 150.8 | 107.7 | 161.5 |
| 98 | 64.1 | 50.4 | 75.6 |

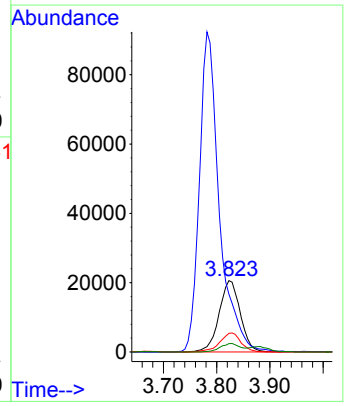



#22
Diisopropyl ether
Concen: 18.46 ug/l
RT: 3.823 min Scan# 465
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

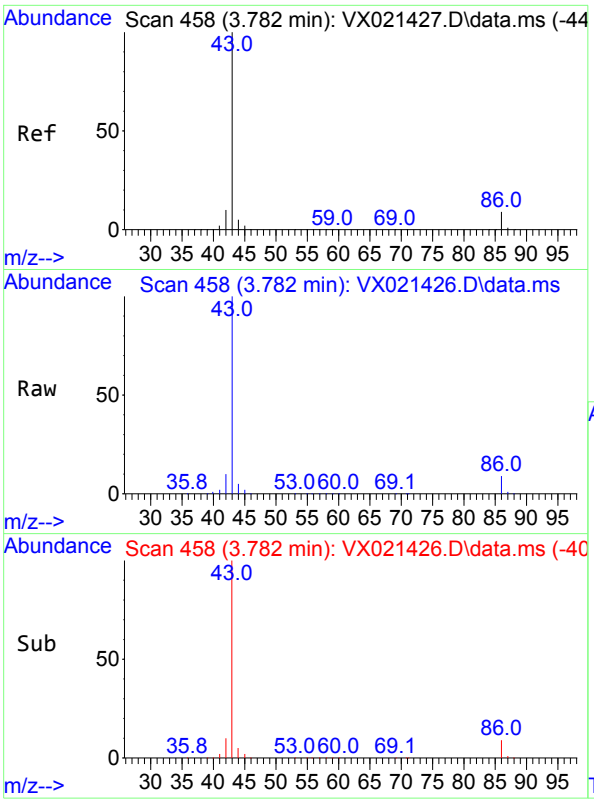
Tgt Ion: 45 Resp: 56864

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 79.7 | 58.0 | 87.0 |
| 87 | 26.0 | 25.4 | 38.0 |
| 59 | 11.6 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

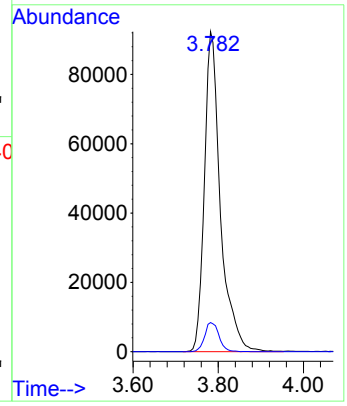
**Manual Integrations APPROVED**
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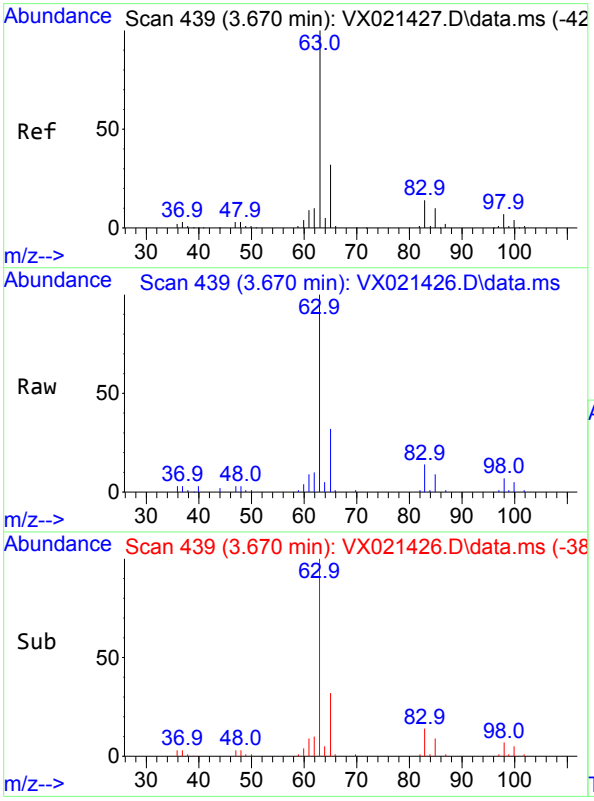



#23
Vinyl Acetate
Concen: 90.26 ug/l
RT: 3.782 min Scan# 458
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 43 Resp: 240672

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.1 | 9.9 | 14.9# |

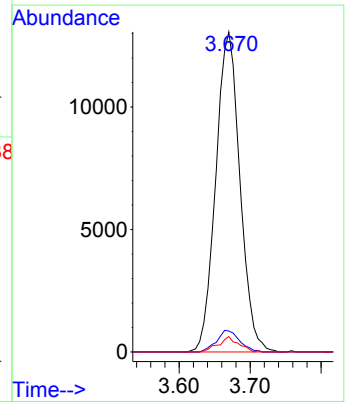



#24
1,1-Dichloroethane
Concen: 18.50 ug/l
RT: 3.670 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

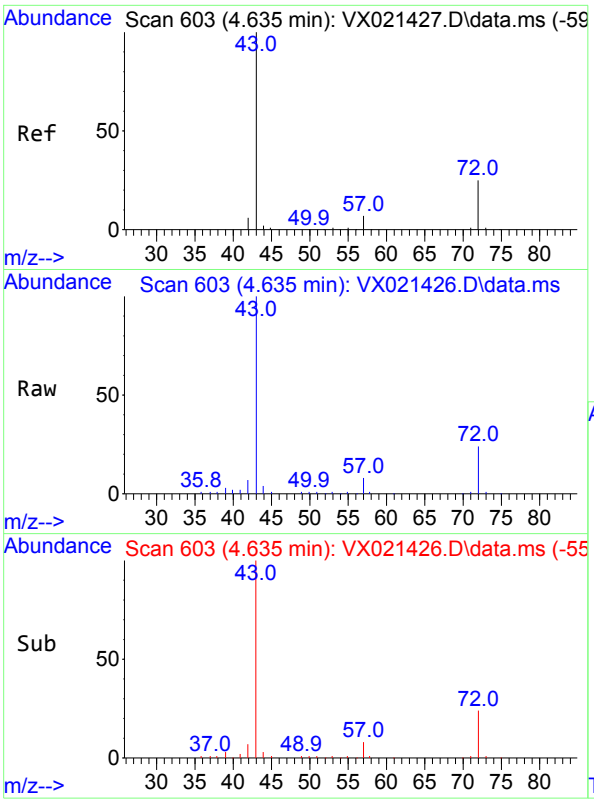
Tgt Ion: 63 Resp: 30829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.5 | 3.8 | 11.2 |
| 100 | 4.8 | 2.5 | 7.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

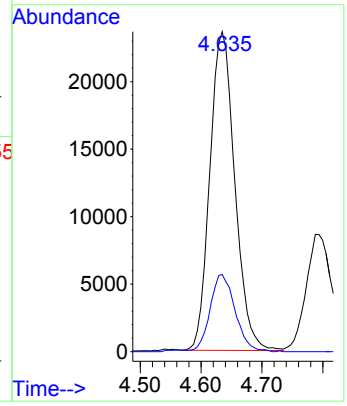
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

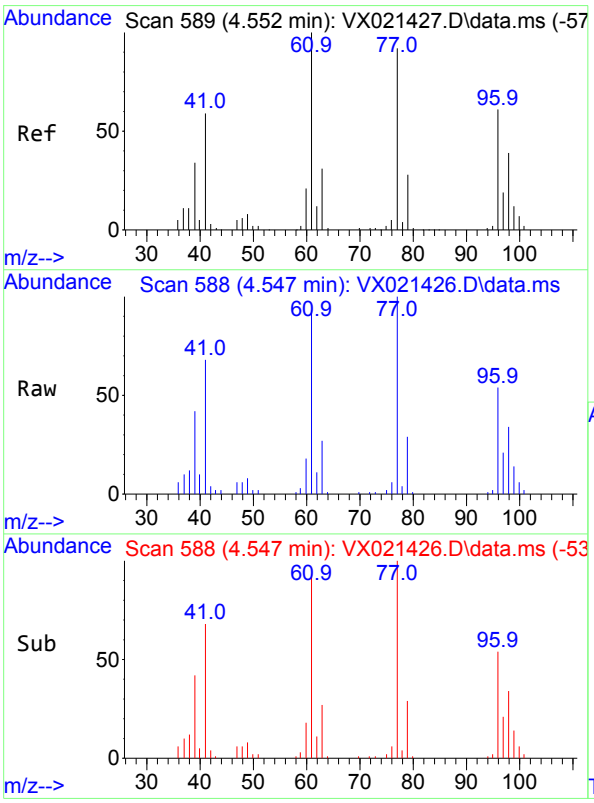



#25
2-Butanone
Concen: 94.36 ug/l
RT: 4.635 min Scan# 603
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 43 Resp: 67343

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.2 | 23.7 | 35.5 |

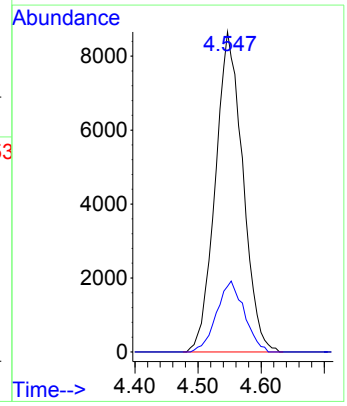



#26
2,2-Dichloropropane
Concen: 18.04 ug/l
RT: 4.547 min Scan# 588
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

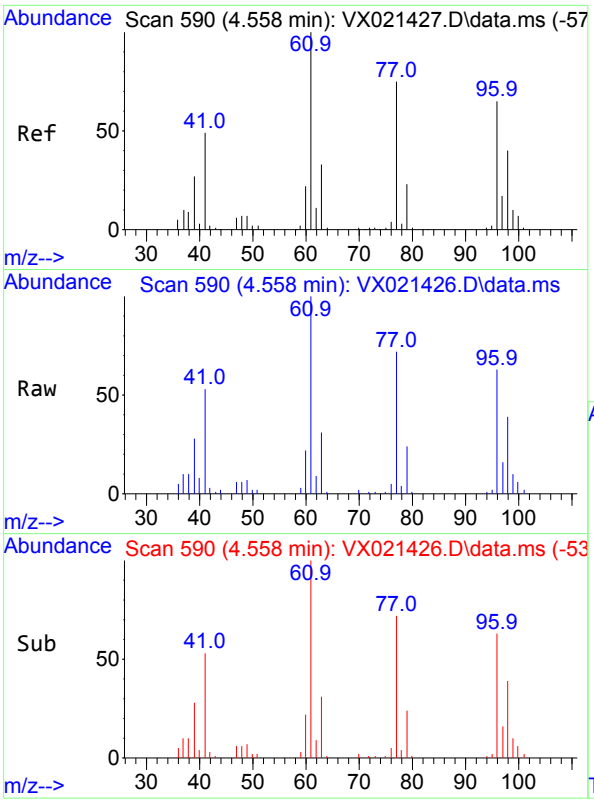
Tgt Ion: 77 Resp: 26154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 22.3 | 11.7 | 35.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

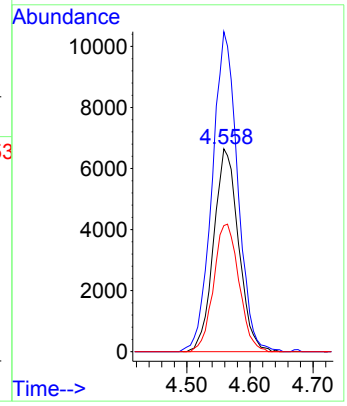
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

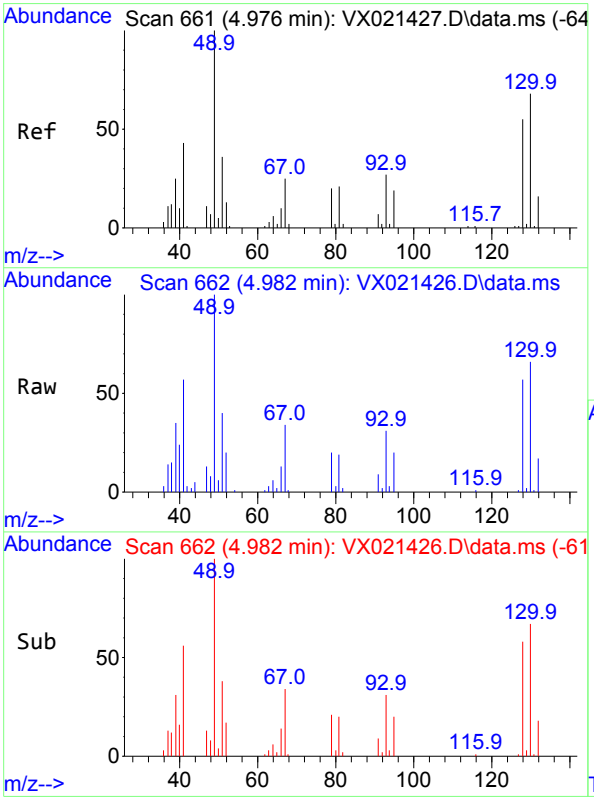



#27
cis-1,2-Dichloroethene
Concen: 18.18 ug/l
RT: 4.558 min Scan# 590
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 96 Resp: 18193

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 161.7 | 0.0 | 285.6 |
| 98 | 64.1 | 0.0 | 129.6 |

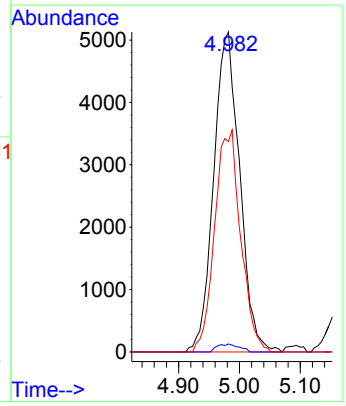



#28
Bromochloromethane
Concen: 19.38 ug/l
RT: 4.982 min Scan# 662
Delta R.T. 0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

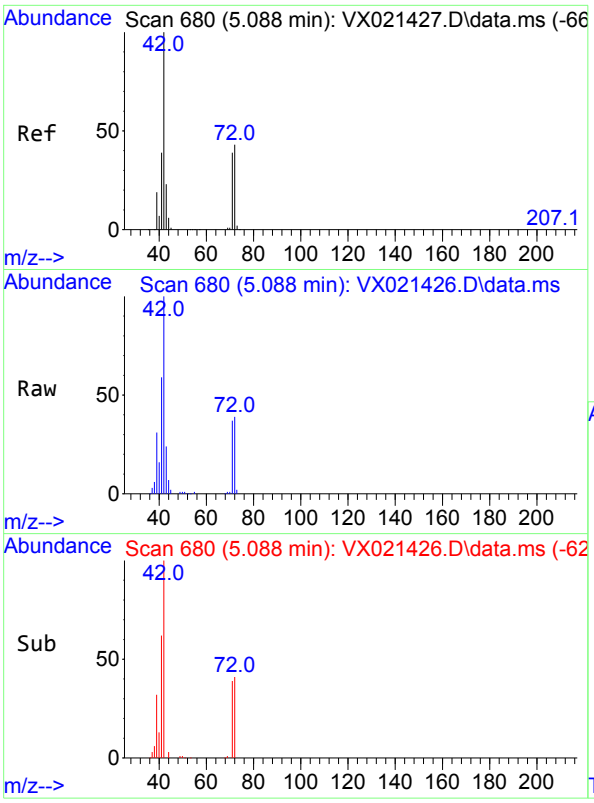
Tgt Ion: 49 Resp: 15247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.1 | 0.0 | 4.0 |
| 130 | 69.2 | 68.2 | 102.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

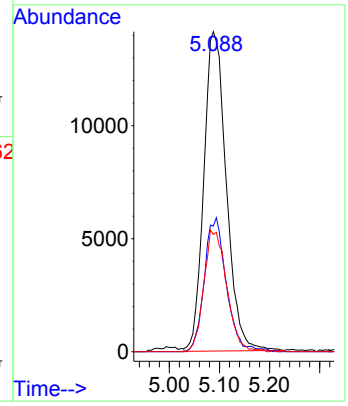
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3/25/2021 9:49:26 AM

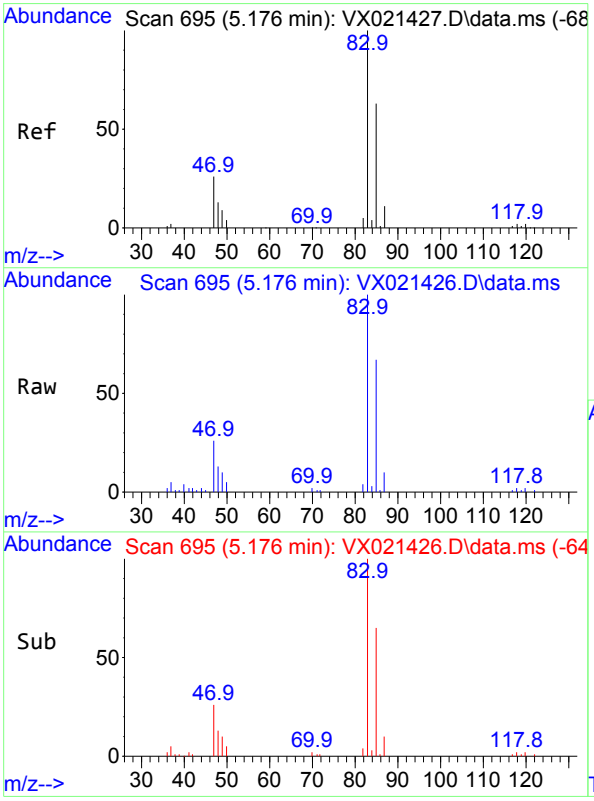



#29
Tetrahydrofuran
Concen: 93.63 ug/l
RT: 5.088 min Scan# 680
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 42 Resp: 44037

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 41.0 | 41.7 | 62.5# |
| 71 | 38.6 | 38.4 | 57.6 |

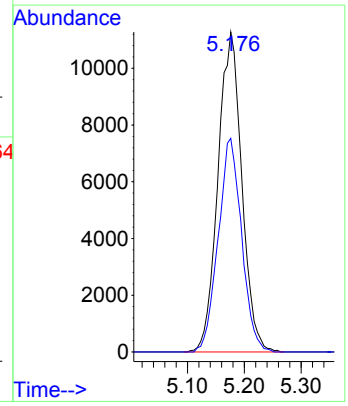



#30
Chloroform
Concen: 18.94 ug/l
RT: 5.176 min Scan# 695
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

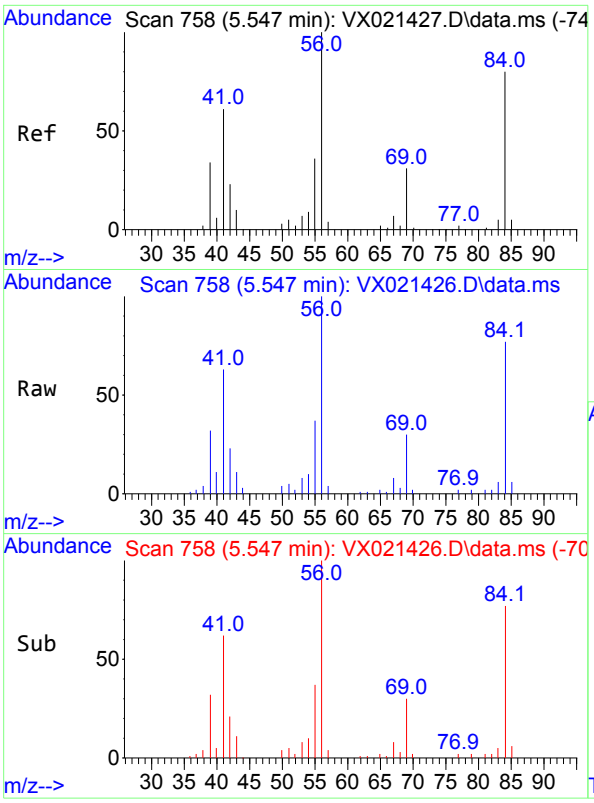
Tgt Ion: 83 Resp: 32866

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.7 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

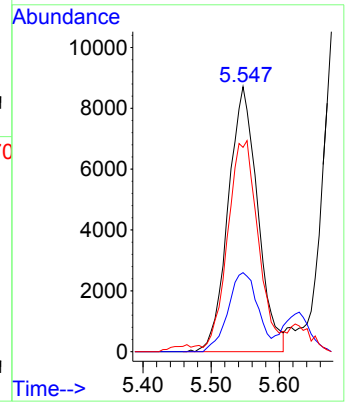
**Manual Integrations APPROVED**
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3/25/2021 9:49:26 AM

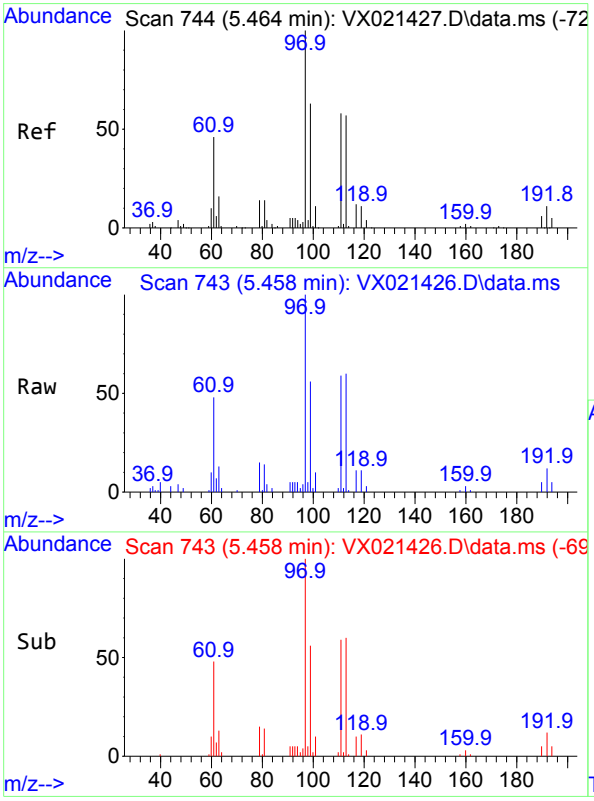



#31
Cyclohexane
Concen: 17.44 ug/l
RT: 5.547 min Scan# 758
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 56 Resp: 26219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 29.8 | 25.3 | 37.9 |
| 84 | 75.2 | 71.4 | 107.0 |

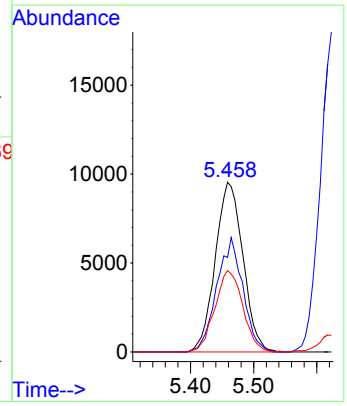



#32
1,1,1-Trichloroethane
Concen: 18.89 ug/l
RT: 5.458 min Scan# 743
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

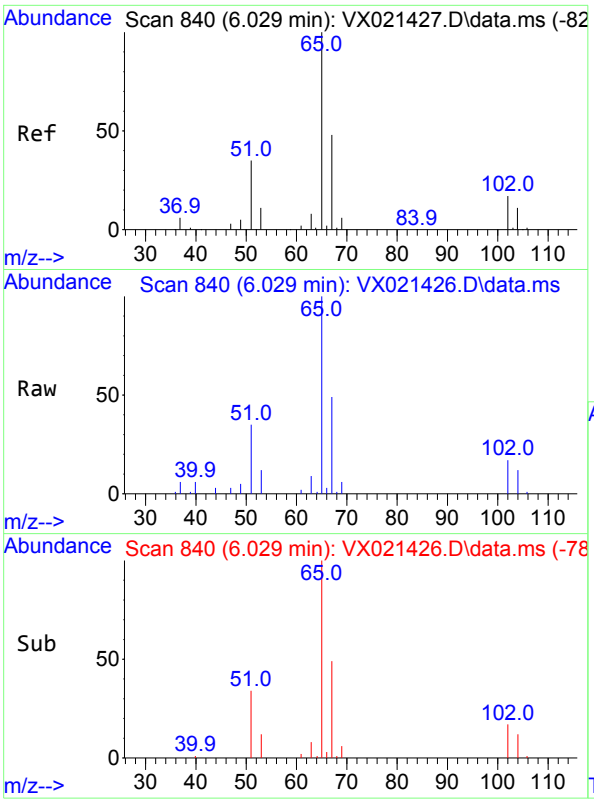
Tgt Ion: 97 Resp: 29065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 63.6 | 51.5 | 77.3 |
| 61 | 48.3 | 34.2 | 51.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

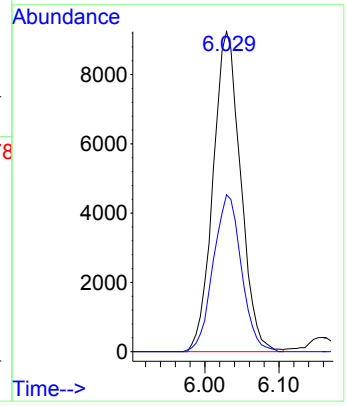
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3/25/2021 9:49:26 AM

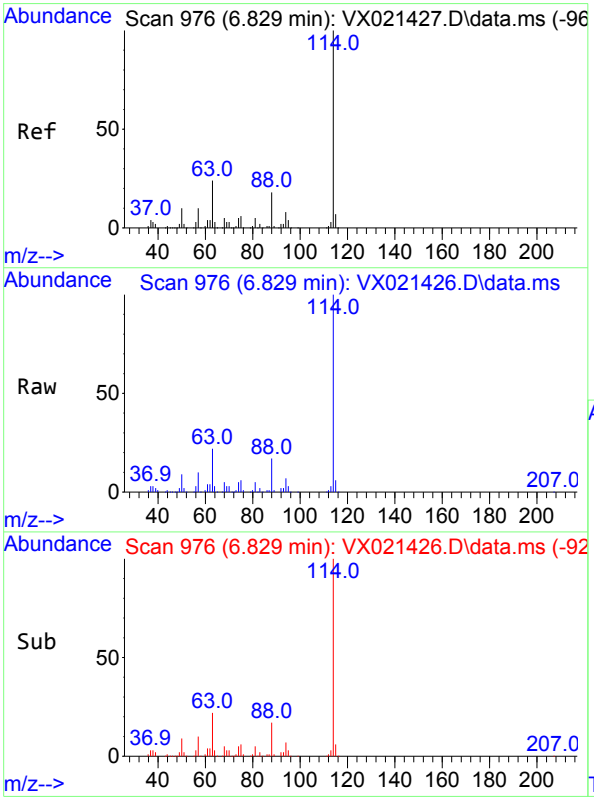



#33
1,2-Dichloroethane-d4
Concen: 18.94 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 65 Resp: 23829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.1 | 0.0 | 105.4 |

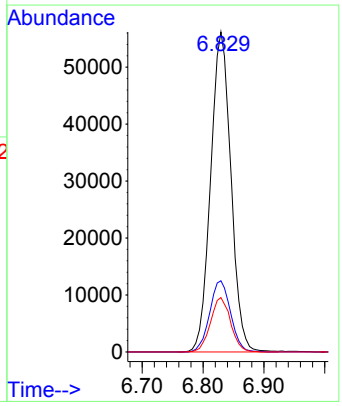



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

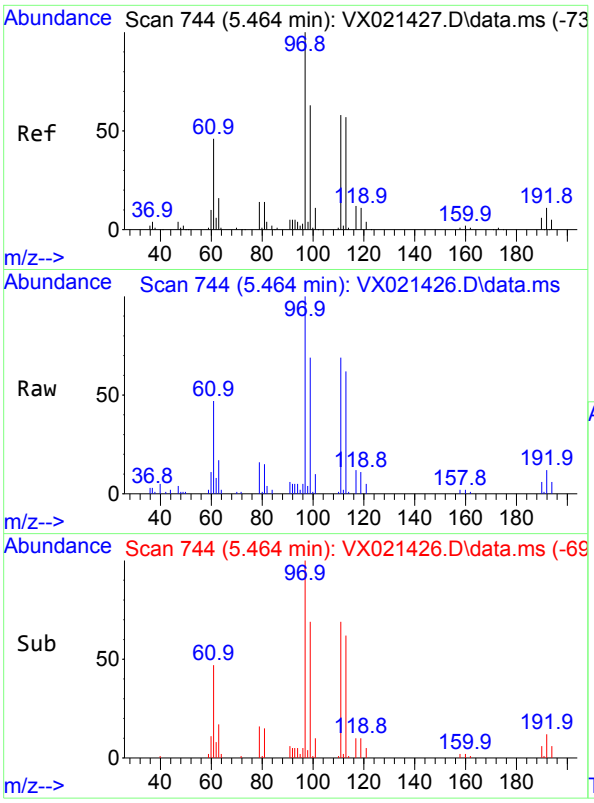
Tgt Ion:114 Resp: 130062

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.2 | 0.0 | 40.8 |
| 88 | 17.0 | 0.0 | 32.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

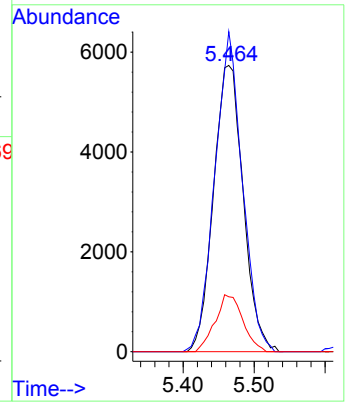
**Manual Integrations APPROVED**
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3/25/2021 9:49:26 AM

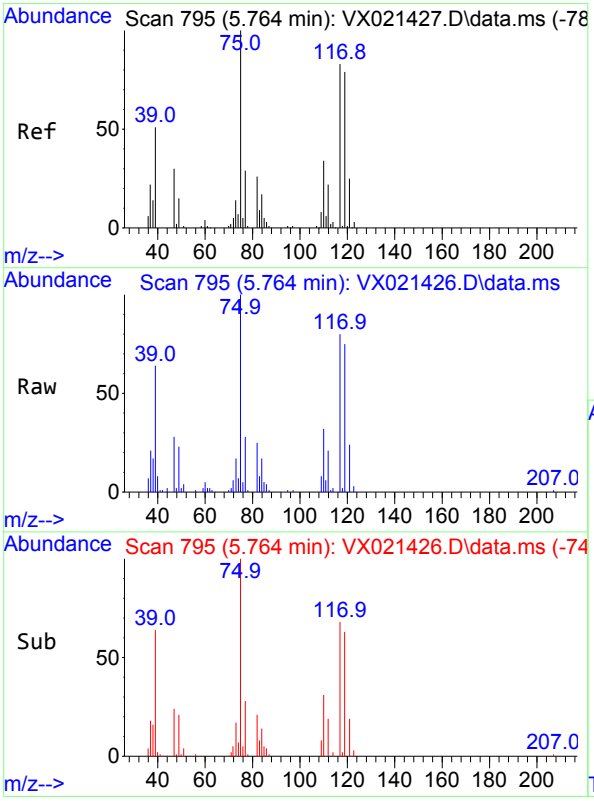



#35
Dibromofluoromethane
Concen: 18.79 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:113 Resp: 16662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.5 | 81.9 | 122.9 |
| 192 | 18.5 | 16.7 | 25.1 |

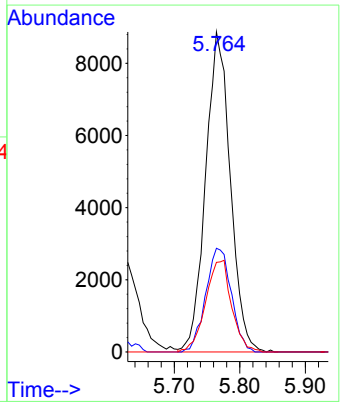



#36
1,1-Dichloropropene
Concen: 17.79 ug/l
RT: 5.764 min Scan# 795
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

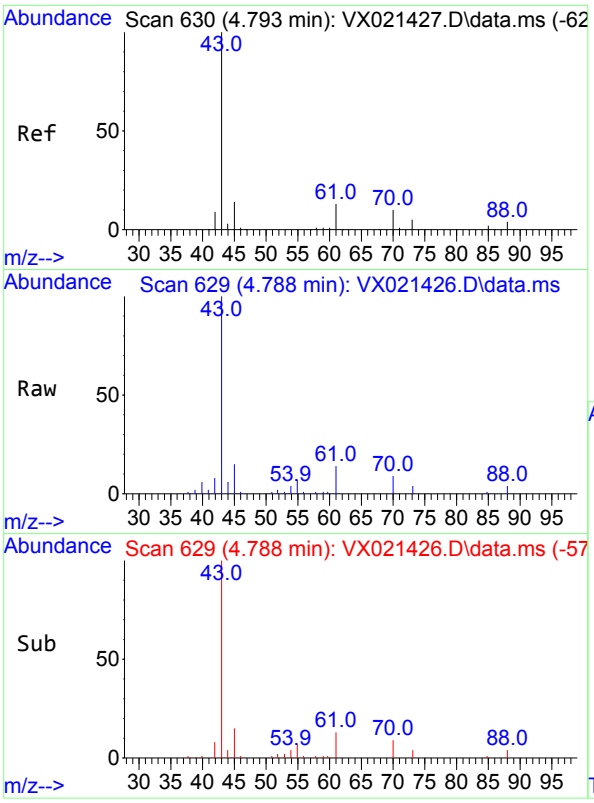
Tgt Ion: 75 Resp: 23205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.6 | 18.1 | 54.4 |
| 77 | 30.2 | 25.3 | 37.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

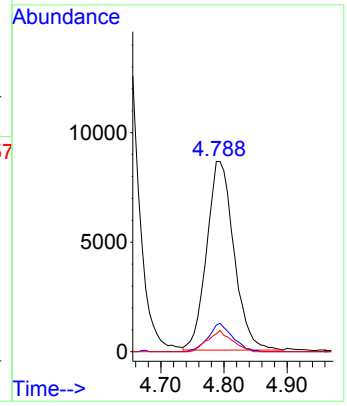
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

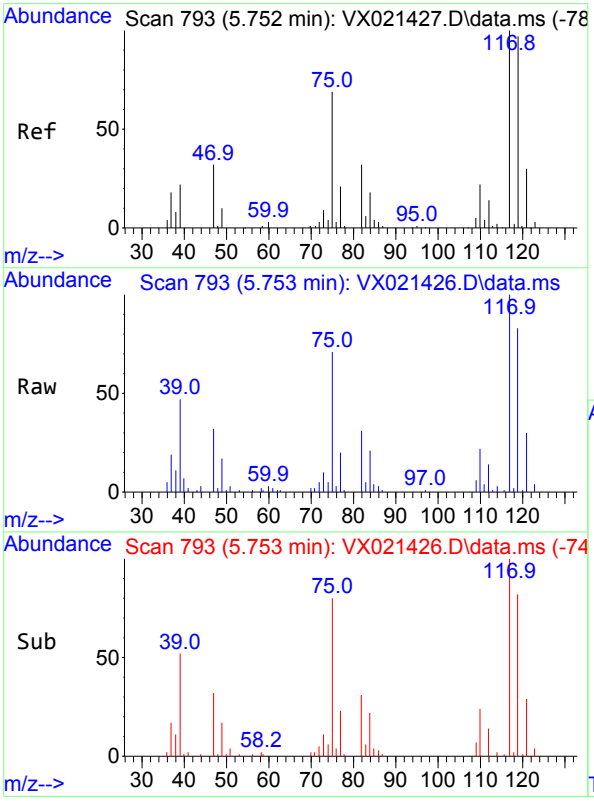



#37
Ethyl Acetate
Concen: 17.10 ug/l
RT: 4.788 min Scan# 629
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 43 Resp: 25793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.5 | 12.8 | 19.2 |
| 70 | 9.9 | 10.5 | 15.7# |

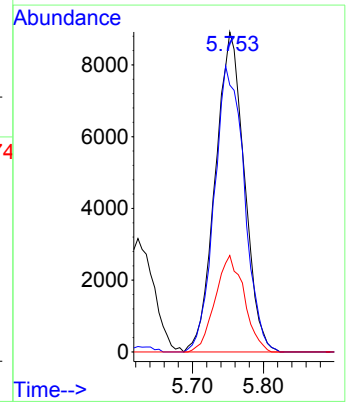



#38
Carbon Tetrachloride
Concen: 18.61 ug/l
RT: 5.753 min Scan# 793
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

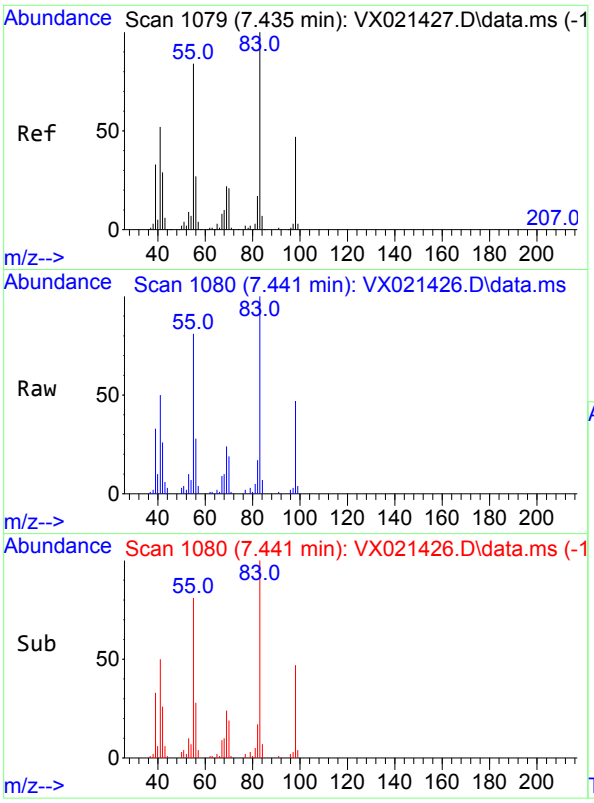
Tgt Ion:117 Resp: 25282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 83.4 | 76.2 | 114.2 |
| 121 | 30.1 | 24.8 | 37.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

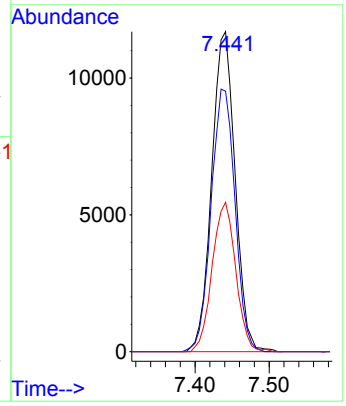
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

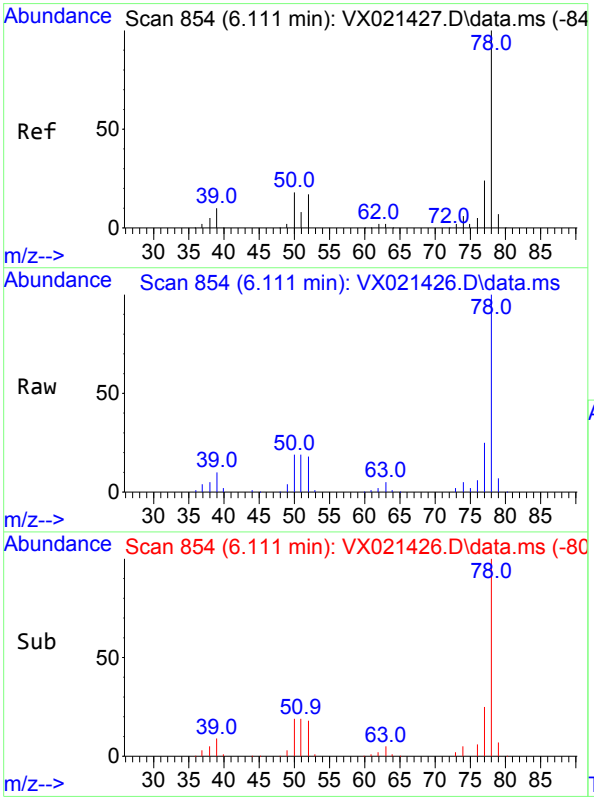



#39
Methylcyclohexane
Concen: 17.70 ug/l
RT: 7.441 min Scan# 1080
Delta R.T. 0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 83 Resp: 25640

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 81.4 | 58.9 | 88.3 |
| 98 | 46.7 | 38.1 | 57.1 |

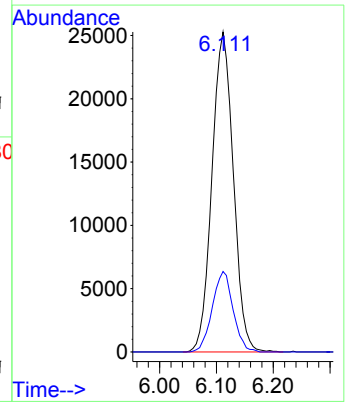



#40
Benzene
Concen: 18.32 ug/l
RT: 6.111 min Scan# 854
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

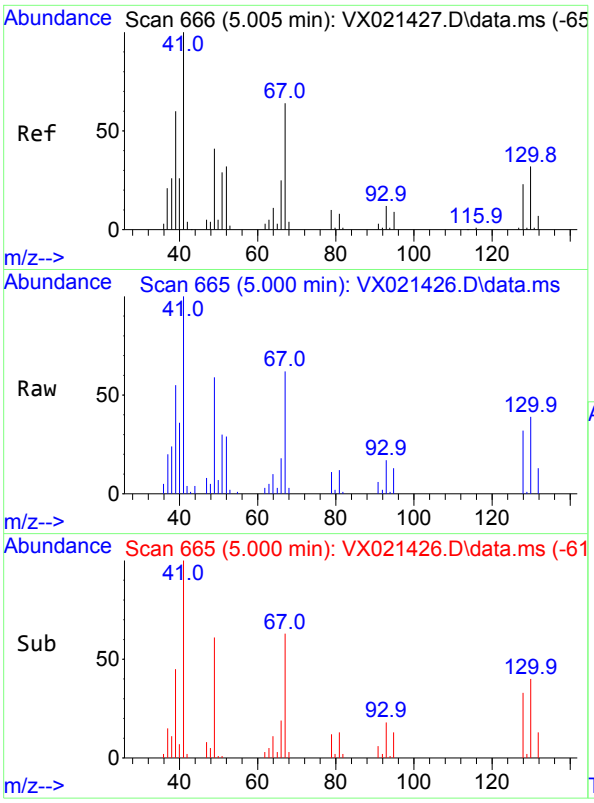
Tgt Ion: 78 Resp: 65987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 25.2 | 18.9 | 28.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

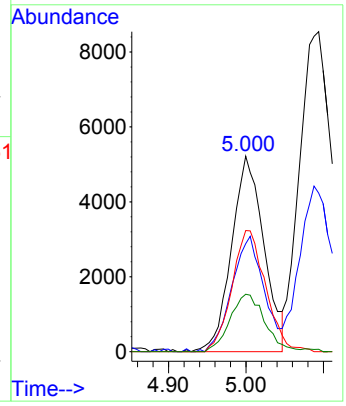
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

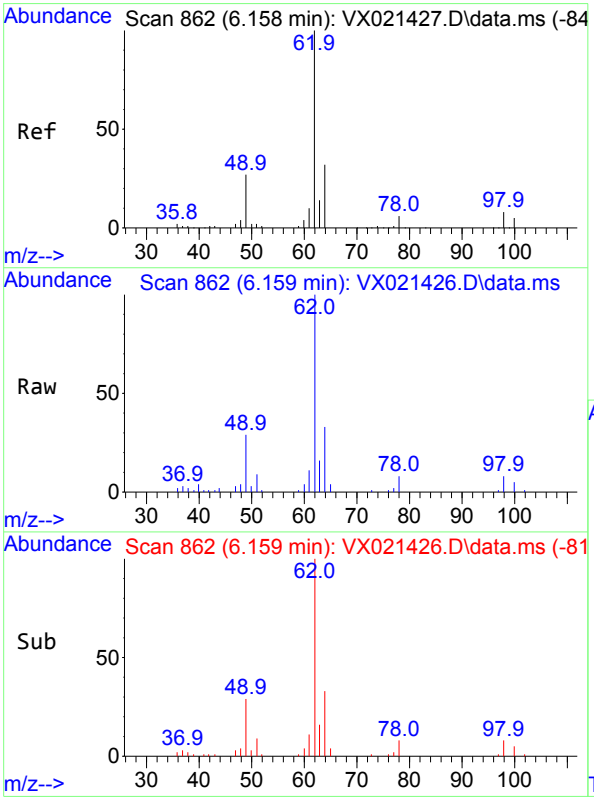



#41
Methacrylonitrile
Concen: 17.38 ug/l
RT: 5.000 min Scan# 665
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 41 Resp: 15185

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 57.7 | 42.5 | 63.7 |
| 67 | 64.5 | 65.0 | 97.6# |
| 52 | 31.4 | 25.3 | 37.9 |

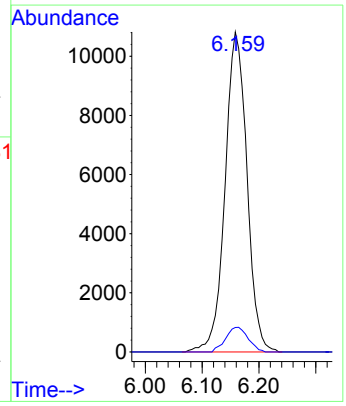



#42
1,2-Dichloroethane
Concen: 18.59 ug/l
RT: 6.159 min Scan# 862
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

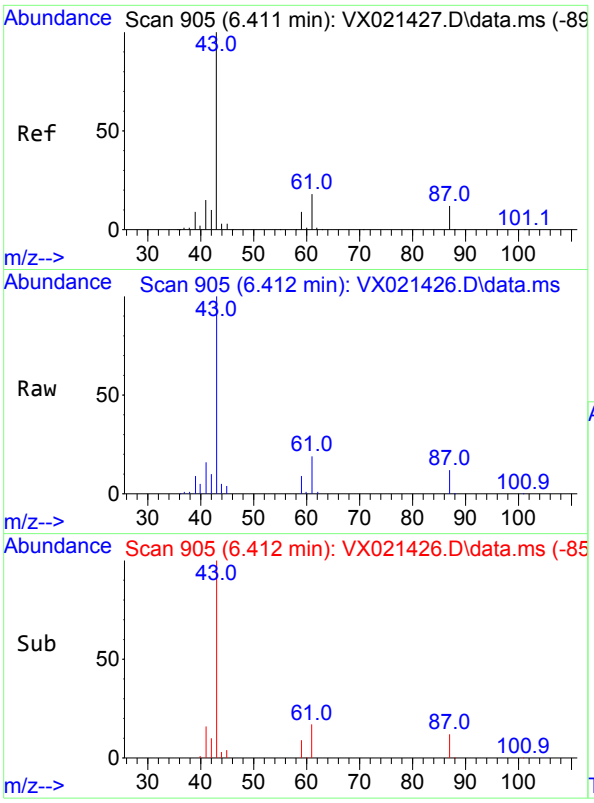
Tgt Ion: 62 Resp: 28976

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.9 | 0.0 | 20.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

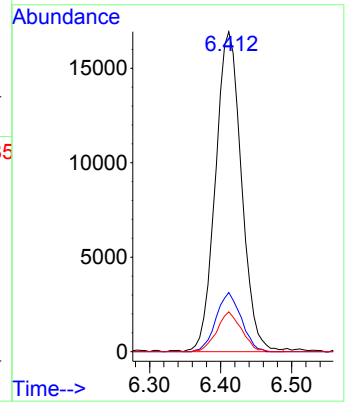
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

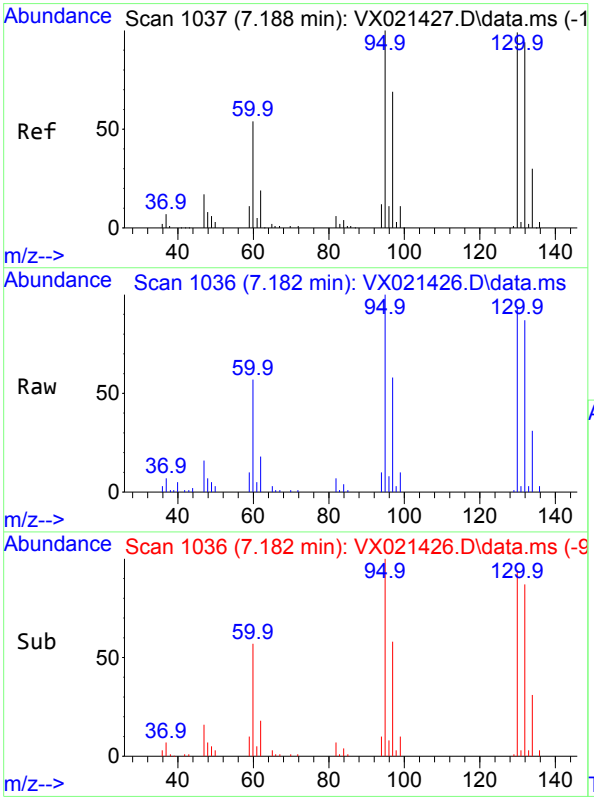



#43
Isopropyl Acetate
Concen: 17.35 ug/l
RT: 6.412 min Scan# 905
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 43 Resp: 42928

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.0 | 18.2 | 27.4# |
| 87 | 11.9 | 12.5 | 18.7# |

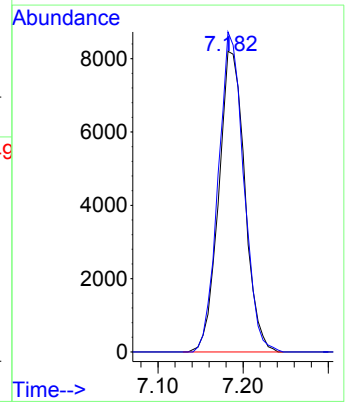



#44
Trichloroethene
Concen: 18.23 ug/l
RT: 7.182 min Scan# 1036
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

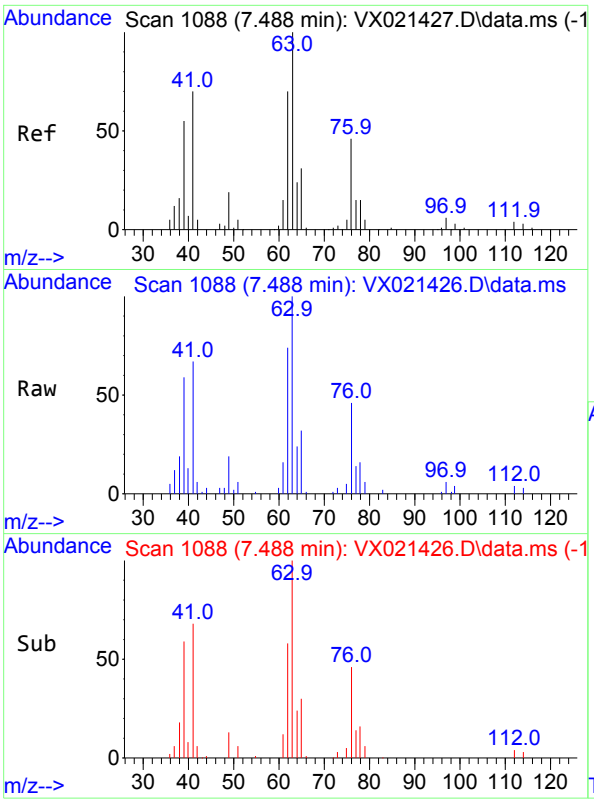
Tgt Ion:130 Resp: 17424

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 106.5 | 0.0 | 198.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

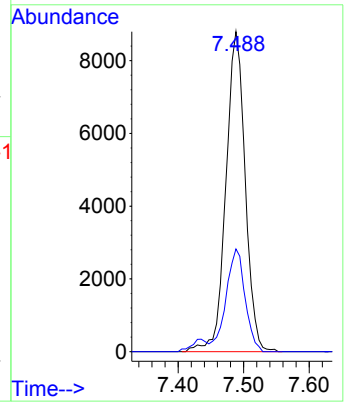
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

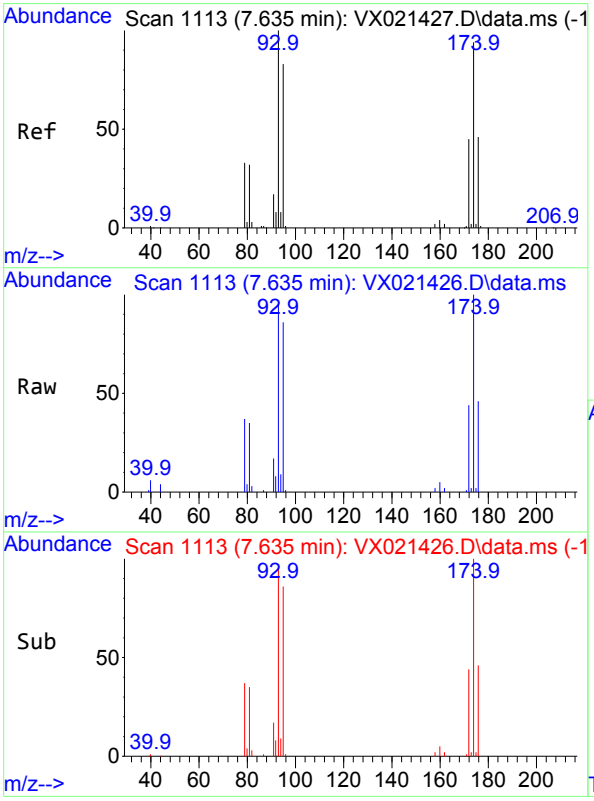



#45
1,2-Dichloropropane
Concen: 18.49 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 63 Resp: 17931

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 32.1 | 25.7 | 38.5 |

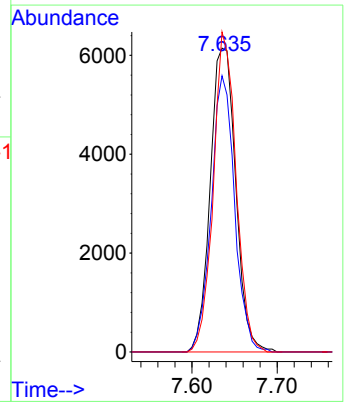



#46
Dibromomethane
Concen: 17.98 ug/l
RT: 7.635 min Scan# 1113
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

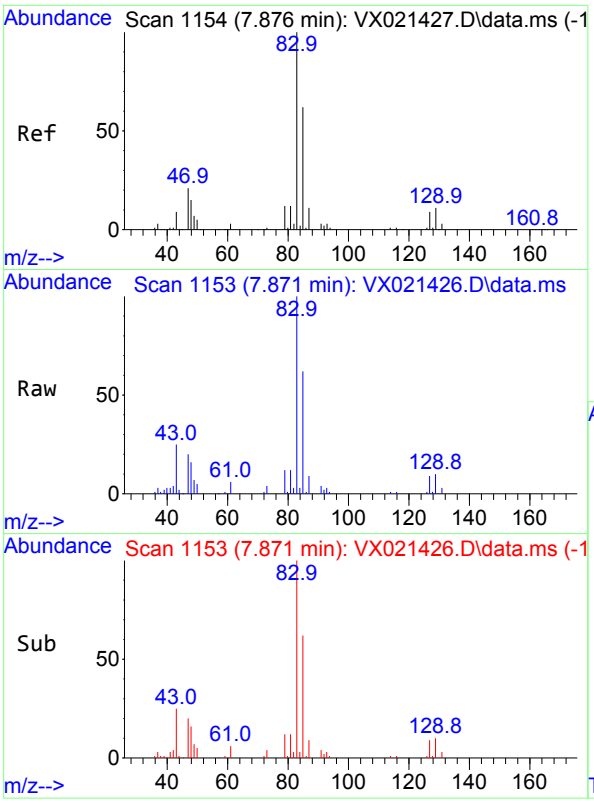
Tgt Ion: 93 Resp: 12794

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.3 | 66.8 | 100.2 |
| 174 | 93.8 | 83.1 | 124.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

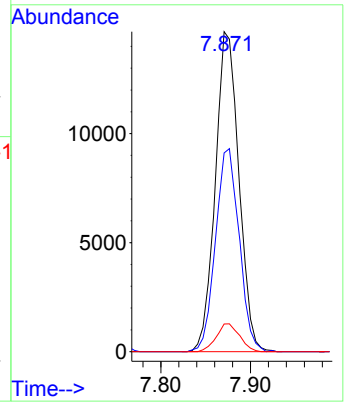
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

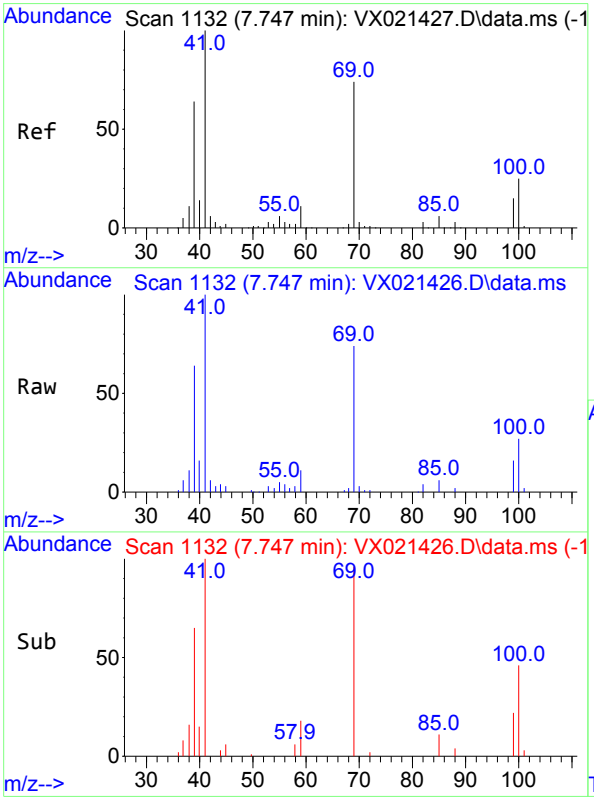



#47
Bromodichloromethane
Concen: 18.79 ug/l
RT: 7.871 min Scan# 1153
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 83 Resp: 26757

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.1 | 51.4 | 77.0 |
| 127 | 8.6 | 6.8 | 10.2 |

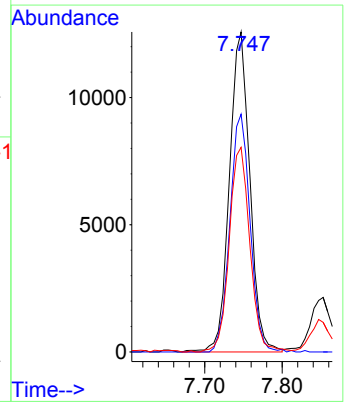



#48
Methyl methacrylate
Concen: 17.47 ug/l
RT: 7.747 min Scan# 1132
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

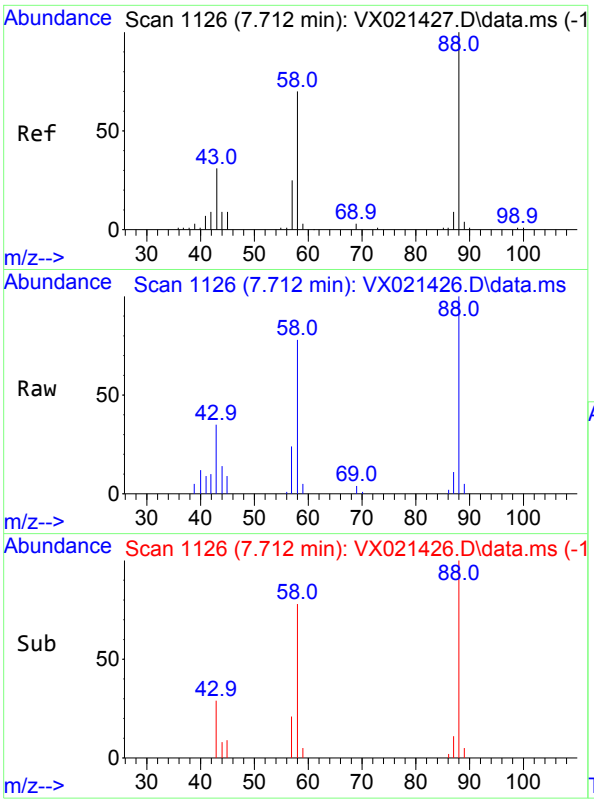
Tgt Ion: 41 Resp: 23054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 73.9 | 76.0 | 114.0# |
| 39 | 64.7 | 44.6 | 67.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

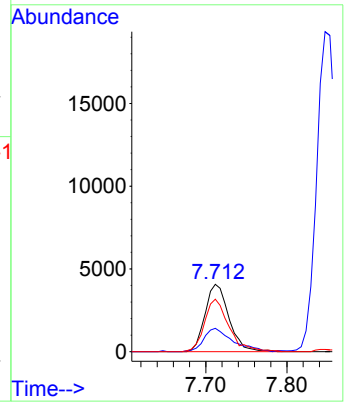
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

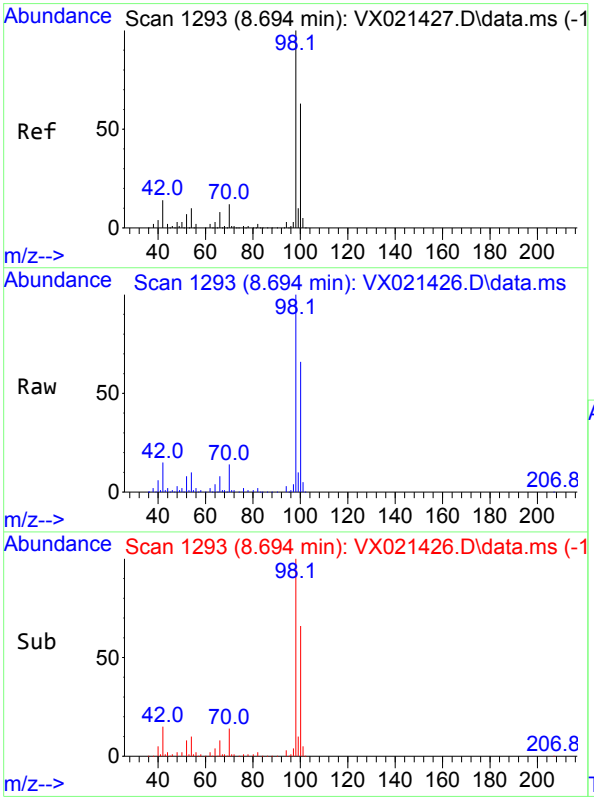



#49
1,4-Dioxane
Concen: 338.96 ug/l
RT: 7.712 min Scan# 1126
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 88 Resp: 8298

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 41.8 | 23.2 | 34.8# |
| 58 | 79.7 | 55.0 | 82.4 |

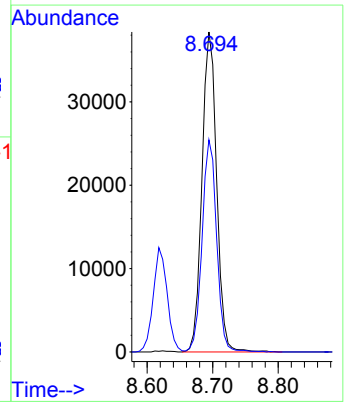



#50
Toluene-d8
Concen: 18.51 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

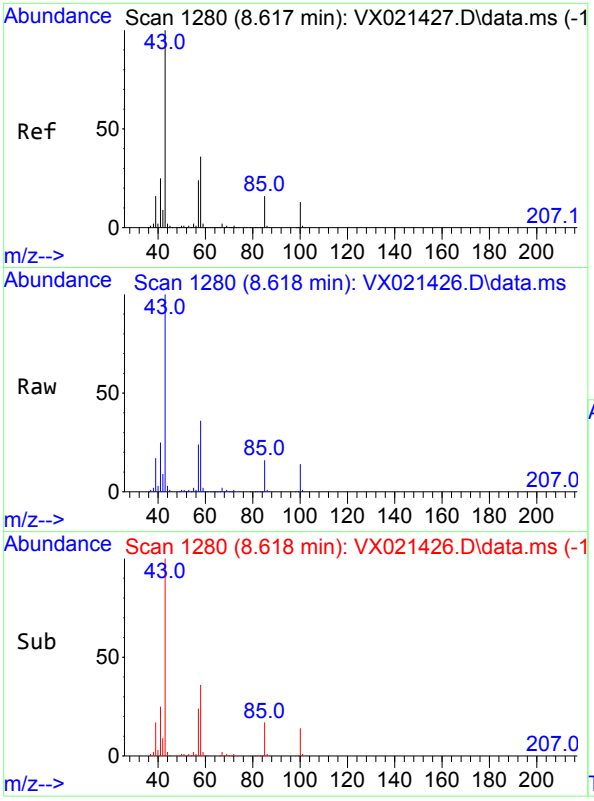
Tgt Ion: 98 Resp: 59815

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.8 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

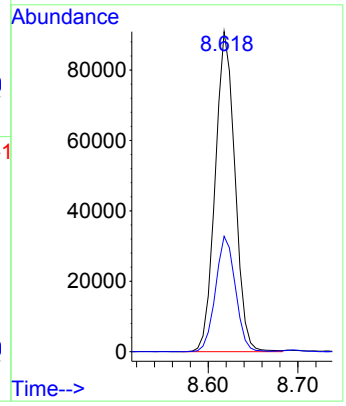
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

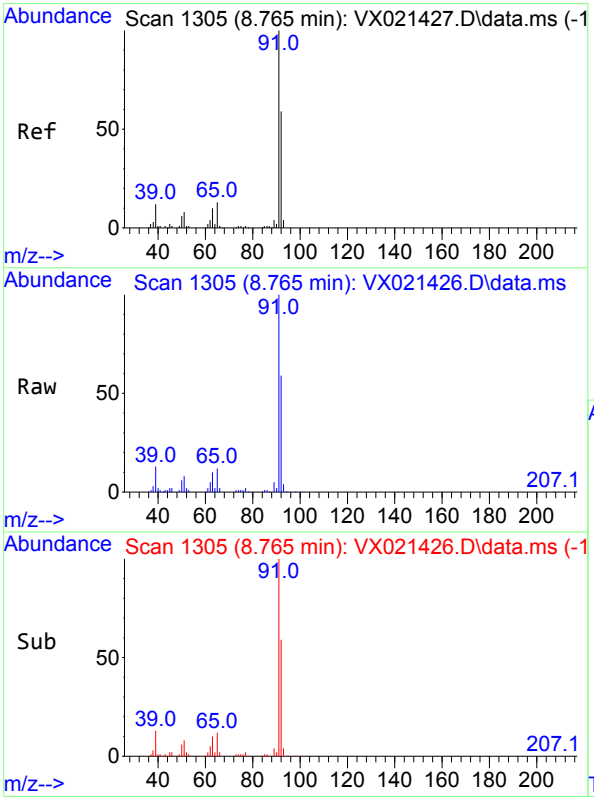



#51
4-Methyl-2-Pentanone
Concen: 95.53 ug/l
RT: 8.618 min Scan# 1280
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 43 Resp: 138866

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.3 | 35.4 | 53.0 |

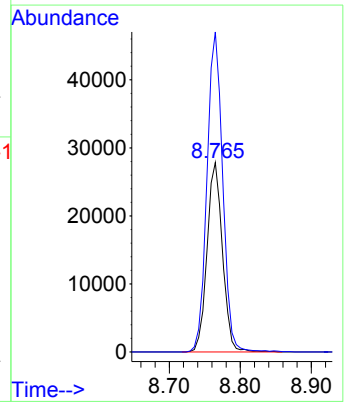



#52
Toluene
Concen: 18.90 ug/l
RT: 8.765 min Scan# 1305
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

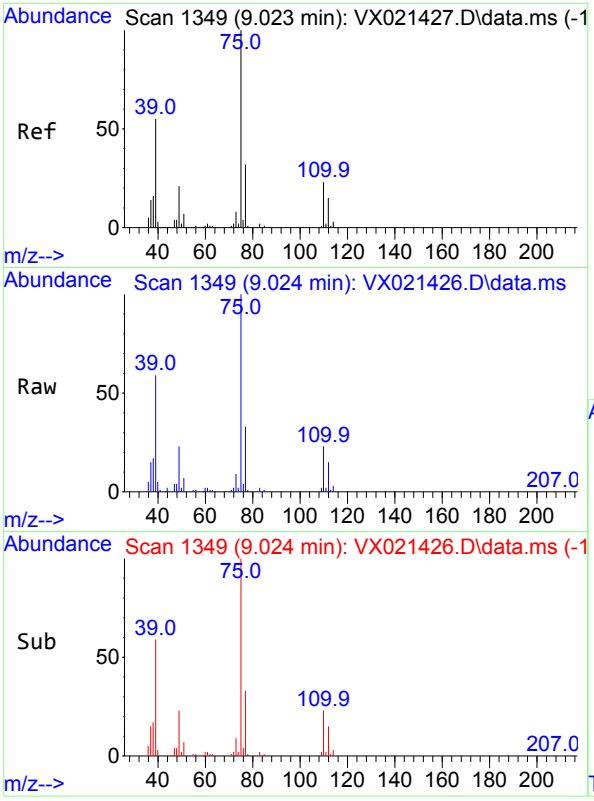
Tgt Ion: 92 Resp: 42135

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 171.9 | 137.1 | 205.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

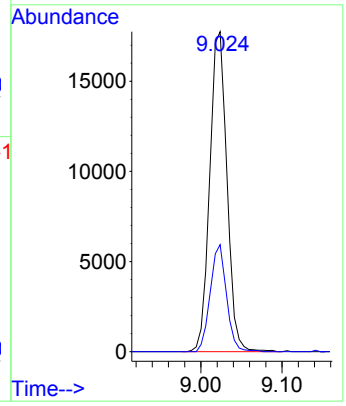
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

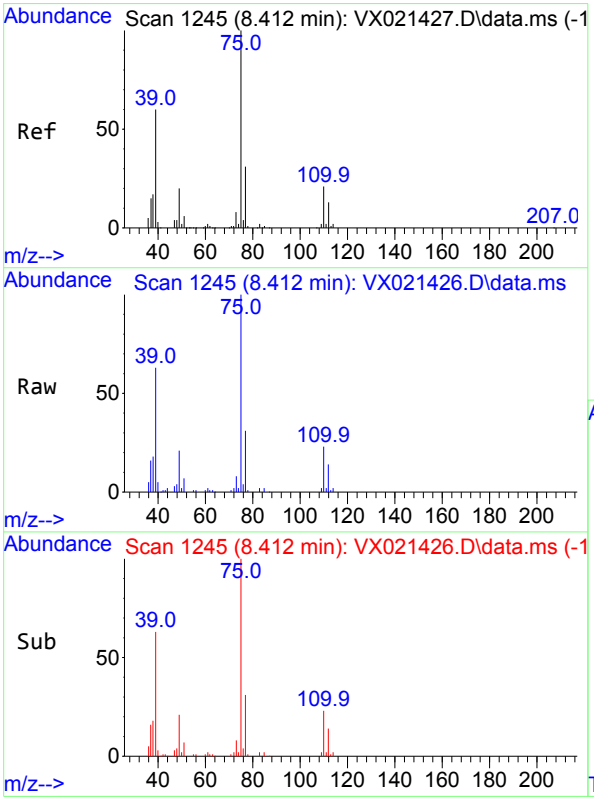



#53
t-1,3-Dichloropropene
Concen: 17.30 ug/l
RT: 9.024 min Scan# 1349
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 75 Resp: 26060

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.5 | 24.9 | 37.3 |

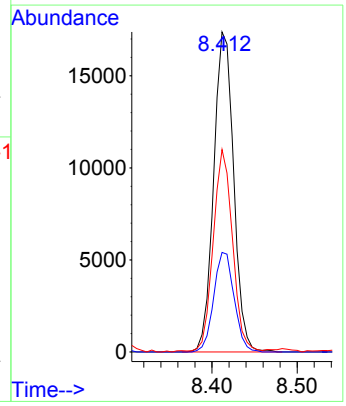



#54
cis-1,3-Dichloropropene
Concen: 17.66 ug/l
RT: 8.412 min Scan# 1245
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

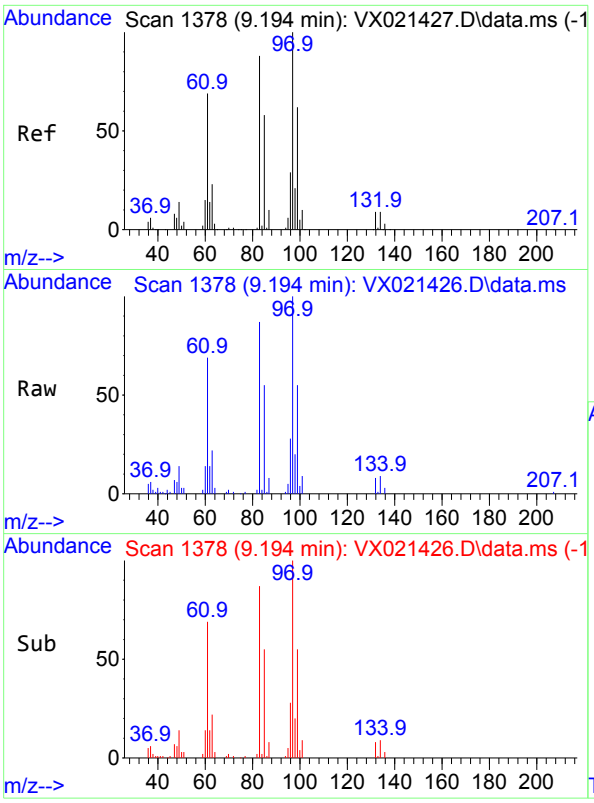
Tgt Ion: 75 Resp: 28326

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.1 | 25.7 | 38.5 |
| 39 | 62.8 | 35.1 | 52.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

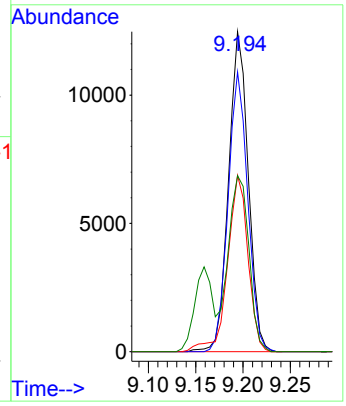
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

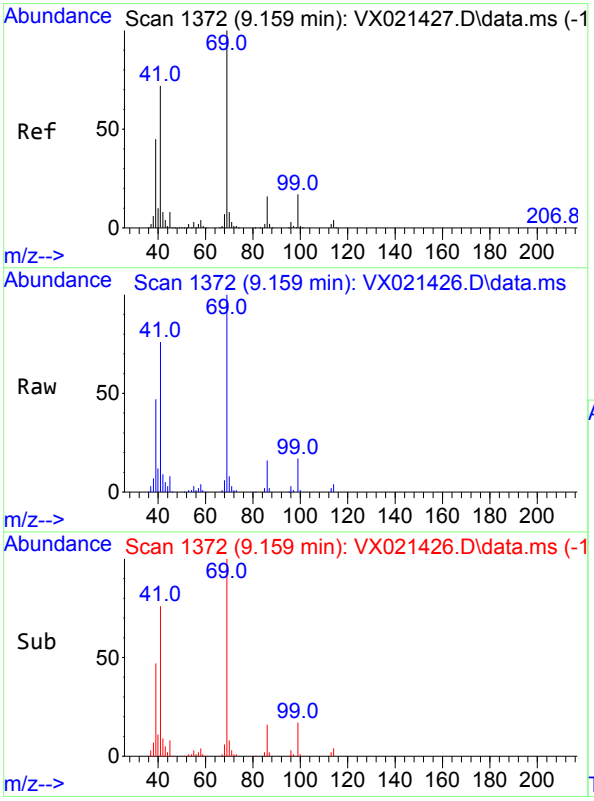



#55
1,1,2-Trichloroethane
Concen: 19.70 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 97 Resp: 18048

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.4 | 69.3 | 103.9 |
| 85 | 55.1 | 44.3 | 66.5 |
| 99 | 55.0 | 50.3 | 75.5 |

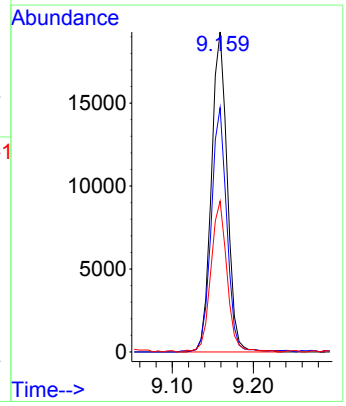



#56
Ethyl methacrylate
Concen: 17.76 ug/l
RT: 9.159 min Scan# 1372
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

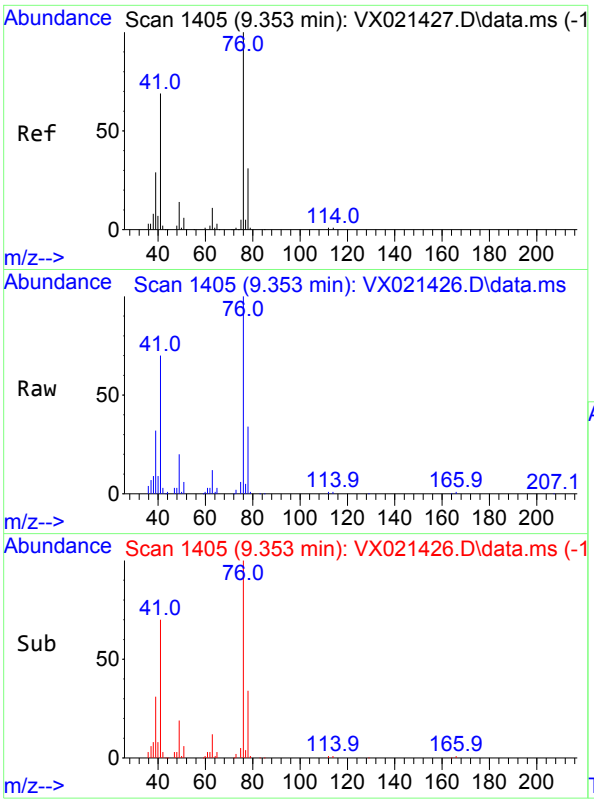
Tgt Ion: 69 Resp: 26047

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 75.5 | 46.8 | 70.2# |
| 39 | 48.5 | 24.7 | 37.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

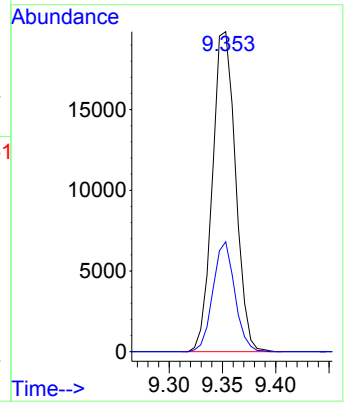
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

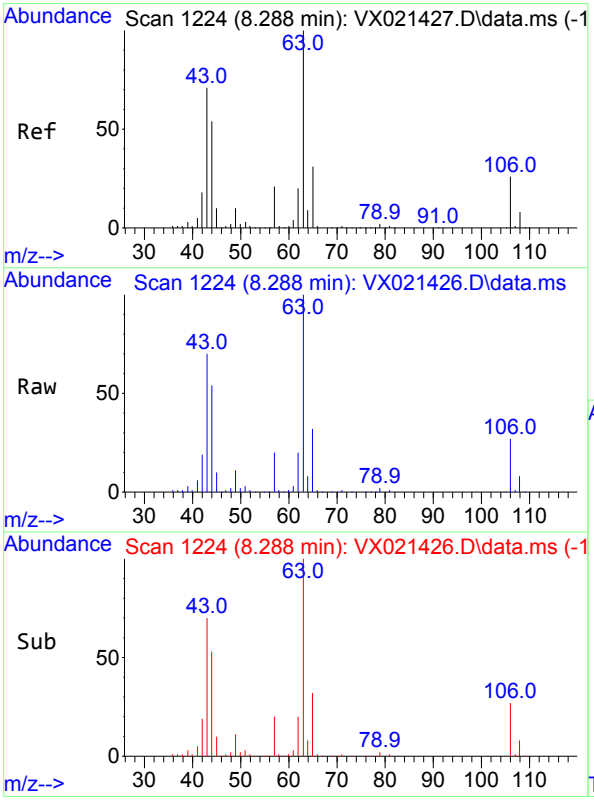



#57
1,3-Dichloropropane
Concen: 18.73 ug/l
RT: 9.353 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 76 Resp: 29873

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.6 | 26.2 | 39.2 |

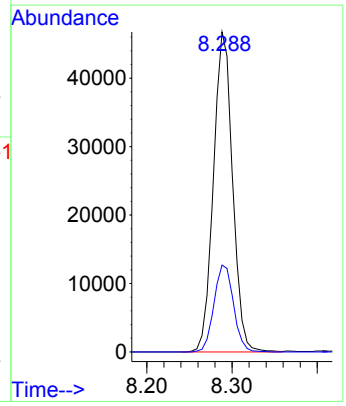



#58
2-Chloroethyl Vinyl ether
Concen: 90.16 ug/l
RT: 8.288 min Scan# 1224
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

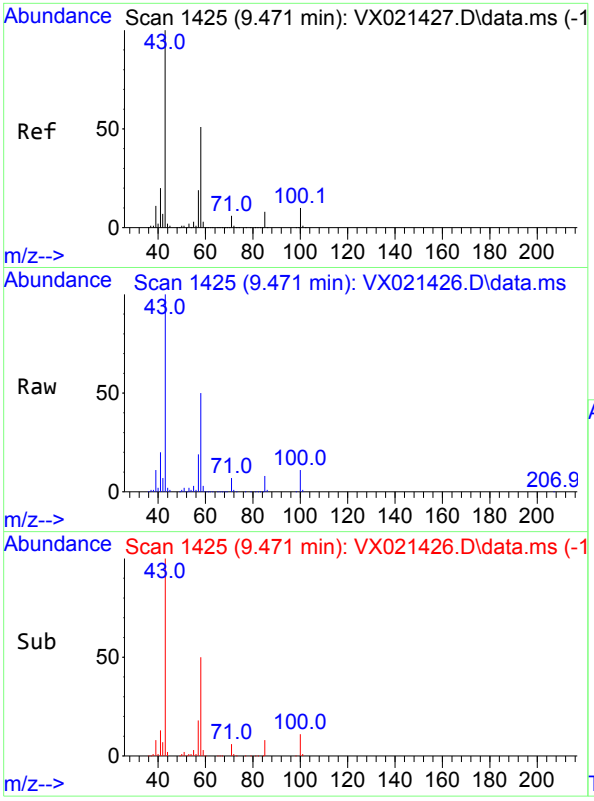
Tgt Ion: 63 Resp: 72843

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 27.7 | 23.5 | 35.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

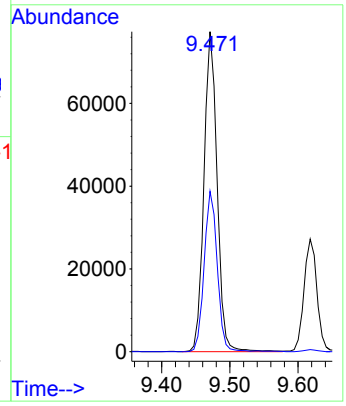
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

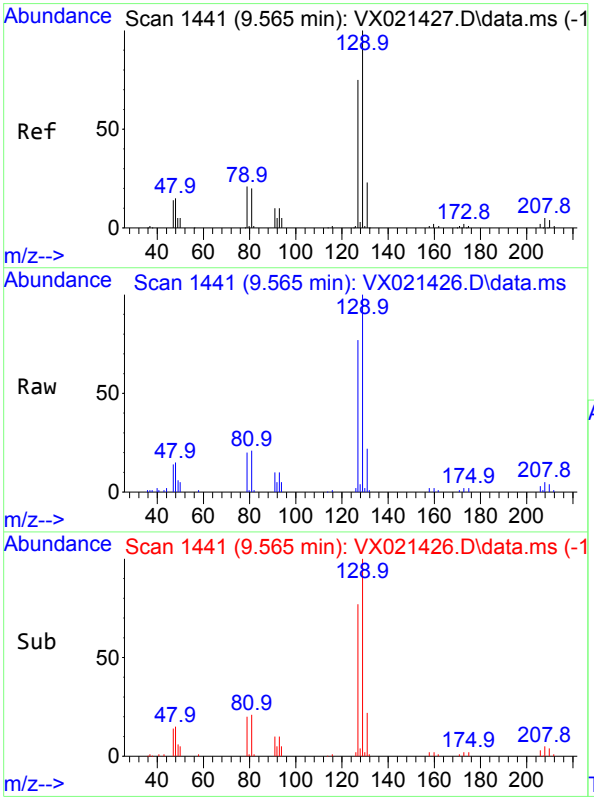



#59
2-Hexanone
Concen: 95.25 ug/l
RT: 9.471 min Scan# 1425
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 43 Resp: 103590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 50.1 | 30.9 | 92.8 |

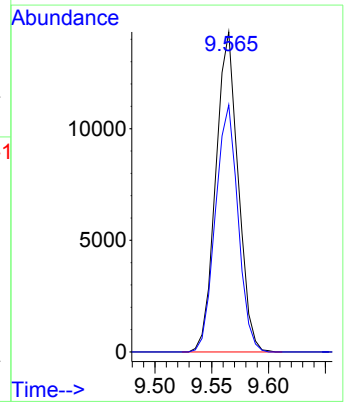



#60
Dibromochloromethane
Concen: 18.88 ug/l
RT: 9.565 min Scan# 1441
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

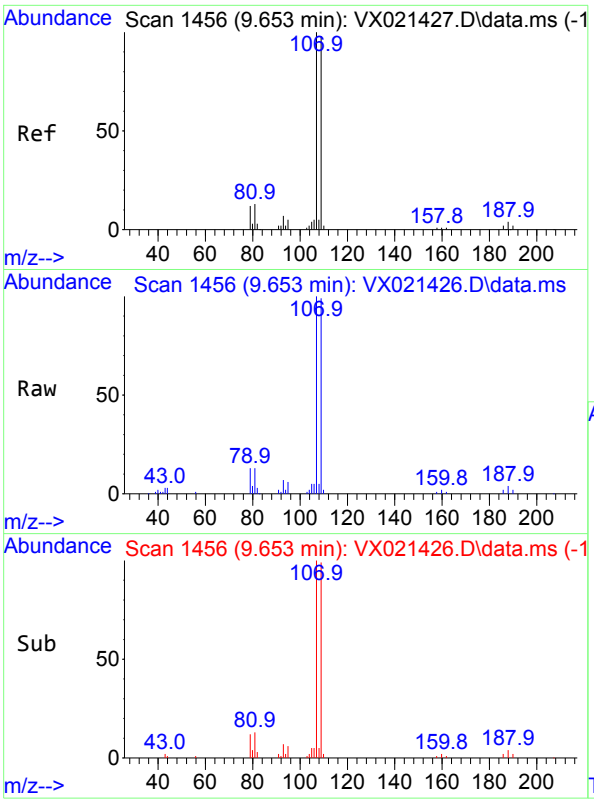
Tgt Ion:129 Resp: 19663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 77.9 | 38.4 | 115.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

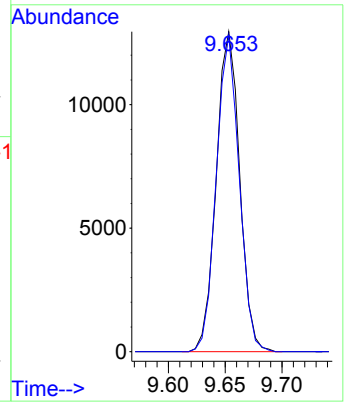
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

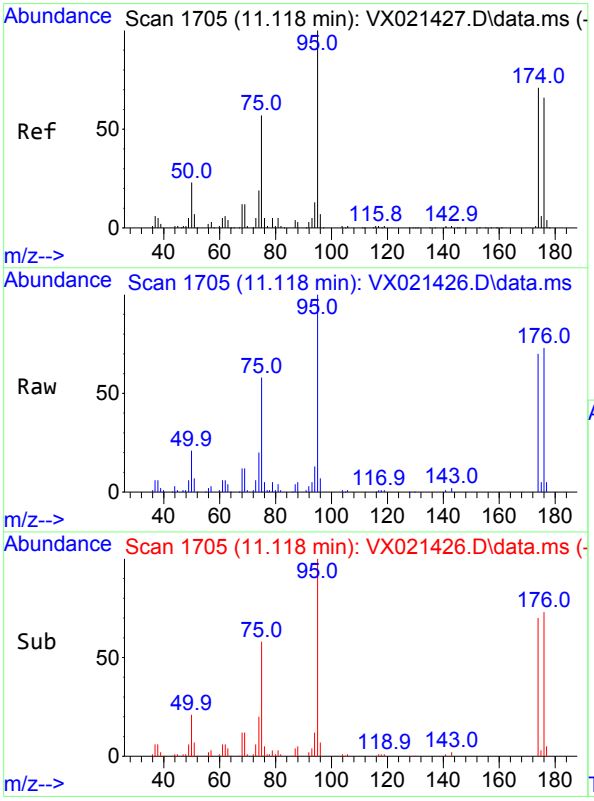



#61
1,2-Dibromoethane
Concen: 18.42 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:107 Resp: 18559

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 96.5 | 75.8 | 113.6 |

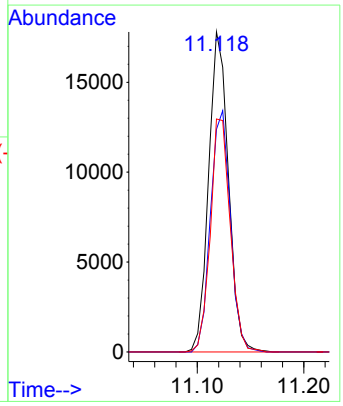



#62
4-Bromofluorobenzene
Concen: 18.39 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

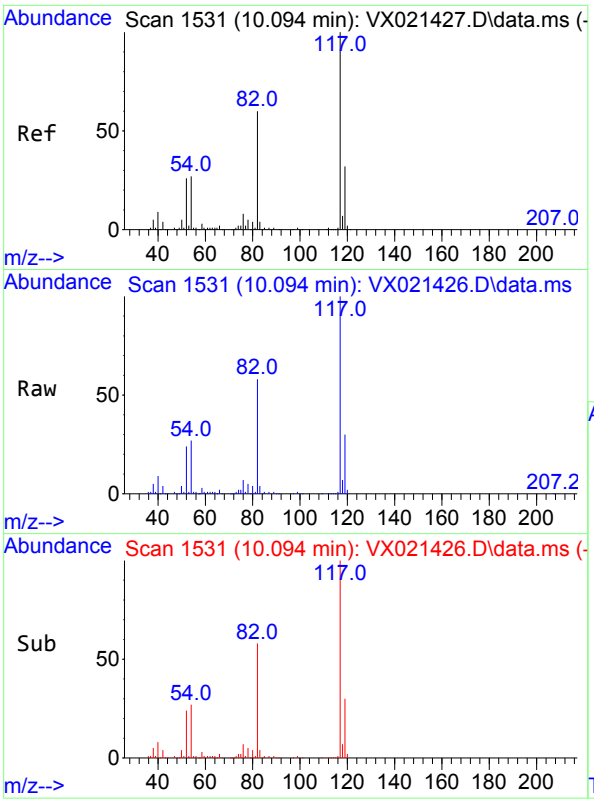
Tgt Ion: 95 Resp: 22955

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.7 | 0.0 | 154.6 |
| 176 | 73.3 | 0.0 | 155.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

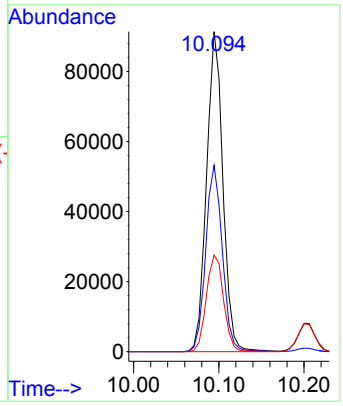
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

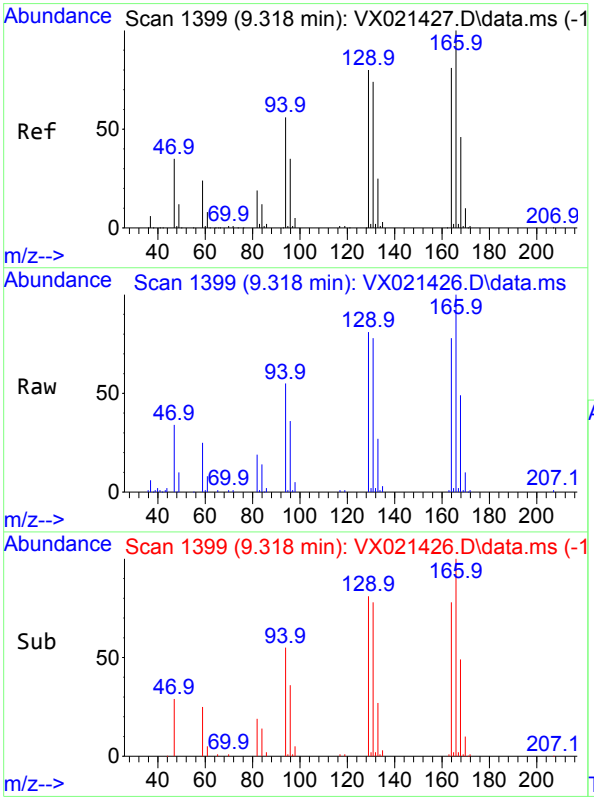



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:117 Resp: 122005

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.3 | 47.4 | 71.2 |
| 119 | 30.2 | 26.6 | 39.8 |

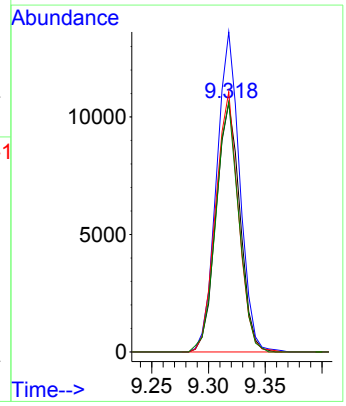



#64
Tetrachloroethene
Concen: 17.11 ug/l
RT: 9.318 min Scan# 1399
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

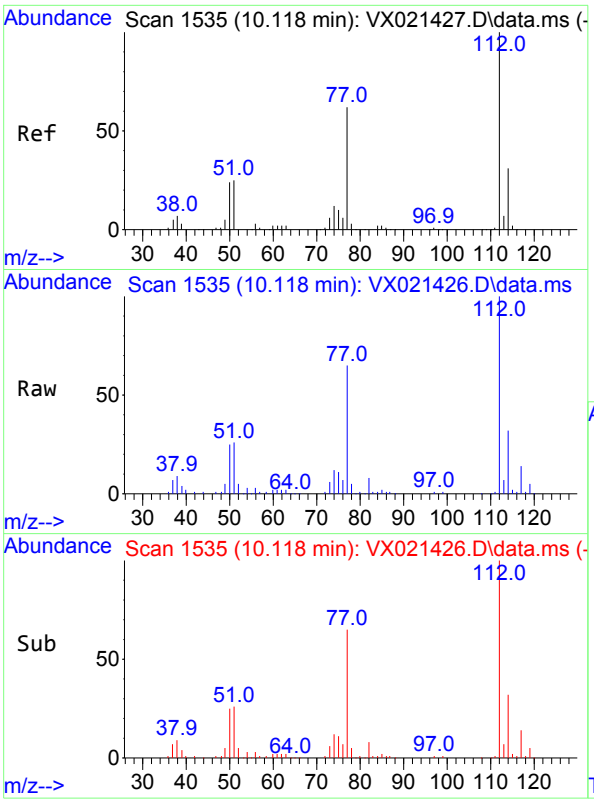
Tgt Ion:164 Resp: 15441

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 128.5 | 103.4 | 155.2 |
| 129 | 104.4 | 70.8 | 106.2 |
| 131 | 100.2 | 72.5 | 108.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

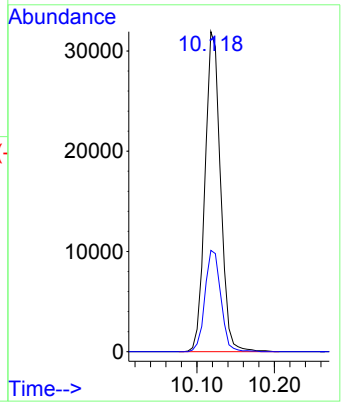
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

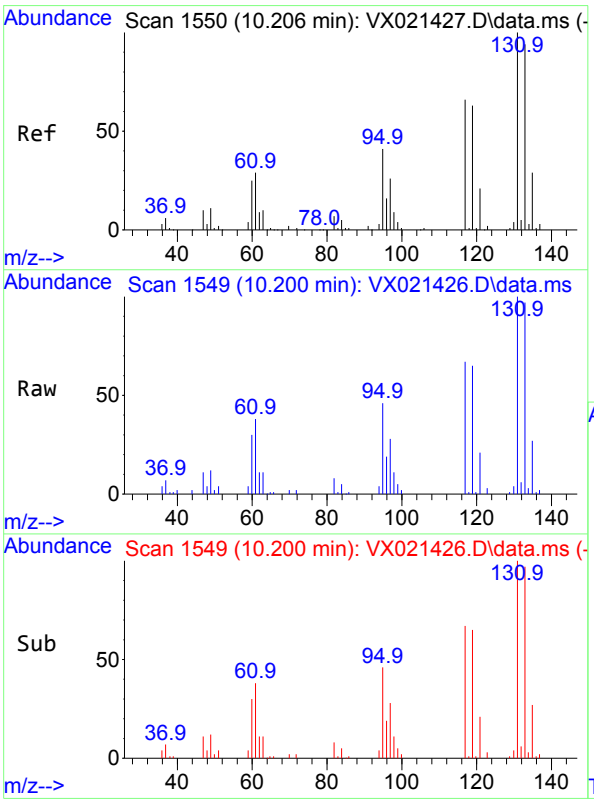



#65
Chlorobenzene
Concen: 17.70 ug/l
RT: 10.118 min Scan# 1535
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:112 Resp: 44424

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.7 | 25.8 | 38.6 |

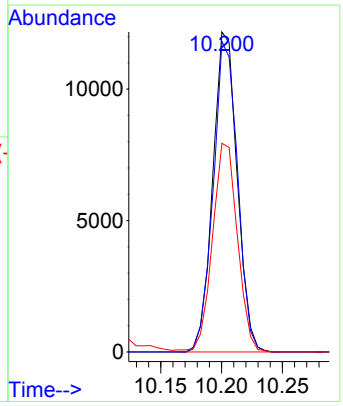



#66
1,1,1,2-Tetrachloroethane
Concen: 18.10 ug/l
RT: 10.200 min Scan# 1549
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

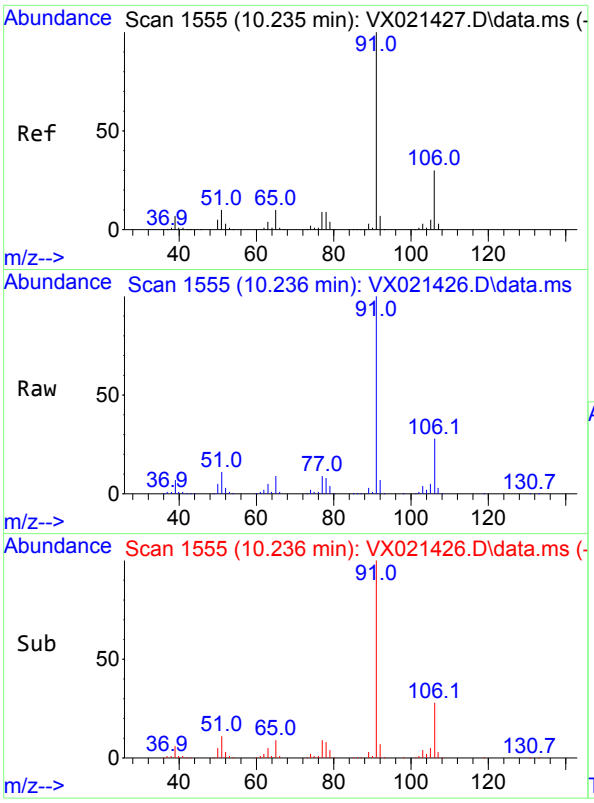
Tgt Ion:131 Resp: 16925

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 97.3 | 47.7 | 143.1 |
| 119 | 66.8 | 32.1 | 96.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

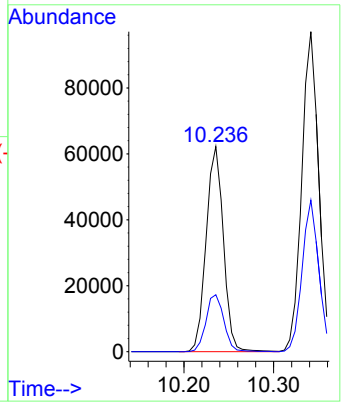
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

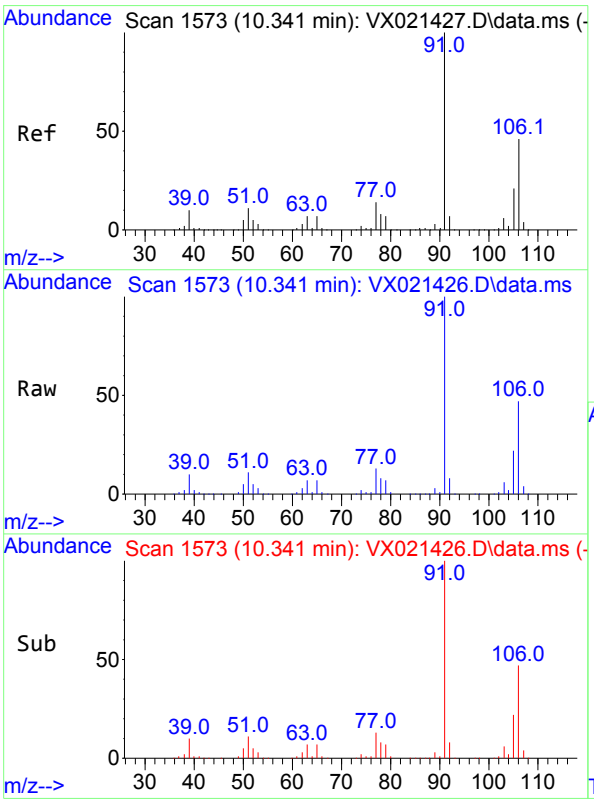



#67
Ethyl Benzene
Concen: 17.98 ug/l
RT: 10.236 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 91 Resp: 83114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 27.8 | 24.6 | 37.0 |

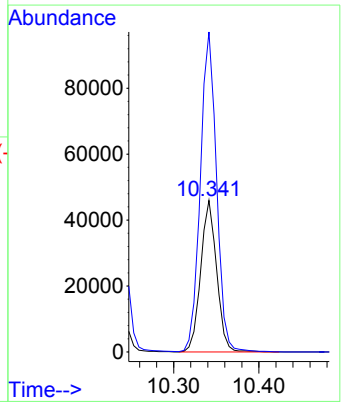



#68
m/p-Xylenes
Concen: 36.20 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

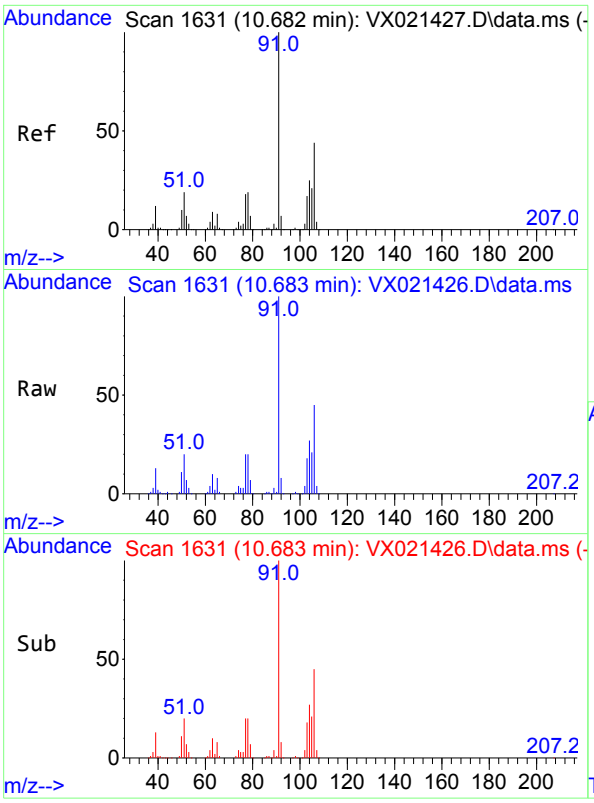
Tgt Ion:106 Resp: 59799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 214.6 | 162.8 | 244.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

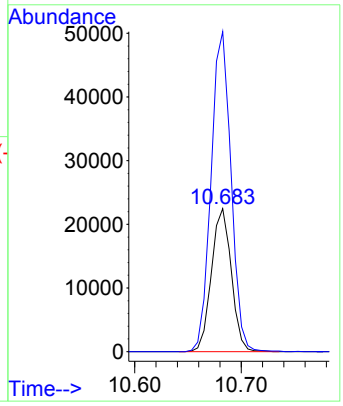
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

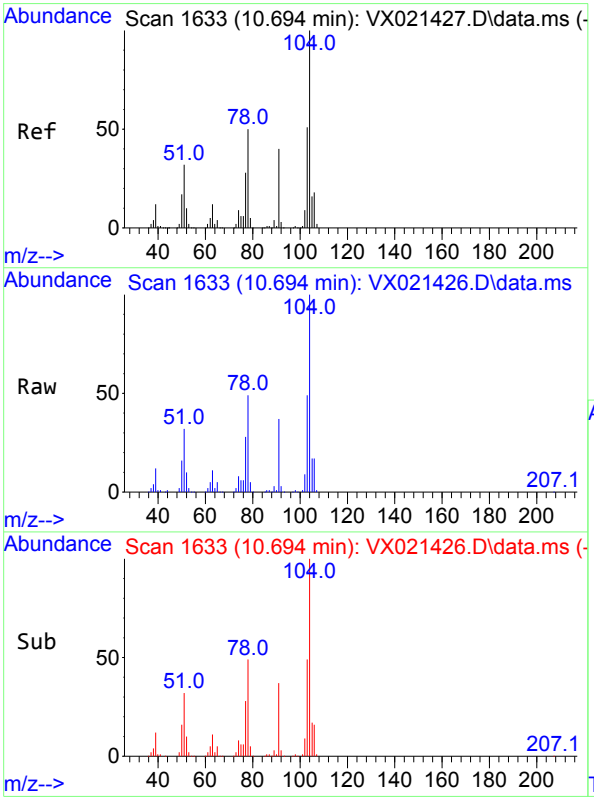



#69
o-Xylene
Concen: 18.14 ug/l
RT: 10.683 min Scan# 1631
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:106 Resp: 29103

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 224.7 | 108.1 | 324.2 |

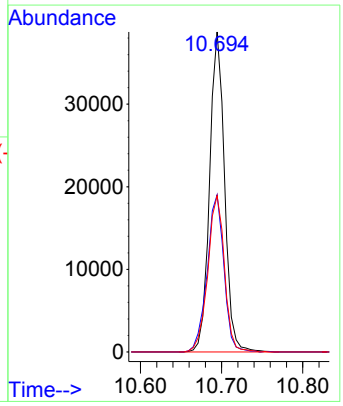



#70
Styrene
Concen: 18.29 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

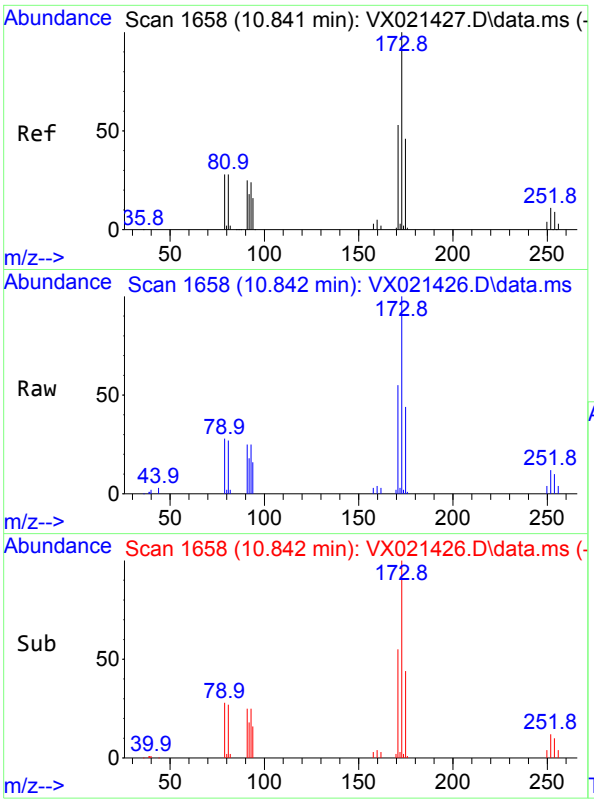
Tgt Ion:104 Resp: 49432

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 55.1 | 40.0 | 60.0 |
| 103 | 54.5 | 43.4 | 65.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

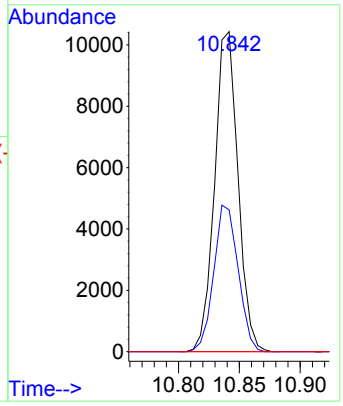
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

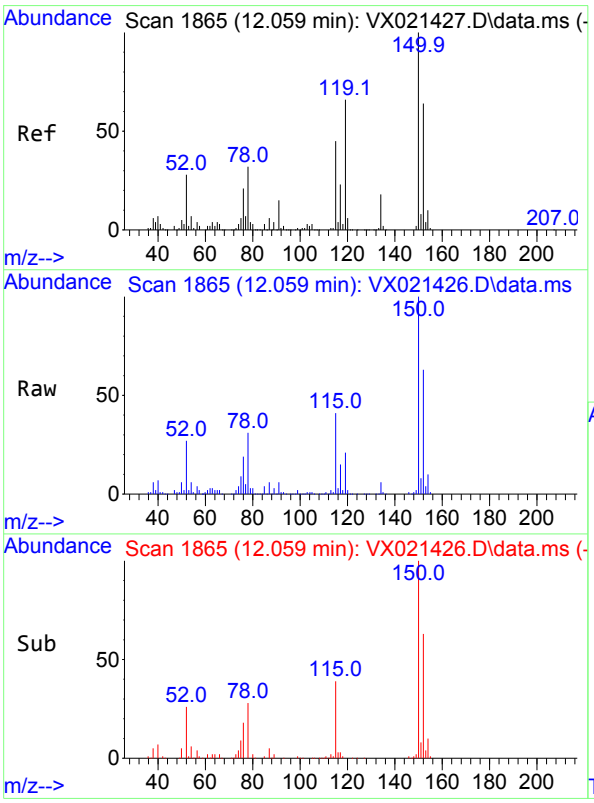



#71
Bromoform
Concen: 18.51 ug/l
RT: 10.842 min Scan# 1658
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:173 Resp: 13951

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.7 | 23.9 | 71.8 |
| 254 | 0.0 | 0.1 | 0.1# |

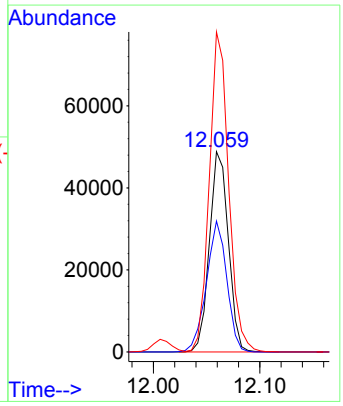



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

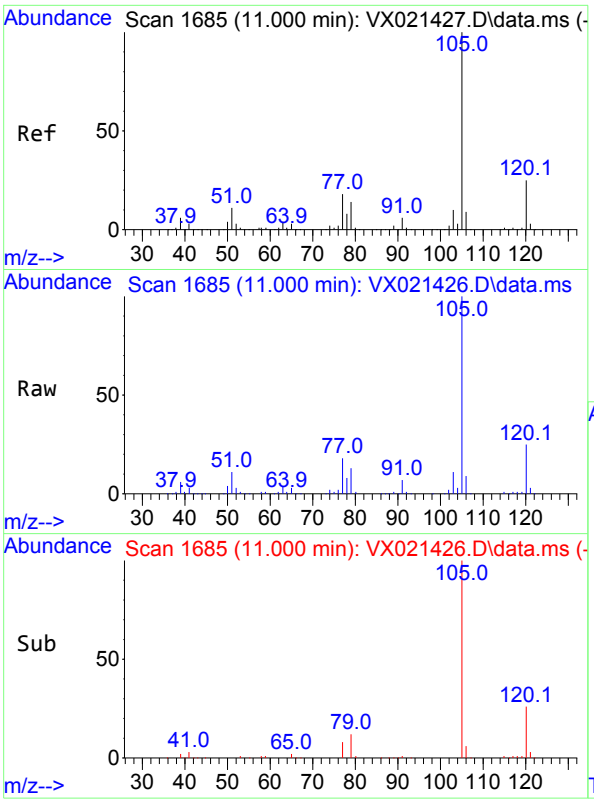
Tgt Ion:152 Resp: 60191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 70.5 | 41.1 | 123.3 |
| 150 | 163.1 | 0.0 | 349.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

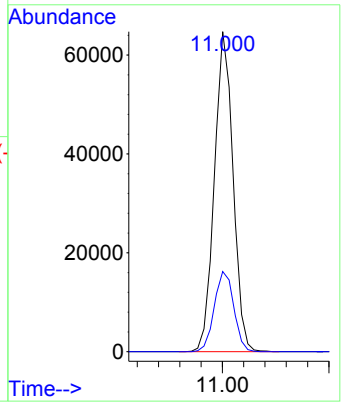
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

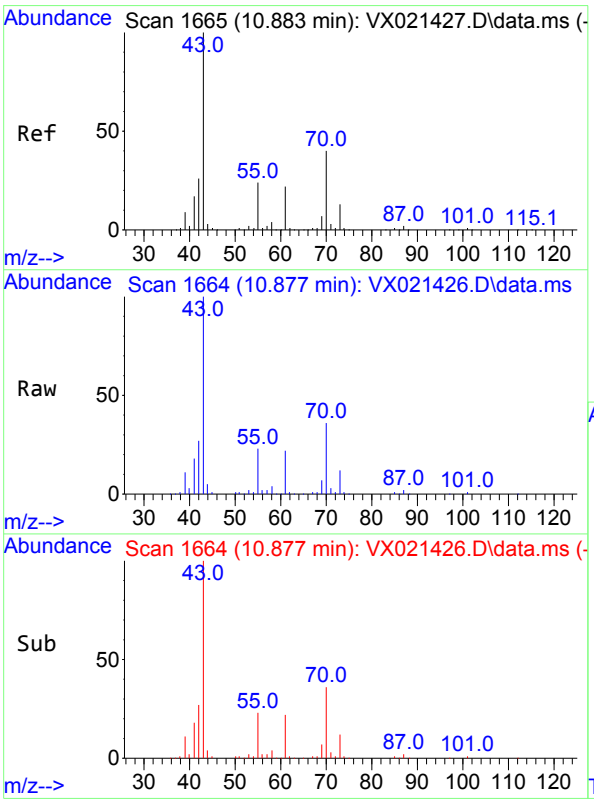



#73
Isopropylbenzene
Concen: 17.63 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:105 Resp: 78456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.2 | 13.2 | 39.6 |

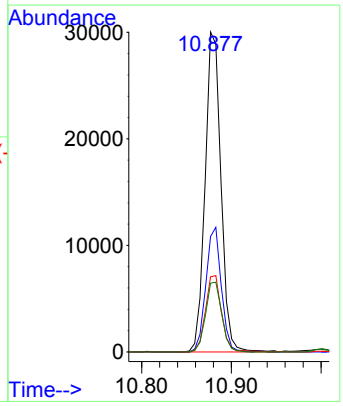



#74
N-amyl acetate
Concen: 16.54 ug/l
RT: 10.877 min Scan# 1664
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

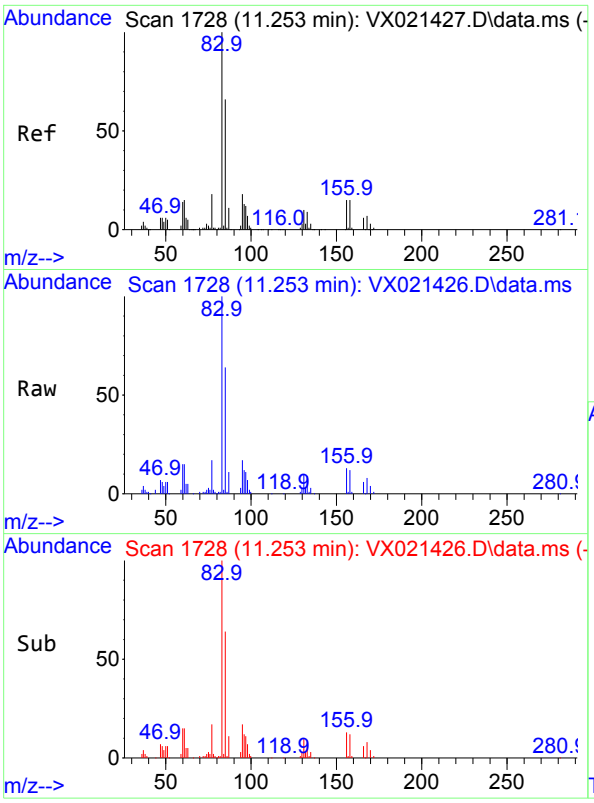
Tgt Ion: 43 Resp: 36826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 38.0 | 39.0 | 58.6# |
| 55 | 24.2 | 21.5 | 32.3 |
| 61 | 22.3 | 22.1 | 33.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

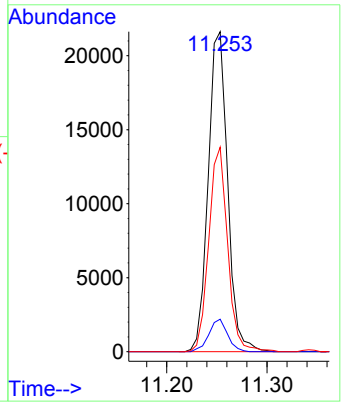
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

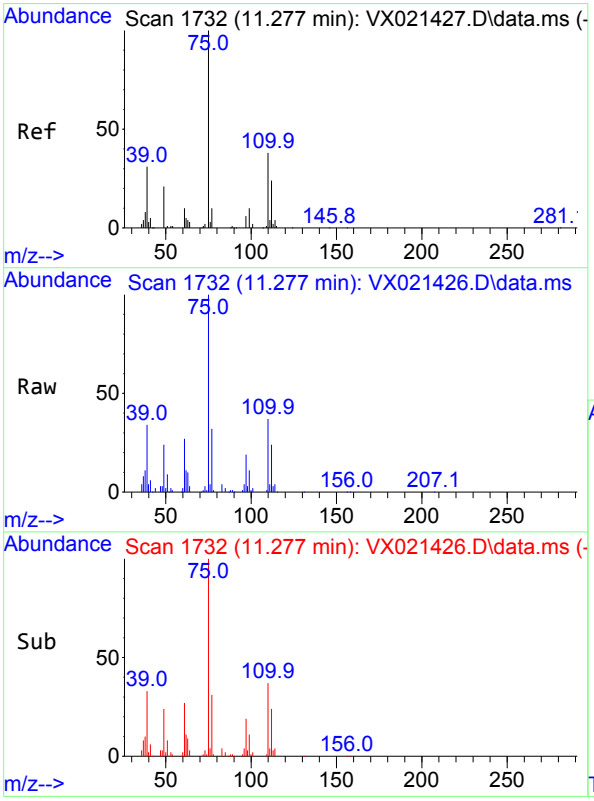



#75
1,1,2,2-Tetrachloroethane
Concen: 19.64 ug/l
RT: 11.253 min Scan# 1728
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 83 Resp: 29031

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.8 | 5.1 | 15.2 |
| 85 | 62.1 | 31.8 | 95.4 |

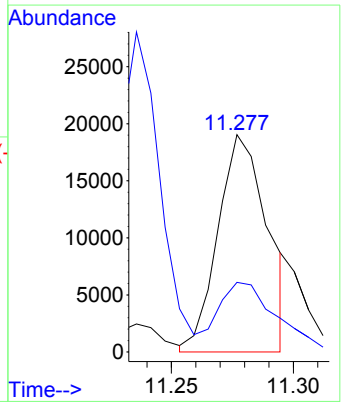



#76
1,2,3-Trichloropropane
Concen: 18.88 ug/l m
RT: 11.277 min Scan# 1732
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

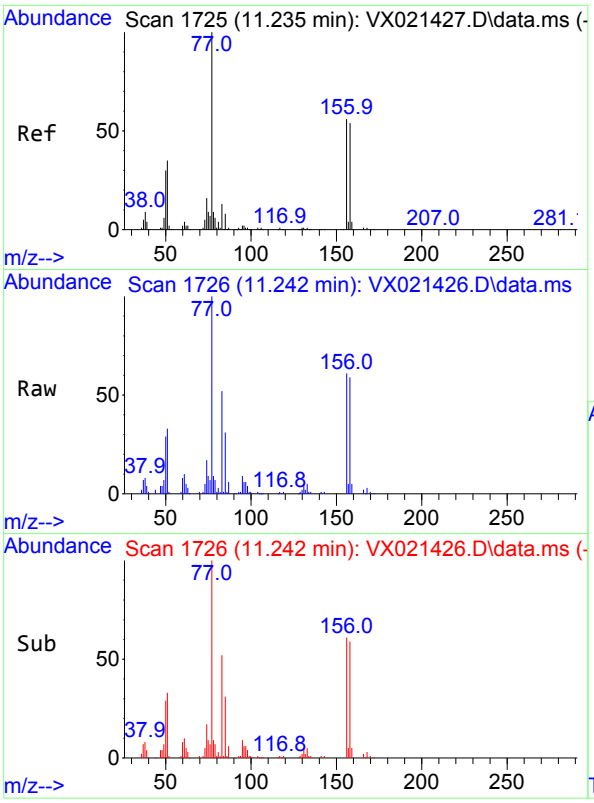
Tgt Ion: 75 Resp: 26887

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 38.4 | 19.1 | 57.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

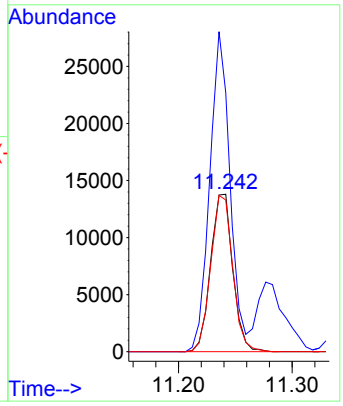
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

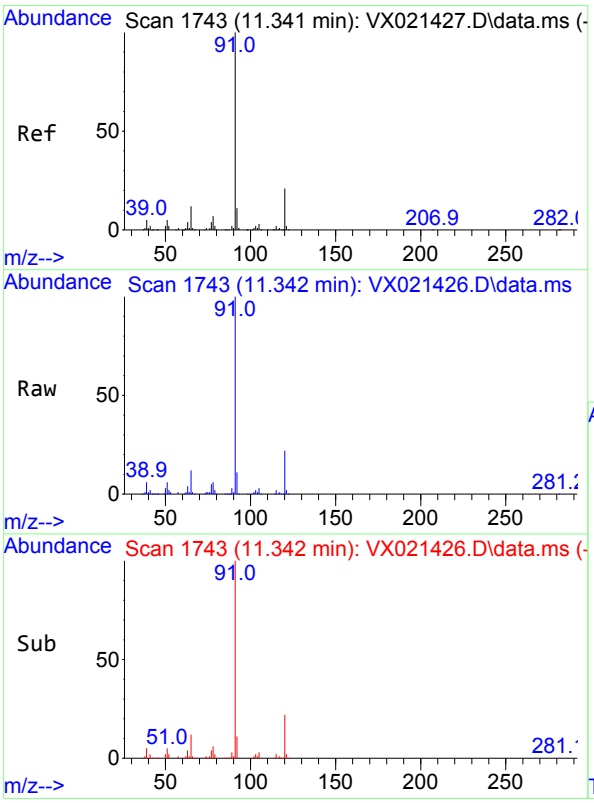



#77
Bromobenzene
Concen: 17.63 ug/l
RT: 11.242 min Scan# 1726
Delta R.T. 0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:156 Resp: 18682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 185.3 | 82.8 | 248.6 |
| 158 | 98.2 | 49.1 | 147.4 |

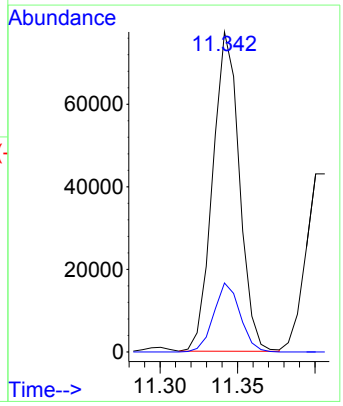



#78
n-propylbenzene
Concen: 17.80 ug/l
RT: 11.342 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

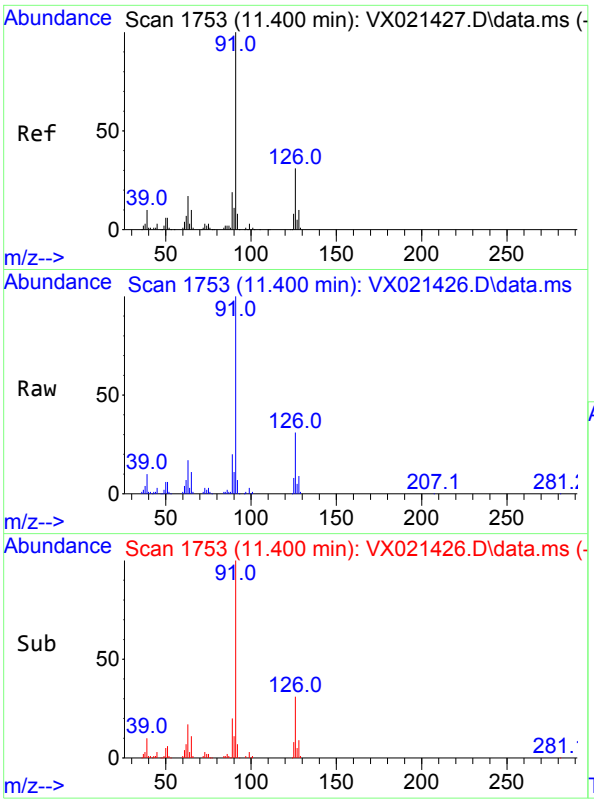
Tgt Ion: 91 Resp: 92531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.4 | 11.5 | 34.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

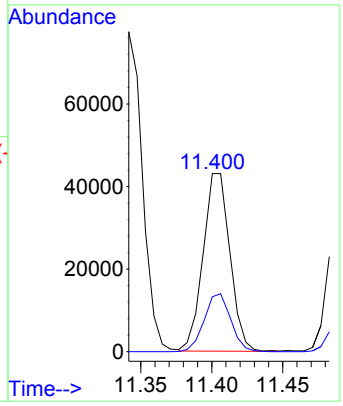
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

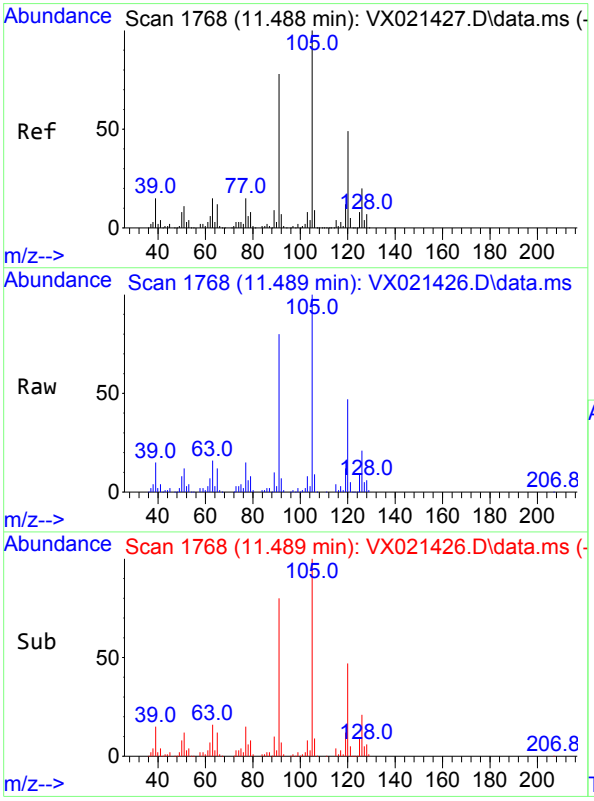



#79
2-Chlorotoluene
Concen: 17.89 ug/l
RT: 11.400 min Scan# 1753
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 91 Resp: 56544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.2 | 16.6 | 49.8 |

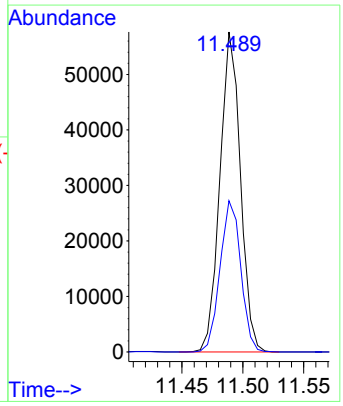



#80
1,3,5-Trimethylbenzene
Concen: 17.96 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

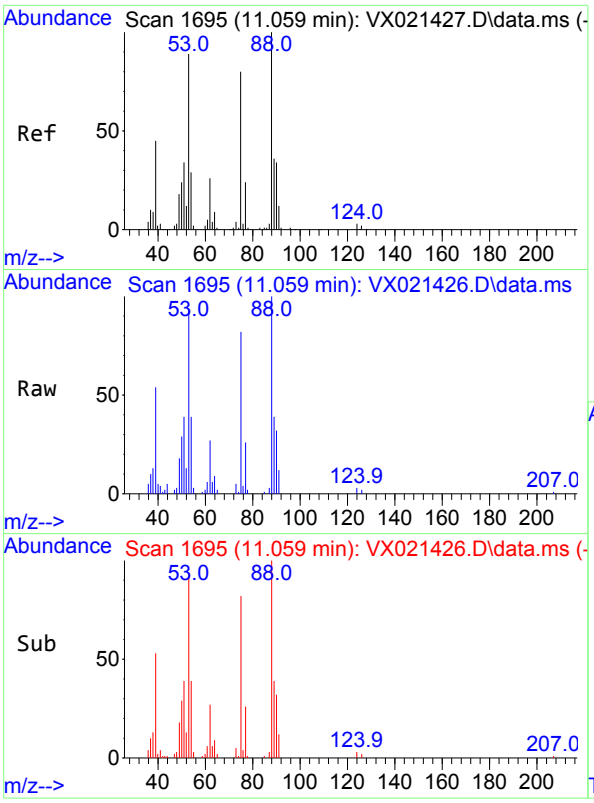
Tgt Ion:105 Resp: 67544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.9 | 23.8 | 71.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

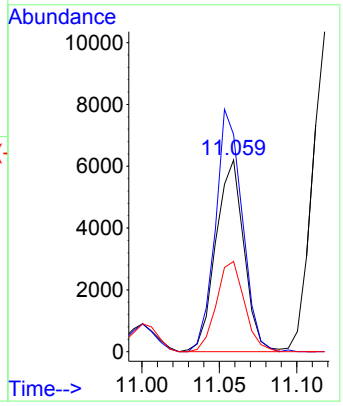
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

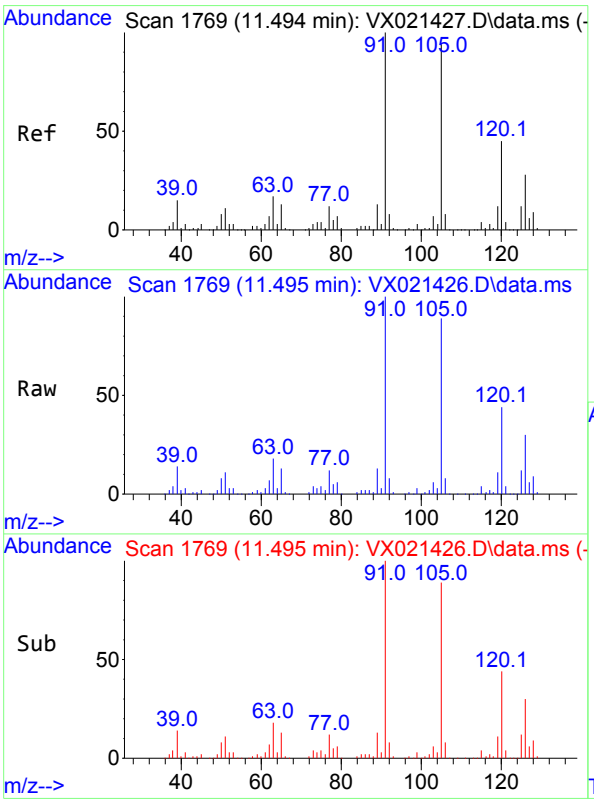



#81
trans-1,4-Dichloro-2-butene
Concen: 15.51 ug/l
RT: 11.059 min Scan# 1695
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 75 Resp: 7828

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 120.8 | 74.5 | 111.7# |
| 89 | 47.0 | 37.9 | 56.9 |

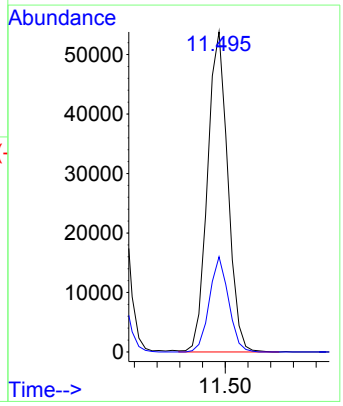



#82
4-Chlorotoluene
Concen: 17.90 ug/l
RT: 11.495 min Scan# 1769
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

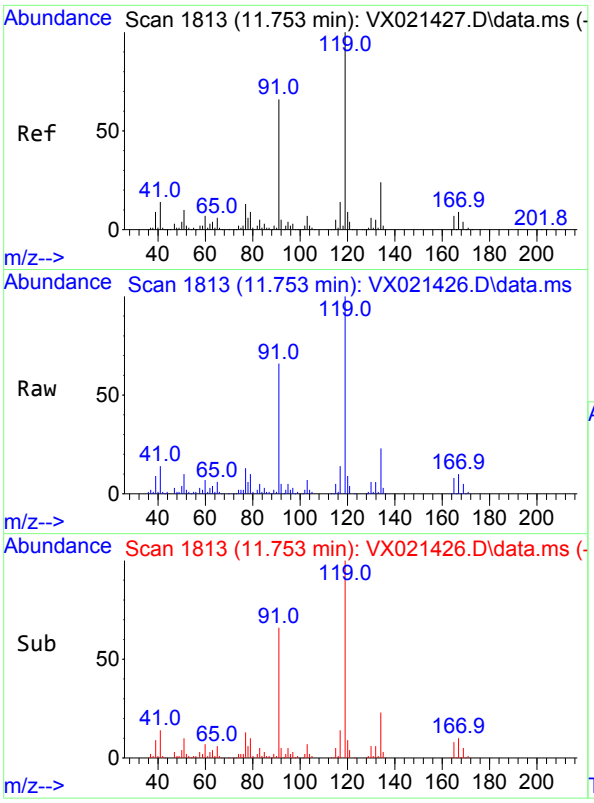
Tgt Ion: 91 Resp: 66662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.0 | 14.9 | 44.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

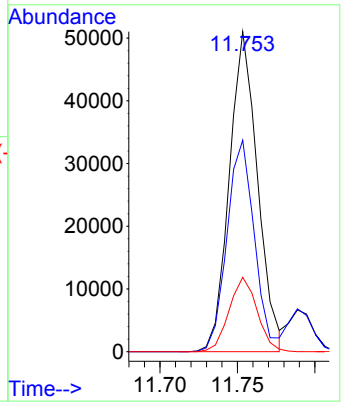
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

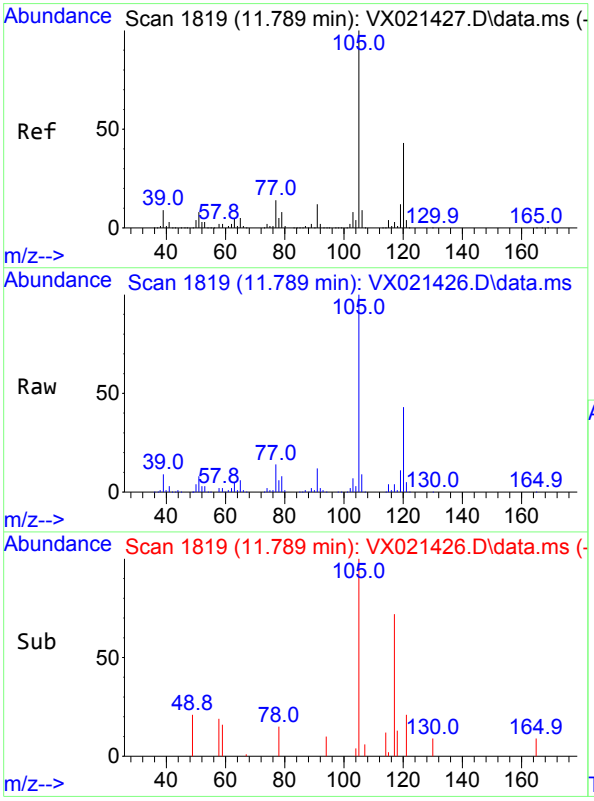



#83
tert-Butylbenzene
Concen: 18.01 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:119 Resp: 64683

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 64.4 | 27.9 | 83.7 |
| 134 | 23.1 | 11.3 | 33.9 |

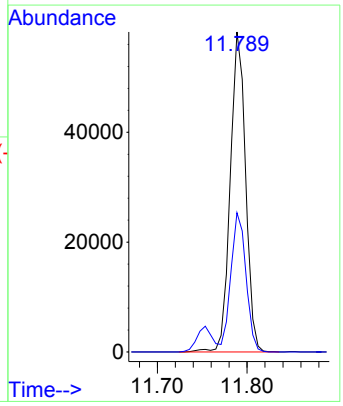



#84
1,2,4-Trimethylbenzene
Concen: 18.09 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

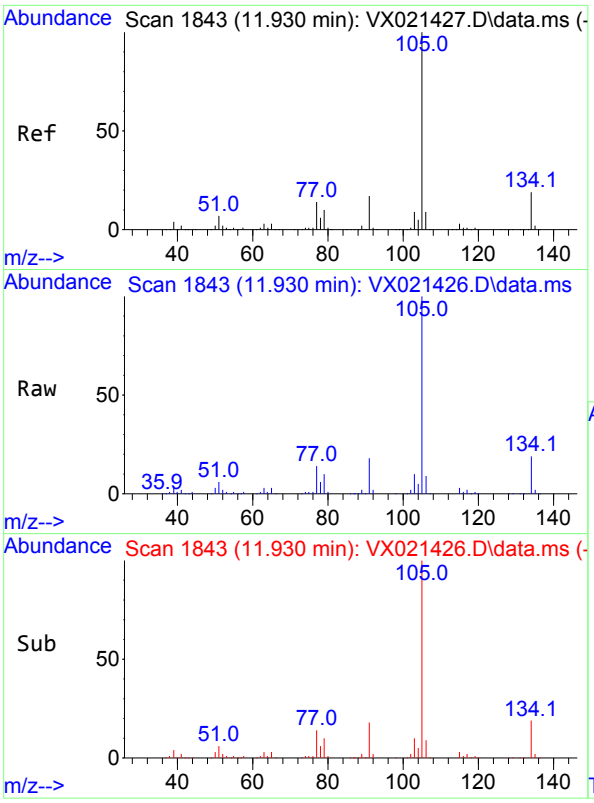
Tgt Ion:105 Resp: 69157

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 42.6 | 22.4 | 67.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

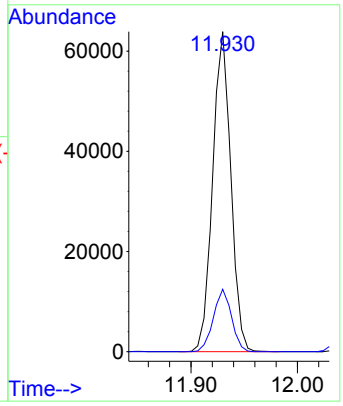
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

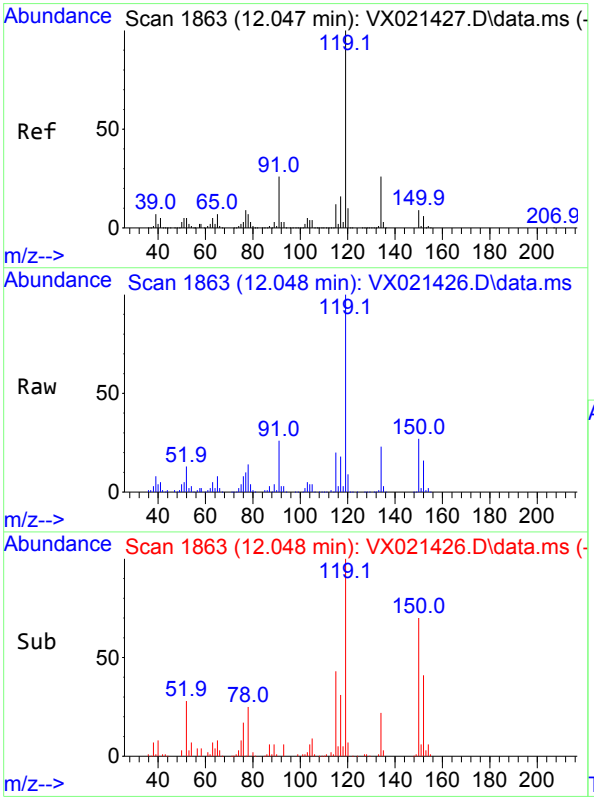



#85
sec-Butylbenzene
Concen: 17.86 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:105 Resp: 75635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.4 | 10.0 | 29.8 |

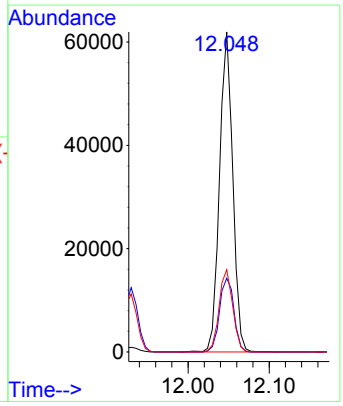



#86
p-Isopropyltoluene
Concen: 18.13 ug/l
RT: 12.048 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

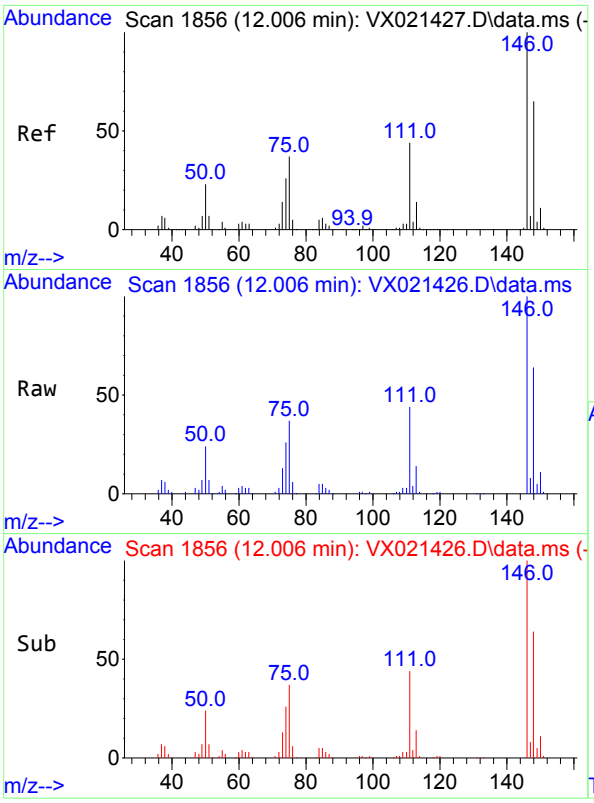
Tgt Ion:119 Resp: 70268

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 24.9 | 12.9 | 38.7 |
| 91 | 26.5 | 11.7 | 35.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

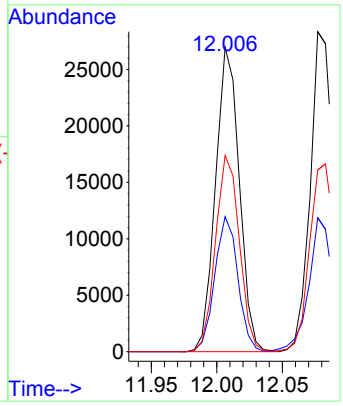
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

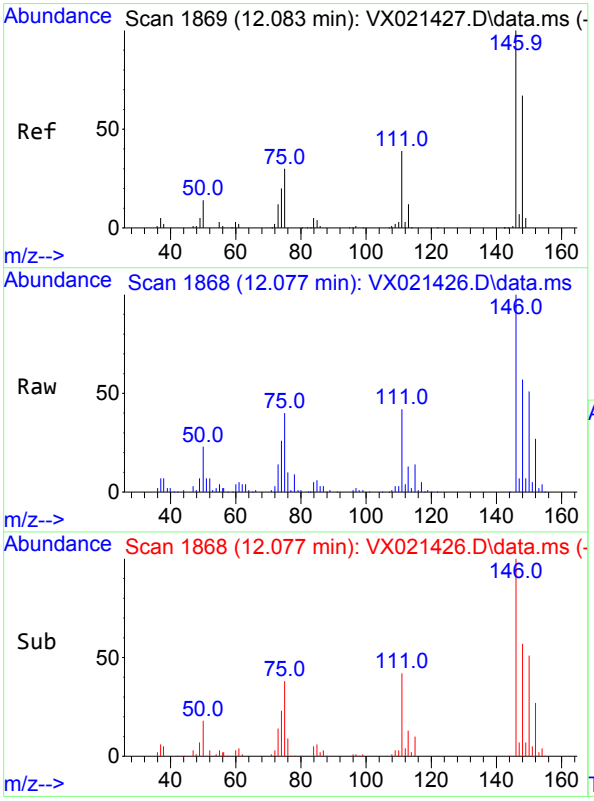



#87
1,3-Dichlorobenzene
Concen: 17.62 ug/l
RT: 12.006 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:146 Resp: 33998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.2 | 20.2 | 60.5 |
| 148 | 64.6 | 31.9 | 95.7 |

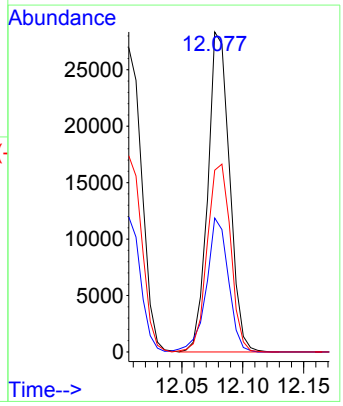



#88
1,4-Dichlorobenzene
Concen: 17.94 ug/l
RT: 12.077 min Scan# 1868
Delta R.T. -0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

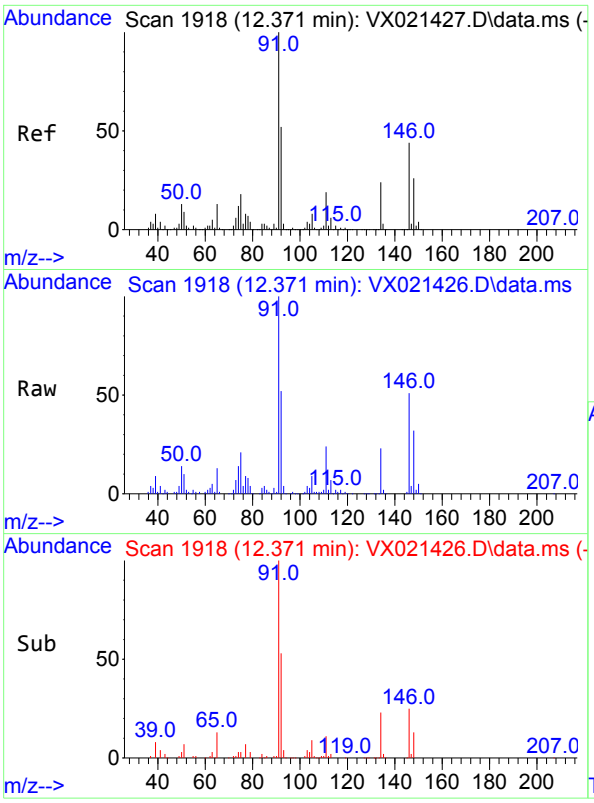
Tgt Ion:146 Resp: 35229

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.2 | 19.6 | 58.8 |
| 148 | 63.1 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

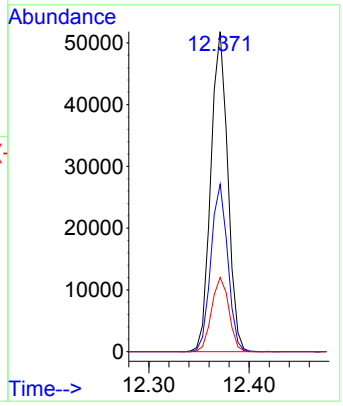
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

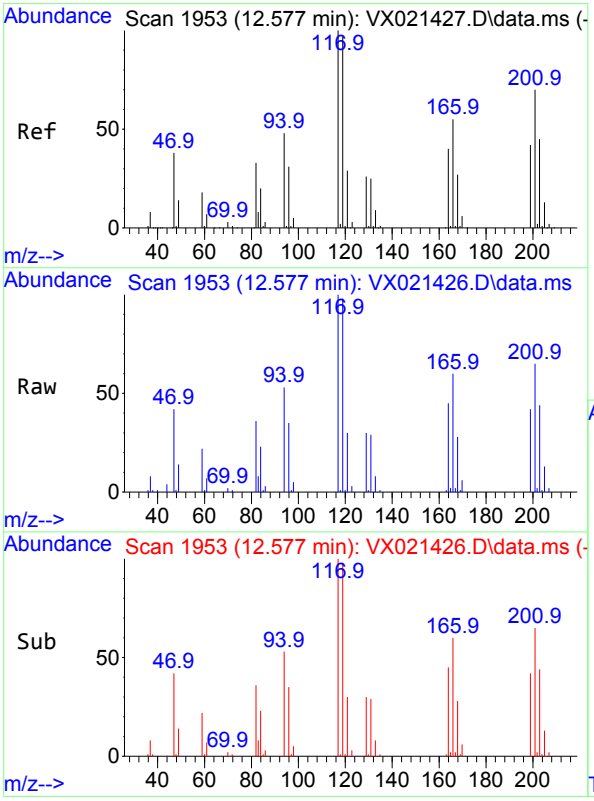



#89
n-Butylbenzene
Concen: 17.25 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion: 91 Resp: 60930

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 51.9 | 27.4 | 82.0 |
| 134 | 23.6 | 13.2 | 39.5 |

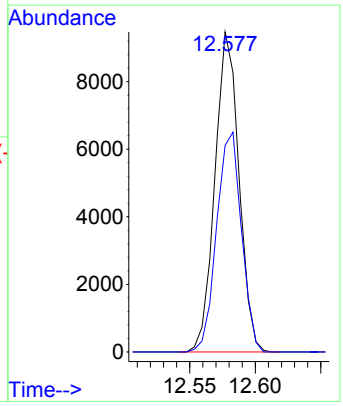



#90
Hexachloroethane
Concen: 20.00 ug/l
RT: 12.577 min Scan# 1953
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

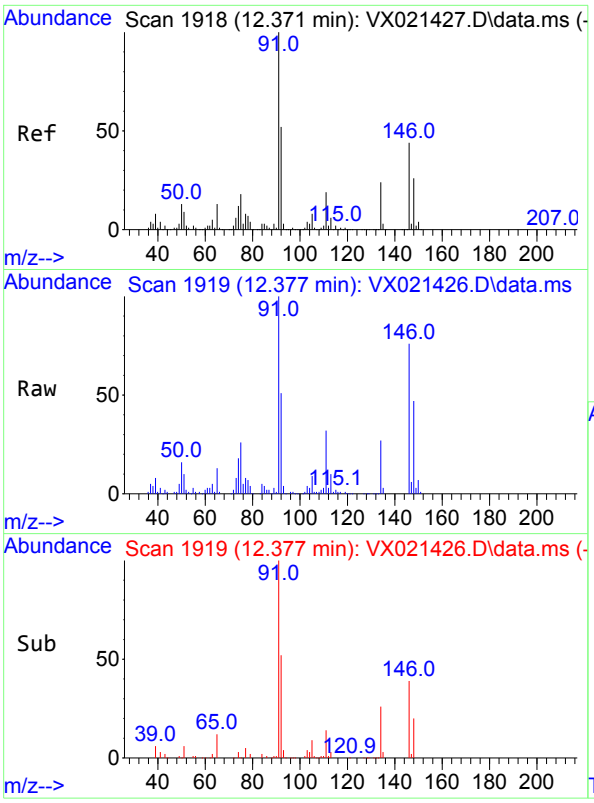
Tgt Ion:117 Resp: 12040

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 71.0 | 40.4 | 121.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

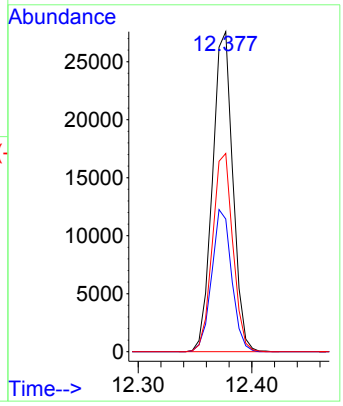
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

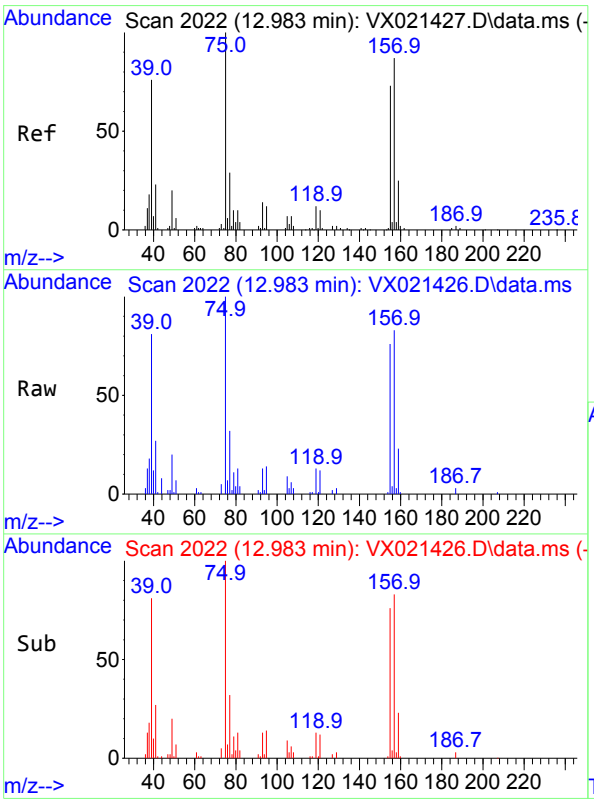



#91
1,2-Dichlorobenzene
Concen: 18.36 ug/l
RT: 12.377 min Scan# 1919
Delta R.T. 0.006 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:146 Resp: 34367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.6 | 20.8 | 62.2 |
| 148 | 62.2 | 31.9 | 95.5 |

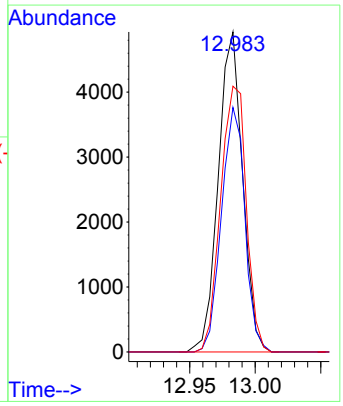



#92
1,2-Dibromo-3-Chloropropane
Concen: 16.82 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

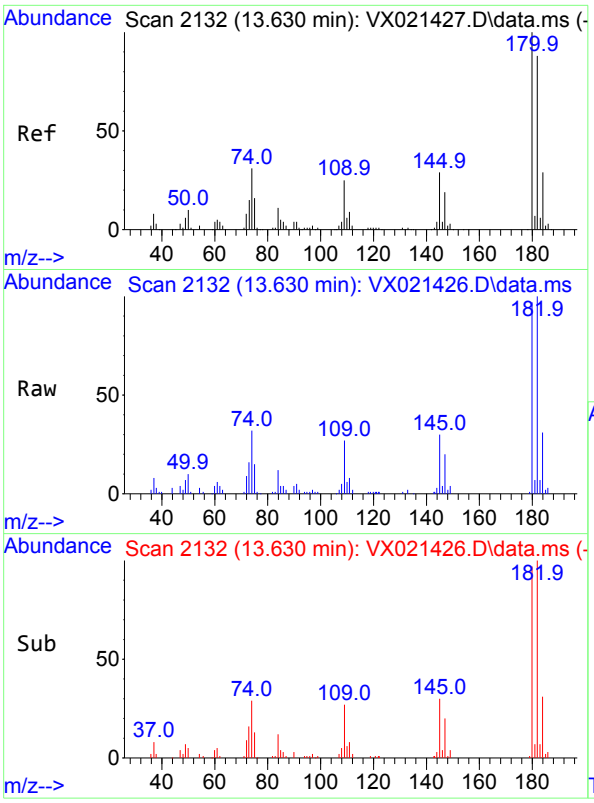
Tgt Ion: 75 Resp: 6340

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 73.8 | 45.3 | 135.9 |
| 157 | 87.9 | 57.7 | 173.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

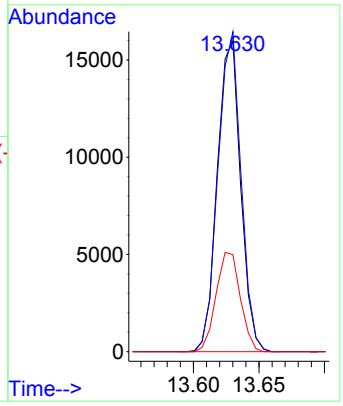
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

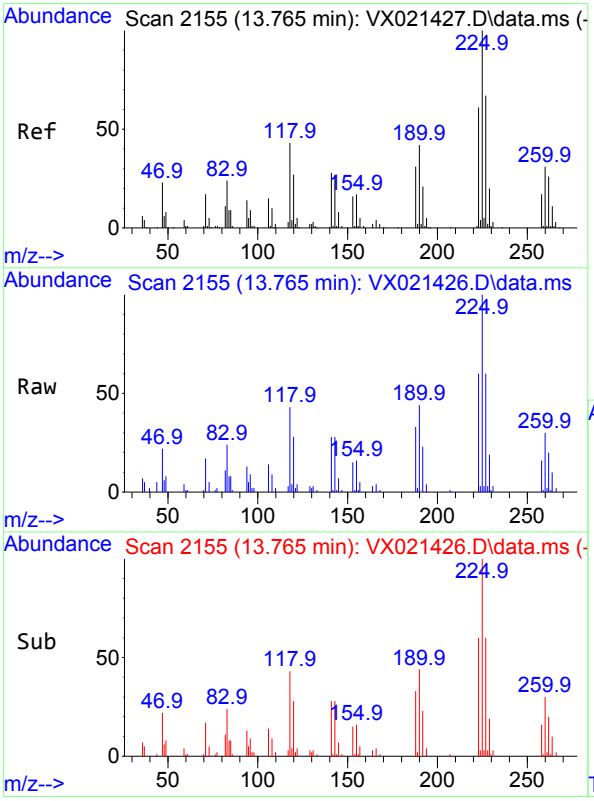



#93
1,2,4-Trichlorobenzene
Concen: 16.04 ug/l
RT: 13.630 min Scan# 2132
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:180 Resp: 19806

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 101.3 | 47.7 | 143.1 |
| 145 | 33.2 | 15.0 | 45.0 |

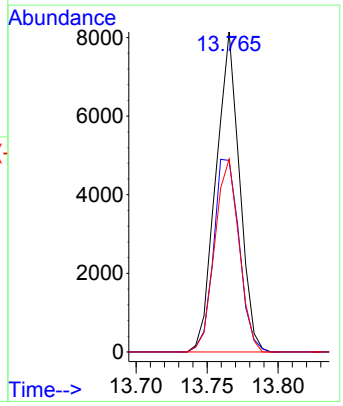



#94
Hexachlorobutadiene
Concen: 18.06 ug/l
RT: 13.765 min Scan# 2155
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

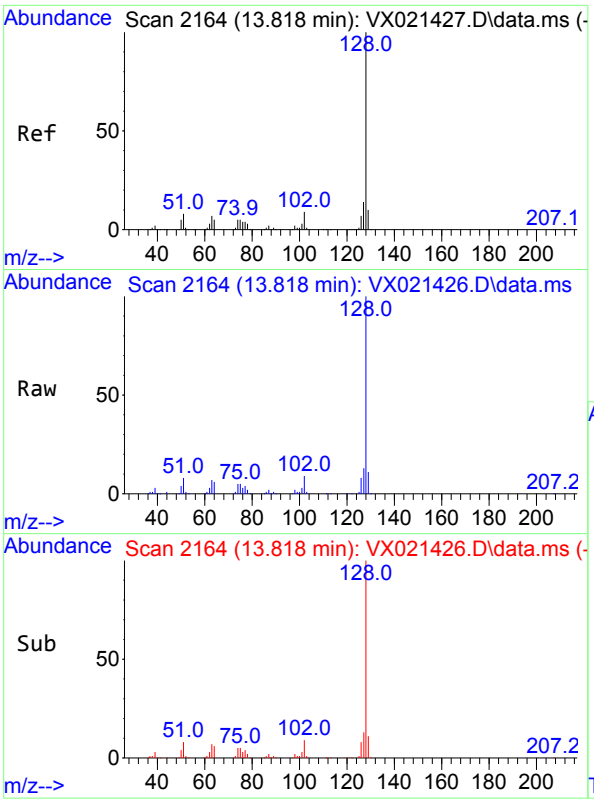
Tgt Ion:225 Resp: 9393

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 65.7 | 31.1 | 93.2 |
| 227 | 62.2 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC020

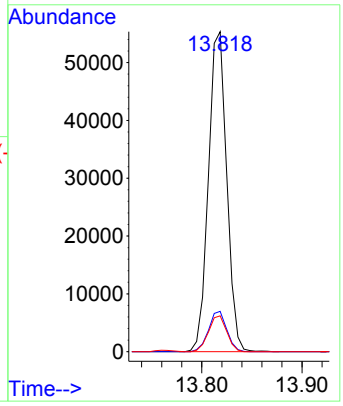
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:26 AM

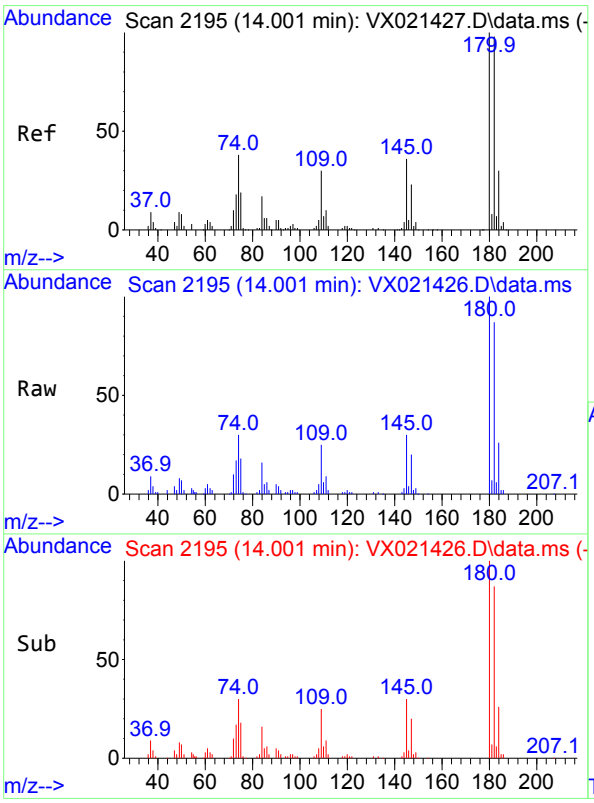



#95
Naphthalene
Concen: 16.64 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:128 Resp: 70218

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.6 | 10.3 | 15.5 |
| 129 | 11.3 | 8.8 | 13.2 |

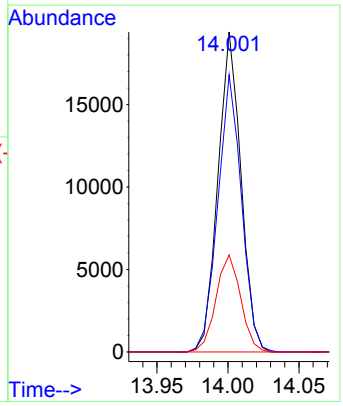



#96
1,2,3-Trichlorobenzene
Concen: 17.83 ug/l
RT: 14.001 min Scan# 2195
Delta R.T. 0.000 min
Lab File: VX021426.D
Acq: 24 Mar 2021 10:49

Tgt Ion:180 Resp: 21794

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 89.2 | 47.6 | 142.9 |
| 145 | 32.6 | 16.1 | 48.3 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021427.D
Acq On : 24 Mar 2021 11:13
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

Quant Time: Mar 24 11:44:24 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 81138 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 132670 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 126559 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 61170 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 63335 | 47.86 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 95.72% | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 44674 | 49.40 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 98.80% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 164814 | 50.01 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 100.02% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 63095 | 49.55 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 99.10% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.187 | 85 | 44939 | 47.20 | ug/l | | 99 |
| 3) Chloromethane | 1.311 | 50 | 49615 | 27.55 | ug/l | | 100 |
| 4) Vinyl Chloride | 1.393 | 62 | 46392 | 47.78 | ug/l | | 98 |
| 5) Bromomethane | 1.622 | 94 | 17870 | 42.78 | ug/l | | 96 |
| 6) Chloroethane | 1.705 | 64 | 29038 | 48.75 | ug/l | | 98 |
| 7) Trichlorofluoromethane | 1.911 | 101 | 76286 | 51.74 | ug/l | | 98 |
| 8) Diethyl Ether | 2.170 | 74 | 25462 | 49.23 | ug/l | | 80 |
| 9) 1,1,2-Trichlorotrifluo... | 2.358 | 101 | 41465 | 49.40 | ug/l | | 97 |
| 10) Methyl Iodide | 2.487 | 142 | 29459 | 41.50 | ug/l | # | 86 |
| 11) Tert butyl alcohol | 3.023 | 59 | 54110 | 243.77 | ug/l | | 96 |
| 12) 1,1-Dichloroethene | 2.352 | 96 | 39183 | 47.99 | ug/l | | 83 |
| 13) Acrolein | 2.276 | 56 | 27041 | 200.22 | ug/l | | 99 |
| 14) Allyl chloride | 2.705 | 41 | 82435 | 48.97 | ug/l | # | 89 |
| 15) Acrylonitrile | 3.117 | 53 | 134663 | 259.40 | ug/l | | 98 |
| 16) Acetone | 2.423 | 43 | 124366 | 253.30 | ug/l | | 89 |
| 17) Carbon Disulfide | 2.546 | 76 | 109798 | 43.48 | ug/l | | 99 |
| 18) Methyl Acetate | 2.752 | 43 | 76504 | 55.61 | ug/l | | 91 |
| 19) Methyl tert-butyl Ether | 3.164 | 73 | 154592 | 50.37 | ug/l | | 99 |
| 20) Methylene Chloride | 2.834 | 84 | 48381 | 48.35 | ug/l | | 87 |
| 21) trans-1,2-Dichloroethene | 3.140 | 96 | 44703 | 48.86 | ug/l | | 93 |
| 22) Diisopropyl ether | 3.823 | 45 | 164138 | 50.66 | ug/l | | 92 |
| 23) Vinyl Acetate | 3.782 | 43 | 703027 | 250.65 | ug/l | # | 92 |
| 24) 1,1-Dichloroethane | 3.670 | 63 | 87532 | 49.93 | ug/l | | 98 |
| 25) 2-Butanone | 4.635 | 43 | 194137 | 258.61 | ug/l | | 91 |
| 26) 2,2-Dichloropropane | 4.552 | 77 | 76612 | 50.24 | ug/l | | 95 |
| 27) cis-1,2-Dichloroethene | 4.558 | 96 | 52272 | 49.66 | ug/l | | 90 |
| 28) Bromochloromethane | 4.976 | 49 | 41006 | 49.56 | ug/l | | 84 |
| 29) Tetrahydrofuran | 5.088 | 42 | 125603 | 253.88 | ug/l | # | 86 |
| 30) Chloroform | 5.176 | 83 | 93237 | 51.08 | ug/l | | 98 |
| 31) Cyclohexane | 5.547 | 56 | 76123 | 48.15 | ug/l | | 92 |
| 32) 1,1,1-Trichloroethane | 5.464 | 97 | 83036 | 51.31 | ug/l | | 96 |
| 36) 1,1-Dichloropropene | 5.764 | 75 | 65712 | 49.39 | ug/l | | 96 |
| 37) Ethyl Acetate | 4.793 | 43 | 73462 | 47.75 | ug/l | # | 93 |
| 38) Carbon Tetrachloride | 5.752 | 117 | 72486 | 52.31 | ug/l | | 98 |
| 39) Methylcyclohexane | 7.435 | 83 | 75819 | 51.30 | ug/l | | 92 |
| 40) Benzene | 6.111 | 78 | 190627 | 51.88 | ug/l | | 98 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021427.D
Acq On : 24 Mar 2021 11:13
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

Quant Time: Mar 24 11:44:24 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 5.005 | 41 | 43694 | 49.02 | ug/l | # | 88 |
| 42) 1,2-Dichloroethane | 6.158 | 62 | 82107 | 51.63 | ug/l | | 94 |
| 43) Isopropyl Acetate | 6.411 | 43 | 125739 | 49.82 | ug/l | # | 91 |
| 44) Trichloroethene | 7.188 | 130 | 49191 | 50.45 | ug/l | | 98 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 51949 | 52.51 | ug/l | | 98 |
| 46) Dibromomethane | 7.635 | 93 | 37639 | 51.84 | ug/l | | 94 |
| 47) Bromodichloromethane | 7.876 | 83 | 77074 | 53.05 | ug/l | | 98 |
| 48) Methyl methacrylate | 7.747 | 41 | 68025 | 50.52 | ug/l | # | 81 |
| 49) 1,4-Dioxane | 7.712 | 88 | 24037 | 962.58 | ug/l | # | 90 |
| 51) 4-Methyl-2-Pentanone | 8.617 | 43 | 396108 | 267.13 | ug/l | | 88 |
| 52) Toluene | 8.765 | 92 | 120203 | 52.86 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 9.023 | 75 | 79493 | 51.73 | ug/l | | 99 |
| 54) cis-1,3-Dichloropropene | 8.412 | 75 | 84789 | 51.83 | ug/l | # | 85 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 50252 | 53.78 | ug/l | | 98 |
| 56) Ethyl methacrylate | 9.159 | 69 | 79045 | 52.83 | ug/l | # | 76 |
| 57) 1,3-Dichloropropane | 9.353 | 76 | 86056 | 52.89 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 8.288 | 63 | 215967 | 262.06 | ug/l | | 95 |
| 59) 2-Hexanone | 9.471 | 43 | 297877 | 268.51 | ug/l | | 85 |
| 60) Dibromochloromethane | 9.565 | 129 | 57413 | 54.04 | ug/l | | 97 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 54783 | 53.30 | ug/l | | 99 |
| 64) Tetrachloroethene | 9.318 | 164 | 43656 | 46.64 | ug/l | | 95 |
| 65) Chlorobenzene | 10.118 | 112 | 130192 | 50.00 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 10.206 | 131 | 50474 | 52.03 | ug/l | | 99 |
| 67) Ethyl Benzene | 10.235 | 91 | 240420 | 50.14 | ug/l | | 99 |
| 68) m/p-Xylenes | 10.341 | 106 | 173676 | 101.34 | ug/l | | 93 |
| 69) o-Xylene | 10.682 | 106 | 83473 | 50.16 | ug/l | | 93 |
| 70) Styrene | 10.694 | 104 | 143435 | 51.17 | ug/l | | 95 |
| 71) Bromoform | 10.841 | 173 | 41165 | 52.66 | ug/l | # | 99 |
| 73) Isopropylbenzene | 11.000 | 105 | 229785 | 50.81 | ug/l | | 99 |
| 74) N-amyl acetate | 10.883 | 43 | 106766 | 47.20 | ug/l | # | 88 |
| 75) 1,1,2,2-Tetrachloroethane | 11.253 | 83 | 77090 | 51.33 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.277 | 75 | 75866m | 52.42 | ug/l | | |
| 77) Bromobenzene | 11.235 | 156 | 55344 | 51.38 | ug/l | | 94 |
| 78) n-propylbenzene | 11.341 | 91 | 268161 | 50.76 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 11.400 | 91 | 161411 | 50.26 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 11.488 | 105 | 196451 | 51.40 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 11.059 | 75 | 24311 | 47.39 | ug/l | # | 84 |
| 82) 4-Chlorotoluene | 11.494 | 91 | 191248 | 50.54 | ug/l | | 97 |
| 83) tert-Butylbenzene | 11.753 | 119 | 187402 | 51.34 | ug/l | | 93 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 197261 | 50.77 | ug/l | | 98 |
| 85) sec-Butylbenzene | 11.930 | 105 | 222152 | 51.60 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 205948 | 52.27 | ug/l | | 97 |
| 87) 1,3-Dichlorobenzene | 12.006 | 146 | 97547 | 49.75 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 12.083 | 146 | 98243 | 49.23 | ug/l | | 97 |
| 89) n-Butylbenzene | 12.371 | 91 | 184796 | 51.48 | ug/l | | 96 |
| 90) Hexachloroethane | 12.577 | 117 | 35137 | 57.42 | ug/l | | 95 |
| 91) 1,2-Dichlorobenzene | 12.371 | 146 | 94044 | 49.43 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 18401 | 48.04 | ug/l | | 80 |
| 93) 1,2,4-Trichlorobenzene | 13.630 | 180 | 62880 | 50.11 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 13.765 | 225 | 27802 | 52.60 | ug/l | | 99 |
| 95) Naphthalene | 13.818 | 128 | 212118 | 49.47 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 14.001 | 180 | 62885 | 50.63 | ug/l | | 98 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021427.D
Acq On : 24 Mar 2021 11:13
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

Quant Time: Mar 24 11:44:24 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

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

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

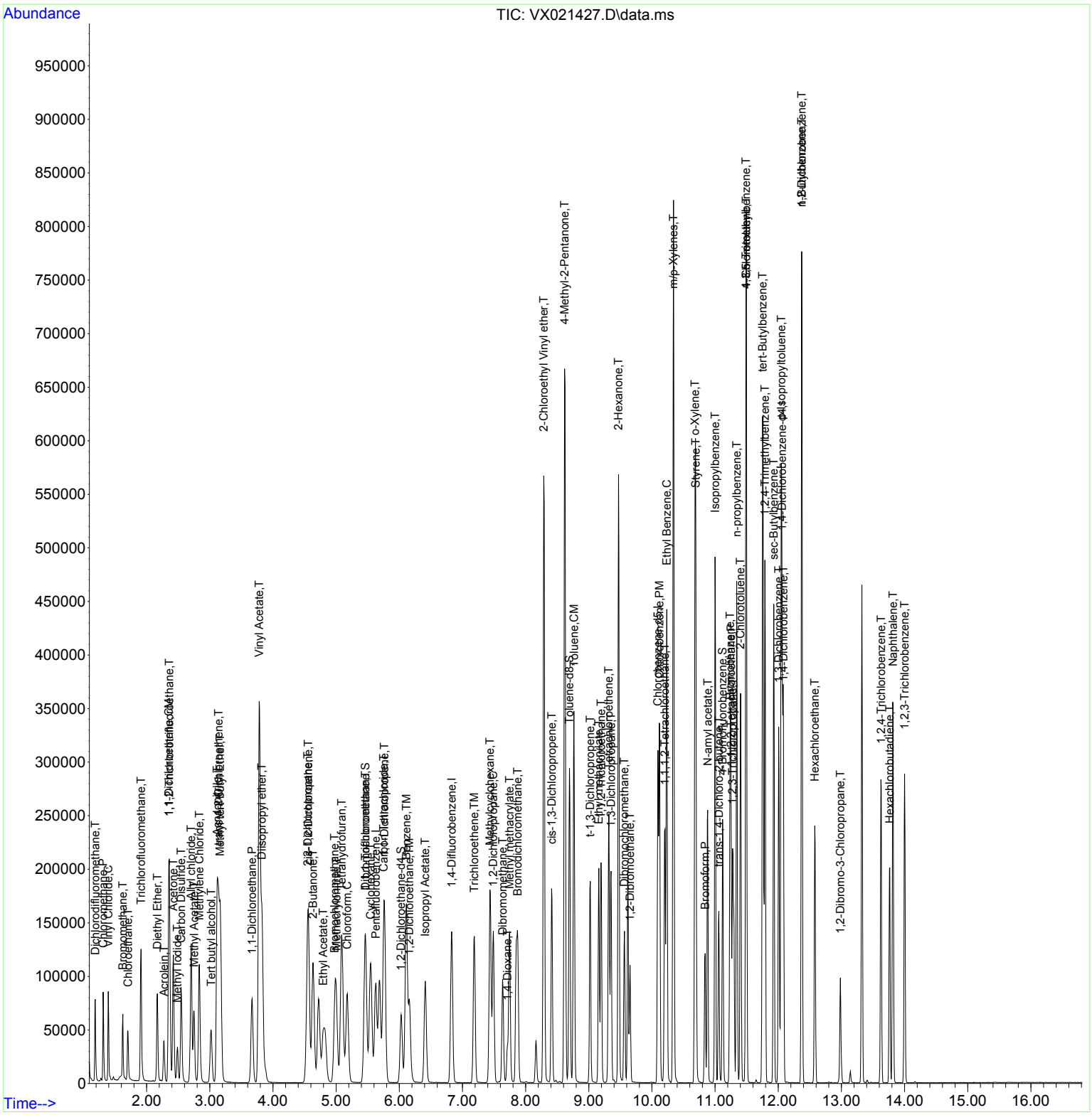
ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021427.D
Acq On : 24 Mar 2021 11:13
Operator : JC/MD
Sample : VSTDICCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 24 11:44:24 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

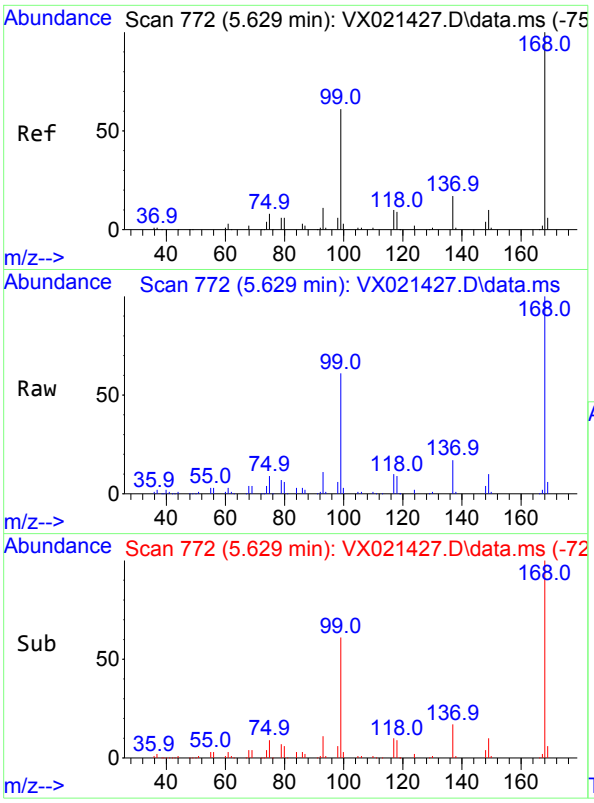
**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

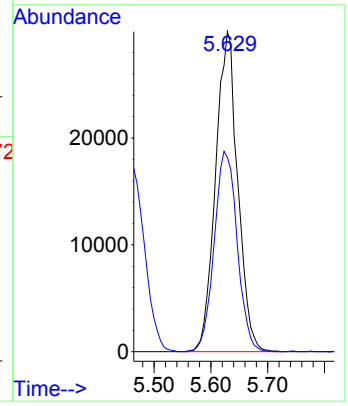
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

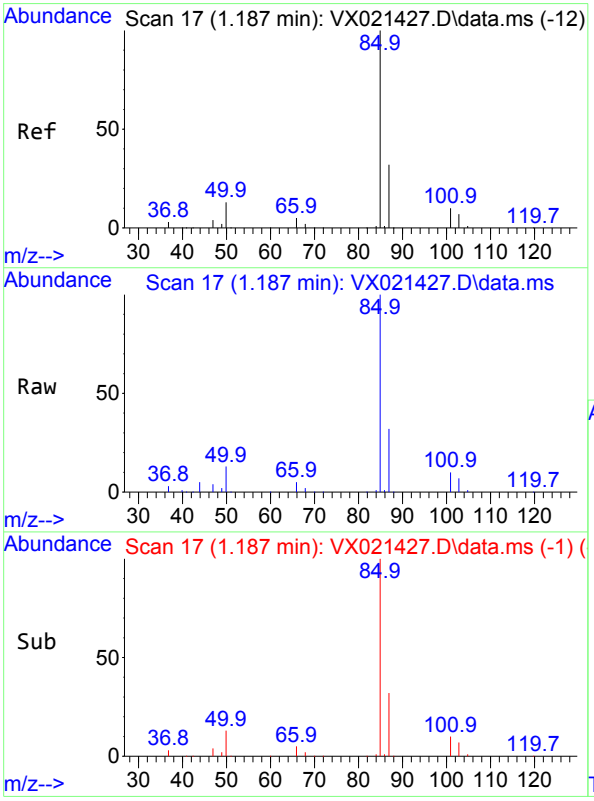



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. -0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:168 Resp: 81138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 60.7 | 45.8 | 68.6 |

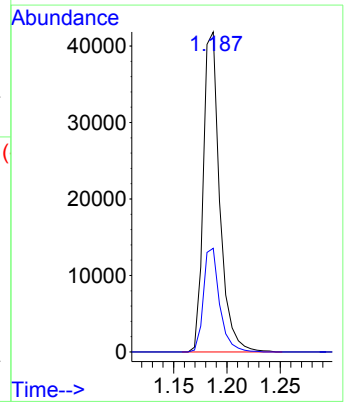



#2
Dichlorodifluoromethane
Concen: 47.20 ug/l
RT: 1.187 min Scan# 17
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

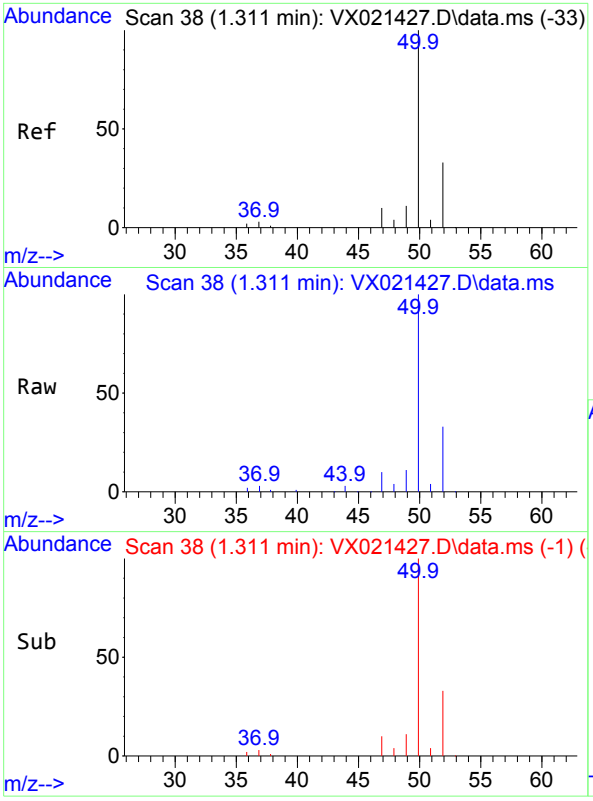
Tgt Ion: 85 Resp: 44939

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.4 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

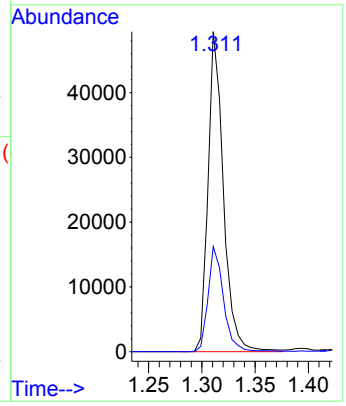
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

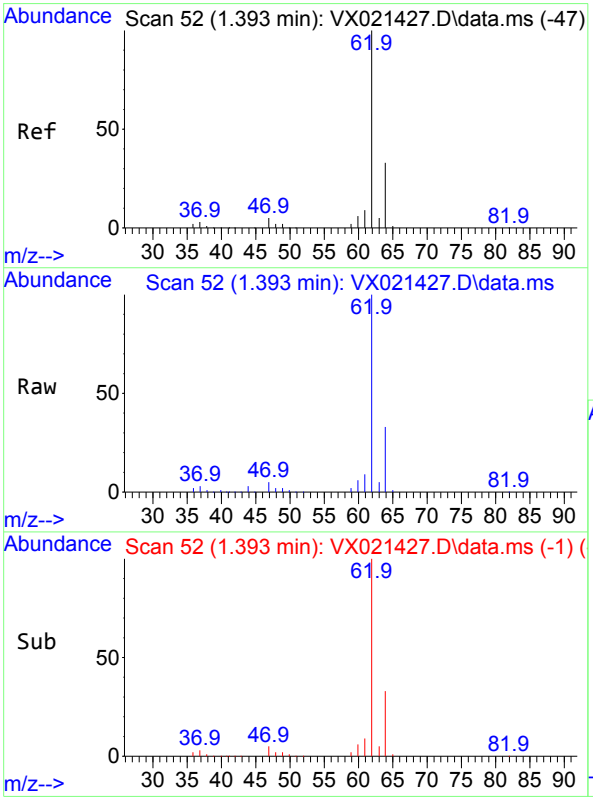



#3
Chloromethane
Concen: 27.55 ug/l
RT: 1.311 min Scan# 38
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 50 Resp: 49615

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.8 | 26.4 | 39.6 |

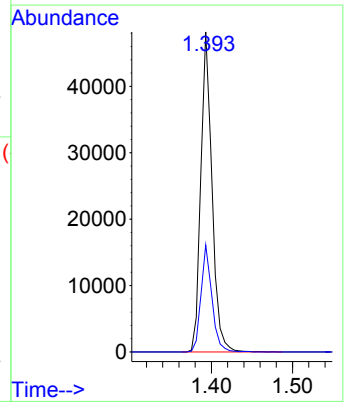



#4
Vinyl Chloride
Concen: 47.78 ug/l
RT: 1.393 min Scan# 52
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

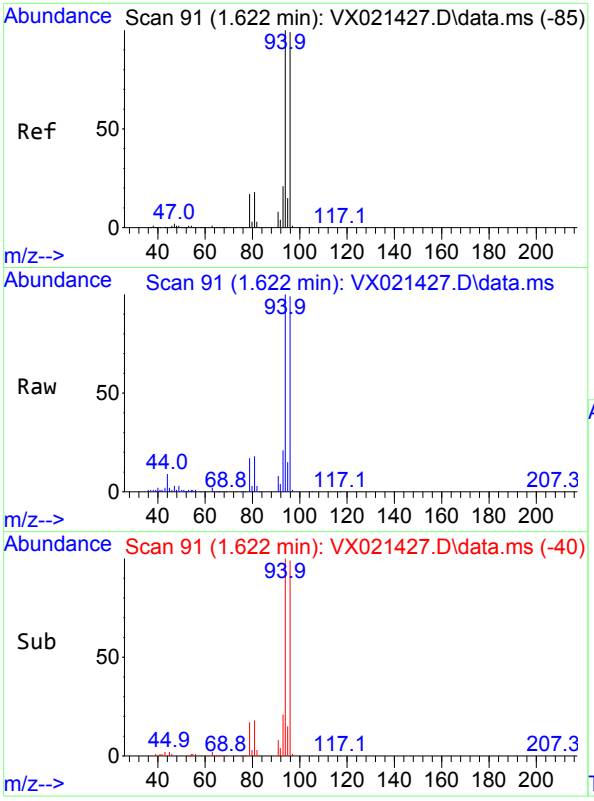
Tgt Ion: 62 Resp: 46392

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 33.4 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

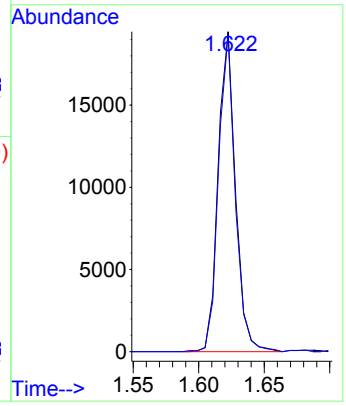
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

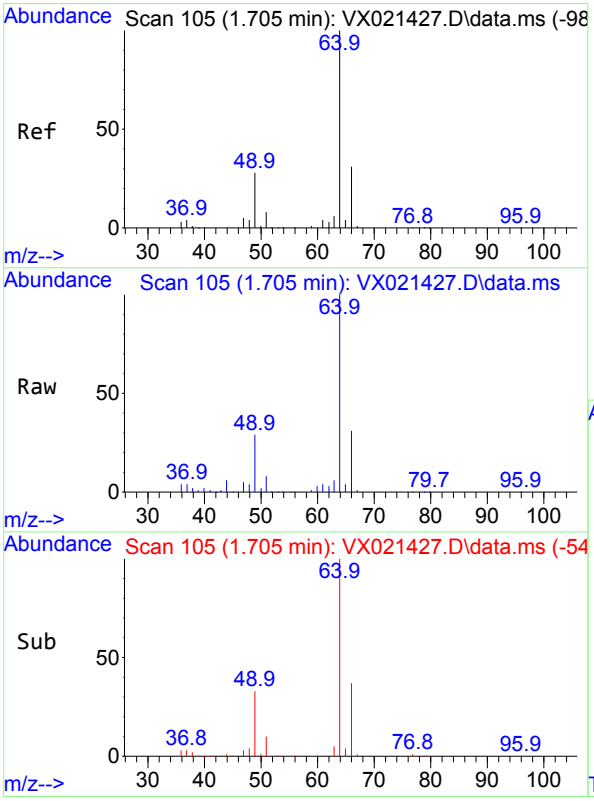



#5
Bromomethane
Concen: 42.78 ug/l
RT: 1.622 min Scan# 91
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 94 Resp: 17870

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 99.1 | 76.4 | 114.6 |

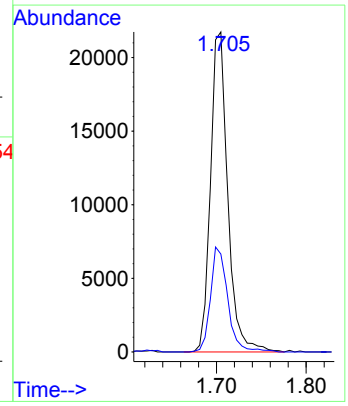



#6
Chloroethane
Concen: 48.75 ug/l
RT: 1.705 min Scan# 105
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

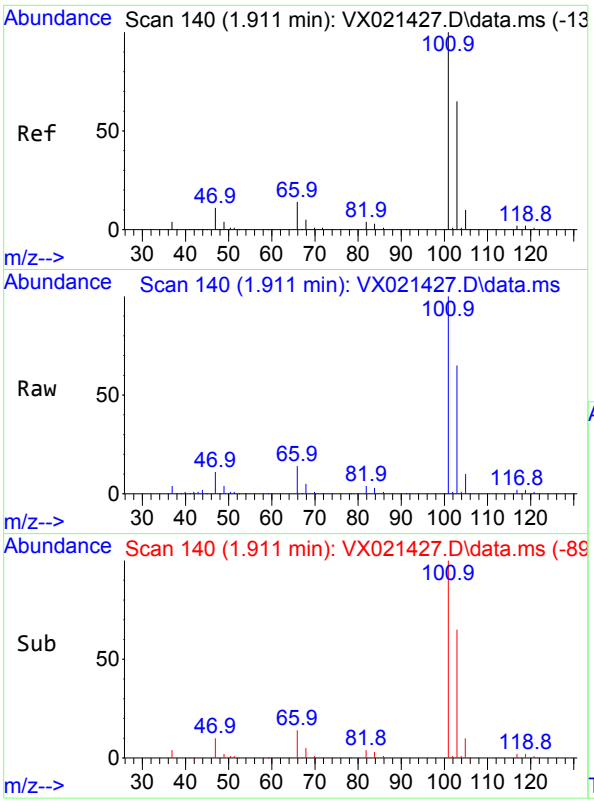
Tgt Ion: 64 Resp: 29038

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.6 | 25.4 | 38.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

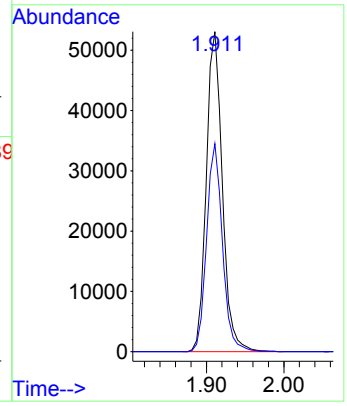
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

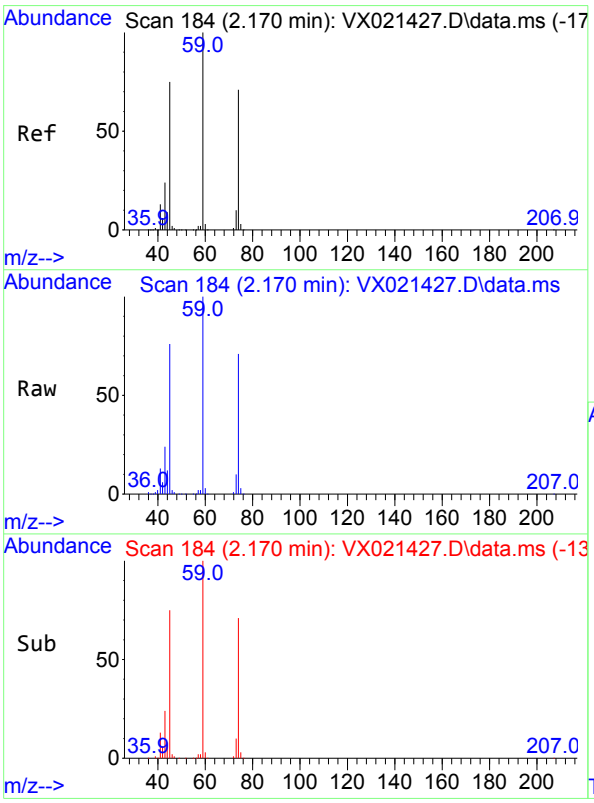



#7
Trichlorofluoromethane
Concen: 51.74 ug/l
RT: 1.911 min Scan# 140
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:101 Resp: 76286

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 65.0 | 53.2 | 79.8 |

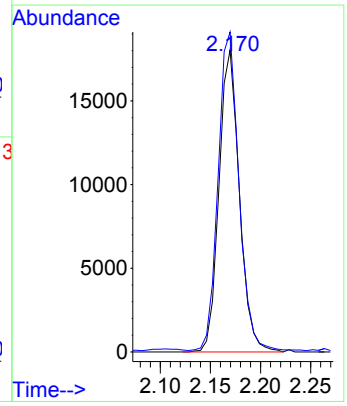



#8
Diethyl Ether
Concen: 49.23 ug/l
RT: 2.170 min Scan# 184
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

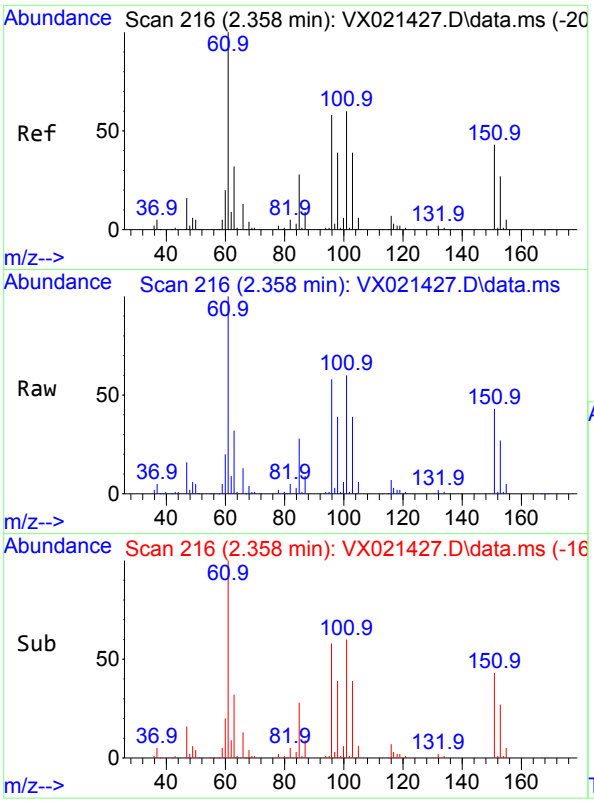
Tgt Ion: 74 Resp: 25462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 107.8 | 44.5 | 133.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

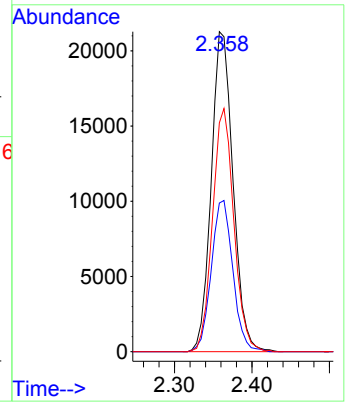
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

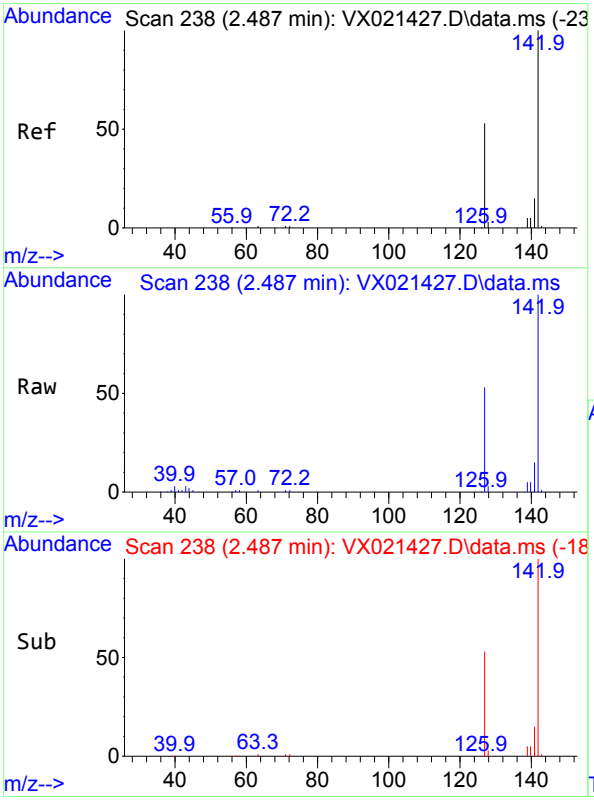



#9
1,1,2-Trichlorotrifluoroethane
Concen: 49.40 ug/l
RT: 2.358 min Scan# 216
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:101 Resp: 41465

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.9 | 34.9 | 52.3 |
| 151 | 74.7 | 61.4 | 92.2 |

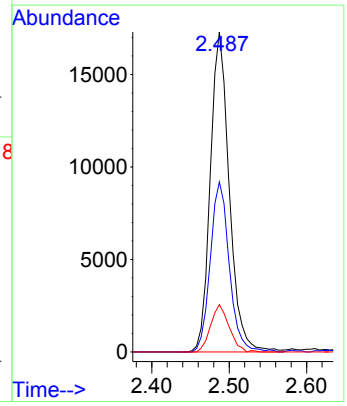



#10
Methyl Iodide
Concen: 41.50 ug/l
RT: 2.487 min Scan# 238
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

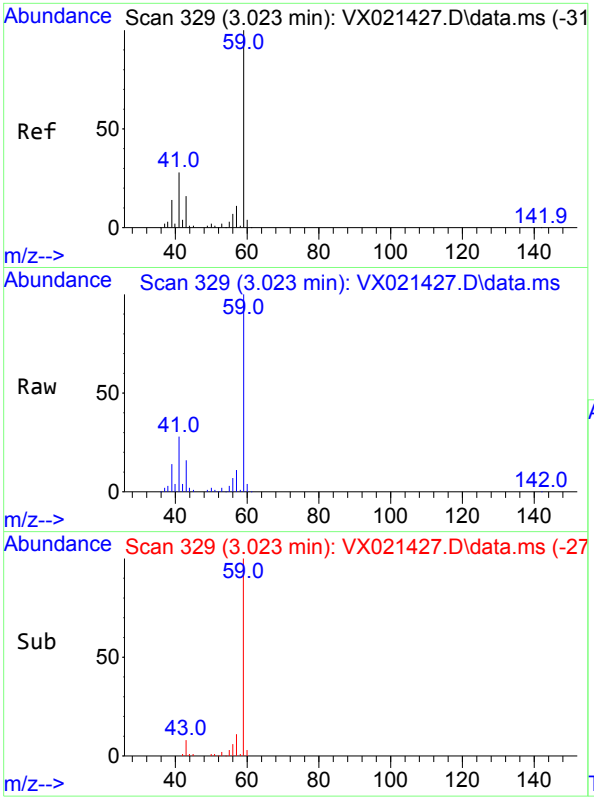
Tgt Ion:142 Resp: 29459

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 53.1 | 33.3 | 49.9# |
| 141 | 14.4 | 11.4 | 17.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

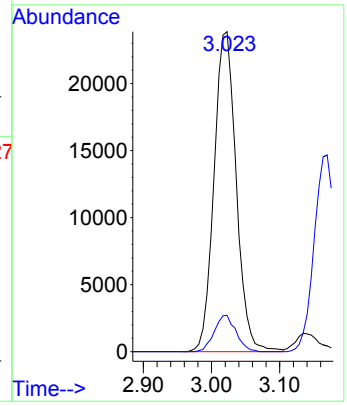
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

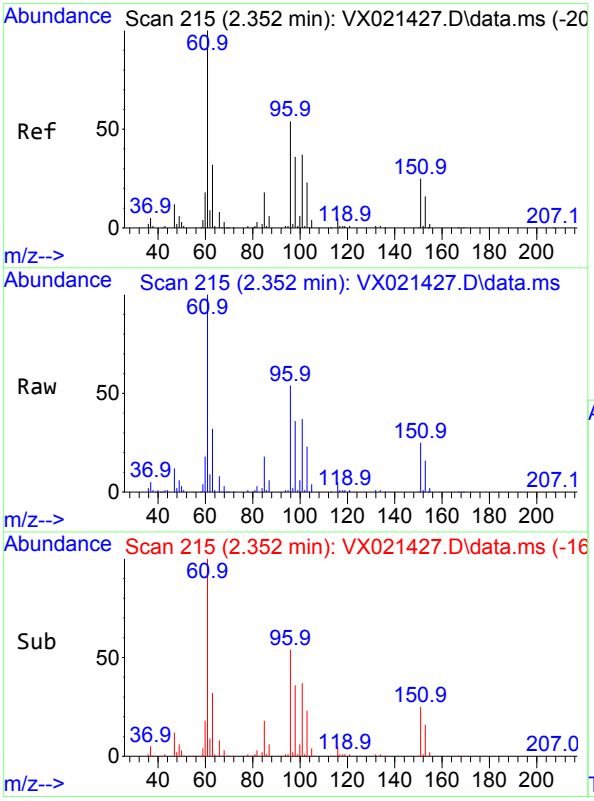



#11
Tert butyl alcohol
Concen: 243.77 ug/l
RT: 3.023 min Scan# 329
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 59 Resp: 54110

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.1 | 7.8 | 11.8 |

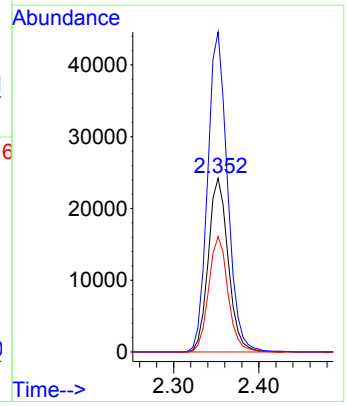



#12
1,1-Dichloroethene
Concen: 47.99 ug/l
RT: 2.352 min Scan# 215
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

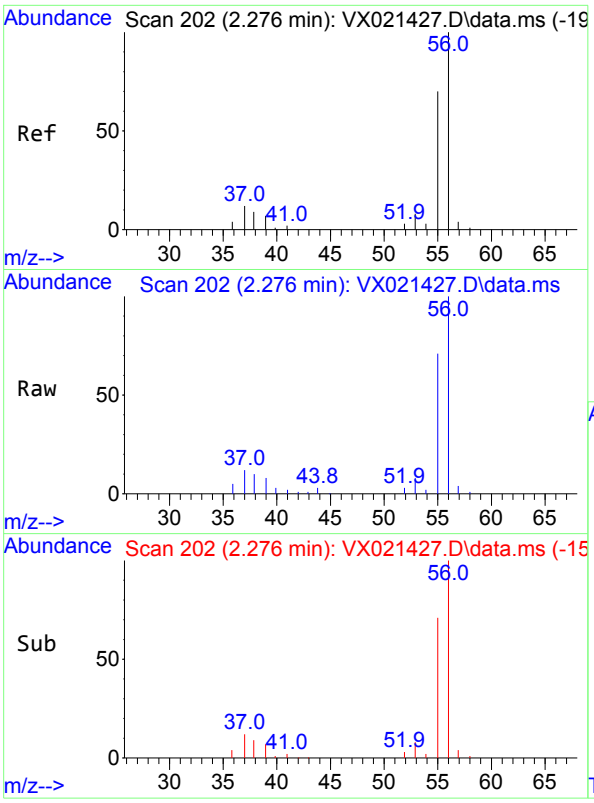
Tgt Ion: 96 Resp: 39183

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 184.2 | 124.6 | 187.0 |
| 98 | 66.4 | 50.6 | 76.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

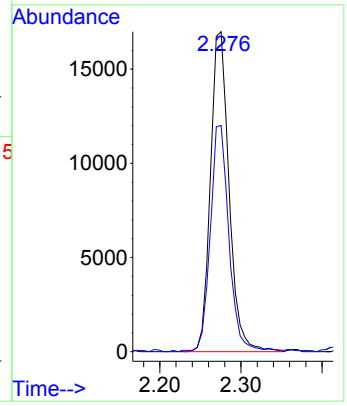
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

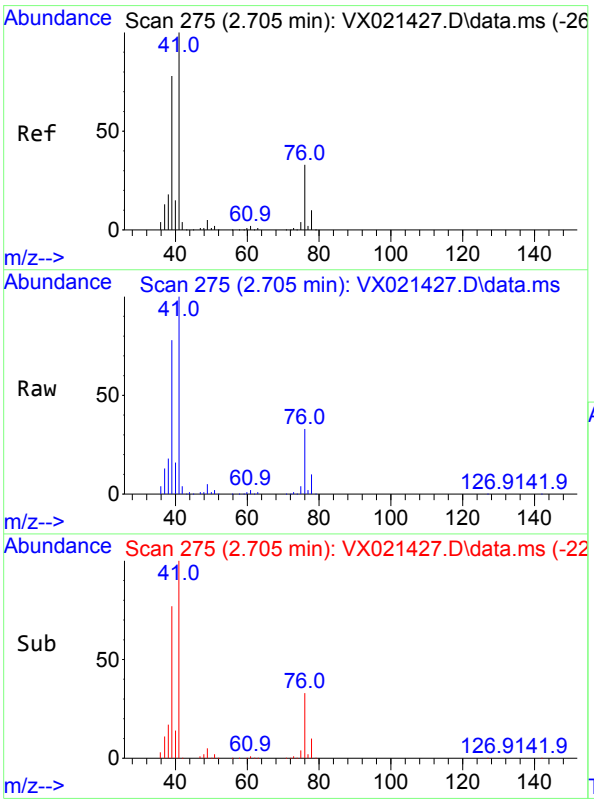



#13
Acrolein
Concen: 200.22 ug/l
RT: 2.276 min Scan# 202
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 56 Resp: 27041

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.0 | 56.4 | 84.6 |

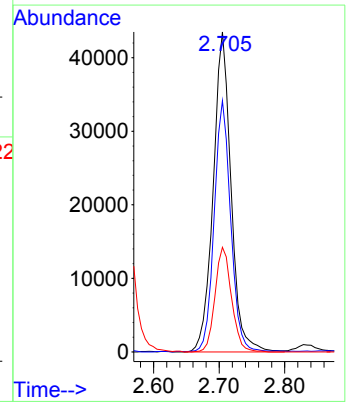



#14
Allyl chloride
Concen: 48.97 ug/l
RT: 2.705 min Scan# 275
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

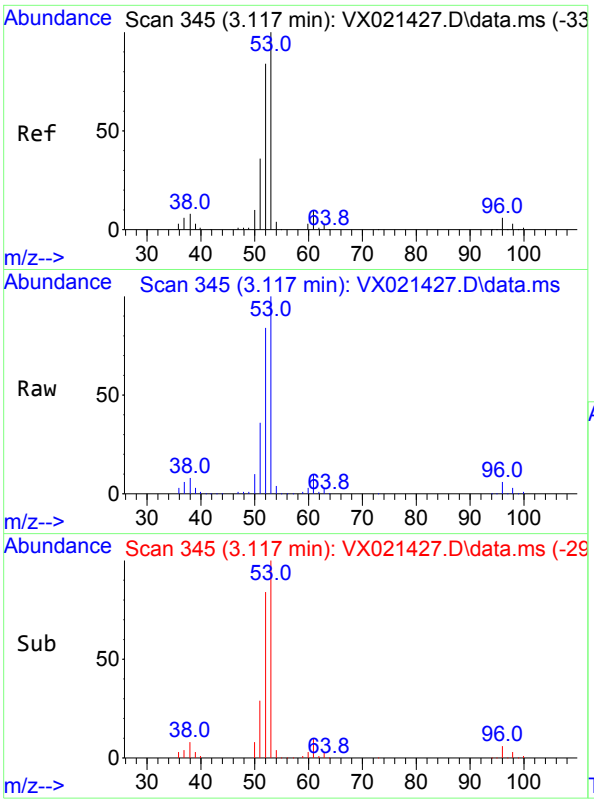
Tgt Ion: 41 Resp: 82435

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 72.7 | 51.6 | 77.4 |
| 76 | 30.2 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

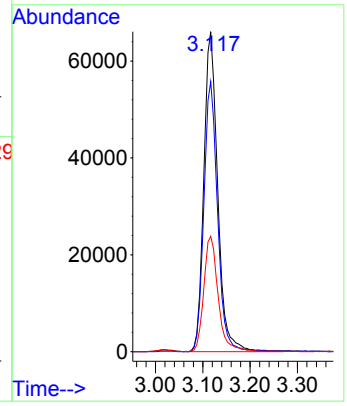
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

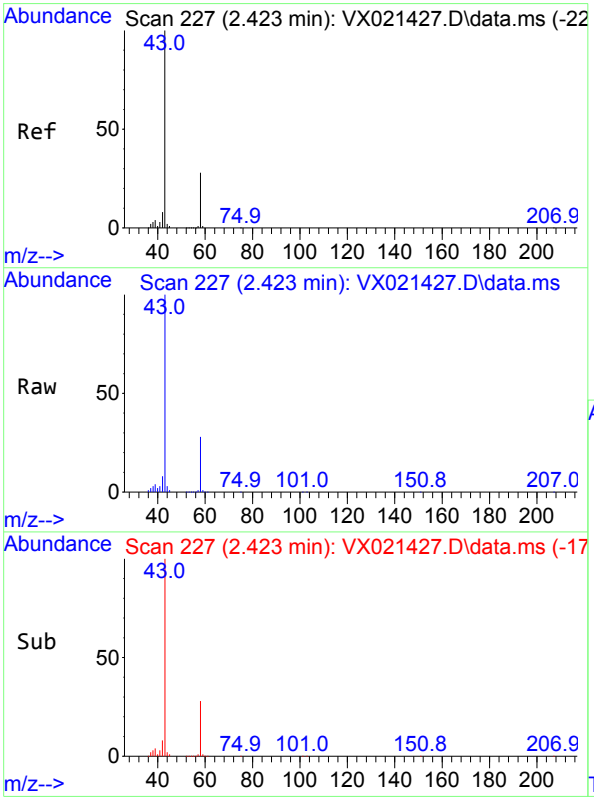



#15
Acrylonitrile
Concen: 259.40 ug/l
RT: 3.117 min Scan# 345
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 53 Resp: 134663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.0 | 65.3 | 97.9 |
| 51 | 37.0 | 28.2 | 42.2 |

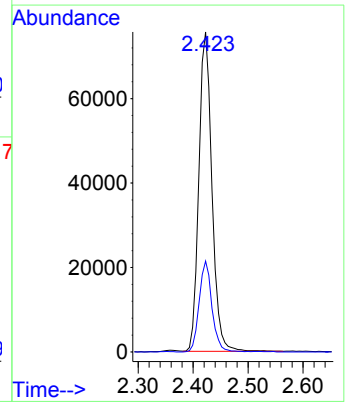



#16
Acetone
Concen: 253.30 ug/l
RT: 2.423 min Scan# 227
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

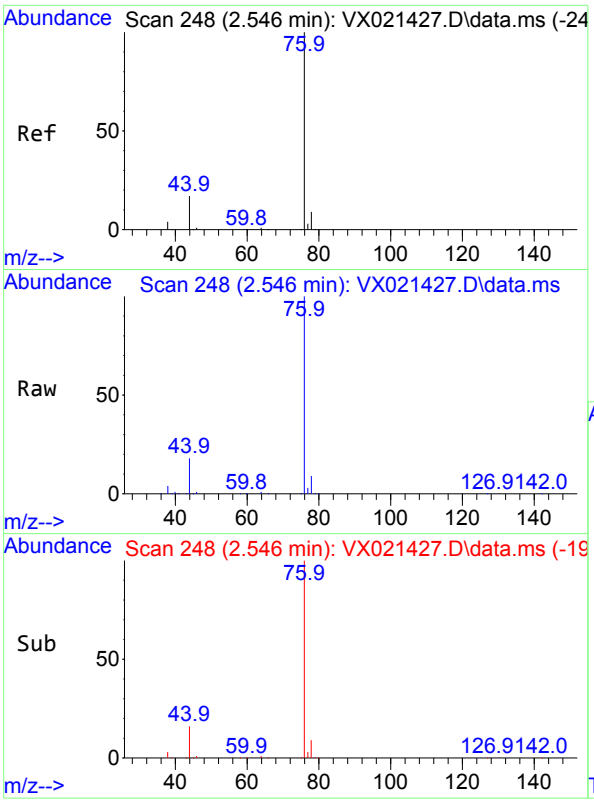
Tgt Ion: 43 Resp: 124366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.5 | 27.8 | 41.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

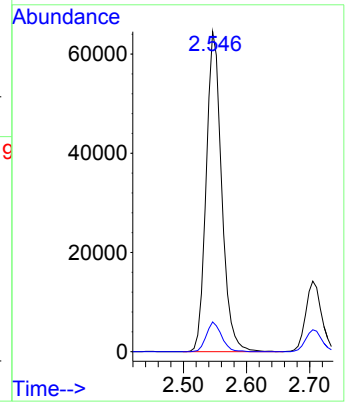
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

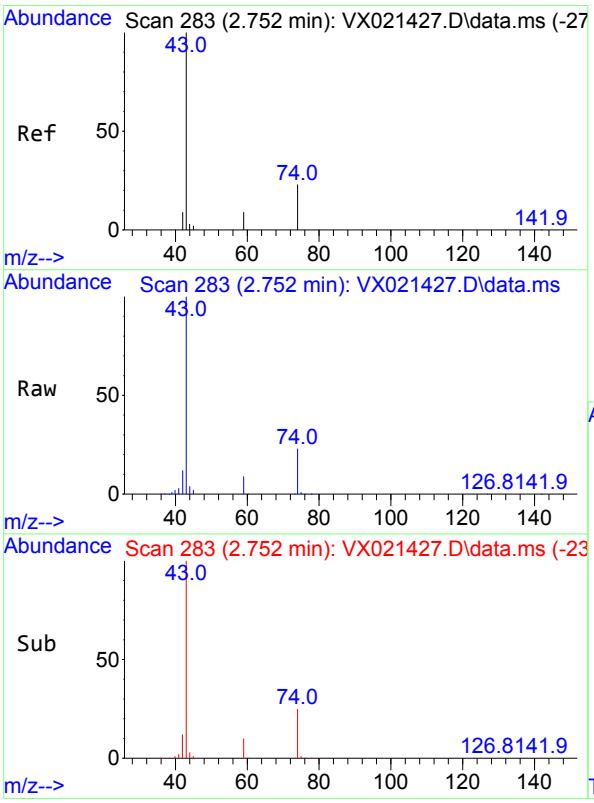



#17
Carbon Disulfide
Concen: 43.48 ug/l
RT: 2.546 min Scan# 248
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 76 Resp: 109798

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.3 | 7.2 | 10.8 |

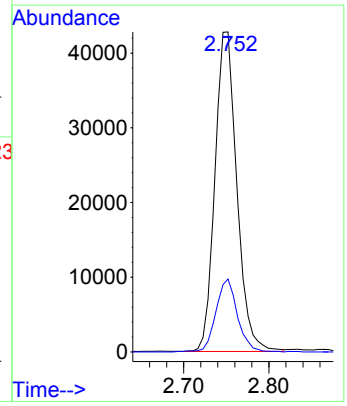



#18
Methyl Acetate
Concen: 55.61 ug/l
RT: 2.752 min Scan# 283
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

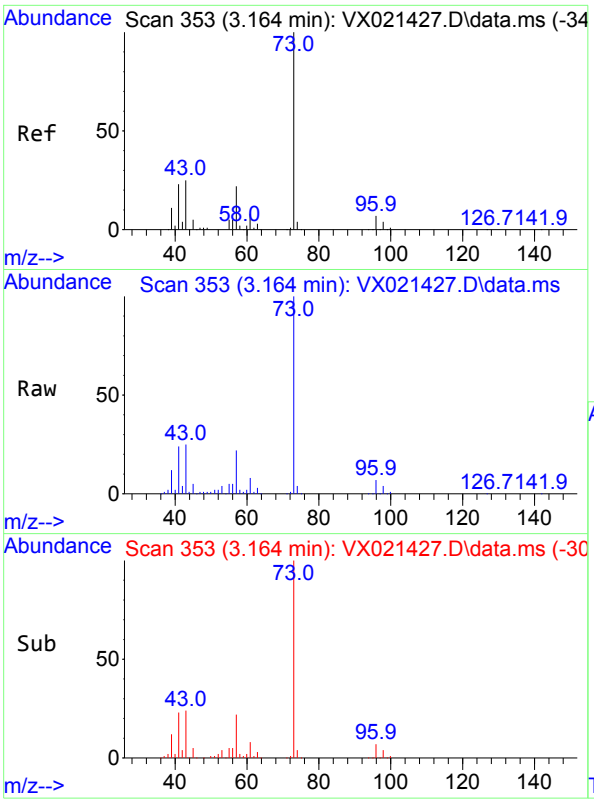
Tgt Ion: 43 Resp: 76504

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.5 | 21.9 | 32.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

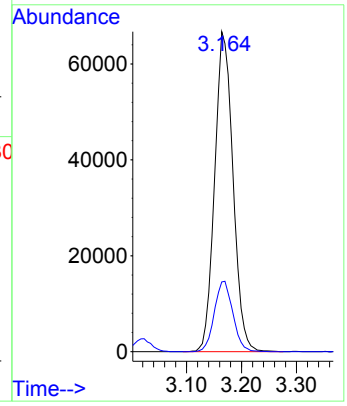
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

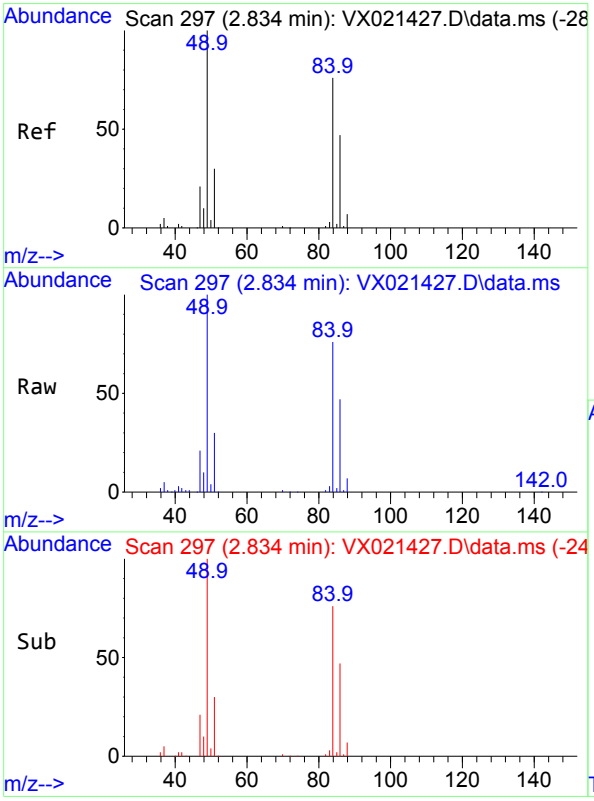



#19
Methyl tert-butyl Ether
Concen: 50.37 ug/l
RT: 3.164 min Scan# 353
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 73 Resp: 154592

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.8 | 17.1 | 25.7 |

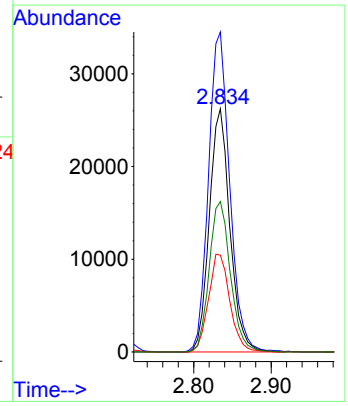



#20
Methylene Chloride
Concen: 48.35 ug/l
RT: 2.834 min Scan# 297
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

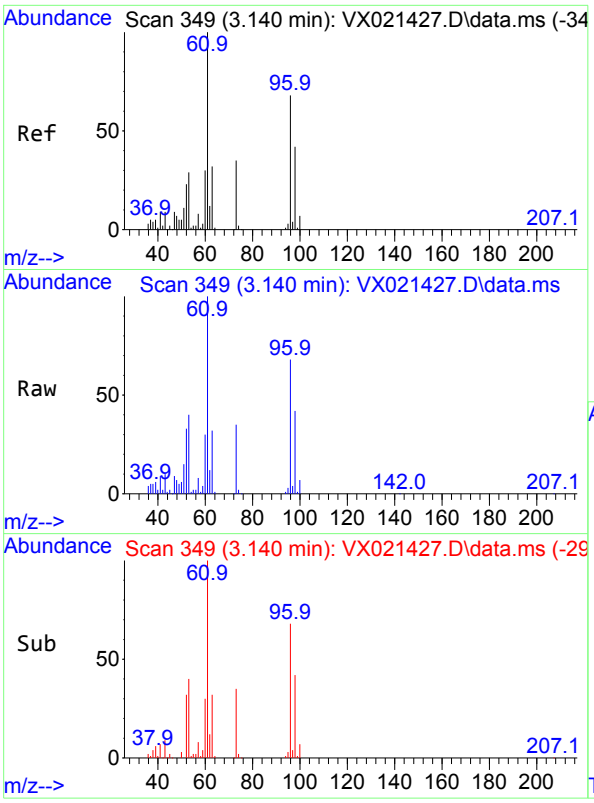
Tgt Ion: 84 Resp: 48381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 131.6 | 88.6 | 132.8 |
| 51 | 39.8 | 27.0 | 40.6 |
| 86 | 61.8 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

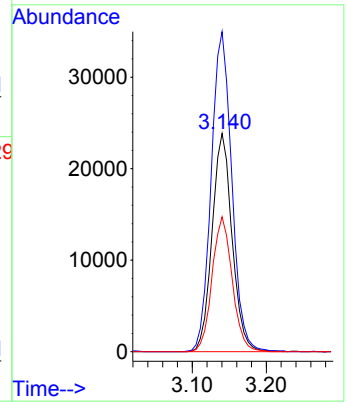
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

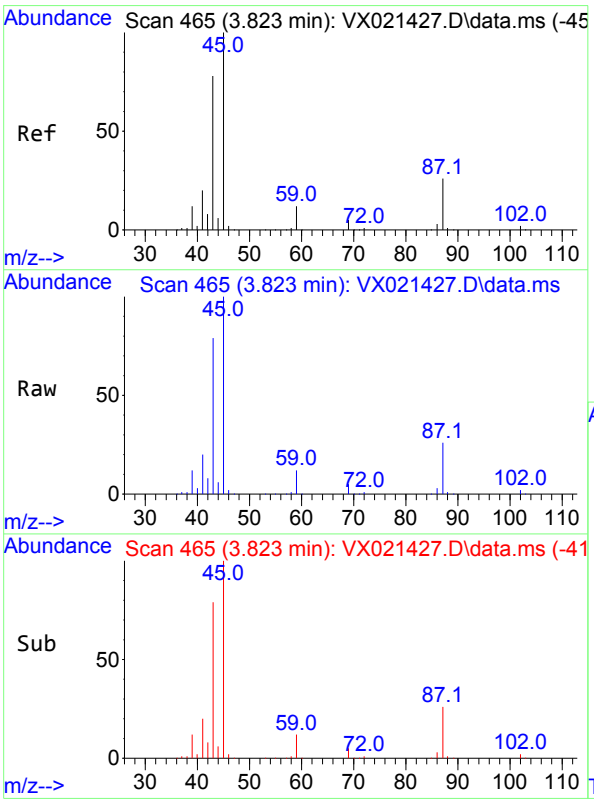



#21
trans-1,2-Dichloroethene
Concen: 48.86 ug/l
RT: 3.140 min Scan# 349
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 96 Resp: 44703

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 146.7 | 107.7 | 161.5 |
| 98 | 61.8 | 50.4 | 75.6 |

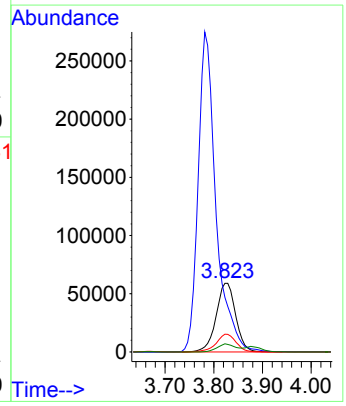



#22
Diisopropyl ether
Concen: 50.66 ug/l
RT: 3.823 min Scan# 465
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

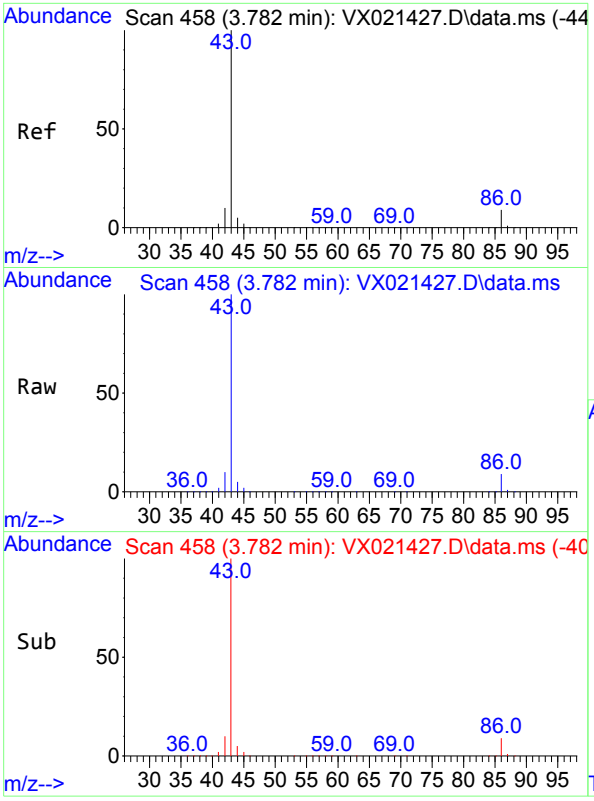
Tgt Ion: 45 Resp: 164138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 79.0 | 58.0 | 87.0 |
| 87 | 25.9 | 25.4 | 38.0 |
| 59 | 12.0 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

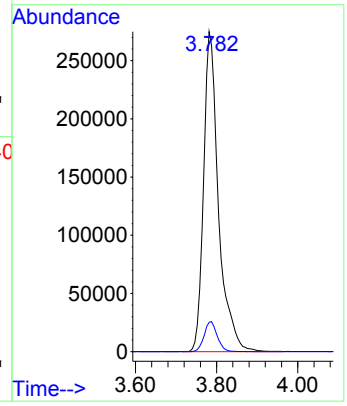
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

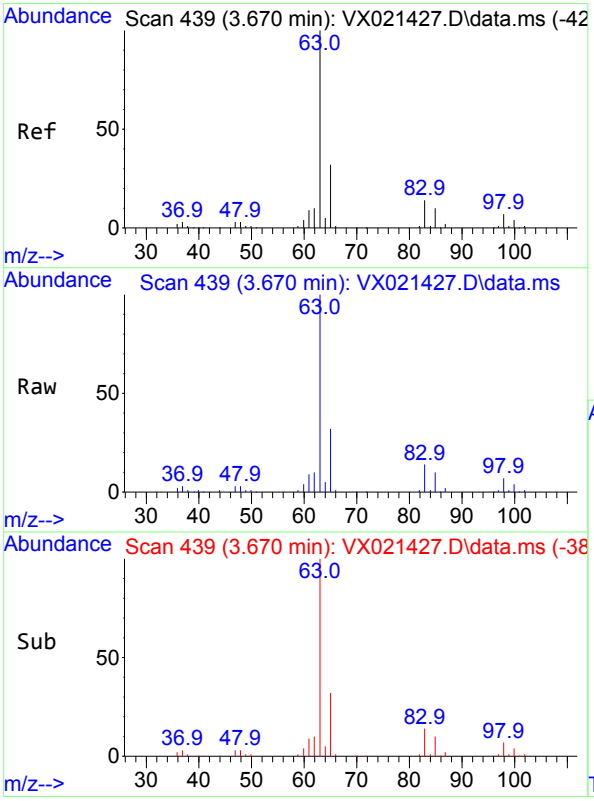



#23
Vinyl Acetate
Concen: 250.65 ug/l
RT: 3.782 min Scan# 458
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 43 Resp: 703027

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.1 | 9.9 | 14.9# |

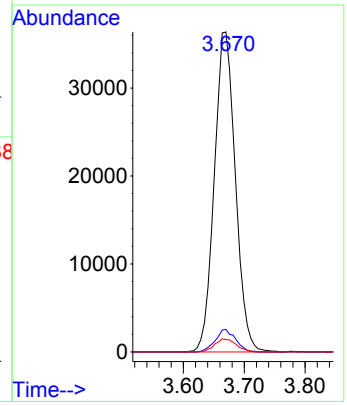



#24
1,1-Dichloroethane
Concen: 49.93 ug/l
RT: 3.670 min Scan# 439
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

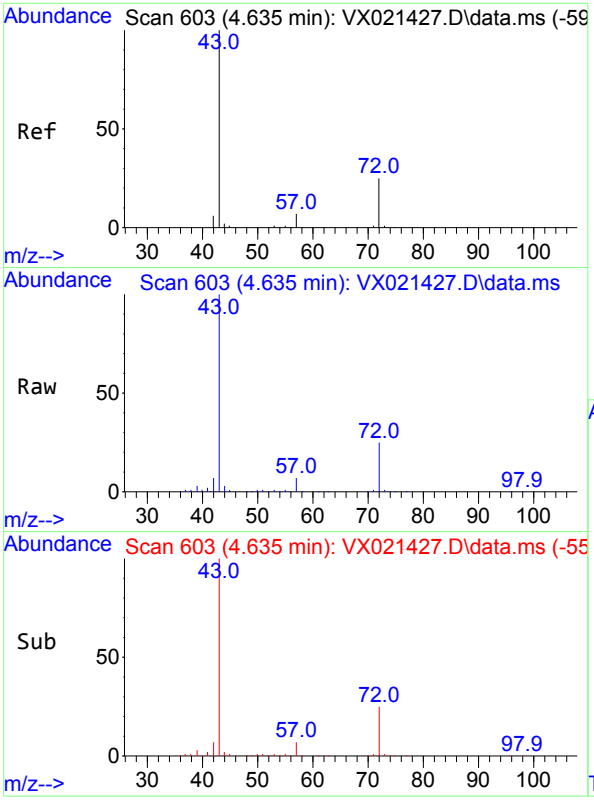
Tgt Ion: 63 Resp: 87532

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 7.0 | 3.8 | 11.2 |
| 100 | 3.9 | 2.5 | 7.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

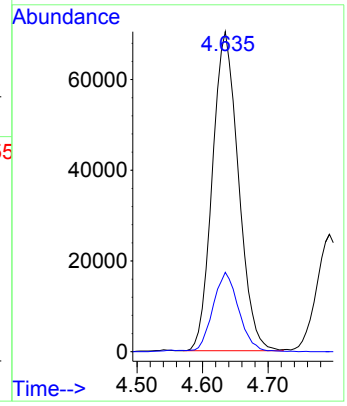
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

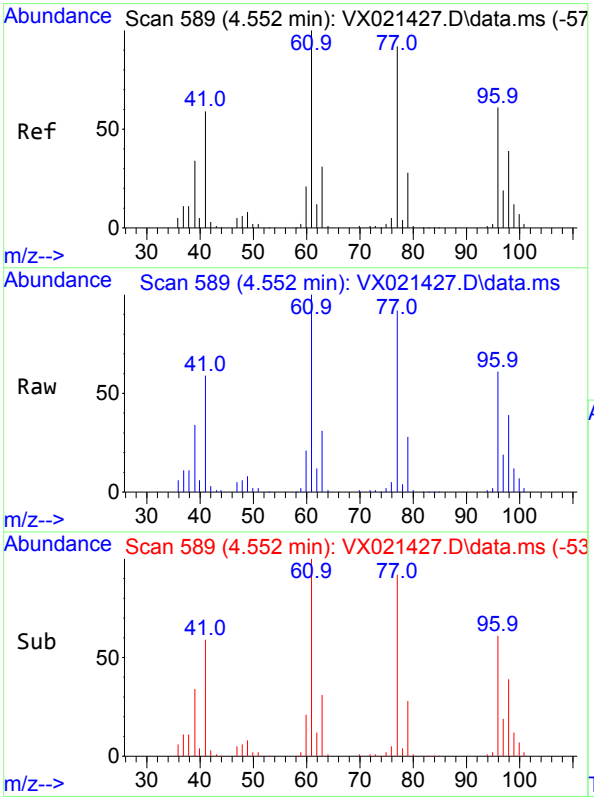



#25
2-Butanone
Concen: 258.61 ug/l
RT: 4.635 min Scan# 603
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 43 Resp: 194137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.8 | 23.7 | 35.5 |

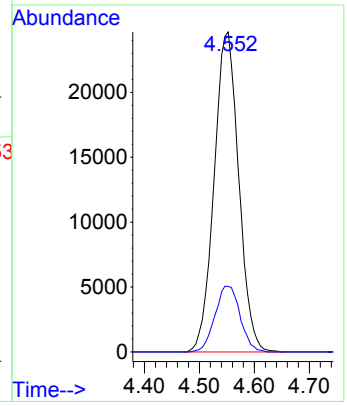



#26
2,2-Dichloropropane
Concen: 50.24 ug/l
RT: 4.552 min Scan# 589
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

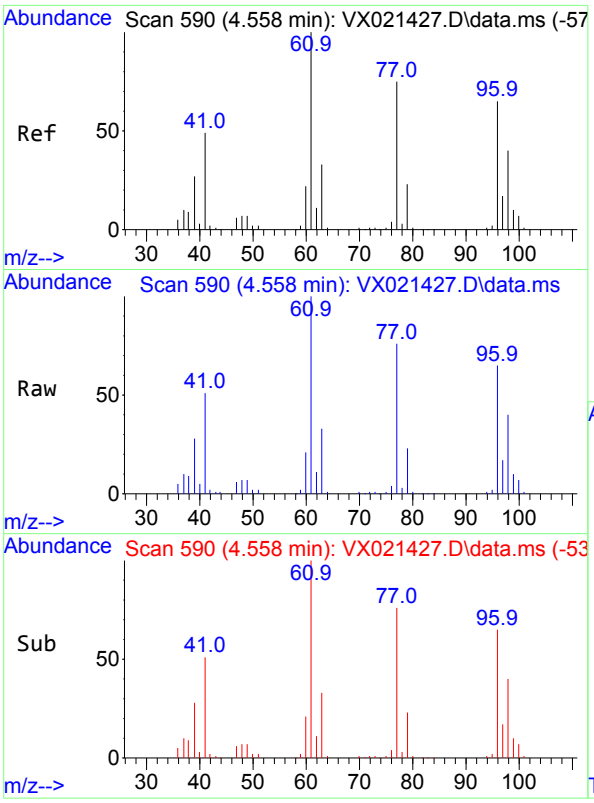
Tgt Ion: 77 Resp: 76612

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.1 | 11.7 | 35.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

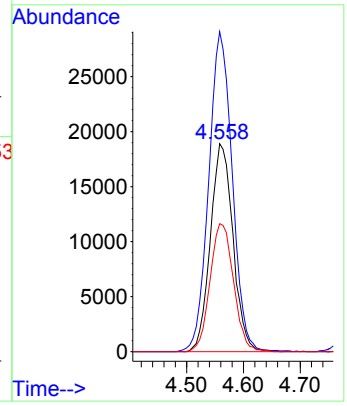
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

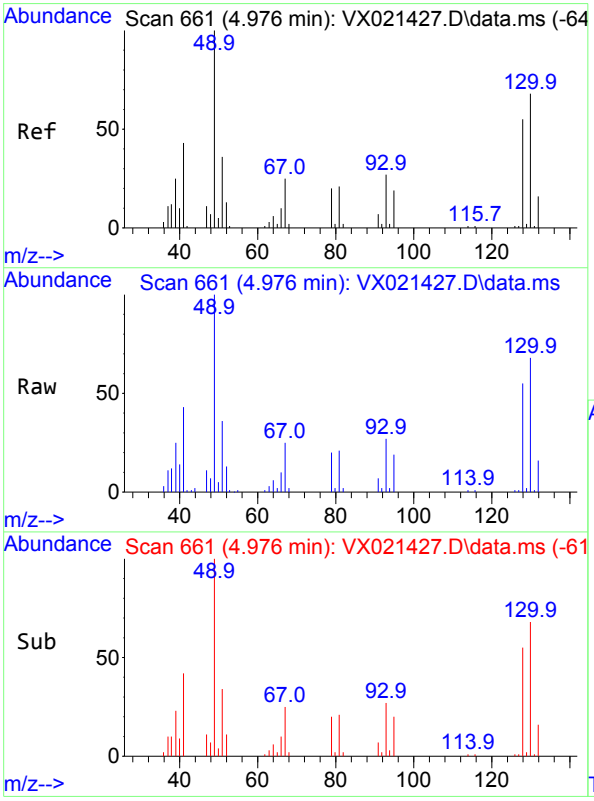



#27
cis-1,2-Dichloroethene
Concen: 49.66 ug/l
RT: 4.558 min Scan# 590
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 96 Resp: 52272

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 159.8 | 0.0 | 285.6 |
| 98 | 63.9 | 0.0 | 129.6 |

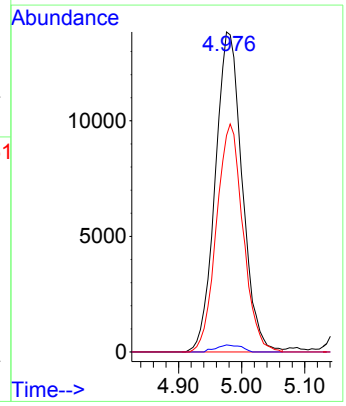



#28
Bromochloromethane
Concen: 49.56 ug/l
RT: 4.976 min Scan# 661
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

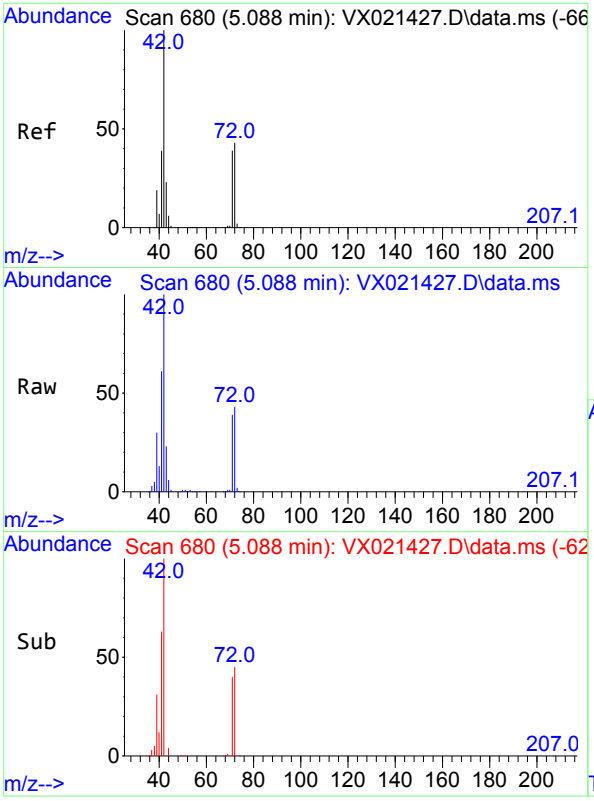
Tgt Ion: 49 Resp: 41006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.1 | 0.0 | 4.0 |
| 130 | 70.4 | 68.2 | 102.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

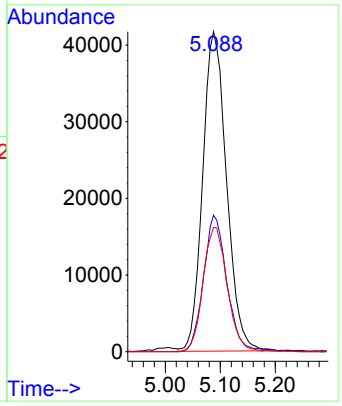
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

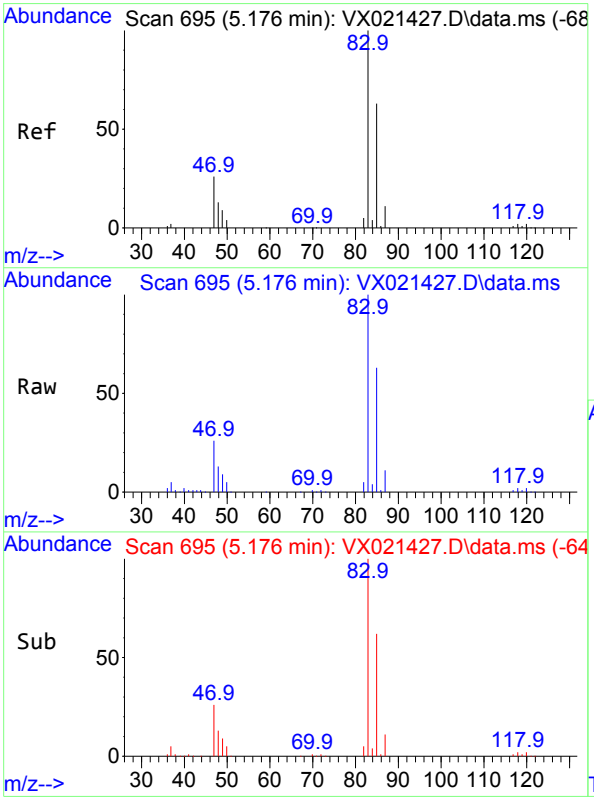



#29
Tetrahydrofuran
Concen: 253.88 ug/l
RT: 5.088 min Scan# 680
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 42 Resp: 125603

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 41.5 | 41.7 | 62.5# |
| 71 | 39.1 | 38.4 | 57.6 |

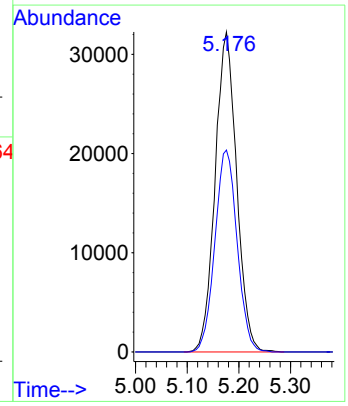



#30
Chloroform
Concen: 51.08 ug/l
RT: 5.176 min Scan# 695
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

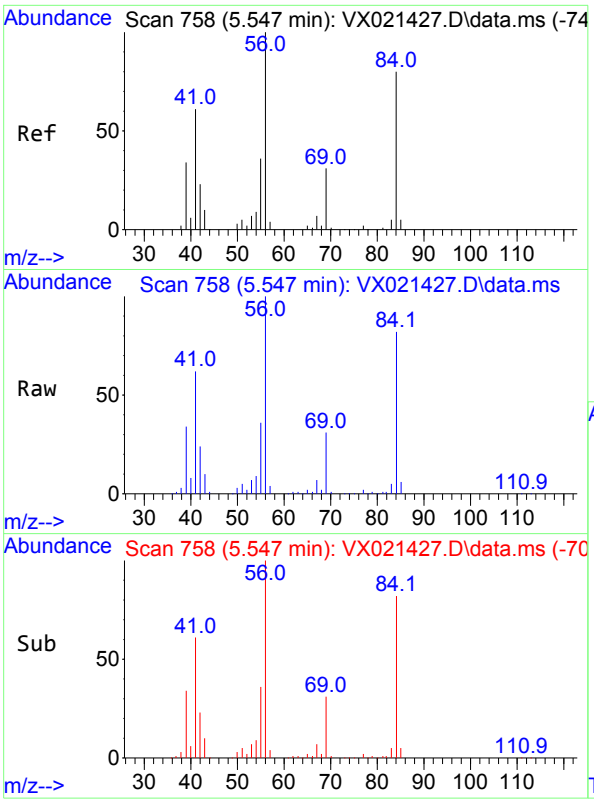
Tgt Ion: 83 Resp: 93237

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.1 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

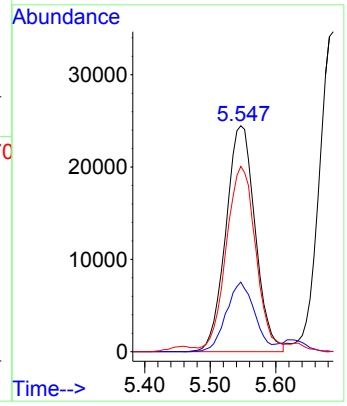
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

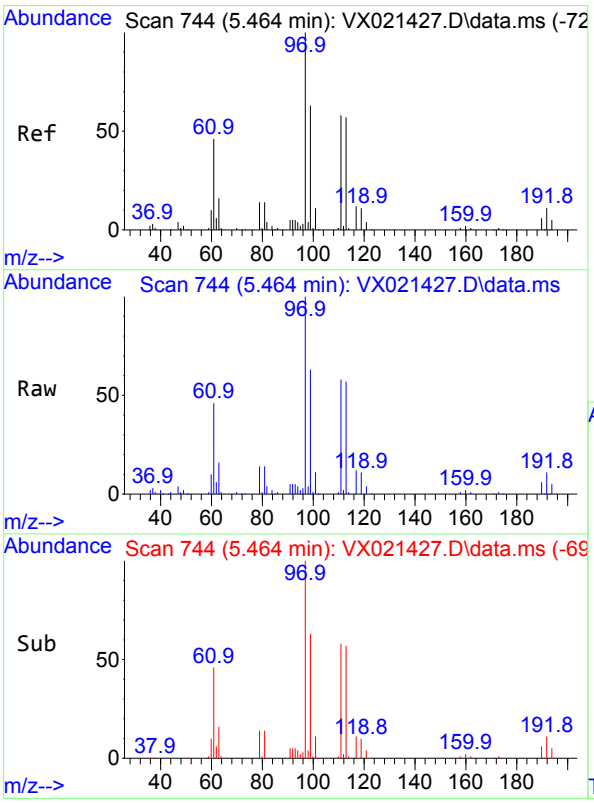



#31
Cyclohexane
Concen: 48.15 ug/l
RT: 5.547 min Scan# 758
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 56 Resp: 76123

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.8 | 25.3 | 37.9 |
| 84 | 79.6 | 71.4 | 107.0 |

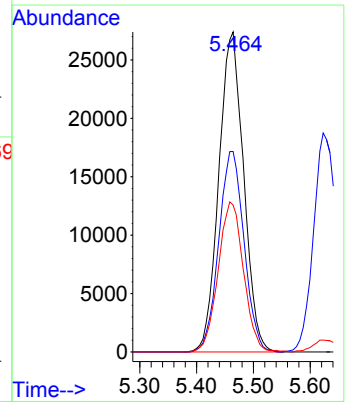



#32
1,1,1-Trichloroethane
Concen: 51.31 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

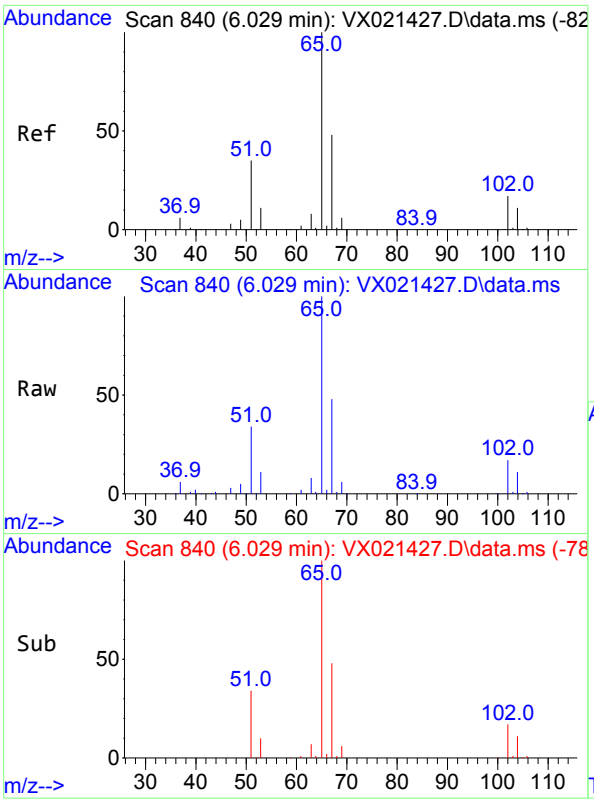
Tgt Ion: 97 Resp: 83036

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 63.9 | 51.5 | 77.3 |
| 61 | 48.0 | 34.2 | 51.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

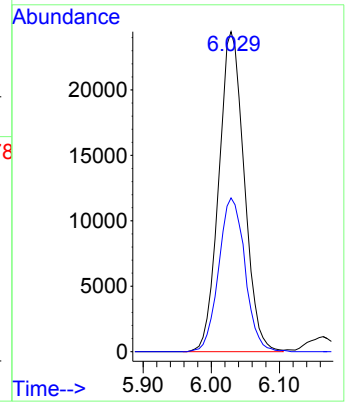
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

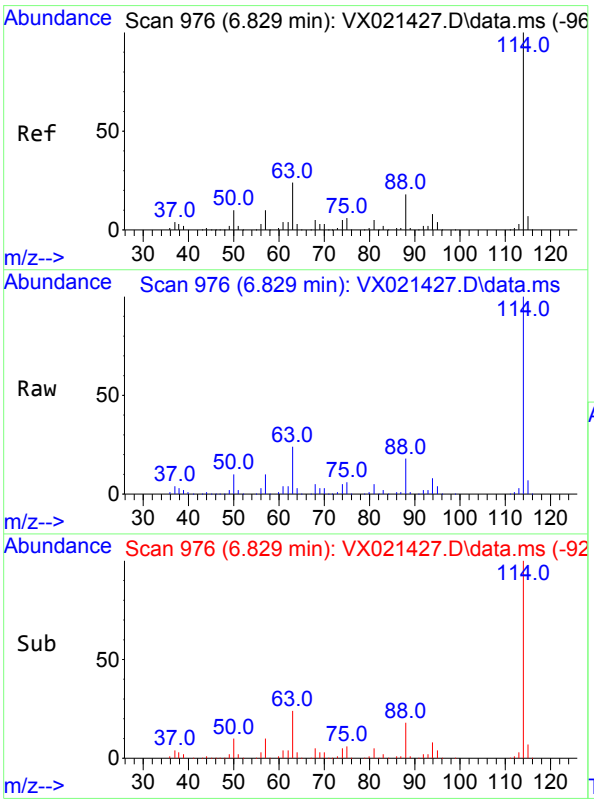



#33
1,2-Dichloroethane-d4
Concen: 47.86 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 65 Resp: 63335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.8 | 0.0 | 105.4 |

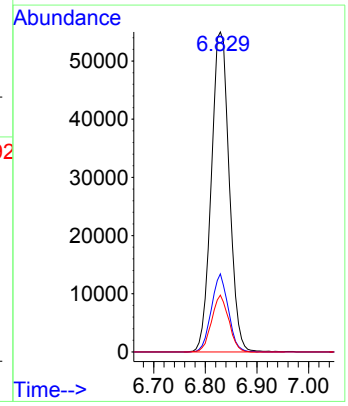



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

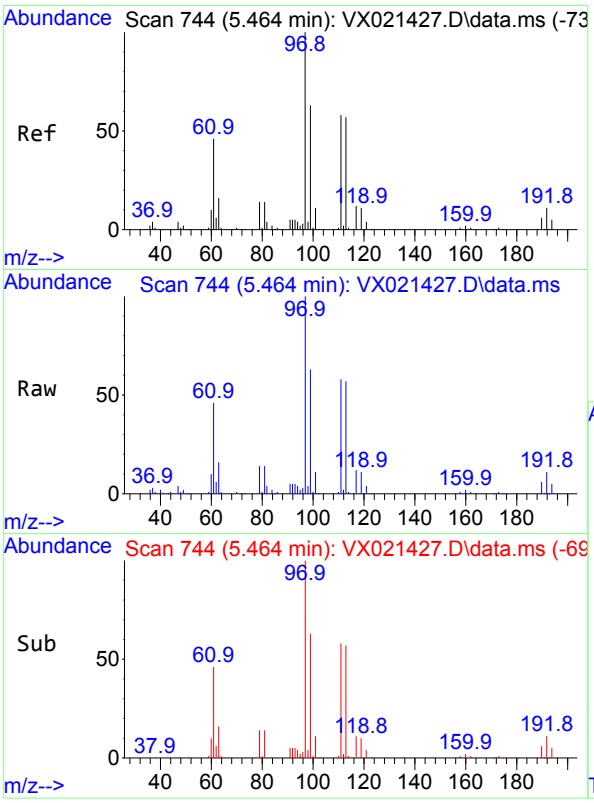
Tgt Ion:114 Resp: 132670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 24.4 | 0.0 | 40.8 |
| 88 | 17.8 | 0.0 | 32.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

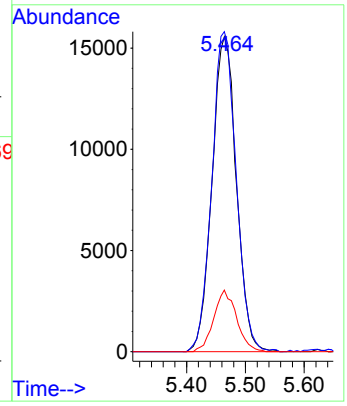
**Manual Integrations APPROVED**
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3/25/2021 9:49:31 AM

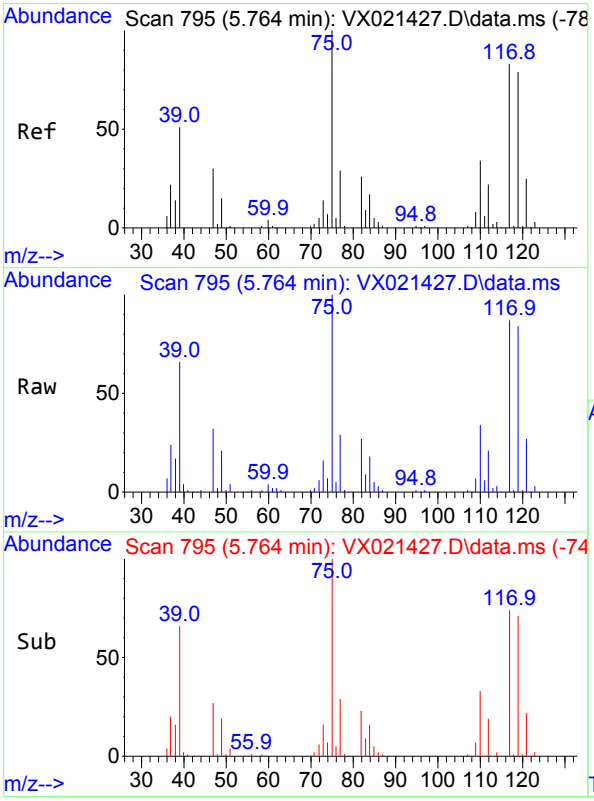



#35
Dibromofluoromethane
Concen: 49.40 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:113 Resp: 44674

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.8 | 81.9 | 122.9 |
| 192 | 18.4 | 16.7 | 25.1 |

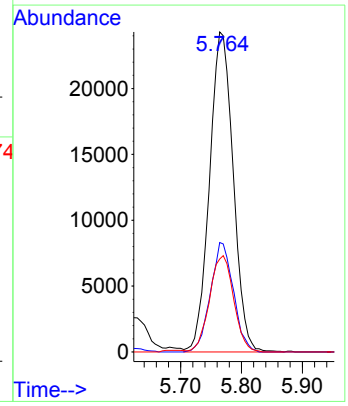



#36
1,1-Dichloropropene
Concen: 49.39 ug/l
RT: 5.764 min Scan# 795
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

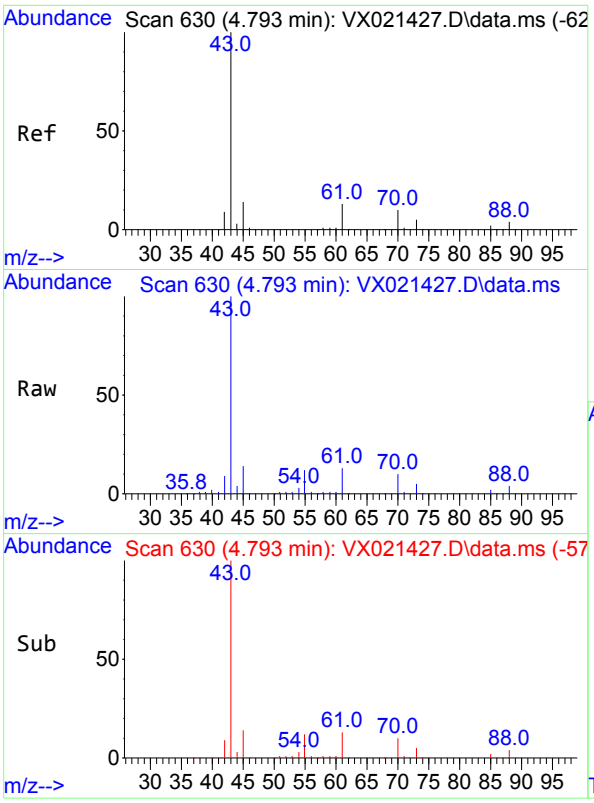
Tgt Ion: 75 Resp: 65712

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.1 | 18.1 | 54.4 |
| 77 | 30.7 | 25.3 | 37.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

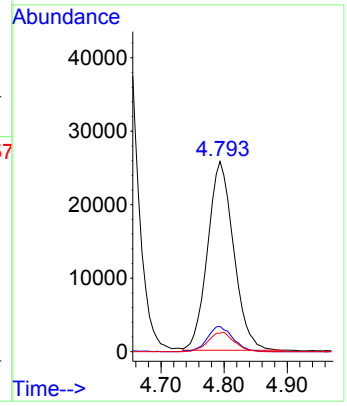
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

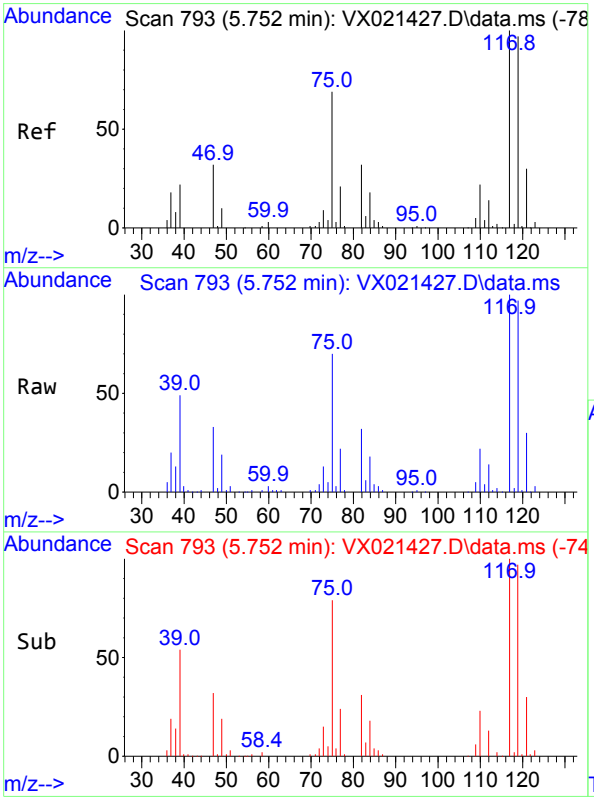



#37
Ethyl Acetate
Concen: 47.75 ug/l
RT: 4.793 min Scan# 630
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 43 Resp: 73462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.3 | 12.8 | 19.2 |
| 70 | 10.3 | 10.5 | 15.7# |

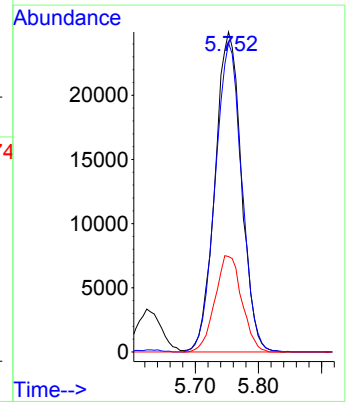



#38
Carbon Tetrachloride
Concen: 52.31 ug/l
RT: 5.752 min Scan# 793
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

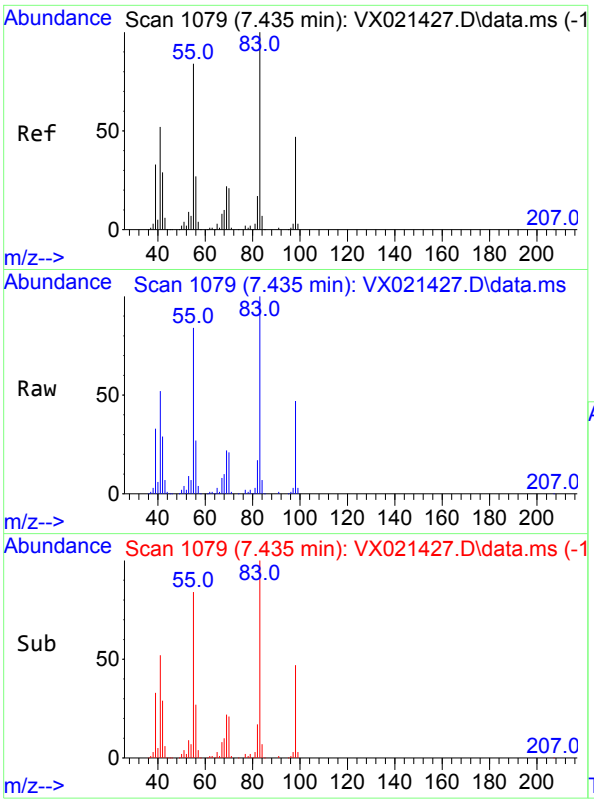
Tgt Ion:117 Resp: 72486

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 96.6 | 76.2 | 114.2 |
| 121 | 29.8 | 24.8 | 37.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

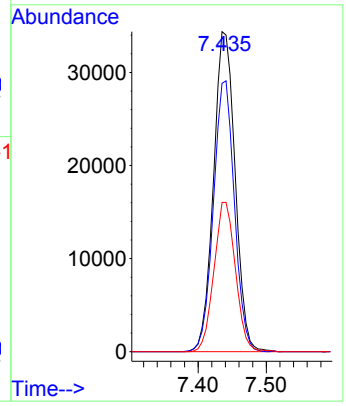
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

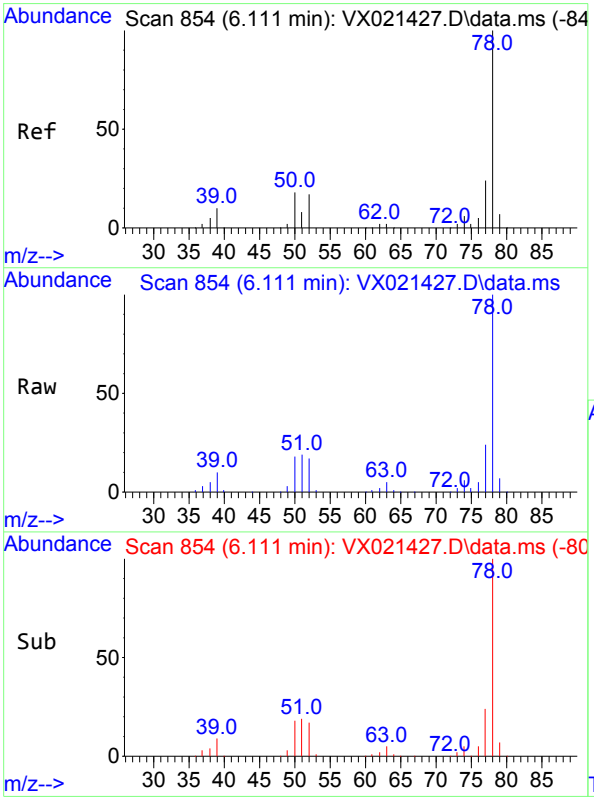



#39
Methylcyclohexane
Concen: 51.30 ug/l
RT: 7.435 min Scan# 1079
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 83 Resp: 75819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 83.8 | 58.9 | 88.3 |
| 98 | 46.7 | 38.1 | 57.1 |

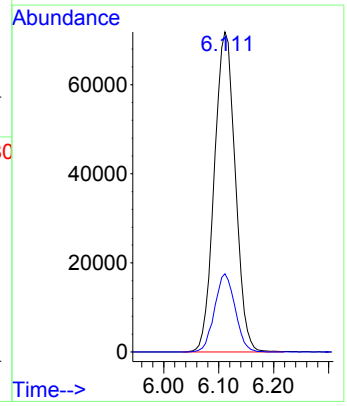



#40
Benzene
Concen: 51.88 ug/l
RT: 6.111 min Scan# 854
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

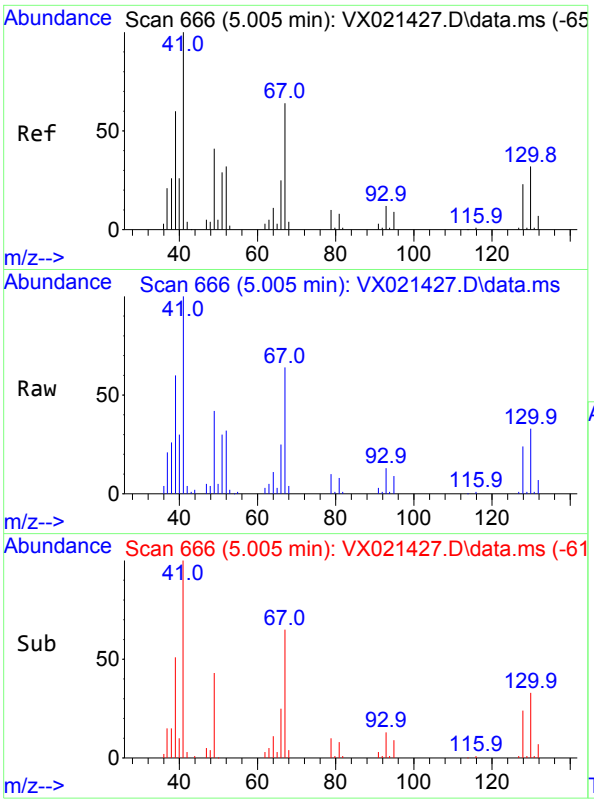
Tgt Ion: 78 Resp: 190627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.4 | 18.9 | 28.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

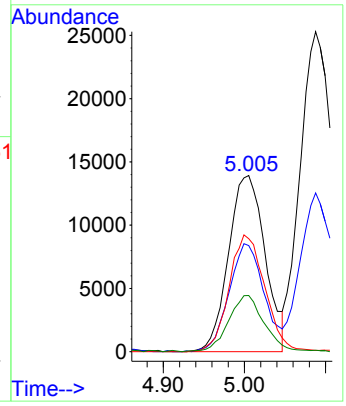
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

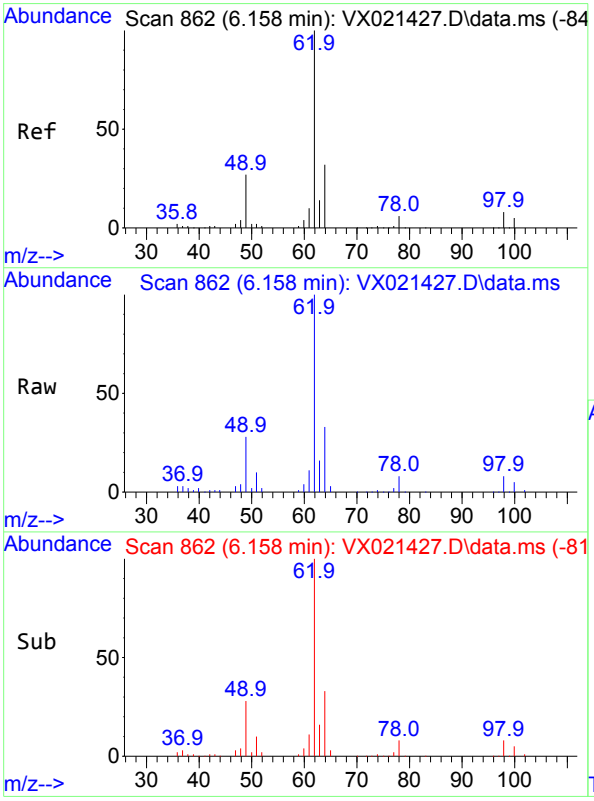



#41
Methacrylonitrile
Concen: 49.02 ug/l
RT: 5.005 min Scan# 666
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 41 Resp: 43694

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 59.0 | 42.5 | 63.7 |
| 67 | 64.9 | 65.0 | 97.6# |
| 52 | 31.2 | 25.3 | 37.9 |

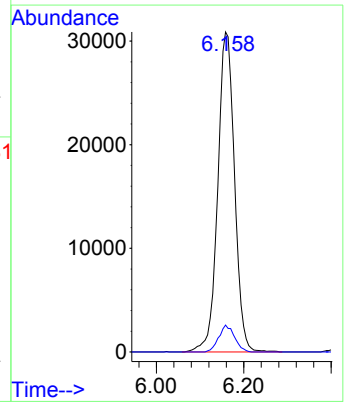



#42
1,2-Dichloroethane
Concen: 51.63 ug/l
RT: 6.158 min Scan# 862
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

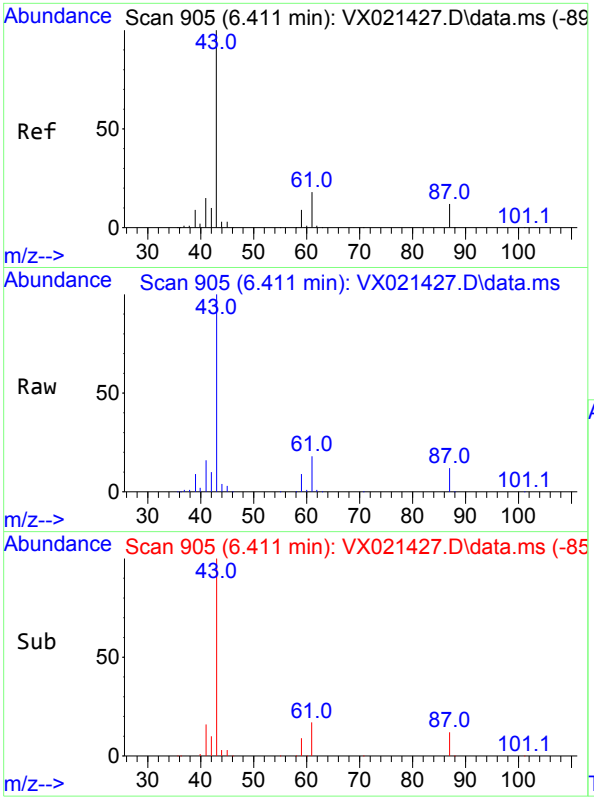
Tgt Ion: 62 Resp: 82107

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.9 | 0.0 | 20.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

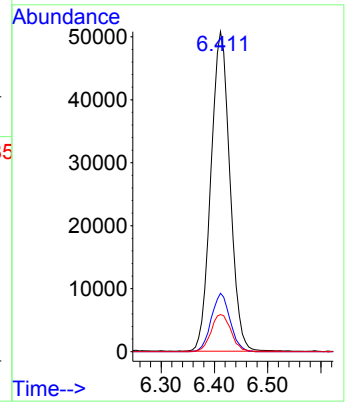
**Manual Integrations APPROVED**
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3/25/2021 9:49:31 AM

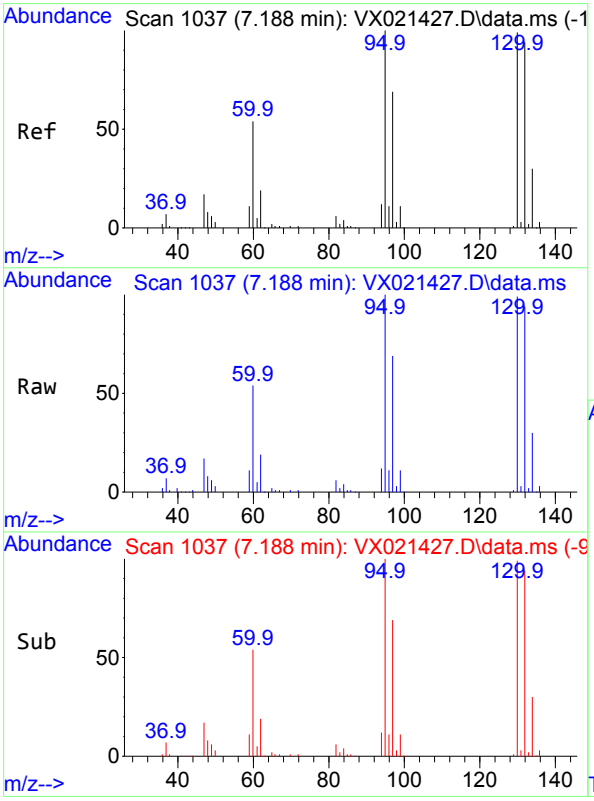



#43
Isopropyl Acetate
Concen: 49.82 ug/l
RT: 6.411 min Scan# 905
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 43 Resp: 125739

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.0 | 18.2 | 27.4# |
| 87 | 12.2 | 12.5 | 18.7# |

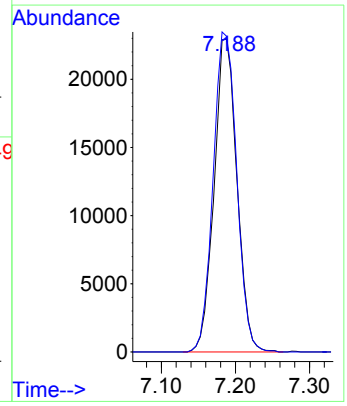



#44
Trichloroethene
Concen: 50.45 ug/l
RT: 7.188 min Scan# 1037
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

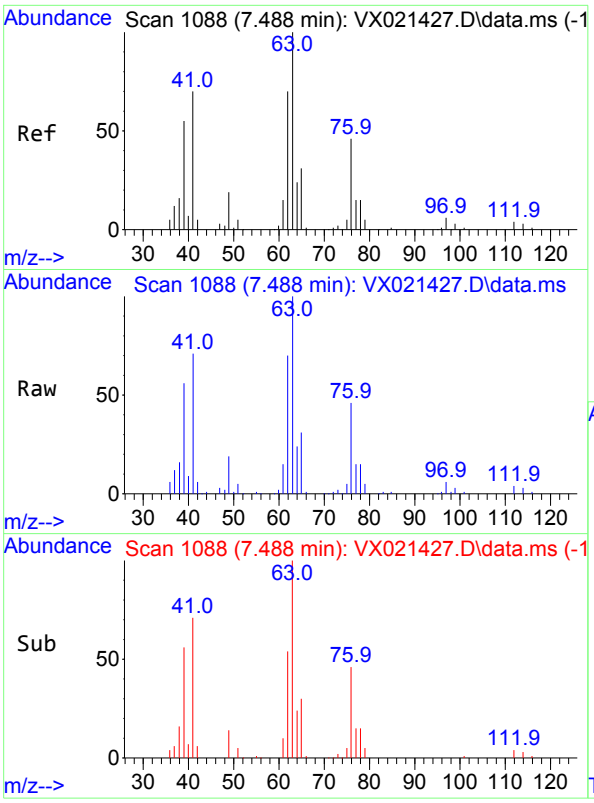
Tgt Ion:130 Resp: 49191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 100.9 | 0.0 | 198.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

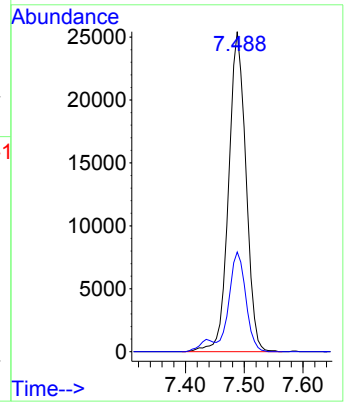
**Manual Integrations APPROVED**
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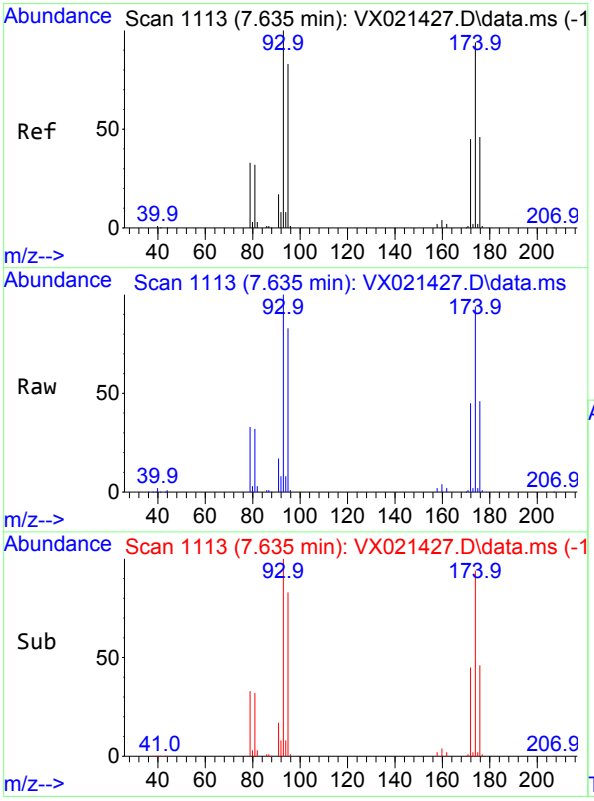



#45
1,2-Dichloropropane
Concen: 52.51 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 63 Resp: 51949

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.2 | 25.7 | 38.5 |

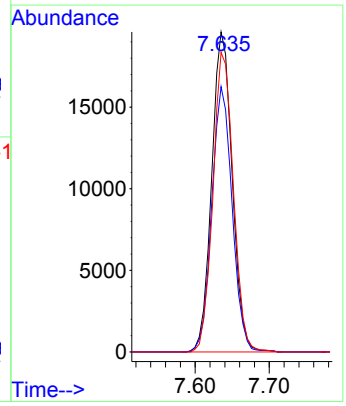



#46
Dibromomethane
Concen: 51.84 ug/l
RT: 7.635 min Scan# 1113
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

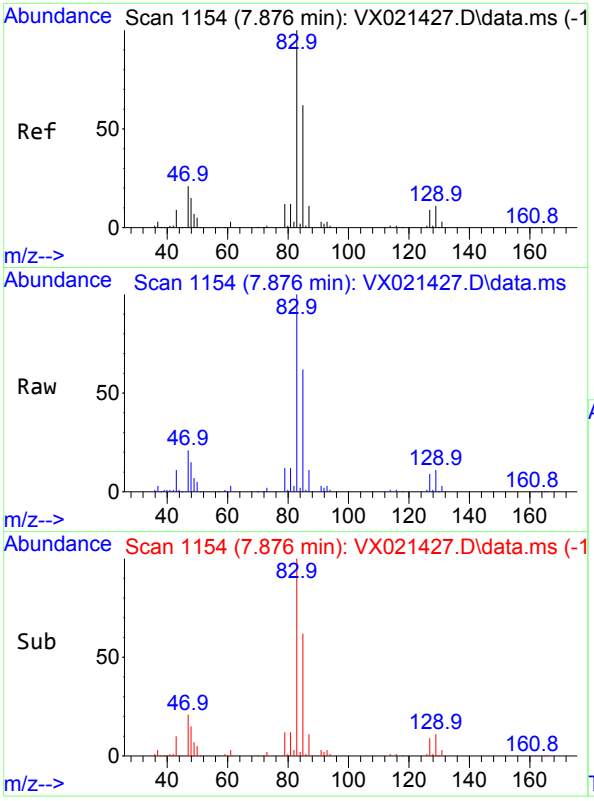
Tgt Ion: 93 Resp: 37639

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.5 | 66.8 | 100.2 |
| 174 | 93.3 | 83.1 | 124.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

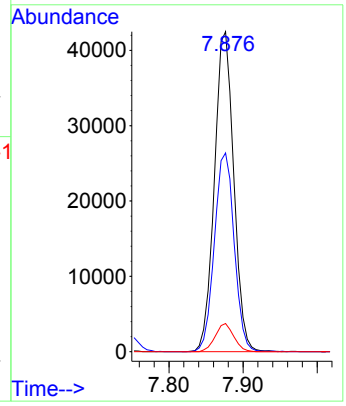
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

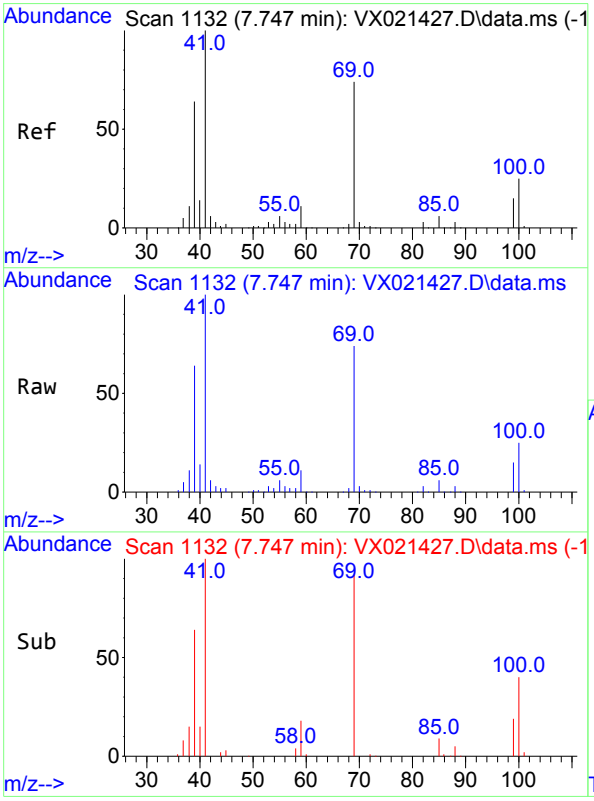



#47
Bromodichloromethane
Concen: 53.05 ug/l
RT: 7.876 min Scan# 1154
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 83 Resp: 77074

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.1 | 51.4 | 77.0 |
| 127 | 8.8 | 6.8 | 10.2 |

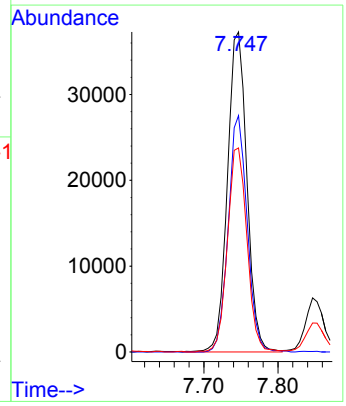



#48
Methyl methacrylate
Concen: 50.52 ug/l
RT: 7.747 min Scan# 1132
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

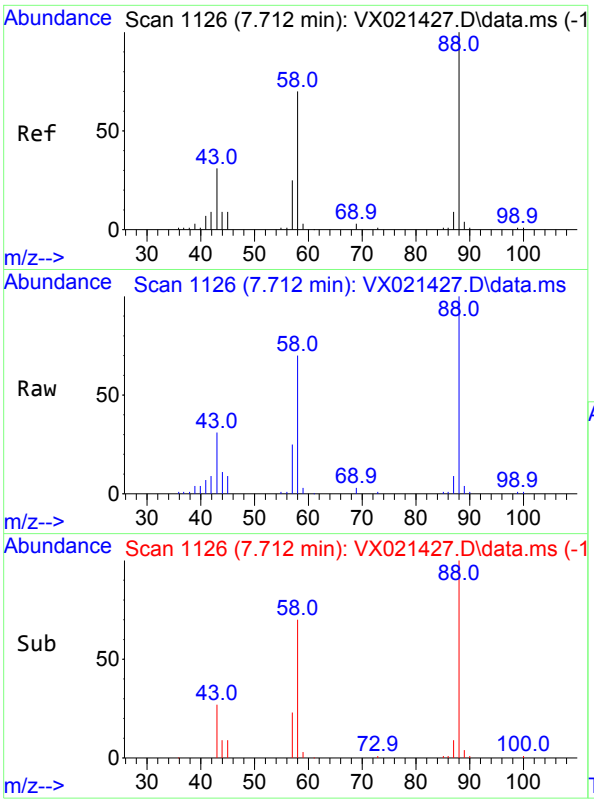
Tgt Ion: 41 Resp: 68025

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 71.9 | 76.0 | 114.0# |
| 39 | 64.1 | 44.6 | 67.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

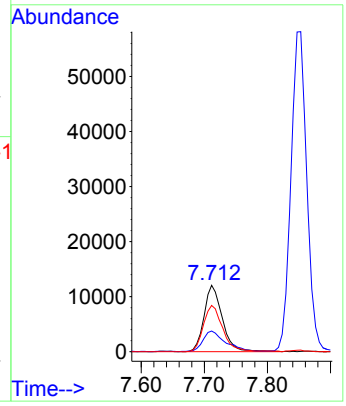
**Manual Integrations APPROVED**
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3/25/2021 9:49:31 AM

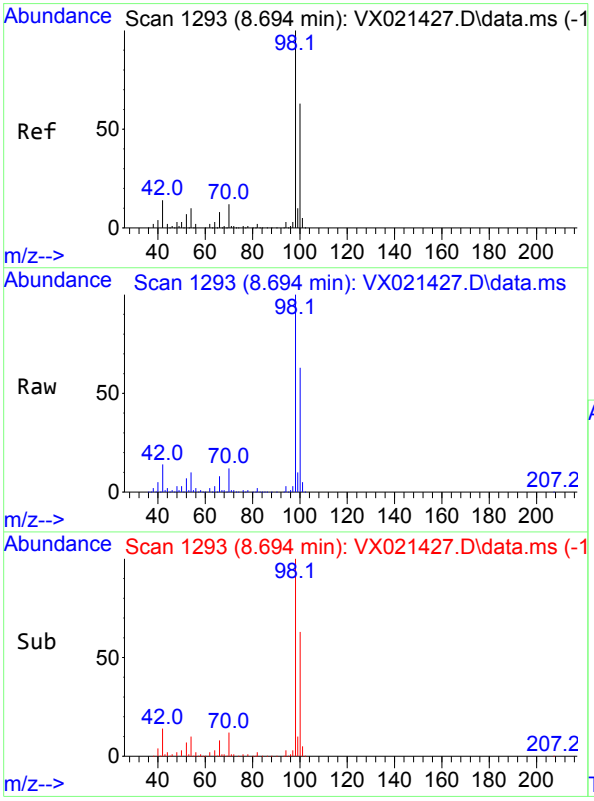



#49
1,4-Dioxane
Concen: 962.58 ug/l
RT: 7.712 min Scan# 1126
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 88 Resp: 24037

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 39.5 | 23.2 | 34.8# |
| 58 | 73.9 | 55.0 | 82.4 |

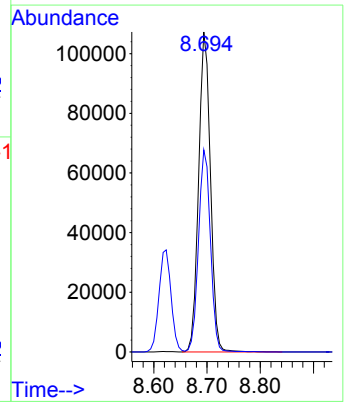



#50
Toluene-d8
Concen: 50.01 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

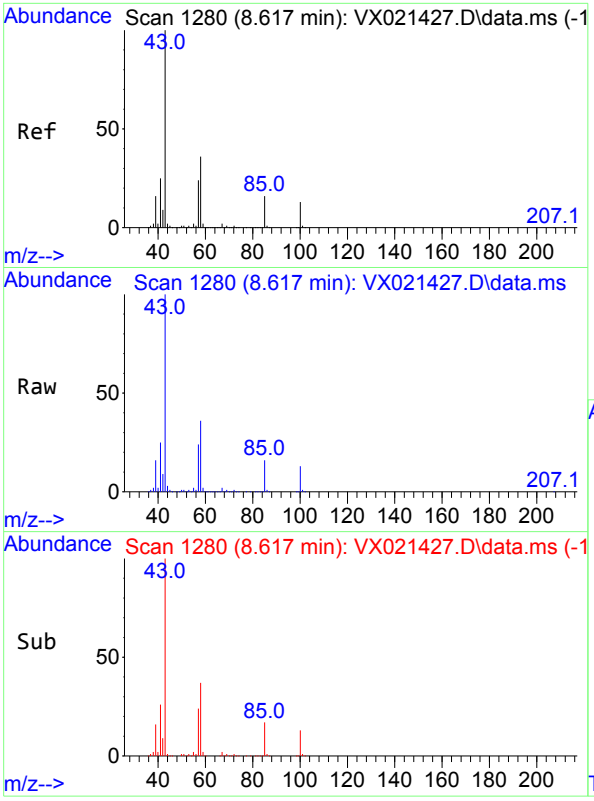
Tgt Ion: 98 Resp: 164814

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.5 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

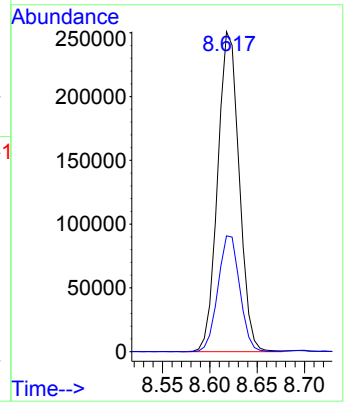
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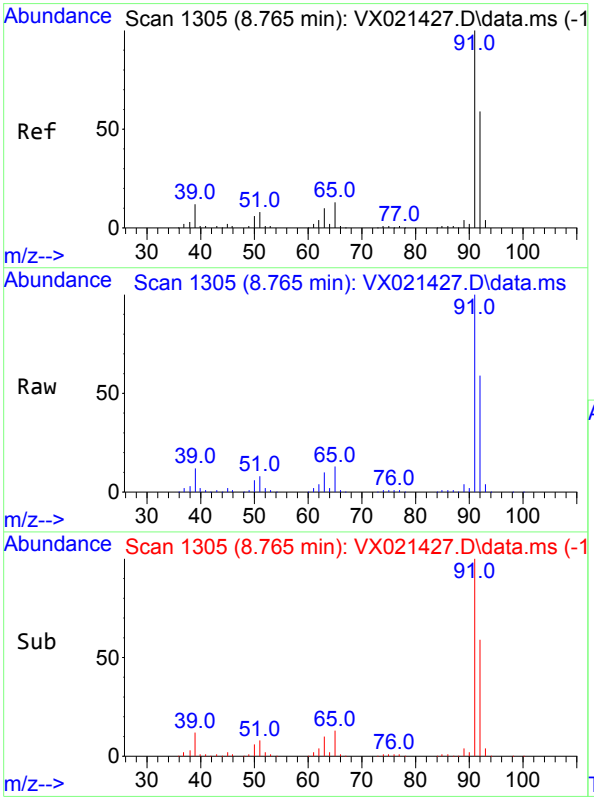



#51
4-Methyl-2-Pentanone
Concen: 267.13 ug/l
RT: 8.617 min Scan# 1280
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 43 Resp: 396108

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.7 | 35.4 | 53.0 |

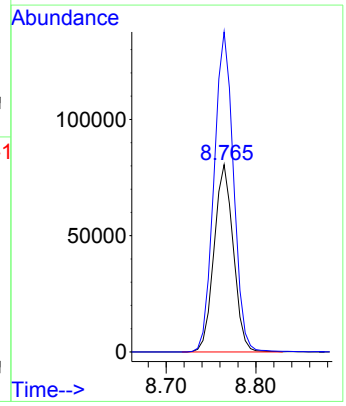



#52
Toluene
Concen: 52.86 ug/l
RT: 8.765 min Scan# 1305
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

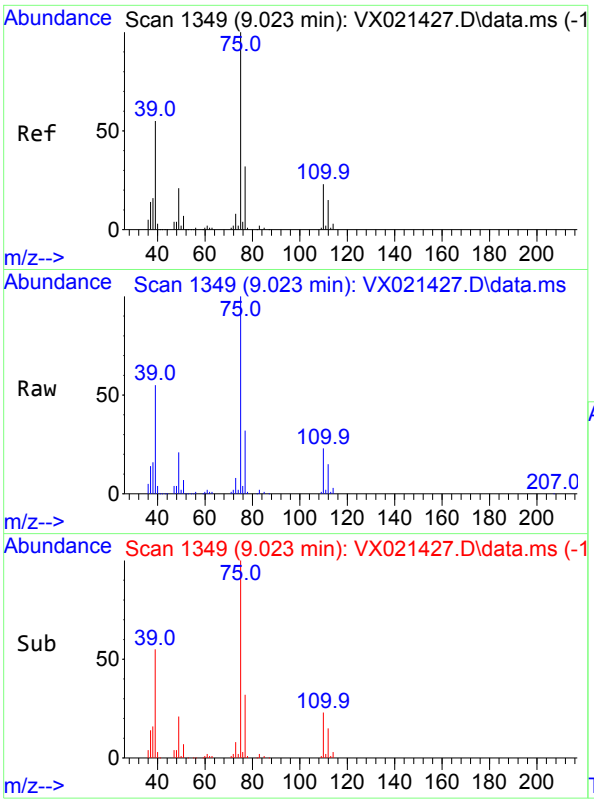
Tgt Ion: 92 Resp: 120203

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.0 | 137.1 | 205.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

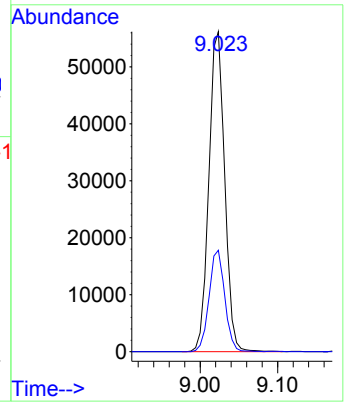
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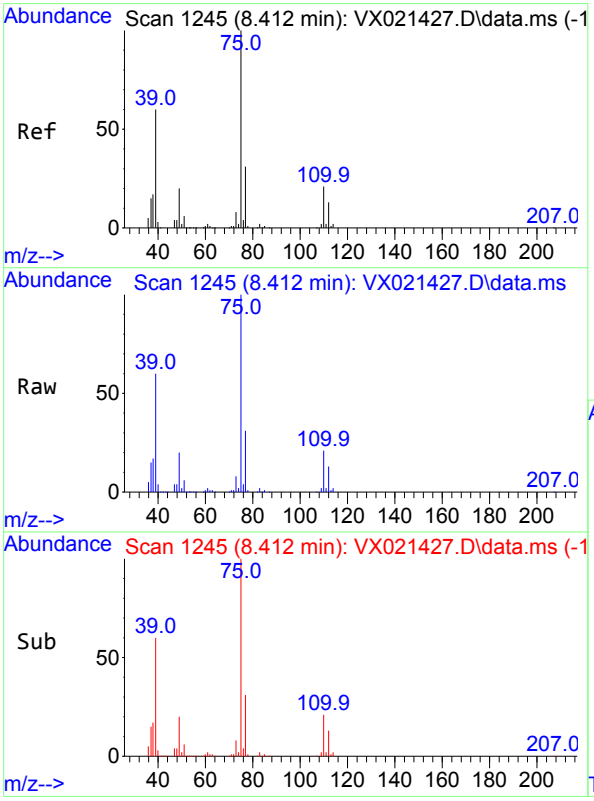



#53
t-1,3-Dichloropropene
Concen: 51.73 ug/l
RT: 9.023 min Scan# 1349
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 75 Resp: 79493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.7 | 24.9 | 37.3 |

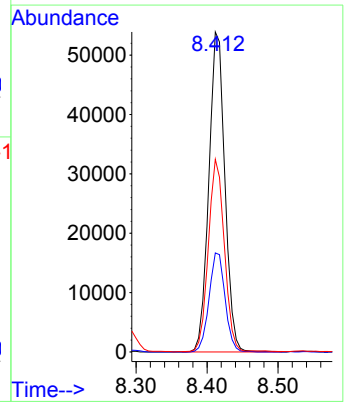



#54
cis-1,3-Dichloropropene
Concen: 51.83 ug/l
RT: 8.412 min Scan# 1245
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

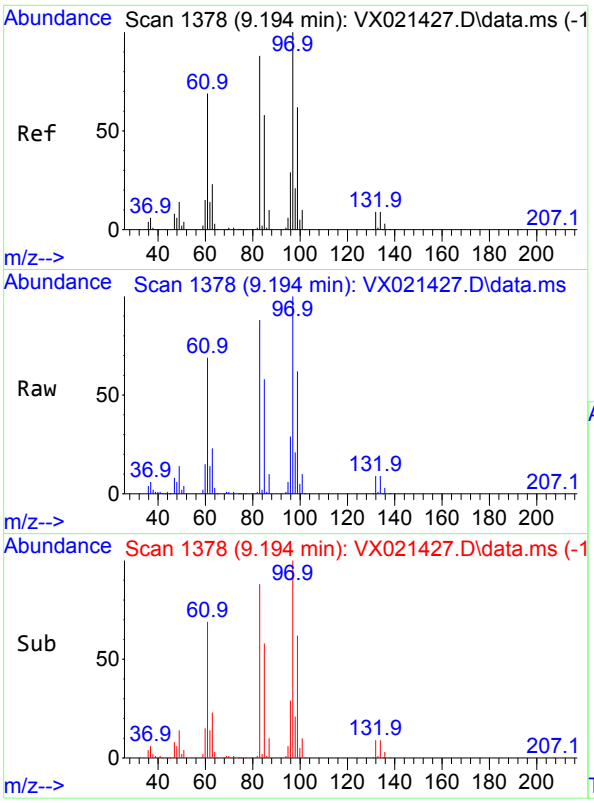
Tgt Ion: 75 Resp: 84789

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.0 | 25.7 | 38.5 |
| 39 | 60.1 | 35.1 | 52.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

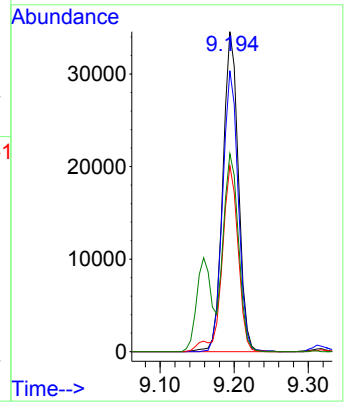
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3/25/2021 9:49:31 AM

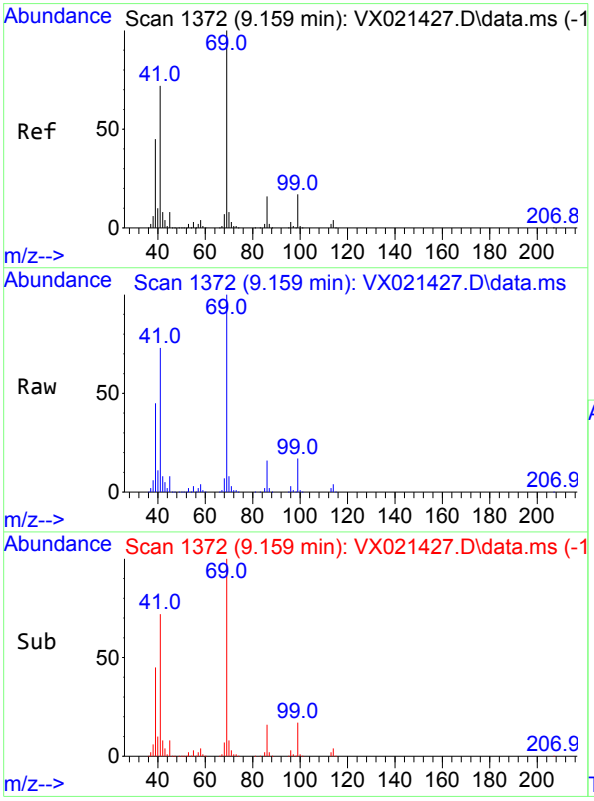



#55
1,1,2-Trichloroethane
Concen: 53.78 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 97 Resp: 50252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.8 | 69.3 | 103.9 |
| 85 | 58.1 | 44.3 | 66.5 |
| 99 | 61.9 | 50.3 | 75.5 |

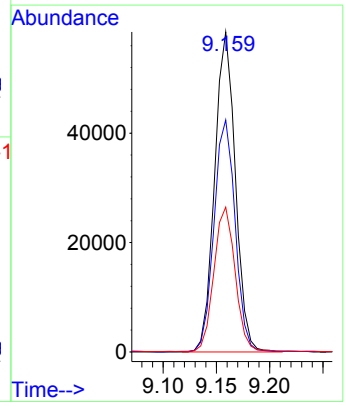



#56
Ethyl methacrylate
Concen: 52.83 ug/l
RT: 9.159 min Scan# 1372
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

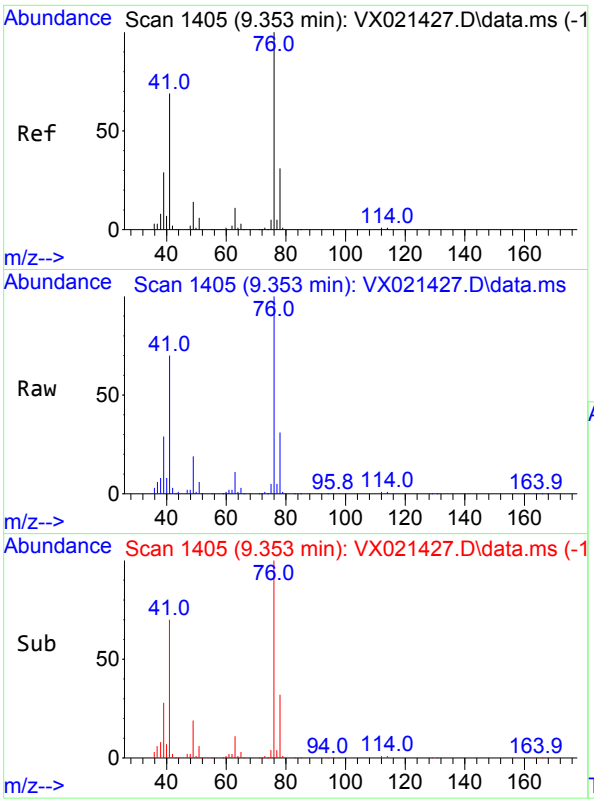
Tgt Ion: 69 Resp: 79045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 74.7 | 46.8 | 70.2# |
| 39 | 46.3 | 24.7 | 37.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

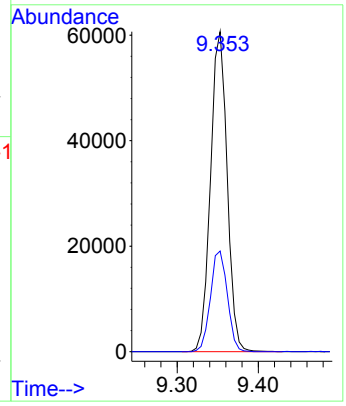
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

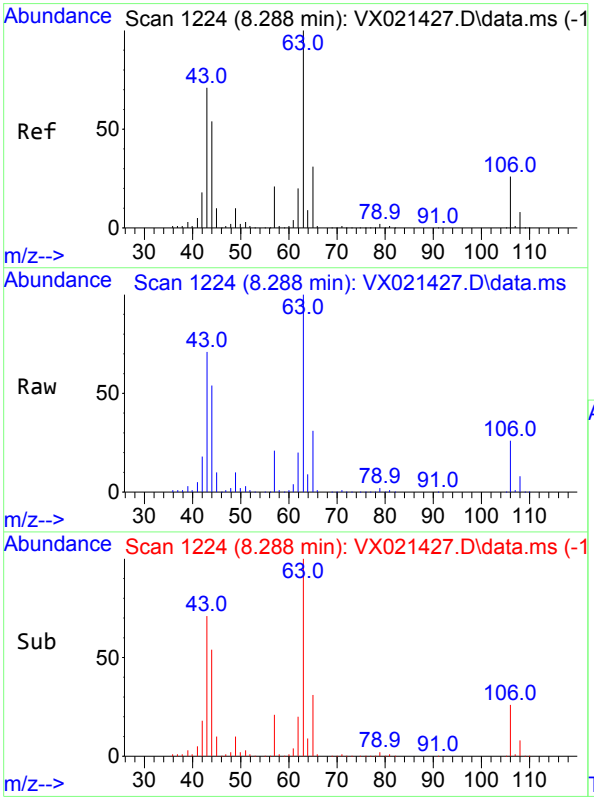



#57
1,3-Dichloropropane
Concen: 52.89 ug/l
RT: 9.353 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 76 Resp: 86056

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.0 | 26.2 | 39.2 |

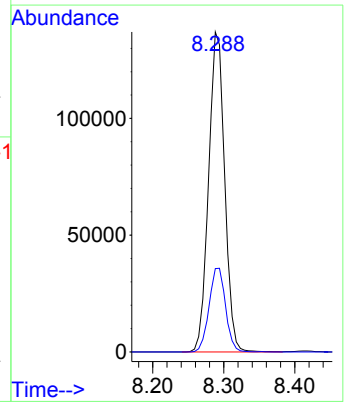



#58
2-Chloroethyl Vinyl ether
Concen: 262.06 ug/l
RT: 8.288 min Scan# 1224
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

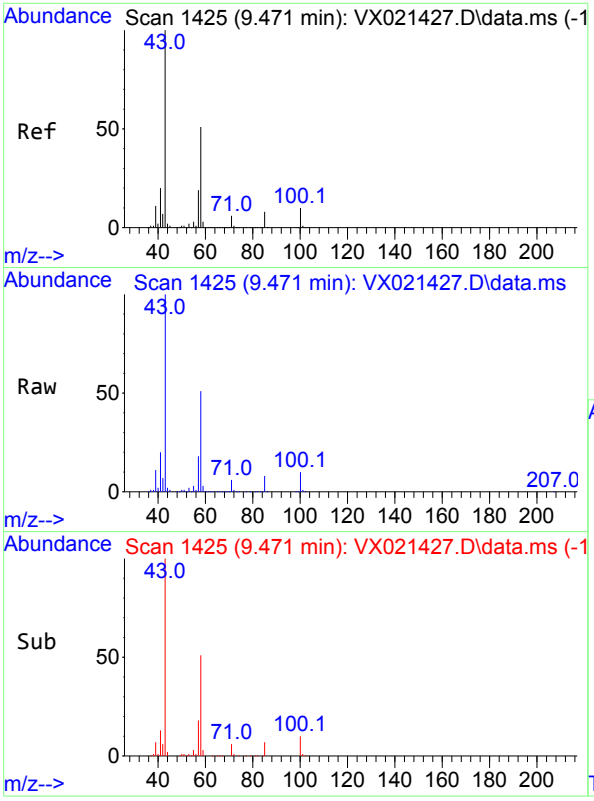
Tgt Ion: 63 Resp: 215967

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.8 | 23.5 | 35.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

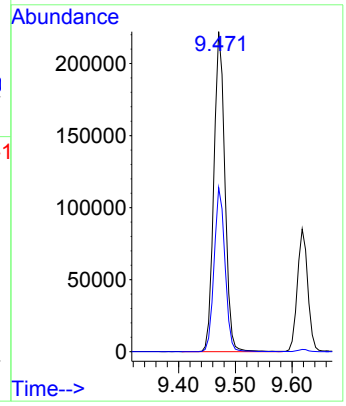
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

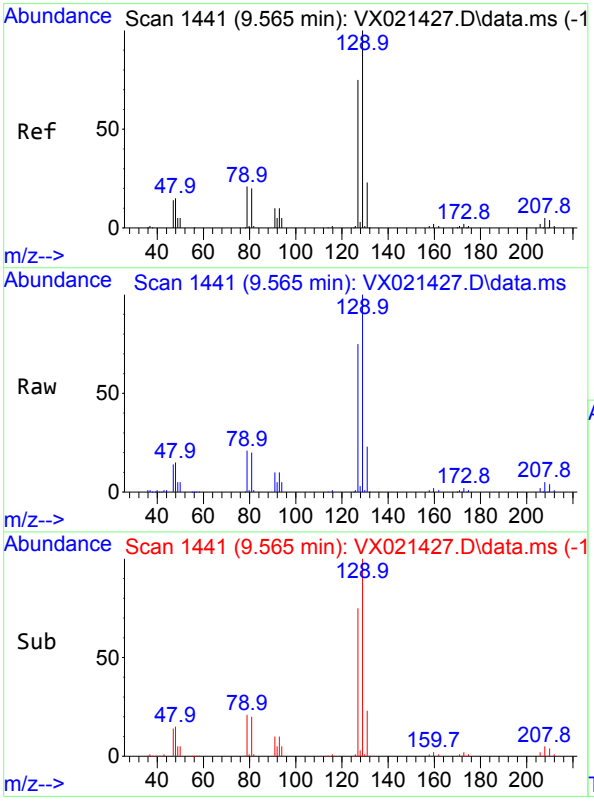



#59
2-Hexanone
Concen: 268.51 ug/l
RT: 9.471 min Scan# 1425
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 43 Resp: 297877

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 50.6 | 30.9 | 92.8 |

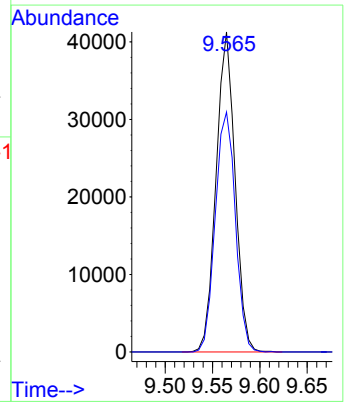



#60
Dibromochloromethane
Concen: 54.04 ug/l
RT: 9.565 min Scan# 1441
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

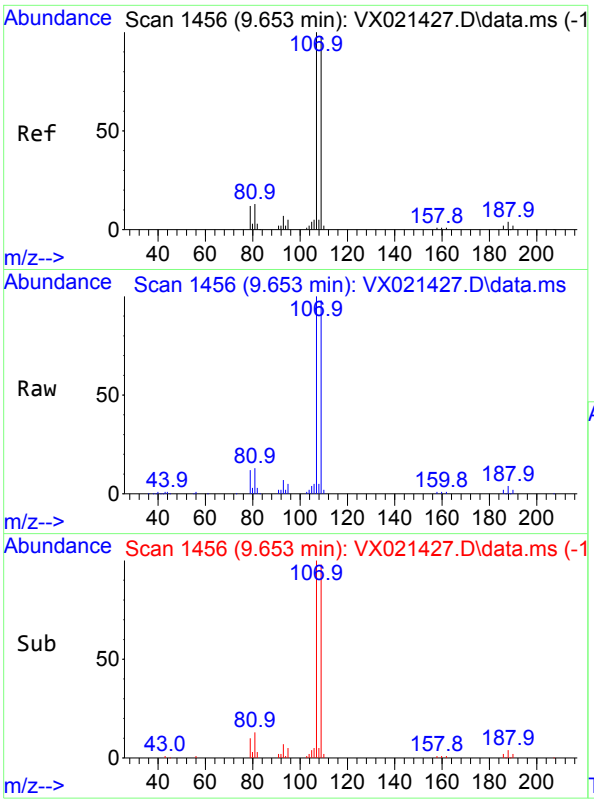
Tgt Ion:129 Resp: 57413

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 79.5 | 38.4 | 115.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

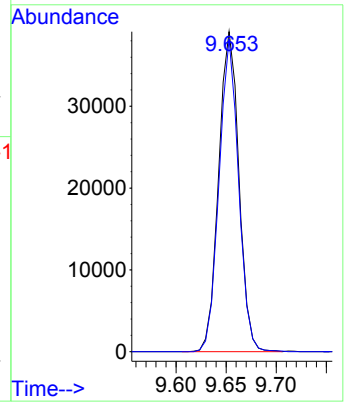
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

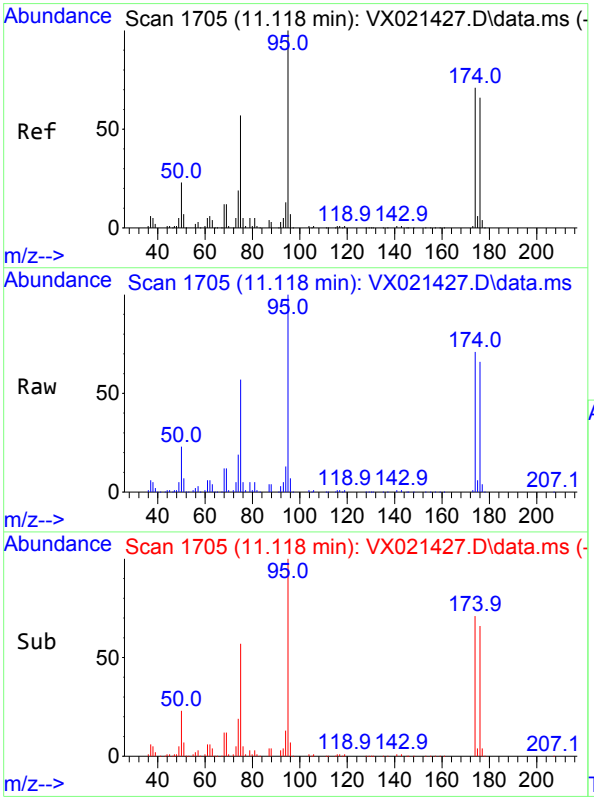



#61
1,2-Dibromoethane
Concen: 53.30 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:107 Resp: 54783

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.0 | 75.8 | 113.6 |

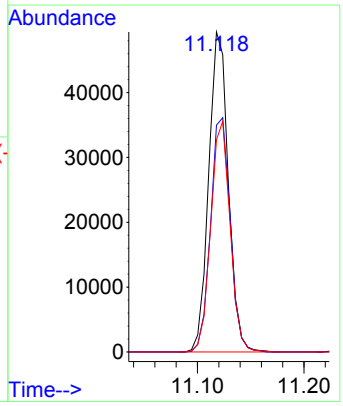



#62
4-Bromofluorobenzene
Concen: 49.55 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

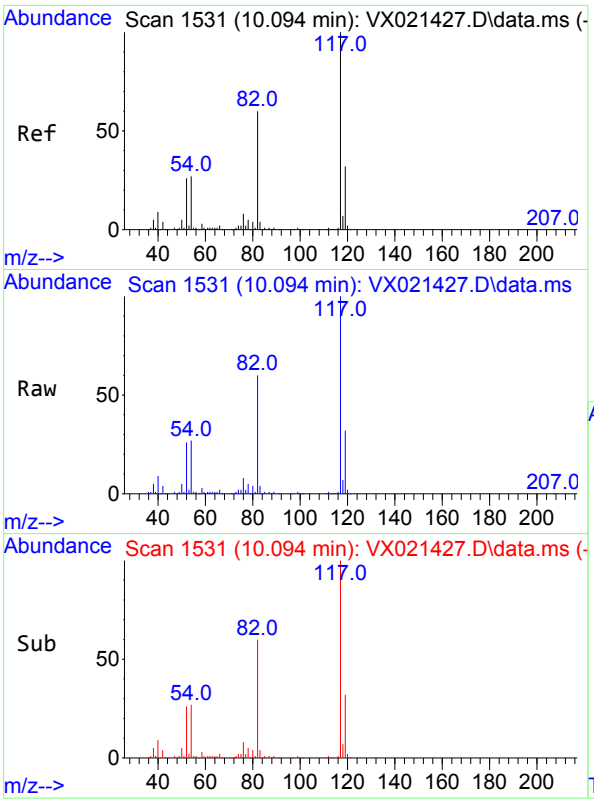
Tgt Ion: 95 Resp: 63095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.9 | 0.0 | 154.6 |
| 176 | 71.1 | 0.0 | 155.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

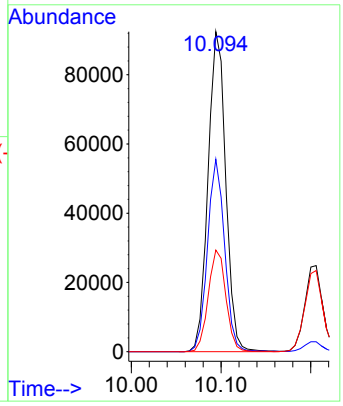
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

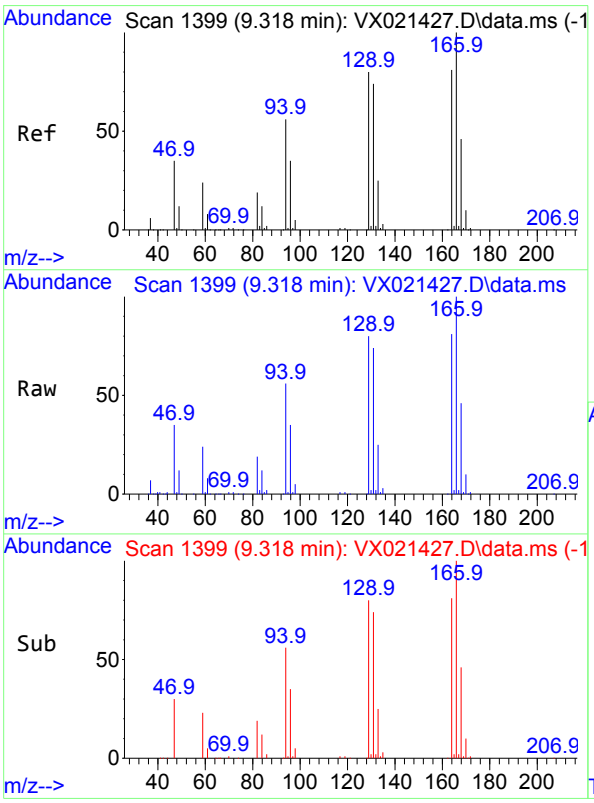



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:117 Resp: 126559

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.1 | 47.4 | 71.2 |
| 119 | 31.7 | 26.6 | 39.8 |

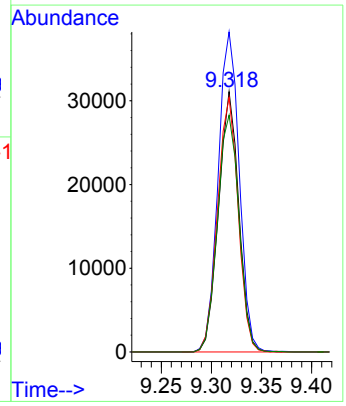



#64
Tetrachloroethene
Concen: 46.64 ug/l
RT: 9.318 min Scan# 1399
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

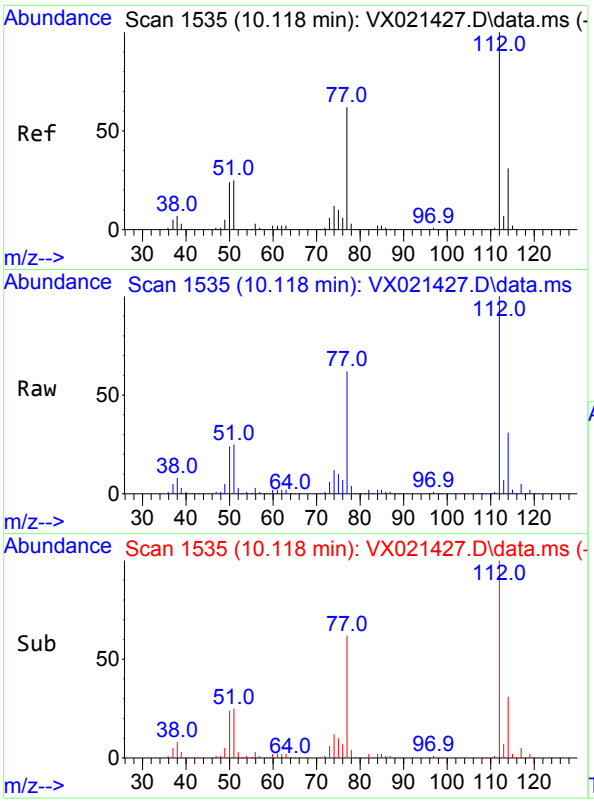
Tgt Ion:164 Resp: 43656

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 122.9 | 103.4 | 155.2 |
| 129 | 97.8 | 70.8 | 106.2 |
| 131 | 90.9 | 72.5 | 108.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

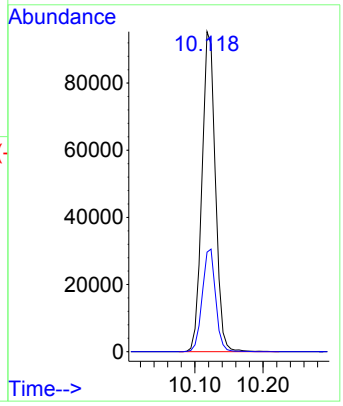
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

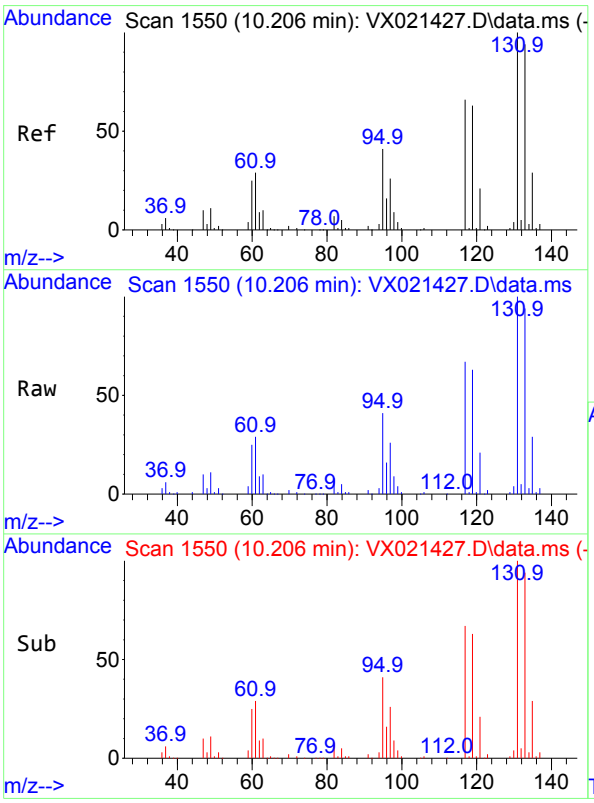



#65
Chlorobenzene
Concen: 50.00 ug/l
RT: 10.118 min Scan# 1535
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:112 Resp: 130192

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.1 | 25.8 | 38.6 |

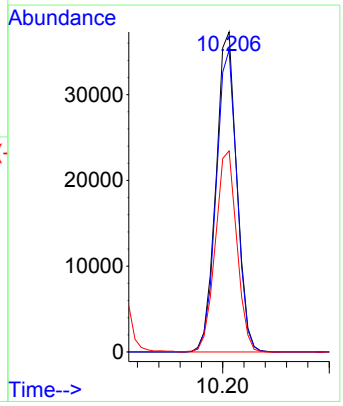



#66
1,1,1,2-Tetrachloroethane
Concen: 52.03 ug/l
RT: 10.206 min Scan# 1550
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

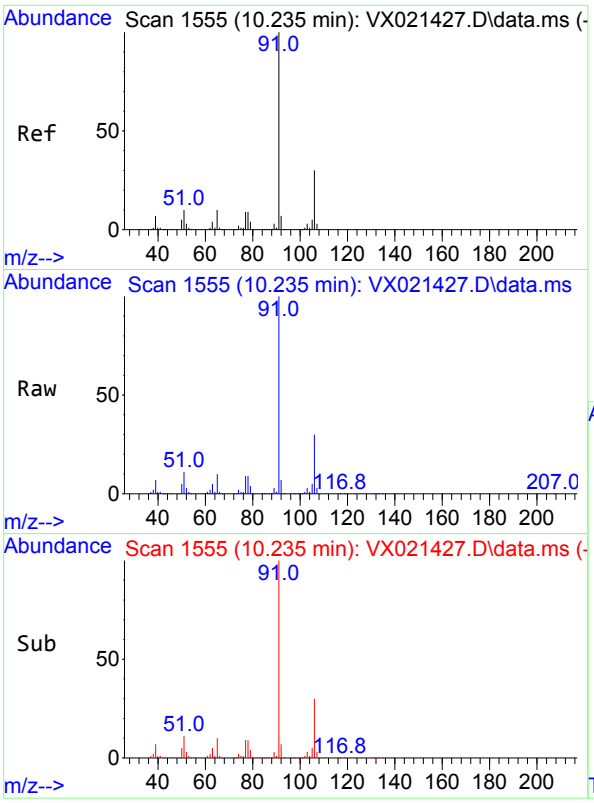
Tgt Ion:131 Resp: 50474

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.2 | 47.7 | 143.1 |
| 119 | 64.8 | 32.1 | 96.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

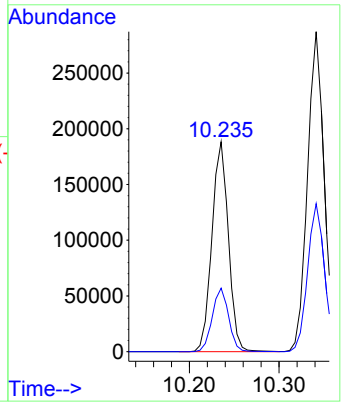
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

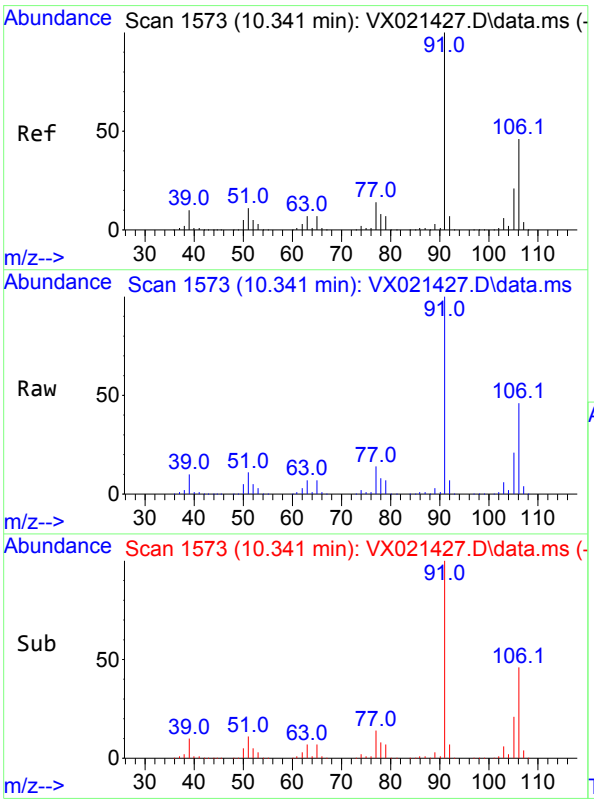



#67
Ethyl Benzene
Concen: 50.14 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 91 Resp: 240420

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.3 | 24.6 | 37.0 |

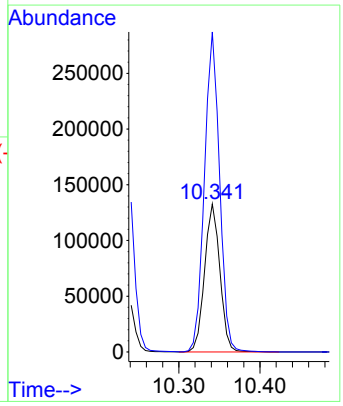



#68
m/p-Xylenes
Concen: 101.34 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

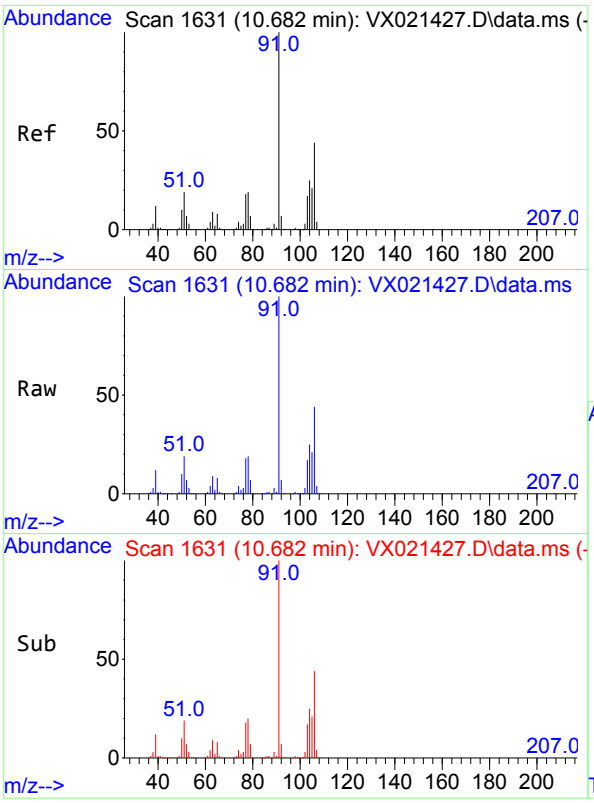
Tgt Ion:106 Resp: 173676

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 213.7 | 162.8 | 244.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

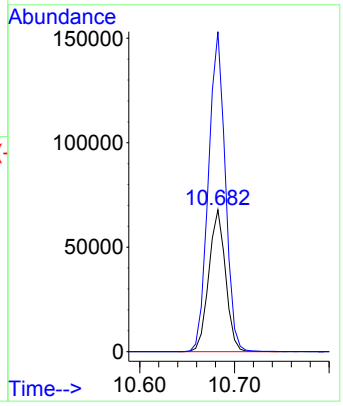
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

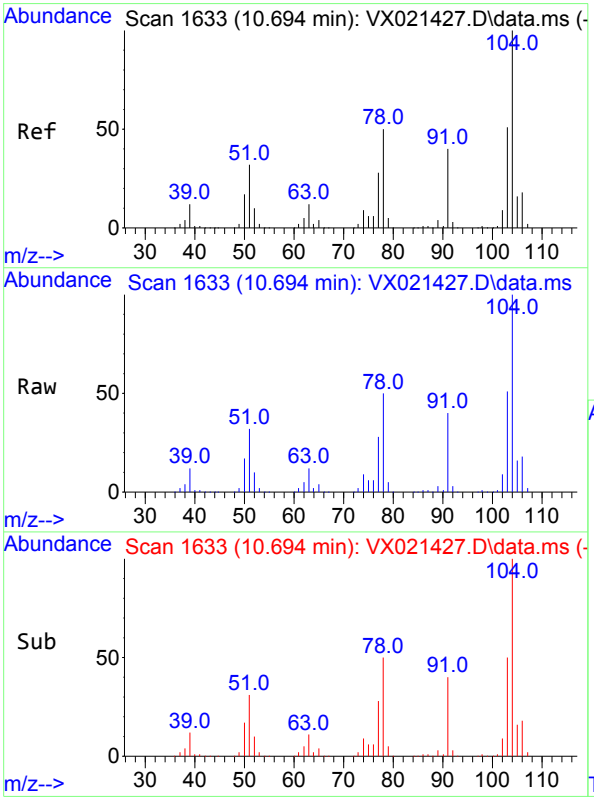



#69
o-Xylene
Concen: 50.16 ug/l
RT: 10.682 min Scan# 1631
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:106 Resp: 83473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 226.5 | 108.1 | 324.2 |

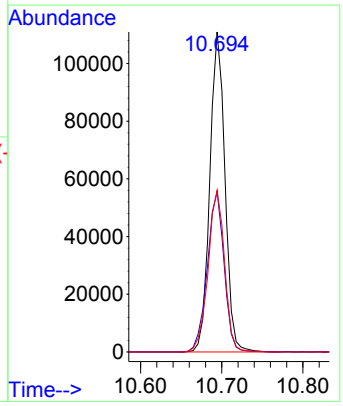



#70
Styrene
Concen: 51.17 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

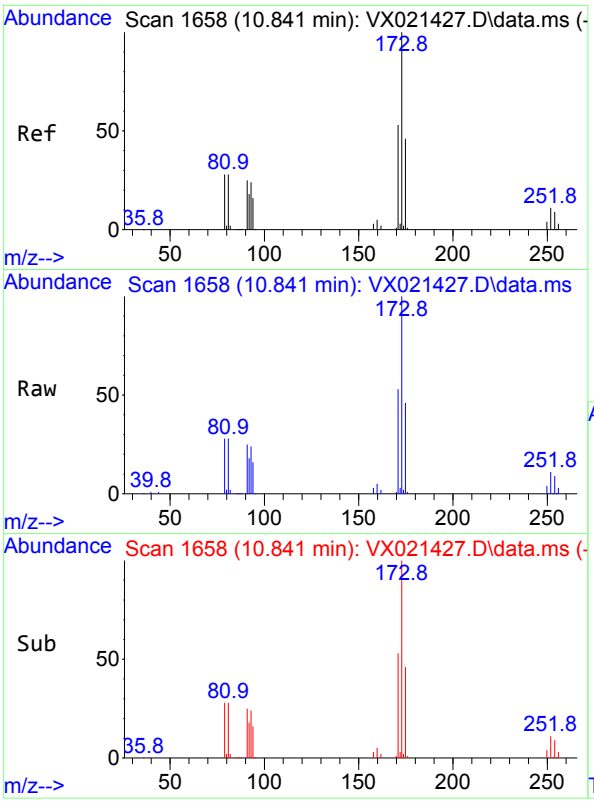
Tgt Ion:104 Resp: 143435

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 55.6 | 40.0 | 60.0 |
| 103 | 55.0 | 43.4 | 65.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

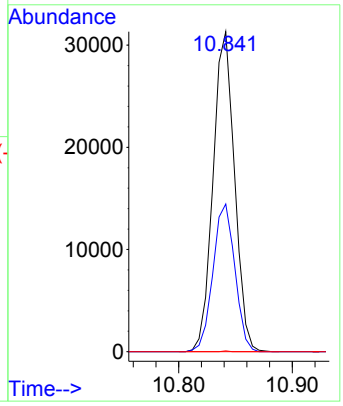
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

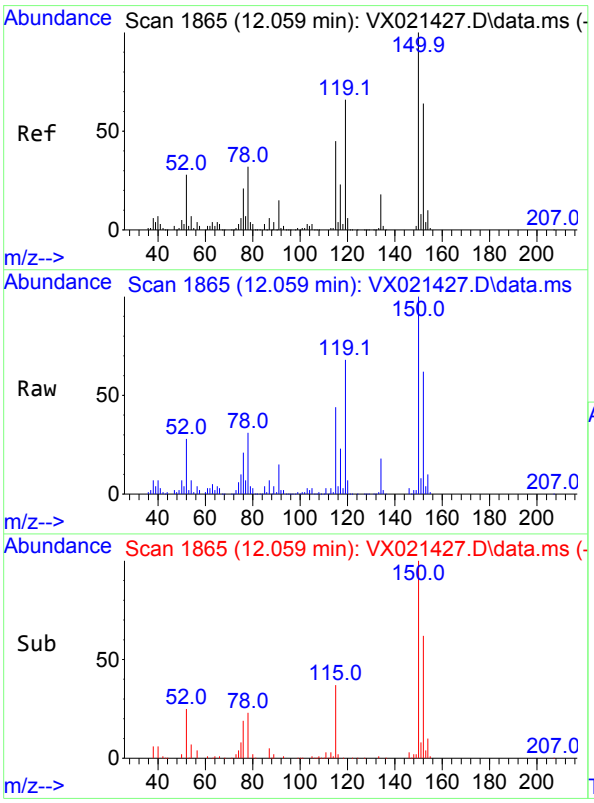



#71
Bromoform
Concen: 52.66 ug/l
RT: 10.841 min Scan# 1658
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:173 Resp: 41165

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 47.1 | 23.9 | 71.8 |
| 254 | 0.1 | 0.1 | 0.1# |

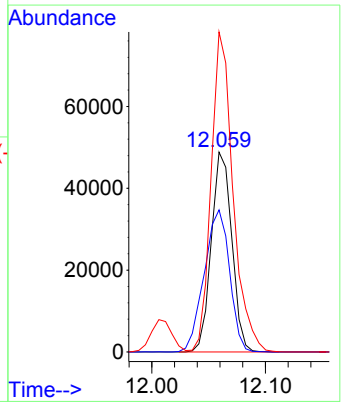



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

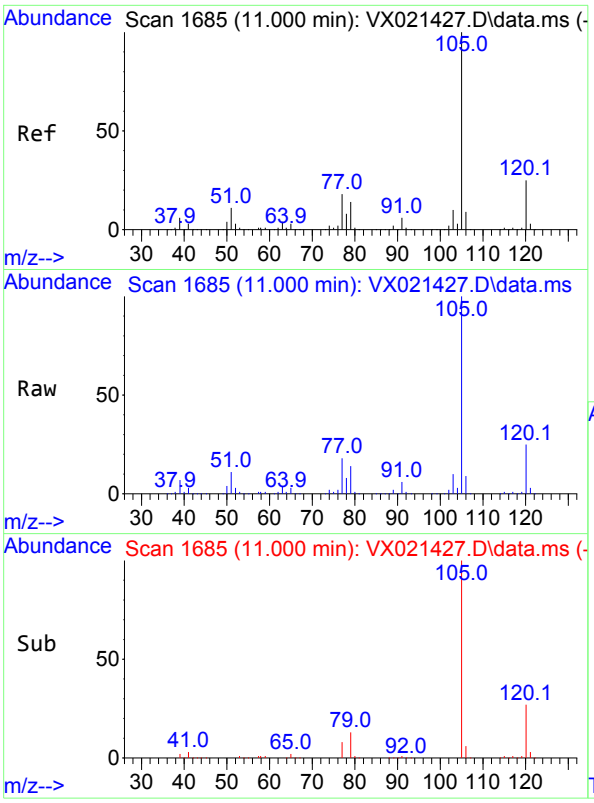
Tgt Ion:152 Resp: 61170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 87.9 | 41.1 | 123.3 |
| 150 | 171.2 | 0.0 | 349.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

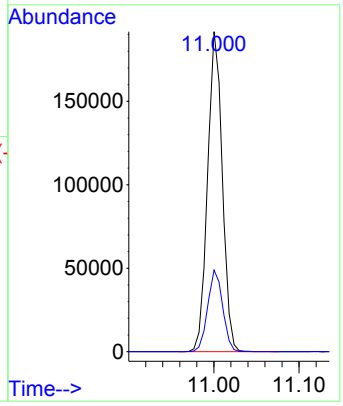
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

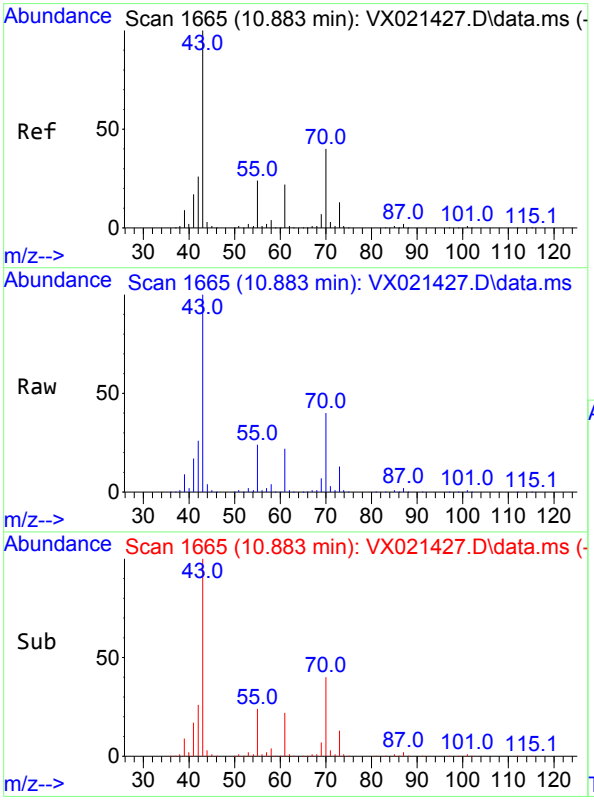



#73
Isopropylbenzene
Concen: 50.81 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:105 Resp: 229785

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.9 | 13.2 | 39.6 |

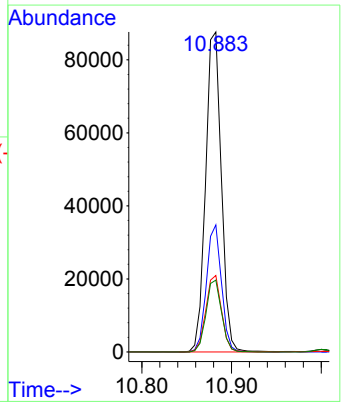



#74
N-amyl acetate
Concen: 47.20 ug/l
RT: 10.883 min Scan# 1665
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

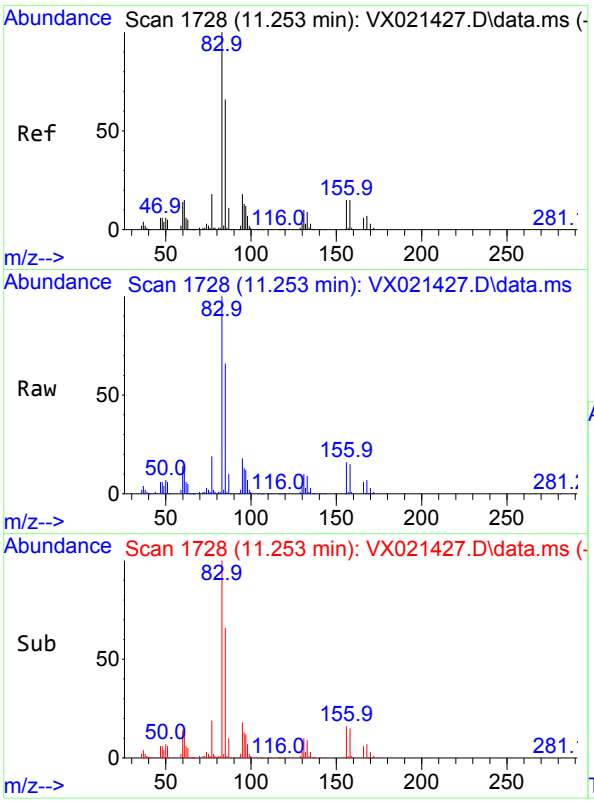
Tgt Ion: 43 Resp: 106766

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 38.0 | 39.0 | 58.6# |
| 55 | 23.9 | 21.5 | 32.3 |
| 61 | 22.2 | 22.1 | 33.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

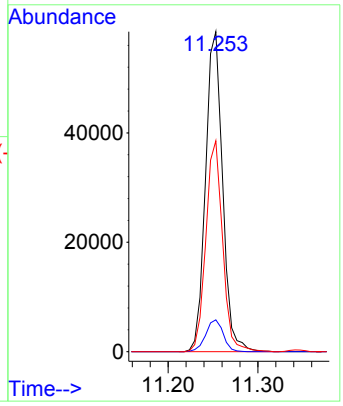
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

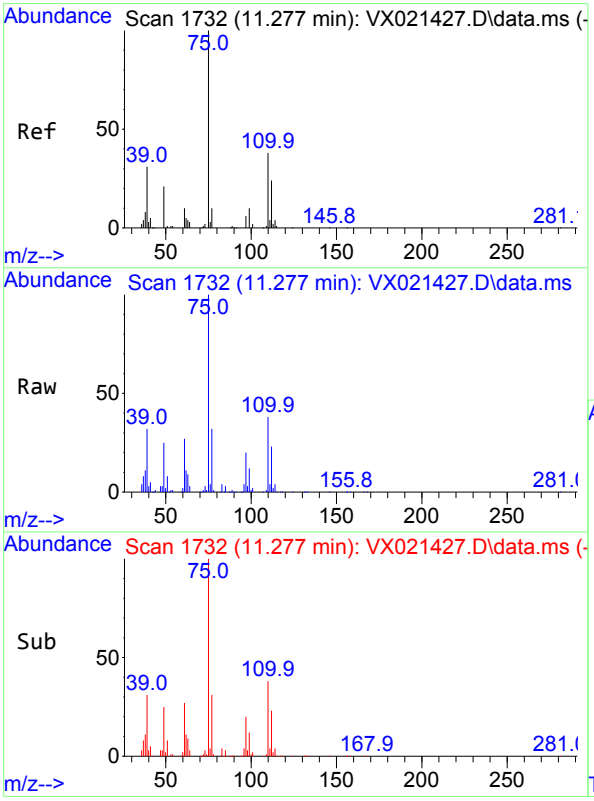



#75
1,1,2,2-Tetrachloroethane
Concen: 51.33 ug/l
RT: 11.253 min Scan# 1728
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 83 Resp: 77090

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.2 | 5.1 | 15.2 |
| 85 | 64.8 | 31.8 | 95.4 |

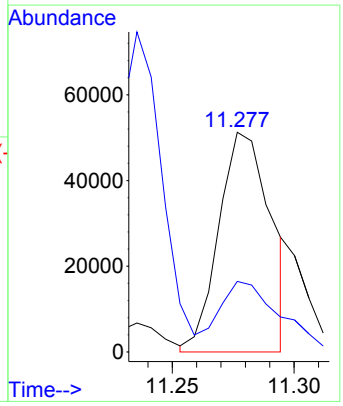



#76
1,2,3-Trichloropropane
Concen: 52.42 ug/l m
RT: 11.277 min Scan# 1732
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

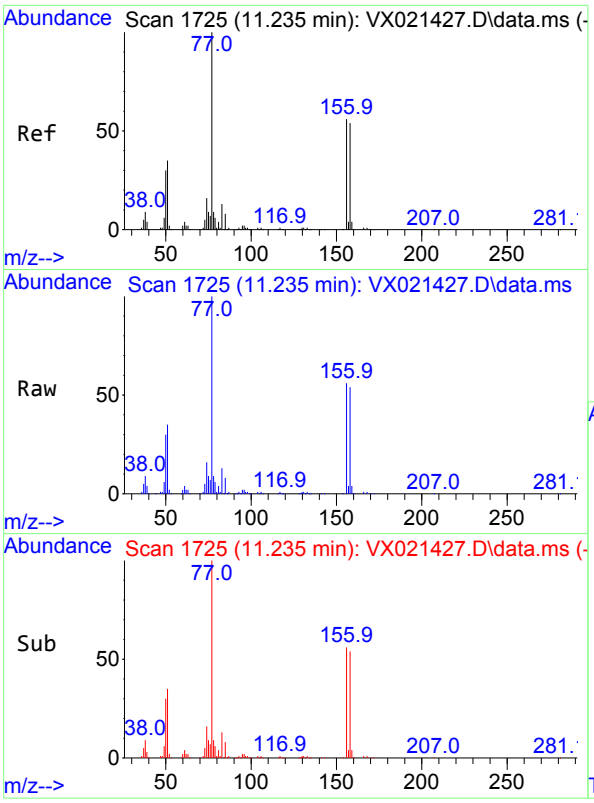
Tgt Ion: 75 Resp: 75866

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 38.1 | 19.1 | 57.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

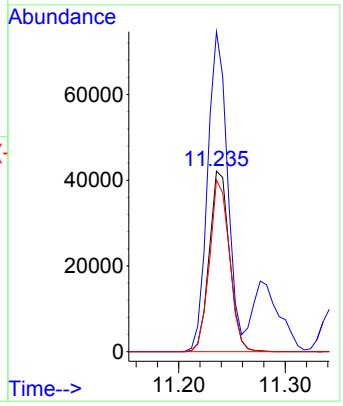
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

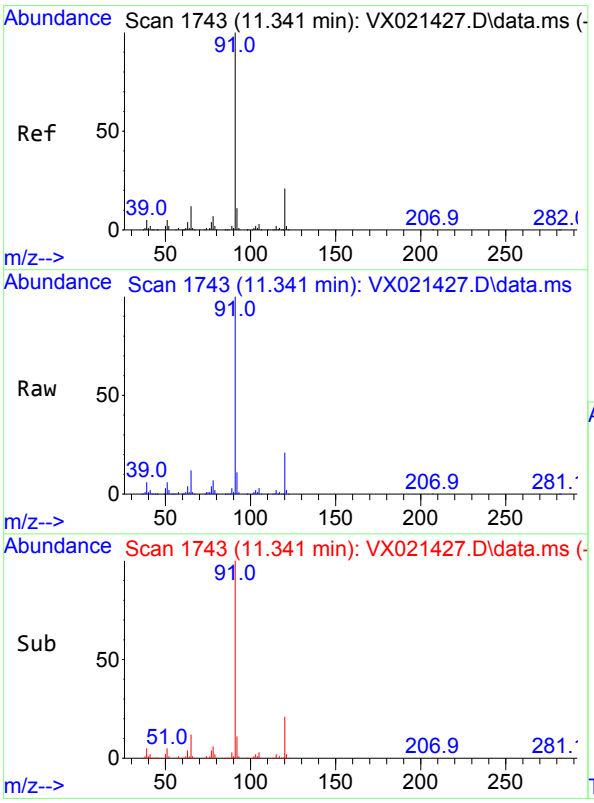



#77
Bromobenzene
Concen: 51.38 ug/l
RT: 11.235 min Scan# 1725
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:156 Resp: 55344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 174.5 | 82.8 | 248.6 |
| 158 | 94.2 | 49.1 | 147.4 |

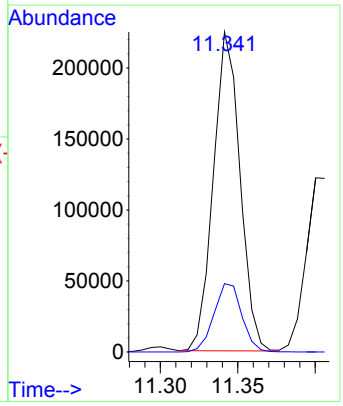



#78
n-propylbenzene
Concen: 50.76 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

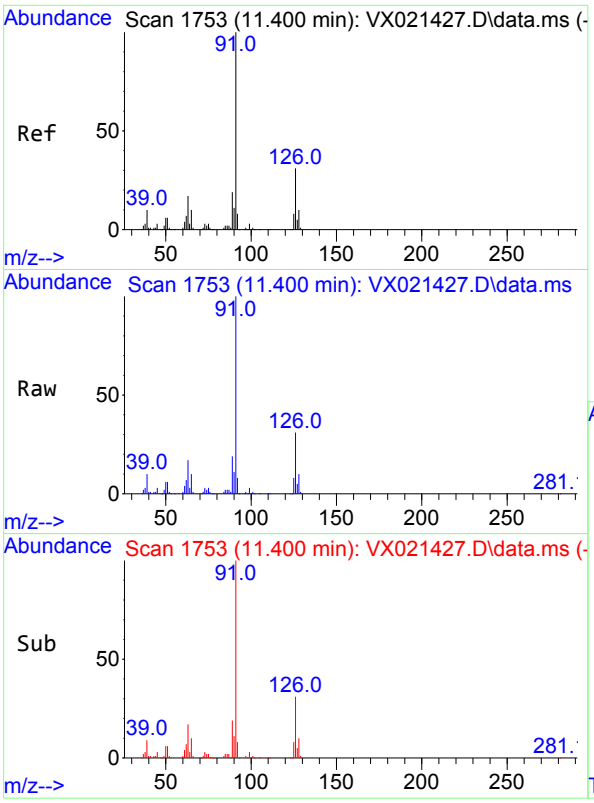
Tgt Ion: 91 Resp: 268161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.5 | 11.5 | 34.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

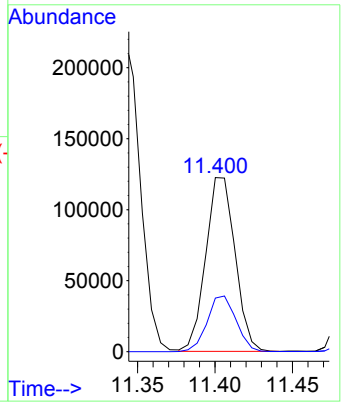
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

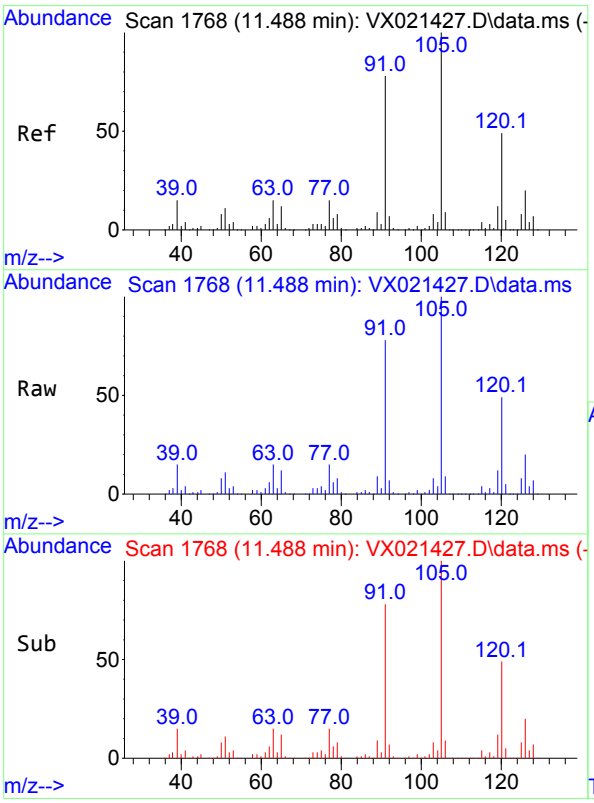



#79
2-Chlorotoluene
Concen: 50.26 ug/l
RT: 11.400 min Scan# 1753
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 91 Resp: 161411

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.7 | 16.6 | 49.8 |

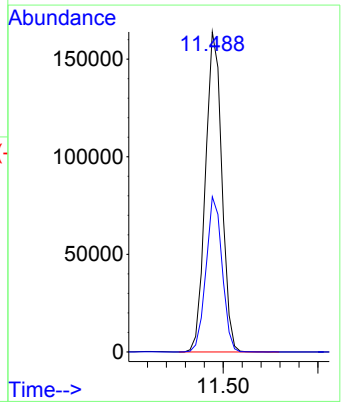



#80
1,3,5-Trimethylbenzene
Concen: 51.40 ug/l
RT: 11.488 min Scan# 1768
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

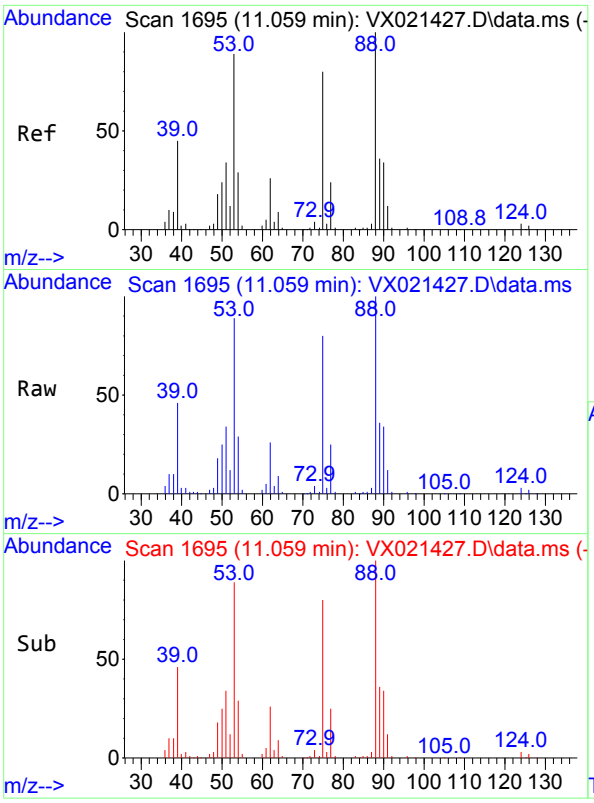
Tgt Ion:105 Resp: 196451

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.8 | 23.8 | 71.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

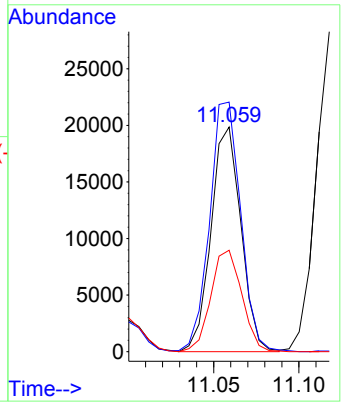
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

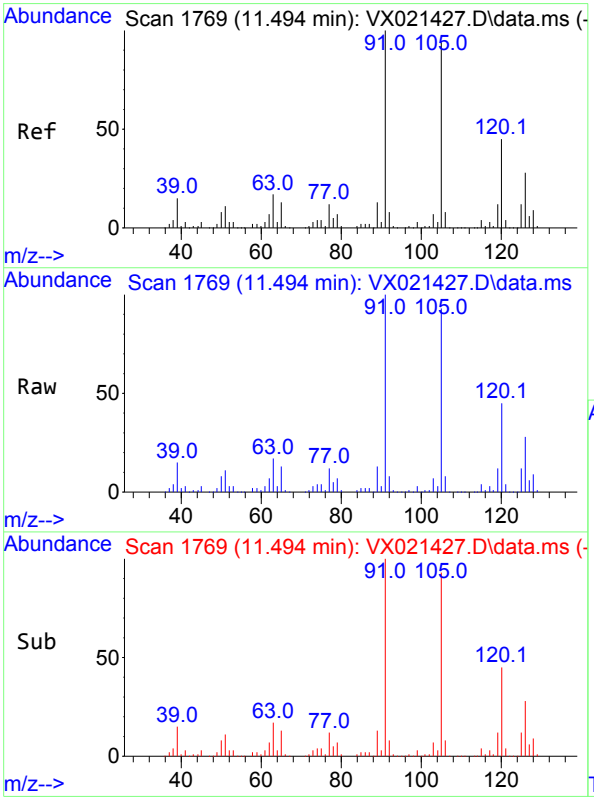



#81
trans-1,4-Dichloro-2-butene
Concen: 47.39 ug/l
RT: 11.059 min Scan# 1695
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 75 Resp: 24311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 115.4 | 74.5 | 111.7# |
| 89 | 46.7 | 37.9 | 56.9 |

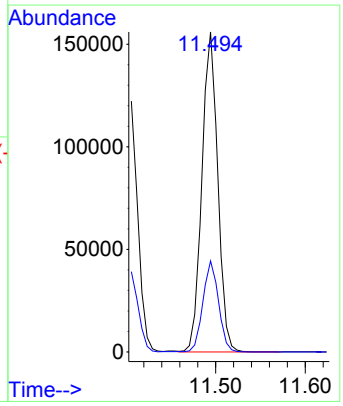



#82
4-Chlorotoluene
Concen: 50.54 ug/l
RT: 11.494 min Scan# 1769
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

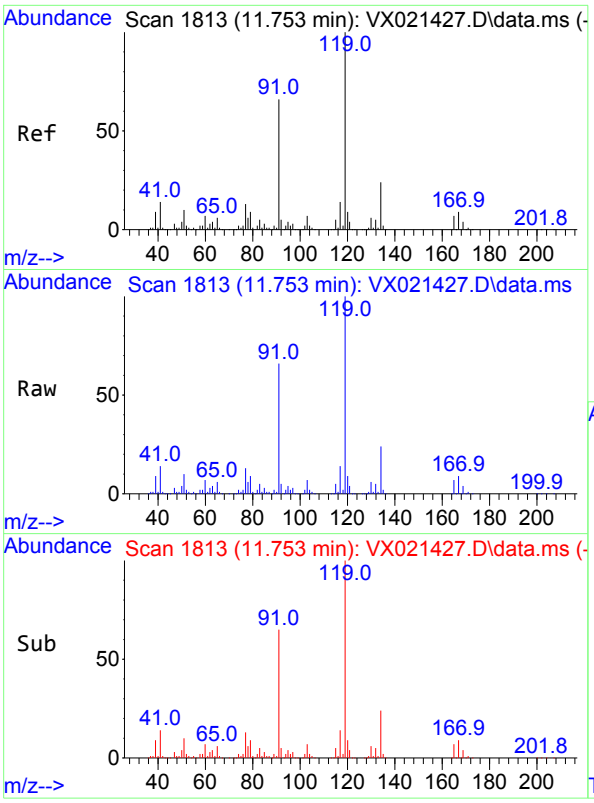
Tgt Ion: 91 Resp: 191248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.0 | 14.9 | 44.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

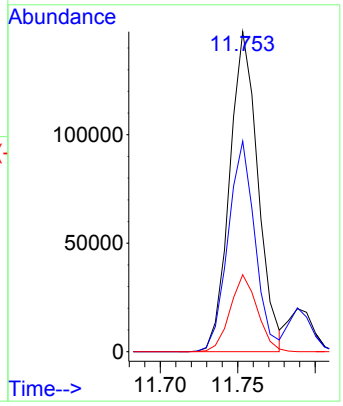
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

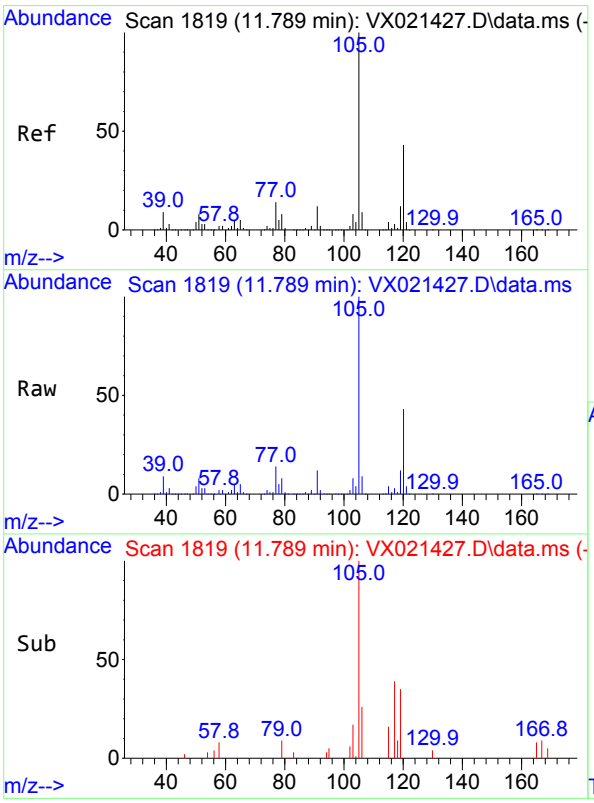



#83
tert-Butylbenzene
Concen: 51.34 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:119 Resp: 187402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 62.7 | 27.9 | 83.7 |
| 134 | 23.1 | 11.3 | 33.9 |

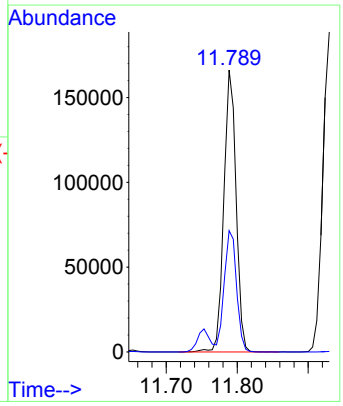



#84
1,2,4-Trimethylbenzene
Concen: 50.77 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

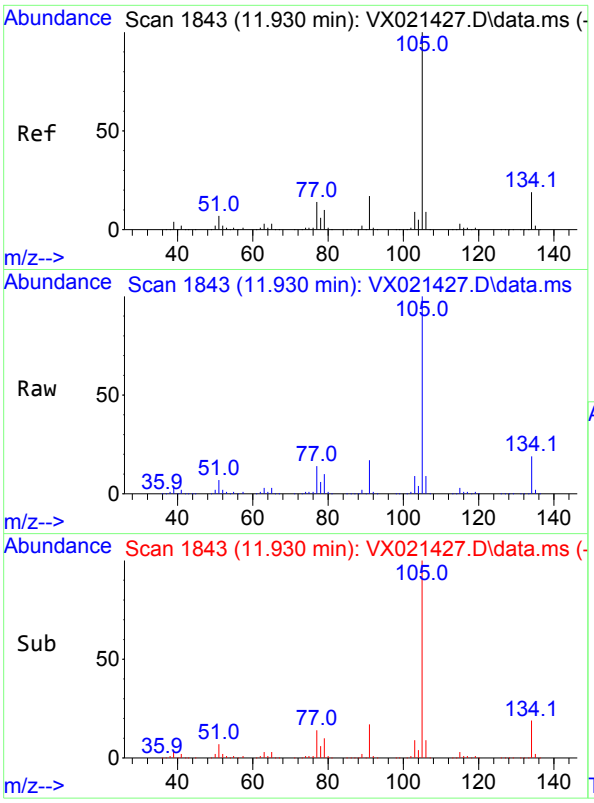
Tgt Ion:105 Resp: 197261

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.3 | 22.4 | 67.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

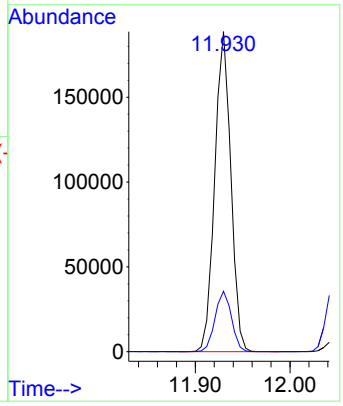
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

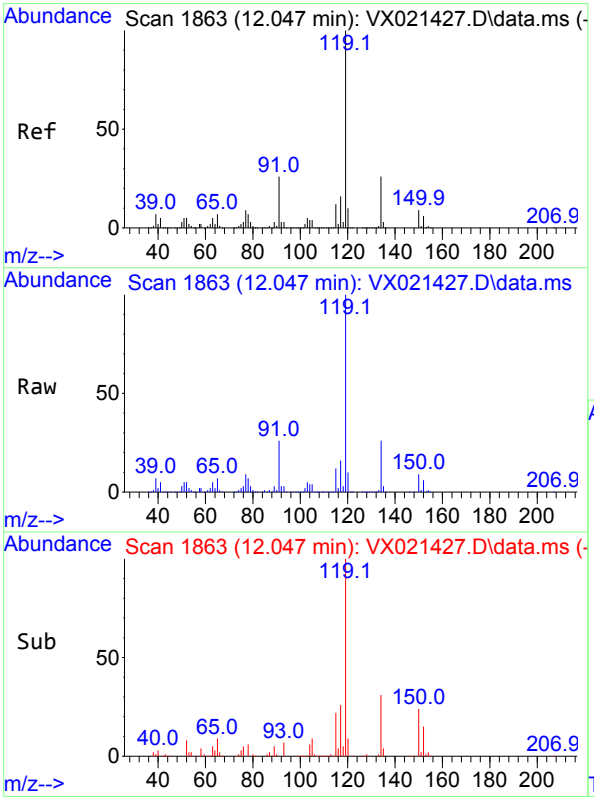



#85
sec-Butylbenzene
Concen: 51.60 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:105 Resp: 222152

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 10.0 | 29.8 |

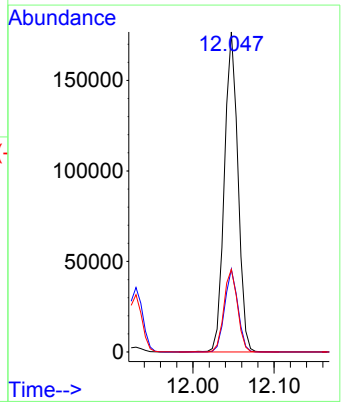



#86
p-Isopropyltoluene
Concen: 52.27 ug/l
RT: 12.047 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

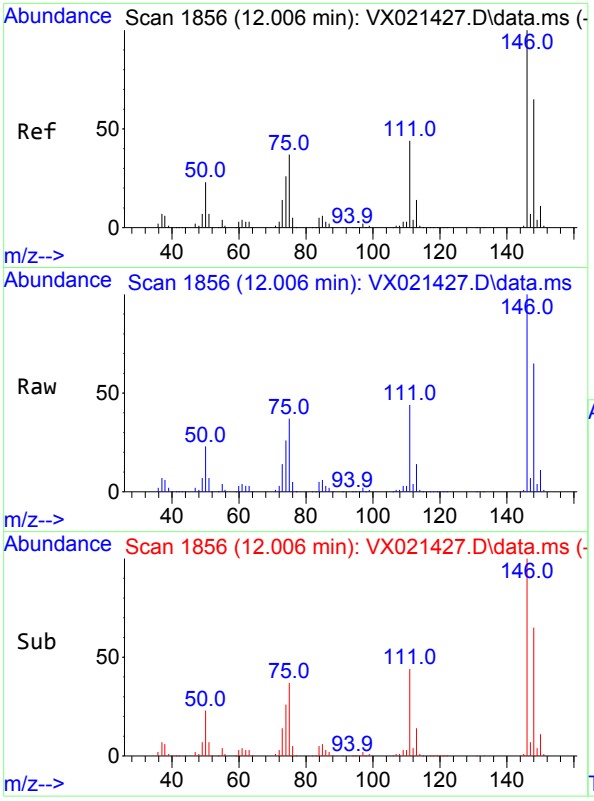
Tgt Ion:119 Resp: 205948

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.1 | 12.9 | 38.7 |
| 91 | 25.8 | 11.7 | 35.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

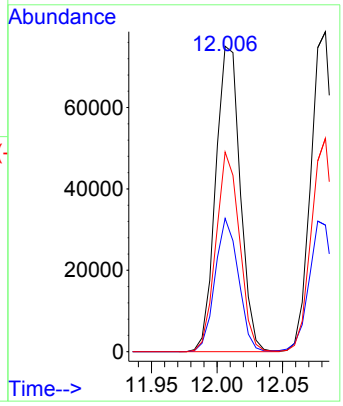
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

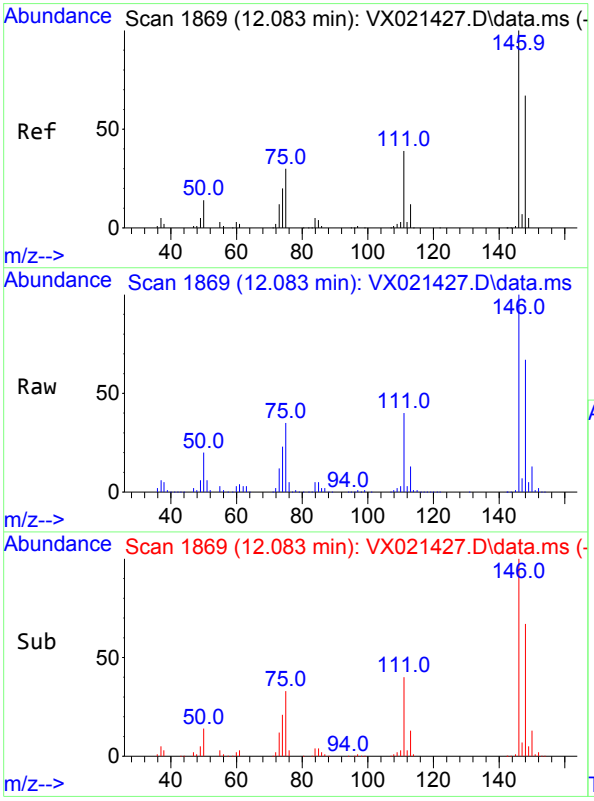



#87
1,3-Dichlorobenzene
Concen: 49.75 ug/l
RT: 12.006 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:146 Resp: 97547

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.7 | 20.2 | 60.5 |
| 148 | 62.8 | 31.9 | 95.7 |

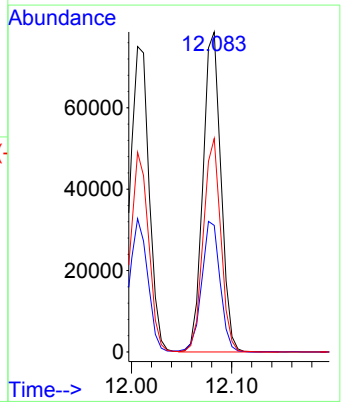



#88
1,4-Dichlorobenzene
Concen: 49.23 ug/l
RT: 12.083 min Scan# 1869
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

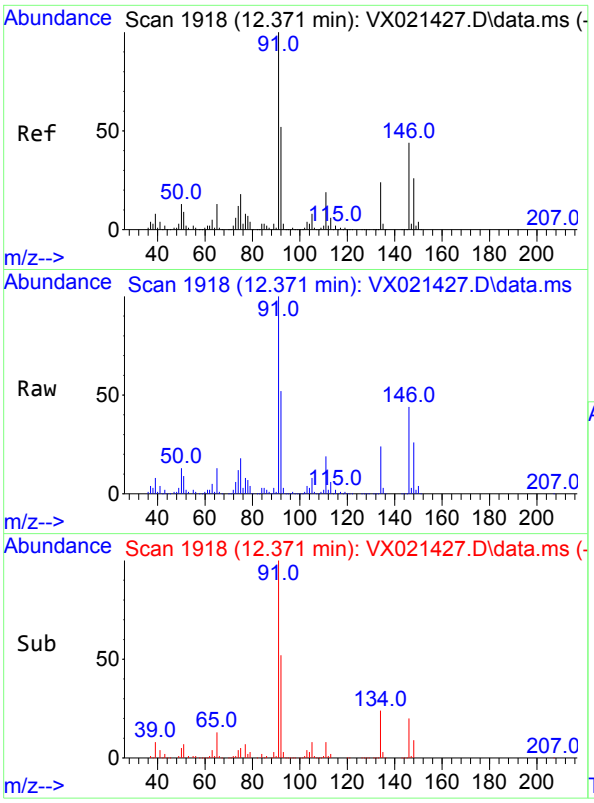
Tgt Ion:146 Resp: 98243

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.8 | 19.6 | 58.8 |
| 148 | 64.9 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

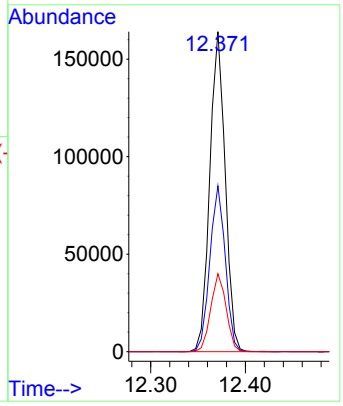
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

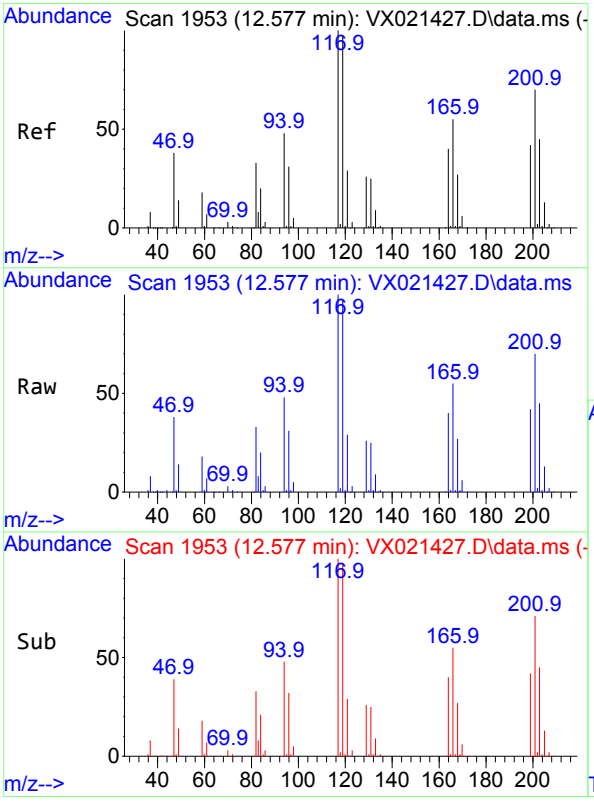



#89
n-Butylbenzene
Concen: 51.48 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion: 91 Resp: 184796

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 52.1 | 27.4 | 82.0 |
| 134 | 24.3 | 13.2 | 39.5 |

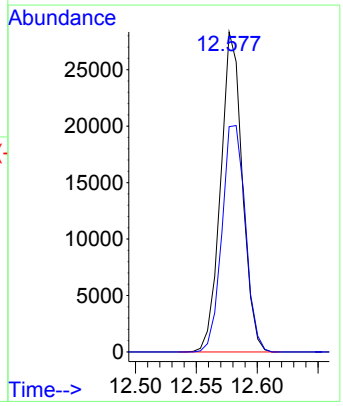



#90
Hexachloroethane
Concen: 57.42 ug/l
RT: 12.577 min Scan# 1953
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

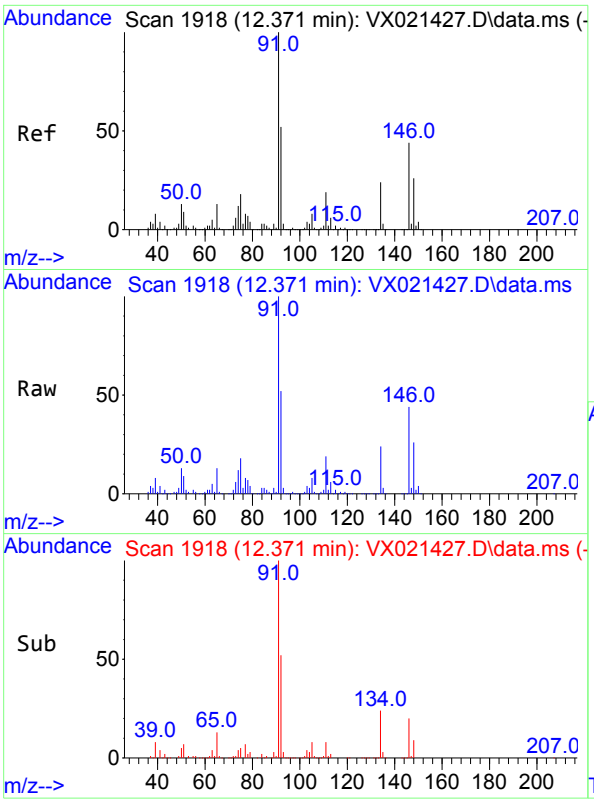
Tgt Ion:117 Resp: 35137

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 76.4 | 40.4 | 121.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

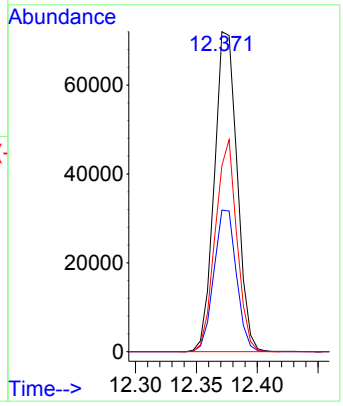
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

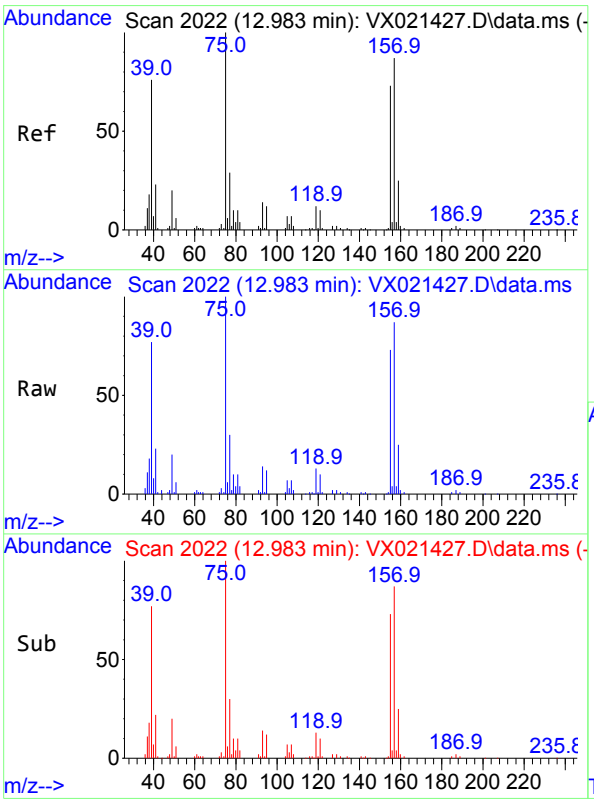



#91
1,2-Dichlorobenzene
Concen: 49.43 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:146 Resp: 94044

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.8 | 20.8 | 62.2 |
| 148 | 62.5 | 31.9 | 95.5 |

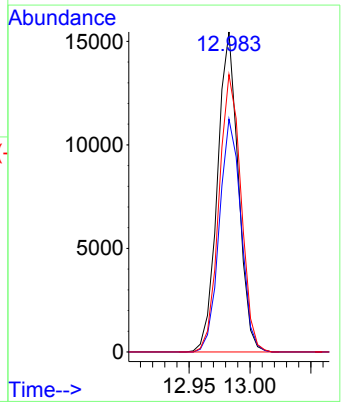



#92
1,2-Dibromo-3-Chloropropane
Concen: 48.04 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

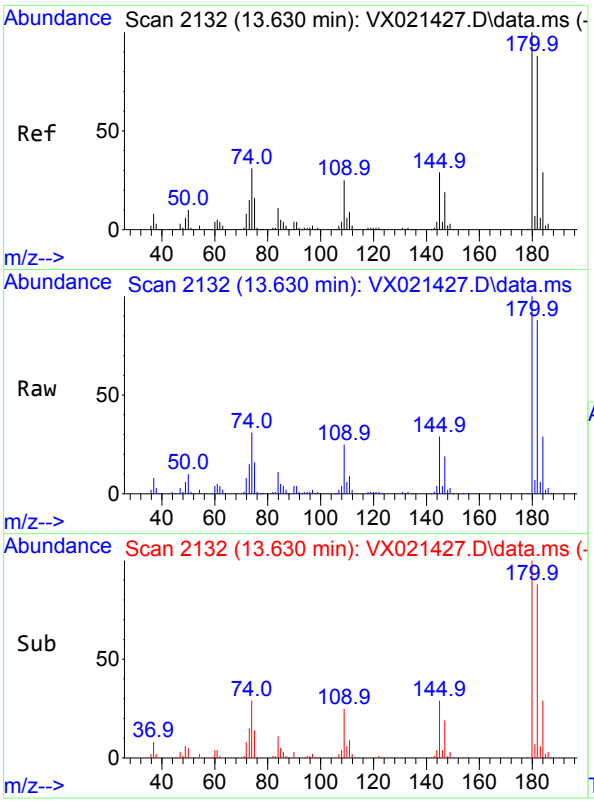
Tgt Ion: 75 Resp: 18401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 75.3 | 45.3 | 135.9 |
| 157 | 91.2 | 57.7 | 173.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

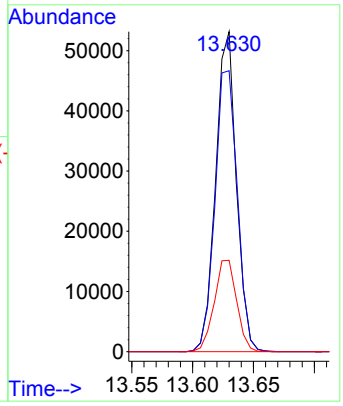
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

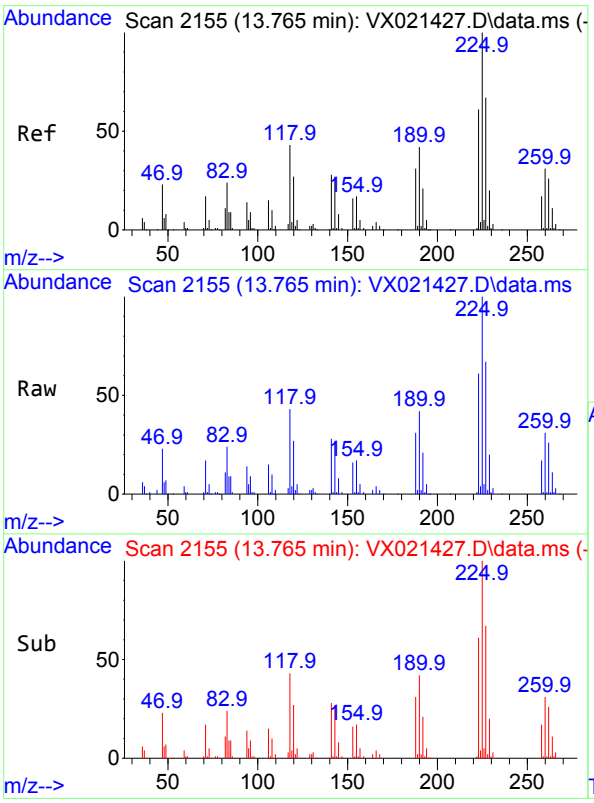



#93
1,2,4-Trichlorobenzene
Concen: 50.11 ug/l
RT: 13.630 min Scan# 2132
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:180 Resp: 62880

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.1 | 47.7 | 143.1 |
| 145 | 31.1 | 15.0 | 45.0 |

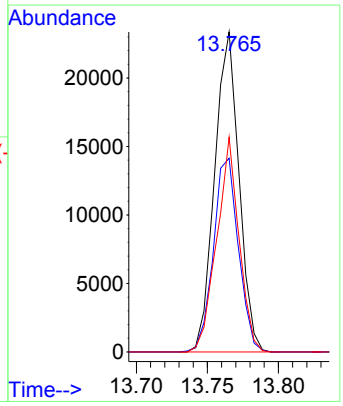



#94
Hexachlorobutadiene
Concen: 52.60 ug/l
RT: 13.765 min Scan# 2155
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

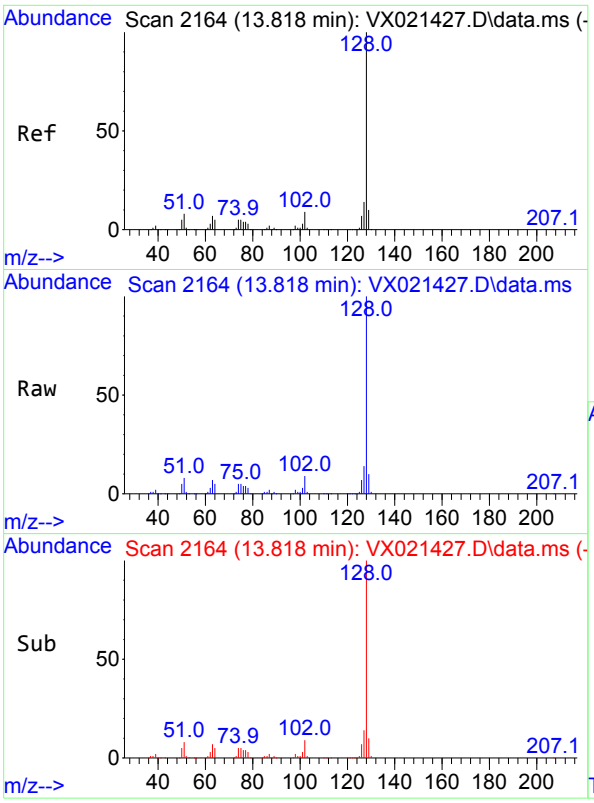
Tgt Ion:225 Resp: 27802

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.3 | 31.1 | 93.2 |
| 227 | 61.4 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICCC050

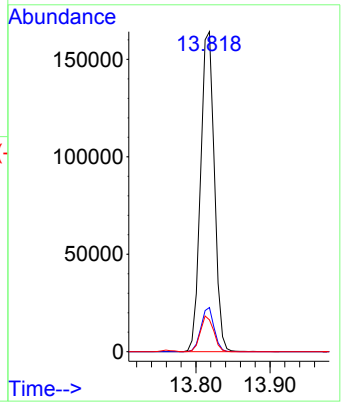
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:31 AM

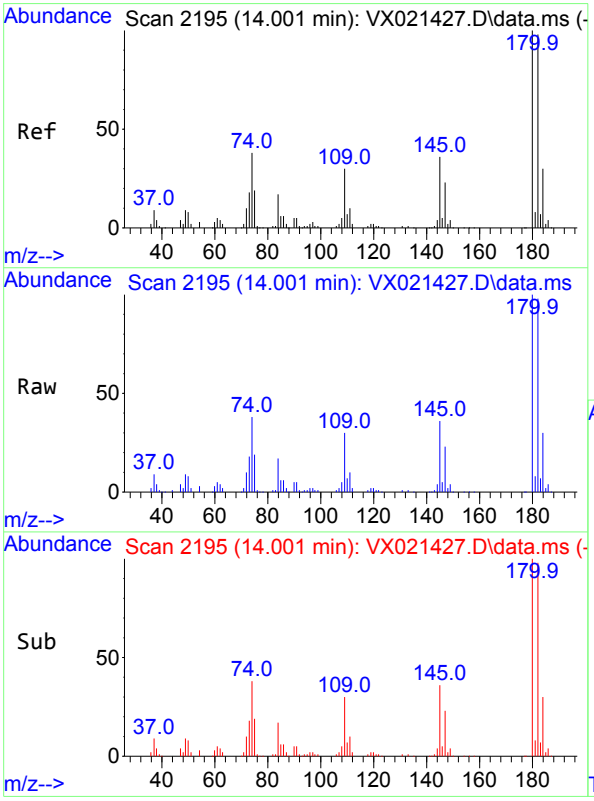



#95
Naphthalene
Concen: 49.47 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:128 Resp: 212118

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.2 | 10.3 | 15.5 |
| 129 | 10.8 | 8.8 | 13.2 |

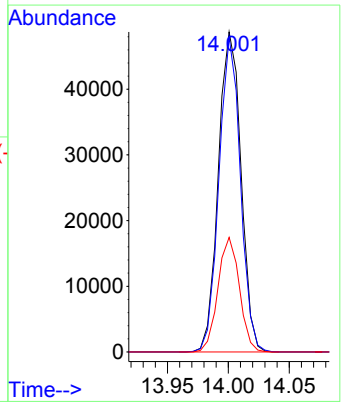



#96
1,2,3-Trichlorobenzene
Concen: 50.63 ug/l
RT: 14.001 min Scan# 2195
Delta R.T. 0.000 min
Lab File: VX021427.D
Acq: 24 Mar 2021 11:13

Tgt Ion:180 Resp: 62885

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.2 | 47.6 | 142.9 |
| 145 | 34.0 | 16.1 | 48.3 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021428.D
Acq On : 24 Mar 2021 11:36
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

Quant Time: Mar 24 11:58:42 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.623 | 168 | 79280 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 131882 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 125390 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.065 | 152 | 63611 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 132636 | 102.58 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 205.16%# | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 95971 | 106.75 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 213.50%# | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 346837 | 105.86 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 211.72%# | | | | |
| 62) 4-Bromofluorobenzene | 11.123 | 95 | 137381 | 108.54 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 217.08%# | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.181 | 85 | 91069 | 97.89 | ug/l | | 98 |
| 3) Chloromethane | 1.310 | 50 | 101444 | 57.66 | ug/l | | 99 |
| 4) Vinyl Chloride | 1.393 | 62 | 95028 | 100.16 | ug/l | | 99 |
| 5) Bromomethane | 1.616 | 94 | 34944 | 85.62 | ug/l | | 99 |
| 6) Chloroethane | 1.693 | 64 | 58525 | 100.55 | ug/l | | 99 |
| 7) Trichlorofluoromethane | 1.905 | 101 | 149199 | 103.56 | ug/l | | 99 |
| 8) Diethyl Ether | 2.169 | 74 | 50378 | 99.68 | ug/l | | 78 |
| 9) 1,1,2-Trichlorotrifluo... | 2.358 | 101 | 83813 | 102.19 | ug/l | | 97 |
| 10) Methyl Iodide | 2.481 | 142 | 66087 | 95.29 | ug/l | # | 87 |
| 11) Tert butyl alcohol | 3.028 | 59 | 113050 | 521.24 | ug/l | | 97 |
| 12) 1,1-Dichloroethene | 2.346 | 96 | 80968 | 101.50 | ug/l | | 85 |
| 13) Acrolein | 2.275 | 56 | 53244 | 403.47 | ug/l | | 99 |
| 14) Allyl chloride | 2.699 | 41 | 166381 | 101.15 | ug/l | # | 89 |
| 15) Acrylonitrile | 3.117 | 53 | 269855 | 532.01 | ug/l | | 97 |
| 16) Acetone | 2.422 | 43 | 252834 | 527.02 | ug/l | # | 88 |
| 17) Carbon Disulfide | 2.546 | 76 | 220768 | 89.47 | ug/l | | 99 |
| 18) Methyl Acetate | 2.752 | 43 | 156862 | 116.69 | ug/l | | 90 |
| 19) Methyl tert-butyl Ether | 3.169 | 73 | 316007 | 105.38 | ug/l | | 99 |
| 20) Methylene Chloride | 2.834 | 84 | 97112 | 99.33 | ug/l | | 88 |
| 21) trans-1,2-Dichloroethene | 3.134 | 96 | 90858 | 101.64 | ug/l | | 91 |
| 22) Diisopropyl ether | 3.828 | 45 | 331401 | 104.69 | ug/l | | 93 |
| 23) Vinyl Acetate | 3.787 | 43 | 1434541 | 523.44 | ug/l | # | 93 |
| 24) 1,1-Dichloroethane | 3.664 | 63 | 177129 | 103.40 | ug/l | | 97 |
| 25) 2-Butanone | 4.634 | 43 | 397210 | 541.52 | ug/l | | 91 |
| 26) 2,2-Dichloropropane | 4.546 | 77 | 152762 | 102.53 | ug/l | | 95 |
| 27) cis-1,2-Dichloroethene | 4.558 | 96 | 107096 | 104.13 | ug/l | | 91 |
| 28) Bromochloromethane | 4.976 | 49 | 82676 | 102.26 | ug/l | | 86 |
| 29) Tetrahydrofuran | 5.093 | 42 | 256372 | 530.35 | ug/l | | 86 |
| 30) Chloroform | 5.176 | 83 | 187353 | 105.04 | ug/l | | 100 |
| 31) Cyclohexane | 5.546 | 56 | 152110 | 98.47 | ug/l | | 91 |
| 32) 1,1,1-Trichloroethane | 5.458 | 97 | 167161 | 105.72 | ug/l | | 97 |
| 36) 1,1-Dichloropropene | 5.764 | 75 | 134298 | 101.53 | ug/l | | 96 |
| 37) Ethyl Acetate | 4.799 | 43 | 152631 | 99.81 | ug/l | # | 93 |
| 38) Carbon Tetrachloride | 5.752 | 117 | 146353 | 106.25 | ug/l | | 96 |
| 39) Methylcyclohexane | 7.435 | 83 | 151837 | 103.34 | ug/l | | 94 |
| 40) Benzene | 6.111 | 78 | 384675 | 105.33 | ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021428.D
Acq On : 24 Mar 2021 11:36
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

Quant Time: Mar 24 11:58:42 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 5.005 | 41 | 88787 | 100.20 | ug/l | | 88 |
| 42) 1,2-Dichloroethane | 6.158 | 62 | 164775 | 104.24 | ug/l | | 94 |
| 43) Isopropyl Acetate | 6.411 | 43 | 259301 | 103.35 | ug/l | # | 91 |
| 44) Trichloroethene | 7.188 | 130 | 99940 | 103.11 | ug/l | | 91 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 103968 | 105.72 | ug/l | | 97 |
| 46) Dibromomethane | 7.635 | 93 | 75136 | 104.11 | ug/l | | 93 |
| 47) Bromodichloromethane | 7.876 | 83 | 156643 | 108.46 | ug/l | | 100 |
| 48) Methyl methacrylate | 7.747 | 41 | 140030 | 104.62 | ug/l | # | 82 |
| 49) 1,4-Dioxane | 7.717 | 88 | 48852 | 1968.00 | ug/l | # | 90 |
| 51) 4-Methyl-2-Pentanone | 8.623 | 43 | 815042 | 552.94 | ug/l | | 88 |
| 52) Toluene | 8.764 | 92 | 244057 | 107.96 | ug/l | | 97 |
| 53) t-1,3-Dichloropropene | 9.023 | 75 | 168002 | 109.99 | ug/l | | 99 |
| 54) cis-1,3-Dichloropropene | 8.411 | 75 | 174335 | 107.20 | ug/l | # | 84 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 103026 | 110.93 | ug/l | | 98 |
| 56) Ethyl methacrylate | 9.158 | 69 | 165184 | 111.07 | ug/l | # | 76 |
| 57) 1,3-Dichloropropane | 9.353 | 76 | 174019 | 107.59 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 8.294 | 63 | 441623 | 539.07 | ug/l | | 96 |
| 59) 2-Hexanone | 9.476 | 43 | 613958 | 556.73 | ug/l | | 85 |
| 60) Dibromochloromethane | 9.564 | 129 | 119524 | 113.18 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 111869 | 109.49 | ug/l | | 100 |
| 64) Tetrachloroethene | 9.317 | 164 | 84336 | 90.94 | ug/l | # | 85 |
| 65) Chlorobenzene | 10.123 | 112 | 269584 | 104.49 | ug/l | | 100 |
| 66) 1,1,1,2-Tetrachloroethane | 10.206 | 131 | 104804 | 109.05 | ug/l | | 100 |
| 67) Ethyl Benzene | 10.235 | 91 | 498820 | 104.99 | ug/l | | 98 |
| 68) m/p-Xylenes | 10.341 | 106 | 360990 | 212.61 | ug/l | | 95 |
| 69) o-Xylene | 10.682 | 106 | 173227 | 105.06 | ug/l | | 95 |
| 70) Styrene | 10.694 | 104 | 304248 | 109.55 | ug/l | | 96 |
| 71) Bromoform | 10.841 | 173 | 85567 | 110.48 | ug/l | # | 98 |
| 73) Isopropylbenzene | 11.000 | 105 | 479841 | 102.04 | ug/l | | 99 |
| 74) N-amyl acetate | 10.882 | 43 | 228255 | 97.03 | ug/l | # | 88 |
| 75) 1,1,2,2-Tetrachloroethane | 11.253 | 83 | 160426 | 102.72 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 11.276 | 75 | 152478m | 101.30 | ug/l | | |
| 77) Bromobenzene | 11.241 | 156 | 115284 | 102.92 | ug/l | | 95 |
| 78) n-propylbenzene | 11.341 | 91 | 565557 | 102.95 | ug/l | | 98 |
| 79) 2-Chlorotoluene | 11.406 | 91 | 333139 | 99.75 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 11.488 | 105 | 411910 | 103.63 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 11.059 | 75 | 53216 | 99.76 | ug/l | | 87 |
| 82) 4-Chlorotoluene | 11.494 | 91 | 399561 | 101.54 | ug/l | | 96 |
| 83) tert-Butylbenzene | 11.753 | 119 | 405116 | 106.72 | ug/l | | 94 |
| 84) 1,2,4-Trimethylbenzene | 11.788 | 105 | 416328 | 103.05 | ug/l | | 98 |
| 85) sec-Butylbenzene | 11.929 | 105 | 468364 | 104.62 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 427235 | 104.28 | ug/l | | 97 |
| 87) 1,3-Dichlorobenzene | 12.012 | 146 | 211216 | 103.59 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 12.082 | 146 | 205539 | 99.04 | ug/l | | 97 |
| 89) n-Butylbenzene | 12.371 | 91 | 395671 | 105.99 | ug/l | | 98 |
| 90) Hexachloroethane | 12.577 | 117 | 77593 | 121.93 | ug/l | | 93 |
| 91) 1,2-Dichlorobenzene | 12.377 | 146 | 202350 | 102.27 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 40154 | 100.81 | ug/l | | 82 |
| 93) 1,2,4-Trichlorobenzene | 13.630 | 180 | 141949 | 108.78 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 13.765 | 225 | 58586 | 106.58 | ug/l | | 97 |
| 95) Naphthalene | 13.818 | 128 | 466719 | 104.68 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 14.000 | 180 | 135416 | 104.85 | ug/l | | 97 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021428.D
Acq On : 24 Mar 2021 11:36
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

Quant Time: Mar 24 11:58:42 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

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

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

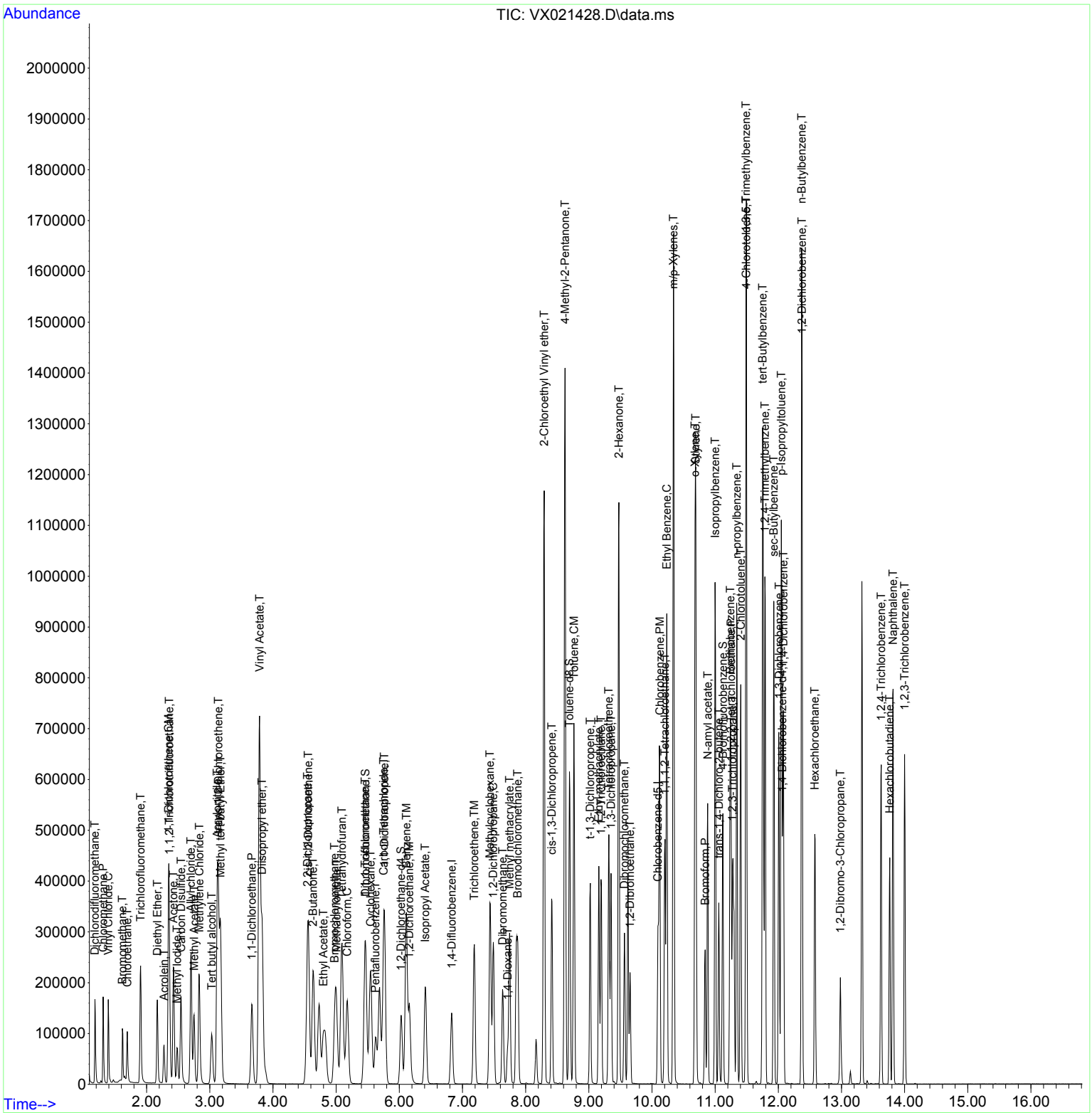
ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021428.D
Acq On : 24 Mar 2021 11:36
Operator : JC/MD
Sample : VSTDICC100
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 24 11:58:42 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

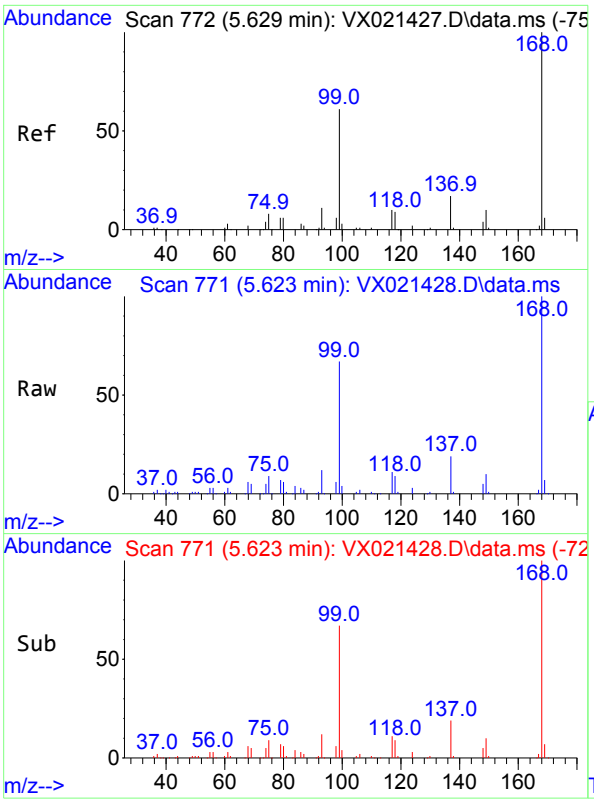
**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

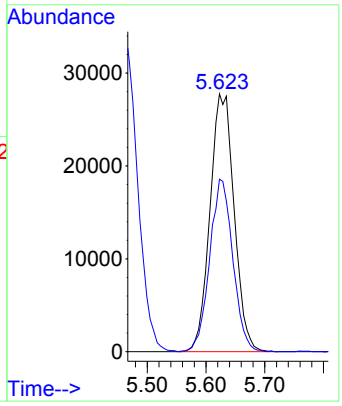
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

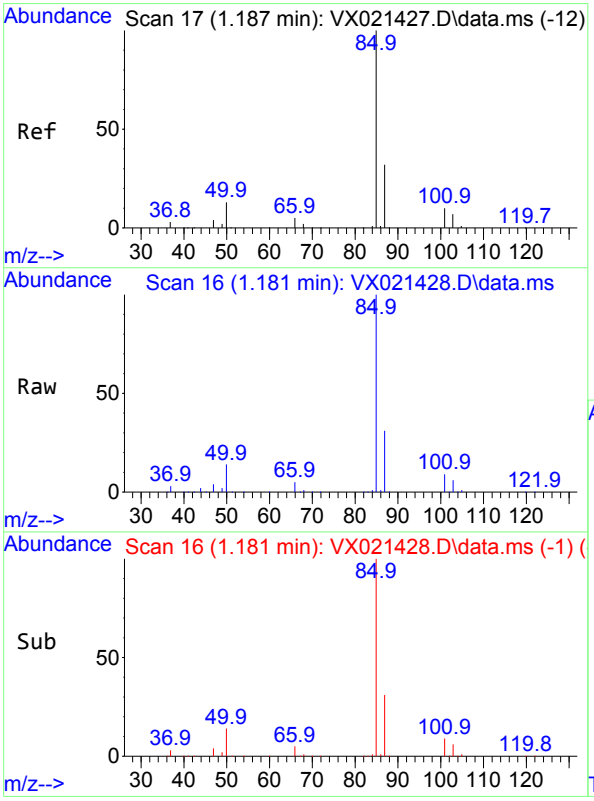



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.623 min Scan# 771
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:168 Resp: 79280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 66.9 | 45.8 | 68.6 |

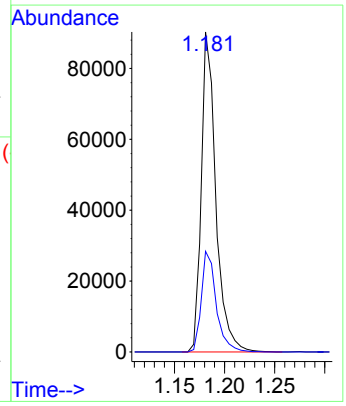



#2
Dichlorodifluoromethane
Concen: 97.89 ug/l
RT: 1.181 min Scan# 16
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

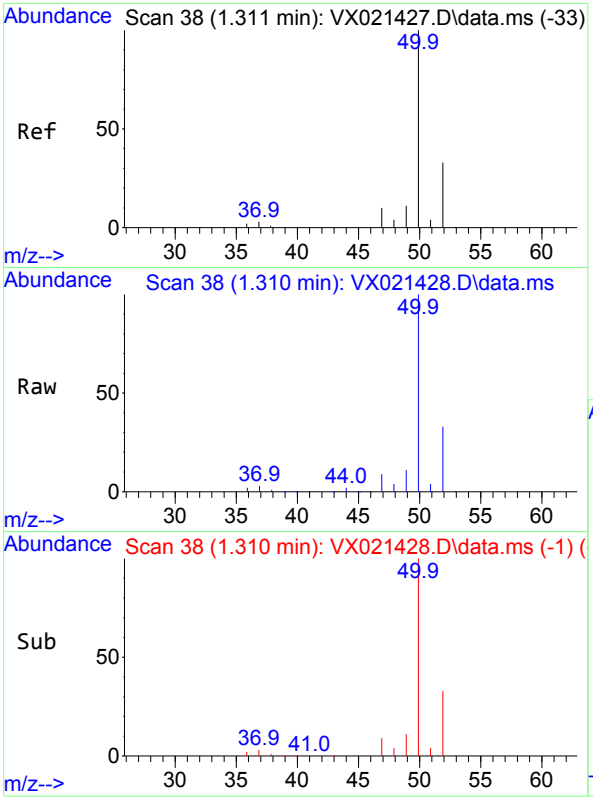
Tgt Ion: 85 Resp: 91069

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.5 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

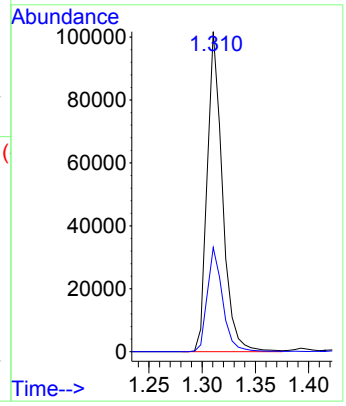
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

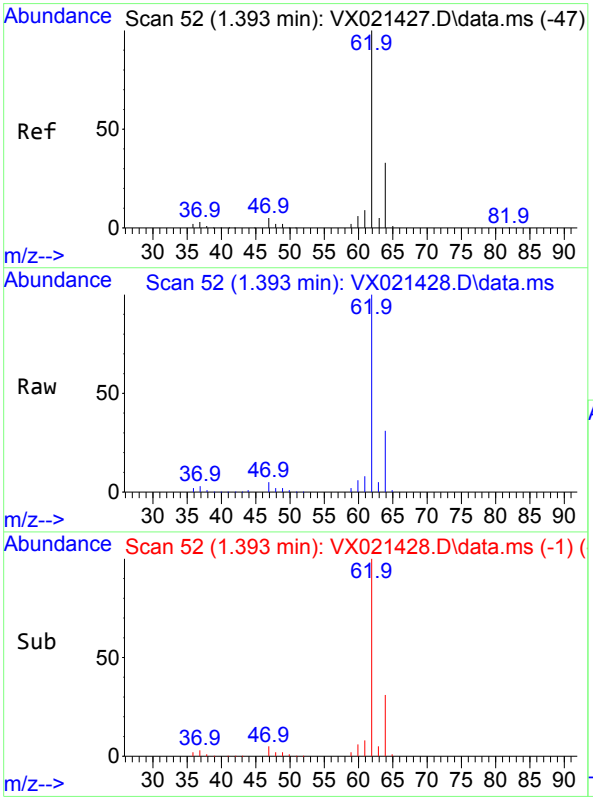



#3
Chloromethane
Concen: 57.66 ug/l
RT: 1.310 min Scan# 38
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 50 Resp: 101444

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.6 | 26.4 | 39.6 |

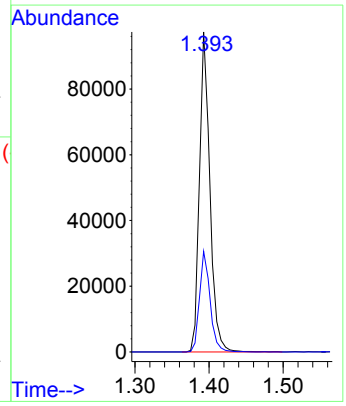



#4
Vinyl Chloride
Concen: 100.16 ug/l
RT: 1.393 min Scan# 52
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

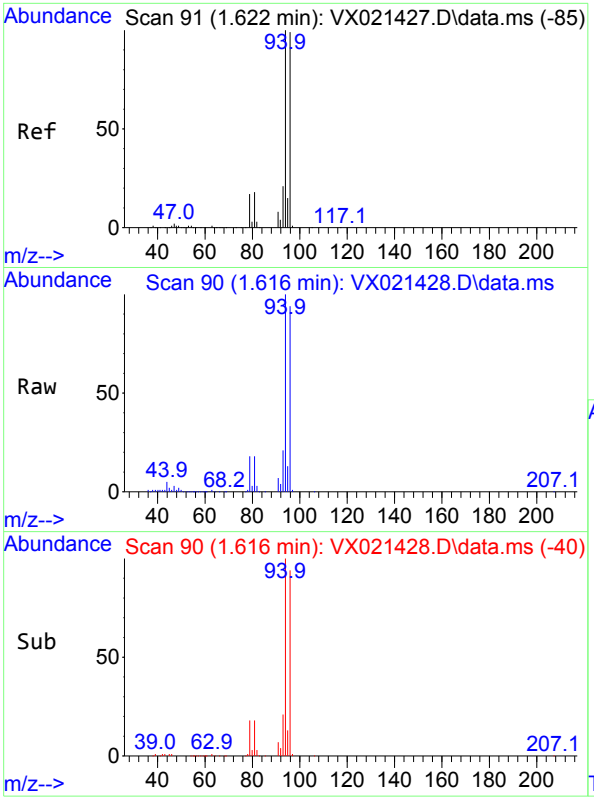
Tgt Ion: 62 Resp: 95028

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.4 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

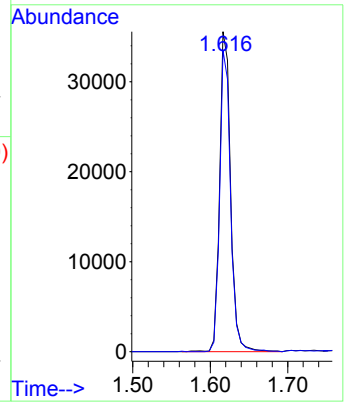
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

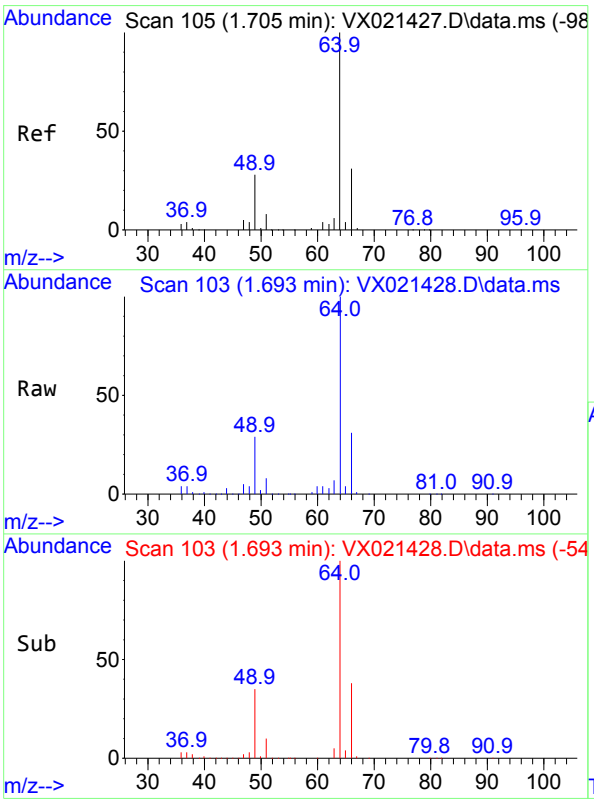



#5
Bromomethane
Concen: 85.62 ug/l
RT: 1.616 min Scan# 90
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 94 Resp: 34944

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 94.1 | 76.4 | 114.6 |

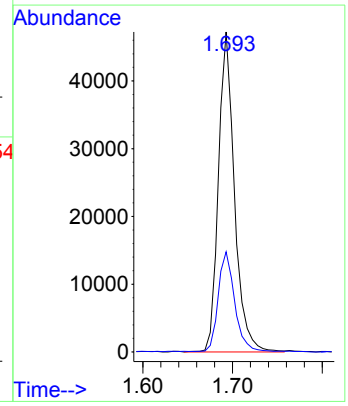



#6
Chloroethane
Concen: 100.55 ug/l
RT: 1.693 min Scan# 103
Delta R.T. -0.012 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

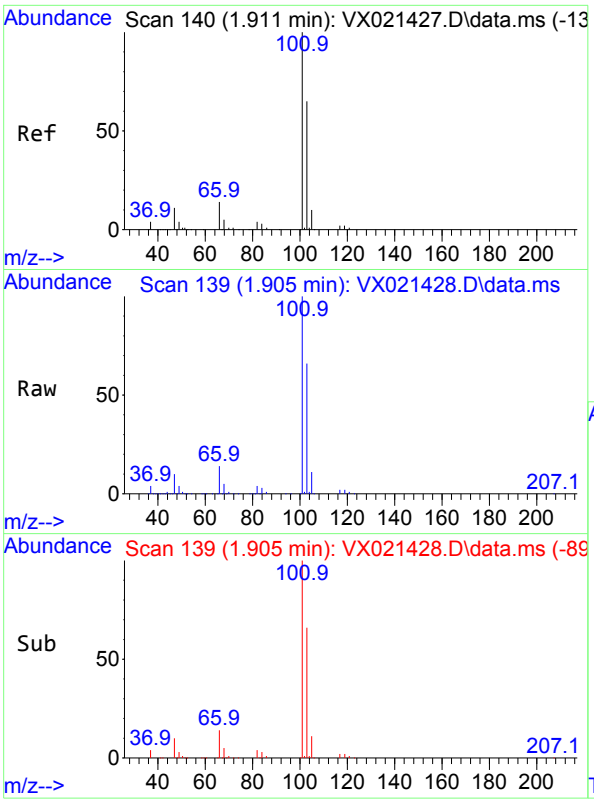
Tgt Ion: 64 Resp: 58525

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.1 | 25.4 | 38.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

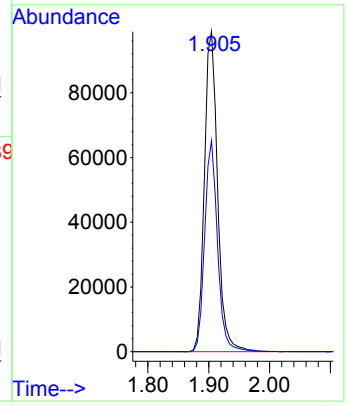
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

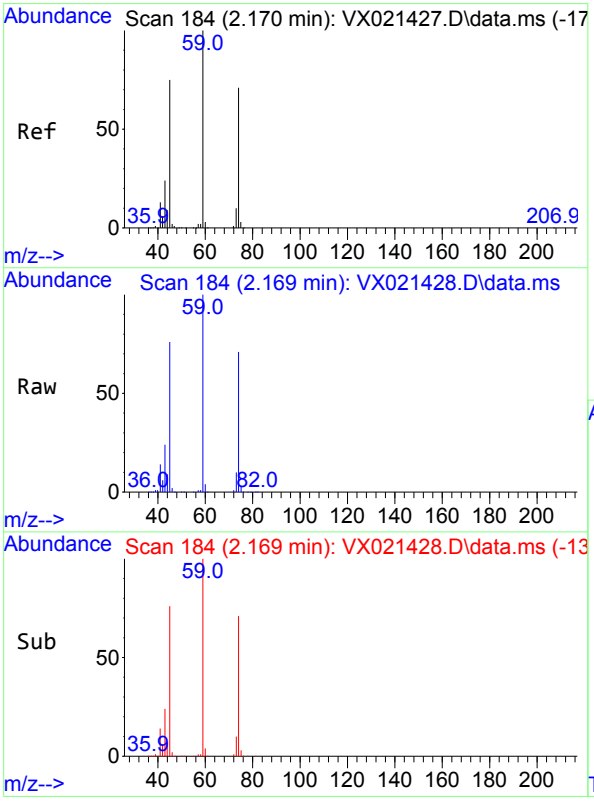



#7
Trichlorofluoromethane
Concen: 103.56 ug/l
RT: 1.905 min Scan# 139
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:101 Resp: 149199

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.0 | 53.2 | 79.8 |

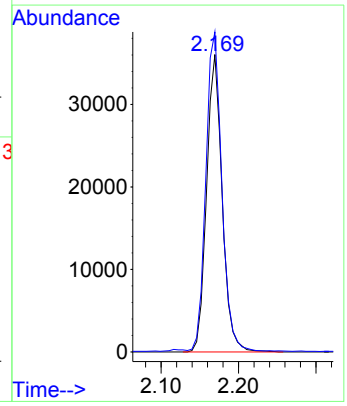



#8
Diethyl Ether
Concen: 99.68 ug/l
RT: 2.169 min Scan# 184
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

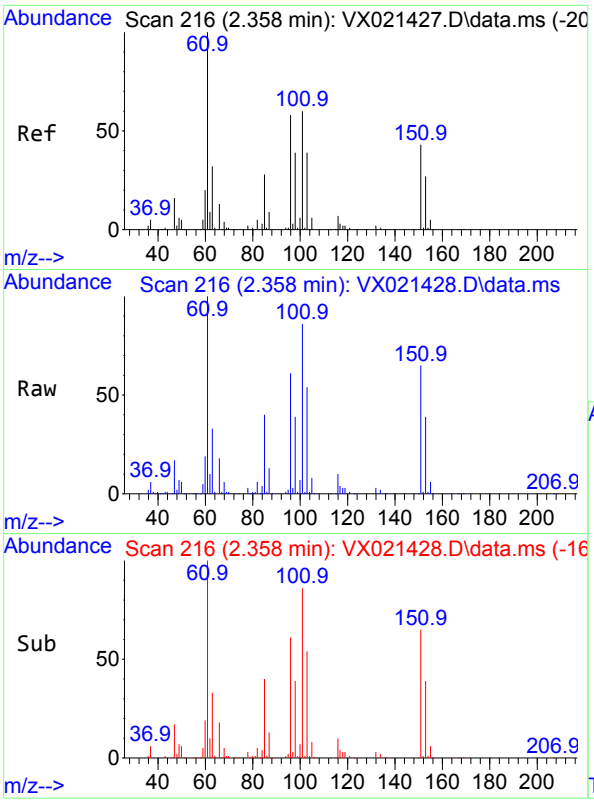
Tgt Ion: 74 Resp: 50378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 109.6 | 44.5 | 133.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

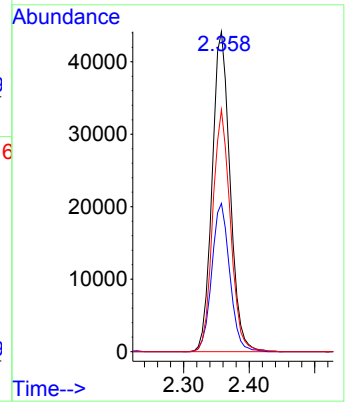
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

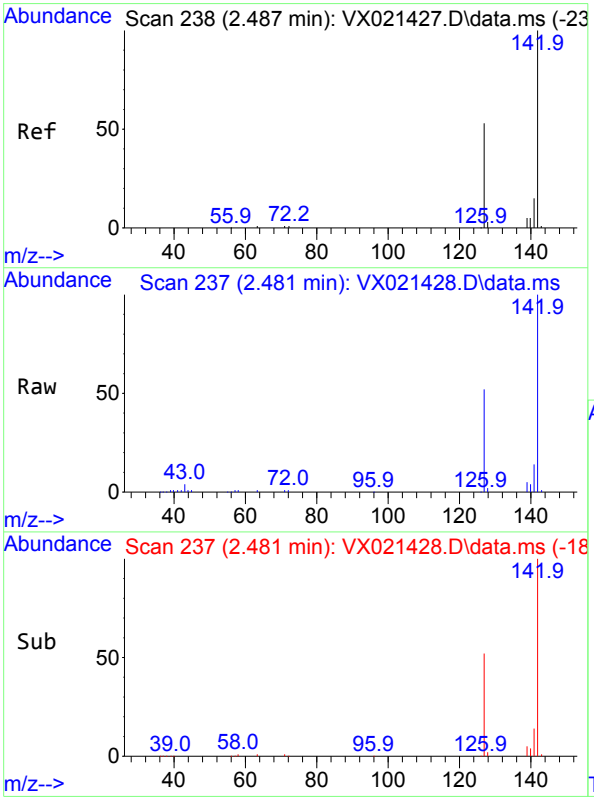



#9
1,1,2-Trichlorotrifluoroethane
Concen: 102.19 ug/l
RT: 2.358 min Scan# 216
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:101 Resp: 83813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.4 | 34.9 | 52.3 |
| 151 | 74.6 | 61.4 | 92.2 |

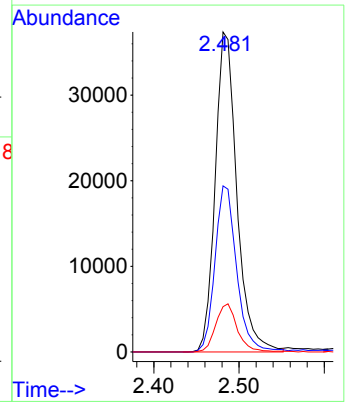



#10
Methyl Iodide
Concen: 95.29 ug/l
RT: 2.481 min Scan# 237
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

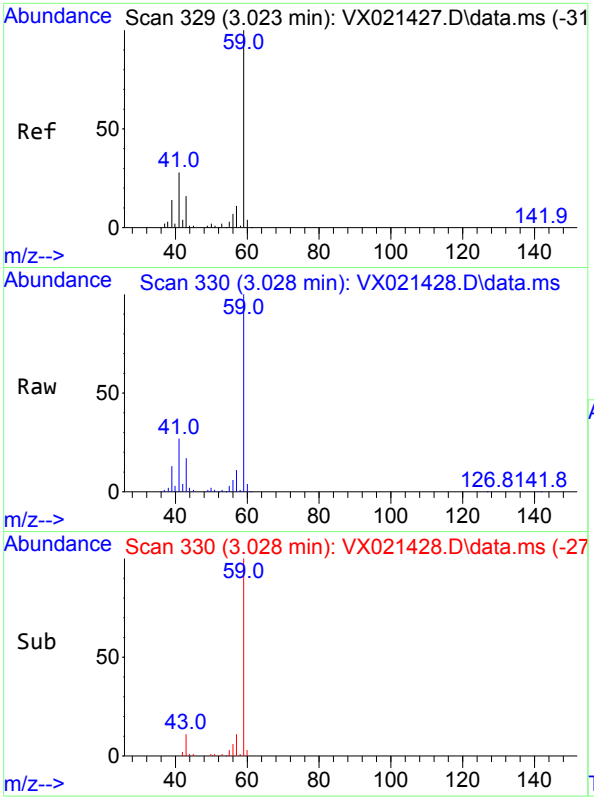
Tgt Ion:142 Resp: 66087

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 52.0 | 33.3 | 49.9# |
| 141 | 15.1 | 11.4 | 17.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

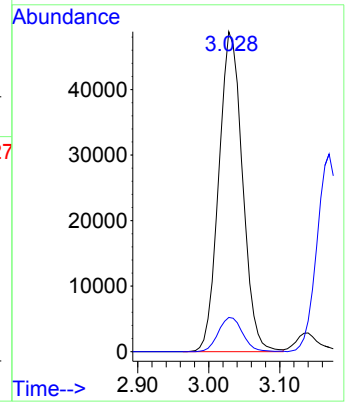
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

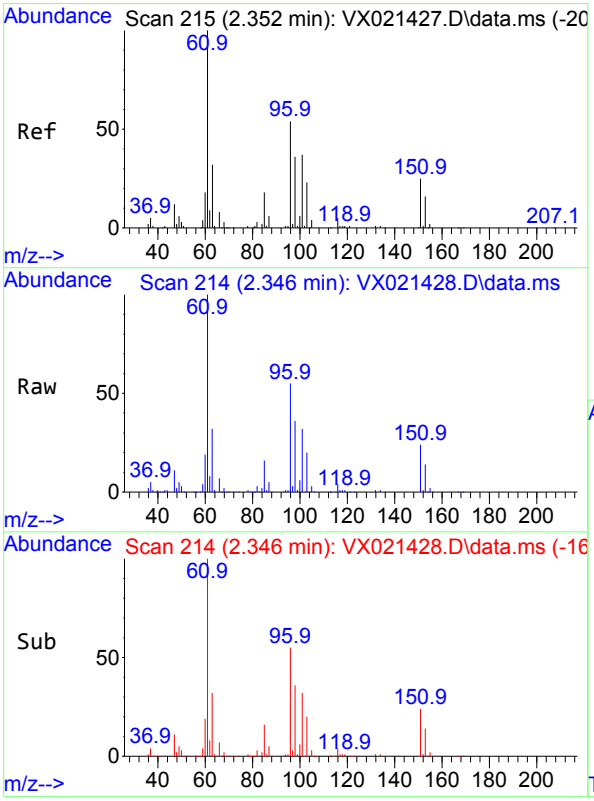



#11
Tert butyl alcohol
Concen: 521.24 ug/l
RT: 3.028 min Scan# 330
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 59 Resp: 113050

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.0 | 7.8 | 11.8 |

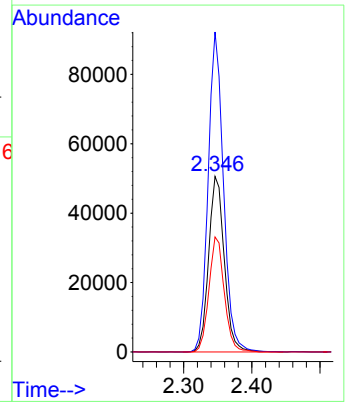



#12
1,1-Dichloroethene
Concen: 101.50 ug/l
RT: 2.346 min Scan# 214
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

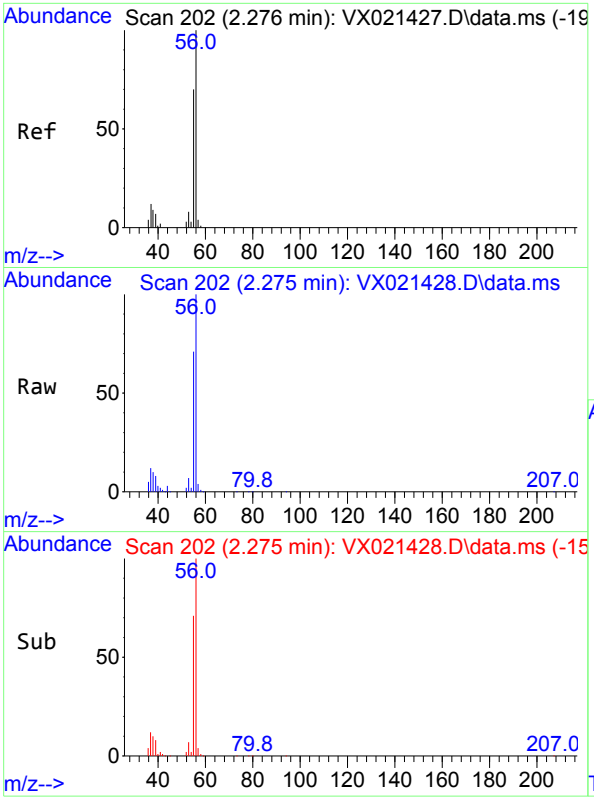
Tgt Ion: 96 Resp: 80968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 182.3 | 124.6 | 187.0 |
| 98 | 65.6 | 50.6 | 76.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

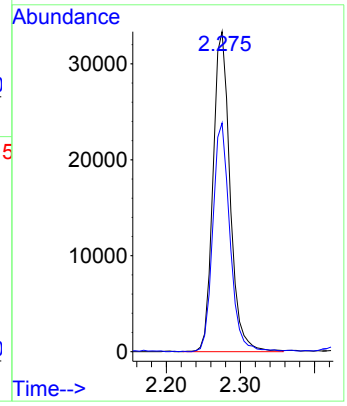
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

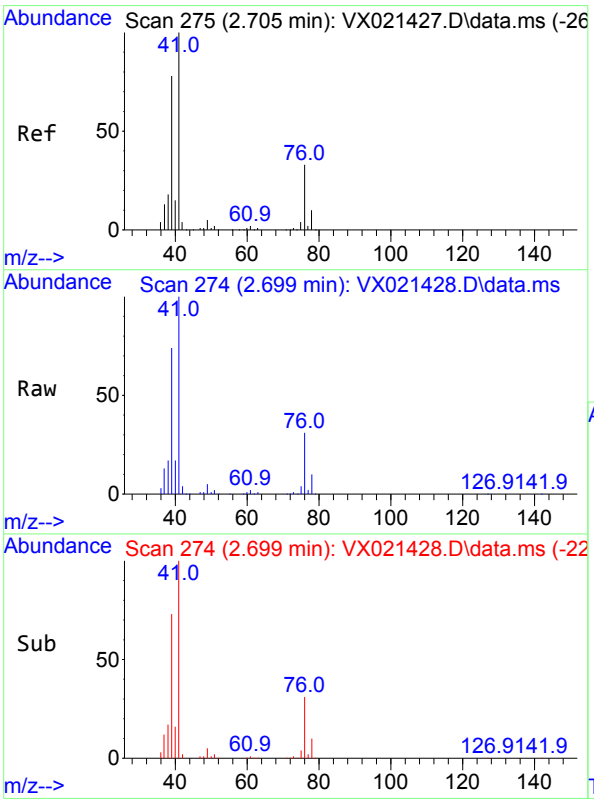



#13
Acrolein
Concen: 403.47 ug/l
RT: 2.275 min Scan# 202
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 56 Resp: 53244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.6 | 56.4 | 84.6 |

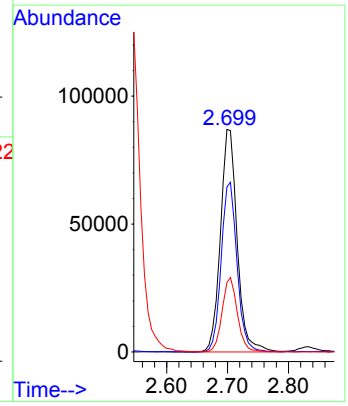



#14
Allyl chloride
Concen: 101.15 ug/l
RT: 2.699 min Scan# 274
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

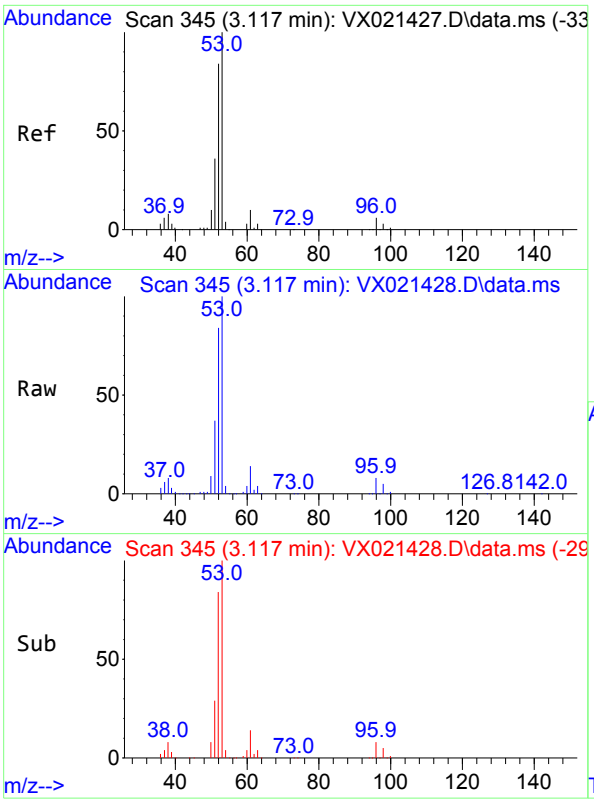
Tgt Ion: 41 Resp: 166381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 72.1 | 51.6 | 77.4 |
| 76 | 30.5 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

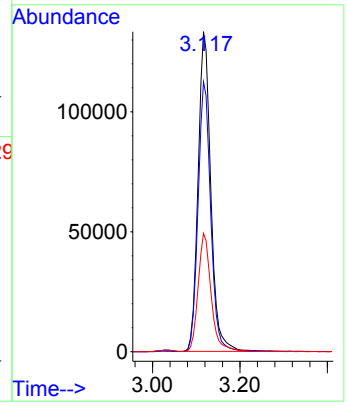
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

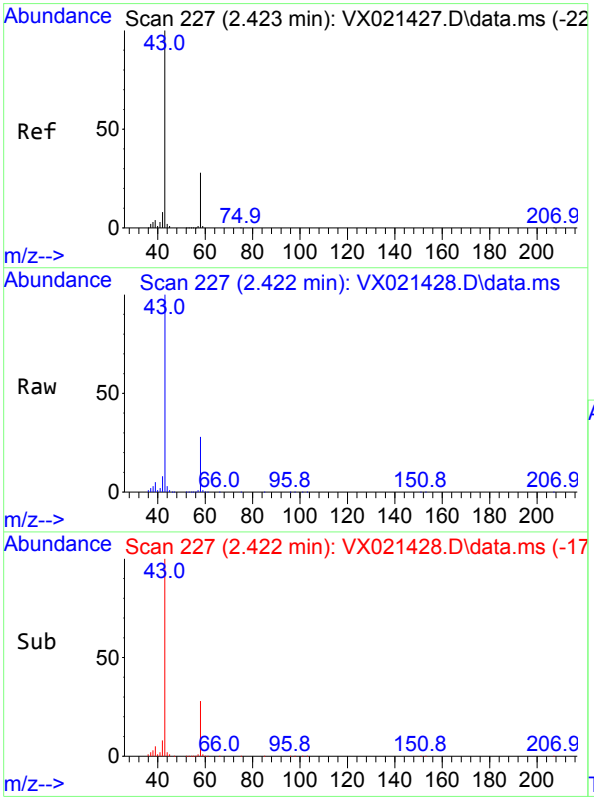



#15
Acrylonitrile
Concen: 532.01 ug/l
RT: 3.117 min Scan# 345
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 53 Resp: 269855

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 84.2 | 65.3 | 97.9 |
| 51 | 37.8 | 28.2 | 42.2 |

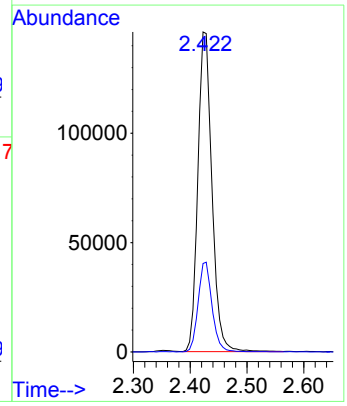



#16
Acetone
Concen: 527.02 ug/l
RT: 2.422 min Scan# 227
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

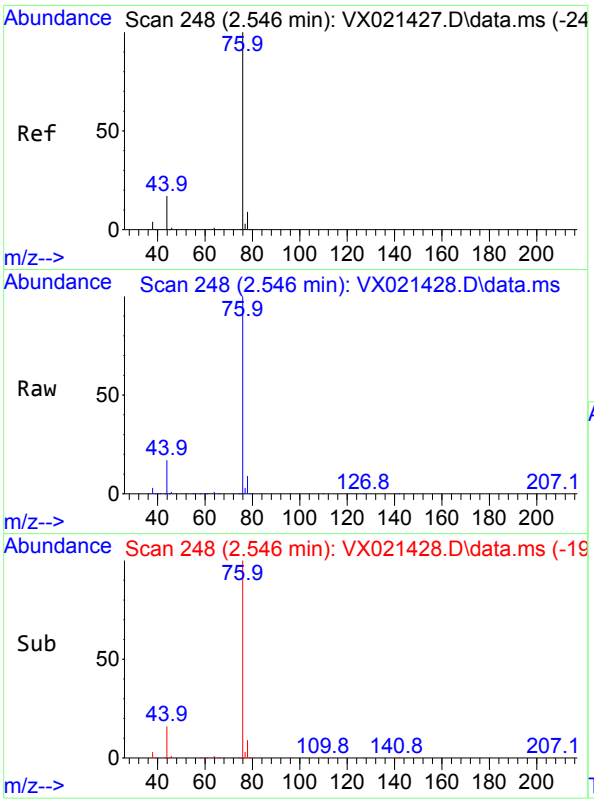
Tgt Ion: 43 Resp: 252834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.6 | 27.8 | 41.8# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

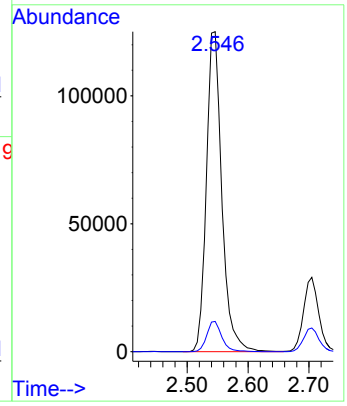
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

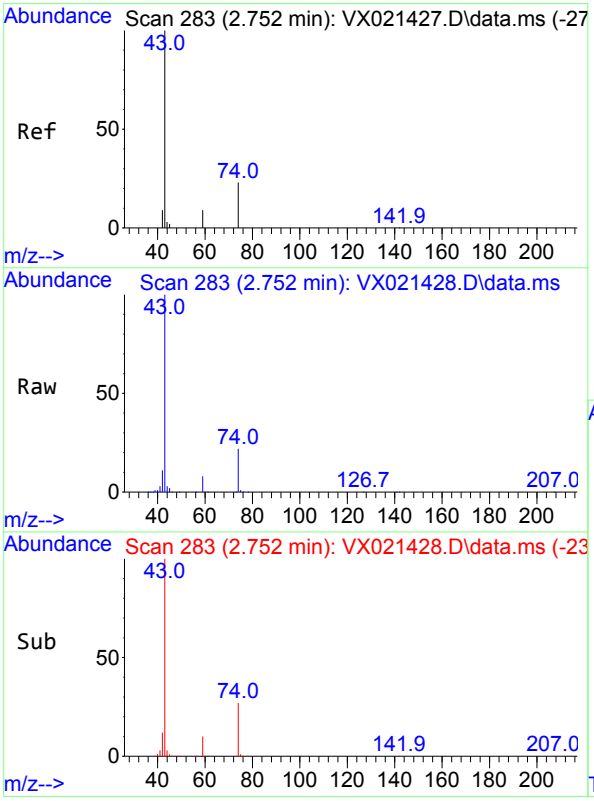



#17
Carbon Disulfide
Concen: 89.47 ug/l
RT: 2.546 min Scan# 248
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 76 Resp: 220768

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.4 | 7.2 | 10.8 |

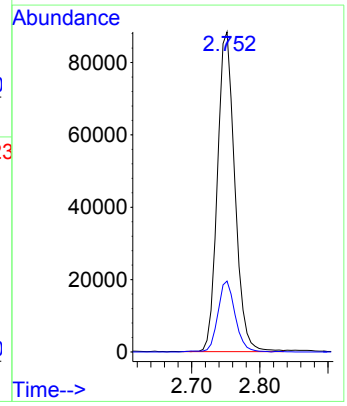



#18
Methyl Acetate
Concen: 116.69 ug/l
RT: 2.752 min Scan# 283
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

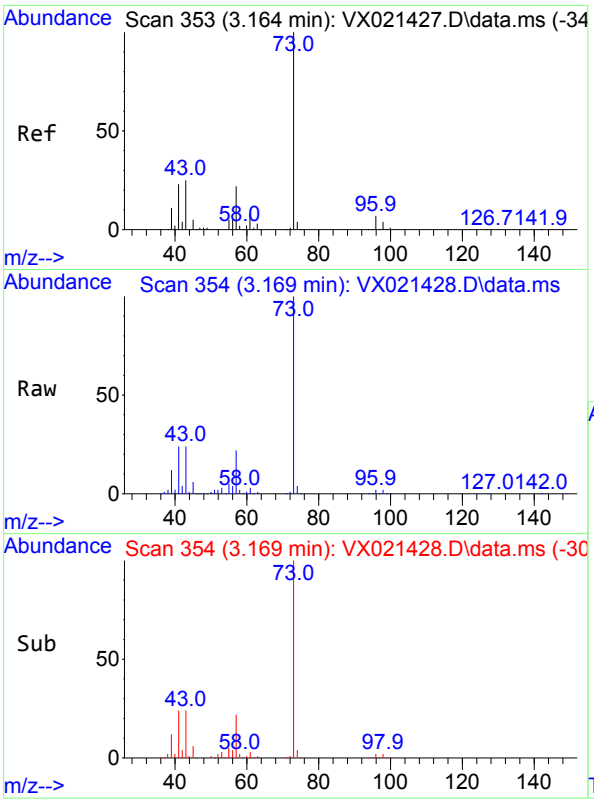
Tgt Ion: 43 Resp: 156862

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.2 | 21.9 | 32.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

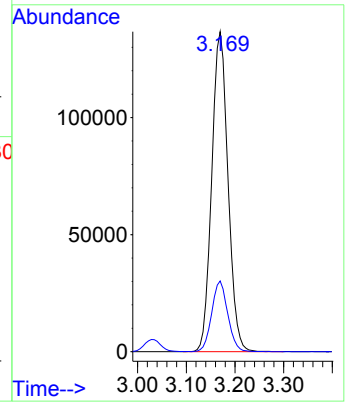
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

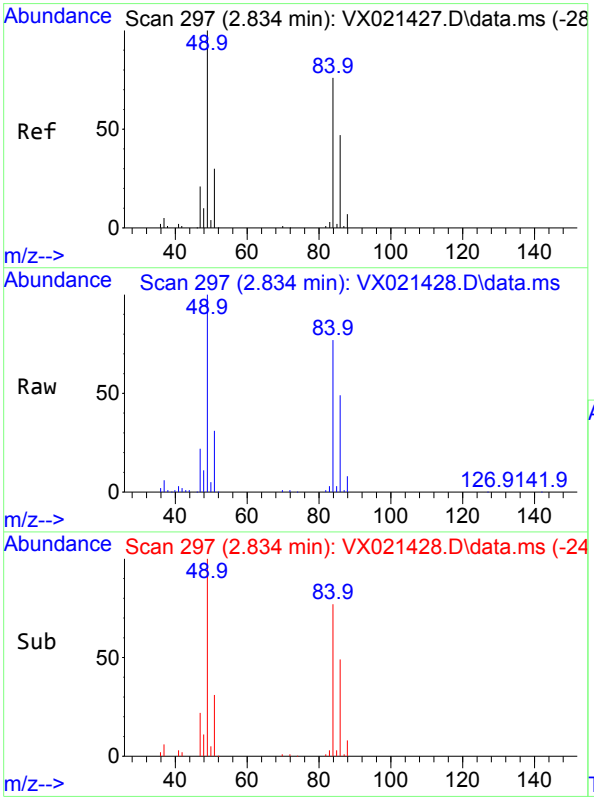



#19
Methyl tert-butyl Ether
Concen: 105.38 ug/l
RT: 3.169 min Scan# 354
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 73 Resp: 316007

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.1 | 17.1 | 25.7 |

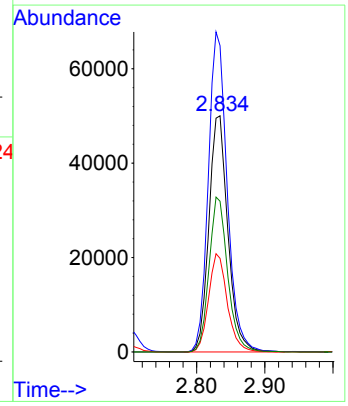



#20
Methylene Chloride
Concen: 99.33 ug/l
RT: 2.834 min Scan# 297
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

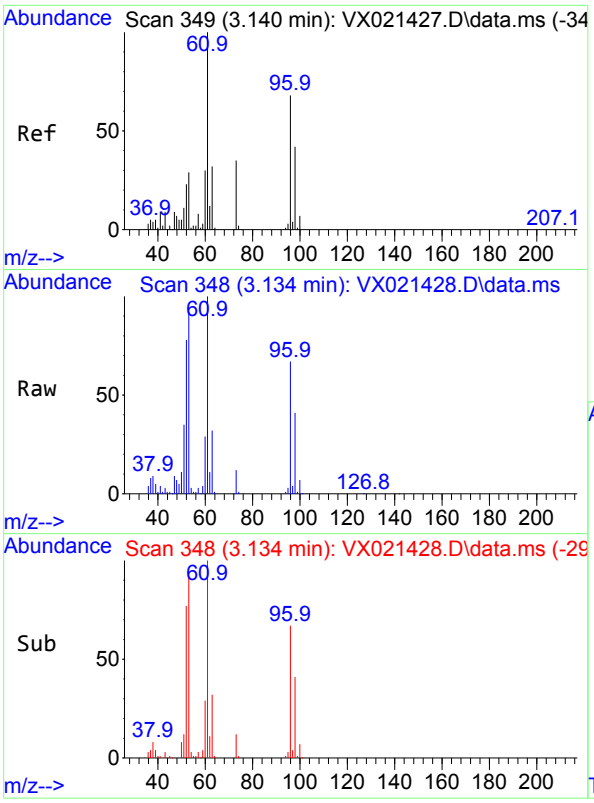
Tgt Ion: 84 Resp: 97112

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 129.7 | 88.6 | 132.8 |
| 51 | 39.6 | 27.0 | 40.6 |
| 86 | 63.8 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

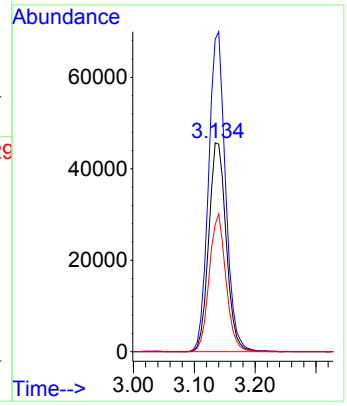
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

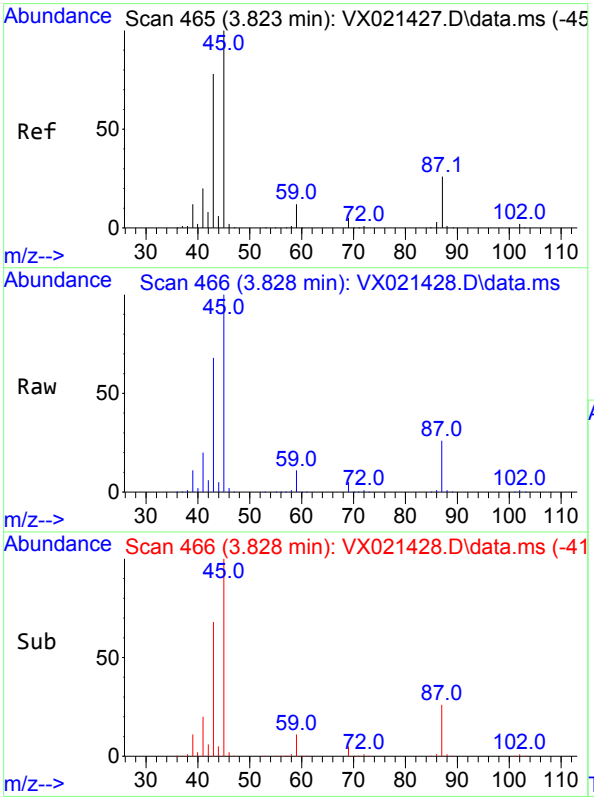



#21
trans-1,2-Dichloroethene
Concen: 101.64 ug/l
RT: 3.134 min Scan# 348
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 96 Resp: 90858

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 149.6 | 107.7 | 161.5 |
| 98 | 60.8 | 50.4 | 75.6 |

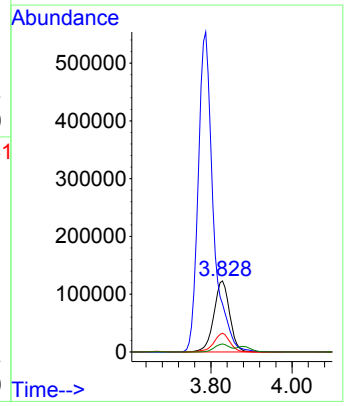



#22
Diisopropyl ether
Concen: 104.69 ug/l
RT: 3.828 min Scan# 466
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

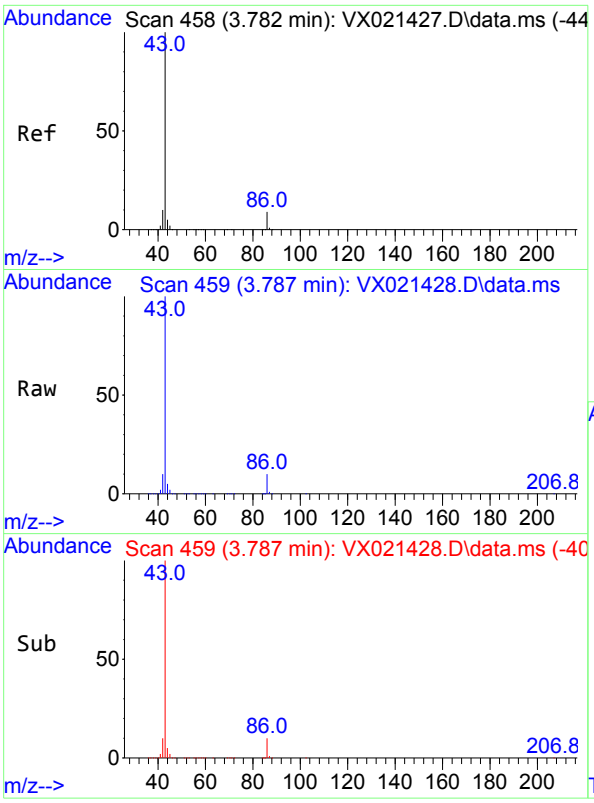
Tgt Ion: 45 Resp: 331401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 67.3 | 58.0 | 87.0 |
| 87 | 26.3 | 25.4 | 38.0 |
| 59 | 11.2 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

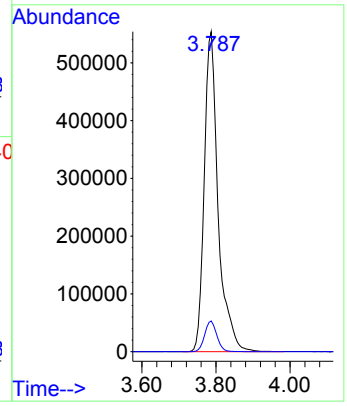
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

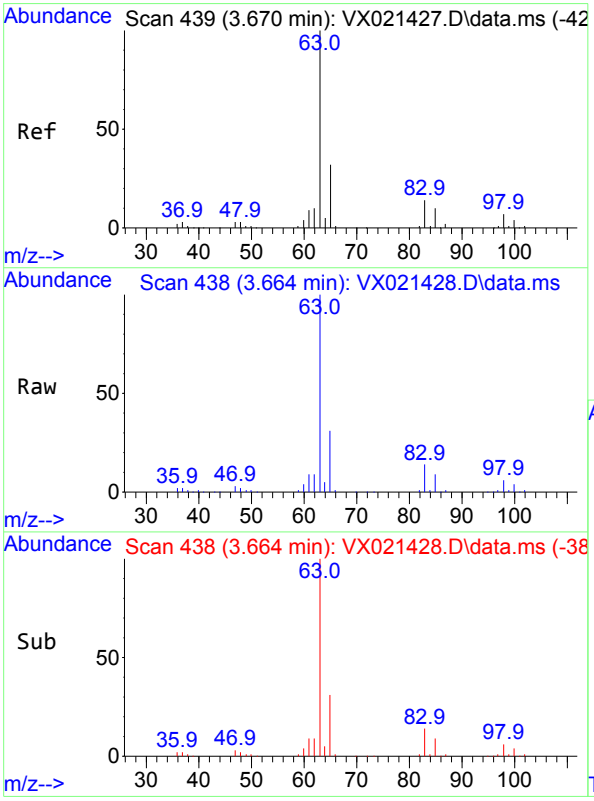



#23
Vinyl Acetate
Concen: 523.44 ug/l
RT: 3.787 min Scan# 459
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 43 Resp: 1434541

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.6 | 9.9 | 14.9# |

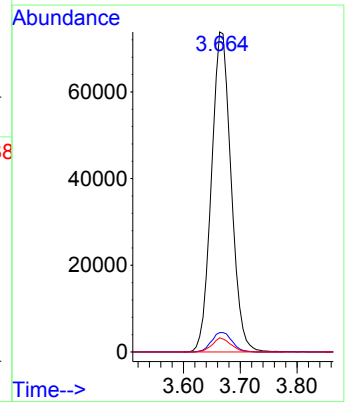



#24
1,1-Dichloroethane
Concen: 103.40 ug/l
RT: 3.664 min Scan# 438
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

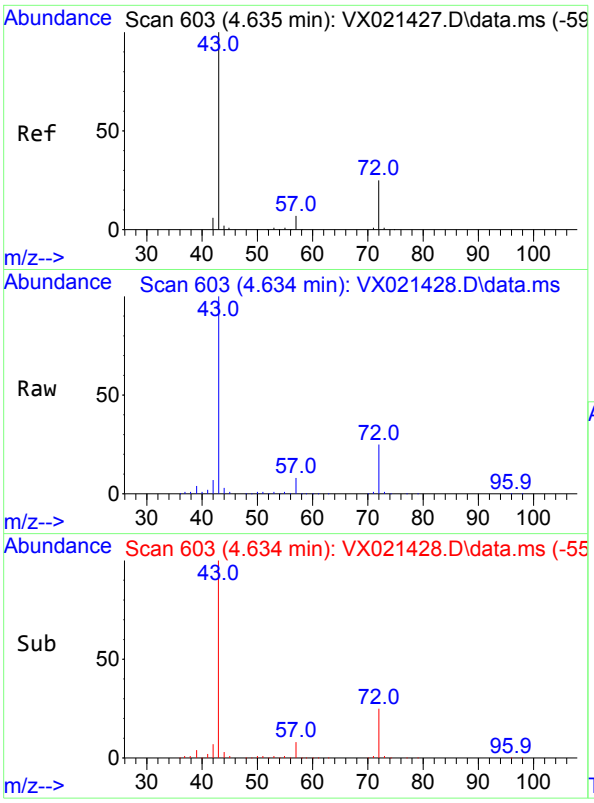
Tgt Ion: 63 Resp: 177129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.1 | 3.8 | 11.2 |
| 100 | 4.4 | 2.5 | 7.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

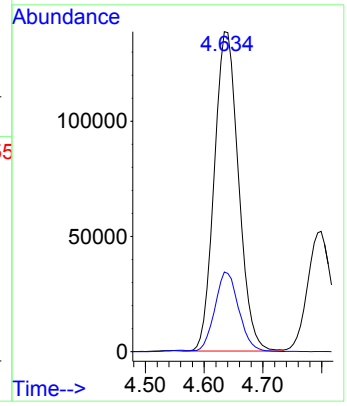
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

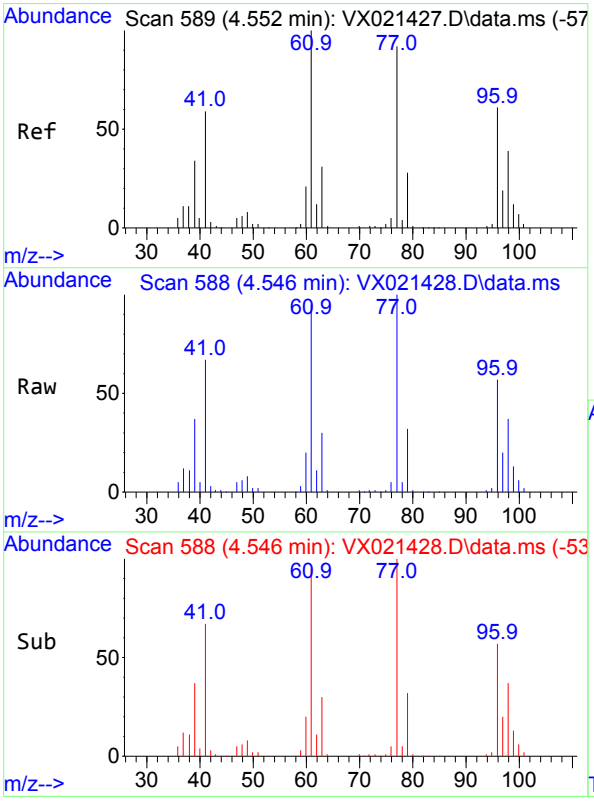



#25
2-Butanone
Concen: 541.52 ug/l
RT: 4.634 min Scan# 603
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 43 Resp: 397210

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.9 | 23.7 | 35.5 |

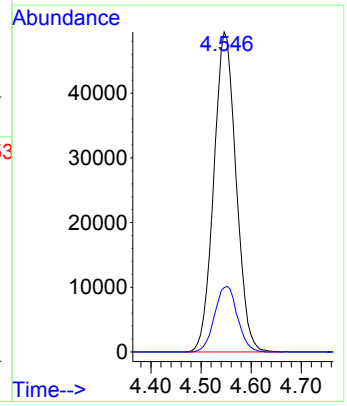



#26
2,2-Dichloropropane
Concen: 102.53 ug/l
RT: 4.546 min Scan# 588
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

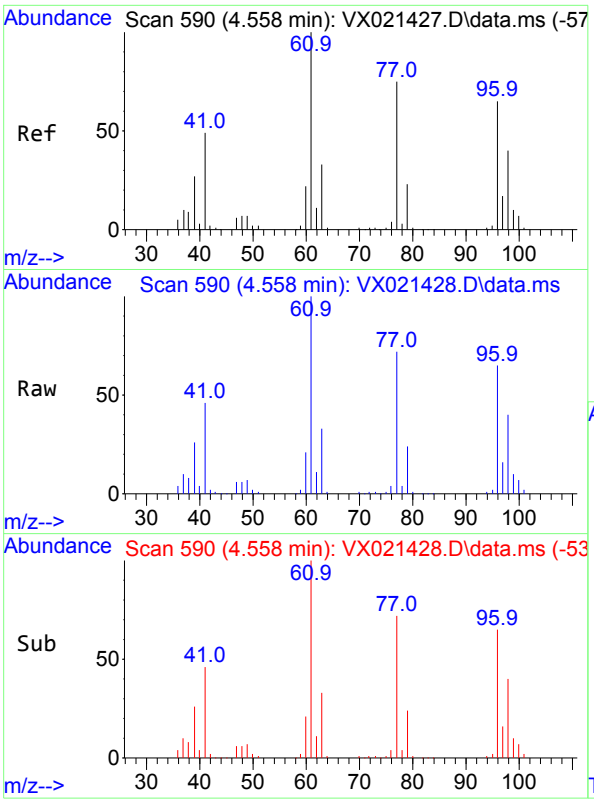
Tgt Ion: 77 Resp: 152762

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.0 | 11.7 | 35.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

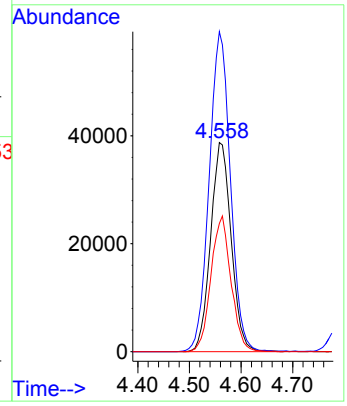
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

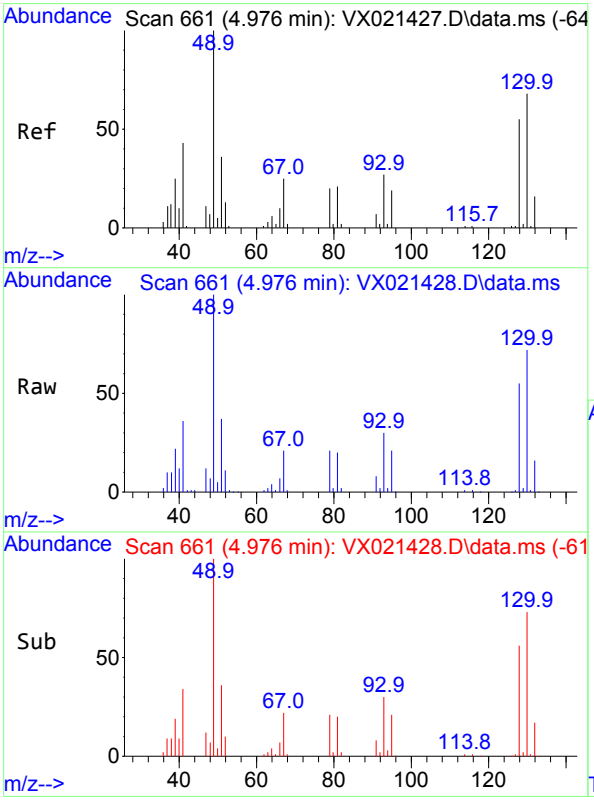



#27
cis-1,2-Dichloroethene
Concen: 104.13 ug/l
RT: 4.558 min Scan# 590
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 96 Resp: 107096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 157.6 | 0.0 | 285.6 |
| 98 | 63.3 | 0.0 | 129.6 |

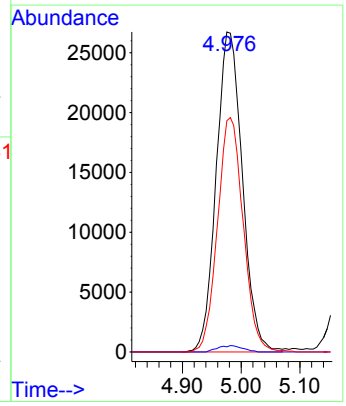



#28
Bromochloromethane
Concen: 102.26 ug/l
RT: 4.976 min Scan# 661
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

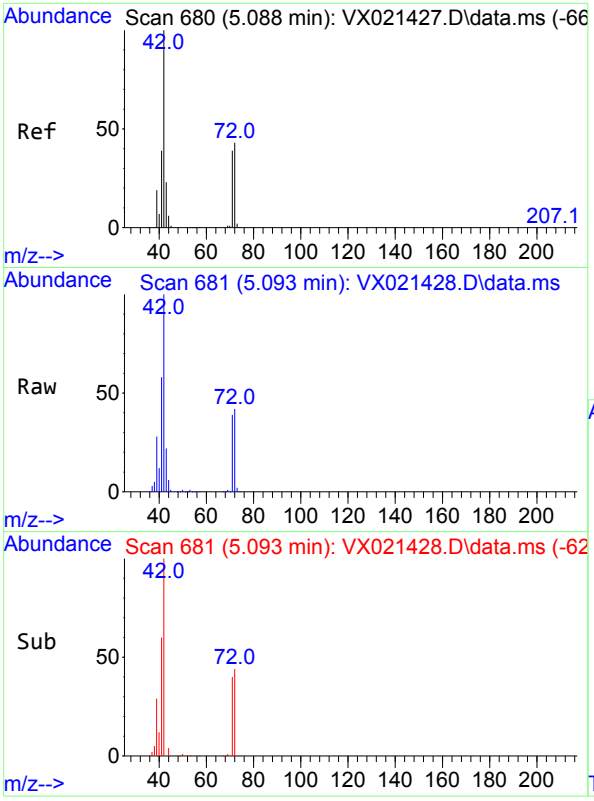
Tgt Ion: 49 Resp: 82676

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 4.0 |
| 130 | 71.9 | 68.2 | 102.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

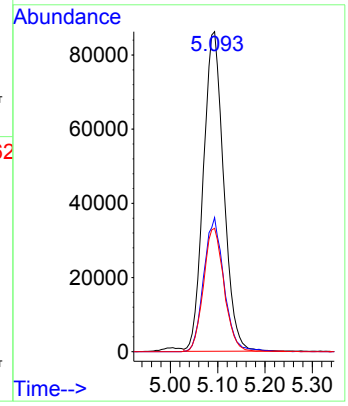
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

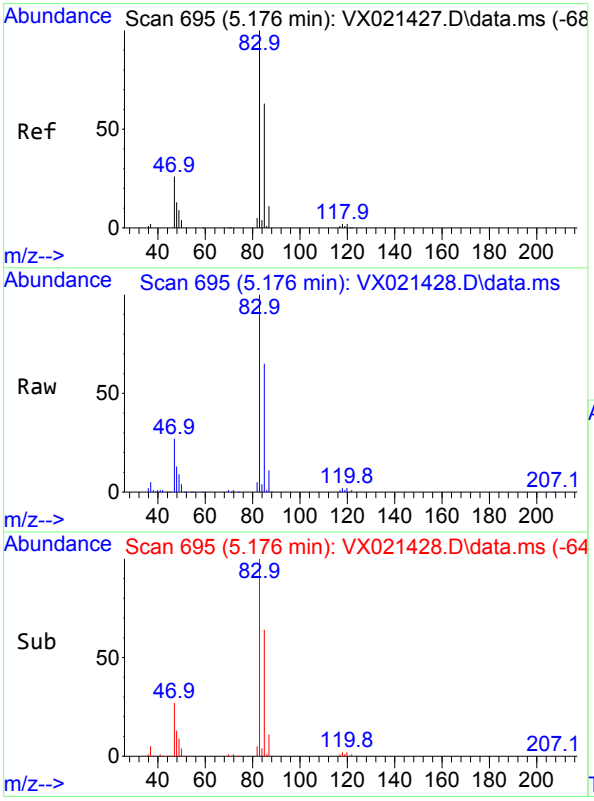



#29
Tetrahydrofuran
Concen: 530.35 ug/l
RT: 5.093 min Scan# 681
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 42 Resp: 256372

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.0 | 41.7 | 62.5 |
| 71 | 39.2 | 38.4 | 57.6 |

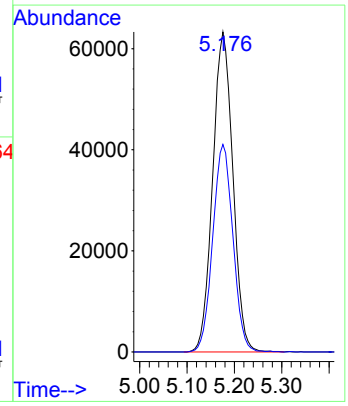



#30
Chloroform
Concen: 105.04 ug/l
RT: 5.176 min Scan# 695
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

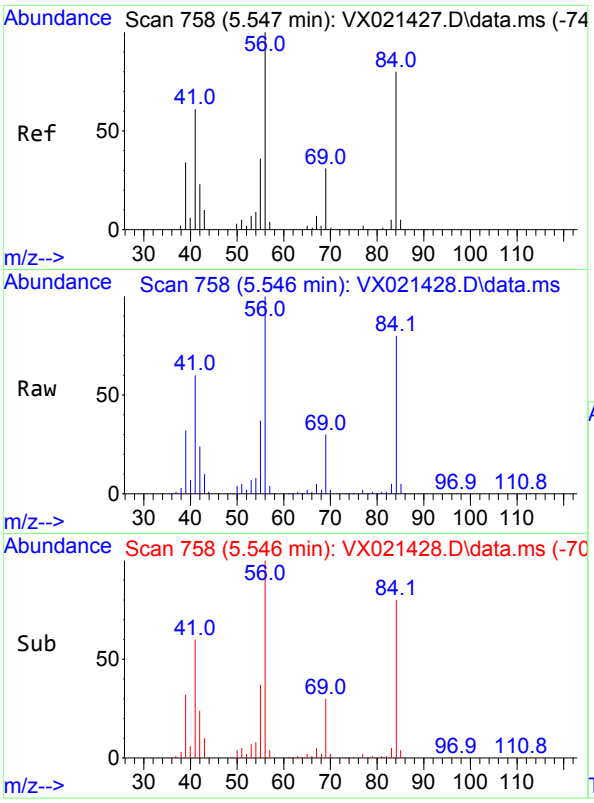
Tgt Ion: 83 Resp: 187353

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.8 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

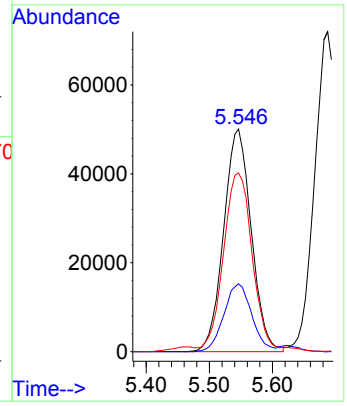
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

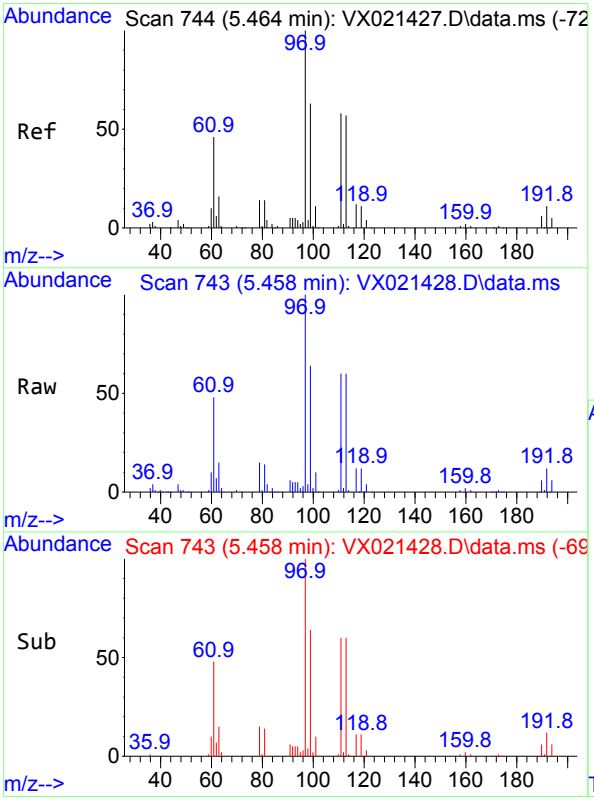



#31
Cyclohexane
Concen: 98.47 ug/l
RT: 5.546 min Scan# 758
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 56 Resp: 152110

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.5 | 25.3 | 37.9 |
| 84 | 78.2 | 71.4 | 107.0 |

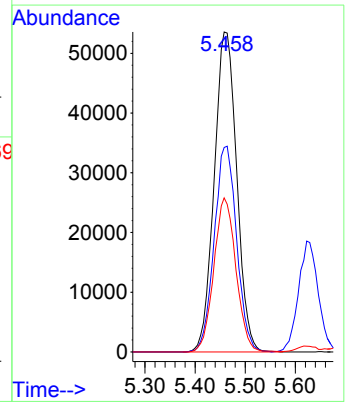



#32
1,1,1-Trichloroethane
Concen: 105.72 ug/l
RT: 5.458 min Scan# 743
Delta R.T. -0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

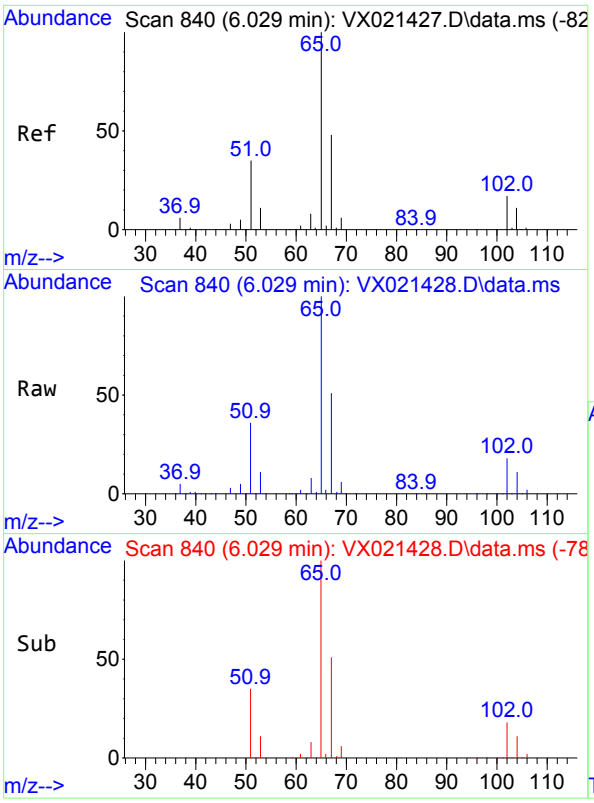
Tgt Ion: 97 Resp: 167161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.2 | 51.5 | 77.3 |
| 61 | 47.3 | 34.2 | 51.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

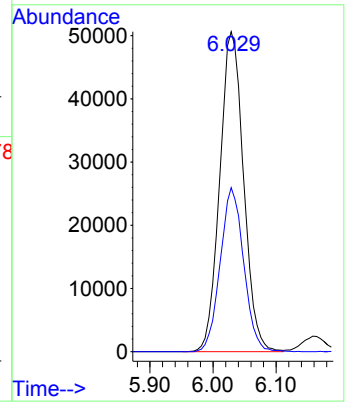
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

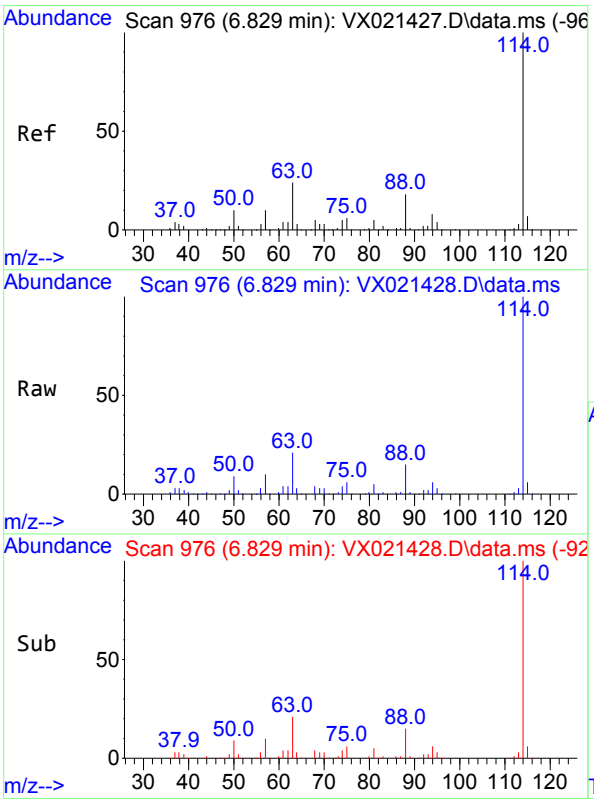



#33
1,2-Dichloroethane-d4
Concen: 102.58 ug/l
RT: 6.029 min Scan# 840
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 65 Resp: 132636

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.5 | 0.0 | 105.4 |

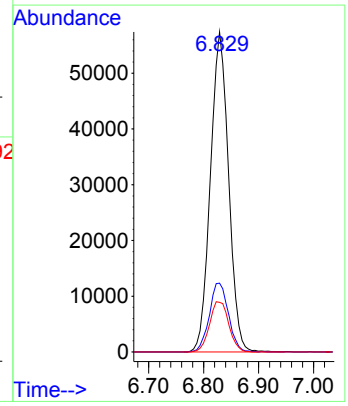



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

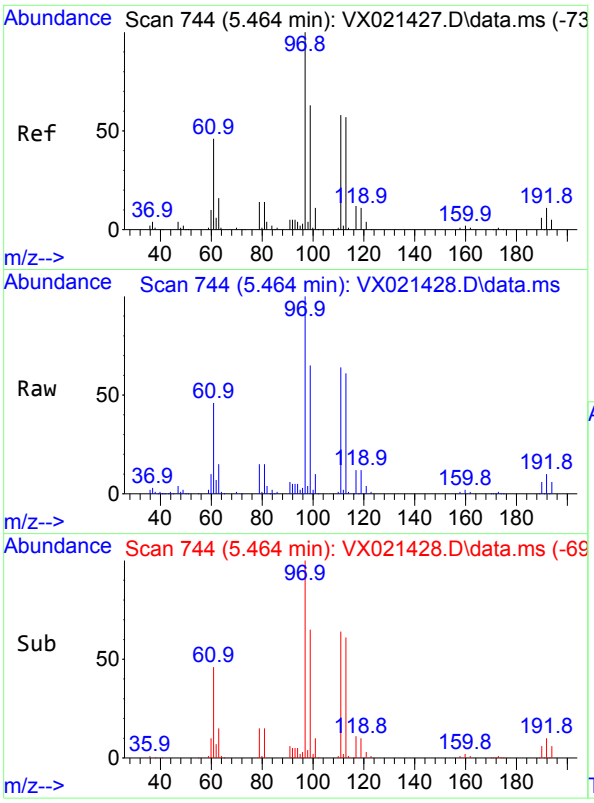
Tgt Ion:114 Resp: 131882

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 21.5 | 0.0 | 40.8 |
| 88 | 15.5 | 0.0 | 32.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

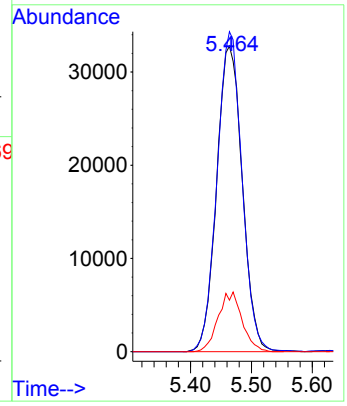
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

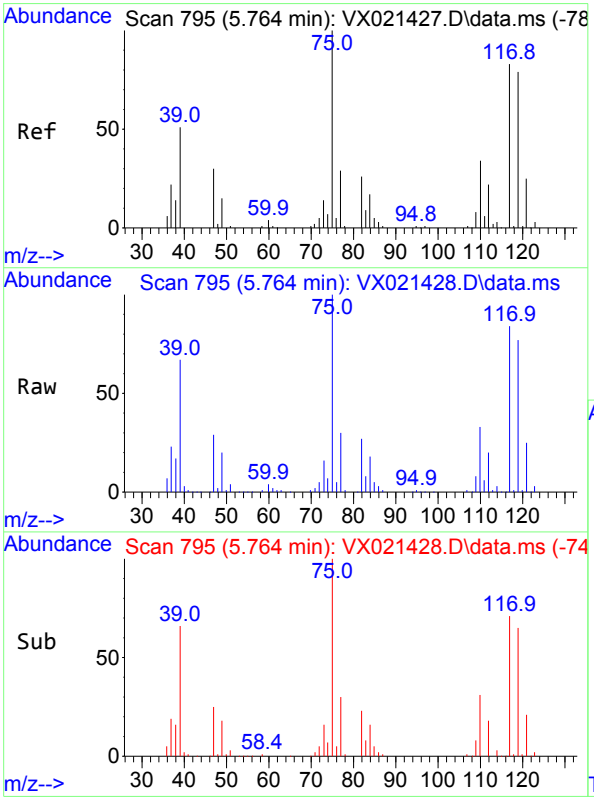



#35
Dibromofluoromethane
Concen: 106.75 ug/l
RT: 5.464 min Scan# 744
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:113 Resp: 95971

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.9 | 81.9 | 122.9 |
| 192 | 18.2 | 16.7 | 25.1 |

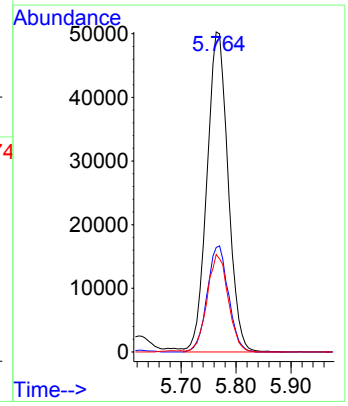



#36
1,1-Dichloropropene
Concen: 101.53 ug/l
RT: 5.764 min Scan# 795
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

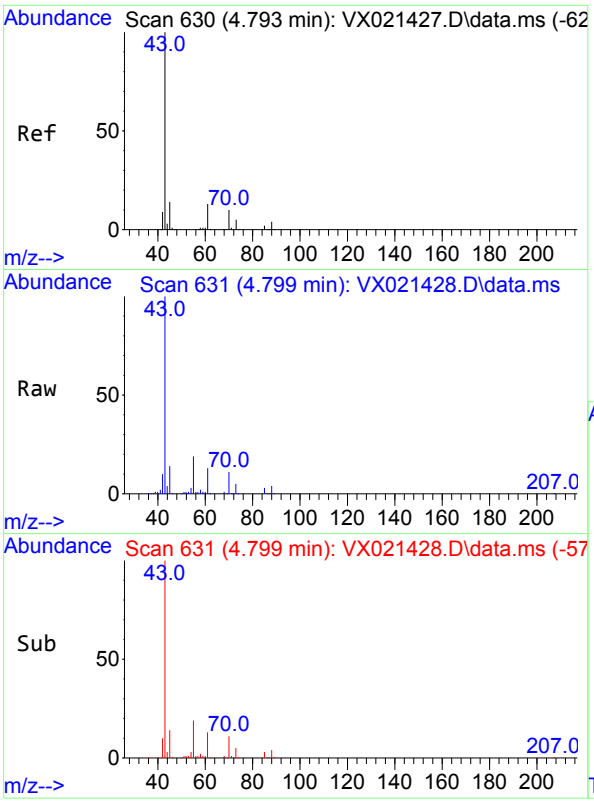
Tgt Ion: 75 Resp: 134298

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.2 | 18.1 | 54.4 |
| 77 | 30.5 | 25.3 | 37.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

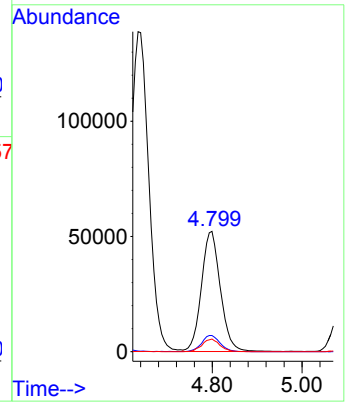
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

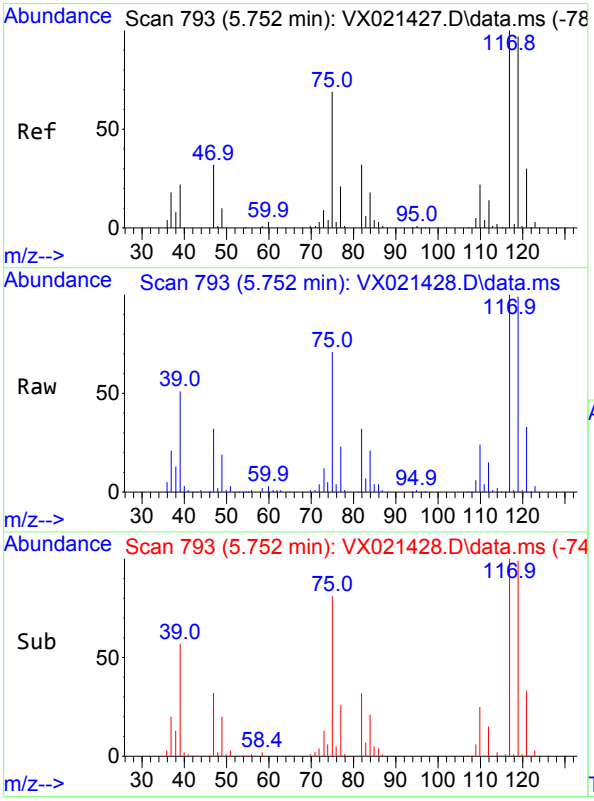



#37
Ethyl Acetate
Concen: 99.81 ug/l
RT: 4.799 min Scan# 631
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 43 Resp: 152631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.3 | 12.8 | 19.2 |
| 70 | 9.9 | 10.5 | 15.7# |

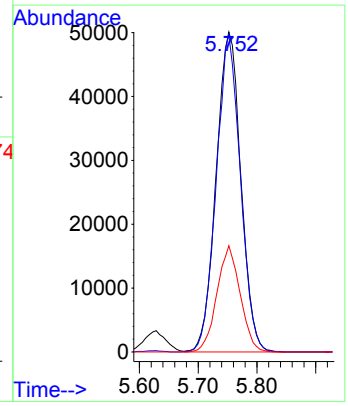



#38
Carbon Tetrachloride
Concen: 106.25 ug/l
RT: 5.752 min Scan# 793
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

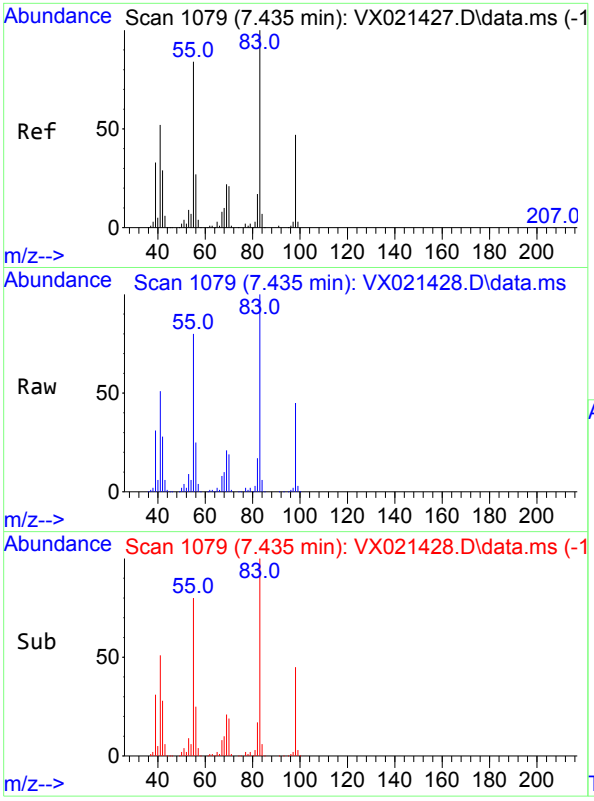
Tgt Ion:117 Resp: 146353

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 99.2 | 76.2 | 114.2 |
| 121 | 33.2 | 24.8 | 37.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

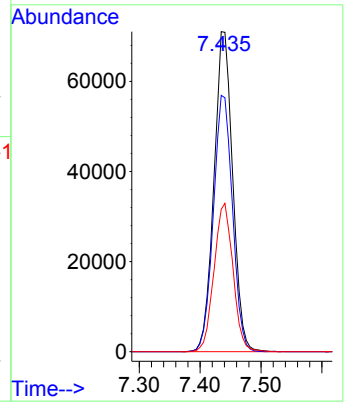
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

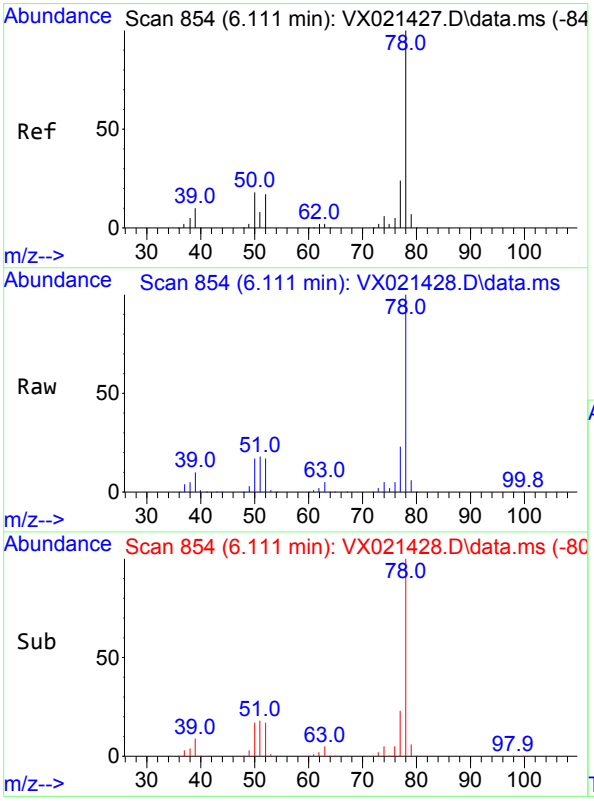



#39
Methylcyclohexane
Concen: 103.34 ug/l
RT: 7.435 min Scan# 1079
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 83 Resp: 151837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 80.1 | 58.9 | 88.3 |
| 98 | 44.5 | 38.1 | 57.1 |

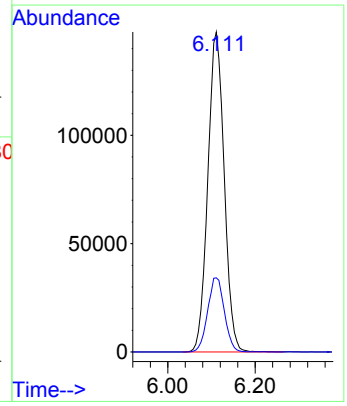



#40
Benzene
Concen: 105.33 ug/l
RT: 6.111 min Scan# 854
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

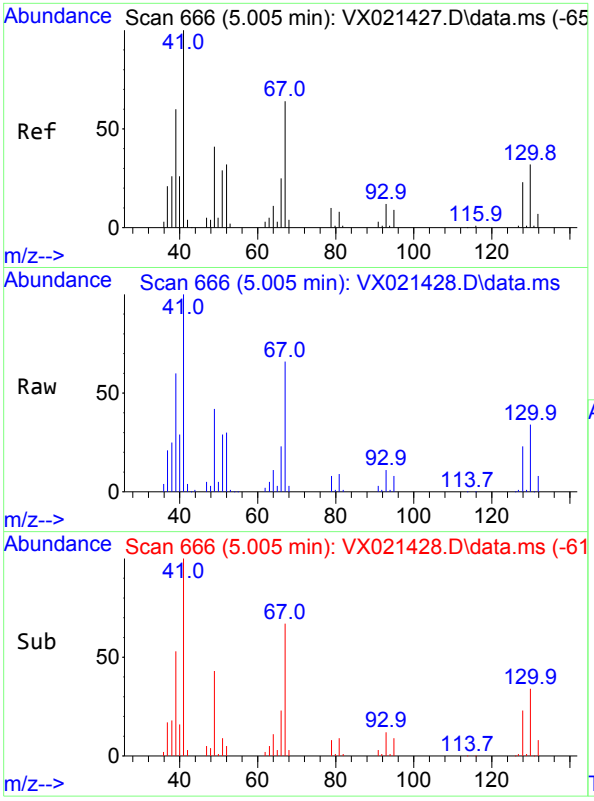
Tgt Ion: 78 Resp: 384675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.2 | 18.9 | 28.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

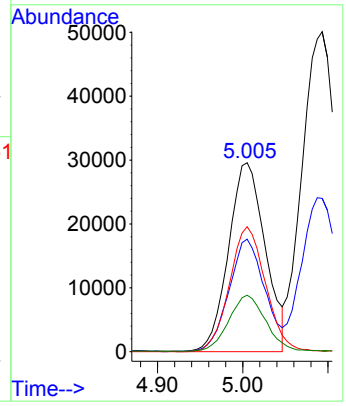
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

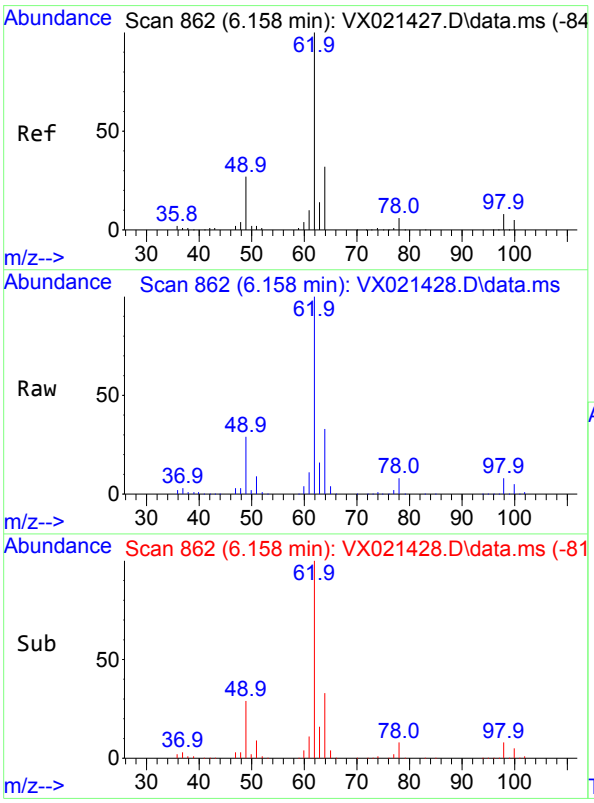



#41
Methacrylonitrile
Concen: 100.20 ug/l
RT: 5.005 min Scan# 666
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 41 Resp: 88787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 58.5 | 42.5 | 63.7 |
| 67 | 65.5 | 65.0 | 97.6 |
| 52 | 29.6 | 25.3 | 37.9 |

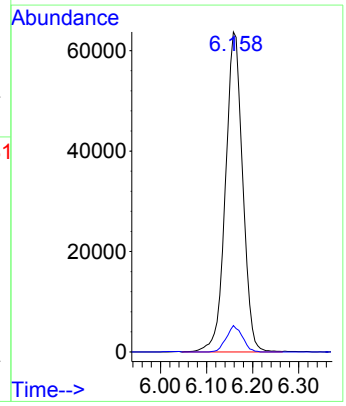



#42
1,2-Dichloroethane
Concen: 104.24 ug/l
RT: 6.158 min Scan# 862
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

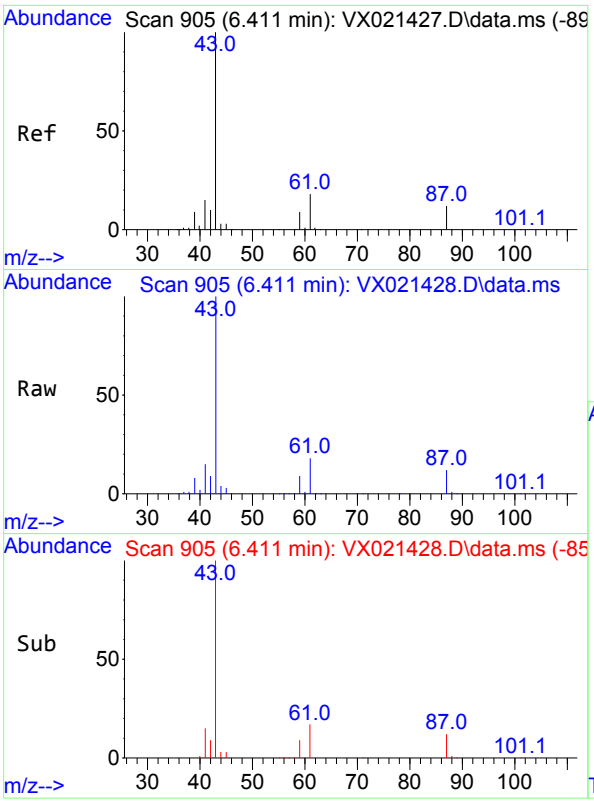
Tgt Ion: 62 Resp: 164775

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.7 | 0.0 | 20.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

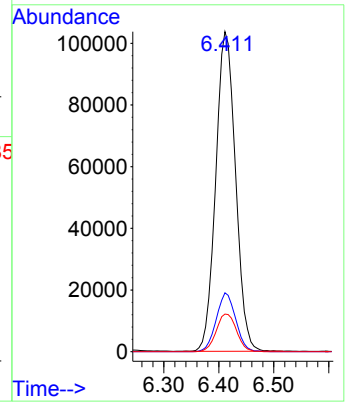
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

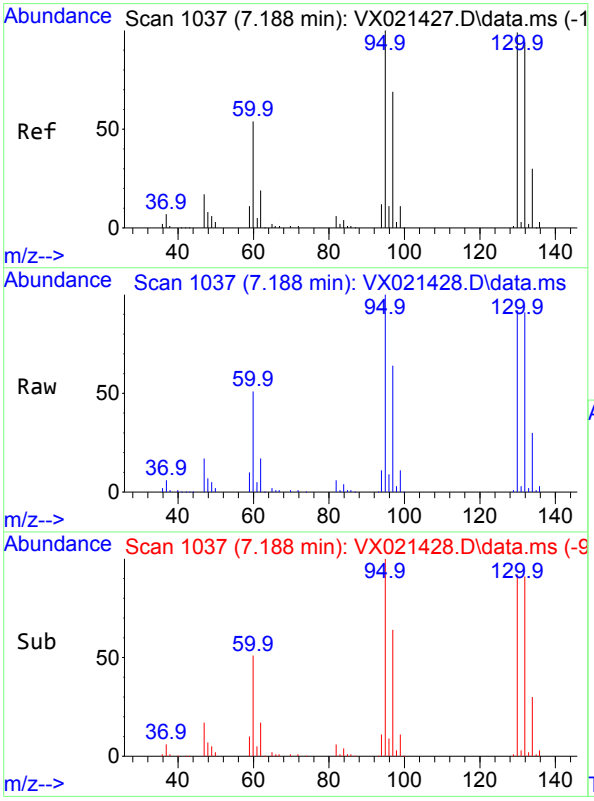



#43
Isopropyl Acetate
Concen: 103.35 ug/l
RT: 6.411 min Scan# 905
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 43 Resp: 259301

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.1 | 18.2 | 27.4# |
| 87 | 12.1 | 12.5 | 18.7# |

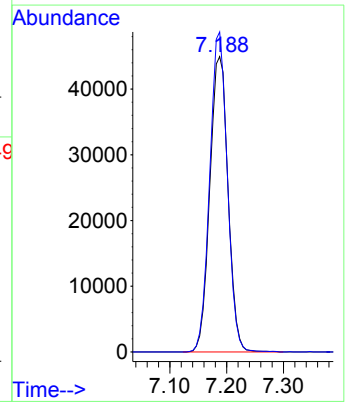



#44
Trichloroethene
Concen: 103.11 ug/l
RT: 7.188 min Scan# 1037
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

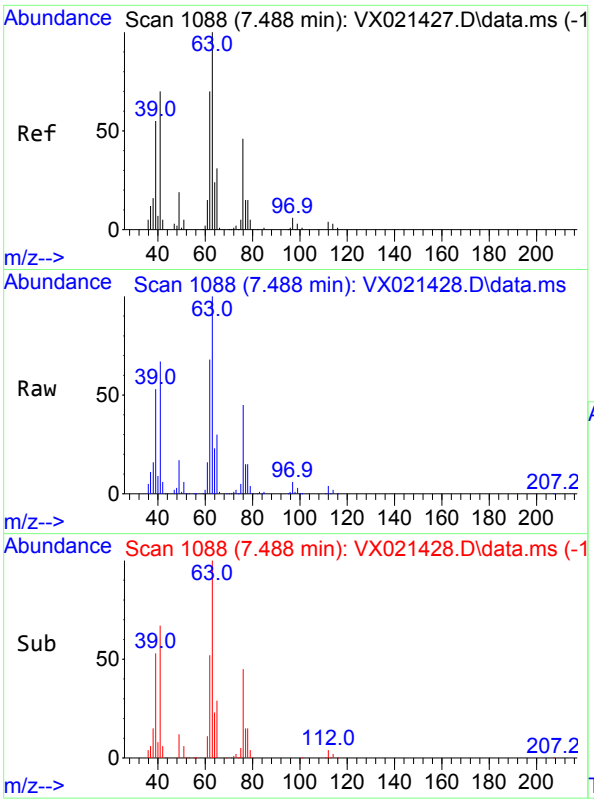
Tgt Ion:130 Resp: 99940

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 108.3 | 0.0 | 198.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

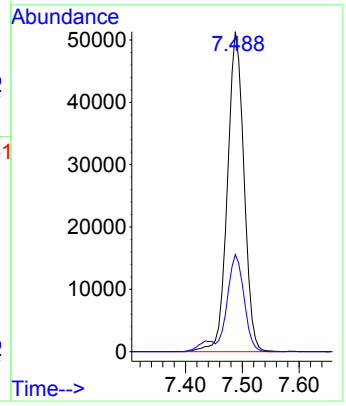
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

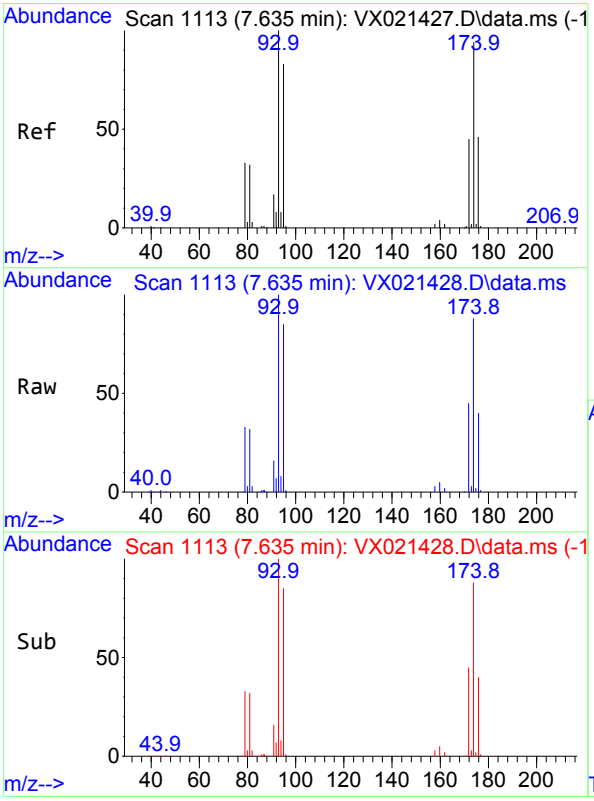



#45
1,2-Dichloropropane
Concen: 105.72 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 63 Resp: 103968

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.4 | 25.7 | 38.5 |

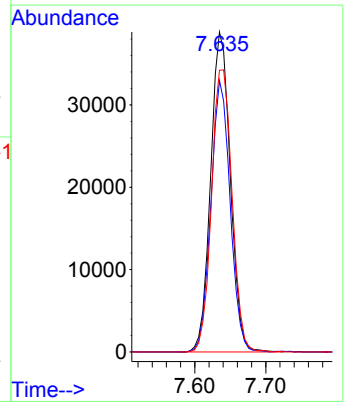



#46
Dibromomethane
Concen: 104.11 ug/l
RT: 7.635 min Scan# 1113
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

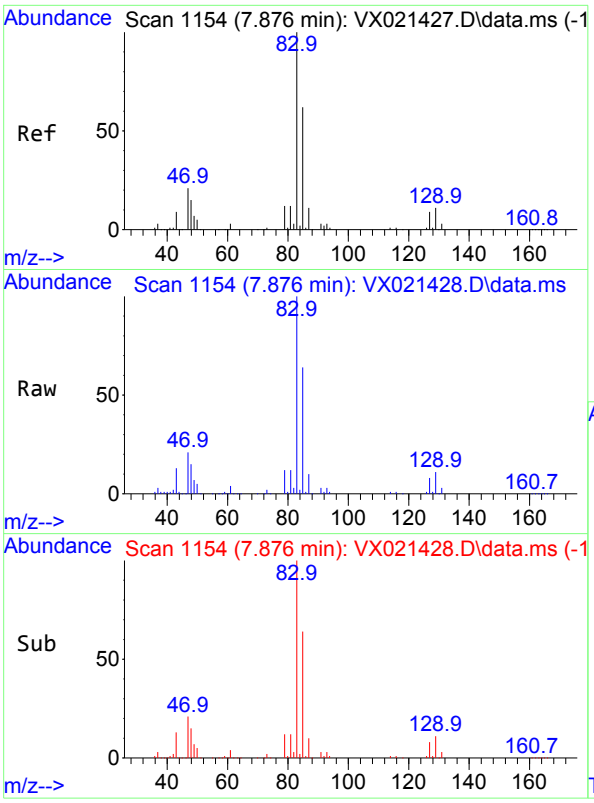
Tgt Ion: 93 Resp: 75136

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.0 | 66.8 | 100.2 |
| 174 | 91.6 | 83.1 | 124.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

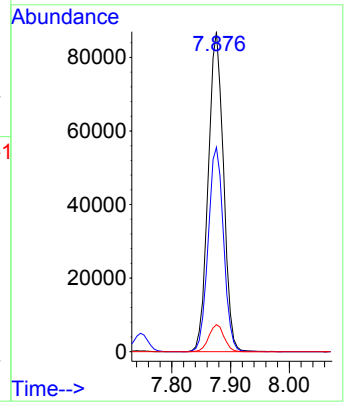
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

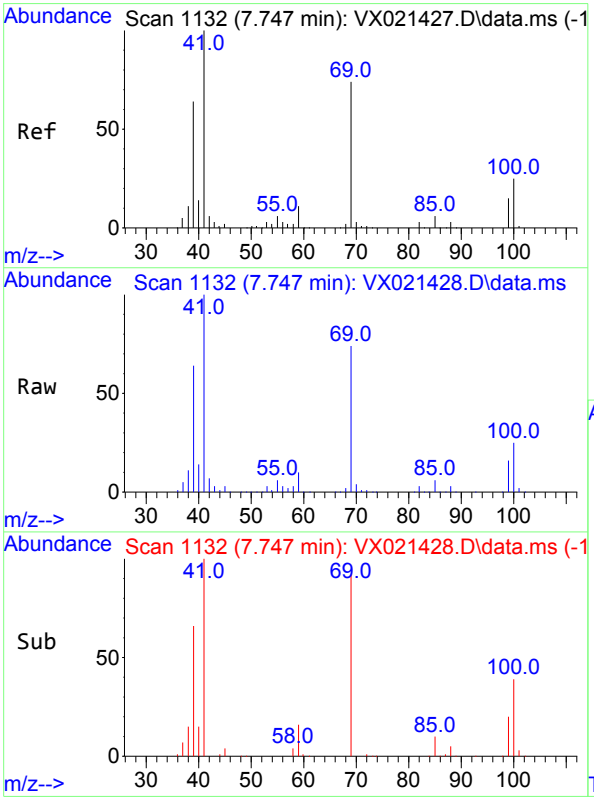



#47
Bromodichloromethane
Concen: 108.46 ug/l
RT: 7.876 min Scan# 1154
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 83 Resp: 156643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.8 | 51.4 | 77.0 |
| 127 | 8.4 | 6.8 | 10.2 |

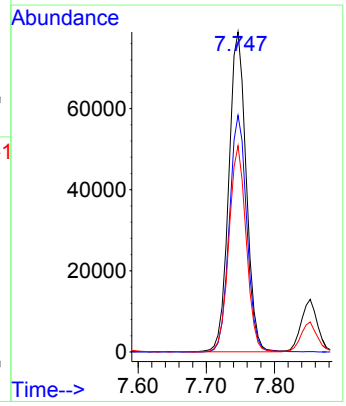



#48
Methyl methacrylate
Concen: 104.62 ug/l
RT: 7.747 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

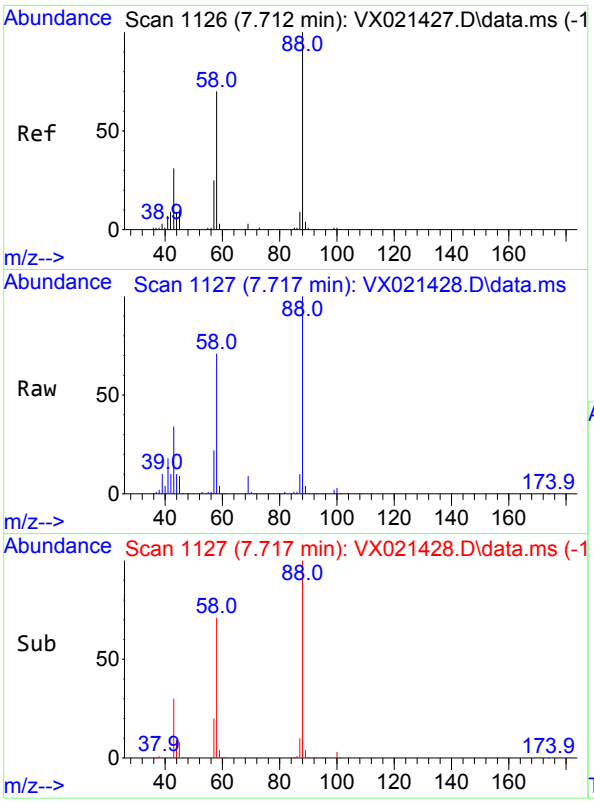
Tgt Ion: 41 Resp: 140030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 74.1 | 76.0 | 114.0# |
| 39 | 63.9 | 44.6 | 67.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

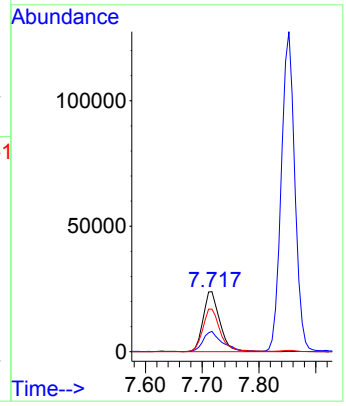
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

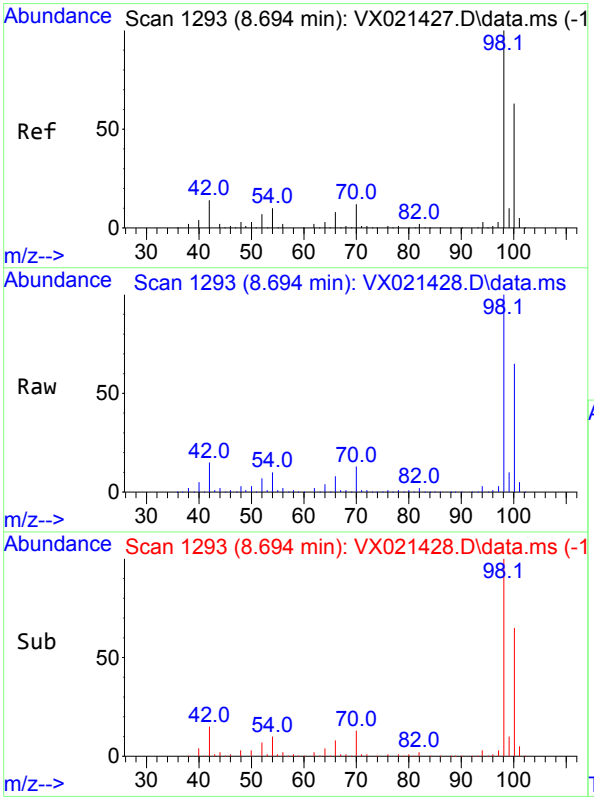



#49
1,4-Dioxane
Concen: 1968.00 ug/l
RT: 7.717 min Scan# 1127
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 88 Resp: 48852

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 38.1 | 23.2 | 34.8# |
| 58 | 74.3 | 55.0 | 82.4 |

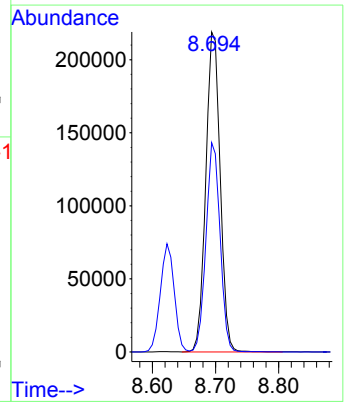



#50
Toluene-d8
Concen: 105.86 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

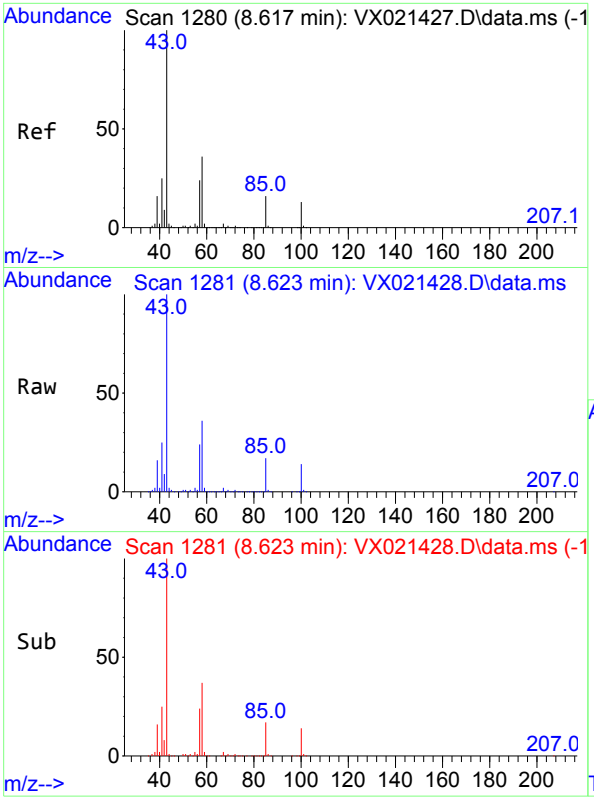
Tgt Ion: 98 Resp: 346837

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.1 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

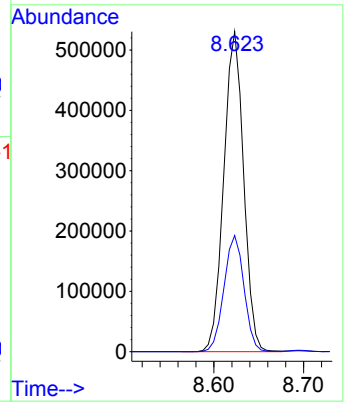
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

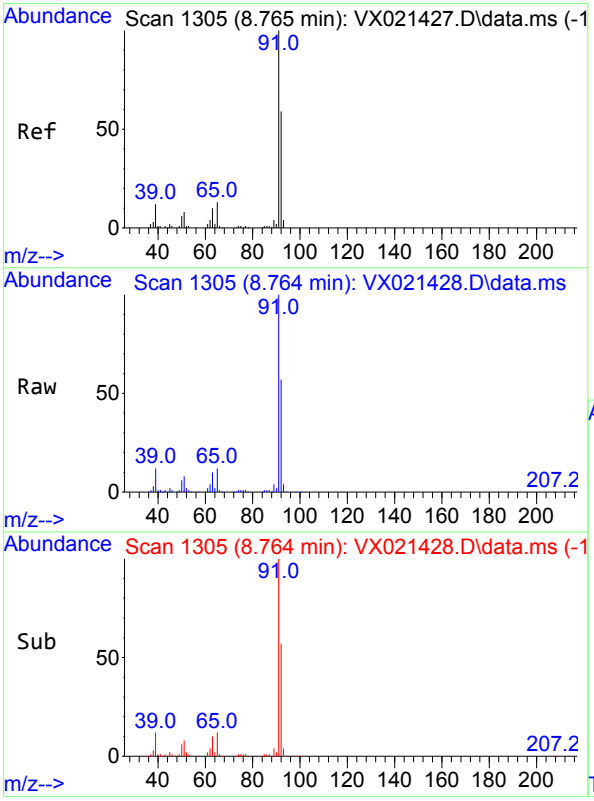



#51
4-Methyl-2-Pentanone
Concen: 552.94 ug/l
RT: 8.623 min Scan# 1281
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 43 Resp: 815042

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.6 | 35.4 | 53.0 |

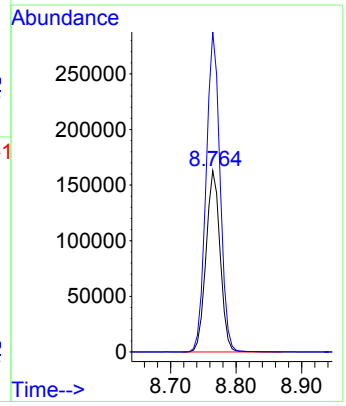



#52
Toluene
Concen: 107.96 ug/l
RT: 8.764 min Scan# 1305
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

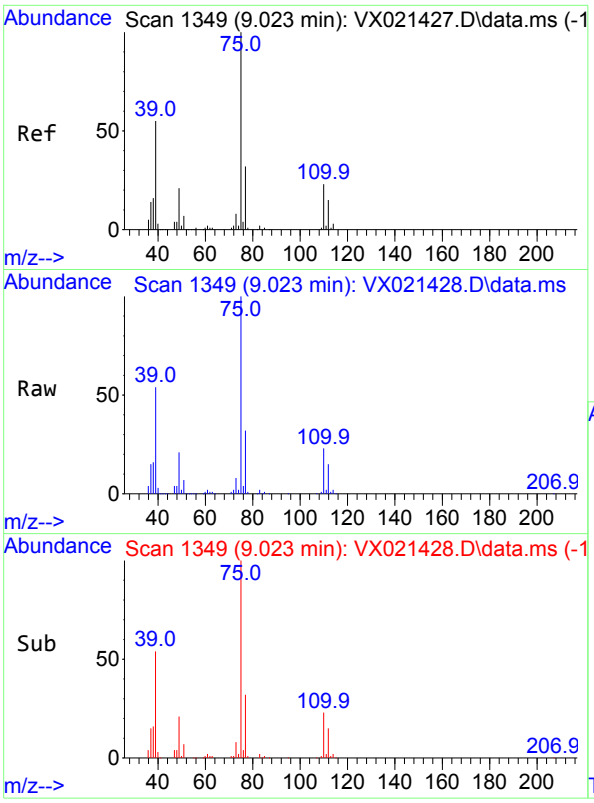
Tgt Ion: 92 Resp: 244057

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 175.1 | 137.1 | 205.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

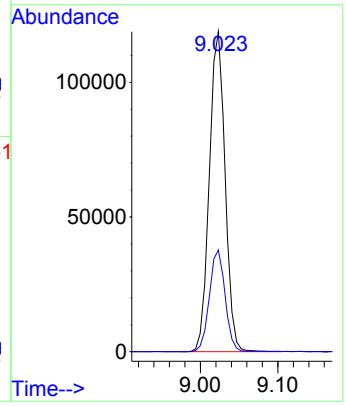
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

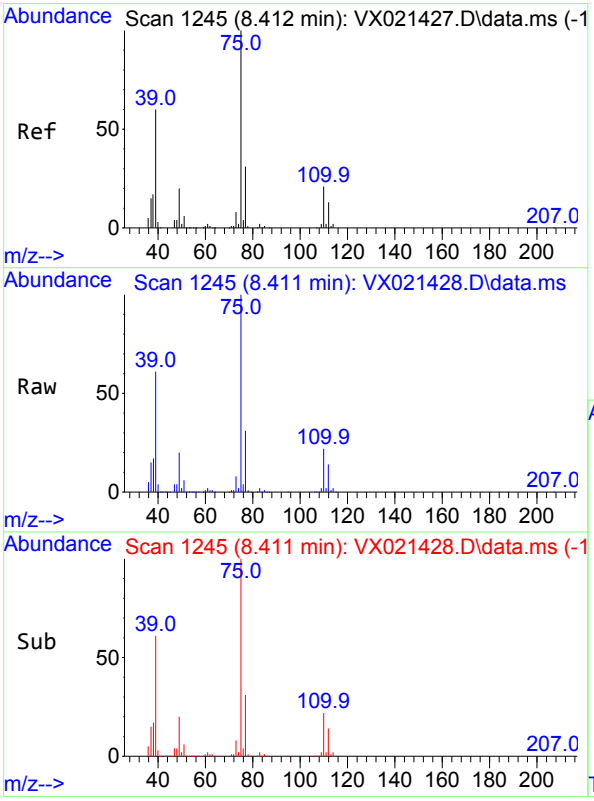



#53
t-1,3-Dichloropropene
Concen: 109.99 ug/l
RT: 9.023 min Scan# 1349
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 75 Resp: 168002

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.8 | 24.9 | 37.3 |

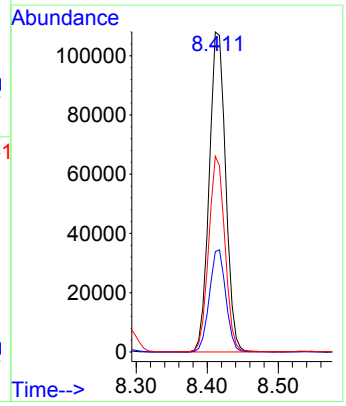



#54
cis-1,3-Dichloropropene
Concen: 107.20 ug/l
RT: 8.411 min Scan# 1245
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

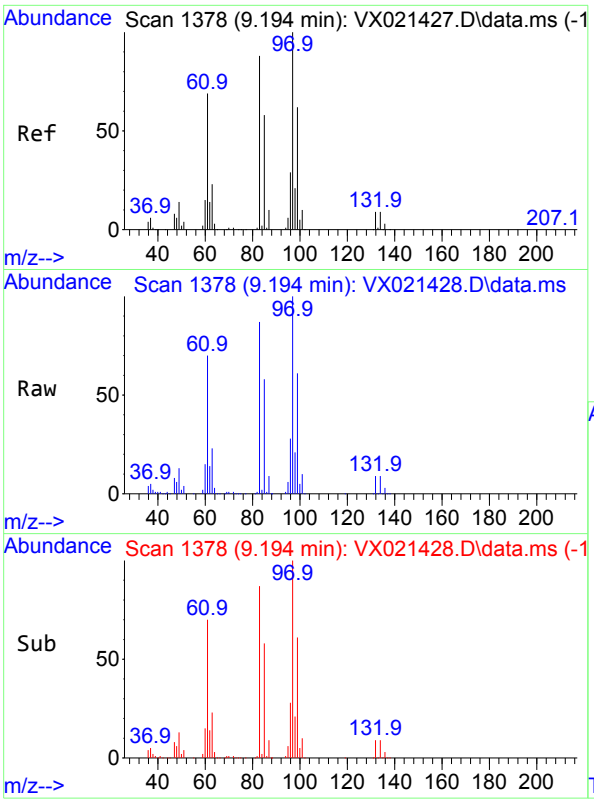
Tgt Ion: 75 Resp: 174335

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.3 | 25.7 | 38.5 |
| 39 | 61.1 | 35.1 | 52.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

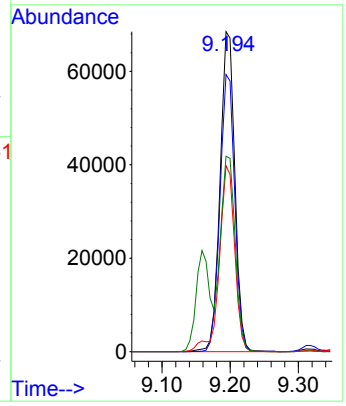
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

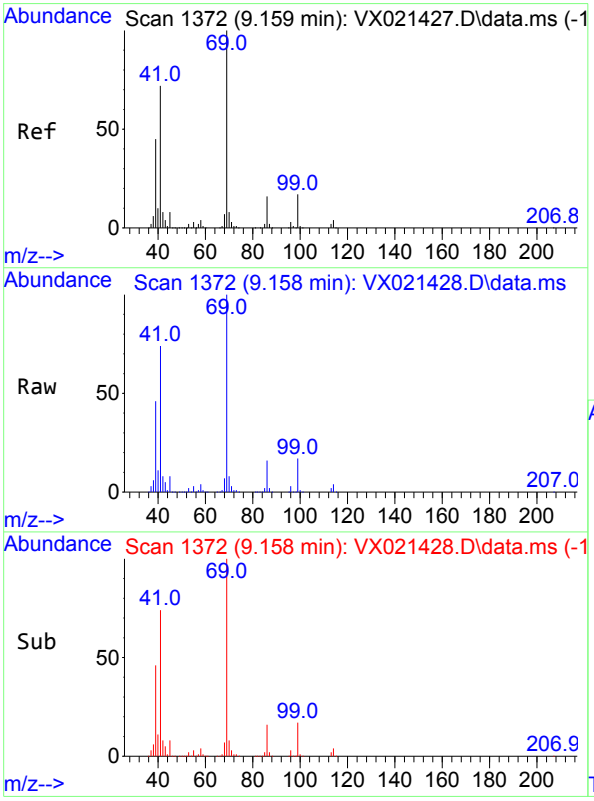



#55
1,1,2-Trichloroethane
Concen: 110.93 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 97 Resp: 103026

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 86.6 | 69.3 | 103.9 |
| 85 | 58.1 | 44.3 | 66.5 |
| 99 | 61.1 | 50.3 | 75.5 |

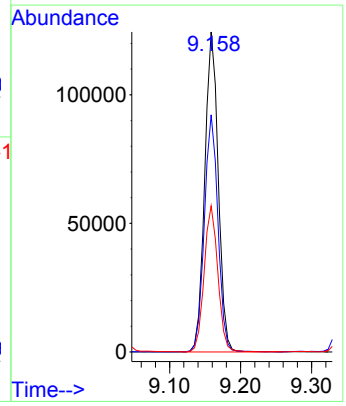



#56
Ethyl methacrylate
Concen: 111.07 ug/l
RT: 9.158 min Scan# 1372
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

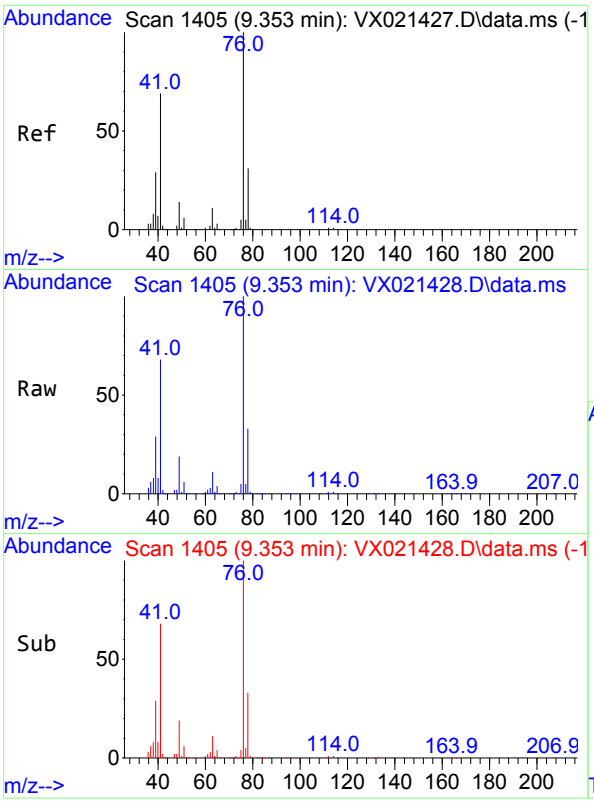
Tgt Ion: 69 Resp: 165184

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 74.5 | 46.8 | 70.2# |
| 39 | 46.0 | 24.7 | 37.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

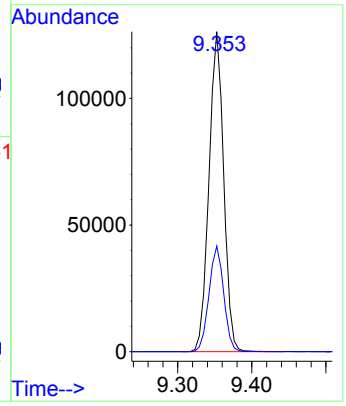
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

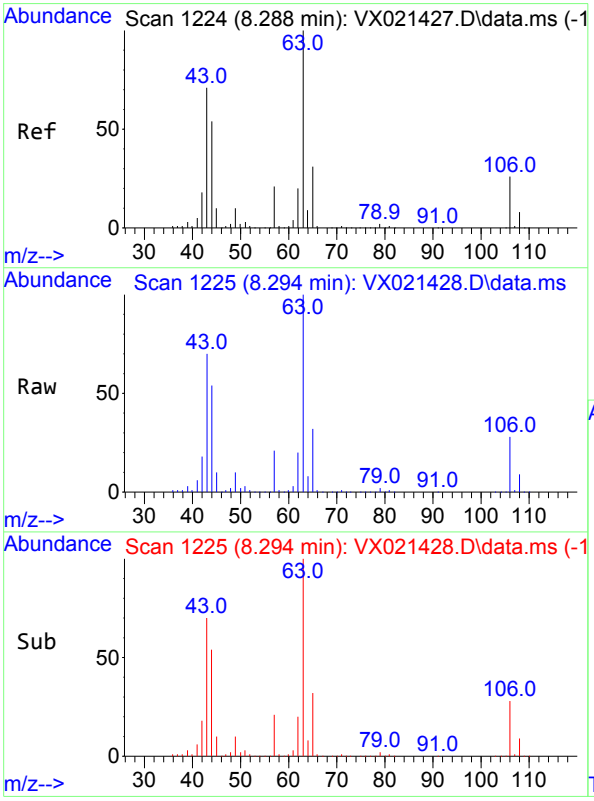



#57
1,3-Dichloropropane
Concen: 107.59 ug/l
RT: 9.353 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 76 Resp: 174019

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 33.0 | 26.2 | 39.2 |

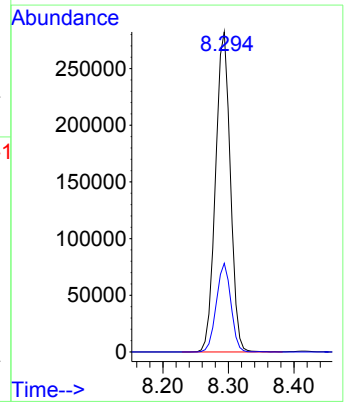



#58
2-Chloroethyl Vinyl ether
Concen: 539.07 ug/l
RT: 8.294 min Scan# 1225
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

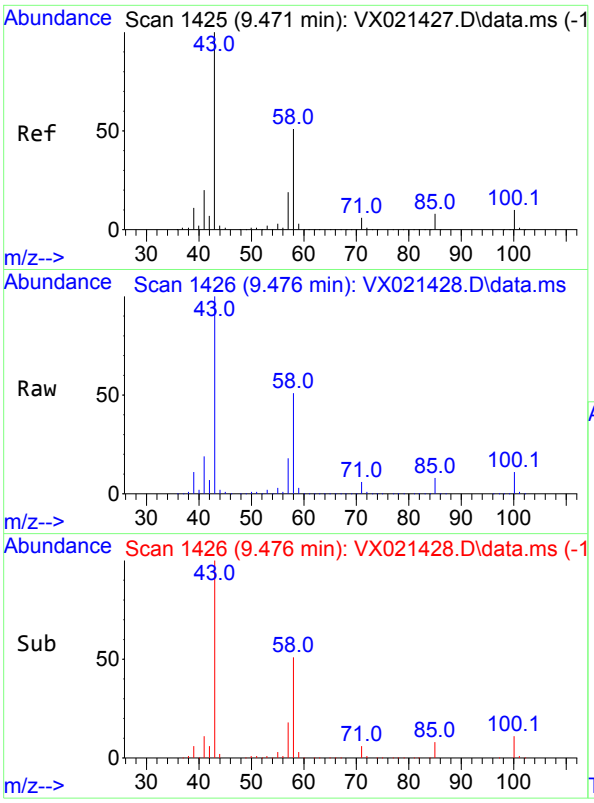
Tgt Ion: 63 Resp: 441623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 27.3 | 23.5 | 35.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

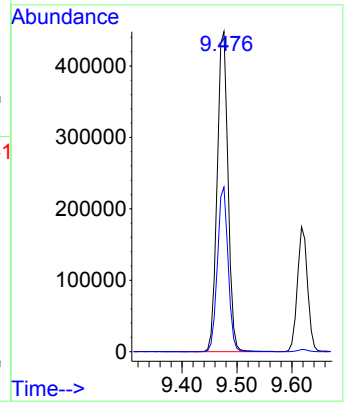
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

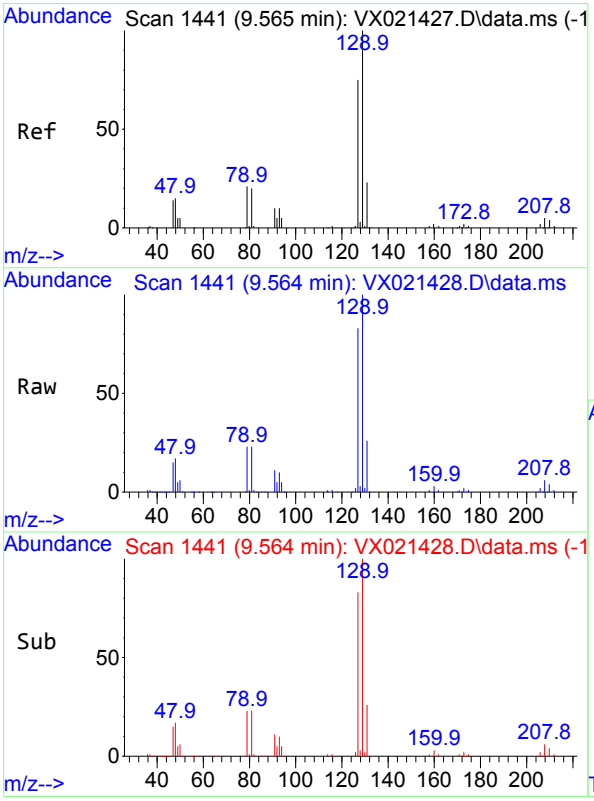



#59
2-Hexanone
Concen: 556.73 ug/l
RT: 9.476 min Scan# 1426
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 43 Resp: 613958

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 50.7 | 30.9 | 92.8 |

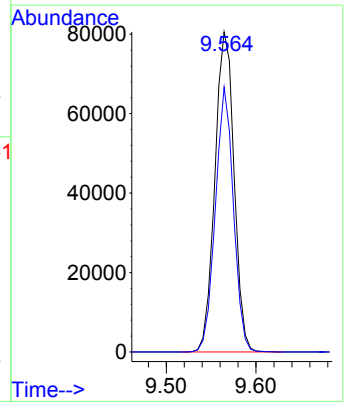



#60
Dibromochloromethane
Concen: 113.18 ug/l
RT: 9.564 min Scan# 1441
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

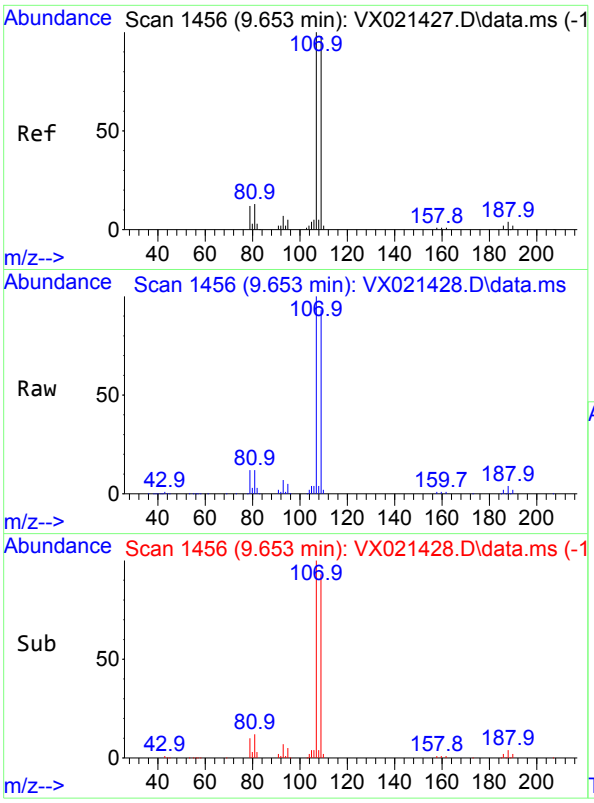
Tgt Ion:129 Resp: 119524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.0 | 38.4 | 115.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

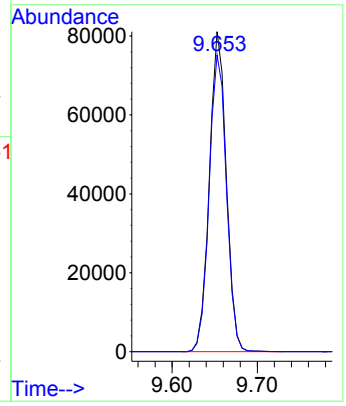
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

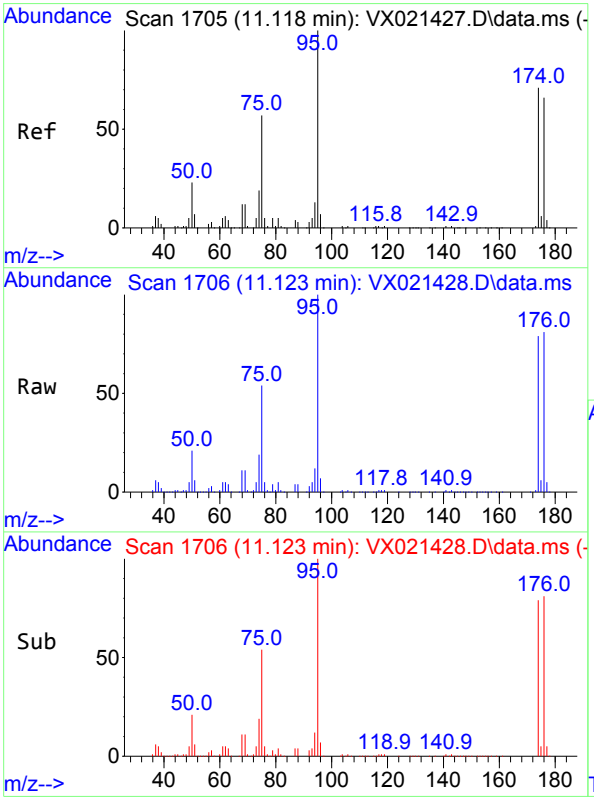



#61
1,2-Dibromoethane
Concen: 109.49 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:107 Resp: 111869

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.6 | 75.8 | 113.6 |

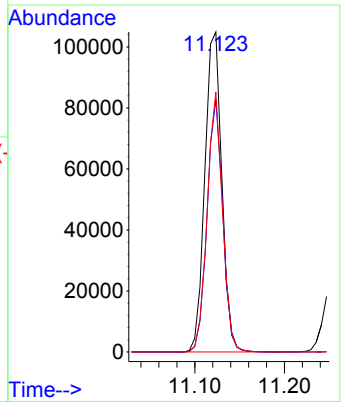



#62
4-Bromofluorobenzene
Concen: 108.54 ug/l
RT: 11.123 min Scan# 1706
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

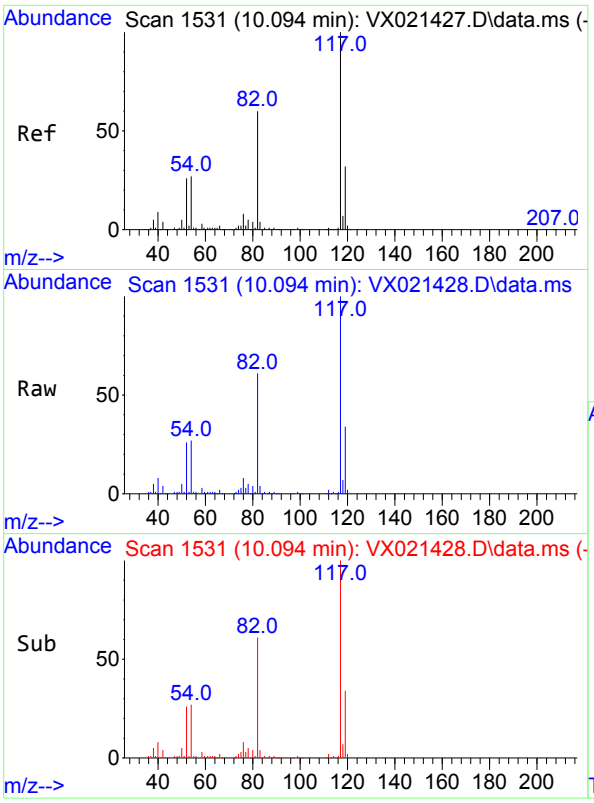
Tgt Ion: 95 Resp: 137381

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.2 | 0.0 | 154.6 |
| 176 | 73.9 | 0.0 | 155.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

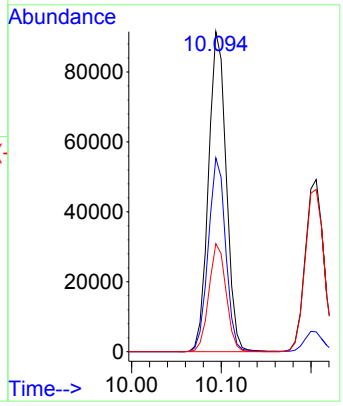
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

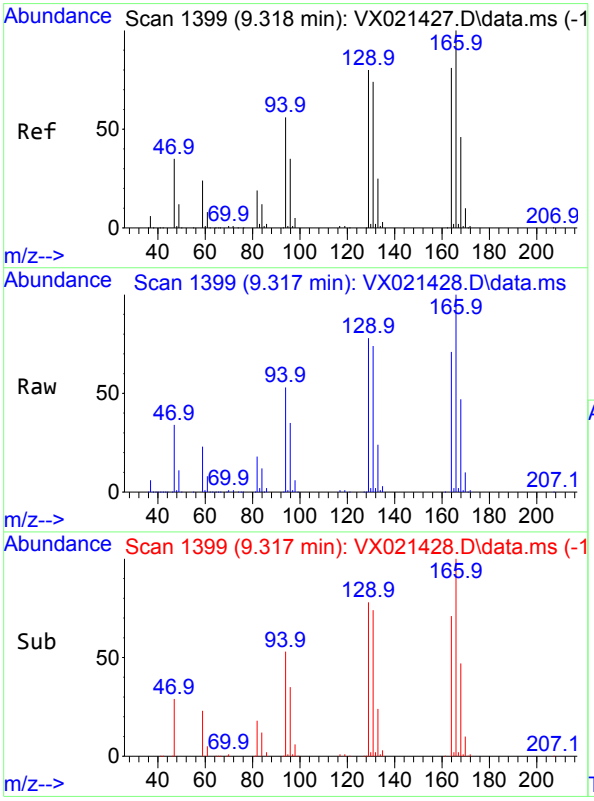



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:117 Resp: 125390

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.5 | 47.4 | 71.2 |
| 119 | 33.8 | 26.6 | 39.8 |

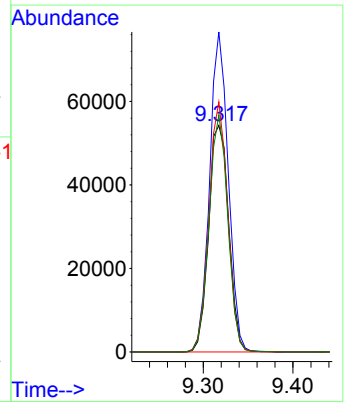



#64
Tetrachloroethene
Concen: 90.94 ug/l
RT: 9.317 min Scan# 1399
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

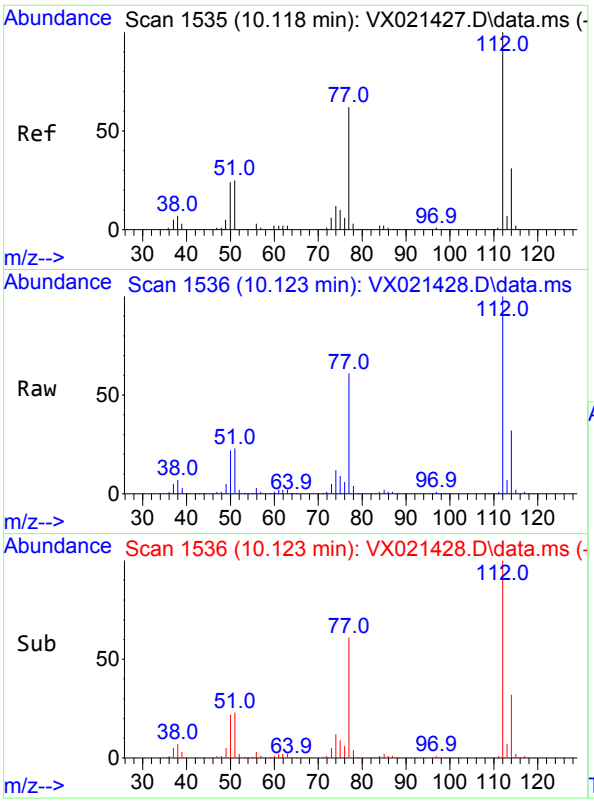
Tgt Ion:164 Resp: 84336

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 141.3 | 103.4 | 155.2 |
| 129 | 110.4 | 70.8 | 106.2# |
| 131 | 104.7 | 72.5 | 108.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

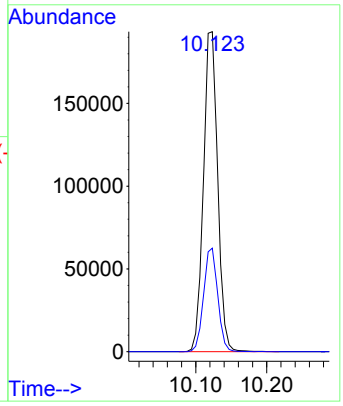
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

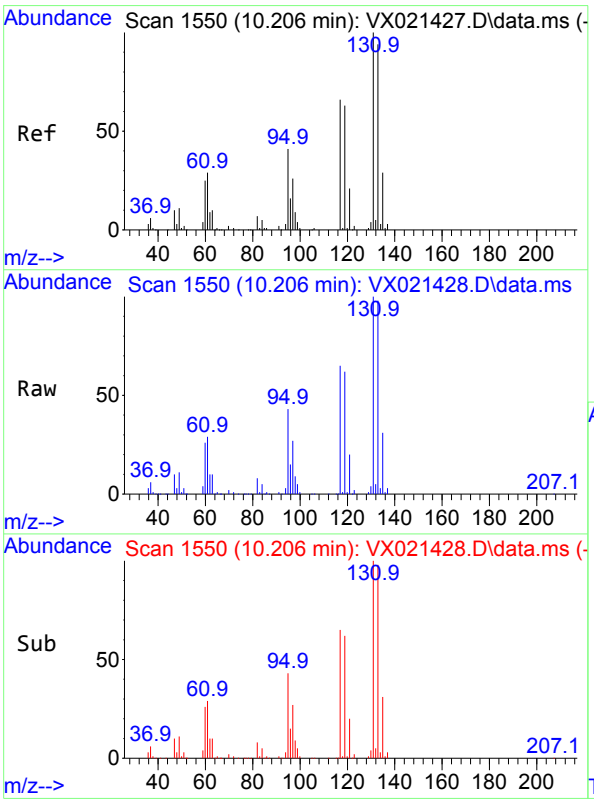



#65
Chlorobenzene
Concen: 104.49 ug/l
RT: 10.123 min Scan# 1536
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:112 Resp: 269584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.3 | 25.8 | 38.6 |

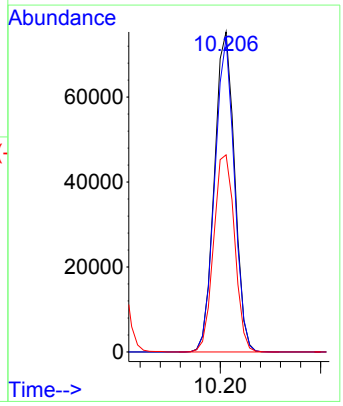



#66
1,1,1,2-Tetrachloroethane
Concen: 109.05 ug/l
RT: 10.206 min Scan# 1550
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

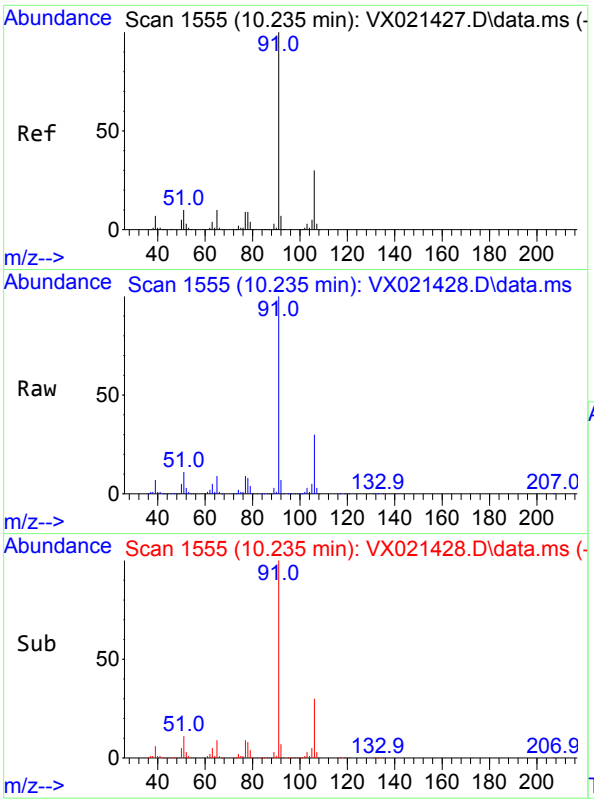
Tgt Ion:131 Resp: 104804

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.2 | 47.7 | 143.1 |
| 119 | 64.2 | 32.1 | 96.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

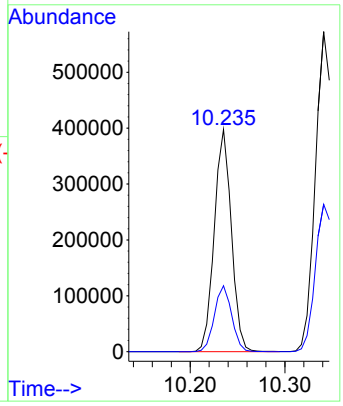
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

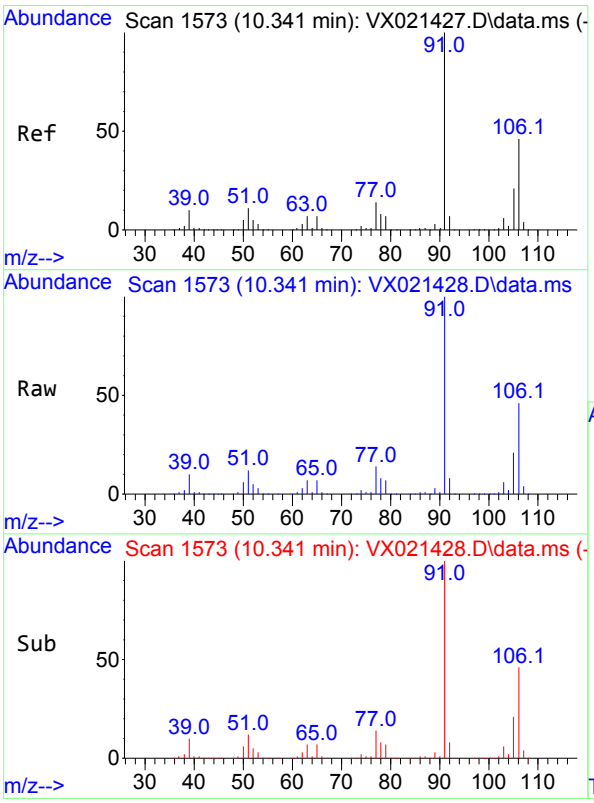



#67
Ethyl Benzene
Concen: 104.99 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 91 Resp: 498820

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.7 | 24.6 | 37.0 |

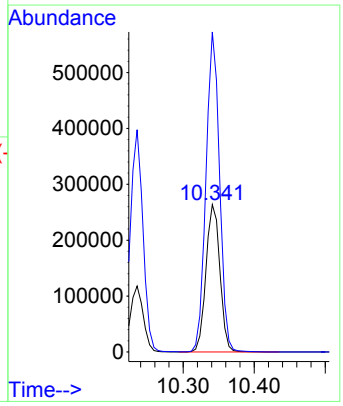



#68
m/p-Xylenes
Concen: 212.61 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

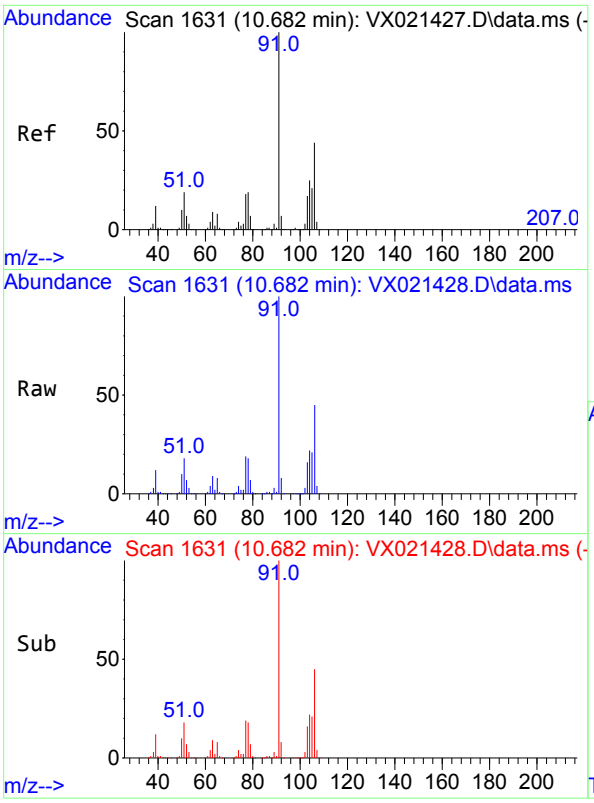
Tgt Ion:106 Resp: 360990

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 210.9 | 162.8 | 244.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

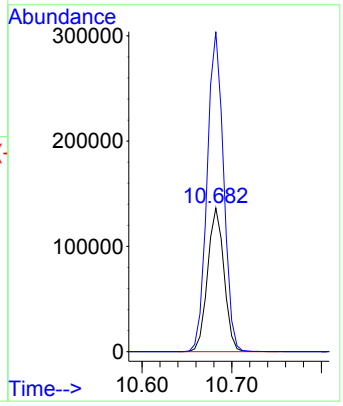
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

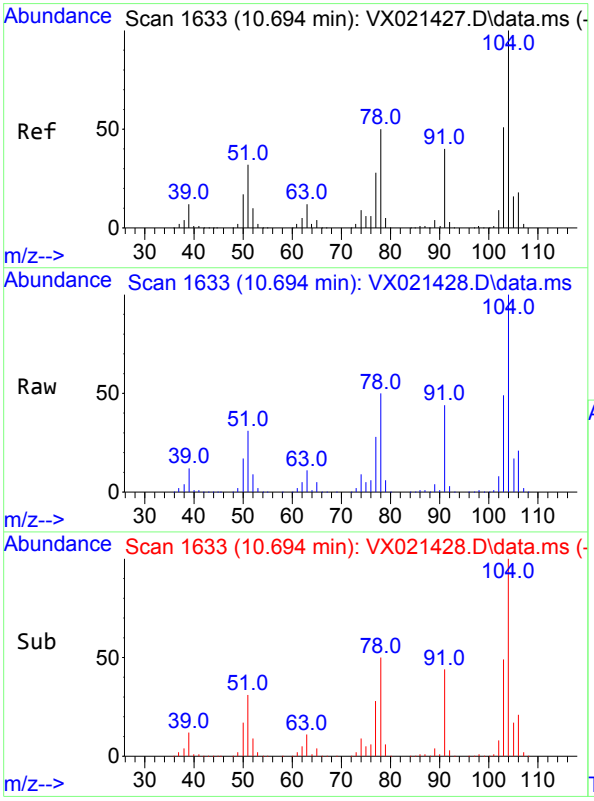



#69
o-Xylene
Concen: 105.06 ug/l
RT: 10.682 min Scan# 1631
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:106 Resp: 173227

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 223.3 | 108.1 | 324.2 |

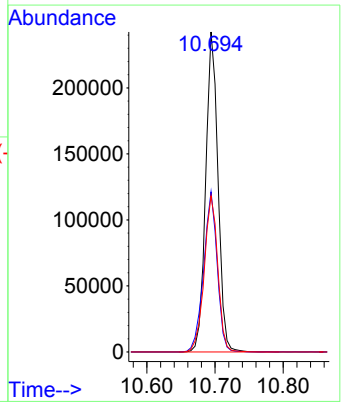



#70
Styrene
Concen: 109.55 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

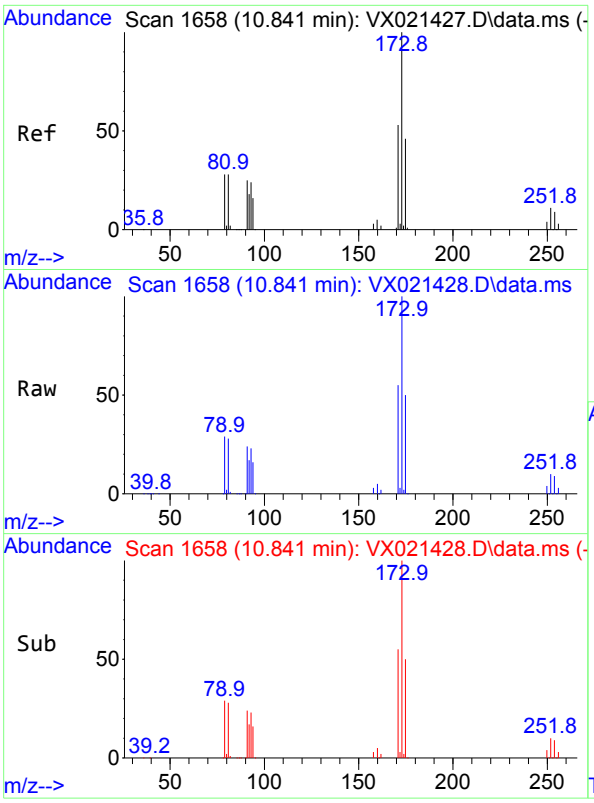
Tgt Ion:104 Resp: 304248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 55.2 | 40.0 | 60.0 |
| 103 | 53.8 | 43.4 | 65.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

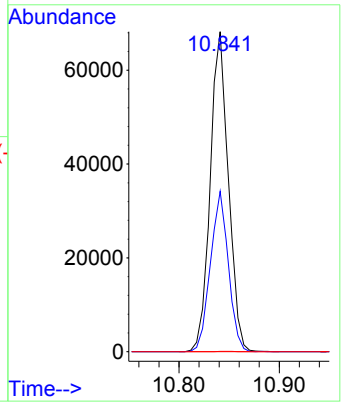
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

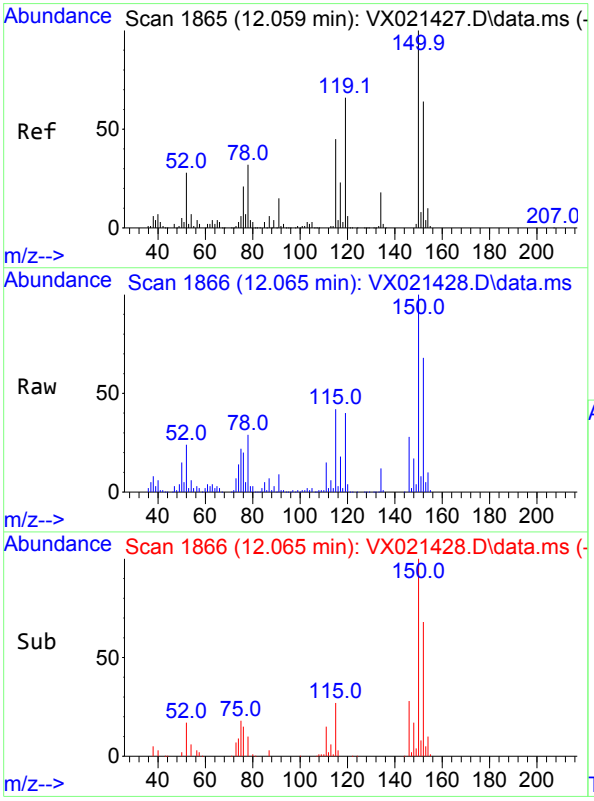



#71
Bromoform
Concen: 110.48 ug/l
RT: 10.841 min Scan# 1658
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:173 Resp: 85567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.5 | 23.9 | 71.8 |
| 254 | 0.1 | 0.1 | 0.1# |

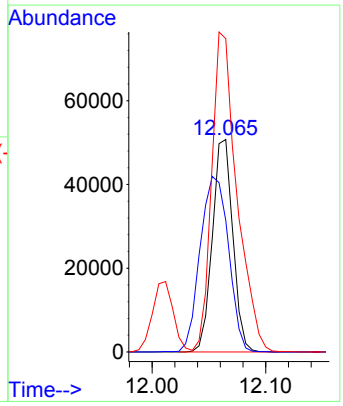



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.065 min Scan# 1866
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

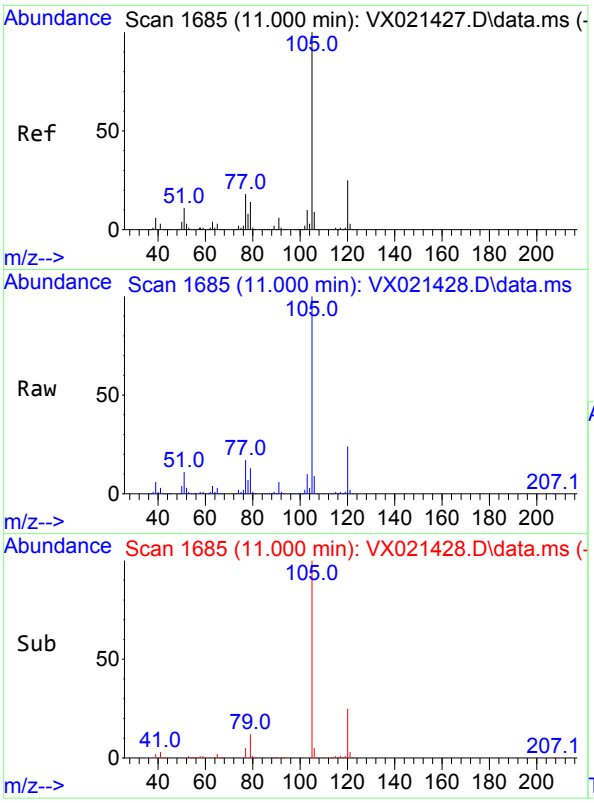
Tgt Ion:152 Resp: 63611

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 114.4 | 41.1 | 123.3 |
| 150 | 185.5 | 0.0 | 349.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

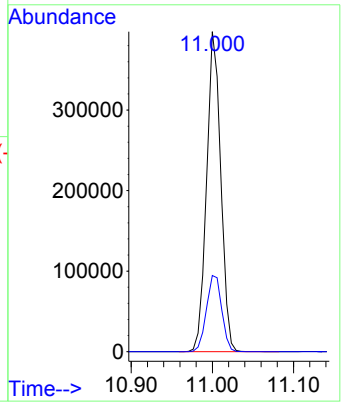
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

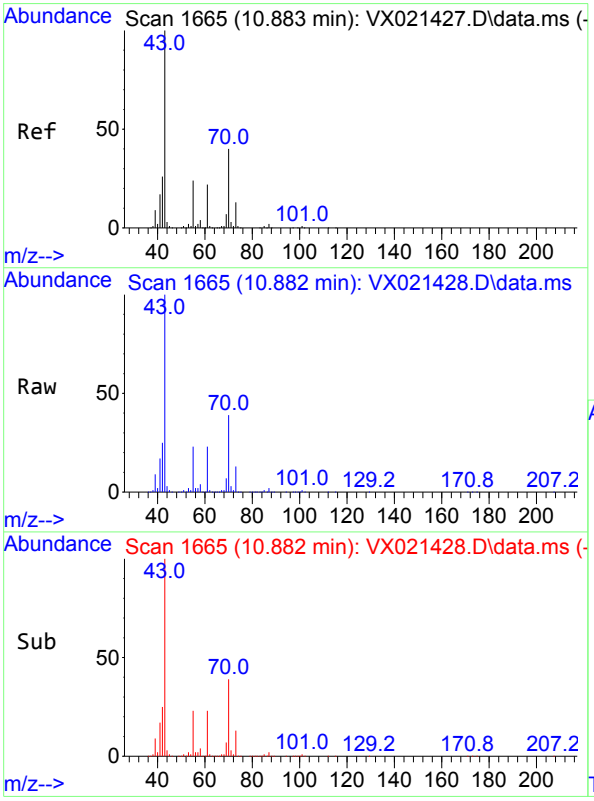



#73
Isopropylbenzene
Concen: 102.04 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:105 Resp: 479841

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.7 | 13.2 | 39.6 |

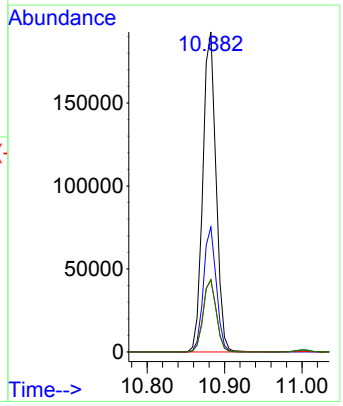



#74
N-amyl acetate
Concen: 97.03 ug/l
RT: 10.882 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

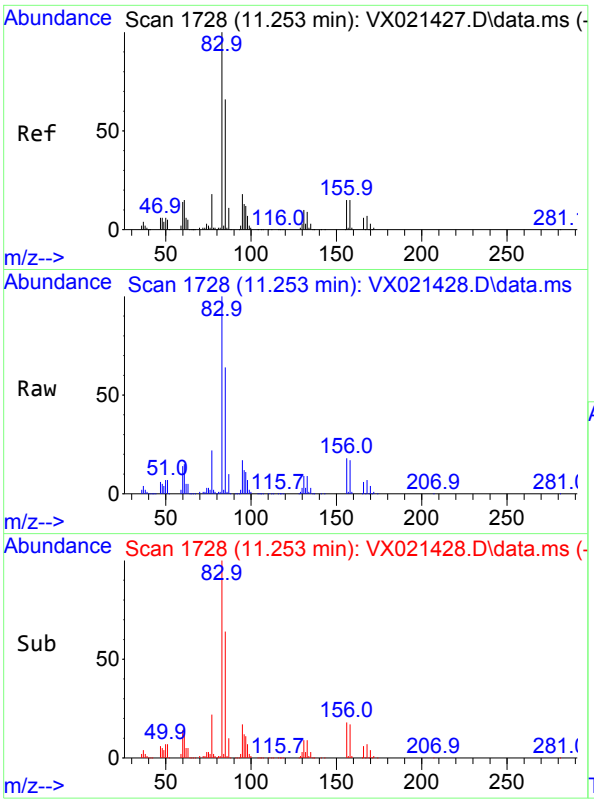
Tgt Ion: 43 Resp: 228255

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 38.0 | 39.0 | 58.6# |
| 55 | 22.6 | 21.5 | 32.3 |
| 61 | 22.2 | 22.1 | 33.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

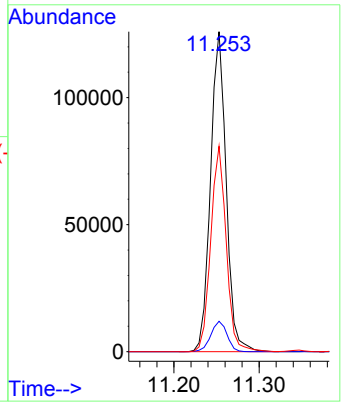
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

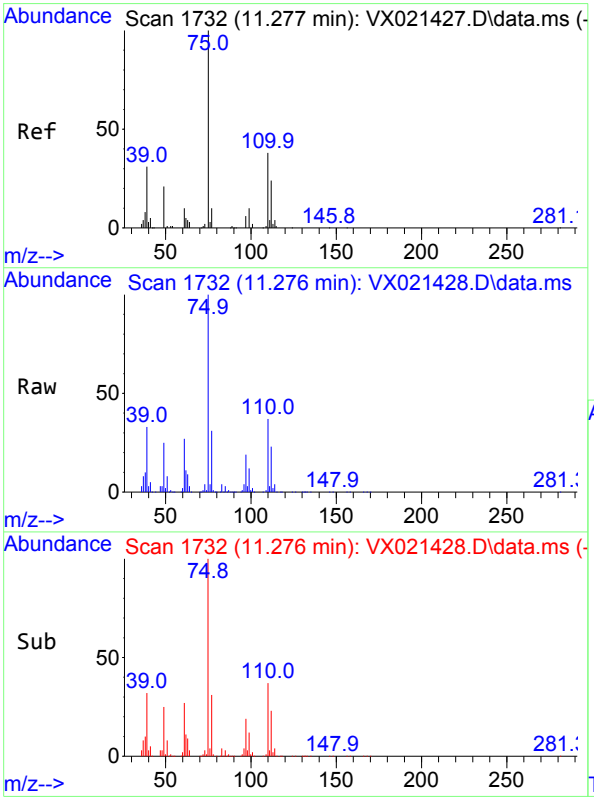



#75
1,1,2,2-Tetrachloroethane
Concen: 102.72 ug/l
RT: 11.253 min Scan# 1728
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 83 Resp: 160426

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 9.9 | 5.1 | 15.2 |
| 85 | 63.7 | 31.8 | 95.4 |

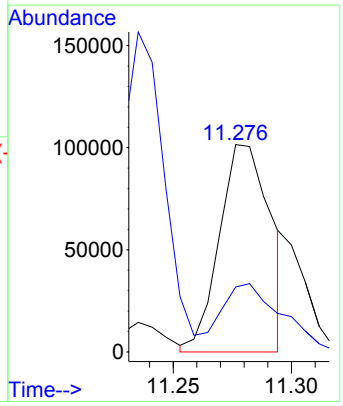



#76
1,2,3-Trichloropropane
Concen: 101.30 ug/l m
RT: 11.276 min Scan# 1732
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

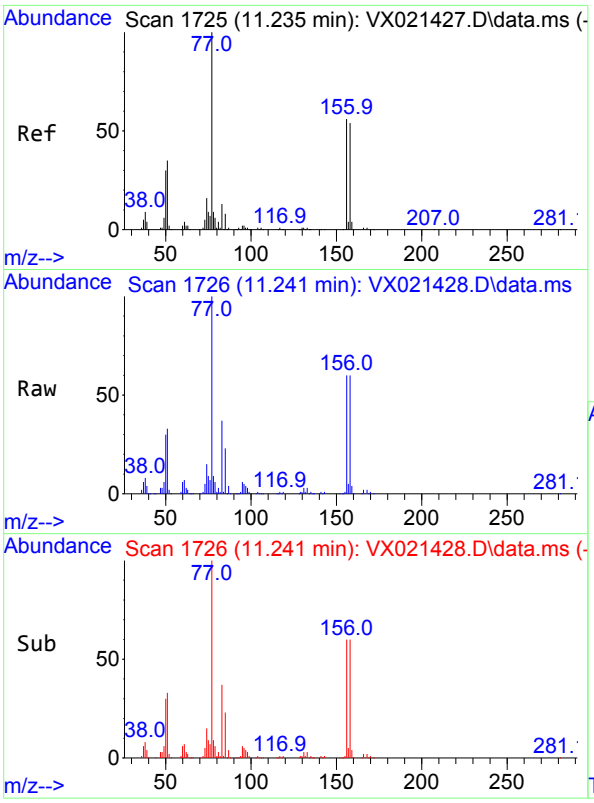
Tgt Ion: 75 Resp: 152478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 40.0 | 19.1 | 57.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

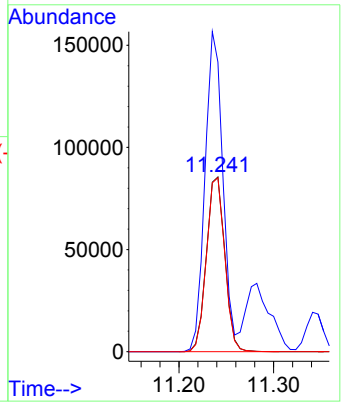
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

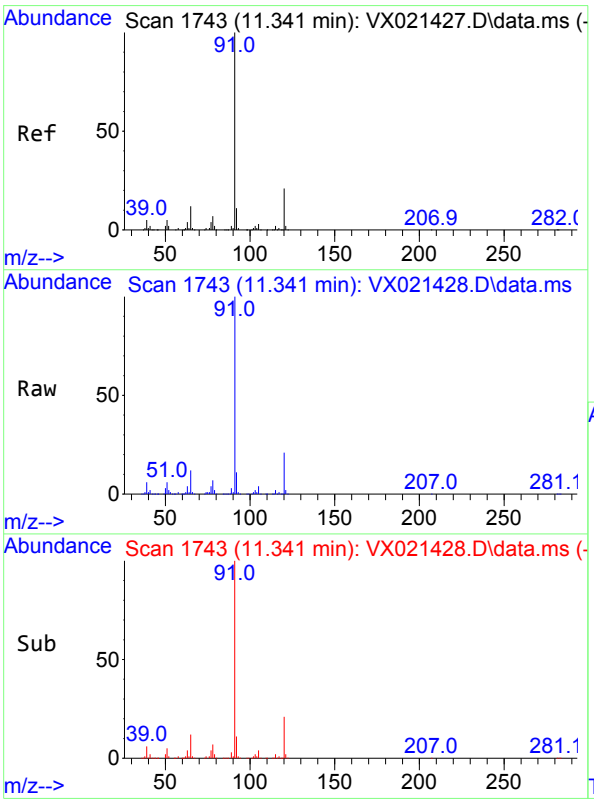



#77
Bromobenzene
Concen: 102.92 ug/l
RT: 11.241 min Scan# 1726
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:156 Resp: 115284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 176.5 | 82.8 | 248.6 |
| 158 | 98.6 | 49.1 | 147.4 |

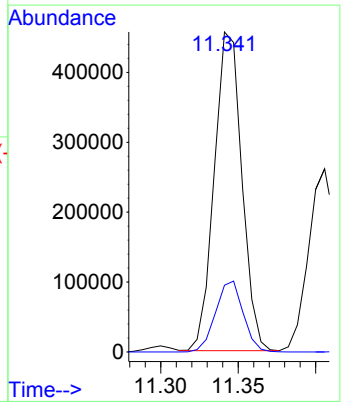



#78
n-propylbenzene
Concen: 102.95 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

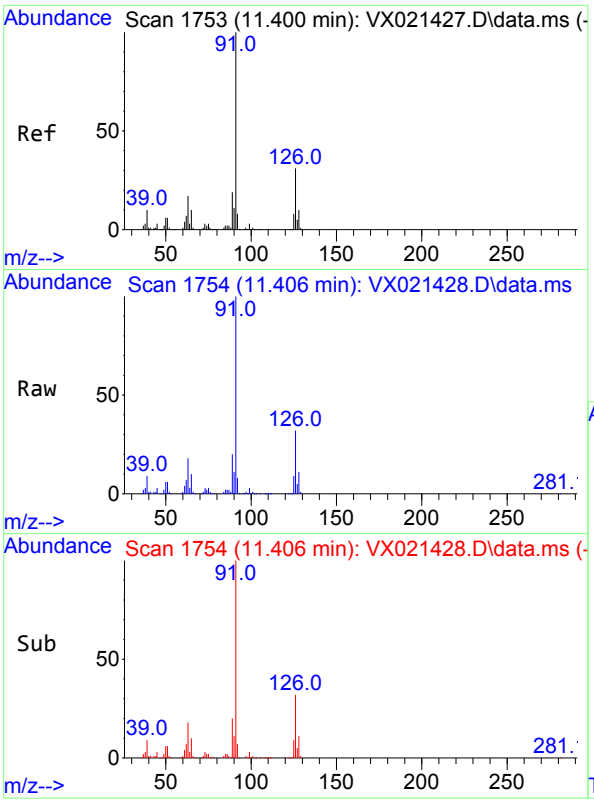
Tgt Ion: 91 Resp: 565557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.2 | 11.5 | 34.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

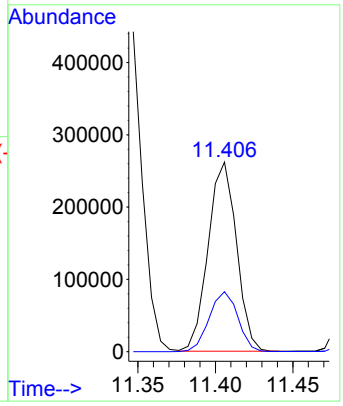
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

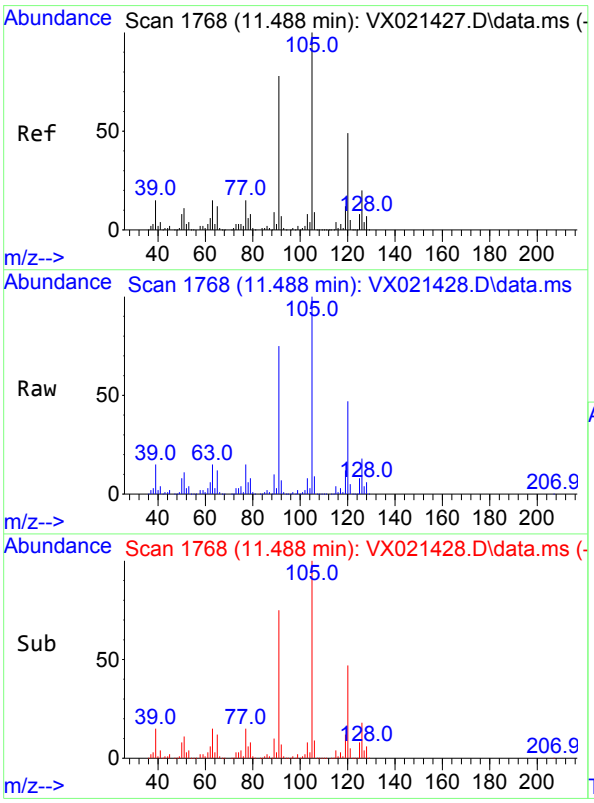



#79
2-Chlorotoluene
Concen: 99.75 ug/l
RT: 11.406 min Scan# 1754
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 91 Resp: 333139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.0 | 16.6 | 49.8 |

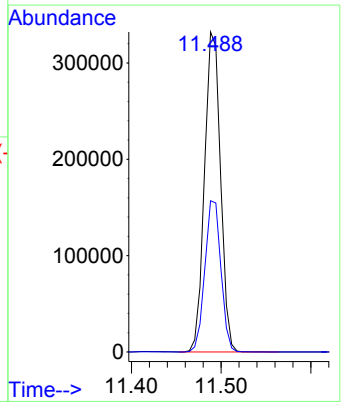



#80
1,3,5-Trimethylbenzene
Concen: 103.63 ug/l
RT: 11.488 min Scan# 1768
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

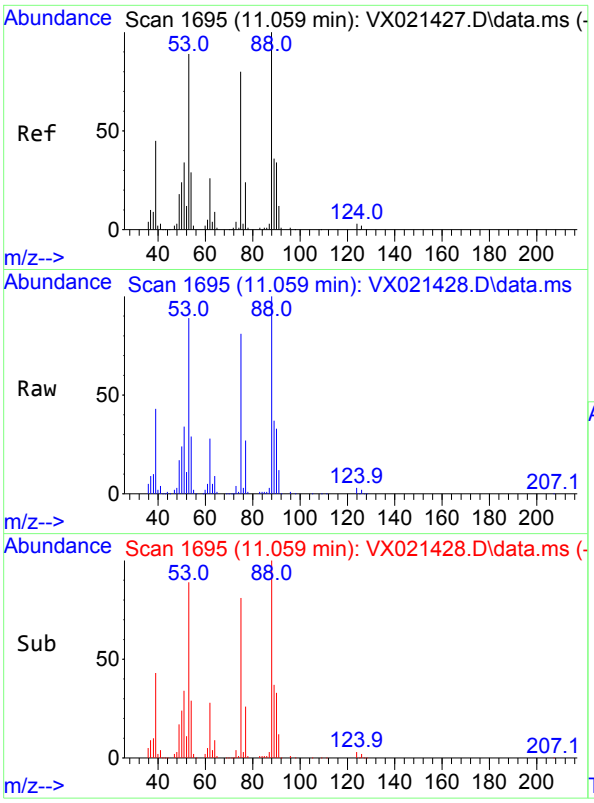
Tgt Ion:105 Resp: 411910

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.4 | 23.8 | 71.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

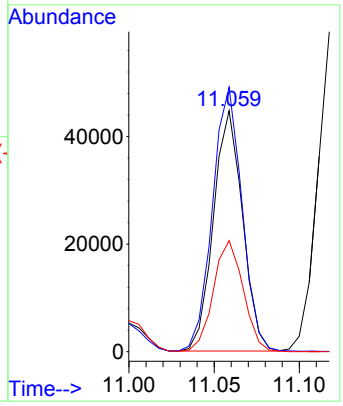
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

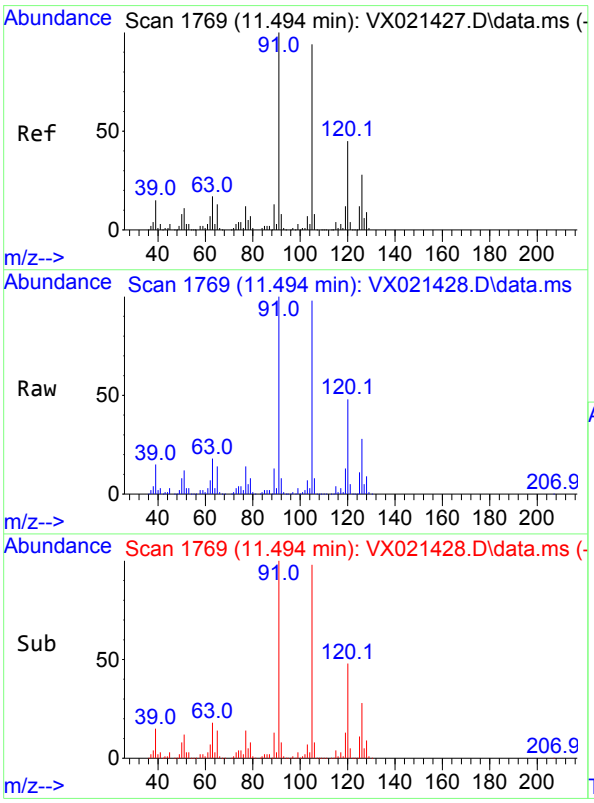



#81
trans-1,4-Dichloro-2-butene
Concen: 99.76 ug/l
RT: 11.059 min Scan# 1695
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 75 Resp: 53216

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 111.5 | 74.5 | 111.7 |
| 89 | 47.3 | 37.9 | 56.9 |

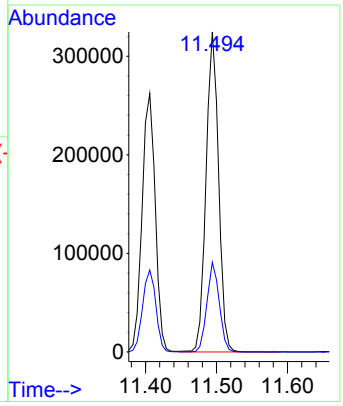



#82
4-Chlorotoluene
Concen: 101.54 ug/l
RT: 11.494 min Scan# 1769
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

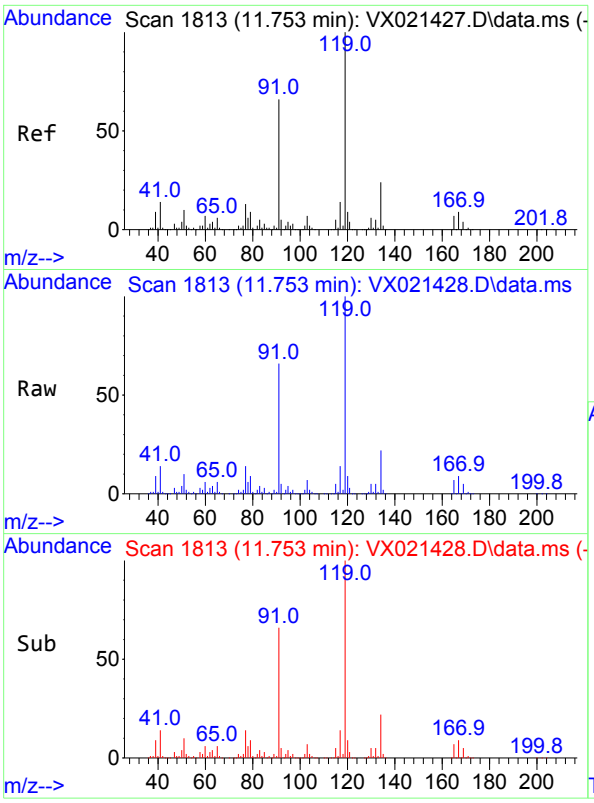
Tgt Ion: 91 Resp: 399561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 27.5 | 14.9 | 44.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

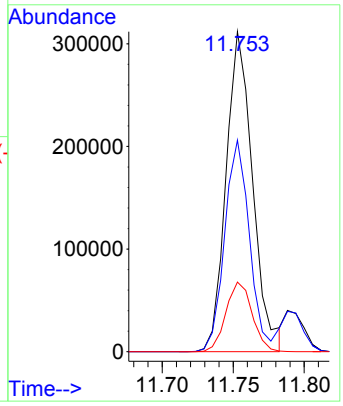
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

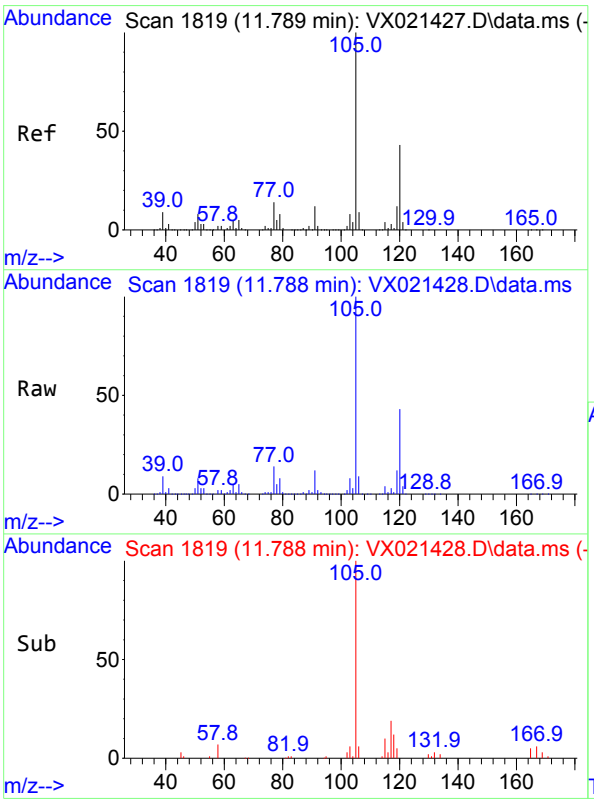



#83
tert-Butylbenzene
Concen: 106.72 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:119 Resp: 405116

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 61.6 | 27.9 | 83.7 |
| 134 | 21.5 | 11.3 | 33.9 |

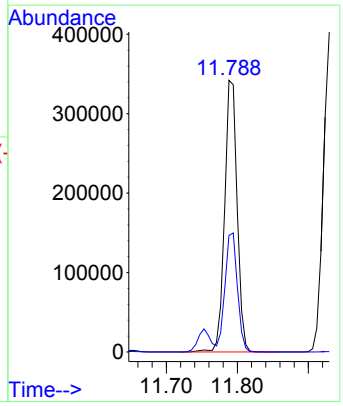



#84
1,2,4-Trimethylbenzene
Concen: 103.05 ug/l
RT: 11.788 min Scan# 1819
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

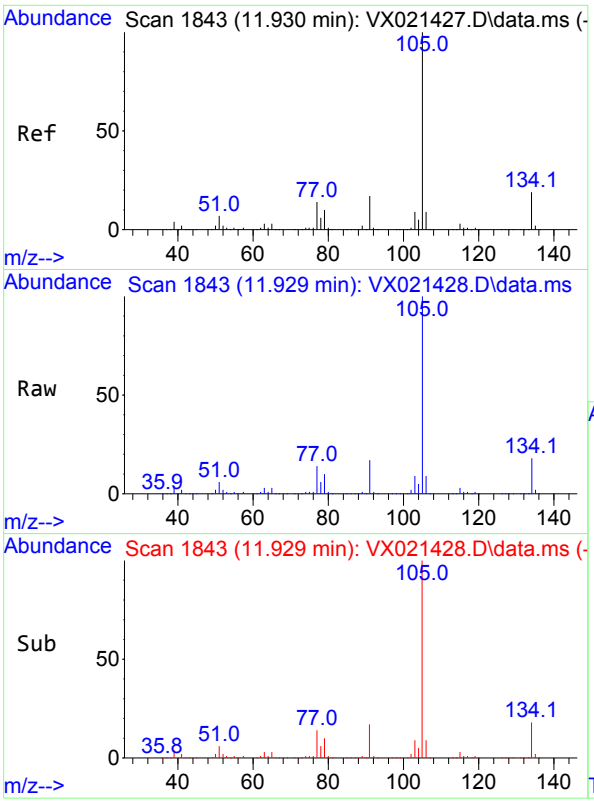
Tgt Ion:105 Resp: 416328

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.5 | 22.4 | 67.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

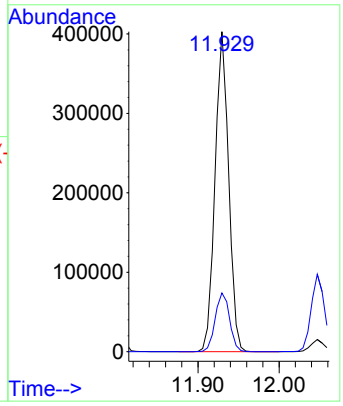
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

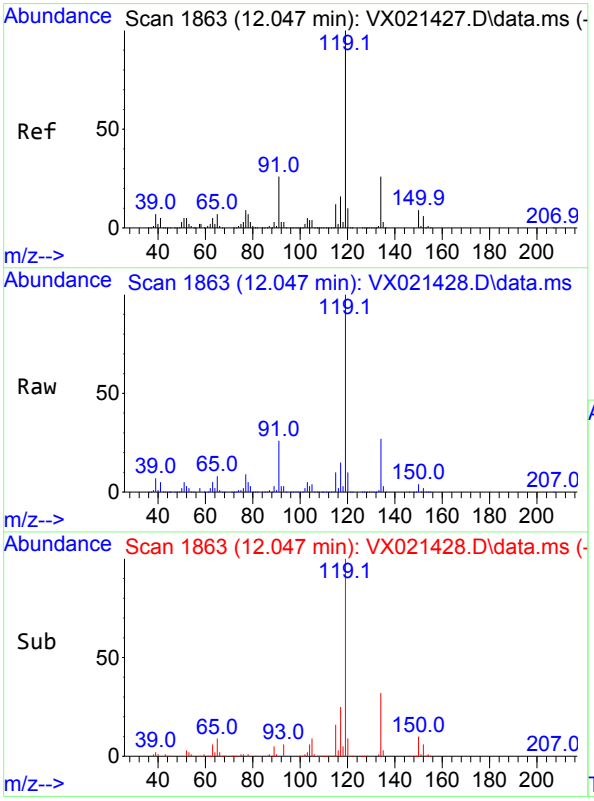



#85
sec-Butylbenzene
Concen: 104.62 ug/l
RT: 11.929 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:105 Resp: 468364

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.4 | 10.0 | 29.8 |

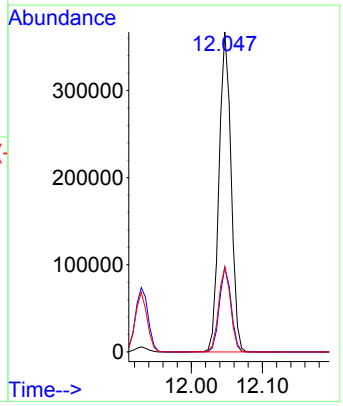



#86
p-Isopropyltoluene
Concen: 104.28 ug/l
RT: 12.047 min Scan# 1863
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

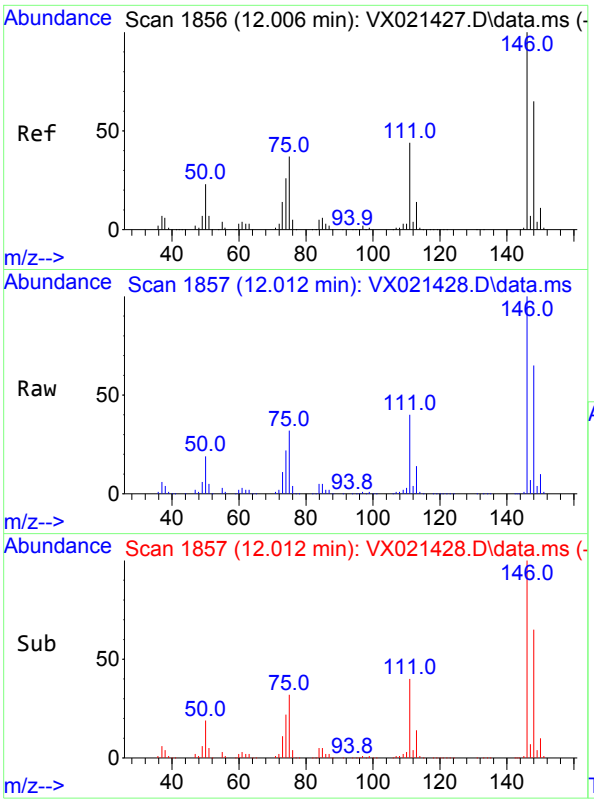
Tgt Ion:119 Resp: 427235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.0 | 12.9 | 38.7 |
| 91 | 26.4 | 11.7 | 35.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

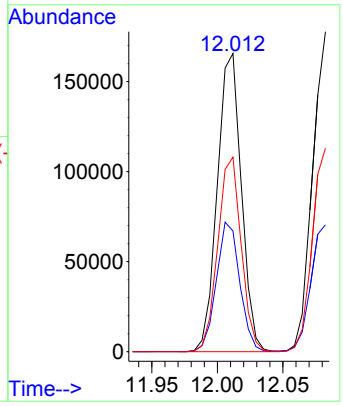
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

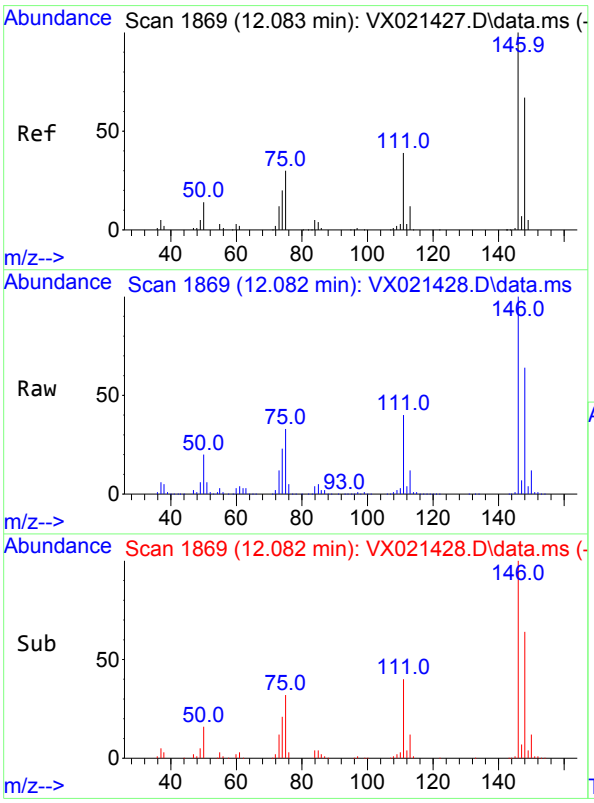



#87
1,3-Dichlorobenzene
Concen: 103.59 ug/l
RT: 12.012 min Scan# 1857
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:146 Resp: 211216

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.4 | 20.2 | 60.5 |
| 148 | 63.5 | 31.9 | 95.7 |

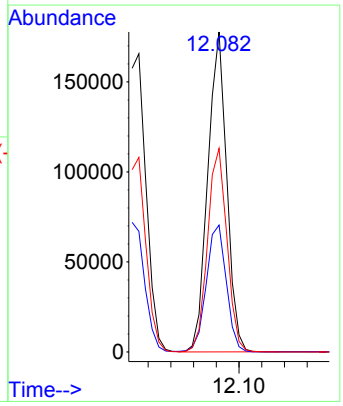



#88
1,4-Dichlorobenzene
Concen: 99.04 ug/l
RT: 12.082 min Scan# 1869
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

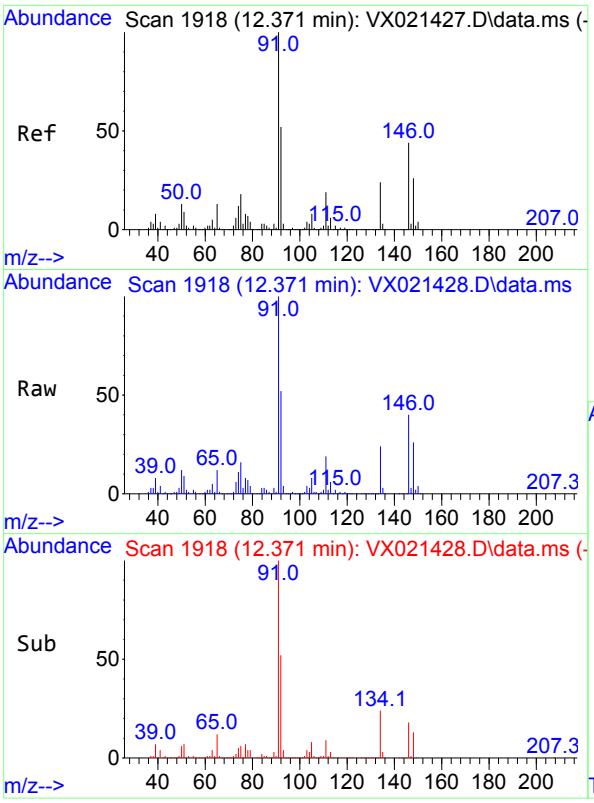
Tgt Ion:146 Resp: 205539

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.9 | 19.6 | 58.8 |
| 148 | 65.3 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

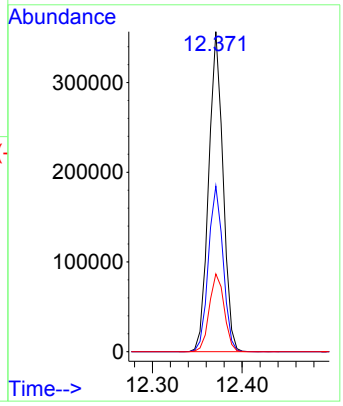
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

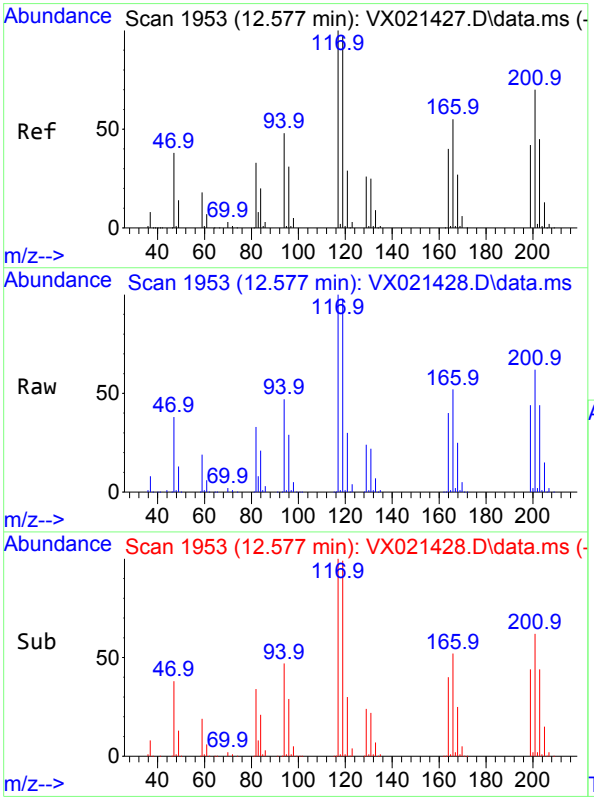



#89
n-Butylbenzene
Concen: 105.99 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion: 91 Resp: 395671

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 52.8 | 27.4 | 82.0 |
| 134 | 25.3 | 13.2 | 39.5 |

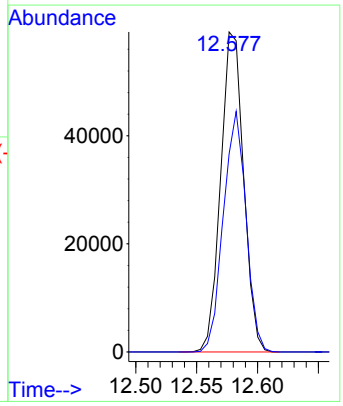



#90
Hexachloroethane
Concen: 121.93 ug/l
RT: 12.577 min Scan# 1953
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

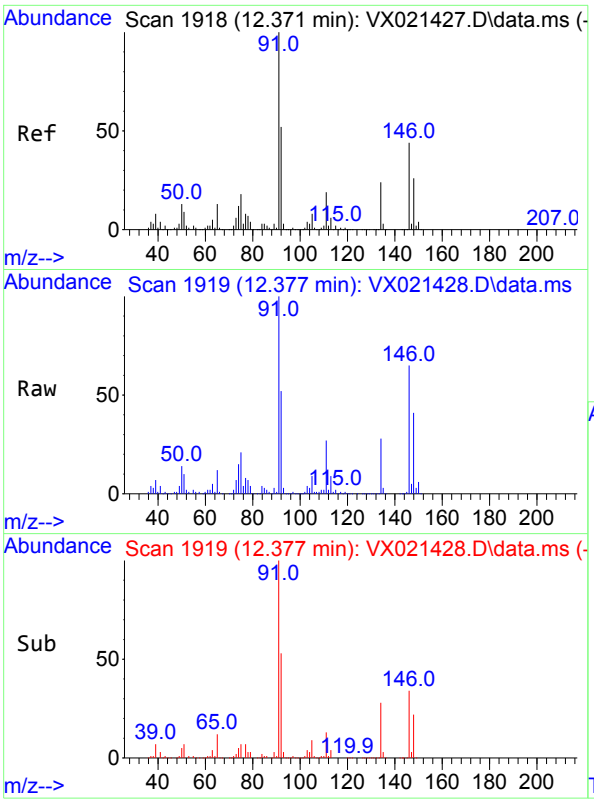
Tgt Ion:117 Resp: 77593

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 74.3 | 40.4 | 121.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

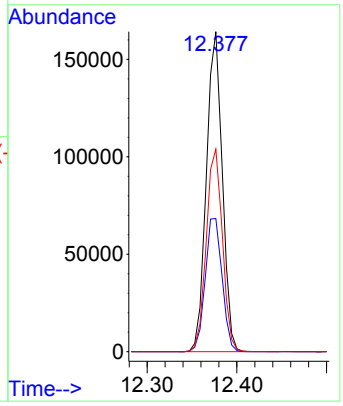
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

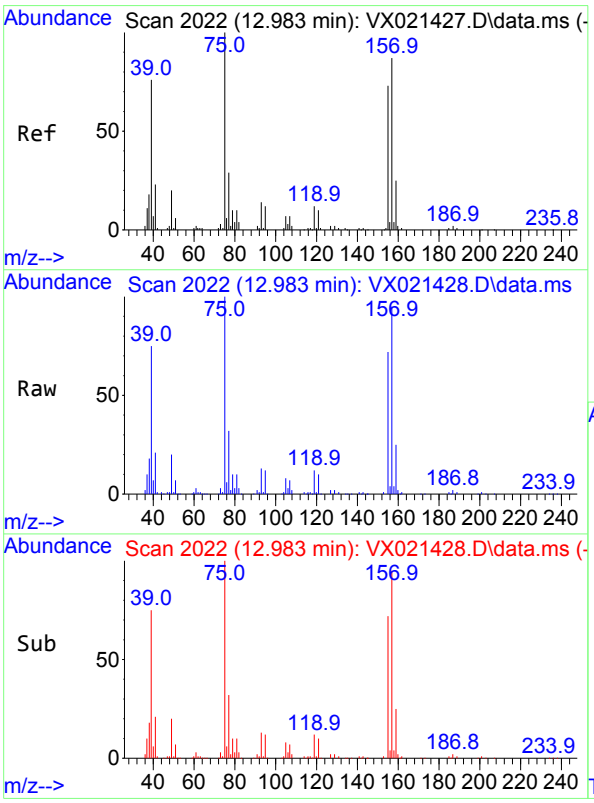



#91
1,2-Dichlorobenzene
Concen: 102.27 ug/l
RT: 12.377 min Scan# 1919
Delta R.T. 0.006 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:146 Resp: 202350

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.2 | 20.8 | 62.2 |
| 148 | 64.2 | 31.9 | 95.5 |

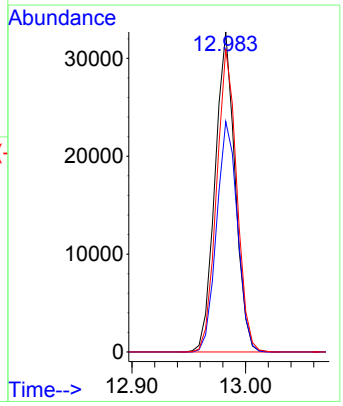



#92
1,2-Dibromo-3-Chloropropane
Concen: 100.81 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

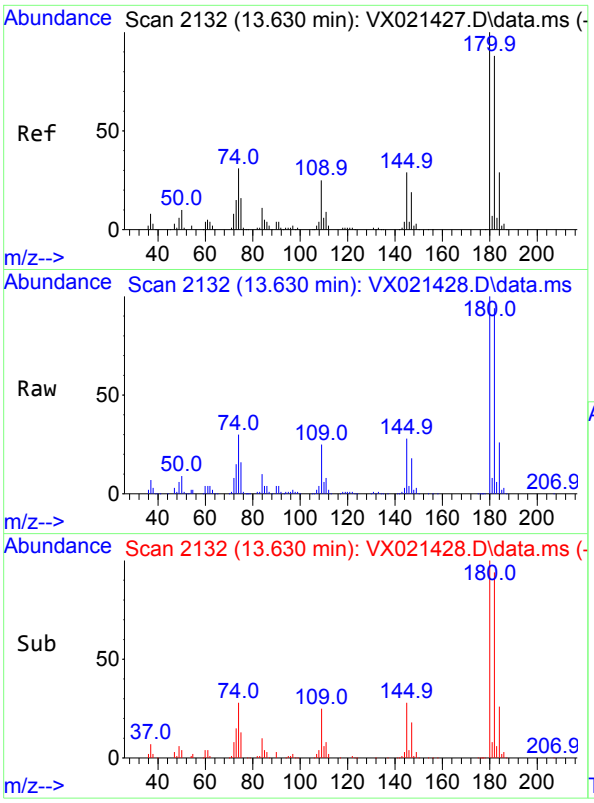
Tgt Ion: 75 Resp: 40154

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 74.6 | 45.3 | 135.9 |
| 157 | 95.0 | 57.7 | 173.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

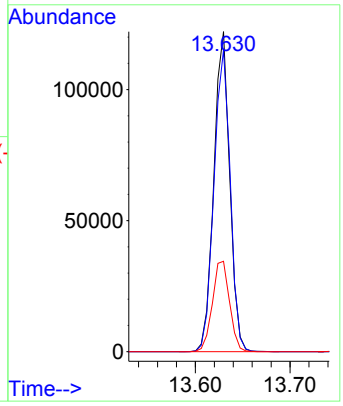
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

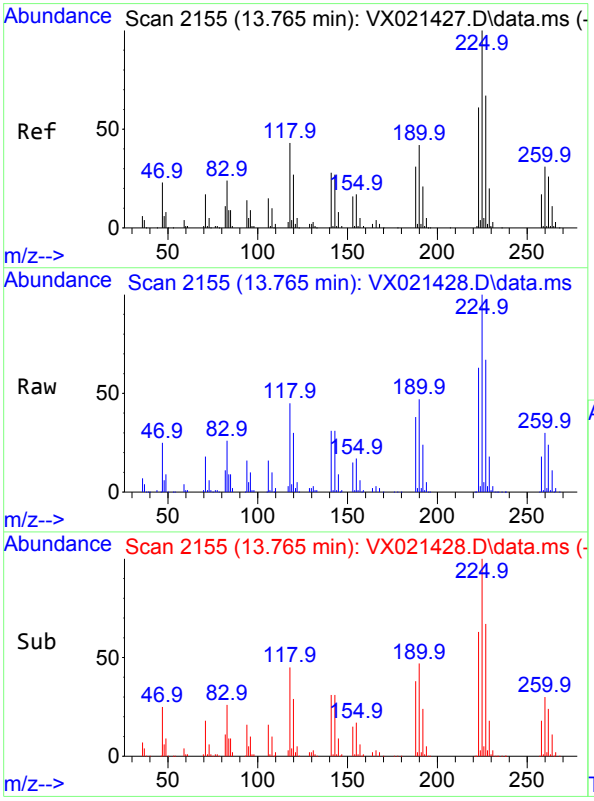



#93
1,2,4-Trichlorobenzene
Concen: 108.78 ug/l
RT: 13.630 min Scan# 2132
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:180 Resp: 141949

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.6 | 47.7 | 143.1 |
| 145 | 30.6 | 15.0 | 45.0 |

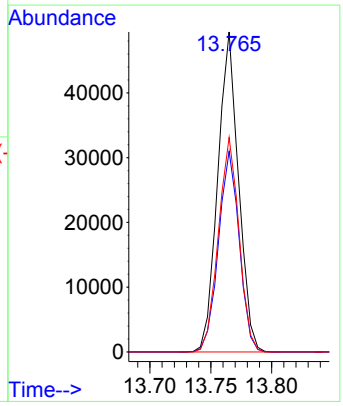



#94
Hexachlorobutadiene
Concen: 106.58 ug/l
RT: 13.765 min Scan# 2155
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

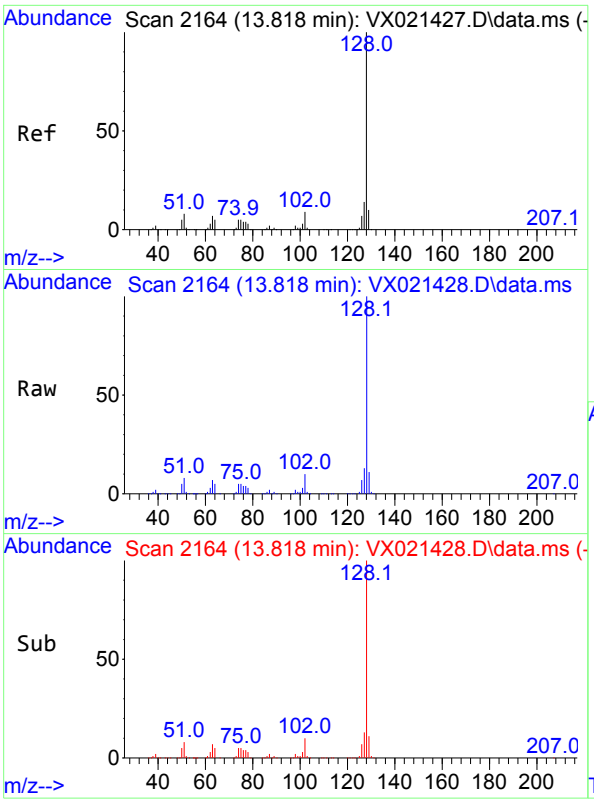
Tgt Ion:225 Resp: 58586

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.6 | 31.1 | 93.2 |
| 227 | 66.7 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC100

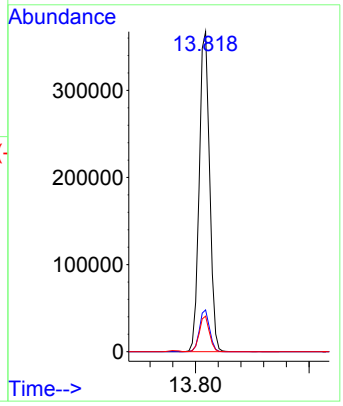
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:35 AM

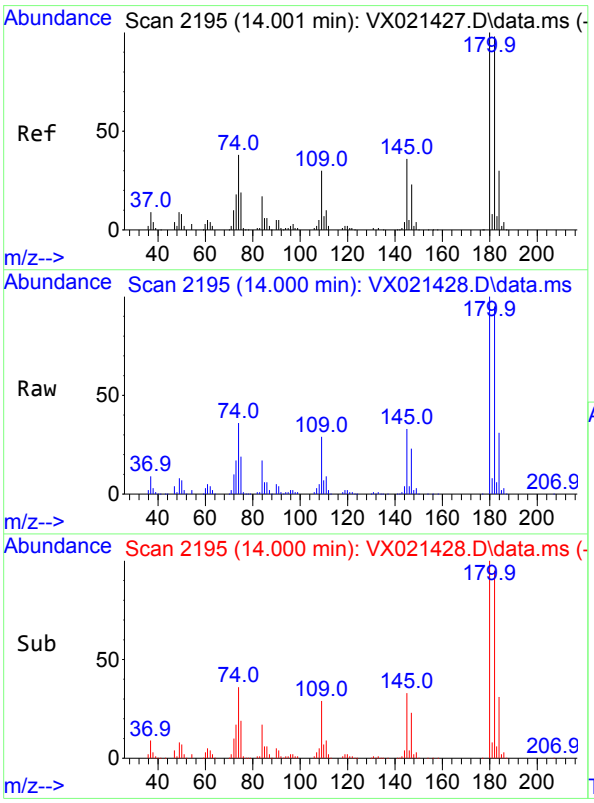



#95
Naphthalene
Concen: 104.68 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:128 Resp: 466719

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.7 | 10.3 | 15.5 |
| 129 | 10.8 | 8.8 | 13.2 |

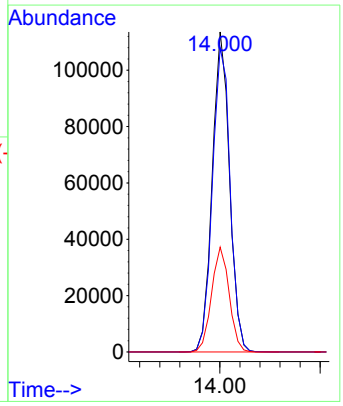



#96
1,2,3-Trichlorobenzene
Concen: 104.85 ug/l
RT: 14.000 min Scan# 2195
Delta R.T. -0.000 min
Lab File: VX021428.D
Acq: 24 Mar 2021 11:36

Tgt Ion:180 Resp: 135416

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.9 | 47.6 | 142.9 |
| 145 | 33.5 | 16.1 | 48.3 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021429.D
Acq On : 24 Mar 2021 11:58
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

Quant Time: Mar 24 12:18:27 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 78484 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 130602 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 124542 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.065 | 152 | 63259 | 50.00 | ug/l | # | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 206597 | 161.39 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 322.78%# | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 148012 | 166.25 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 332.50%# | | | | |
| 50) Toluene-d8 | 8.700 | 98 | 537648 | 165.71 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 331.42%# | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 213145 | 170.05 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 340.10%# | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.181 | 85 | 125716 | 136.50 | ug/l | | 98 |
| 3) Chloromethane | 1.311 | 50 | 148668 | 85.36 | ug/l | | 100 |
| 4) Vinyl Chloride | 1.393 | 62 | 135121 | 143.86 | ug/l | | 99 |
| 5) Bromomethane | 1.617 | 94 | 50084 | 123.96 | ug/l | | 97 |
| 6) Chloroethane | 1.687 | 64 | 77605 | 134.68 | ug/l | | 98 |
| 7) Trichlorofluoromethane | 1.899 | 101 | 208691 | 146.32 | ug/l | | 94 |
| 8) Diethyl Ether | 2.170 | 74 | 77008 | 153.91 | ug/l | | 80 |
| 9) 1,1,2-Trichlorotrifluo... | 2.352 | 101 | 118865 | 146.39 | ug/l | | 97 |
| 10) Methyl Iodide | 2.482 | 142 | 106912 | 155.71 | ug/l | # | 89 |
| 11) Tert butyl alcohol | 3.040 | 59 | 173128 | 806.34 | ug/l | | 97 |
| 12) 1,1-Dichloroethene | 2.346 | 96 | 116242 | 147.20 | ug/l | | 86 |
| 13) Acrolein | 2.276 | 56 | 84486 | 646.70 | ug/l | | 100 |
| 14) Allyl chloride | 2.699 | 41 | 239001 | 146.78 | ug/l | # | 89 |
| 15) Acrylonitrile | 3.123 | 53 | 410754 | 817.99 | ug/l | | 98 |
| 16) Acetone | 2.429 | 43 | 382033 | 804.41 | ug/l | # | 88 |
| 17) Carbon Disulfide | 2.540 | 76 | 320016 | 131.00 | ug/l | | 100 |
| 18) Methyl Acetate | 2.752 | 43 | 238241 | 179.02 | ug/l | | 90 |
| 19) Methyl tert-butyl Ether | 3.170 | 73 | 473343 | 159.44 | ug/l | | 97 |
| 20) Methylene Chloride | 2.829 | 84 | 146022 | 150.88 | ug/l | # | 86 |
| 21) trans-1,2-Dichloroethene | 3.135 | 96 | 131962 | 149.12 | ug/l | | 90 |
| 22) Diisopropyl ether | 3.829 | 45 | 493223 | 157.38 | ug/l | | 94 |
| 23) Vinyl Acetate | 3.788 | 43 | 2159399 | 795.91 | ug/l | # | 93 |
| 24) 1,1-Dichloroethane | 3.664 | 63 | 259577 | 153.06 | ug/l | | 97 |
| 25) 2-Butanone | 4.641 | 43 | 598754 | 824.57 | ug/l | | 89 |
| 26) 2,2-Dichloropropane | 4.546 | 77 | 223469 | 151.51 | ug/l | | 96 |
| 27) cis-1,2-Dichloroethene | 4.558 | 96 | 158997 | 156.17 | ug/l | | 92 |
| 28) Bromochloromethane | 4.982 | 49 | 122924 | 153.59 | ug/l | | 85 |
| 29) Tetrahydrofuran | 5.094 | 42 | 391090 | 817.24 | ug/l | | 86 |
| 30) Chloroform | 5.182 | 83 | 280720 | 158.99 | ug/l | | 99 |
| 31) Cyclohexane | 5.547 | 56 | 215576 | 140.97 | ug/l | | 94 |
| 32) 1,1,1-Trichloroethane | 5.464 | 97 | 242820 | 155.13 | ug/l | | 97 |
| 36) 1,1-Dichloropropene | 5.764 | 75 | 192219 | 146.75 | ug/l | | 97 |
| 37) Ethyl Acetate | 4.799 | 43 | 231805 | 153.07 | ug/l | # | 92 |
| 38) Carbon Tetrachloride | 5.753 | 117 | 209405 | 153.52 | ug/l | | 97 |
| 39) Methylcyclohexane | 7.441 | 83 | 217476 | 149.47 | ug/l | | 94 |
| 40) Benzene | 6.111 | 78 | 568473 | 157.18 | ug/l | | 98 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021429.D
Acq On : 24 Mar 2021 11:58
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

Quant Time: Mar 24 12:18:27 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 5.005 | 41 | 132567 | 151.07 | ug/l | | 89 |
| 42) 1,2-Dichloroethane | 6.158 | 62 | 247644 | 158.20 | ug/l | | 94 |
| 43) Isopropyl Acetate | 6.417 | 43 | 394005 | 158.58 | ug/l | # | 91 |
| 44) Trichloroethene | 7.188 | 130 | 148232 | 154.43 | ug/l | | 100 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 155666 | 159.85 | ug/l | | 98 |
| 46) Dibromomethane | 7.635 | 93 | 113771 | 159.19 | ug/l | | 93 |
| 47) Bromodichloromethane | 7.876 | 83 | 235248 | 164.48 | ug/l | | 100 |
| 48) Methyl methacrylate | 7.747 | 41 | 211540 | 159.60 | ug/l | # | 83 |
| 49) 1,4-Dioxane | 7.717 | 88 | 73400 | 2985.89 | ug/l | # | 92 |
| 51) 4-Methyl-2-Pentanone | 8.623 | 43 | 1208278 | 827.75 | ug/l | | 89 |
| 52) Toluene | 8.765 | 92 | 366475 | 163.70 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 9.024 | 75 | 255377 | 168.83 | ug/l | | 99 |
| 54) cis-1,3-Dichloropropene | 8.418 | 75 | 263971 | 163.92 | ug/l | # | 86 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 152675 | 165.99 | ug/l | | 100 |
| 56) Ethyl methacrylate | 9.159 | 69 | 248059 | 168.42 | ug/l | # | 77 |
| 57) 1,3-Dichloropropane | 9.353 | 76 | 261121 | 163.03 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 8.294 | 63 | 656572 | 809.30 | ug/l | | 96 |
| 59) 2-Hexanone | 9.477 | 43 | 916408 | 839.13 | ug/l | | 85 |
| 60) Dibromochloromethane | 9.565 | 129 | 173838 | 166.22 | ug/l | | 97 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 165332 | 163.41 | ug/l | | 100 |
| 64) Tetrachloroethene | 9.318 | 164 | 127956 | 138.92 | ug/l | | 91 |
| 65) Chlorobenzene | 10.124 | 112 | 392937 | 153.34 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 10.206 | 131 | 152772 | 160.04 | ug/l | | 98 |
| 67) Ethyl Benzene | 10.235 | 91 | 715136 | 151.55 | ug/l | | 100 |
| 68) m/p-Xylenes | 10.341 | 106 | 515863 | 305.90 | ug/l | | 92 |
| 69) o-Xylene | 10.683 | 106 | 253545 | 154.82 | ug/l | | 95 |
| 70) Styrene | 10.694 | 104 | 443588 | 160.80 | ug/l | | 96 |
| 71) Bromoform | 10.841 | 173 | 126571 | 164.54 | ug/l | # | 98 |
| 73) Isopropylbenzene | 11.000 | 105 | 687670 | 147.04 | ug/l | | 98 |
| 74) N-amyl acetate | 10.883 | 43 | 347791 | 148.67 | ug/l | # | 87 |
| 75) 1,1,2,2-Tetrachloroethane | 11.253 | 83 | 239871 | 154.45 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.283 | 75 | 224557m | 150.02 | ug/l | | |
| 77) Bromobenzene | 11.241 | 156 | 169165 | 151.86 | ug/l | | 95 |
| 78) n-propylbenzene | 11.341 | 91 | 813163 | 148.84 | ug/l | | 98 |
| 79) 2-Chlorotoluene | 11.406 | 91 | 482861 | 145.38 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 593131 | 150.06 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 11.059 | 75 | 83589 | 157.56 | ug/l | | 89 |
| 82) 4-Chlorotoluene | 11.494 | 91 | 579474 | 148.09 | ug/l | | 97 |
| 83) tert-Butylbenzene | 11.753 | 119 | 578778 | 153.31 | ug/l | | 94 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 602128 | 149.86 | ug/l | | 98 |
| 85) sec-Butylbenzene | 11.930 | 105 | 668961 | 150.26 | ug/l | | 99 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 614754 | 150.88 | ug/l | | 97 |
| 87) 1,3-Dichlorobenzene | 12.012 | 146 | 310892 | 153.33 | ug/l | | 99 |
| 88) 1,4-Dichlorobenzene | 12.083 | 146 | 315092 | 152.67 | ug/l | | 98 |
| 89) n-Butylbenzene | 12.371 | 91 | 582923 | 157.02 | ug/l | | 96 |
| 90) Hexachloroethane | 12.583 | 117 | 115244 | 182.11 | ug/l | | 91 |
| 91) 1,2-Dichlorobenzene | 12.377 | 146 | 302160 | 153.56 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 61621 | 155.56 | ug/l | | 81 |
| 93) 1,2,4-Trichlorobenzene | 13.630 | 180 | 218662 | 168.49 | ug/l | | 97 |
| 94) Hexachlorobutadiene | 13.765 | 225 | 84948 | 155.40 | ug/l | | 95 |
| 95) Naphthalene | 13.818 | 128 | 702214 | 158.37 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 14.001 | 180 | 205544 | 160.04 | ug/l | | 96 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021429.D
Acq On : 24 Mar 2021 11:58
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

Quant Time: Mar 24 12:18:27 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

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

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

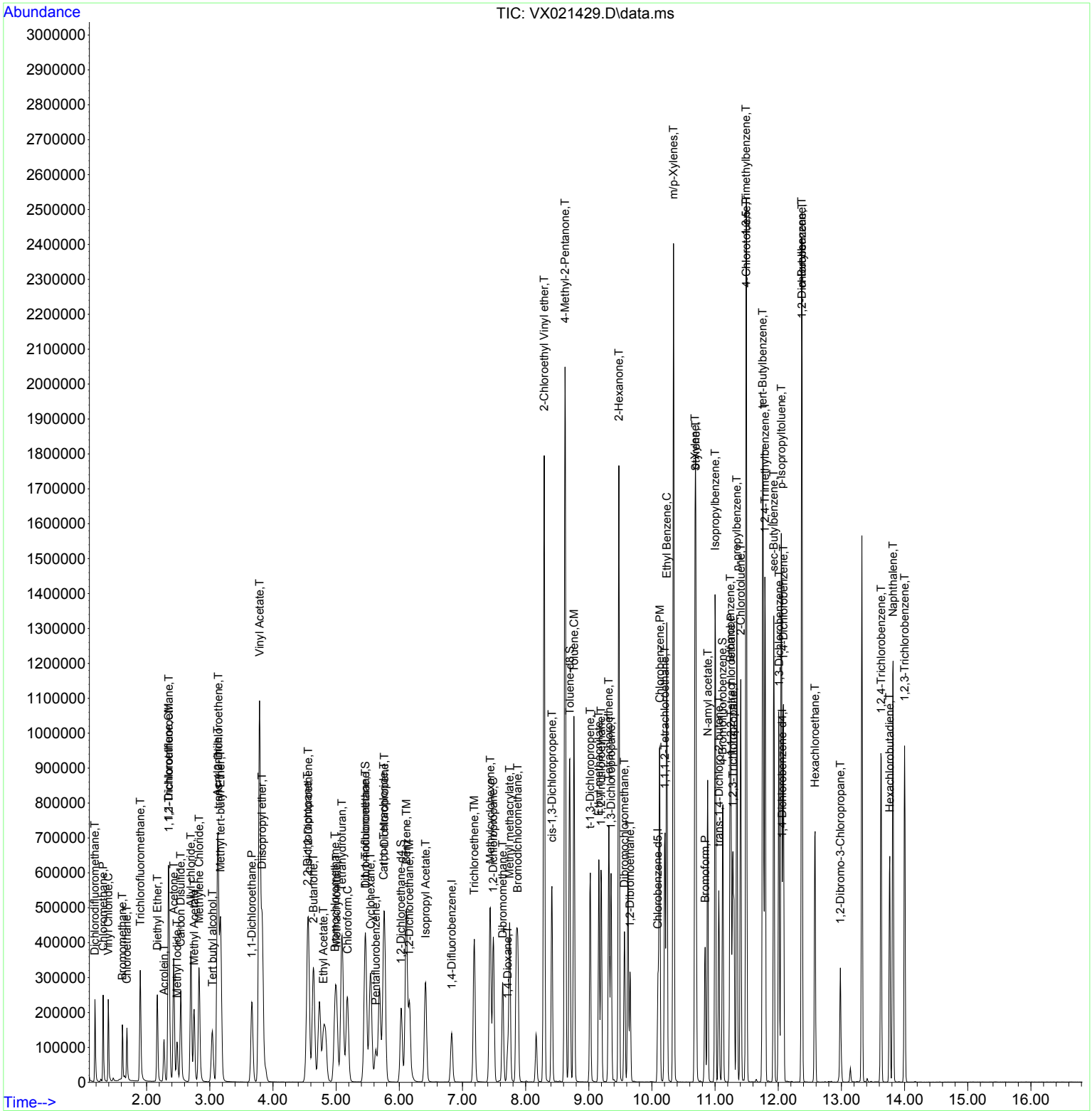
ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021429.D
Acq On : 24 Mar 2021 11:58
Operator : JC/MD
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 24 12:18:27 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 11:38:07 2021
Response via : Initial Calibration

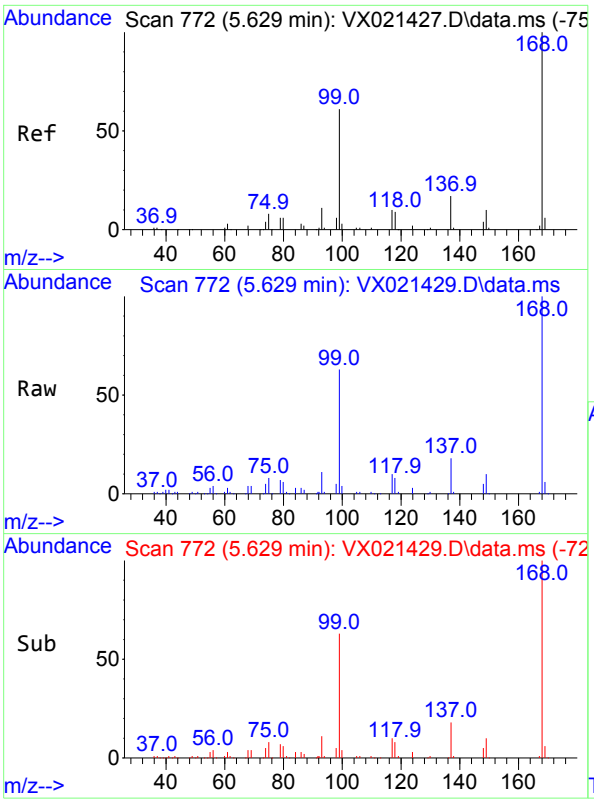
**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

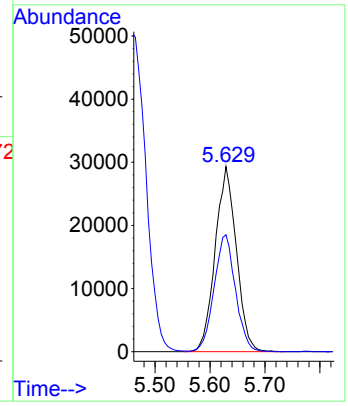
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

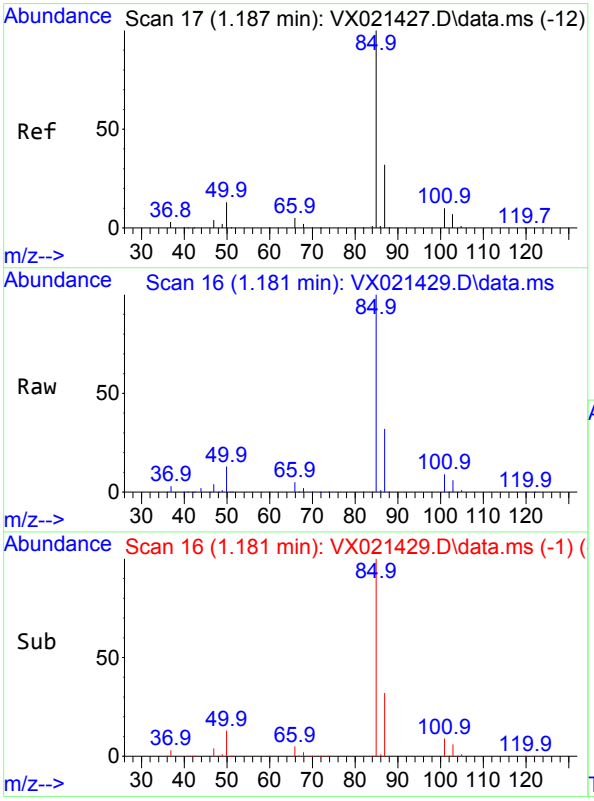



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. -0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:168 Resp: 78484

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 63.2 | 45.8 | 68.6 |

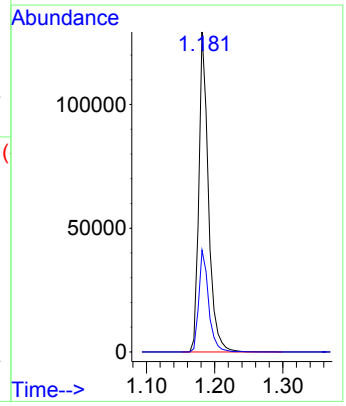



#2
Dichlorodifluoromethane
Concen: 136.50 ug/l
RT: 1.181 min Scan# 16
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

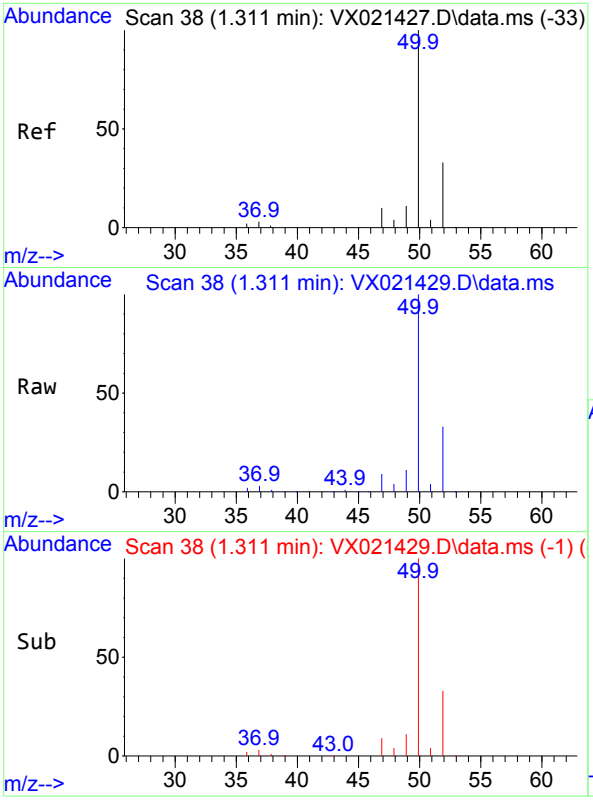
Tgt Ion: 85 Resp: 125716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.8 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

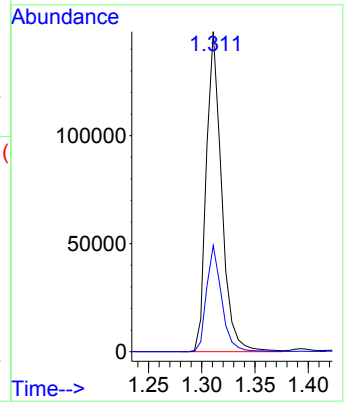
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

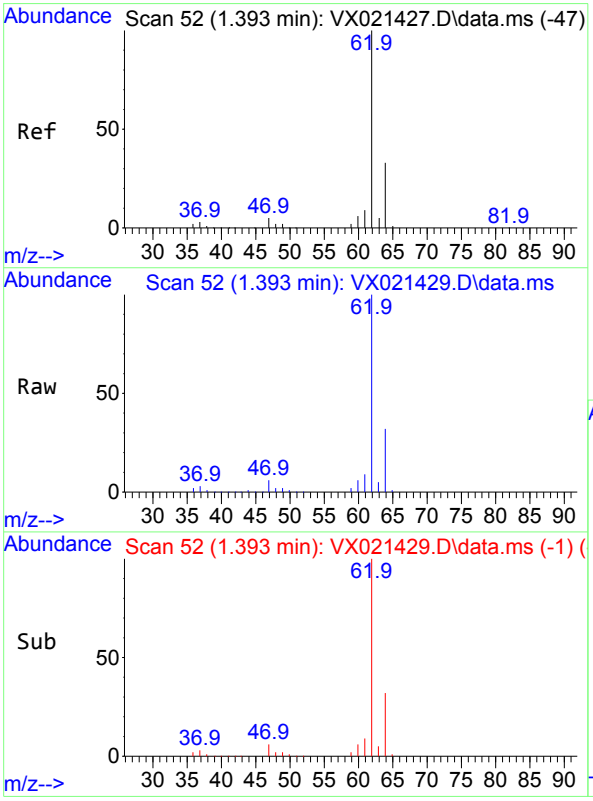



#3
Chloromethane
Concen: 85.36 ug/l
RT: 1.311 min Scan# 38
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 50 Resp: 148668

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 33.2 | 26.4 | 39.6 |

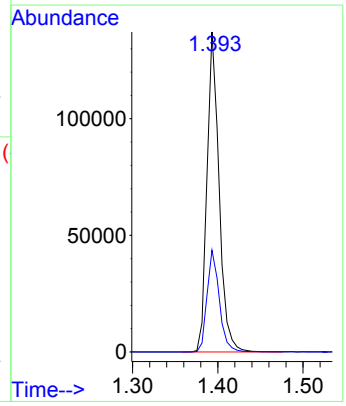



#4
Vinyl Chloride
Concen: 143.86 ug/l
RT: 1.393 min Scan# 52
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

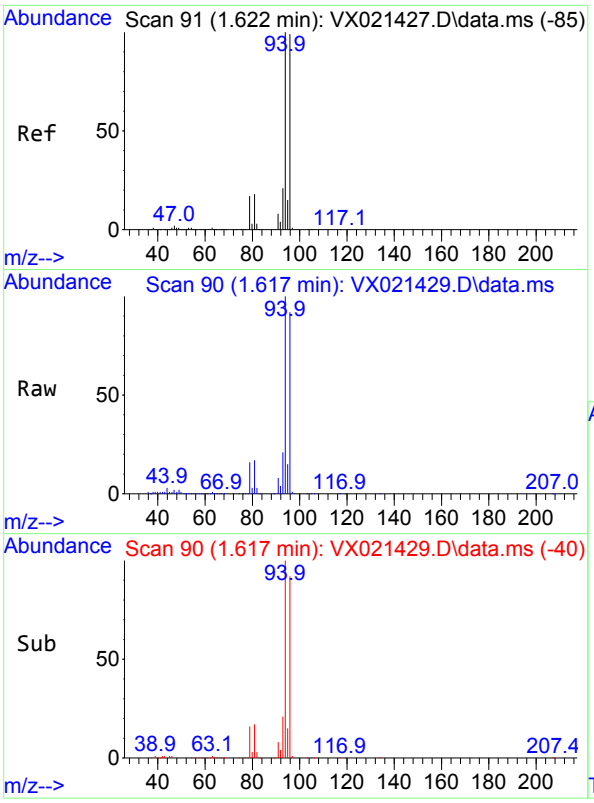
Tgt Ion: 62 Resp: 135121

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.8 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

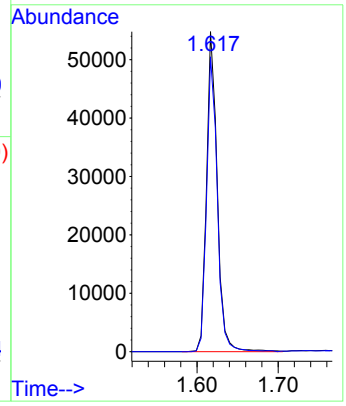
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

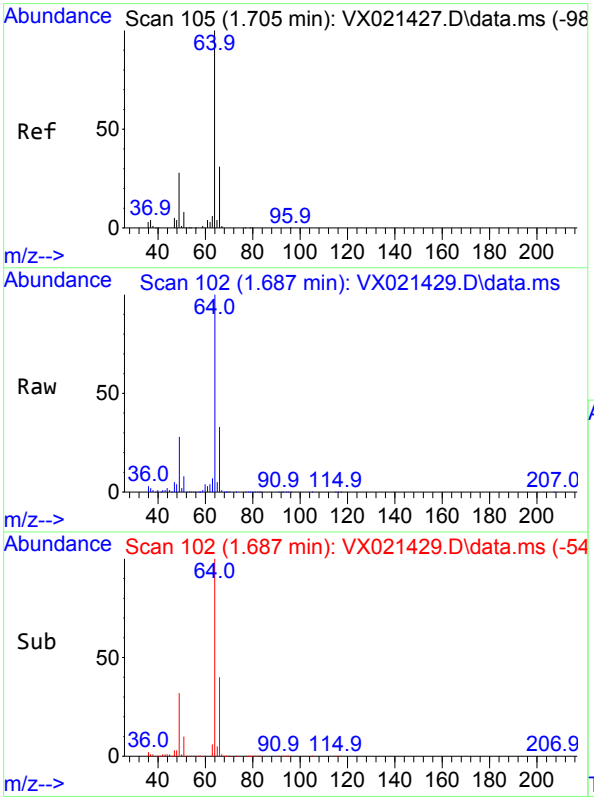



#5
Bromomethane
Concen: 123.96 ug/l
RT: 1.617 min Scan# 90
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 94 Resp: 50084

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 92.2 | 76.4 | 114.6 |

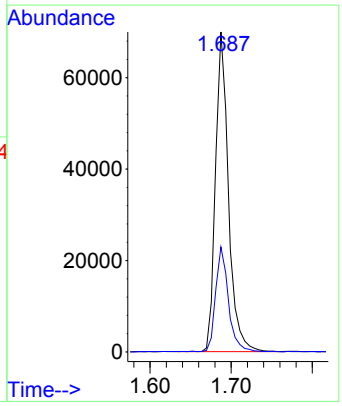



#6
Chloroethane
Concen: 134.68 ug/l
RT: 1.687 min Scan# 102
Delta R.T. -0.018 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

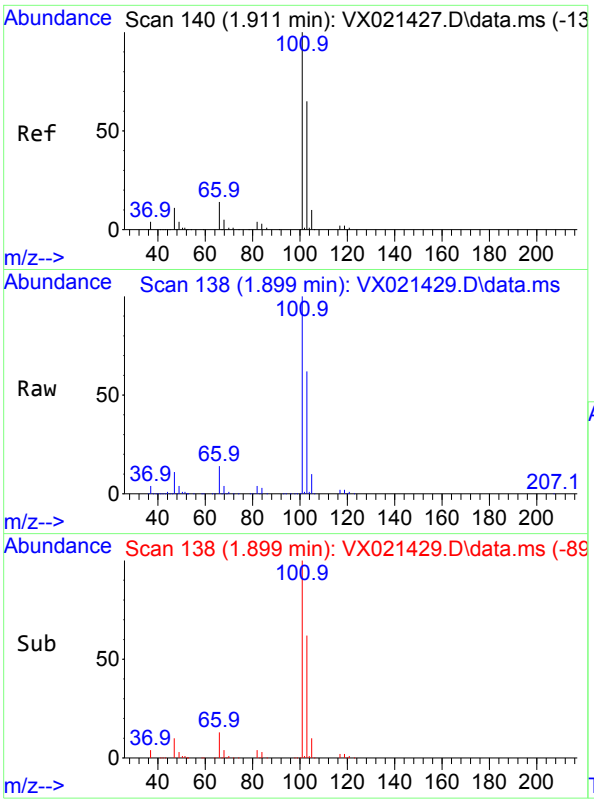
Tgt Ion: 64 Resp: 77605

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.7 | 25.4 | 38.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

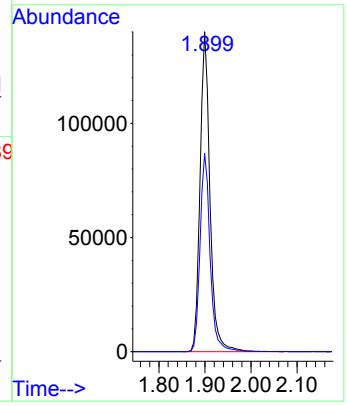
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

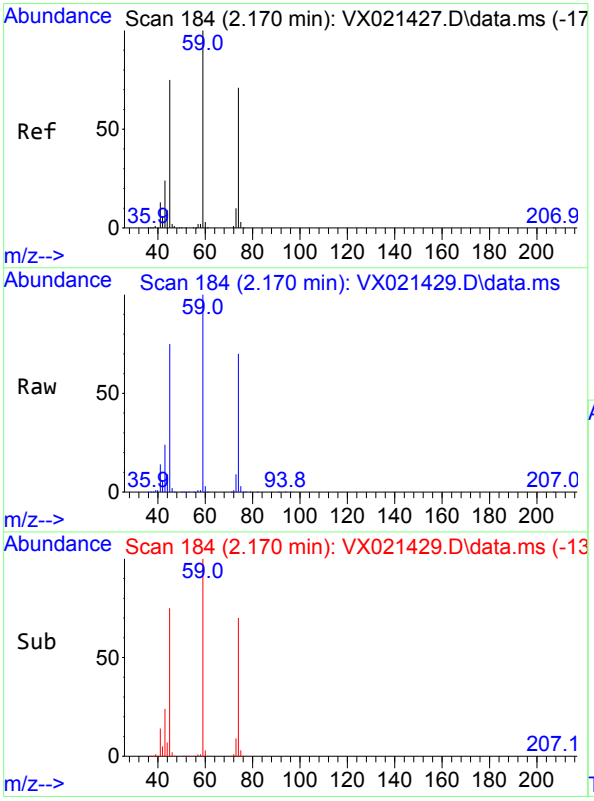



#7
Trichlorofluoromethane
Concen: 146.32 ug/l
RT: 1.899 min Scan# 138
Delta R.T. -0.012 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:101 Resp: 208691

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 61.9 | 53.2 | 79.8 |

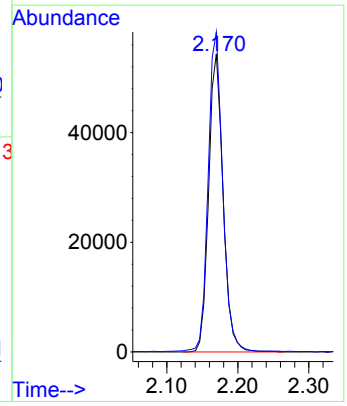



#8
Diethyl Ether
Concen: 153.91 ug/l
RT: 2.170 min Scan# 184
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

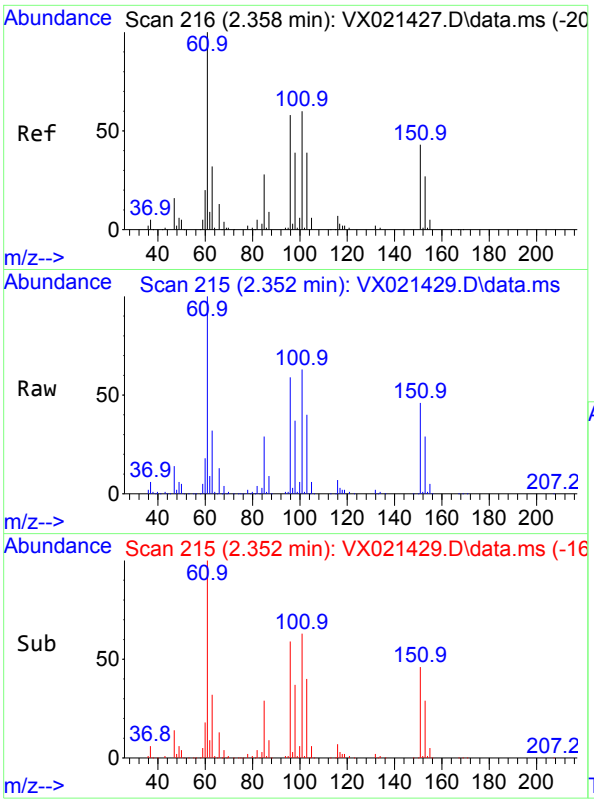
Tgt Ion: 74 Resp: 77008

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 108.1 | 44.5 | 133.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

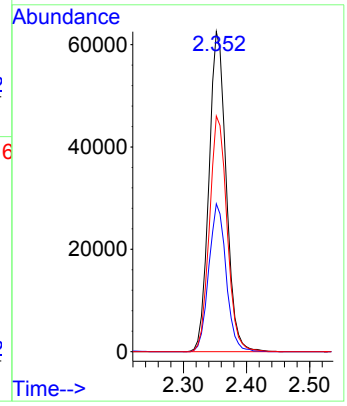
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

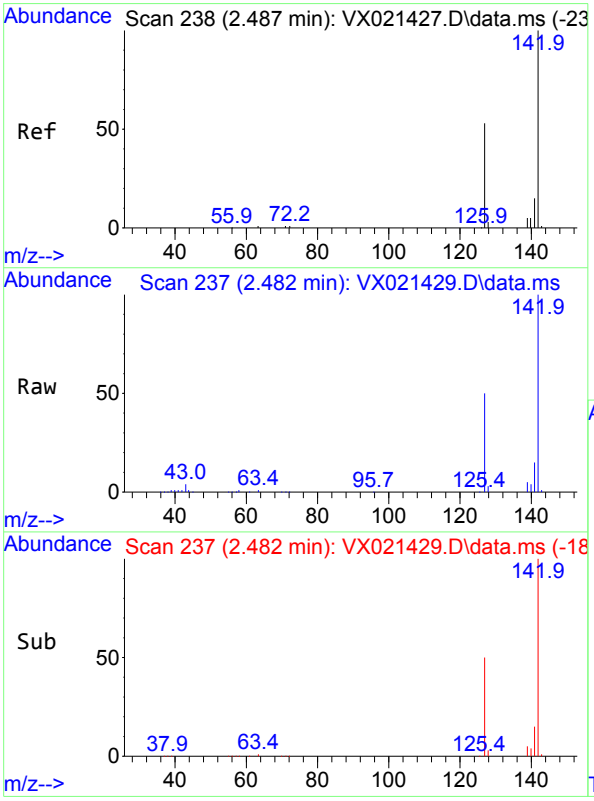



#9
1,1,2-Trichlorotrifluoroethane
Concen: 146.39 ug/l
RT: 2.352 min Scan# 215
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:101 Resp: 118865

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 46.3 | 34.9 | 52.3 |
| 151 | 74.9 | 61.4 | 92.2 |

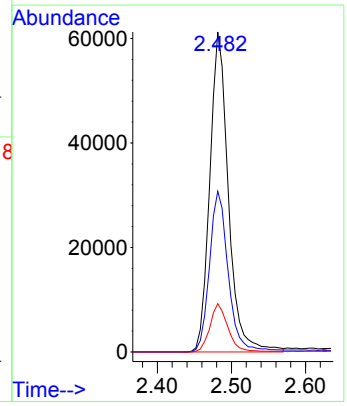



#10
Methyl Iodide
Concen: 155.71 ug/l
RT: 2.482 min Scan# 237
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

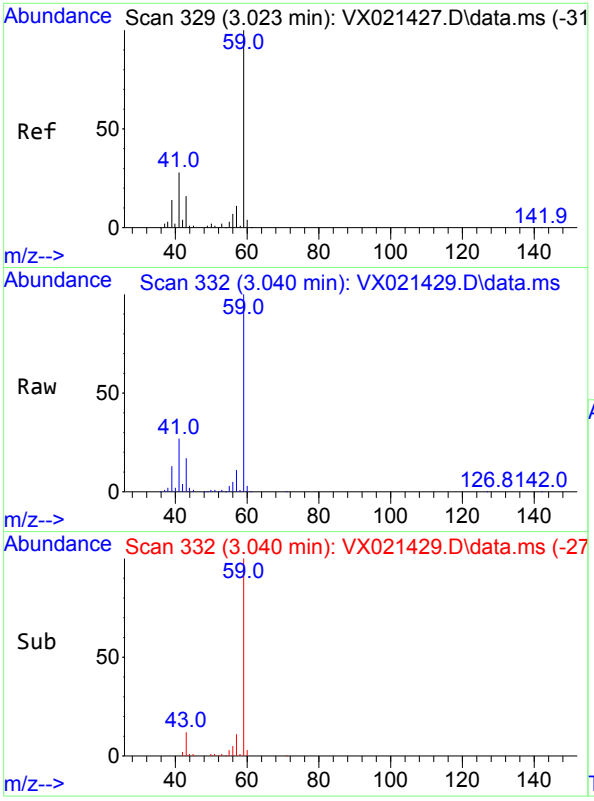
Tgt Ion:142 Resp: 106912

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 50.8 | 33.3 | 49.9# |
| 141 | 14.8 | 11.4 | 17.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

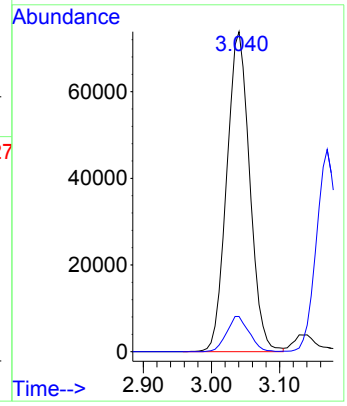
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

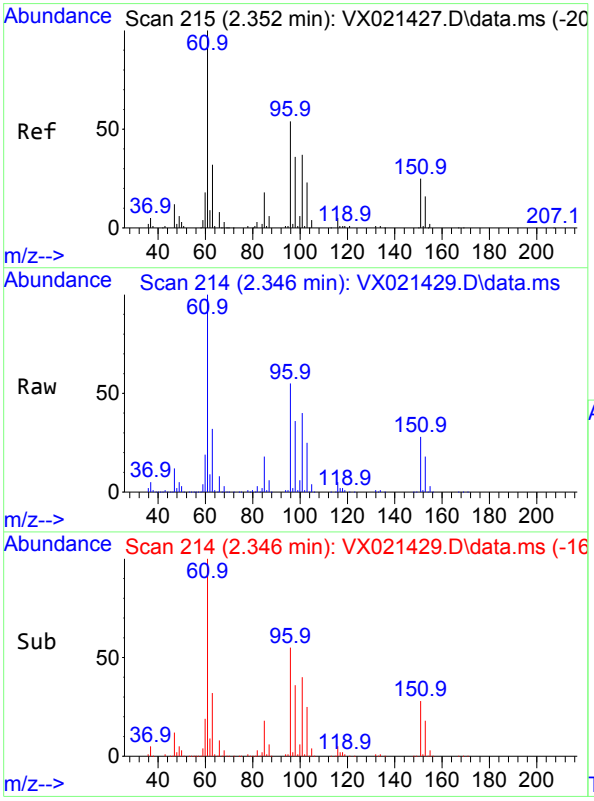



#11
Tert butyl alcohol
Concen: 806.34 ug/l
RT: 3.040 min Scan# 332
Delta R.T. 0.018 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 59 Resp: 173128

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.8 | 7.8 | 11.8 |

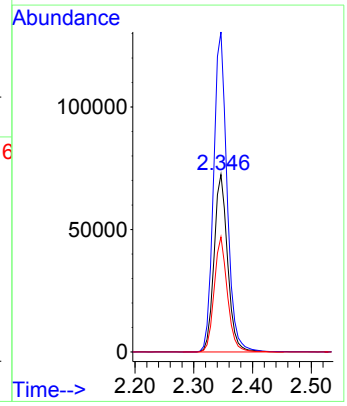



#12
1,1-Dichloroethene
Concen: 147.20 ug/l
RT: 2.346 min Scan# 214
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

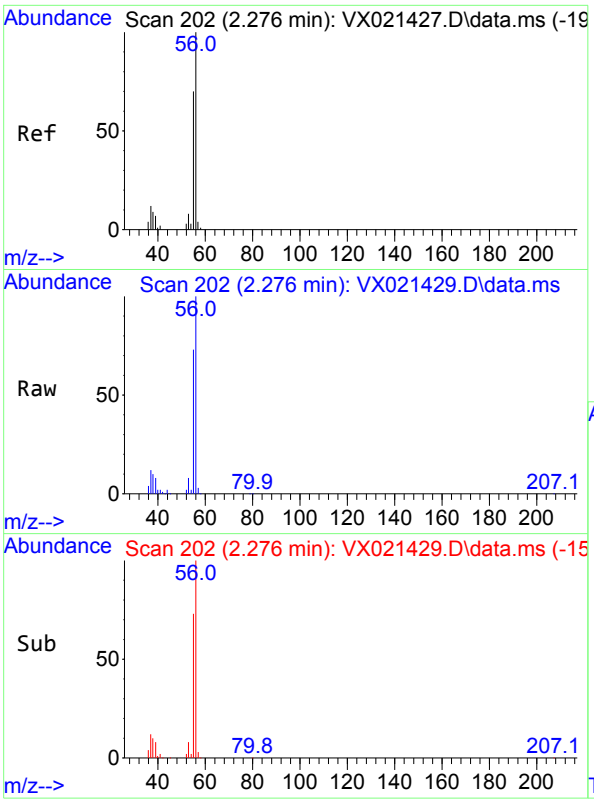
Tgt Ion: 96 Resp: 116242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 180.4 | 124.6 | 187.0 |
| 98 | 64.9 | 50.6 | 76.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

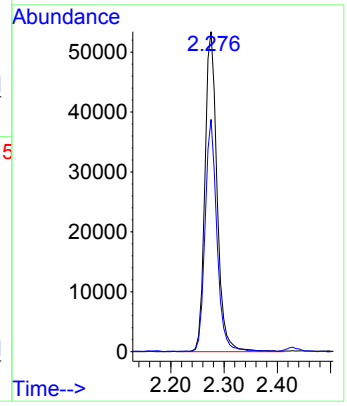
**Manual Integrations APPROVED**
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3/25/2021 9:49:41 AM

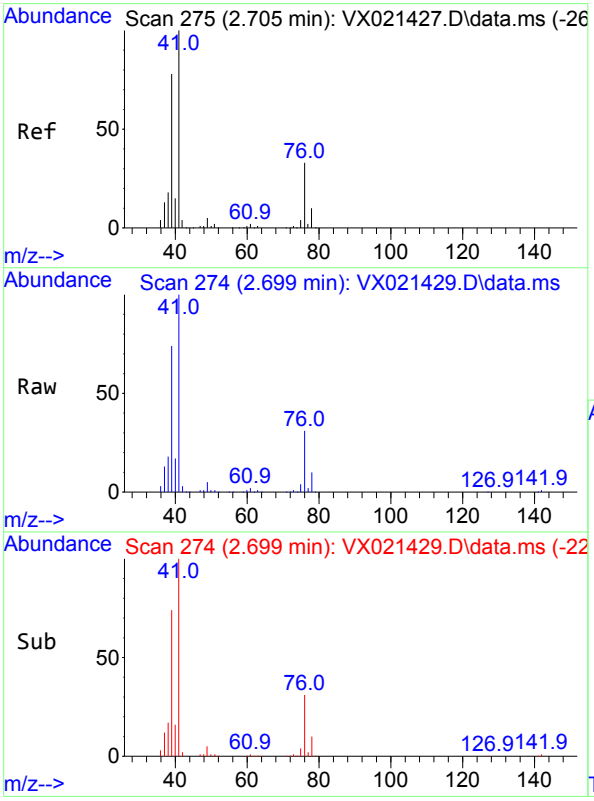



#13
Acrolein
Concen: 646.70 ug/l
RT: 2.276 min Scan# 202
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 56 Resp: 84486

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.5 | 56.4 | 84.6 |

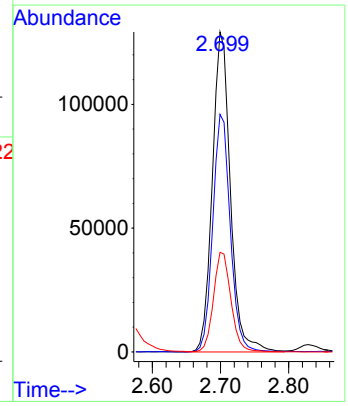



#14
Allyl chloride
Concen: 146.78 ug/l
RT: 2.699 min Scan# 274
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

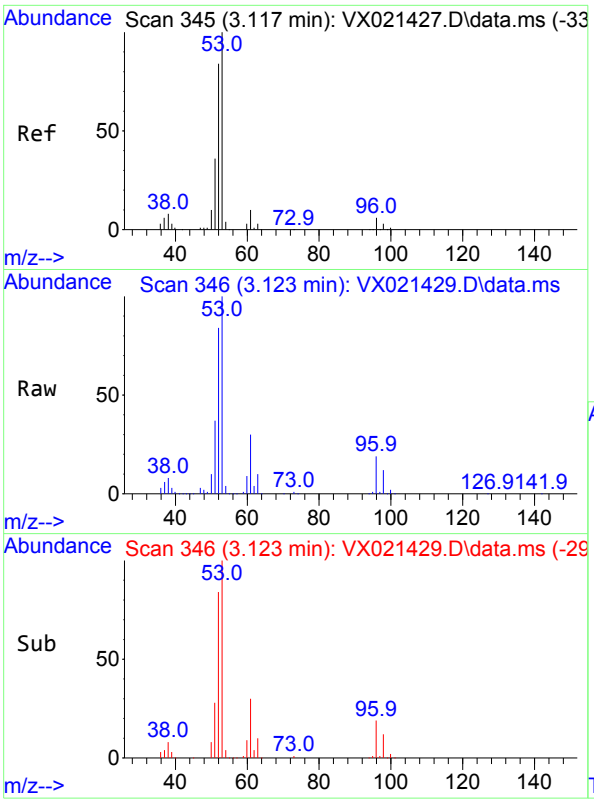
Tgt Ion: 41 Resp: 239001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 71.7 | 51.6 | 77.4 |
| 76 | 30.2 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

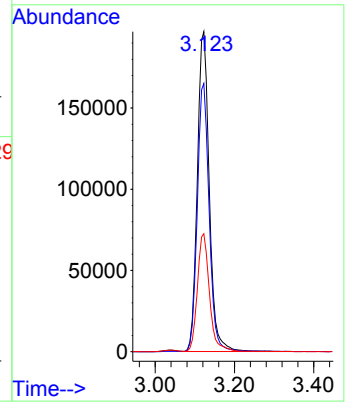
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

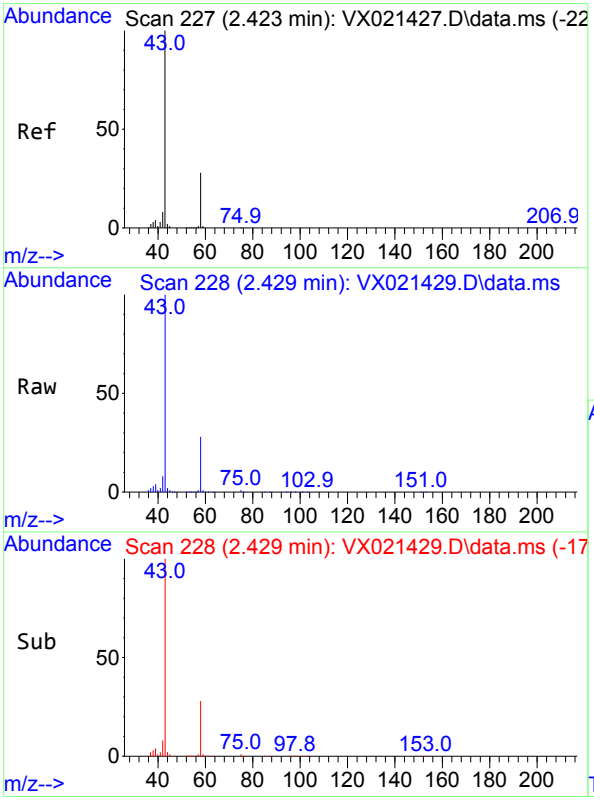



#15
Acrylonitrile
Concen: 817.99 ug/l
RT: 3.123 min Scan# 346
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 53 Resp: 410754

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.1 | 65.3 | 97.9 |
| 51 | 37.3 | 28.2 | 42.2 |

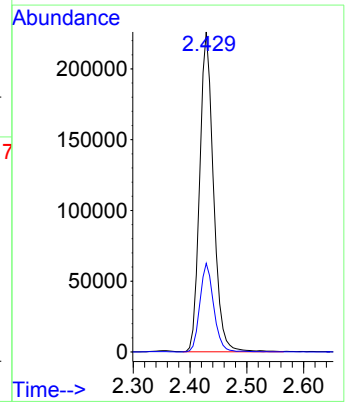



#16
Acetone
Concen: 804.41 ug/l
RT: 2.429 min Scan# 228
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

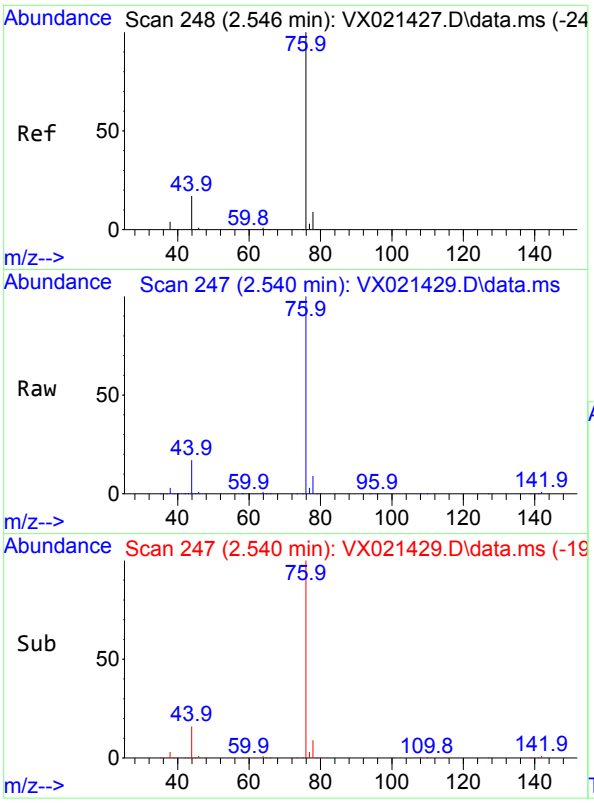
Tgt Ion: 43 Resp: 382033

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.7 | 27.8 | 41.8# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

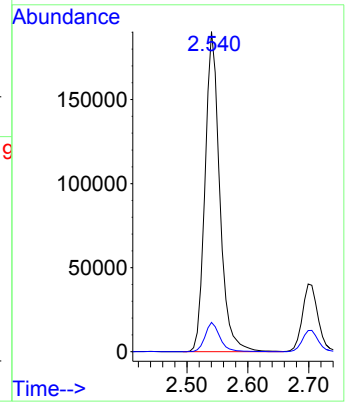
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

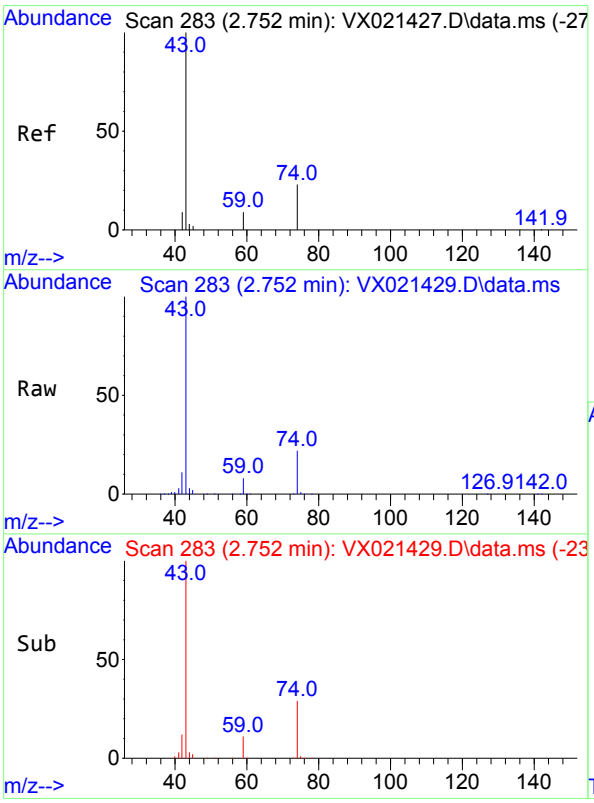



#17
Carbon Disulfide
Concen: 131.00 ug/l
RT: 2.540 min Scan# 247
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 76 Resp: 320016

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

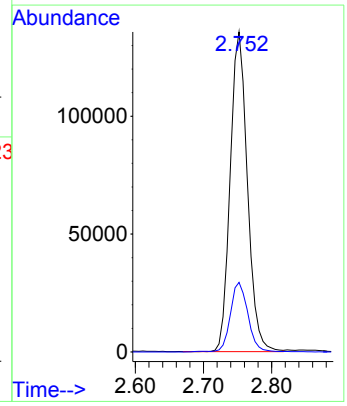



#18
Methyl Acetate
Concen: 179.02 ug/l
RT: 2.752 min Scan# 283
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

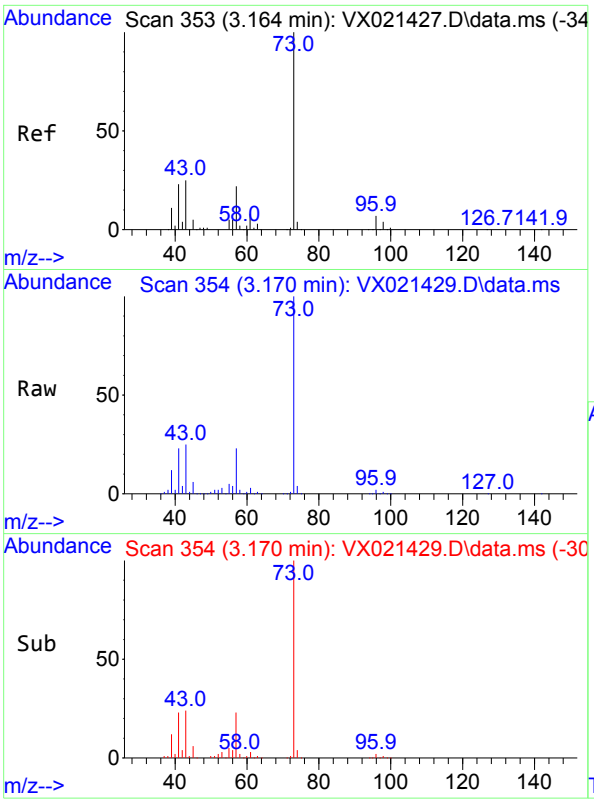
Tgt Ion: 43 Resp: 238241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.2 | 21.9 | 32.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

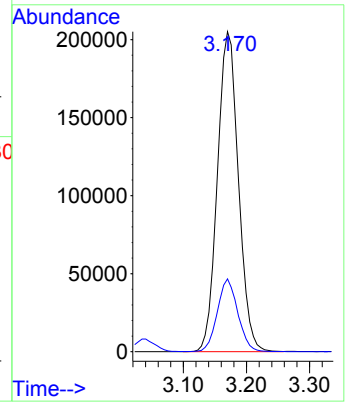
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

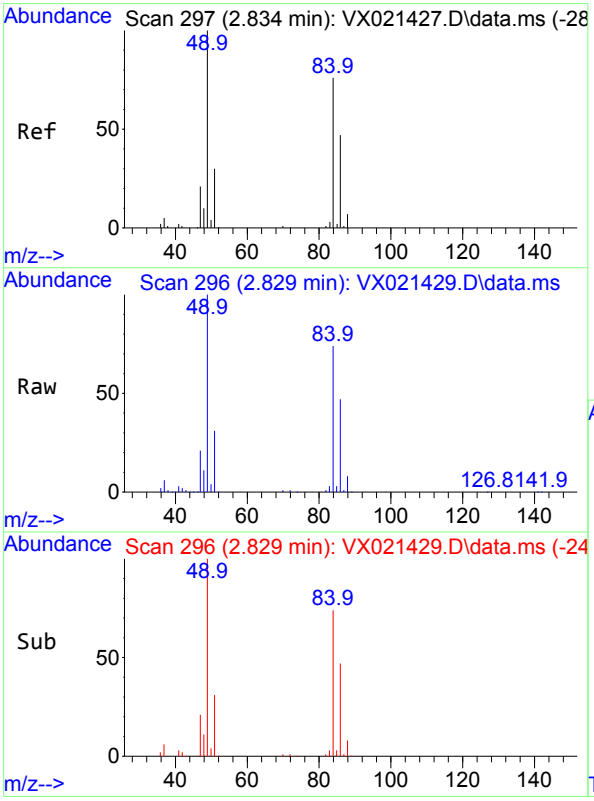



#19
Methyl tert-butyl Ether
Concen: 159.44 ug/l
RT: 3.170 min Scan# 354
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 73 Resp: 473343

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.7 | 17.1 | 25.7 |

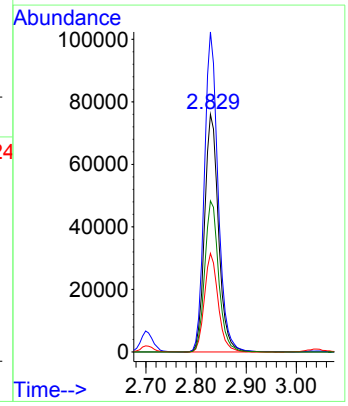



#20
Methylene Chloride
Concen: 150.88 ug/l
RT: 2.829 min Scan# 296
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

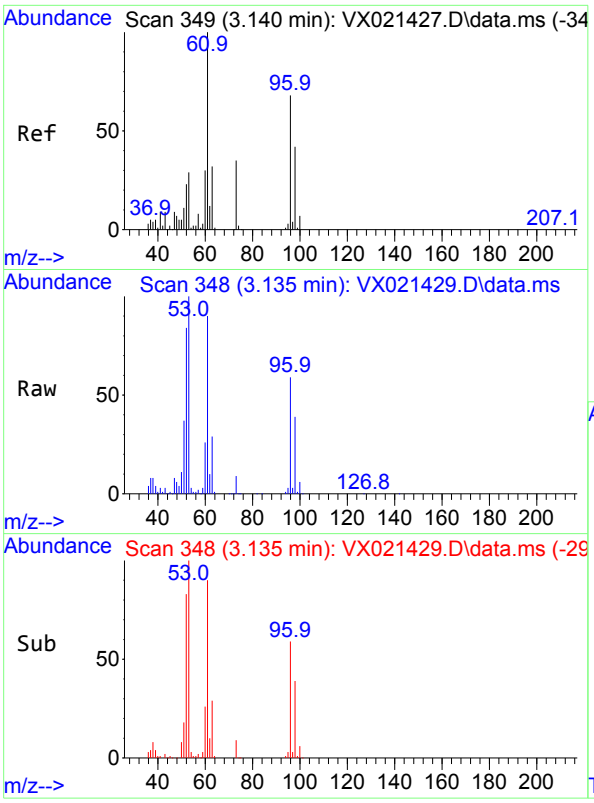
Tgt Ion: 84 Resp: 146022

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 134.6 | 88.6 | 132.8# |
| 51 | 41.5 | 27.0 | 40.6# |
| 86 | 63.6 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

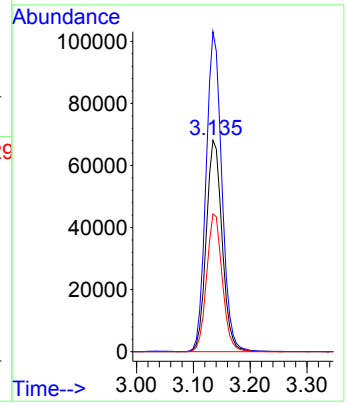
**Manual Integrations APPROVED**
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3/25/2021 9:49:41 AM

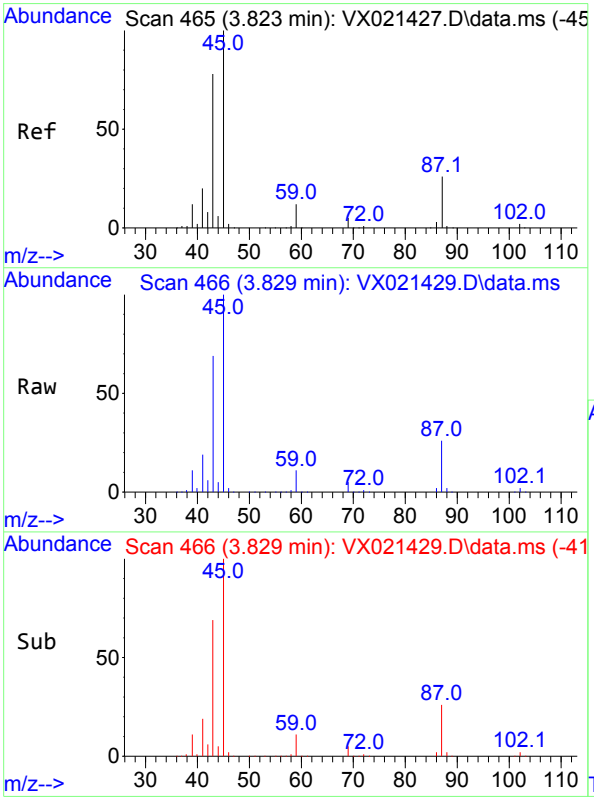



#21
trans-1,2-Dichloroethene
Concen: 149.12 ug/l
RT: 3.135 min Scan# 348
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 96 Resp: 131962

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 151.3 | 107.7 | 161.5 |
| 98 | 65.2 | 50.4 | 75.6 |

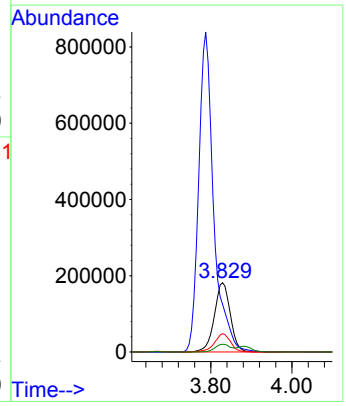



#22
Diisopropyl ether
Concen: 157.38 ug/l
RT: 3.829 min Scan# 466
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

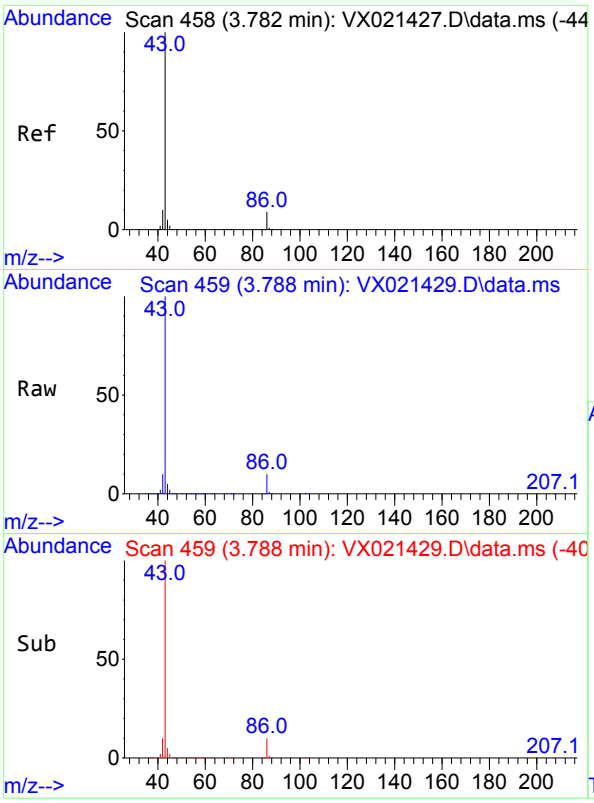
Tgt Ion: 45 Resp: 493223

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 68.7 | 58.0 | 87.0 |
| 87 | 26.3 | 25.4 | 38.0 |
| 59 | 11.1 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

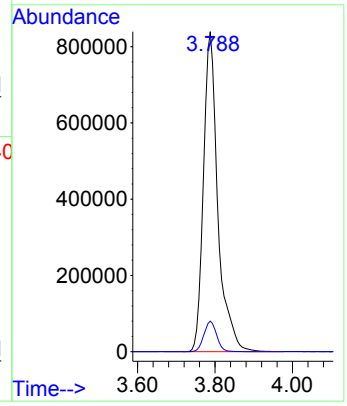
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3/25/2021 9:49:41 AM

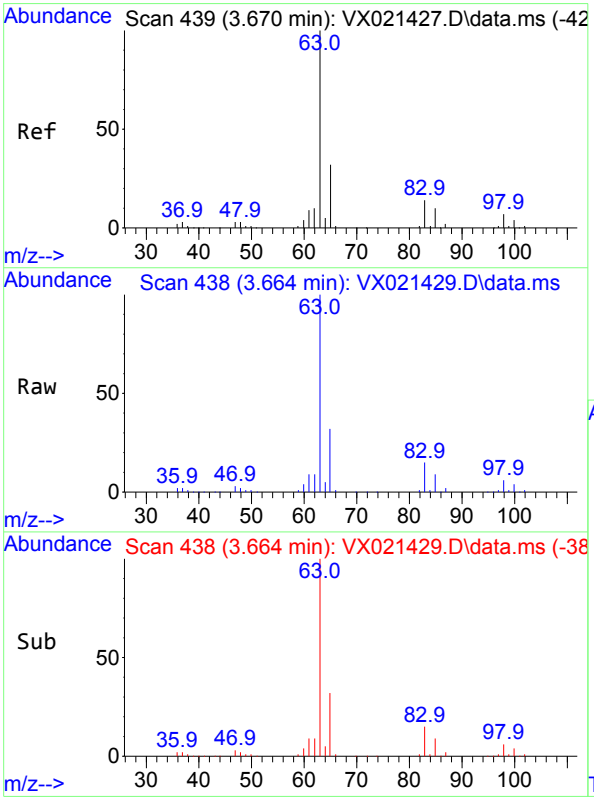



#23
Vinyl Acetate
Concen: 795.91 ug/l
RT: 3.788 min Scan# 459
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 43 Resp: 2159399

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.6 | 9.9 | 14.9# |

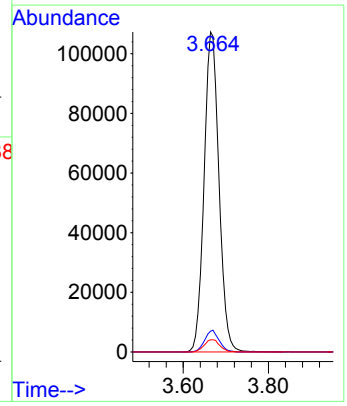



#24
1,1-Dichloroethane
Concen: 153.06 ug/l
RT: 3.664 min Scan# 438
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

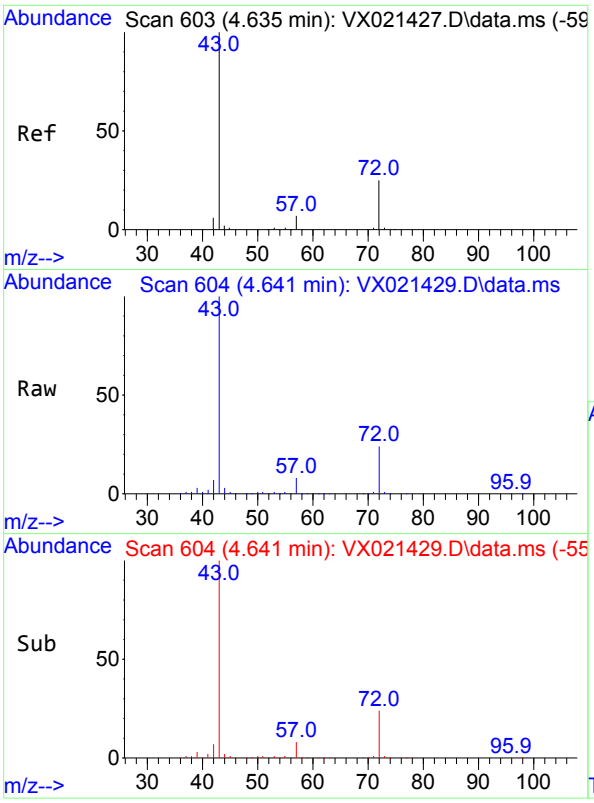
Tgt Ion: 63 Resp: 259577

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.5 | 3.8 | 11.2 |
| 100 | 3.8 | 2.5 | 7.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

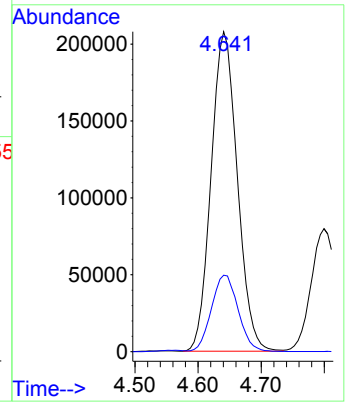
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

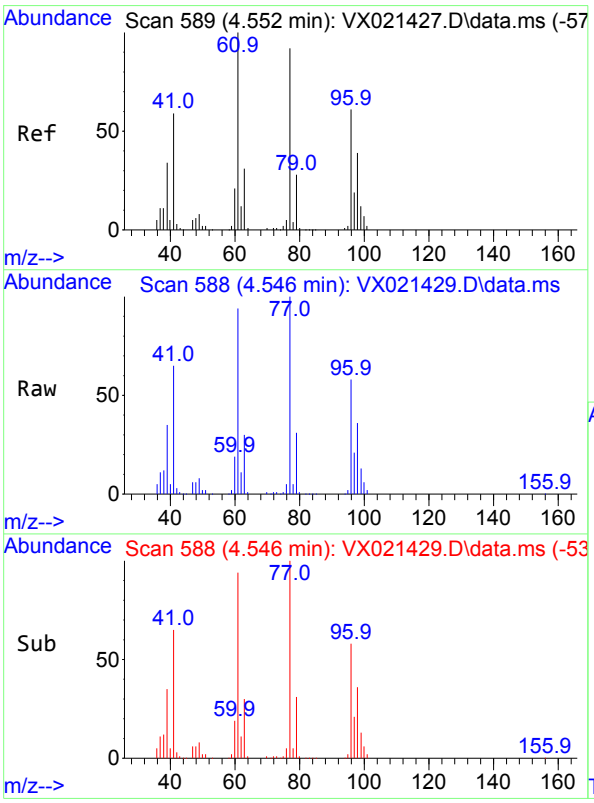



#25
2-Butanone
Concen: 824.57 ug/l
RT: 4.641 min Scan# 604
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 43 Resp: 598754

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 23.8 | 23.7 | 35.5 |

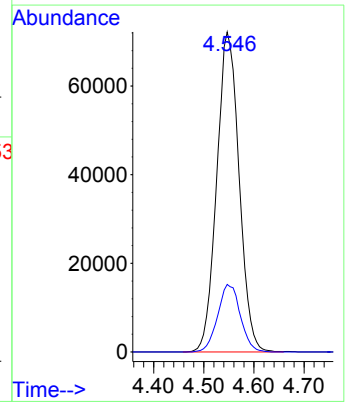



#26
2,2-Dichloropropane
Concen: 151.51 ug/l
RT: 4.546 min Scan# 588
Delta R.T. -0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

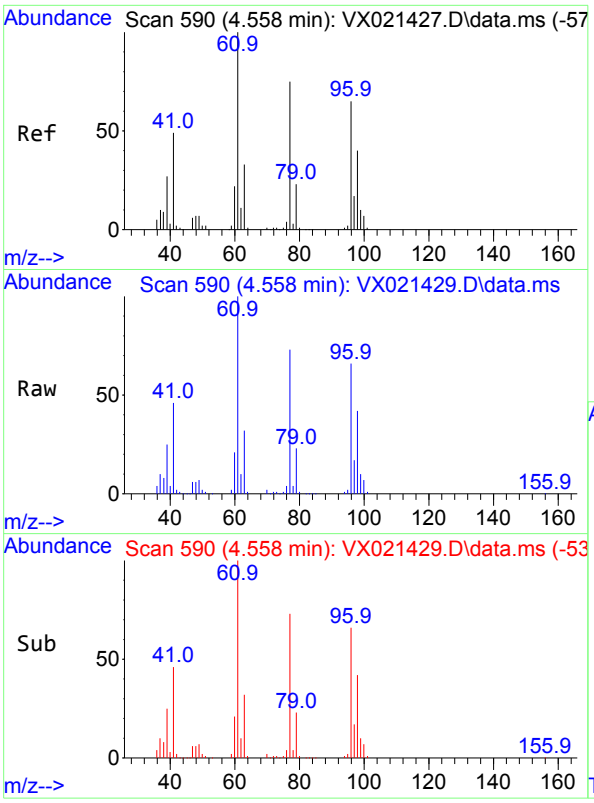
Tgt Ion: 77 Resp: 223469

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.4 | 11.7 | 35.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

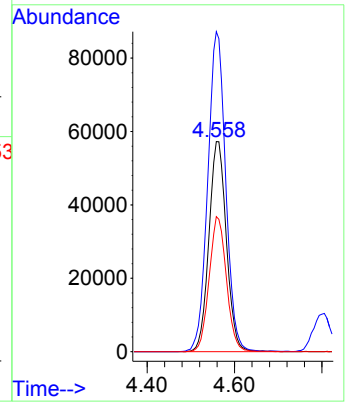
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

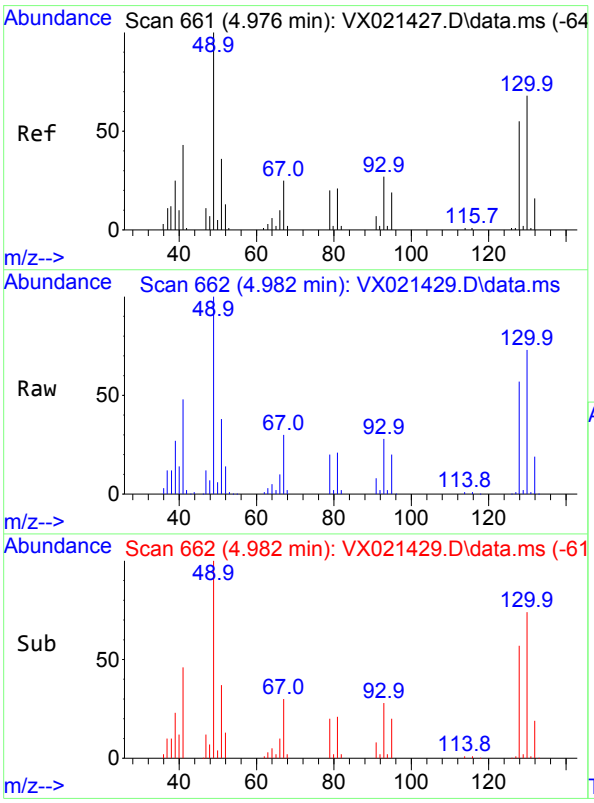



#27
cis-1,2-Dichloroethene
Concen: 156.17 ug/l
RT: 4.558 min Scan# 590
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 96 Resp: 158997

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 156.5 | 0.0 | 285.6 |
| 98 | 63.7 | 0.0 | 129.6 |

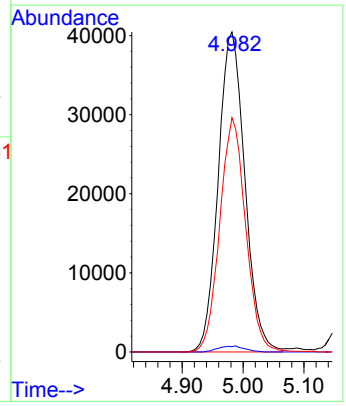



#28
Bromochloromethane
Concen: 153.59 ug/l
RT: 4.982 min Scan# 662
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

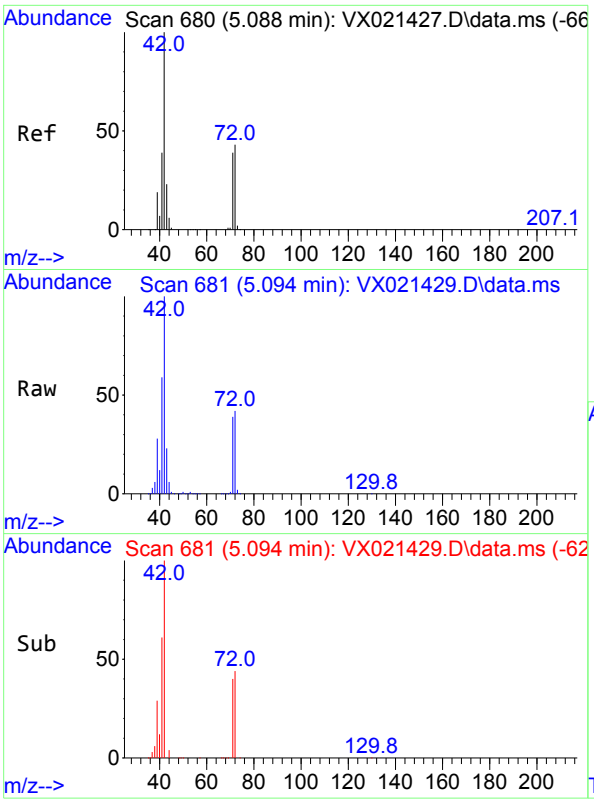
Tgt Ion: 49 Resp: 122924

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.8 | 0.0 | 4.0 |
| 130 | 71.2 | 68.2 | 102.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

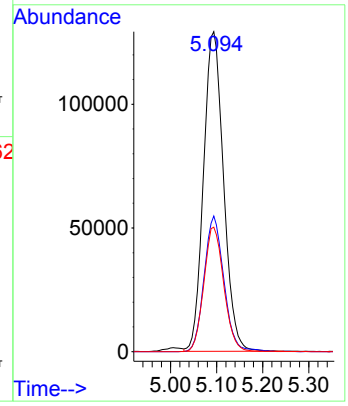
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

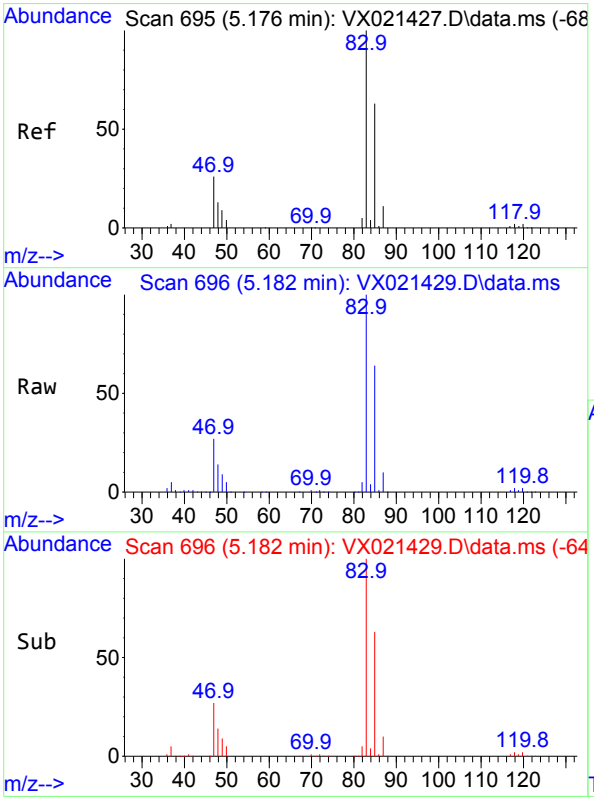



#29
Tetrahydrofuran
Concen: 817.24 ug/l
RT: 5.094 min Scan# 681
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 42 Resp: 391090

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.0 | 41.7 | 62.5 |
| 71 | 38.9 | 38.4 | 57.6 |

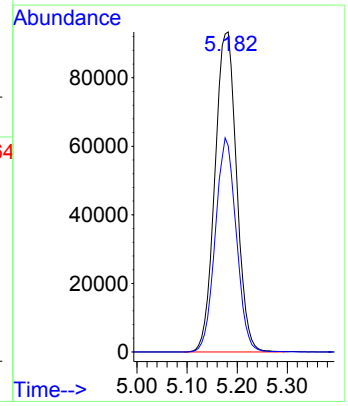



#30
Chloroform
Concen: 158.99 ug/l
RT: 5.182 min Scan# 696
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

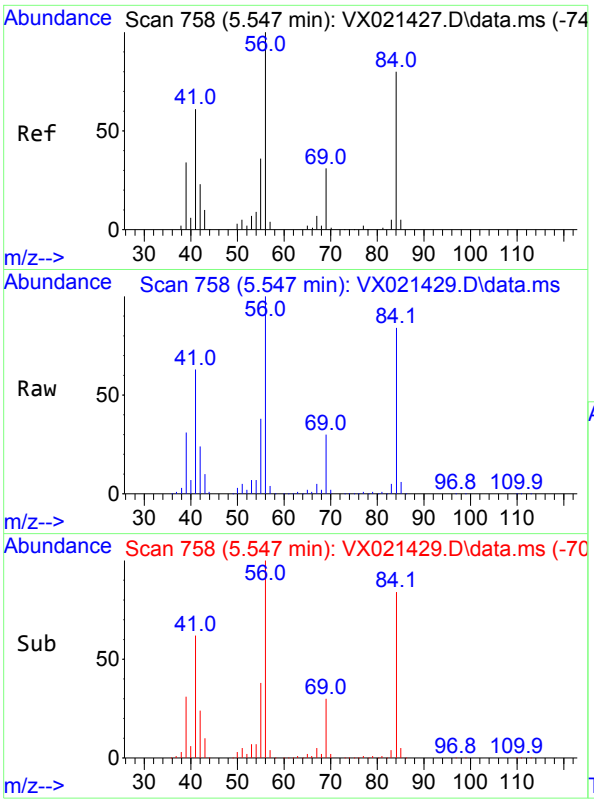
Tgt Ion: 83 Resp: 280720

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.4 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

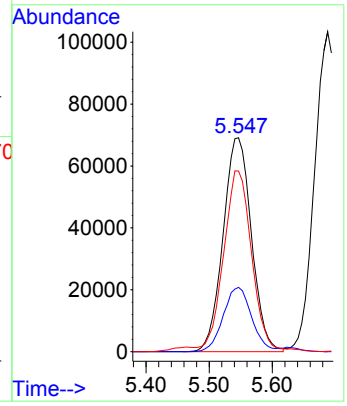
**Manual Integrations APPROVED**
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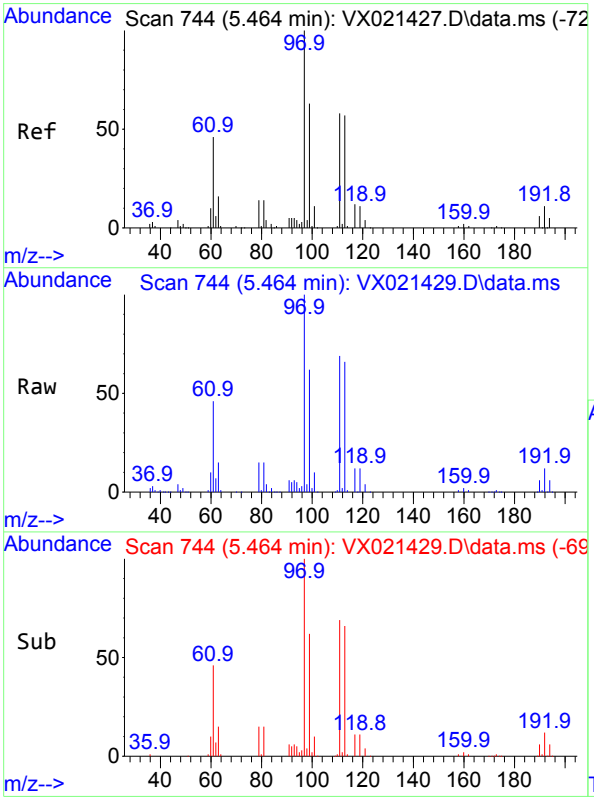



#31
Cyclohexane
Concen: 140.97 ug/l
RT: 5.547 min Scan# 758
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 56 Resp: 215576

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.1 | 25.3 | 37.9 |
| 84 | 83.1 | 71.4 | 107.0 |

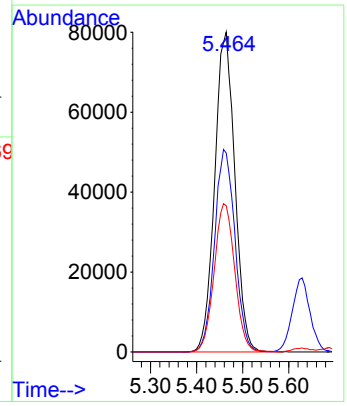



#32
1,1,1-Trichloroethane
Concen: 155.13 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

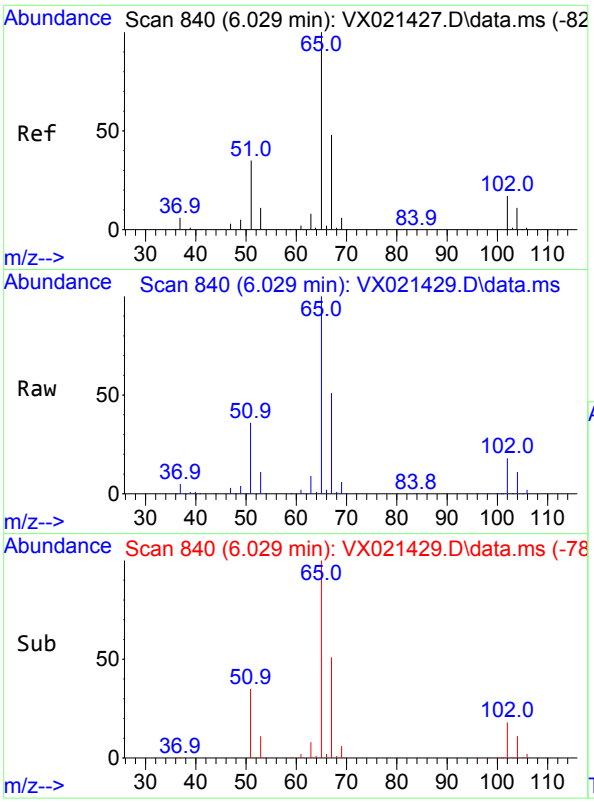
Tgt Ion: 97 Resp: 242820

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.2 | 51.5 | 77.3 |
| 61 | 47.6 | 34.2 | 51.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

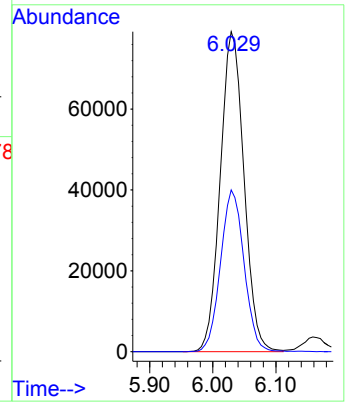
**Manual Integrations APPROVED**
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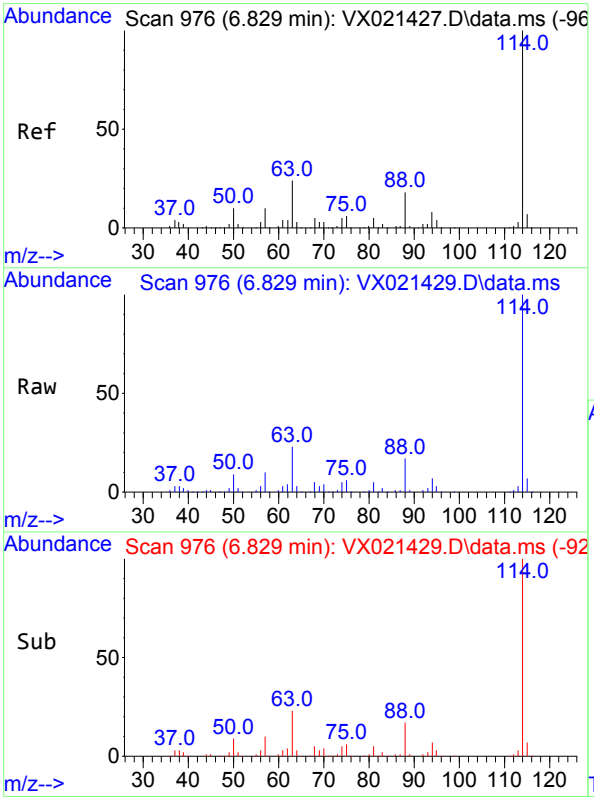



#33
1,2-Dichloroethane-d4
Concen: 161.39 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 65 Resp: 206597

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.1 | 0.0 | 105.4 |

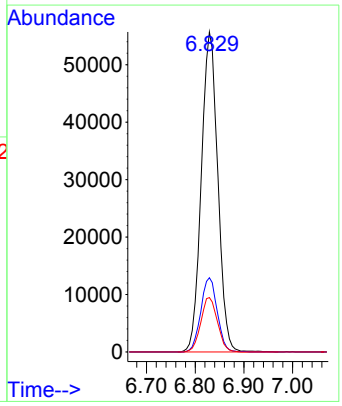



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

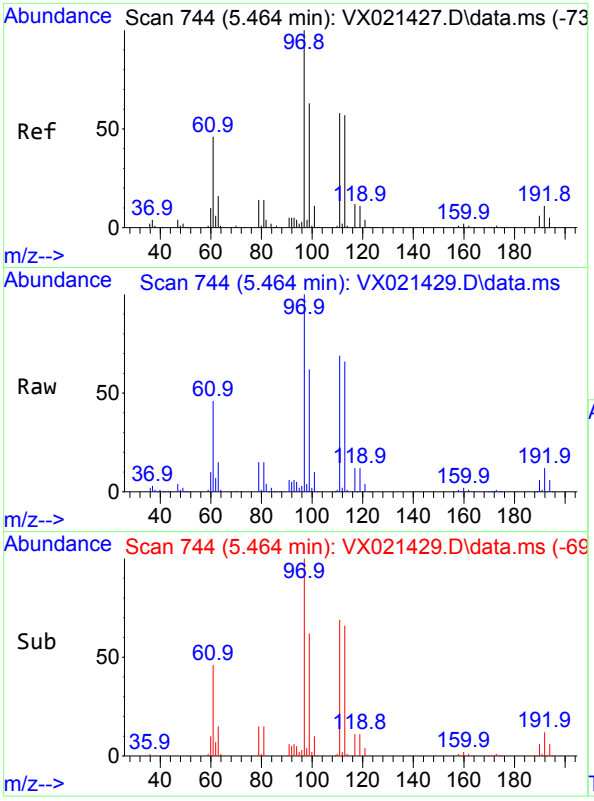
Tgt Ion:114 Resp: 130602

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.2 | 0.0 | 40.8 |
| 88 | 17.0 | 0.0 | 32.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

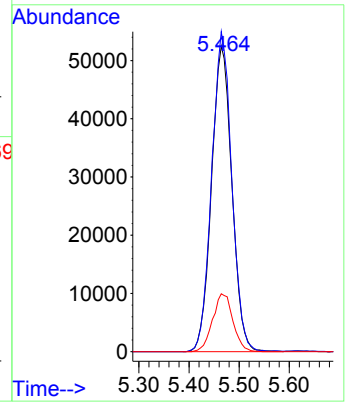
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3/25/2021 9:49:41 AM

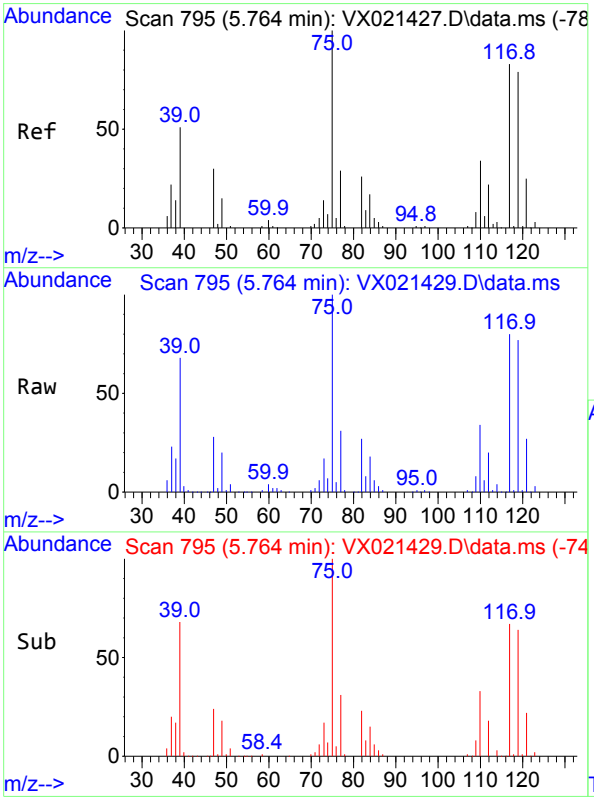



#35
Dibromofluoromethane
Concen: 166.25 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:113 Resp: 148012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 103.0 | 81.9 | 122.9 |
| 192 | 18.9 | 16.7 | 25.1 |

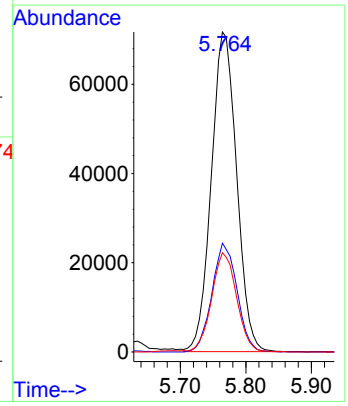



#36
1,1-Dichloropropene
Concen: 146.75 ug/l
RT: 5.764 min Scan# 795
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

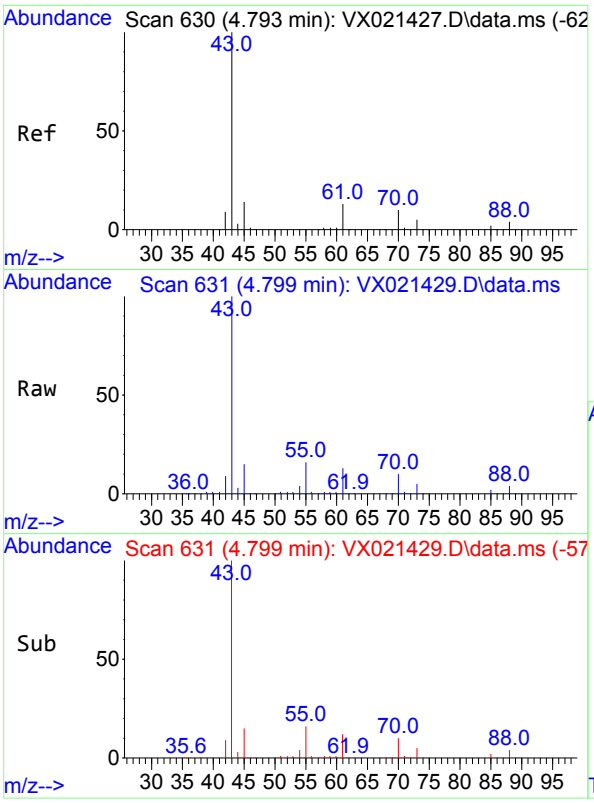
Tgt Ion: 75 Resp: 192219

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.7 | 18.1 | 54.4 |
| 77 | 30.8 | 25.3 | 37.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

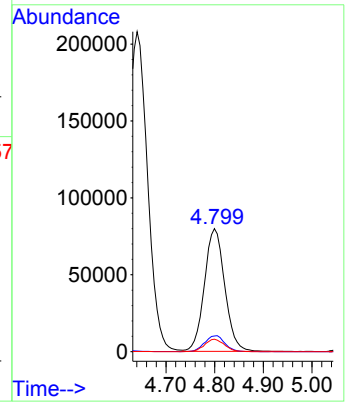
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3/25/2021 9:49:41 AM

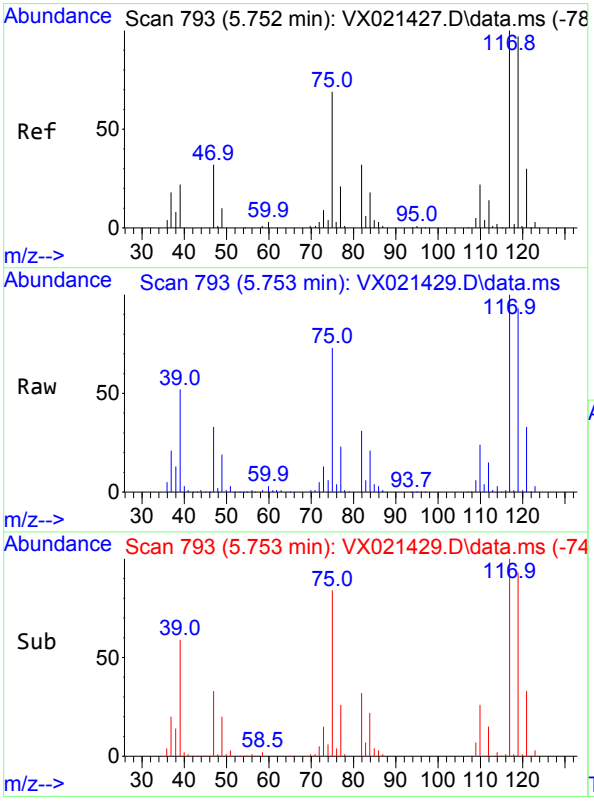



#37
Ethyl Acetate
Concen: 153.07 ug/l
RT: 4.799 min Scan# 631
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 43 Resp: 231805

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.0 | 12.8 | 19.2 |
| 70 | 9.9 | 10.5 | 15.7# |

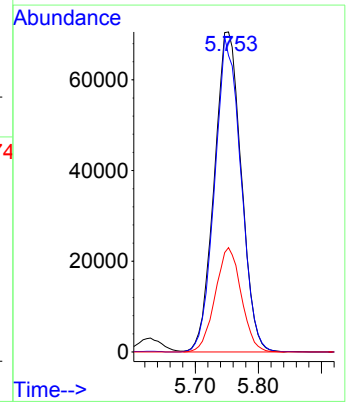



#38
Carbon Tetrachloride
Concen: 153.52 ug/l
RT: 5.753 min Scan# 793
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

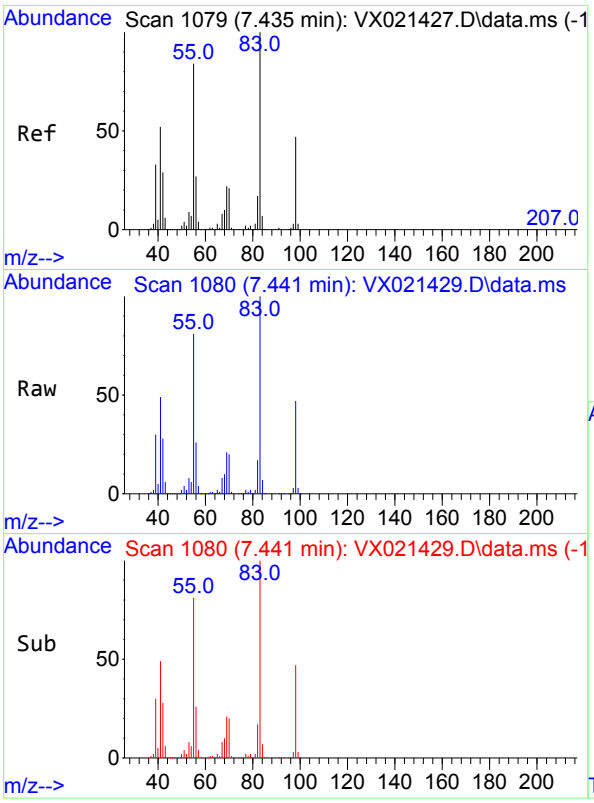
Tgt Ion:117 Resp: 209405

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 92.5 | 76.2 | 114.2 |
| 121 | 32.6 | 24.8 | 37.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

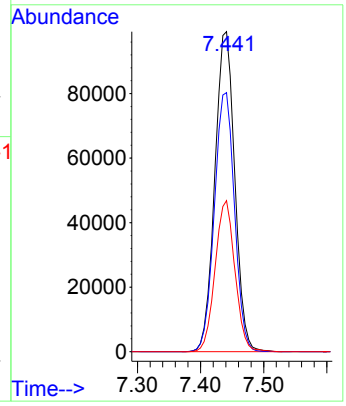
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3/25/2021 9:49:41 AM

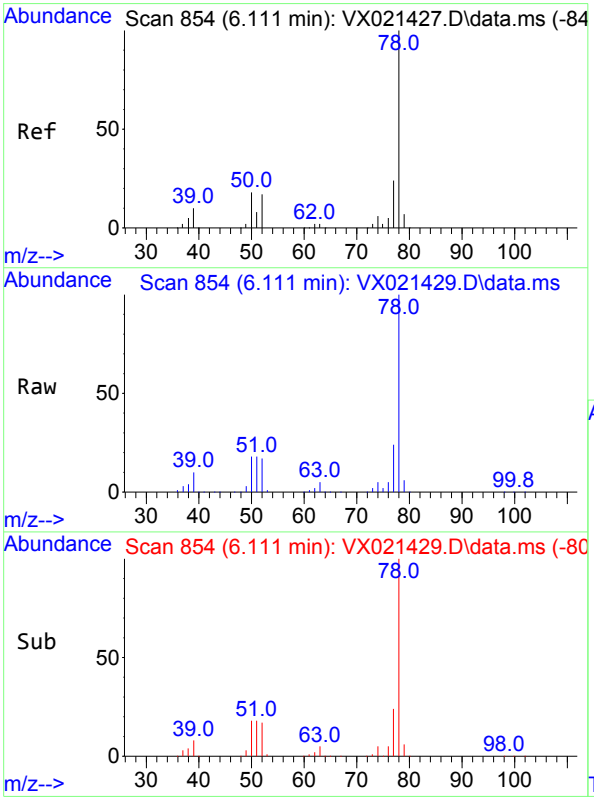



#39
Methylcyclohexane
Concen: 149.47 ug/l
RT: 7.441 min Scan# 1080
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 83 Resp: 217476

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 81.0 | 58.9 | 88.3 |
| 98 | 47.2 | 38.1 | 57.1 |

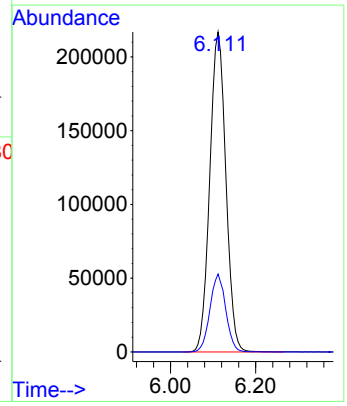



#40
Benzene
Concen: 157.18 ug/l
RT: 6.111 min Scan# 854
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

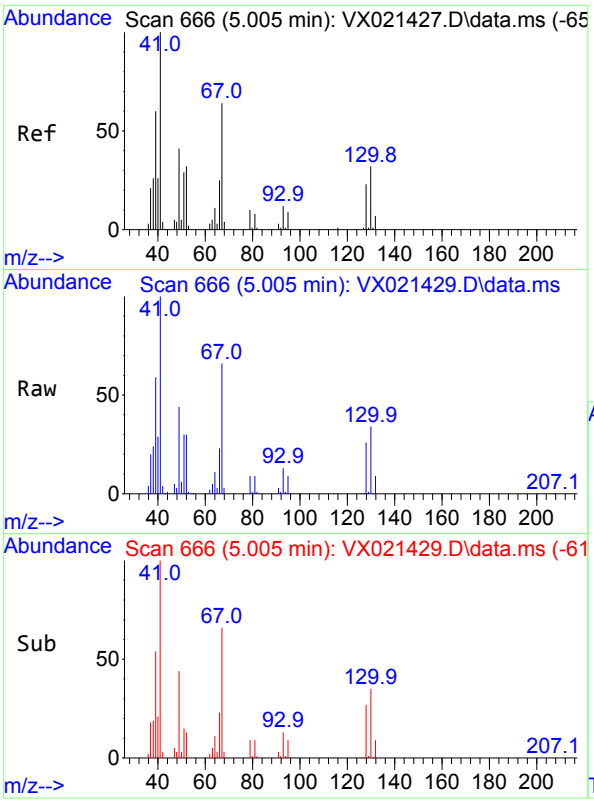
Tgt Ion: 78 Resp: 568473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.4 | 18.9 | 28.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

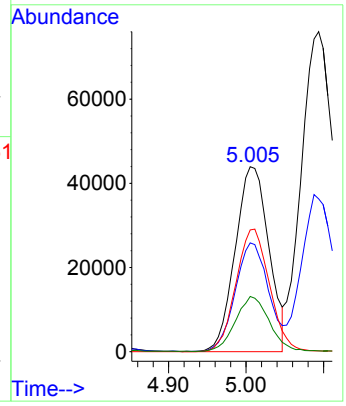
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3/25/2021 9:49:41 AM

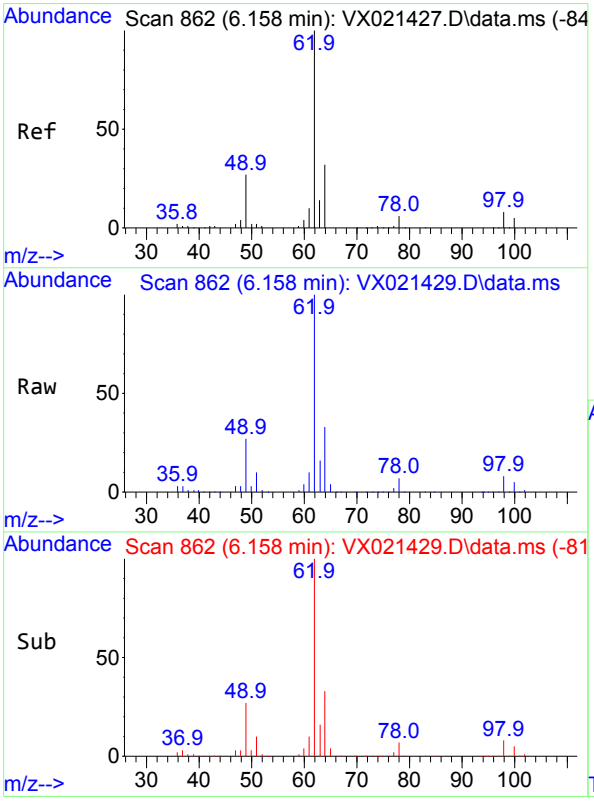



#41
Methacrylonitrile
Concen: 151.07 ug/l
RT: 5.005 min Scan# 666
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 41 Resp: 132567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 58.0 | 42.5 | 63.7 |
| 67 | 66.5 | 65.0 | 97.6 |
| 52 | 30.7 | 25.3 | 37.9 |

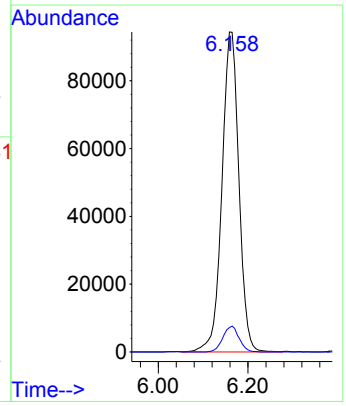



#42
1,2-Dichloroethane
Concen: 158.20 ug/l
RT: 6.158 min Scan# 862
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

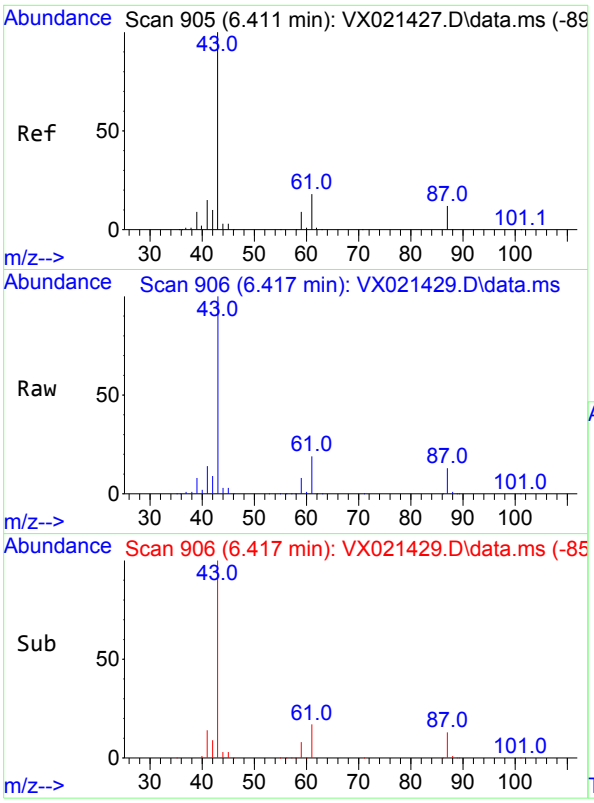
Tgt Ion: 62 Resp: 247644

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.7 | 0.0 | 20.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

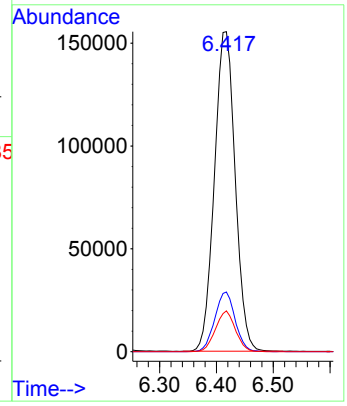
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3/25/2021 9:49:41 AM

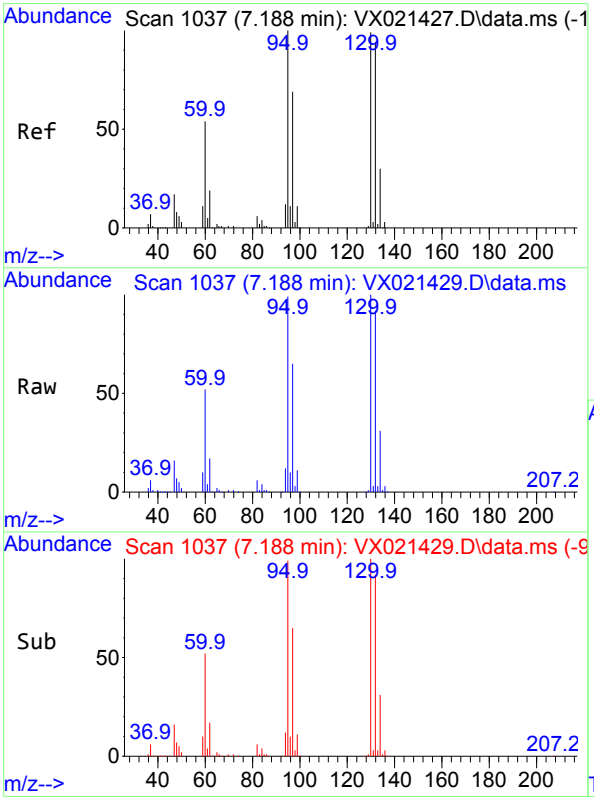



#43
Isopropyl Acetate
Concen: 158.58 ug/l
RT: 6.417 min Scan# 906
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 43 Resp: 394005

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.4 | 18.2 | 27.4 |
| 87 | 12.3 | 12.5 | 18.7# |

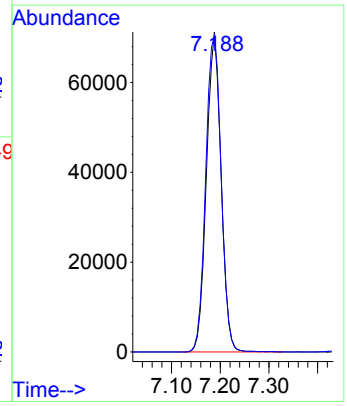



#44
Trichloroethene
Concen: 154.43 ug/l
RT: 7.188 min Scan# 1037
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

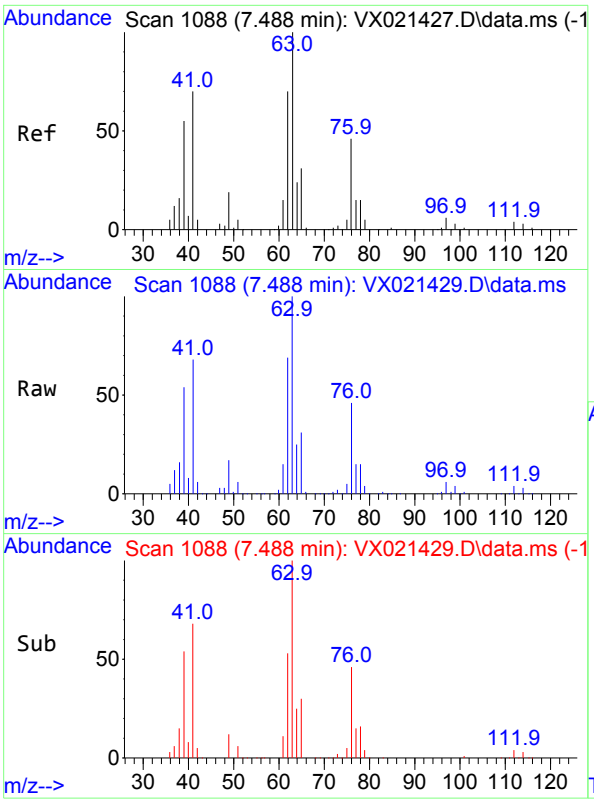
Tgt Ion:130 Resp: 148232

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 98.9 | 0.0 | 198.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

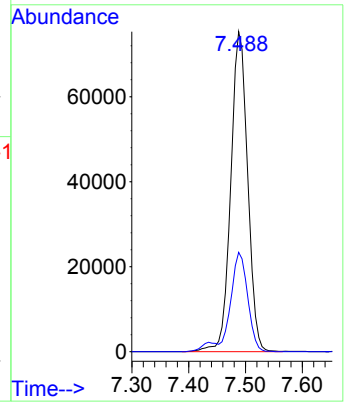
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MMDadoda
3/25/2021 9:49:41 AM

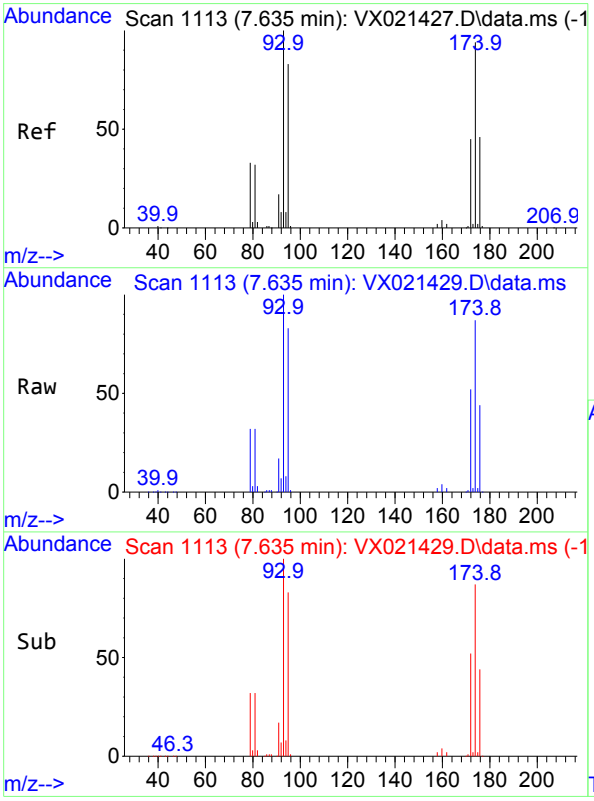



#45
1,2-Dichloropropane
Concen: 159.85 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 63 Resp: 155666

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.0 | 25.7 | 38.5 |

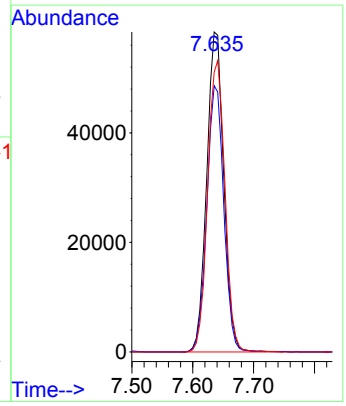



#46
Dibromomethane
Concen: 159.19 ug/l
RT: 7.635 min Scan# 1113
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

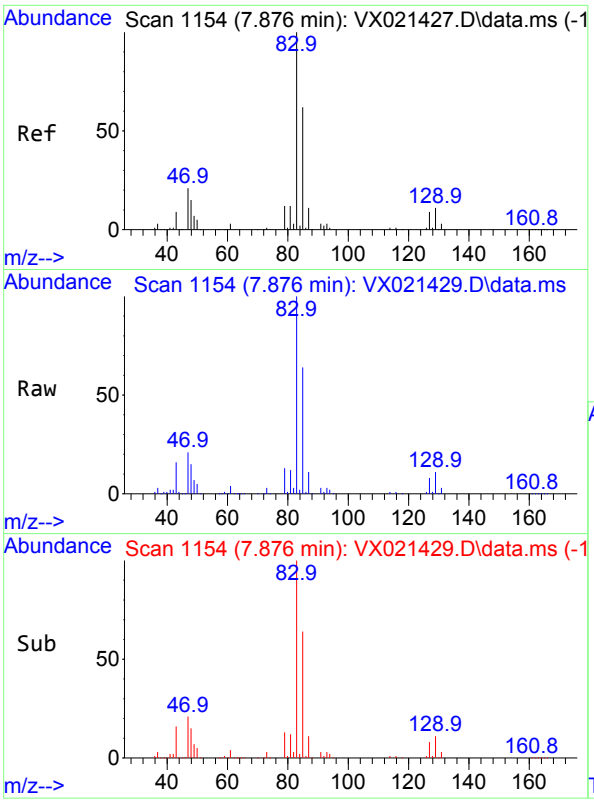
Tgt Ion: 93 Resp: 113771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.0 | 66.8 | 100.2 |
| 174 | 92.1 | 83.1 | 124.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

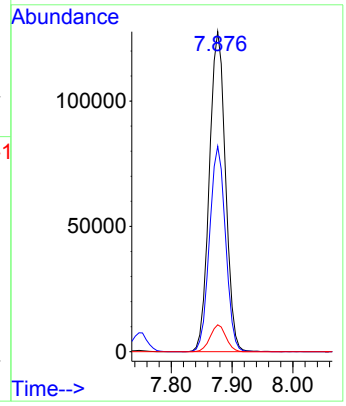
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

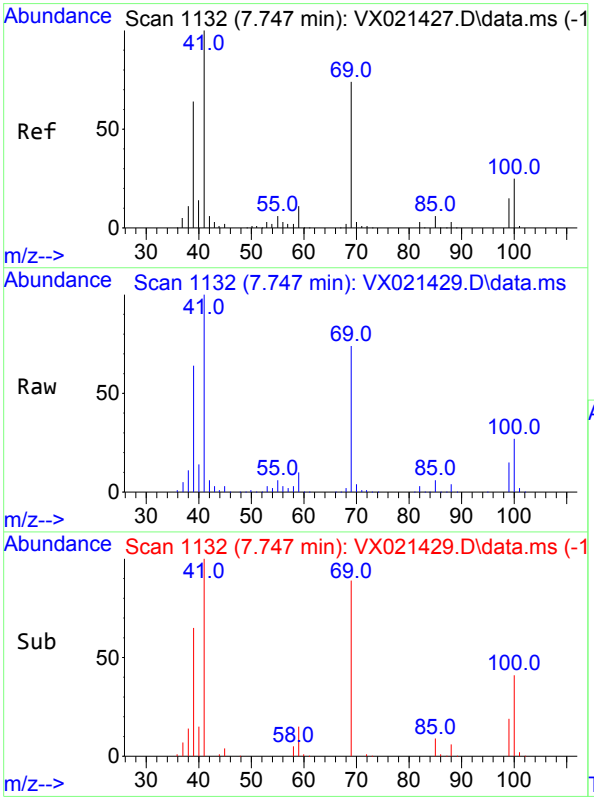



#47
Bromodichloromethane
Concen: 164.48 ug/l
RT: 7.876 min Scan# 1154
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 83 Resp: 235248

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.2 | 51.4 | 77.0 |
| 127 | 8.4 | 6.8 | 10.2 |

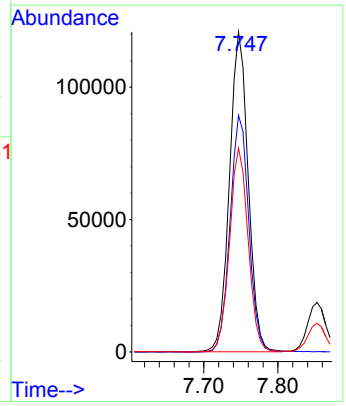



#48
Methyl methacrylate
Concen: 159.60 ug/l
RT: 7.747 min Scan# 1132
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

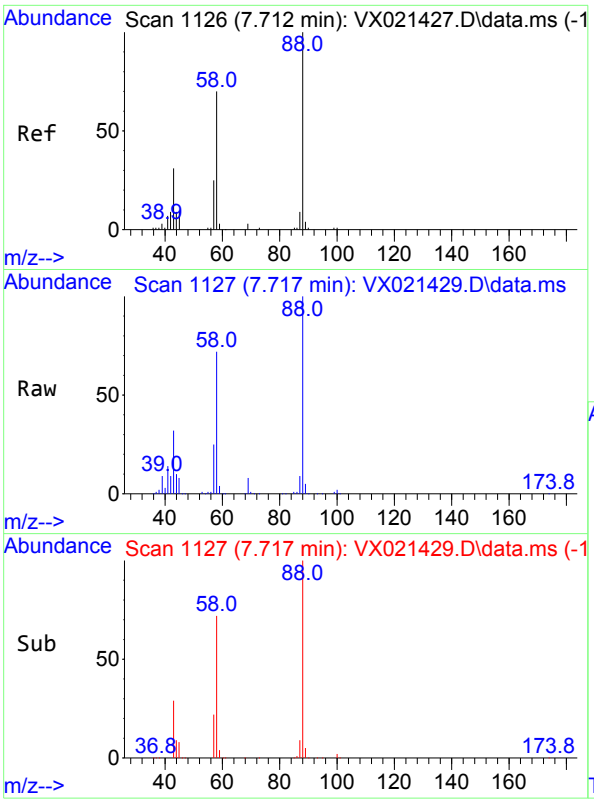
Tgt Ion: 41 Resp: 211540

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 74.5 | 76.0 | 114.0# |
| 39 | 63.7 | 44.6 | 67.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

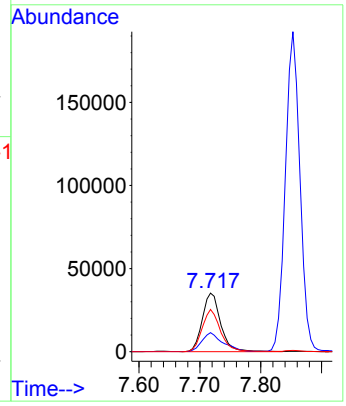
**Manual Integrations APPROVED**
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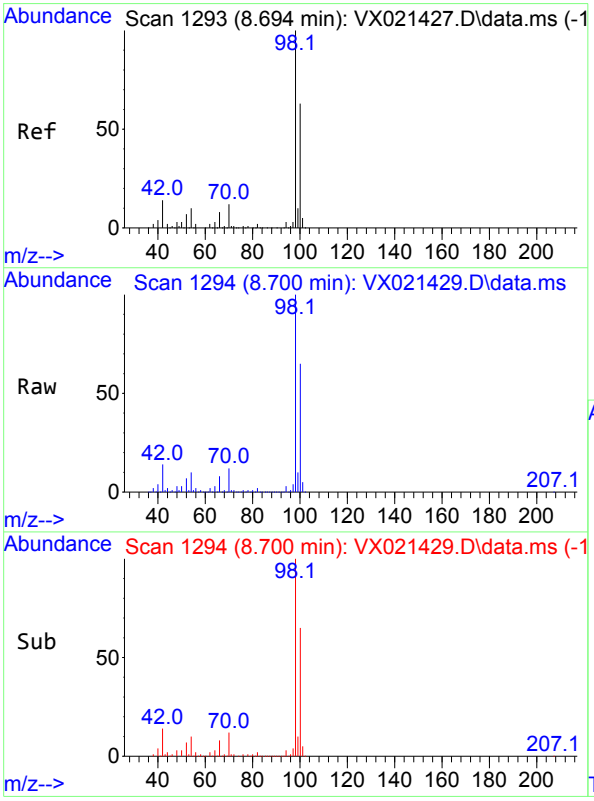



#49
1,4-Dioxane
Concen: 2985.89 ug/l
RT: 7.717 min Scan# 1127
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 88 Resp: 73400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 37.0 | 23.2 | 34.8# |
| 58 | 72.3 | 55.0 | 82.4 |

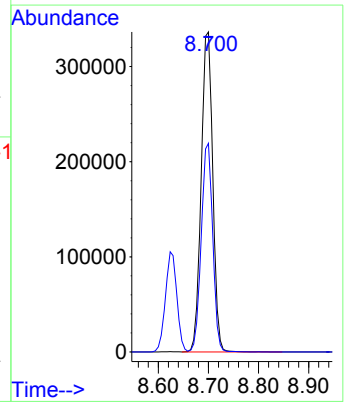



#50
Toluene-d8
Concen: 165.71 ug/l
RT: 8.700 min Scan# 1294
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

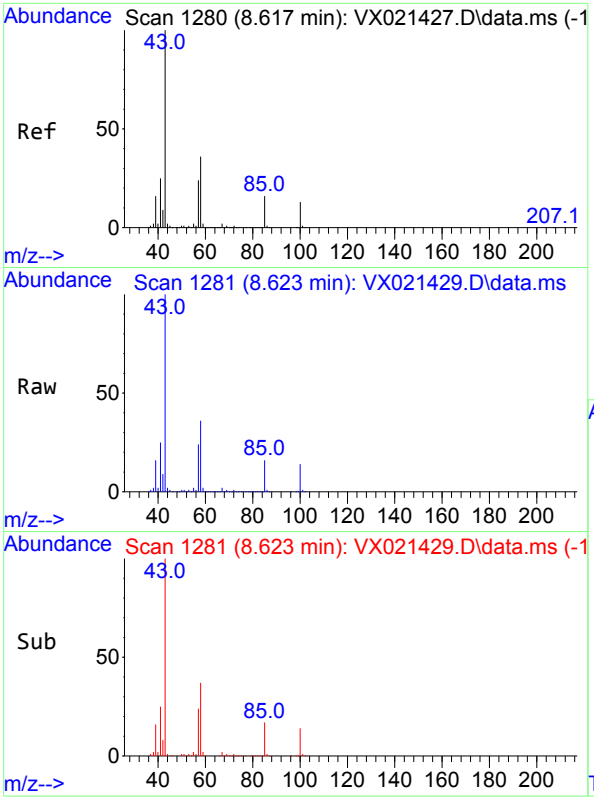
Tgt Ion: 98 Resp: 537648

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.6 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

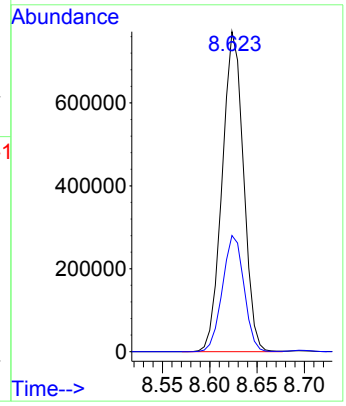
**Manual Integrations APPROVED**
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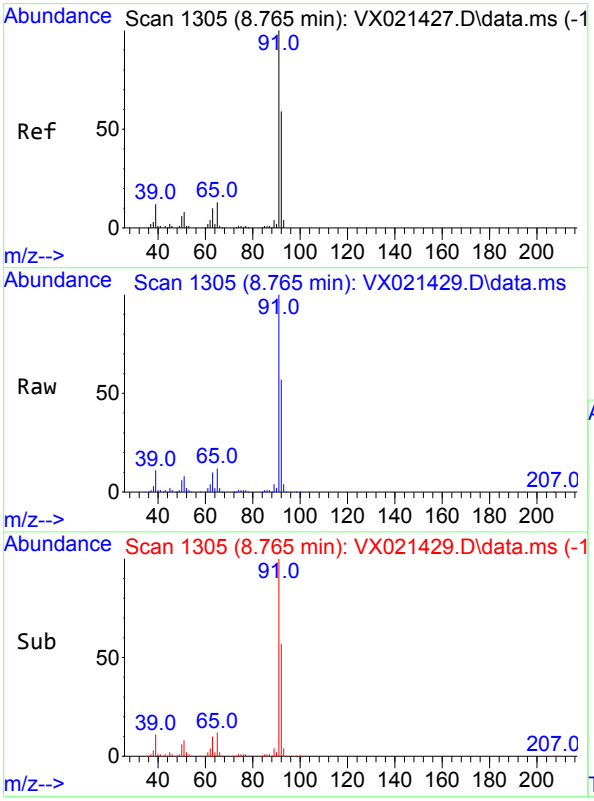



#51
4-Methyl-2-Pentanone
Concen: 827.75 ug/l
RT: 8.623 min Scan# 1281
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 43 Resp: 1208278

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.7 | 35.4 | 53.0 |

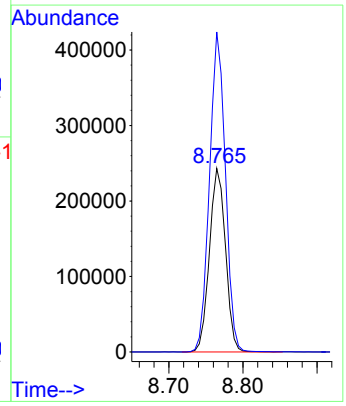



#52
Toluene
Concen: 163.70 ug/l
RT: 8.765 min Scan# 1305
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

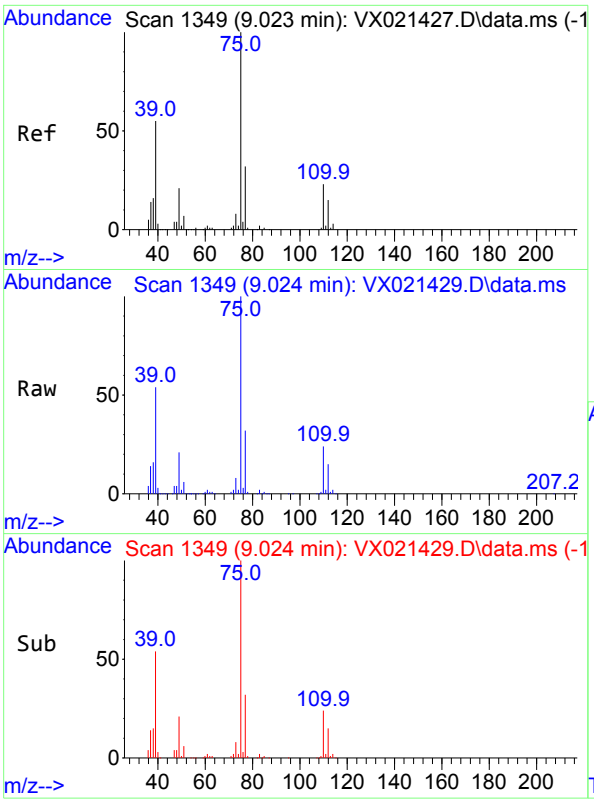
Tgt Ion: 92 Resp: 366475

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.2 | 137.1 | 205.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

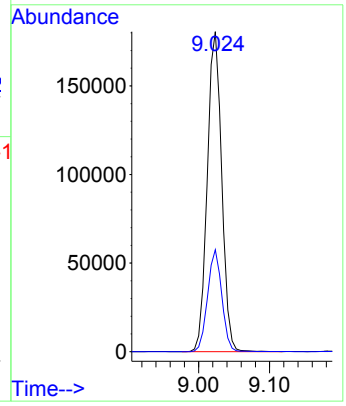
**Manual Integrations APPROVED**
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3/25/2021 9:49:41 AM

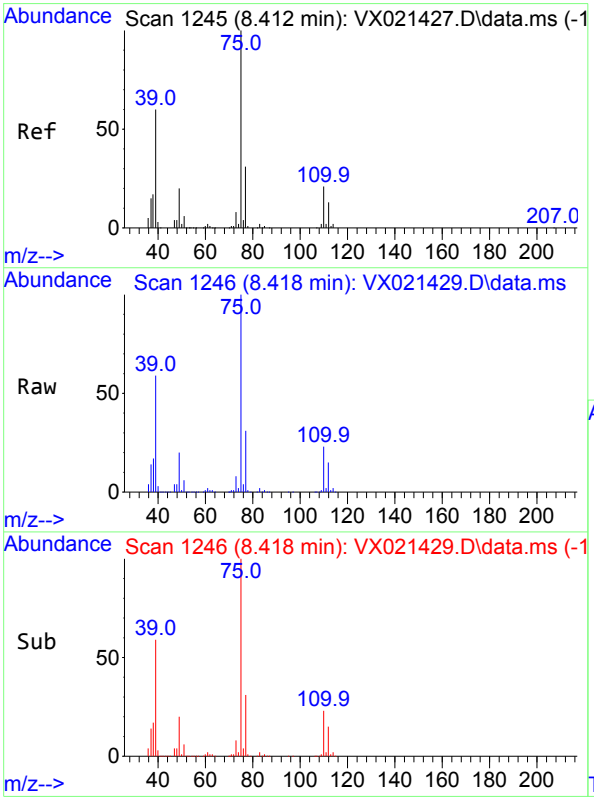



#53
t-1,3-Dichloropropene
Concen: 168.83 ug/l
RT: 9.024 min Scan# 1349
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 75 Resp: 255377

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.8 | 24.9 | 37.3 |

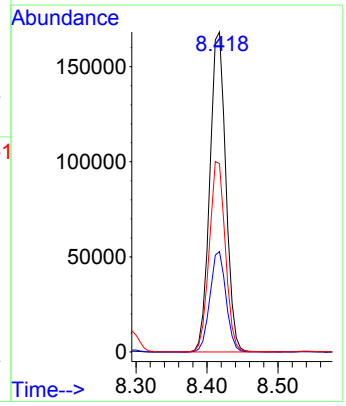



#54
cis-1,3-Dichloropropene
Concen: 163.92 ug/l
RT: 8.418 min Scan# 1246
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

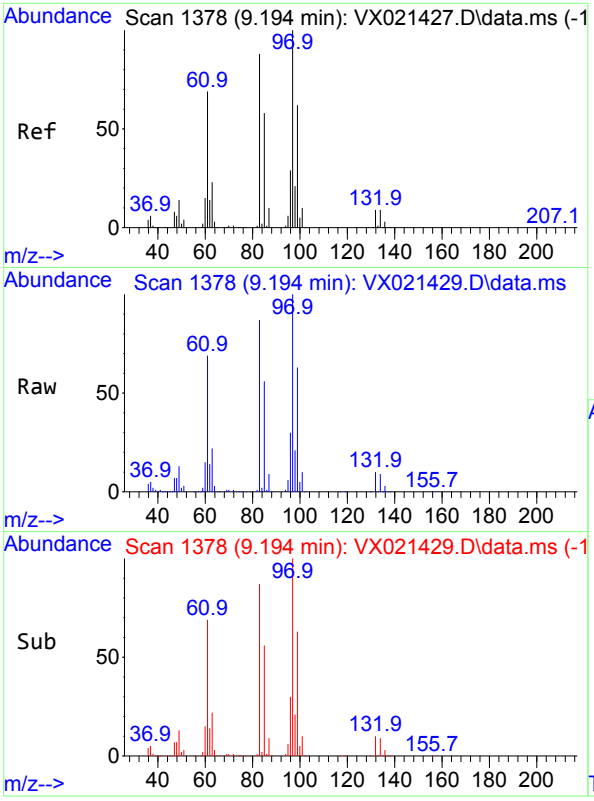
Tgt Ion: 75 Resp: 263971

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.4 | 25.7 | 38.5 |
| 39 | 58.8 | 35.1 | 52.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

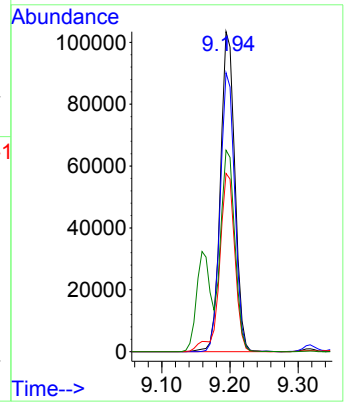
**Manual Integrations APPROVED**
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3/25/2021 9:49:41 AM

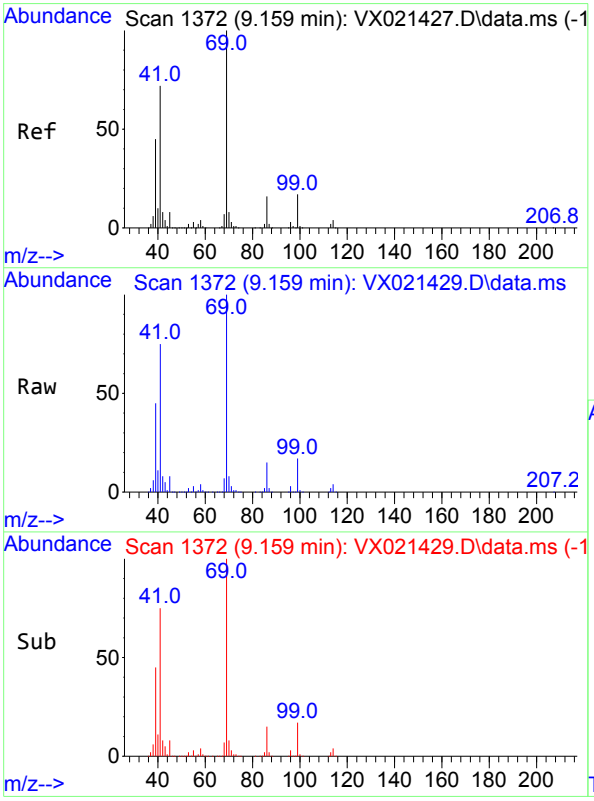



#55
1,1,2-Trichloroethane
Concen: 165.99 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 97 Resp: 152675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 87.2 | 69.3 | 103.9 |
| 85 | 55.7 | 44.3 | 66.5 |
| 99 | 62.9 | 50.3 | 75.5 |

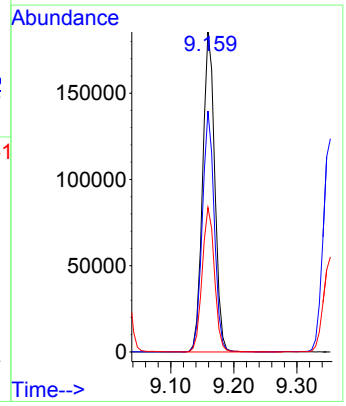



#56
Ethyl methacrylate
Concen: 168.42 ug/l
RT: 9.159 min Scan# 1372
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

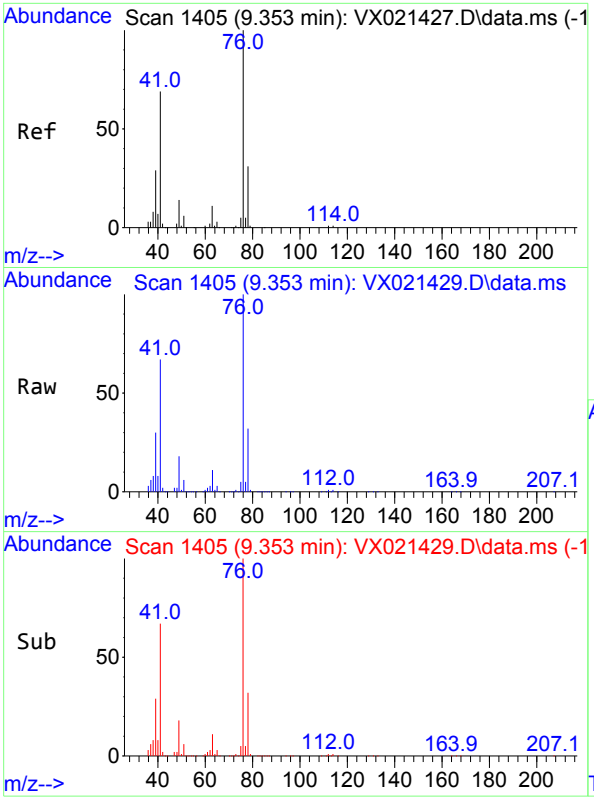
Tgt Ion: 69 Resp: 248059

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 74.0 | 46.8 | 70.2# |
| 39 | 45.6 | 24.7 | 37.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

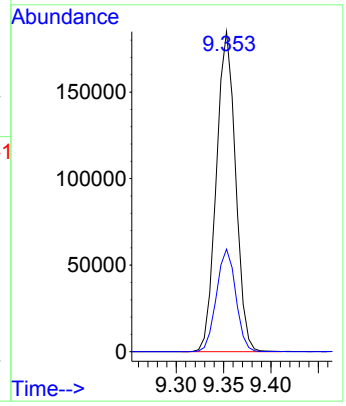
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3/25/2021 9:49:41 AM

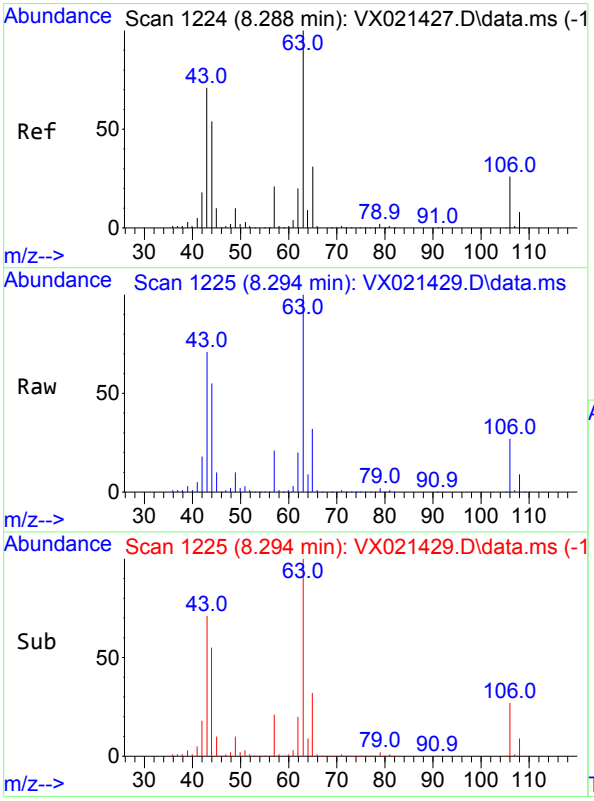



#57
1,3-Dichloropropane
Concen: 163.03 ug/l
RT: 9.353 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 76 Resp: 261121

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.2 | 26.2 | 39.2 |

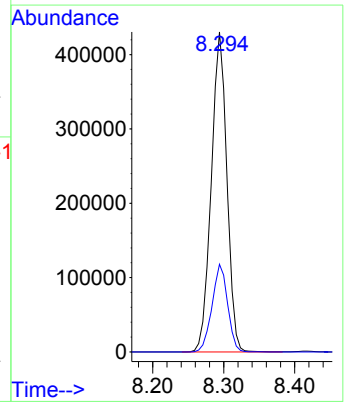



#58
2-Chloroethyl Vinyl ether
Concen: 809.30 ug/l
RT: 8.294 min Scan# 1225
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

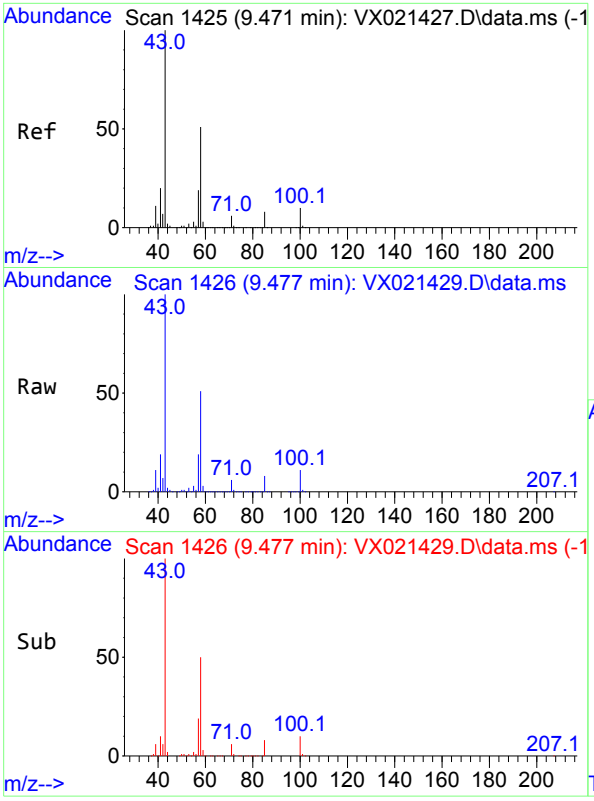
Tgt Ion: 63 Resp: 656572

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 27.3 | 23.5 | 35.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

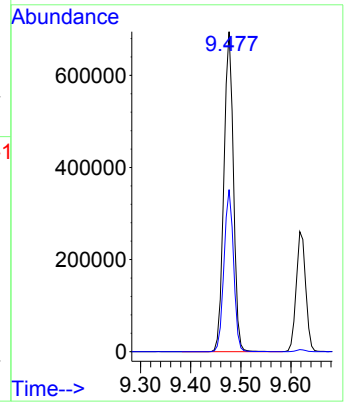
**Manual Integrations APPROVED**
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3/25/2021 9:49:41 AM

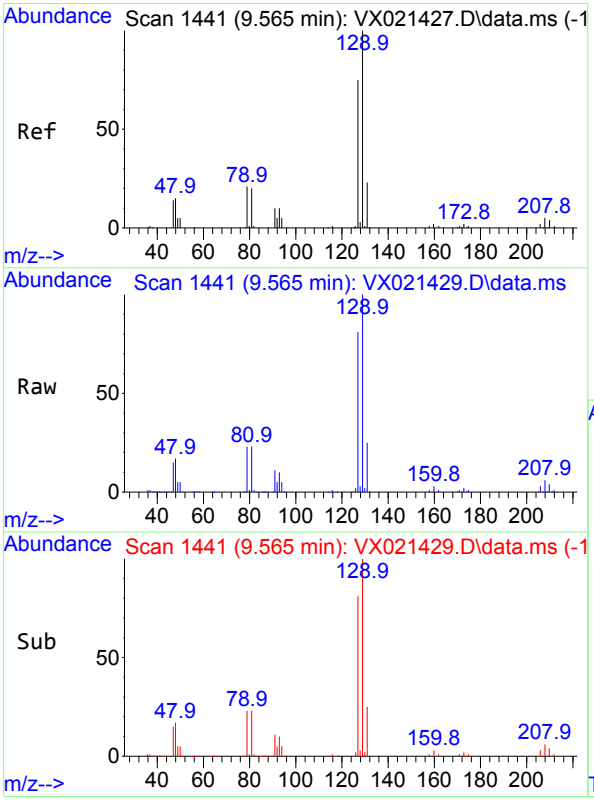



#59
2-Hexanone
Concen: 839.13 ug/l
RT: 9.477 min Scan# 1426
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 43 Resp: 916408

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 50.7 | 30.9 | 92.8 |

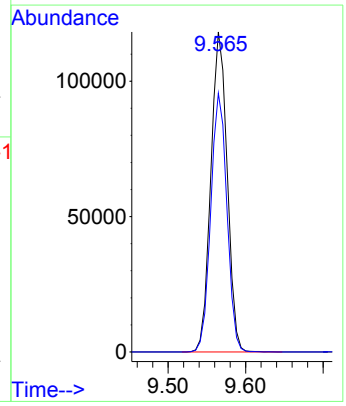



#60
Dibromochloromethane
Concen: 166.22 ug/l
RT: 9.565 min Scan# 1441
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

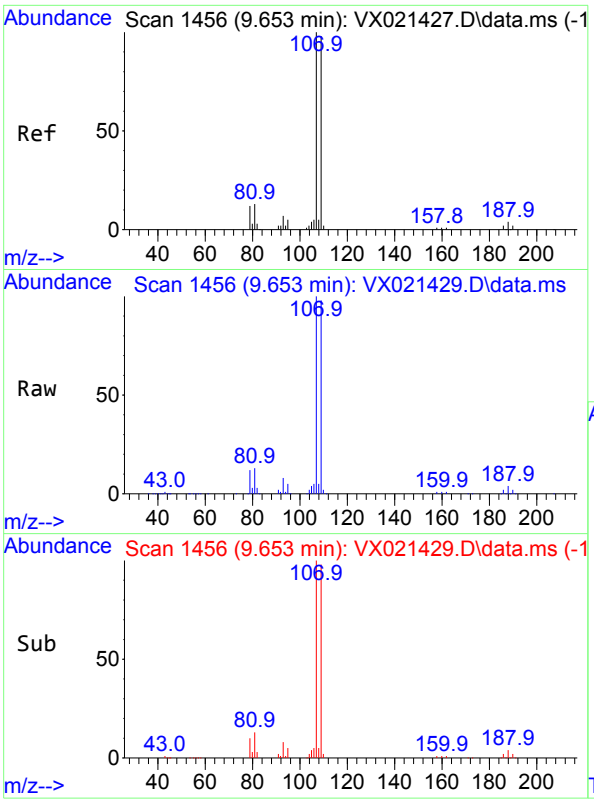
Tgt Ion:129 Resp: 173838

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 79.8 | 38.4 | 115.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

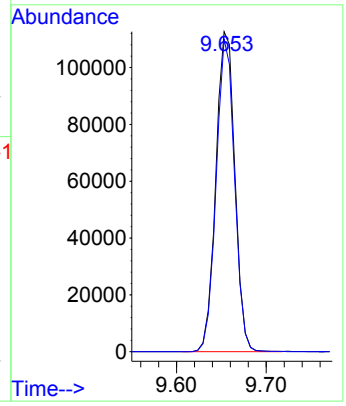
**Manual Integrations APPROVED**
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3/25/2021 9:49:41 AM

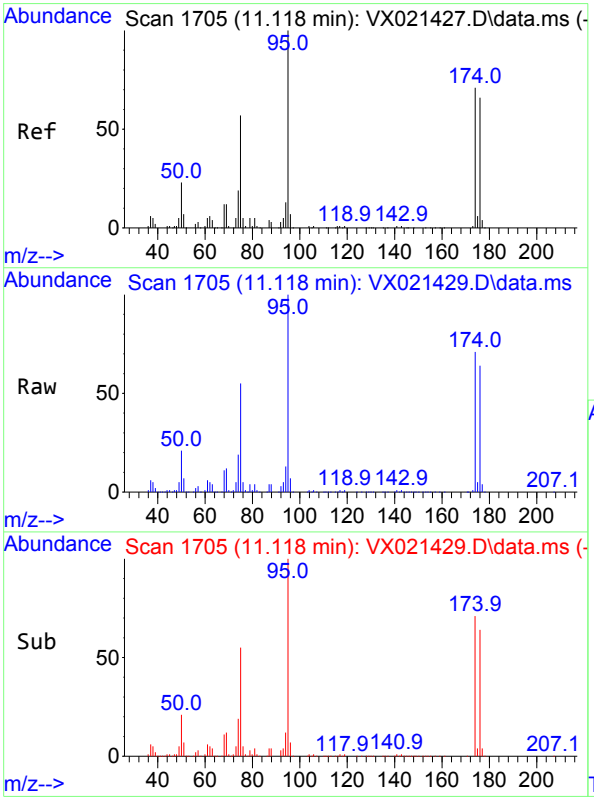



#61
1,2-Dibromoethane
Concen: 163.41 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:107 Resp: 165332

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.6 | 75.8 | 113.6 |

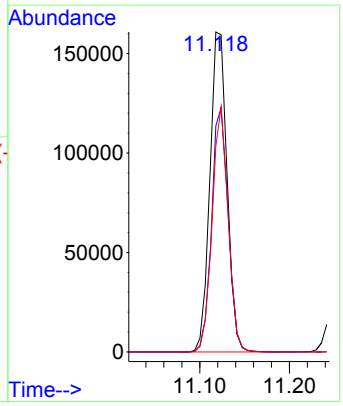



#62
4-Bromofluorobenzene
Concen: 170.05 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

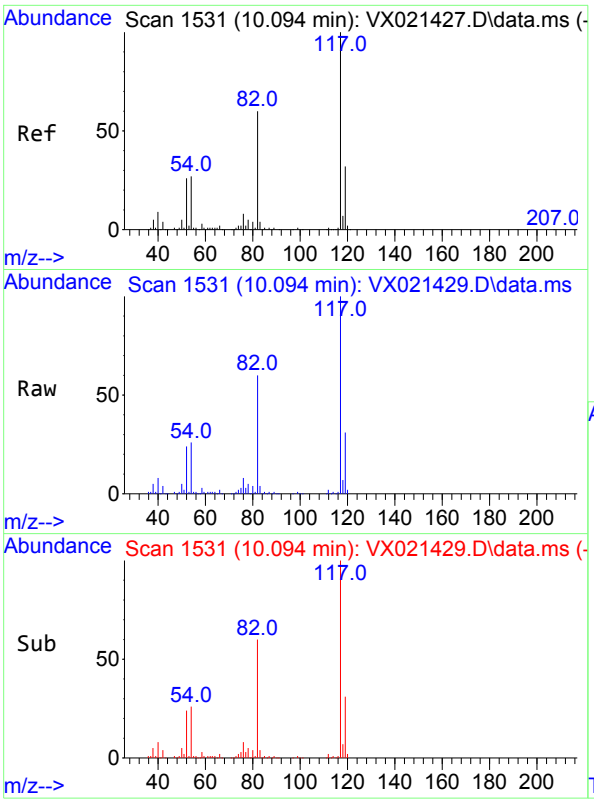
Tgt Ion: 95 Resp: 213145

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.0 | 0.0 | 154.6 |
| 176 | 71.3 | 0.0 | 155.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

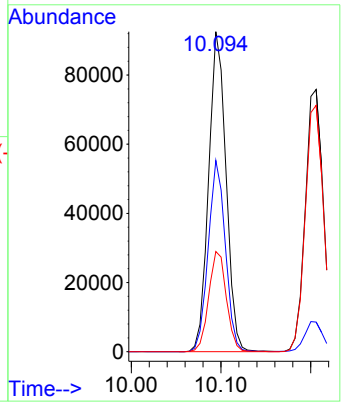
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

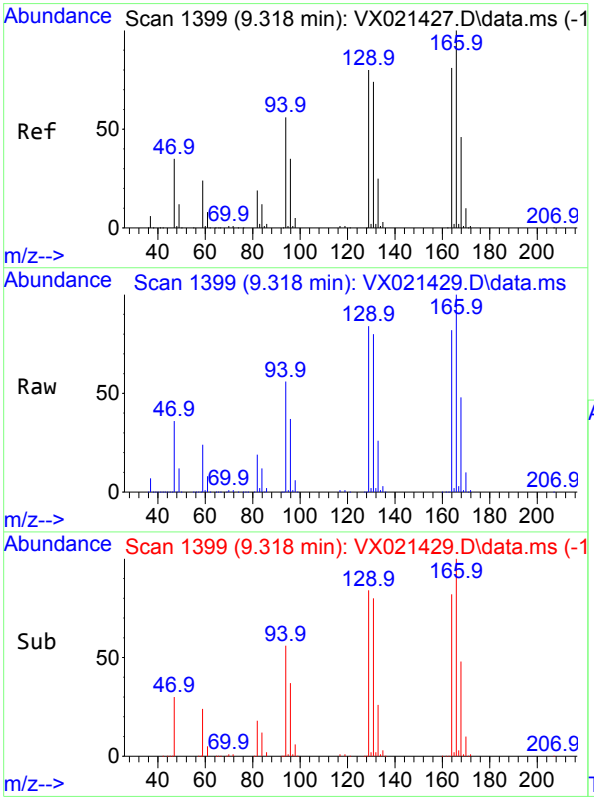



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:117 Resp: 124542

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 59.8 | 47.4 | 71.2 |
| 119 | 31.3 | 26.6 | 39.8 |

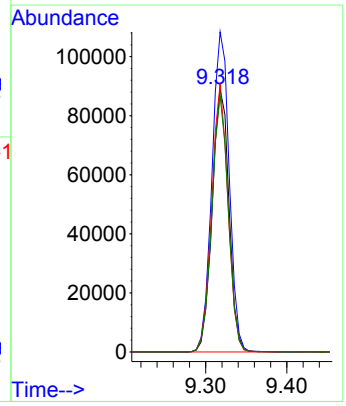



#64
Tetrachloroethene
Concen: 138.92 ug/l
RT: 9.318 min Scan# 1399
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

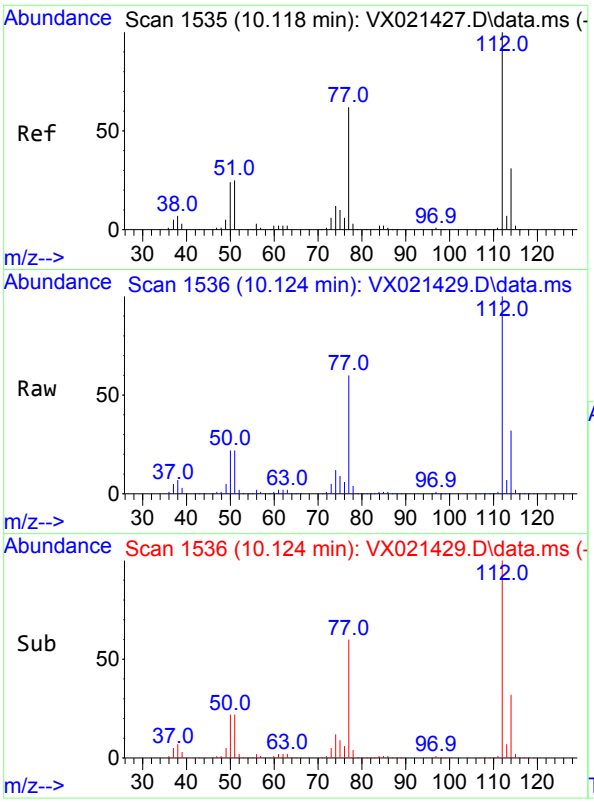
Tgt Ion:164 Resp: 127956

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 121.7 | 103.4 | 155.2 |
| 129 | 102.1 | 70.8 | 106.2 |
| 131 | 97.3 | 72.5 | 108.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

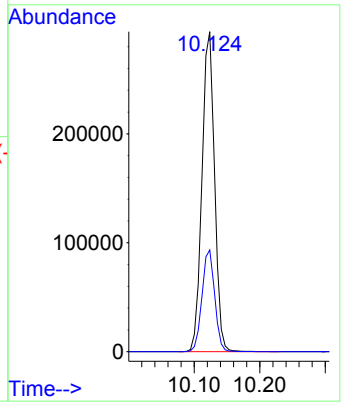
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

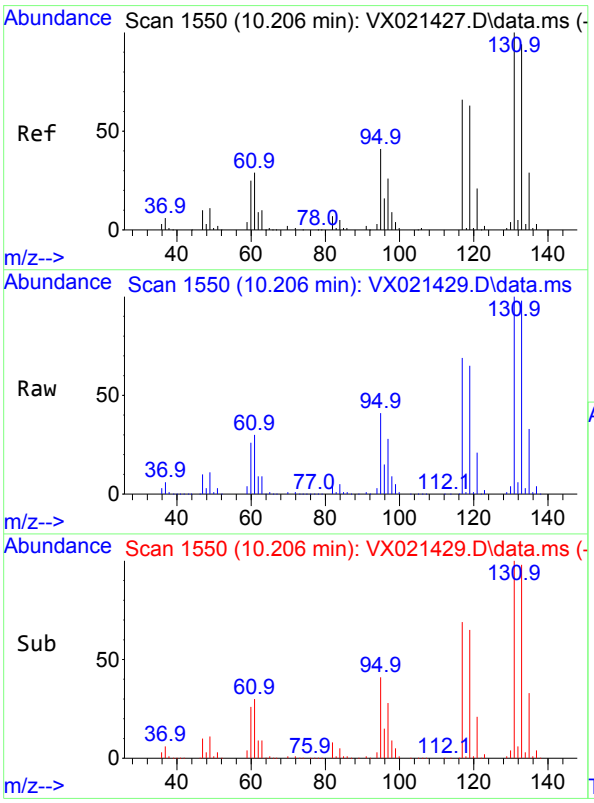



#65
Chlorobenzene
Concen: 153.34 ug/l
RT: 10.124 min Scan# 1536
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:112 Resp: 392937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.8 | 25.8 | 38.6 |

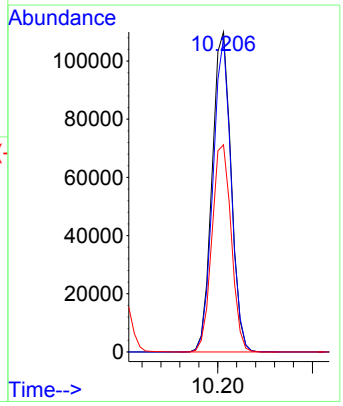



#66
1,1,1,2-Tetrachloroethane
Concen: 160.04 ug/l
RT: 10.206 min Scan# 1550
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

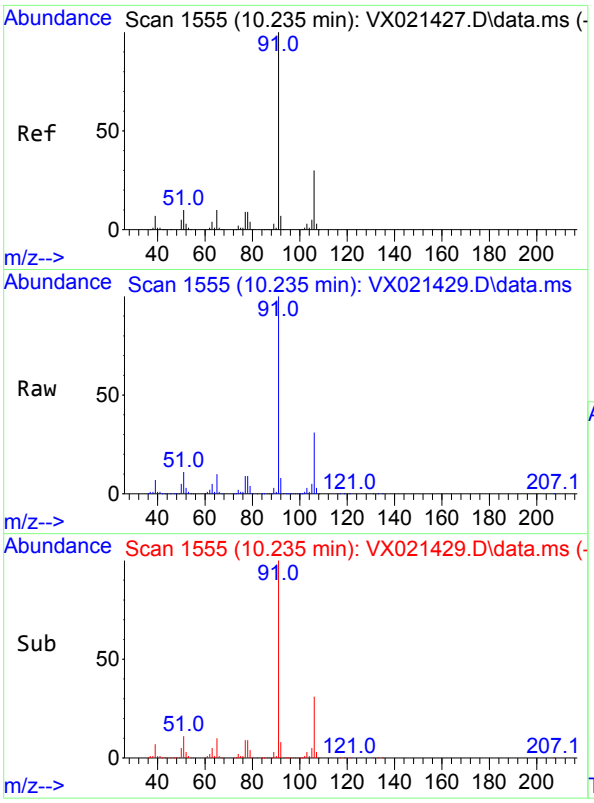
Tgt Ion:131 Resp: 152772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 94.2 | 47.7 | 143.1 |
| 119 | 66.1 | 32.1 | 96.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

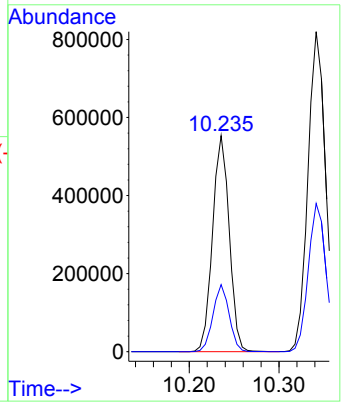
**Manual Integrations APPROVED**
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3/25/2021 9:49:41 AM

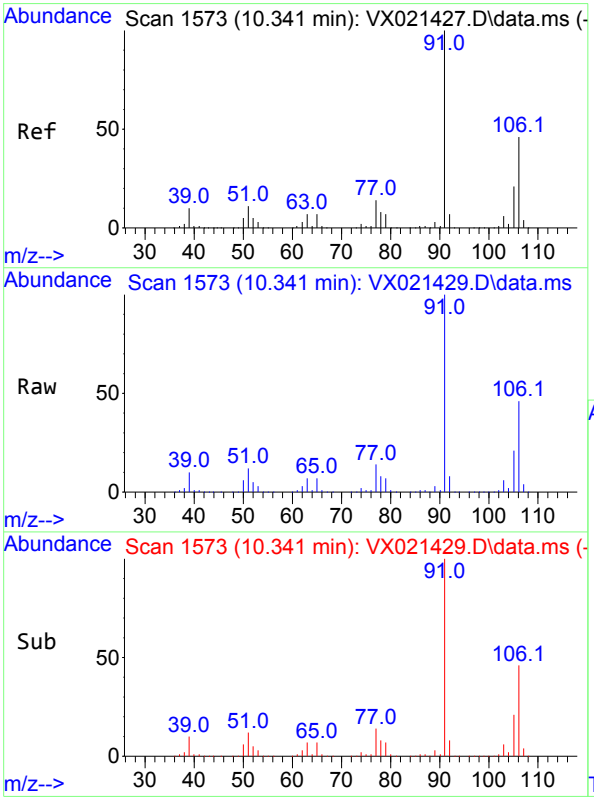



#67
Ethyl Benzene
Concen: 151.55 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 91 Resp: 715136

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.0 | 24.6 | 37.0 |

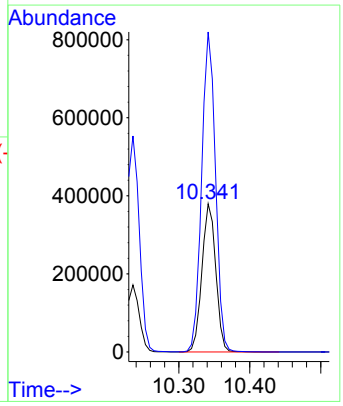



#68
m/p-Xylenes
Concen: 305.90 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

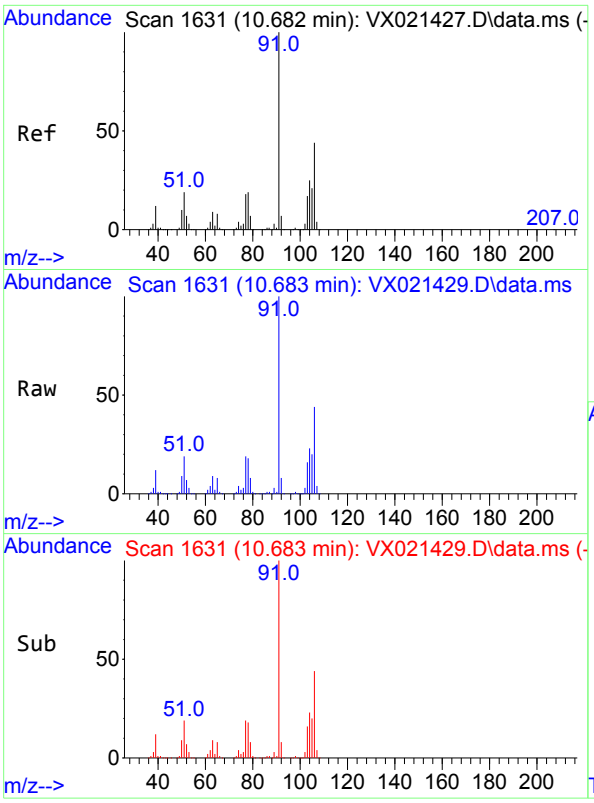
Tgt Ion:106 Resp: 515863

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 215.6 | 162.8 | 244.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

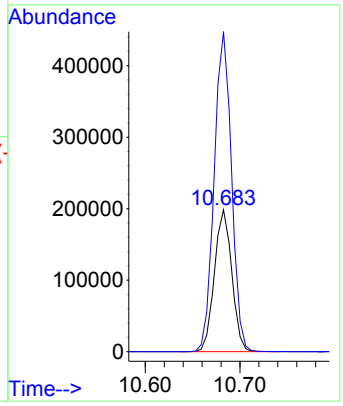
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

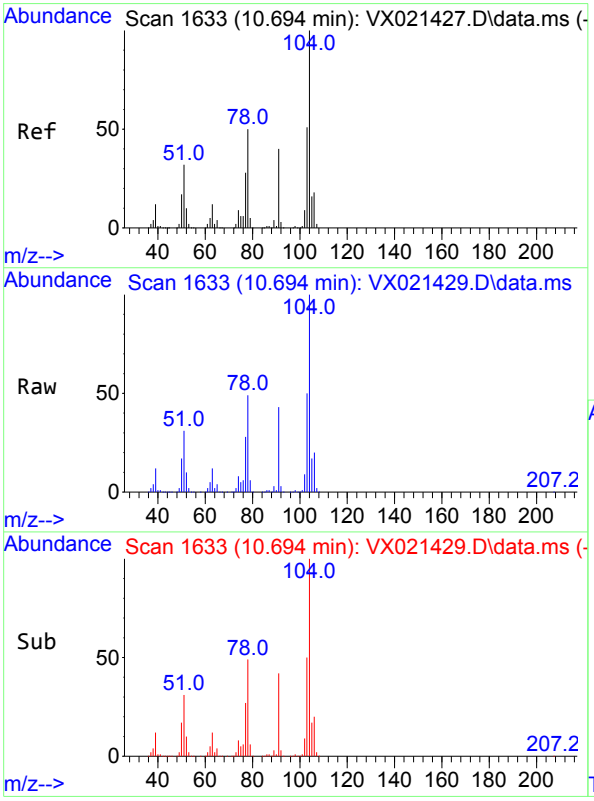



#69
o-Xylene
Concen: 154.82 ug/l
RT: 10.683 min Scan# 1631
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:106 Resp: 253545

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 224.8 | 108.1 | 324.2 |

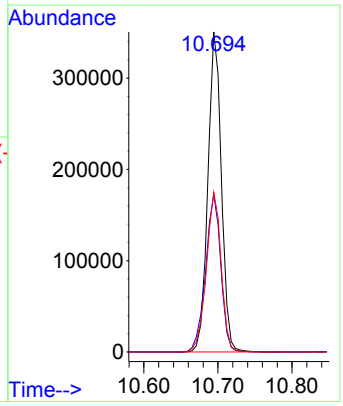



#70
Styrene
Concen: 160.80 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

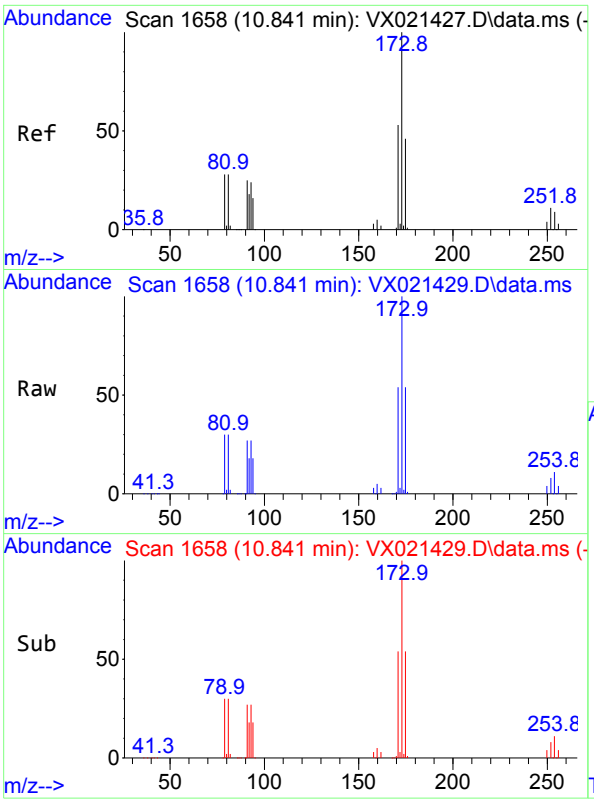
Tgt Ion:104 Resp: 443588

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 55.3 | 40.0 | 60.0 |
| 103 | 54.7 | 43.4 | 65.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

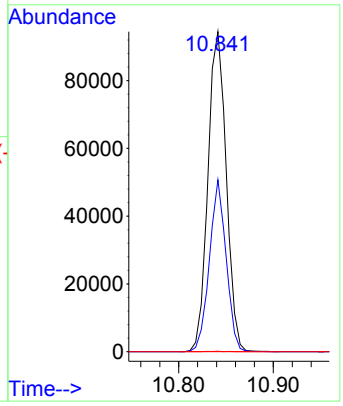
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

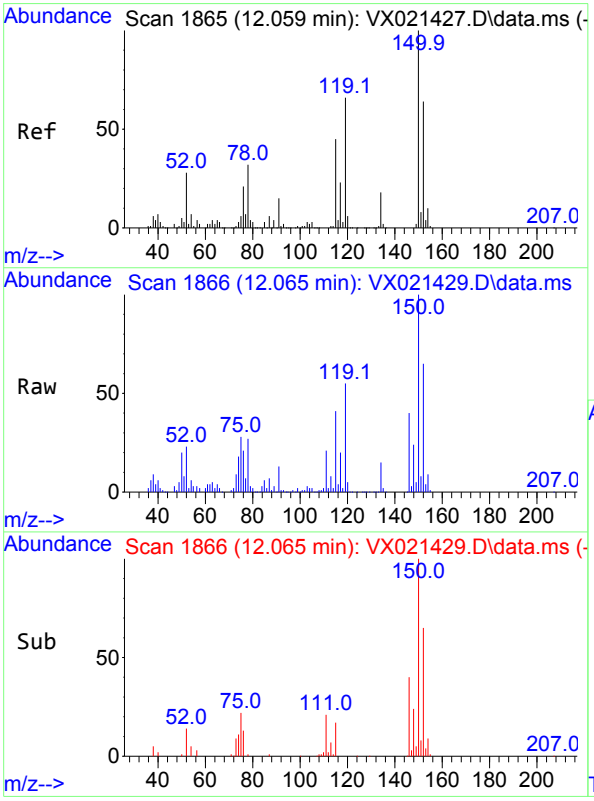



#71
Bromoform
Concen: 164.54 ug/l
RT: 10.841 min Scan# 1658
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:173 Resp: 126571

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.1 | 23.9 | 71.8 |
| 254 | 0.1 | 0.1 | 0.1# |

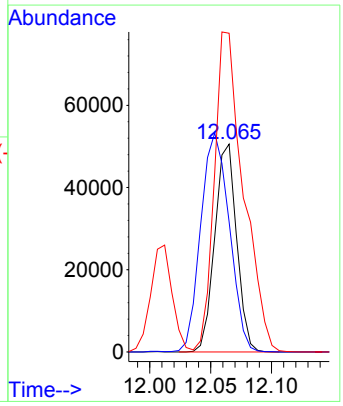



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.065 min Scan# 1866
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

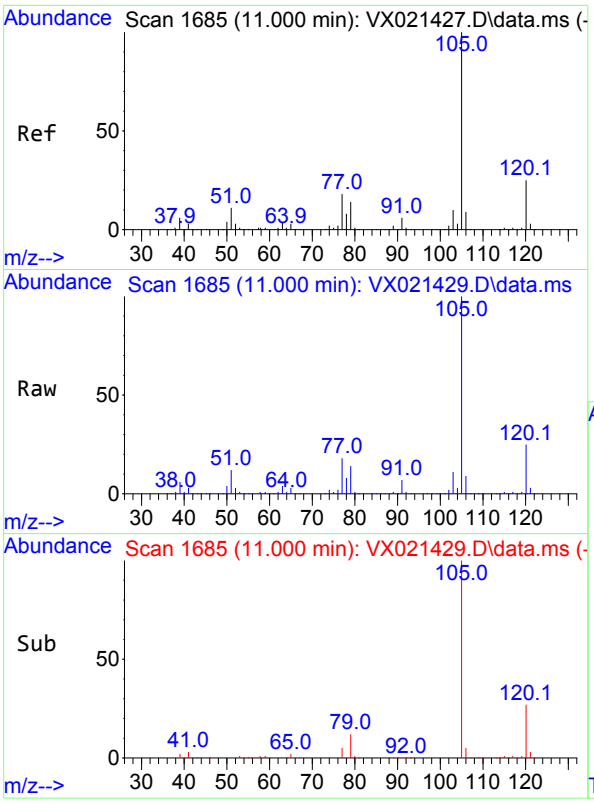
Tgt Ion:152 Resp: 63259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 137.7 | 41.1 | 123.3# |
| 150 | 204.5 | 0.0 | 349.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

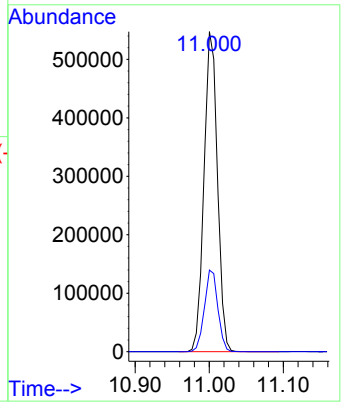
**Manual Integrations APPROVED**
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3/25/2021 9:49:41 AM

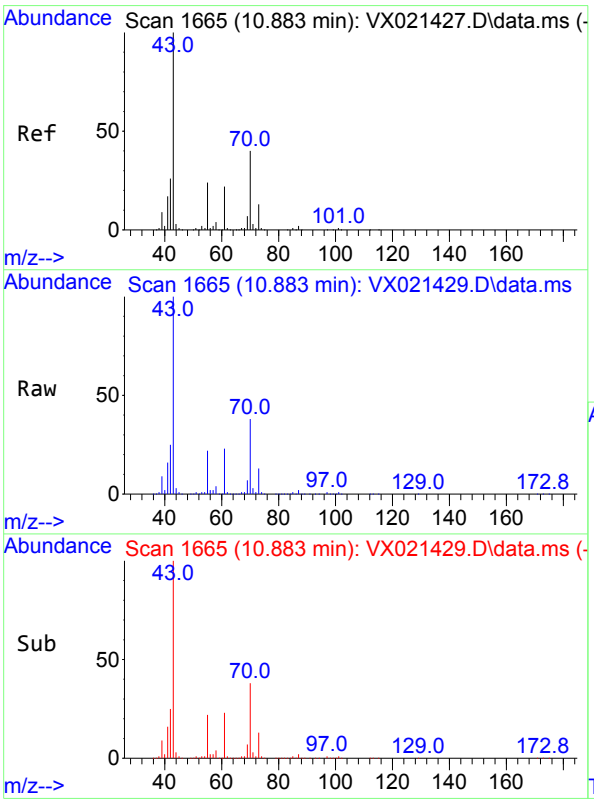



#73
Isopropylbenzene
Concen: 147.04 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:105 Resp: 687670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.5 | 13.2 | 39.6 |

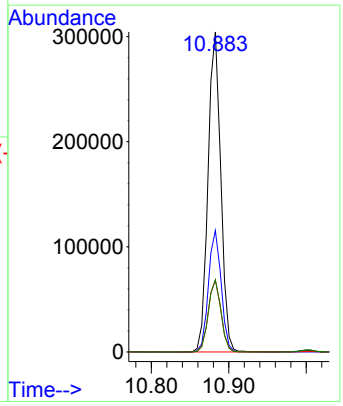



#74
N-amyl acetate
Concen: 148.67 ug/l
RT: 10.883 min Scan# 1665
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

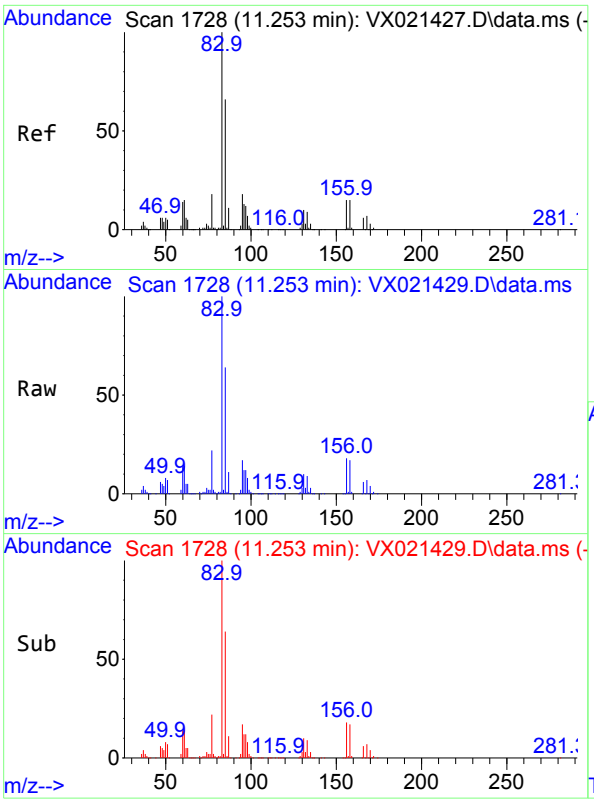
Tgt Ion: 43 Resp: 347791

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 37.8 | 39.0 | 58.6# |
| 55 | 22.5 | 21.5 | 32.3 |
| 61 | 22.3 | 22.1 | 33.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

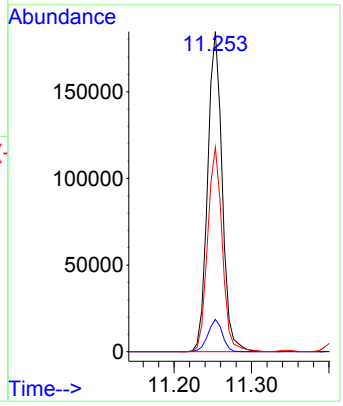
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3/25/2021 9:49:41 AM

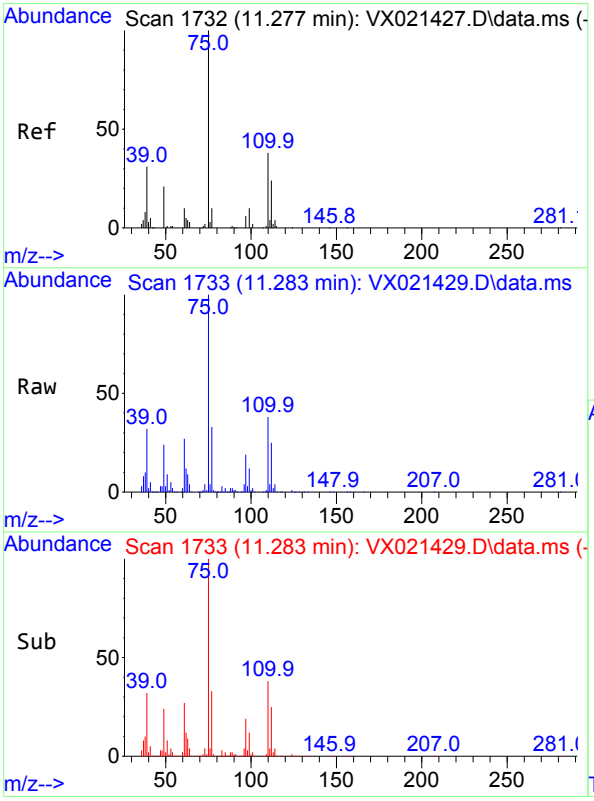



#75
1,1,2,2-Tetrachloroethane
Concen: 154.45 ug/l
RT: 11.253 min Scan# 1728
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 83 Resp: 239871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.0 | 5.1 | 15.2 |
| 85 | 64.3 | 31.8 | 95.4 |

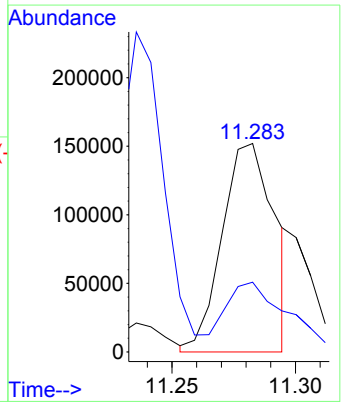



#76
1,2,3-Trichloropropane
Concen: 150.02 ug/l m
RT: 11.283 min Scan# 1733
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

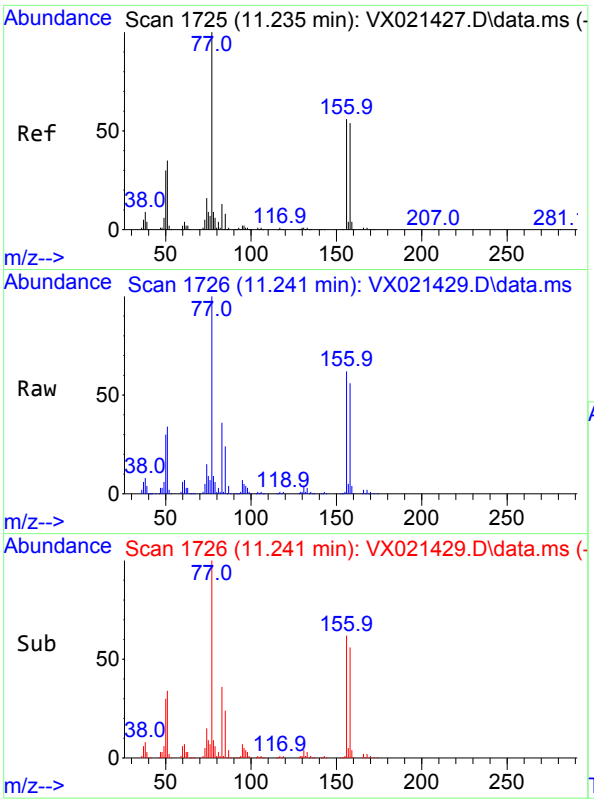
Tgt Ion: 75 Resp: 224557

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 41.2 | 19.1 | 57.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

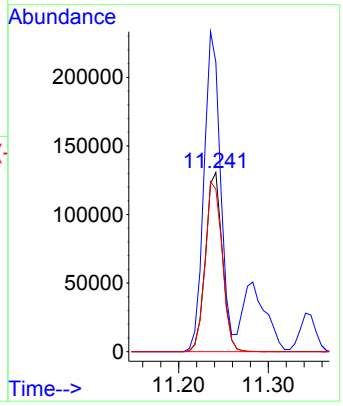
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3/25/2021 9:49:41 AM

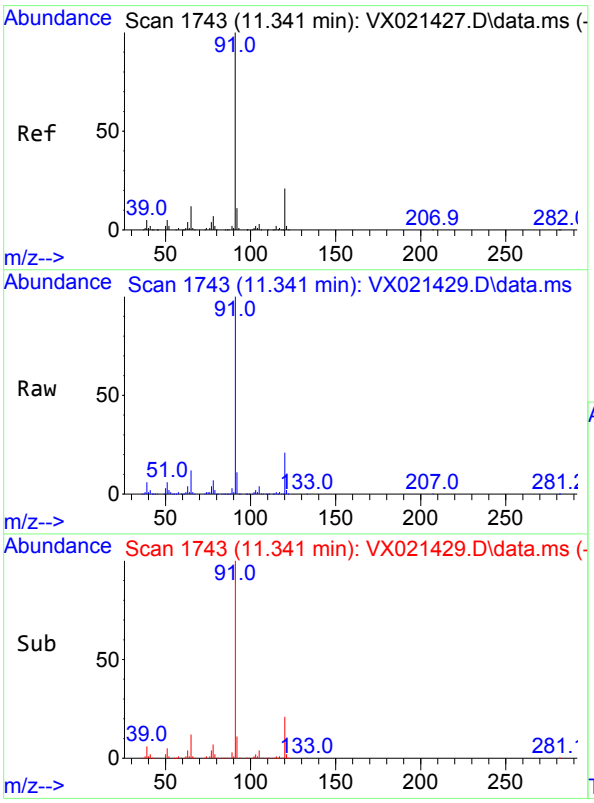



#77
Bromobenzene
Concen: 151.86 ug/l
RT: 11.241 min Scan# 1726
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:156 Resp: 169165

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 175.6 | 82.8 | 248.6 |
| 158 | 96.6 | 49.1 | 147.4 |

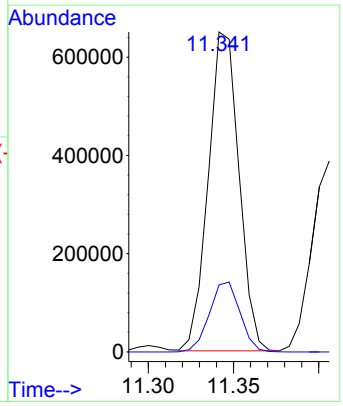



#78
n-propylbenzene
Concen: 148.84 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

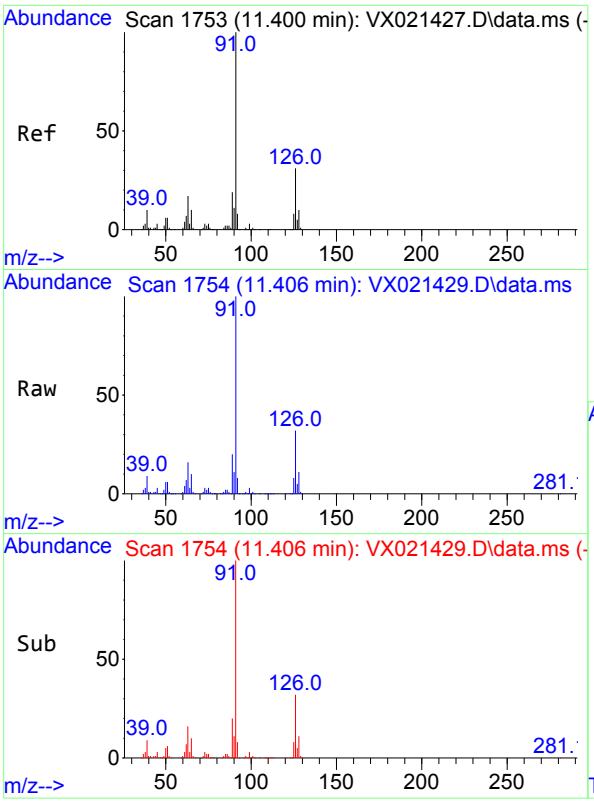
Tgt Ion: 91 Resp: 813163

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.9 | 11.5 | 34.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

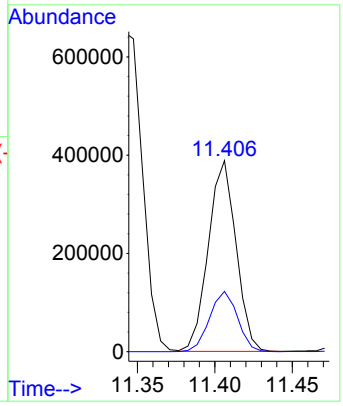
**Manual Integrations APPROVED**
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3/25/2021 9:49:41 AM

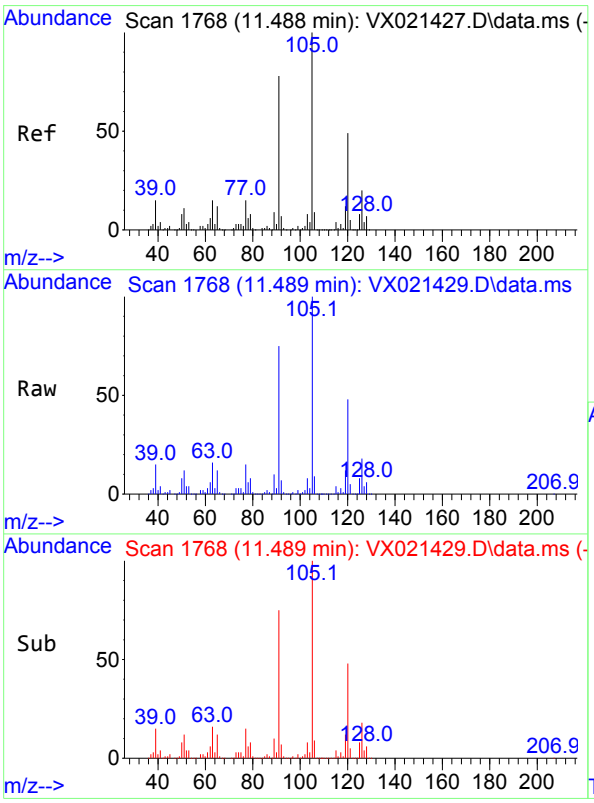



#79
2-Chlorotoluene
Concen: 145.38 ug/l
RT: 11.406 min Scan# 1754
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 91 Resp: 482861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.9 | 16.6 | 49.8 |

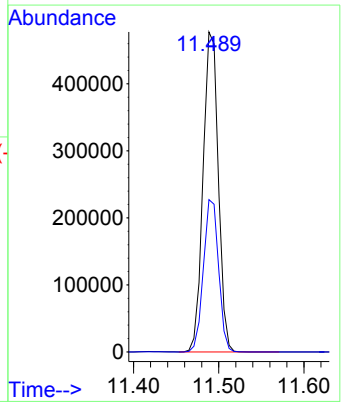



#80
1,3,5-Trimethylbenzene
Concen: 150.06 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

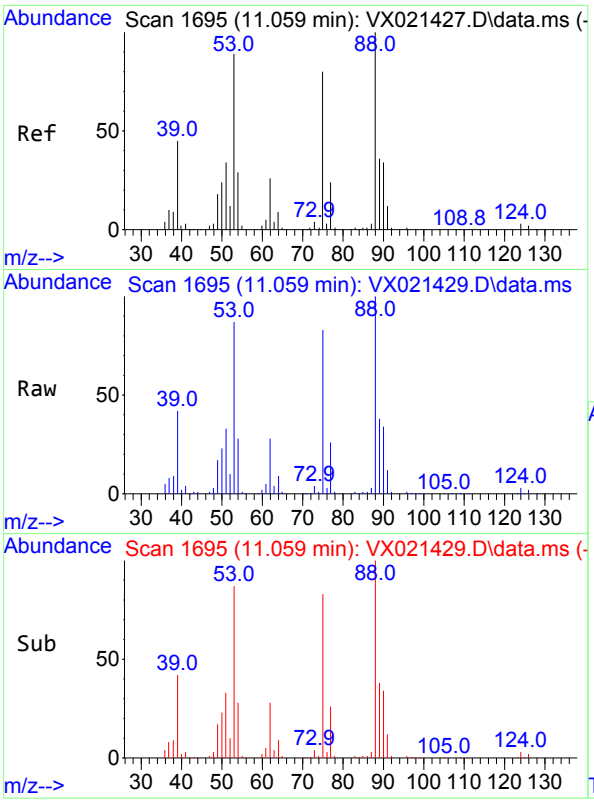
Tgt Ion:105 Resp: 593131

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.3 | 23.8 | 71.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

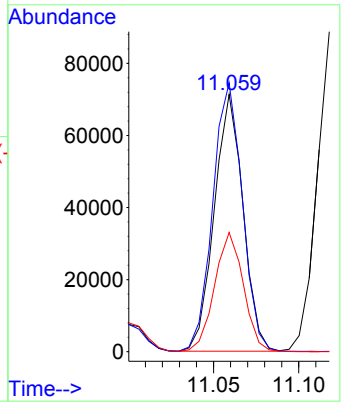
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

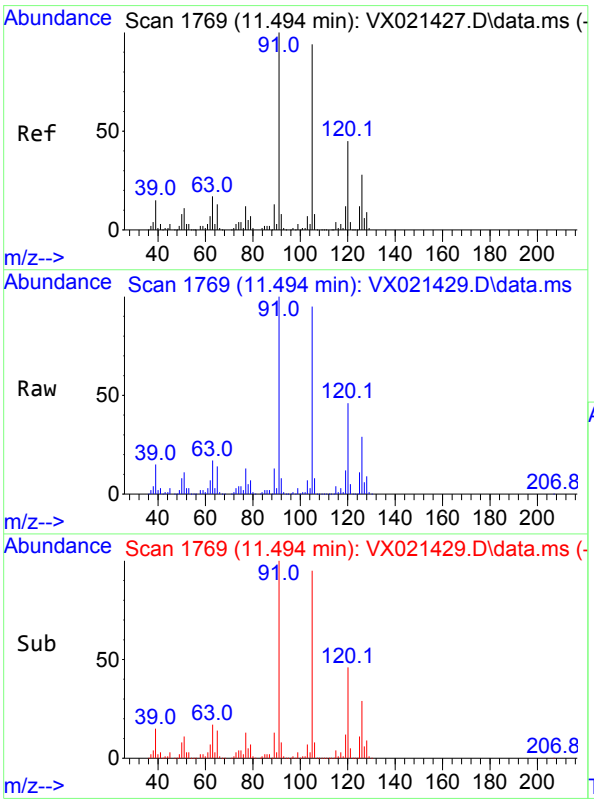



#81
trans-1,4-Dichloro-2-butene
Concen: 157.56 ug/l
RT: 11.059 min Scan# 1695
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 75 Resp: 83589

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 107.8 | 74.5 | 111.7 |
| 89 | 46.7 | 37.9 | 56.9 |

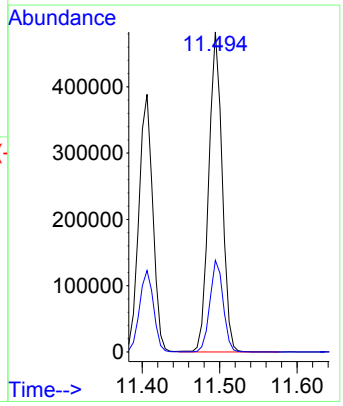



#82
4-Chlorotoluene
Concen: 148.09 ug/l
RT: 11.494 min Scan# 1769
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

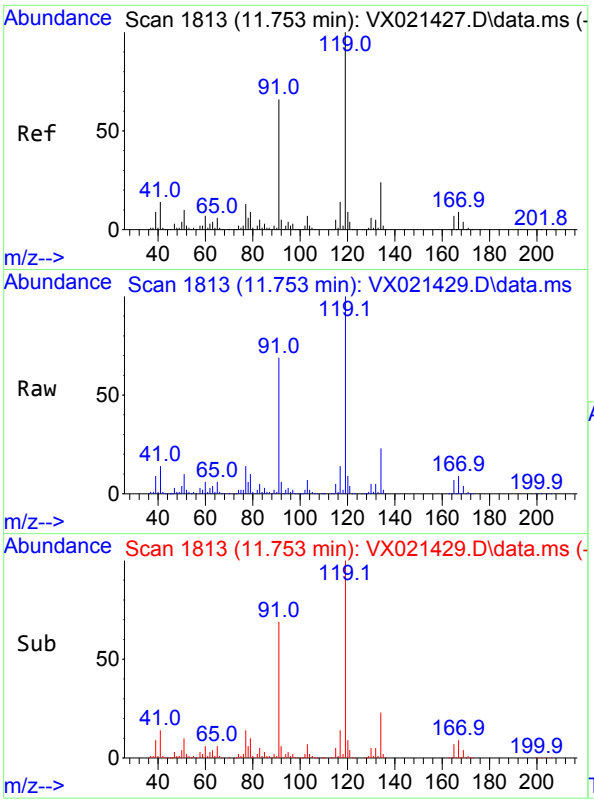
Tgt Ion: 91 Resp: 579474

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.3 | 14.9 | 44.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

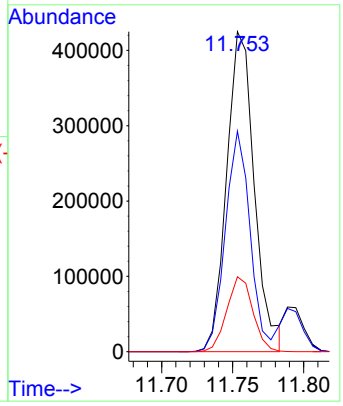
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

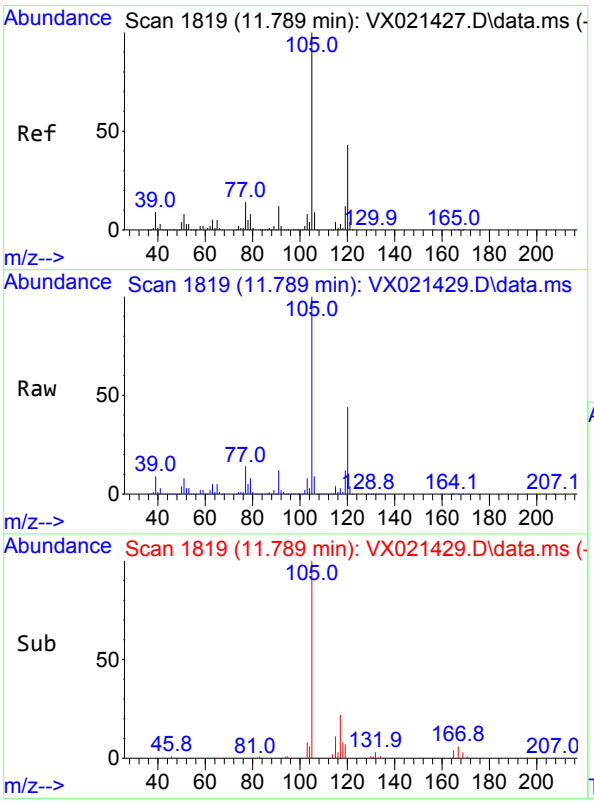



#83
tert-Butylbenzene
Concen: 153.31 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:119 Resp: 578778

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 61.5 | 27.9 | 83.7 |
| 134 | 22.0 | 11.3 | 33.9 |

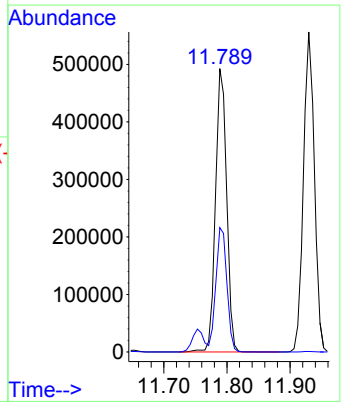



#84
1,2,4-Trimethylbenzene
Concen: 149.86 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

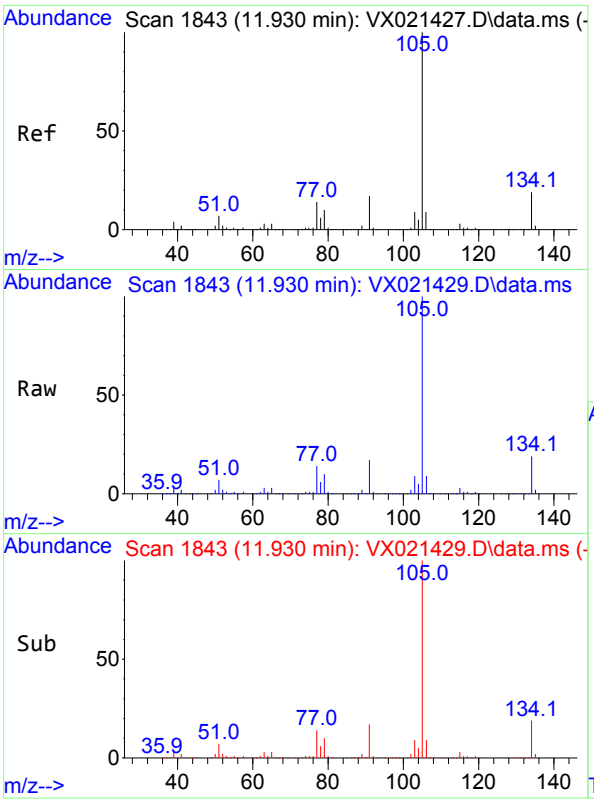
Tgt Ion:105 Resp: 602128

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.4 | 22.4 | 67.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

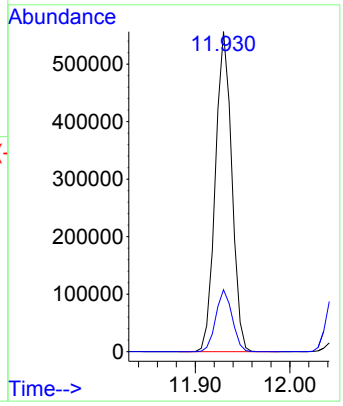
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

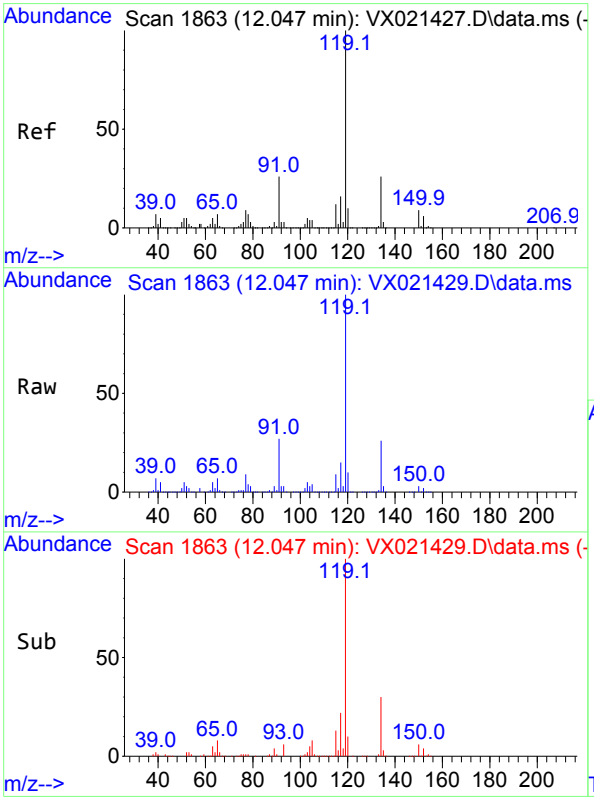



#85
sec-Butylbenzene
Concen: 150.26 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:105 Resp: 668961

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.3 | 10.0 | 29.8 |

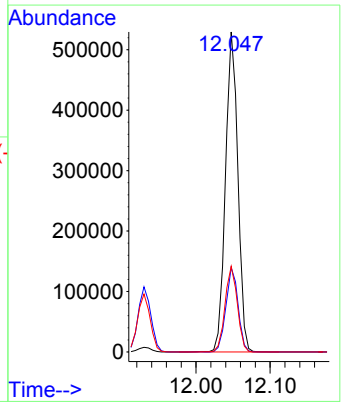



#86
p-Isopropyltoluene
Concen: 150.88 ug/l
RT: 12.047 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

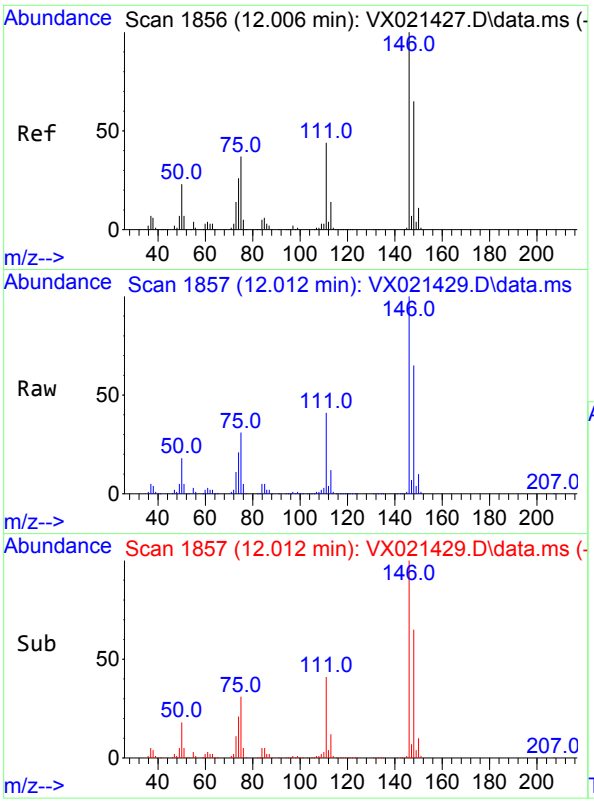
Tgt Ion:119 Resp: 614754

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.9 | 12.9 | 38.7 |
| 91 | 26.6 | 11.7 | 35.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

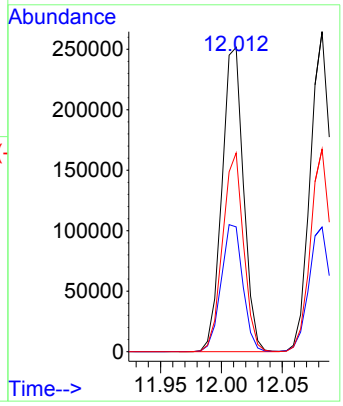
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

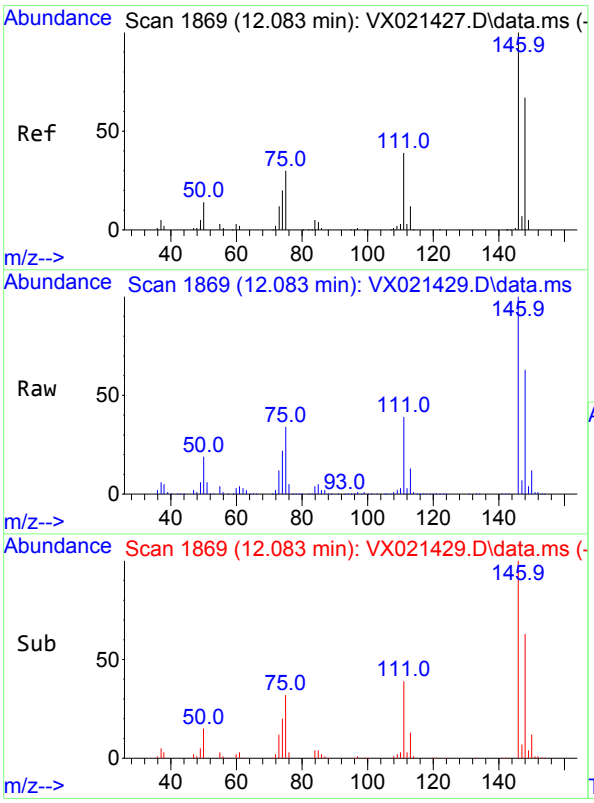



#87
1,3-Dichlorobenzene
Concen: 153.33 ug/l
RT: 12.012 min Scan# 1857
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:146 Resp: 310892

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.2 | 20.2 | 60.5 |
| 148 | 63.5 | 31.9 | 95.7 |

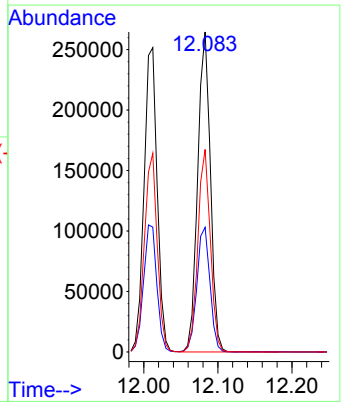



#88
1,4-Dichlorobenzene
Concen: 152.67 ug/l
RT: 12.083 min Scan# 1869
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

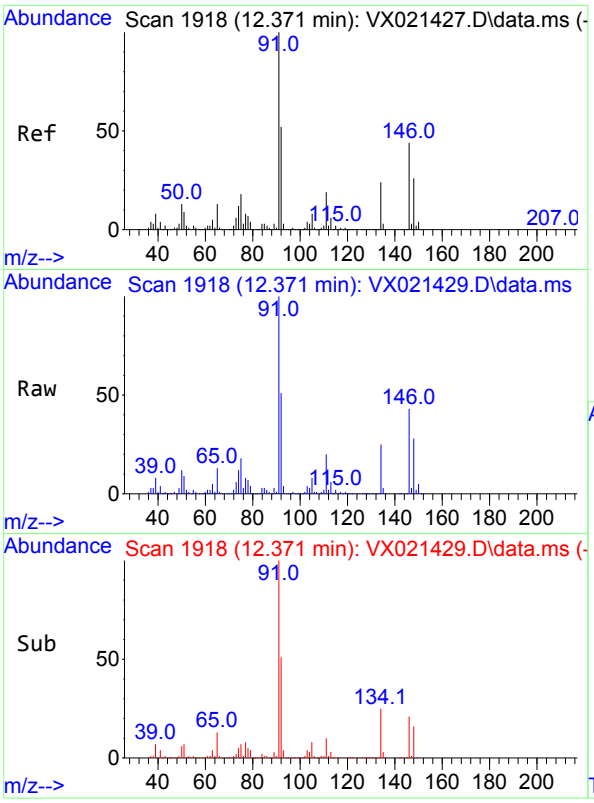
Tgt Ion:146 Resp: 315092

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.2 | 19.6 | 58.8 |
| 148 | 62.2 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

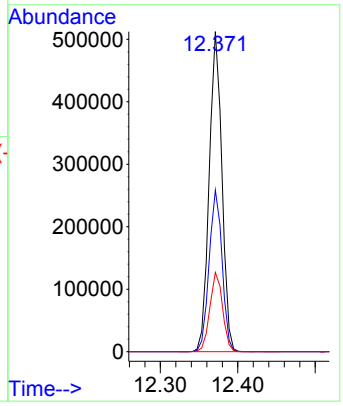
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

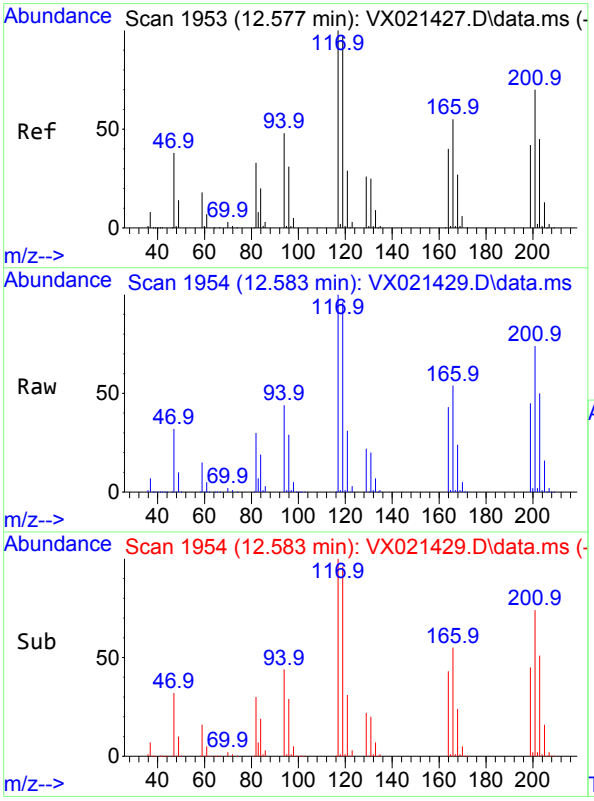



#89
n-Butylbenzene
Concen: 157.02 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion: 91 Resp: 582923

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 51.5 | 27.4 | 82.0 |
| 134 | 24.8 | 13.2 | 39.5 |

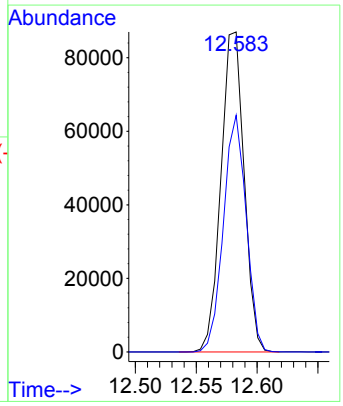



#90
Hexachloroethane
Concen: 182.11 ug/l
RT: 12.583 min Scan# 1954
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

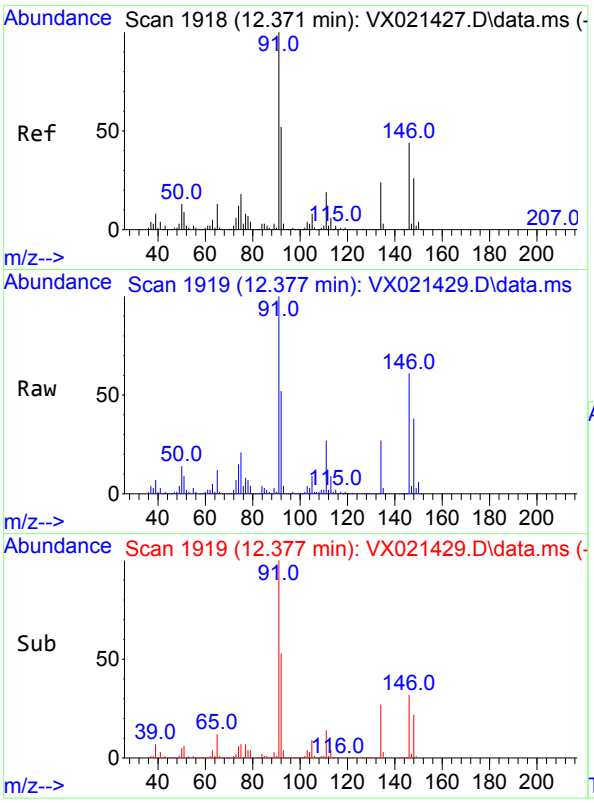
Tgt Ion:117 Resp: 115244

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 72.8 | 40.4 | 121.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

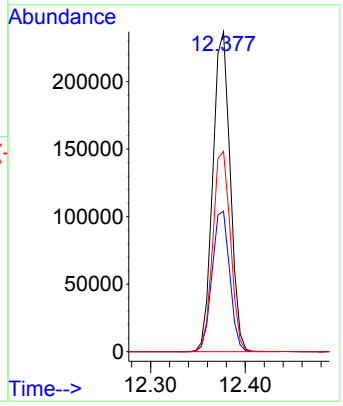
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

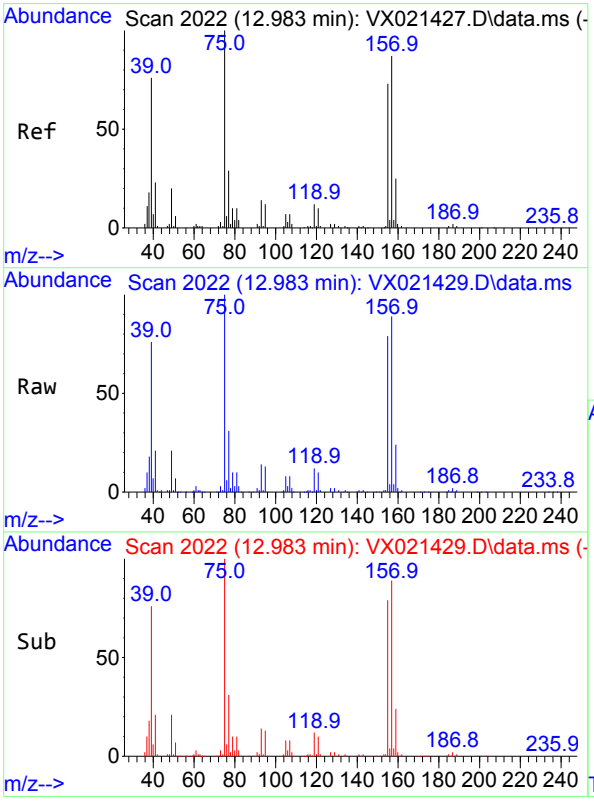



#91
1,2-Dichlorobenzene
Concen: 153.56 ug/l
RT: 12.377 min Scan# 1919
Delta R.T. 0.006 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:146 Resp: 302160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.5 | 20.8 | 62.2 |
| 148 | 63.7 | 31.9 | 95.5 |

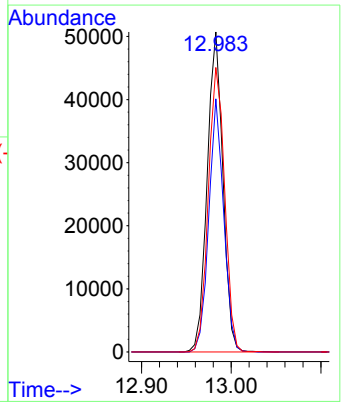



#92
1,2-Dibromo-3-Chloropropane
Concen: 155.56 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

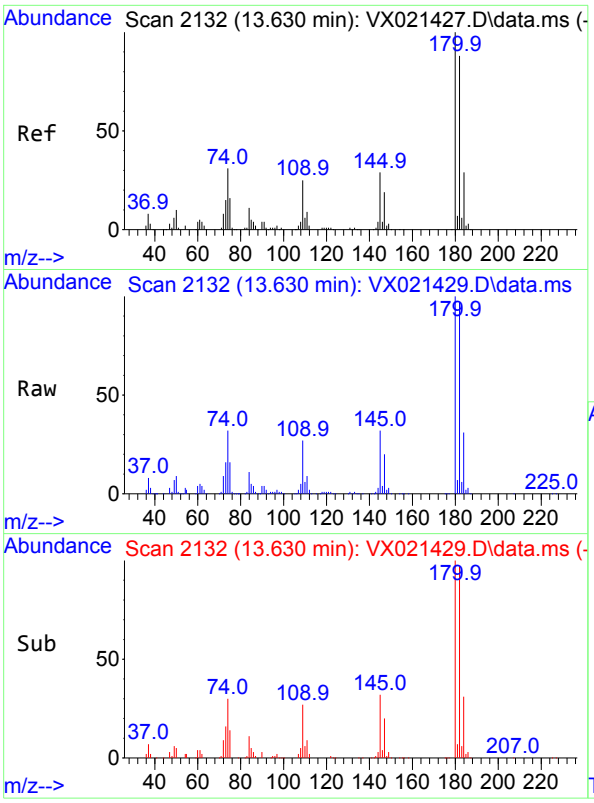
Tgt Ion: 75 Resp: 61621

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 75.0 | 45.3 | 135.9 |
| 157 | 92.7 | 57.7 | 173.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

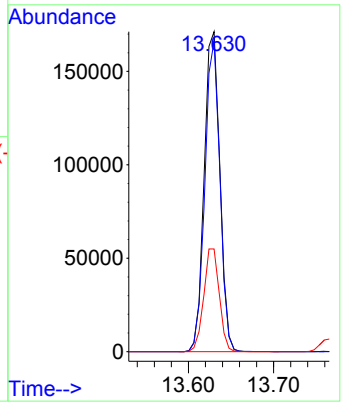
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

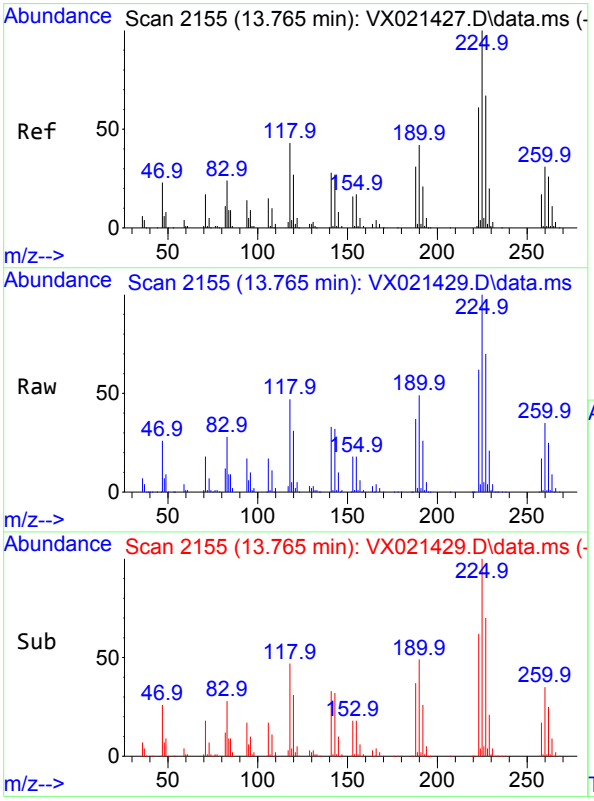



#93
1,2,4-Trichlorobenzene
Concen: 168.49 ug/l
RT: 13.630 min Scan# 2132
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:180 Resp: 218662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 93.3 | 47.7 | 143.1 |
| 145 | 32.0 | 15.0 | 45.0 |

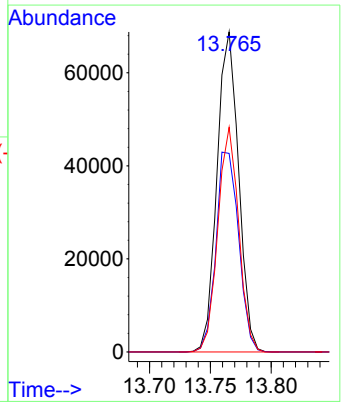



#94
Hexachlorobutadiene
Concen: 155.40 ug/l
RT: 13.765 min Scan# 2155
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

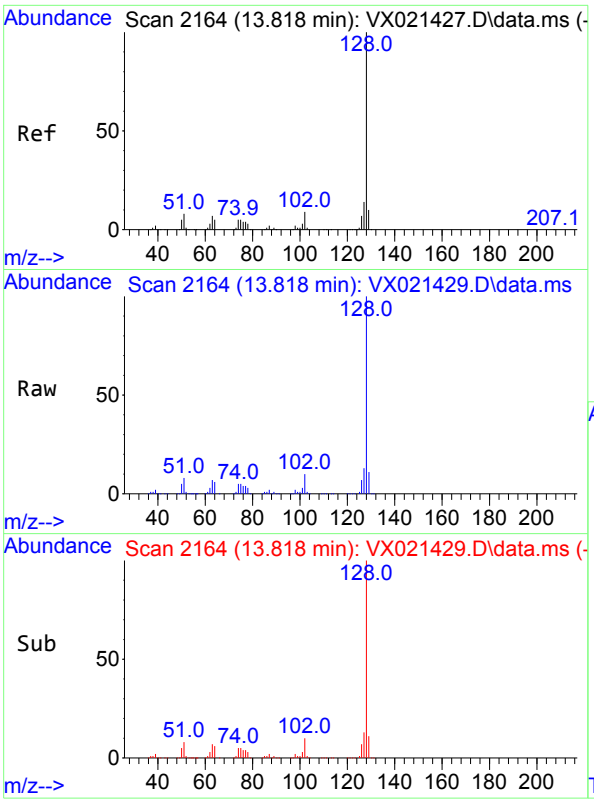
Tgt Ion:225 Resp: 84948

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 65.8 | 31.1 | 93.2 |
| 227 | 67.8 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDICC150

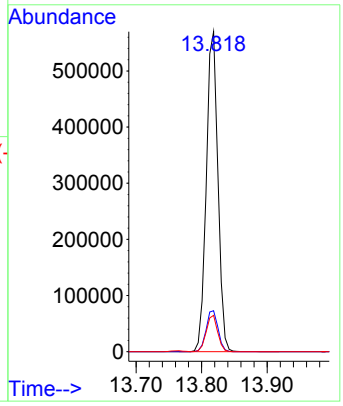
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:41 AM

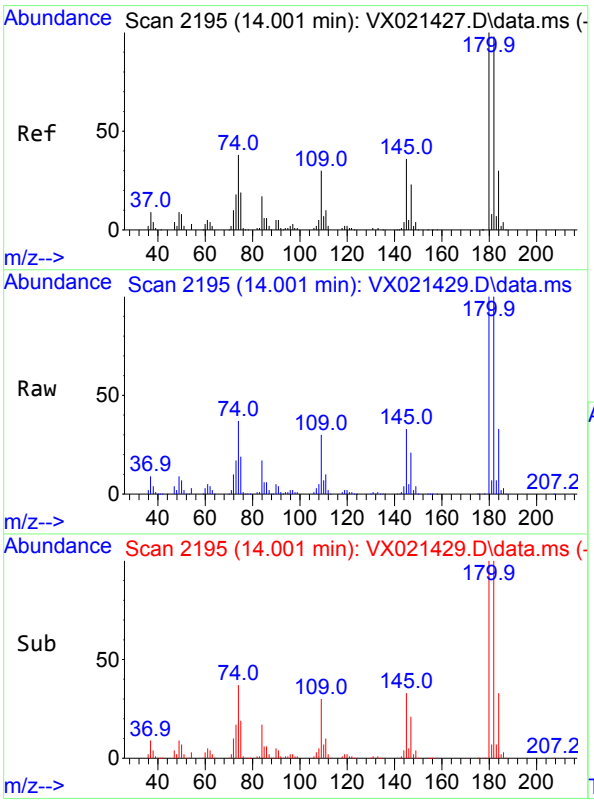



#95
Naphthalene
Concen: 158.37 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:128 Resp: 702214

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.1 | 10.3 | 15.5 |
| 129 | 11.2 | 8.8 | 13.2 |

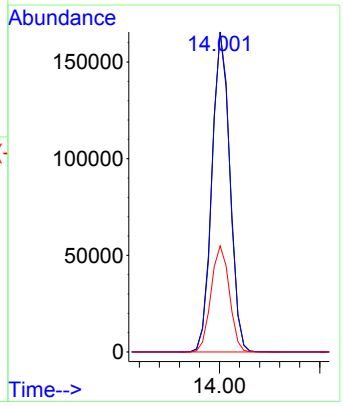



#96
1,2,3-Trichlorobenzene
Concen: 160.04 ug/l
RT: 14.001 min Scan# 2195
Delta R.T. 0.000 min
Lab File: VX021429.D
Acq: 24 Mar 2021 11:58

Tgt Ion:180 Resp: 205544

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 99.2 | 47.6 | 142.9 |
| 145 | 33.9 | 16.1 | 48.3 |



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021431.D
Acq On : 24 Mar 2021 12:43
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

Quant Time: Mar 24 17:16:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 85916 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 138830 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 129853 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 64663 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 64489 | 45.11 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 90.22% | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 46301 | 46.95 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 93.90% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 167144 | 47.56 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 95.12% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 66126 | 48.40 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 96.80% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.181 | 85 | 47202 | 49.98 | ug/l | | 99 |
| 3) Chloromethane | 1.311 | 50 | 51665 | 47.59 | ug/l | | 98 |
| 4) Vinyl Chloride | 1.393 | 62 | 47344 | 49.02 | ug/l | | 99 |
| 5) Bromomethane | 1.623 | 94 | 19682 | 50.63 | ug/l | | 99 |
| 6) Chloroethane | 1.699 | 64 | 29642 | 48.39 | ug/l | | 97 |
| 7) Trichlorofluoromethane | 1.905 | 101 | 76482 | 48.68 | ug/l | | 95 |
| 8) Diethyl Ether | 2.170 | 74 | 26571 | 48.74 | ug/l | | 82 |
| 9) 1,1,2-Trichlorotrifluo... | 2.358 | 101 | 43520 | 49.21 | ug/l | | 97 |
| 10) Methyl Iodide | 2.487 | 142 | 31571 | 46.29 | ug/l | # | 88 |
| 11) Tert butyl alcohol | 3.023 | 59 | 57722 | 244.24 | ug/l | | 97 |
| 12) 1,1-Dichloroethene | 2.352 | 96 | 40773 | 47.09 | ug/l | | 85 |
| 13) Acrolein | 2.276 | 56 | 26307 | 221.19 | ug/l | | 100 |
| 14) Allyl chloride | 2.705 | 41 | 84659 | 48.17 | ug/l | # | 88 |
| 15) Acrylonitrile | 3.117 | 53 | 137280 | 244.42 | ug/l | | 98 |
| 16) Acetone | 2.423 | 43 | 127030 | 235.02 | ug/l | # | 87 |
| 17) Carbon Disulfide | 2.546 | 76 | 112777 | 46.39 | ug/l | | 99 |
| 18) Methyl Acetate | 2.746 | 43 | 77947 | 49.92 | ug/l | | 90 |
| 19) Methyl tert-butyl Ether | 3.170 | 73 | 158135 | 48.91 | ug/l | | 100 |
| 20) Methylene Chloride | 2.835 | 84 | 49164 | 46.61 | ug/l | # | 83 |
| 21) trans-1,2-Dichloroethene | 3.140 | 96 | 45491 | 47.83 | ug/l | | 90 |
| 22) Diisopropyl ether | 3.829 | 45 | 167782 | 49.14 | ug/l | | 91 |
| 23) Vinyl Acetate | 3.788 | 43 | 720192 | 249.36 | ug/l | # | 93 |
| 24) 1,1-Dichloroethane | 3.670 | 63 | 89112 | 48.41 | ug/l | | 98 |
| 25) 2-Butanone | 4.635 | 43 | 198043 | 241.71 | ug/l | | 90 |
| 26) 2,2-Dichloropropane | 4.547 | 77 | 79270 | 49.71 | ug/l | | 96 |
| 27) cis-1,2-Dichloroethene | 4.558 | 96 | 53822 | 48.74 | ug/l | | 90 |
| 28) Bromochloromethane | 4.982 | 49 | 40839 | 44.31 | ug/l | | 86 |
| 29) Tetrahydrofuran | 5.088 | 42 | 128449 | 241.79 | ug/l | | 86 |
| 30) Chloroform | 5.176 | 83 | 95242 | 49.02 | ug/l | | 98 |
| 31) Cyclohexane | 5.547 | 56 | 78196 | 49.74 | ug/l | | 96 |
| 32) 1,1,1-Trichloroethane | 5.458 | 97 | 84744 | 49.22 | ug/l | | 96 |
| 36) 1,1-Dichloropropene | 5.770 | 75 | 68516 | 50.37 | ug/l | | 97 |
| 37) Ethyl Acetate | 4.794 | 43 | 75175 | 47.79 | ug/l | # | 93 |
| 38) Carbon Tetrachloride | 5.753 | 117 | 73978 | 50.61 | ug/l | | 97 |
| 39) Methylcyclohexane | 7.441 | 83 | 79198 | 52.52 | ug/l | | 91 |
| 40) Benzene | 6.111 | 78 | 193565 | 50.11 | ug/l | | 99 |

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021431.D
Acq On : 24 Mar 2021 12:43
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

Quant Time: Mar 24 17:16:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 5.000 | 41 | 44080 | 48.32 | ug/l | | 89 |
| 42) 1,2-Dichloroethane | 6.159 | 62 | 84072 | 50.20 | ug/l | | 93 |
| 43) Isopropyl Acetate | 6.412 | 43 | 127670 | 49.99 | ug/l | # | 91 |
| 44) Trichloroethene | 7.188 | 130 | 50616 | 49.66 | ug/l | | 92 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 53017 | 50.67 | ug/l | | 97 |
| 46) Dibromomethane | 7.635 | 93 | 38191 | 50.08 | ug/l | | 92 |
| 47) Bromodichloromethane | 7.876 | 83 | 79237 | 51.05 | ug/l | | 99 |
| 48) Methyl methacrylate | 7.747 | 41 | 69096 | 50.72 | ug/l | # | 82 |
| 49) 1,4-Dioxane | 7.712 | 88 | 25020 | 1025.81 | ug/l | # | 91 |
| 51) 4-Methyl-2-Pentanone | 8.624 | 43 | 405305 | 258.01 | ug/l | | 89 |
| 52) Toluene | 8.765 | 92 | 125547 | 52.62 | ug/l | | 100 |
| 53) t-1,3-Dichloropropene | 9.024 | 75 | 82519 | 52.65 | ug/l | | 98 |
| 54) cis-1,3-Dichloropropene | 8.412 | 75 | 86927 | 52.12 | ug/l | # | 85 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 52639 | 52.27 | ug/l | | 99 |
| 56) Ethyl methacrylate | 9.159 | 69 | 81341 | 47.91 | ug/l | # | 76 |
| 57) 1,3-Dichloropropane | 9.353 | 76 | 88319 | 51.25 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 8.288 | 63 | 221880 | 260.72 | ug/l | | 96 |
| 59) 2-Hexanone | 9.471 | 43 | 307140 | 260.39 | ug/l | | 85 |
| 60) Dibromochloromethane | 9.565 | 129 | 59207 | 52.49 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 55650 | 51.44 | ug/l | | 100 |
| 64) Tetrachloroethene | 9.318 | 164 | 45762 | 52.61 | ug/l | | 94 |
| 65) Chlorobenzene | 10.124 | 112 | 134081 | 51.40 | ug/l | | 98 |
| 66) 1,1,1,2-Tetrachloroethane | 10.206 | 131 | 51433 | 51.45 | ug/l | | 99 |
| 67) Ethyl Benzene | 10.236 | 91 | 252898 | 53.19 | ug/l | | 98 |
| 68) m/p-Xylenes | 10.341 | 106 | 182238 | 107.58 | ug/l | | 94 |
| 69) o-Xylene | 10.683 | 106 | 86685 | 52.83 | ug/l | | 92 |
| 70) Styrene | 10.694 | 104 | 150089 | 53.19 | ug/l | | 96 |
| 71) Bromoform | 10.842 | 173 | 41954 | 51.65 | ug/l | # | 98 |
| 73) Isopropylbenzene | 11.000 | 105 | 242563 | 53.39 | ug/l | | 99 |
| 74) N-amyl acetate | 10.883 | 43 | 110943 | 50.47 | ug/l | # | 88 |
| 75) 1,1,2,2-Tetrachloroethane | 11.253 | 83 | 80423 | 50.10 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.277 | 75 | 78320m | 52.03 | ug/l | | |
| 77) Bromobenzene | 11.236 | 156 | 56367 | 50.05 | ug/l | | 93 |
| 78) n-propylbenzene | 11.342 | 91 | 286011 | 53.31 | ug/l | | 97 |
| 79) 2-Chlorotoluene | 11.406 | 91 | 170815 | 52.48 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 209265 | 53.91 | ug/l | | 98 |
| 81) trans-1,4-Dichloro-2-b... | 11.059 | 75 | 24820 | 50.22 | ug/l | # | 79 |
| 82) 4-Chlorotoluene | 11.495 | 91 | 202393 | 52.37 | ug/l | | 96 |
| 83) tert-Butylbenzene | 11.753 | 119 | 194705 | 51.52 | ug/l | | 91 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 211365 | 54.02 | ug/l | | 95 |
| 85) sec-Butylbenzene | 11.930 | 105 | 236006 | 54.14 | ug/l | | 98 |
| 86) p-Isopropyltoluene | 12.048 | 119 | 218740 | 55.12 | ug/l | | 96 |
| 87) 1,3-Dichlorobenzene | 12.006 | 146 | 108272 | 53.39 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 12.083 | 146 | 103631 | 49.39 | ug/l | | 98 |
| 89) n-Butylbenzene | 12.371 | 91 | 199675 | 54.92 | ug/l | | 96 |
| 90) Hexachloroethane | 12.577 | 117 | 37354 | 52.16 | ug/l | | 97 |
| 91) 1,2-Dichlorobenzene | 12.377 | 146 | 99280 | 50.35 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 18989 | 47.06 | ug/l | | 81 |
| 93) 1,2,4-Trichlorobenzene | 13.624 | 180 | 68389 | 52.92 | ug/l | | 99 |
| 94) Hexachlorobutadiene | 13.760 | 225 | 30555 | 52.38 | ug/l | | 100 |
| 95) Naphthalene | 13.812 | 128 | 224939 | 53.36 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 14.001 | 180 | 67410 | 52.18 | ug/l | | 99 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021431.D
Acq On : 24 Mar 2021 12:43
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

Quant Time: Mar 24 17:16:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

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

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

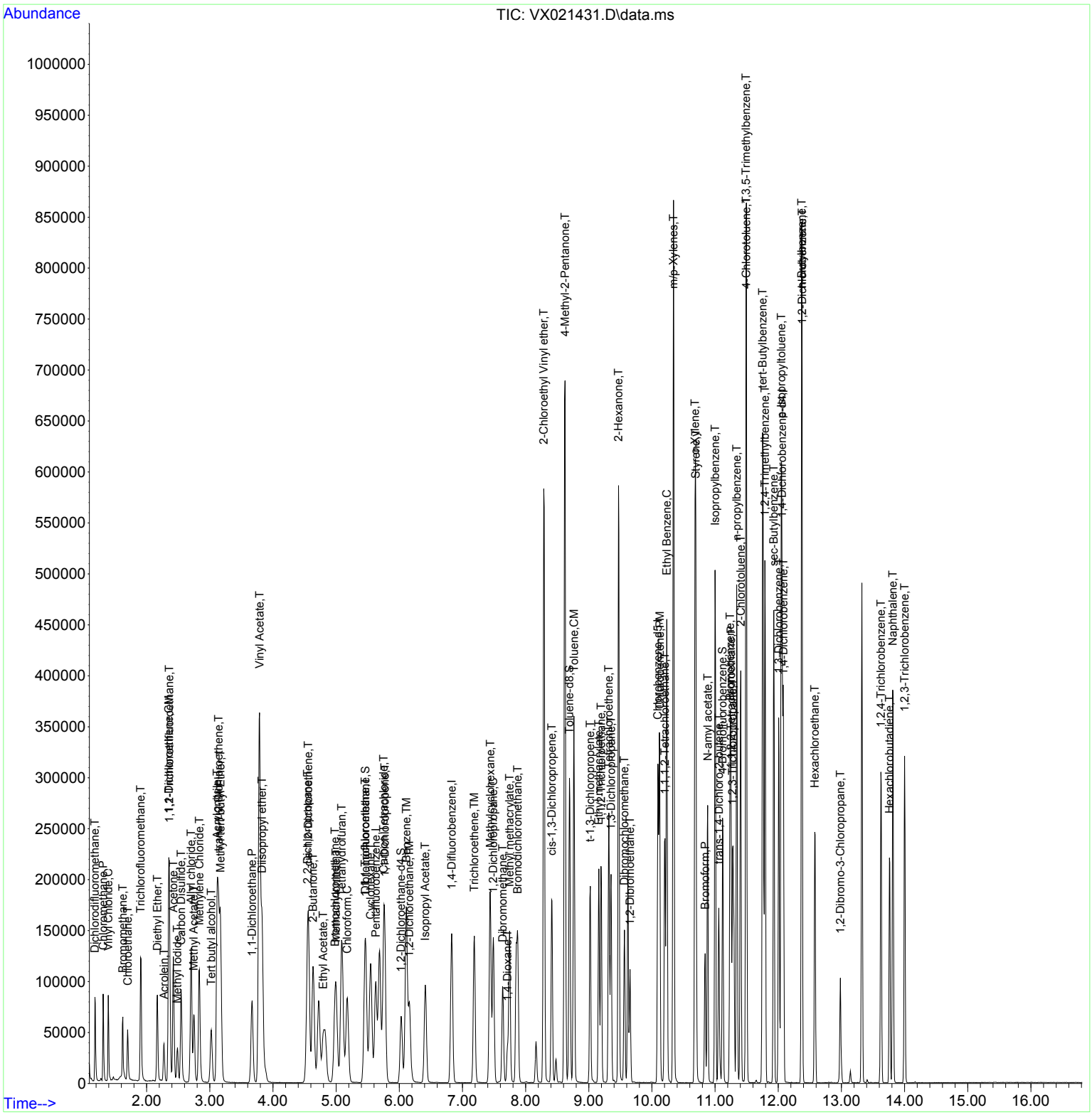
ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021431.D
Acq On : 24 Mar 2021 12:43
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

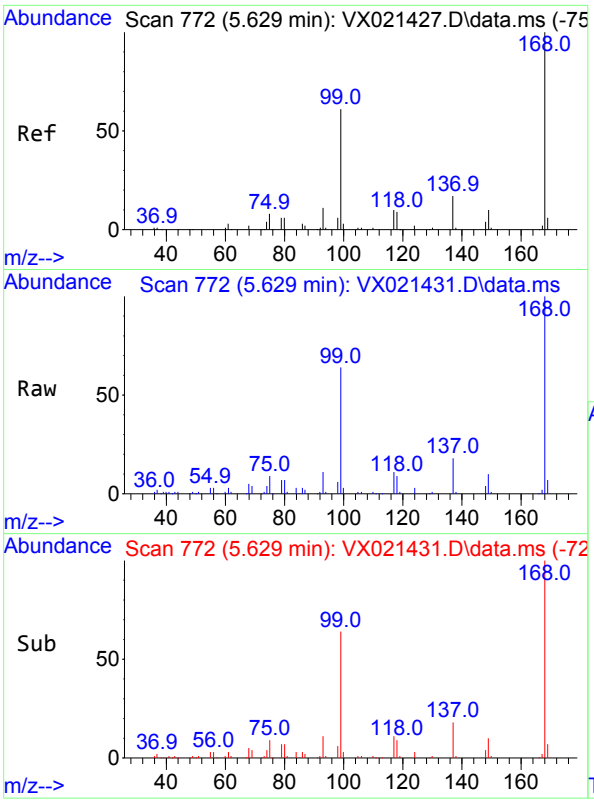
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

Quant Time: Mar 24 17:16:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

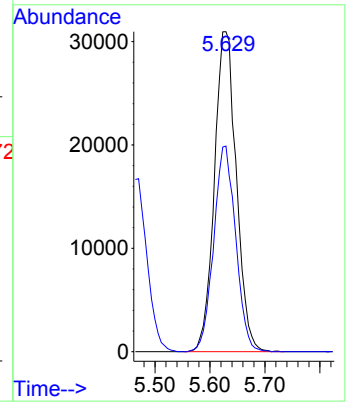
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3/25/2021 9:49:46 AM

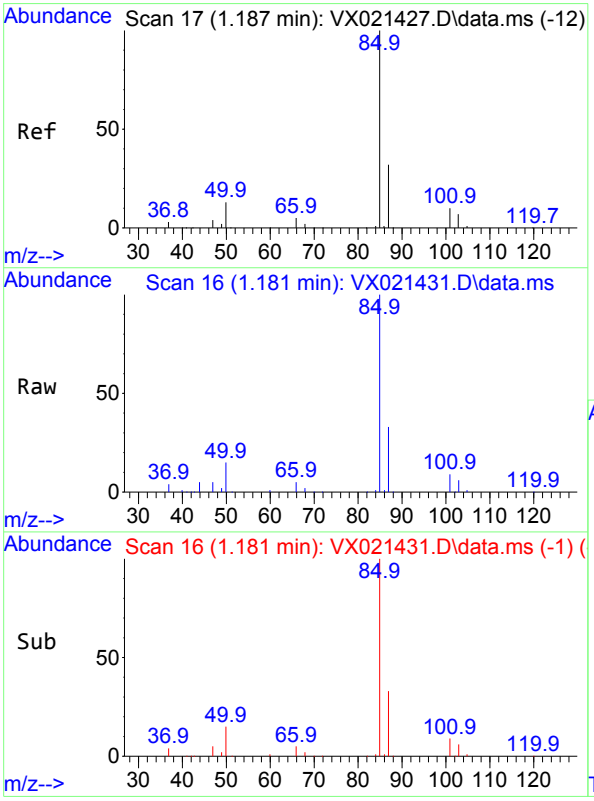



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:168 Resp: 85916

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 64.3 | 45.8 | 68.6 |

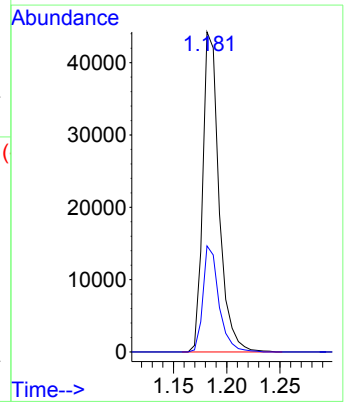



#2
Dichlorodifluoromethane
Concen: 49.98 ug/l
RT: 1.181 min Scan# 16
Delta R.T. -0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

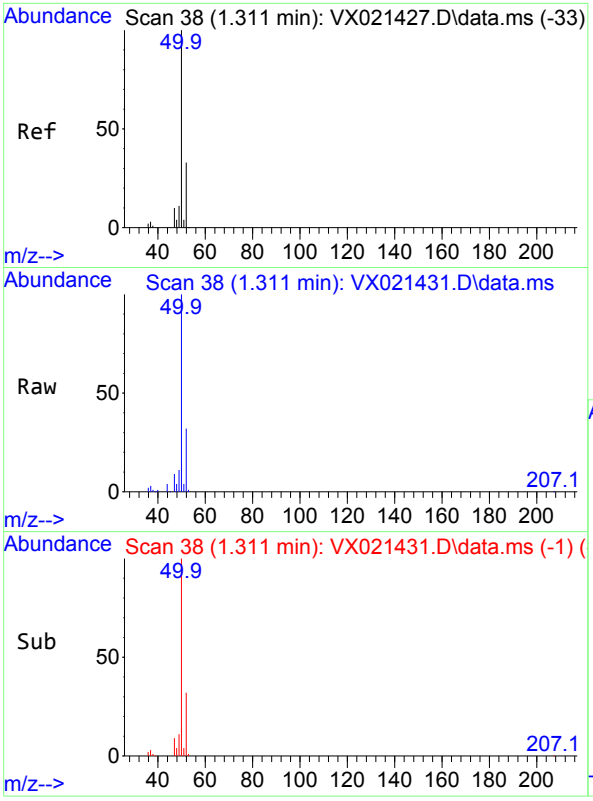
Tgt Ion: 85 Resp: 47202

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.2 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

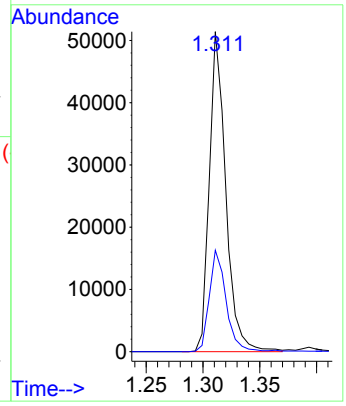
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

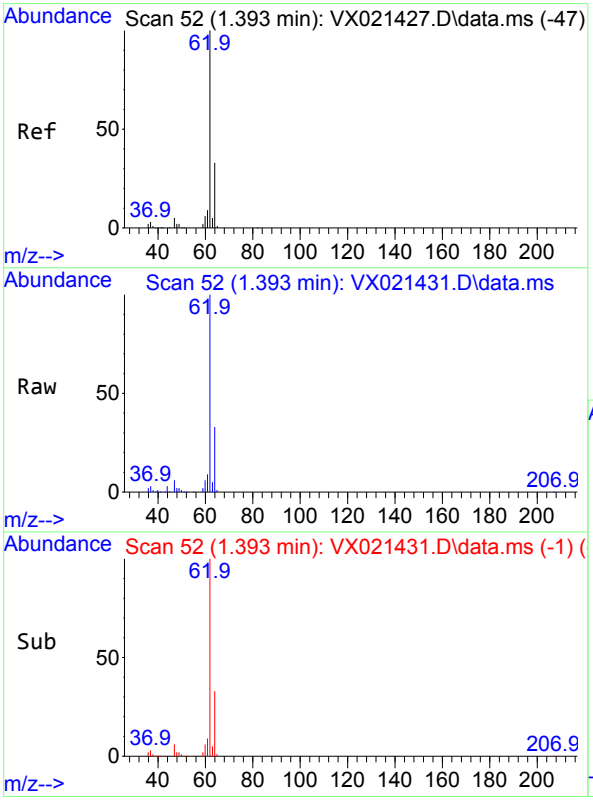



#3
Chloromethane
Concen: 47.59 ug/l
RT: 1.311 min Scan# 38
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 50 Resp: 51665

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.7 | 26.4 | 39.6 |

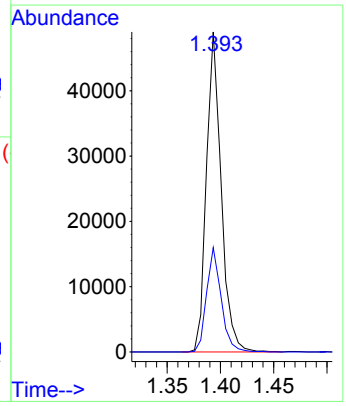



#4
Vinyl Chloride
Concen: 49.02 ug/l
RT: 1.393 min Scan# 52
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

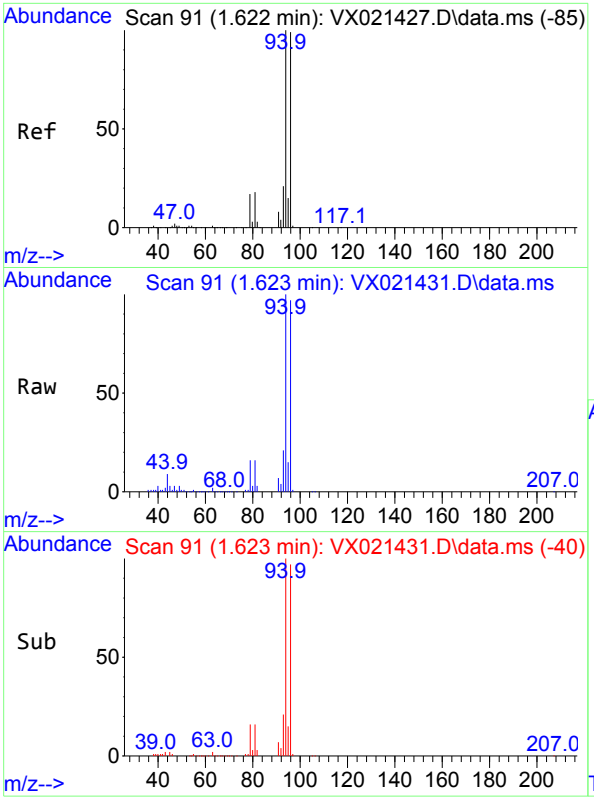
Tgt Ion: 62 Resp: 47344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 32.6 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

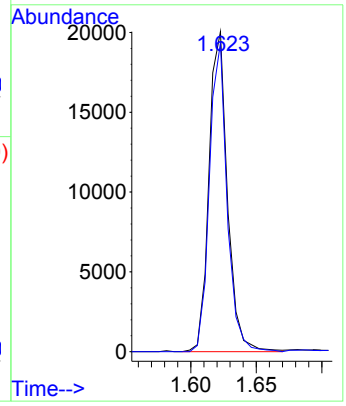
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

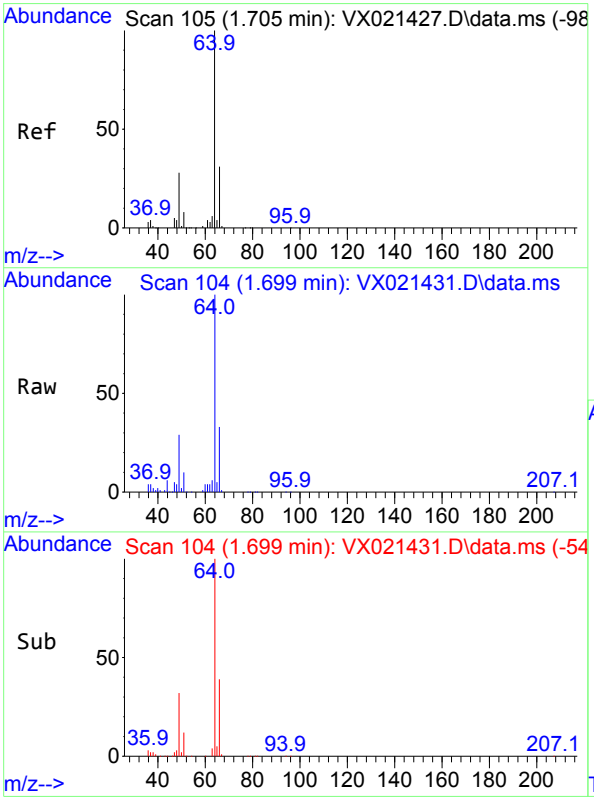



#5
Bromomethane
Concen: 50.63 ug/l
RT: 1.623 min Scan# 91
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 94 Resp: 19682

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 96.5 | 76.4 | 114.6 |

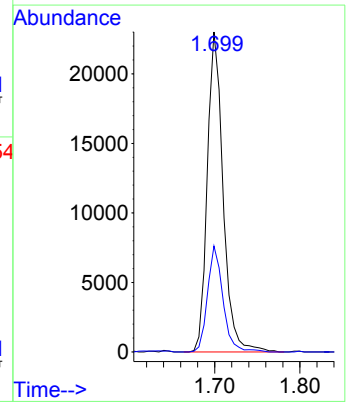



#6
Chloroethane
Concen: 48.39 ug/l
RT: 1.699 min Scan# 104
Delta R.T. -0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

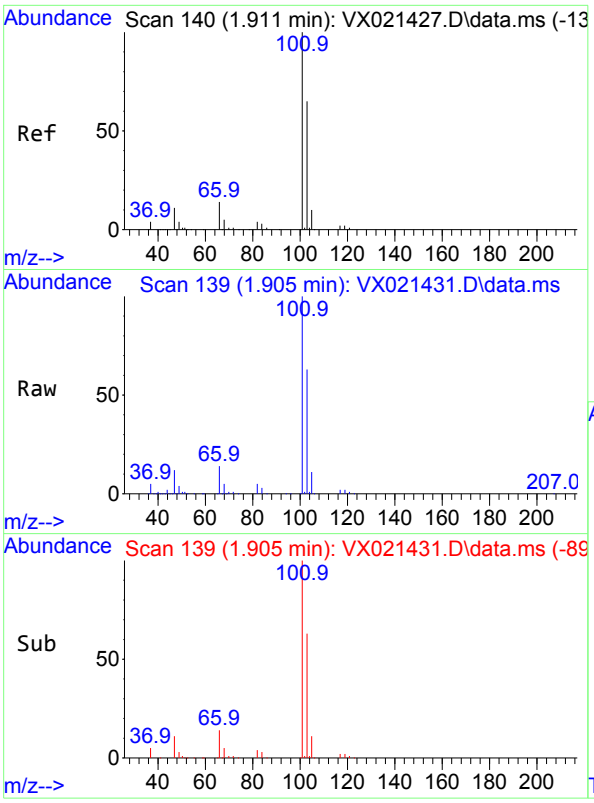
Tgt Ion: 64 Resp: 29642

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 33.1 | 25.4 | 38.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

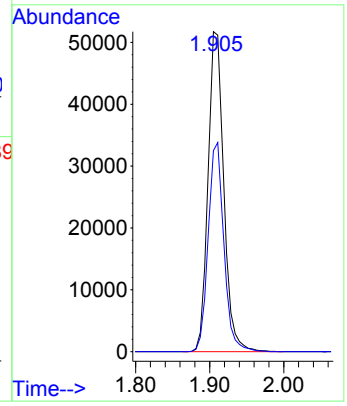
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

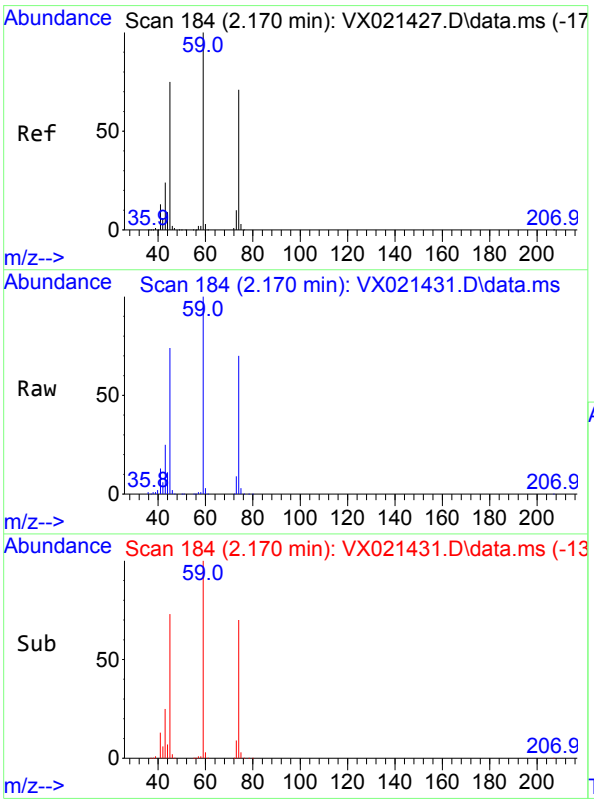



#7
Trichlorofluoromethane
Concen: 48.68 ug/l
RT: 1.905 min Scan# 139
Delta R.T. -0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:101 Resp: 76482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 62.9 | 53.2 | 79.8 |

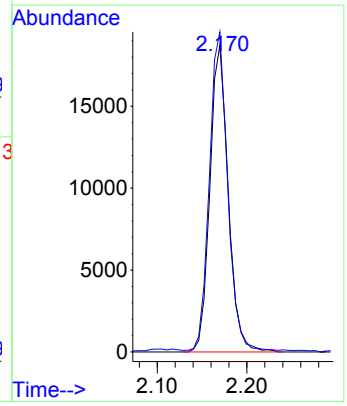



#8
Diethyl Ether
Concen: 48.74 ug/l
RT: 2.170 min Scan# 184
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

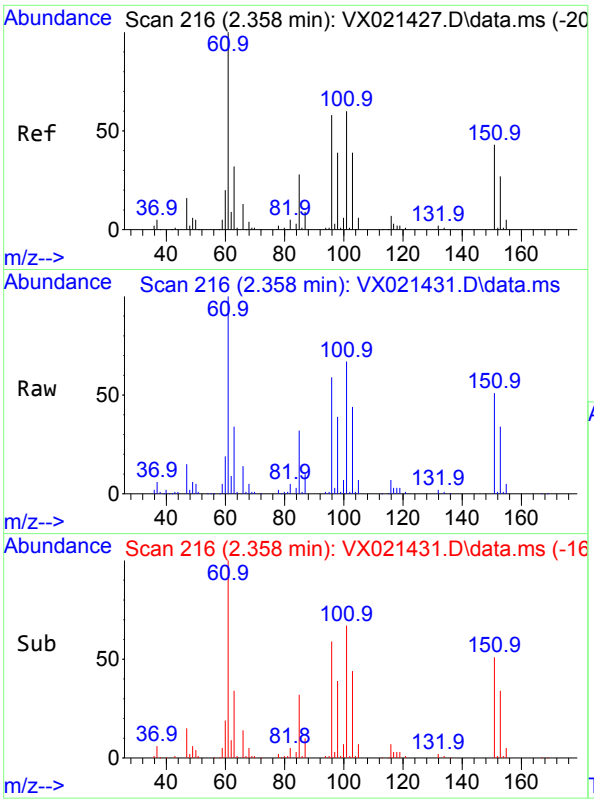
Tgt Ion: 74 Resp: 26571

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 106.1 | 44.5 | 133.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

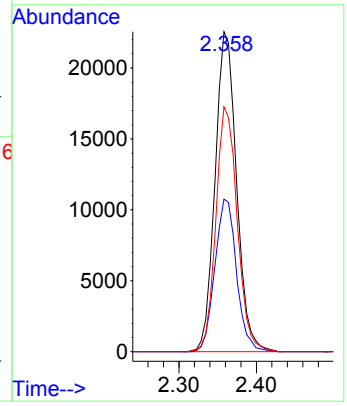
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

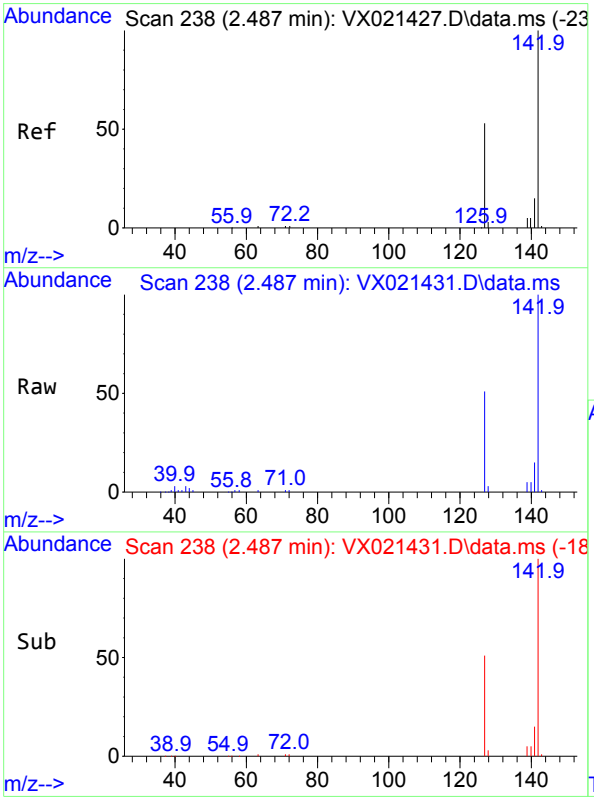



#9
1,1,2-Trichlorotrifluoroethane
Concen: 49.21 ug/l
RT: 2.358 min Scan# 216
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:101 Resp: 43520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 48.1 | 34.9 | 52.3 |
| 151 | 76.0 | 61.4 | 92.2 |

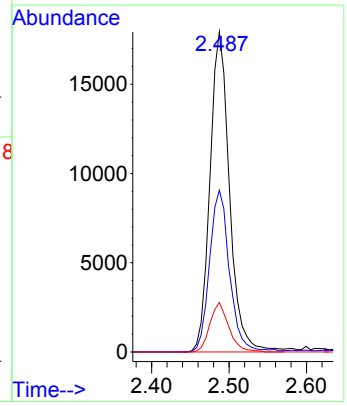



#10
Methyl Iodide
Concen: 46.29 ug/l
RT: 2.487 min Scan# 238
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

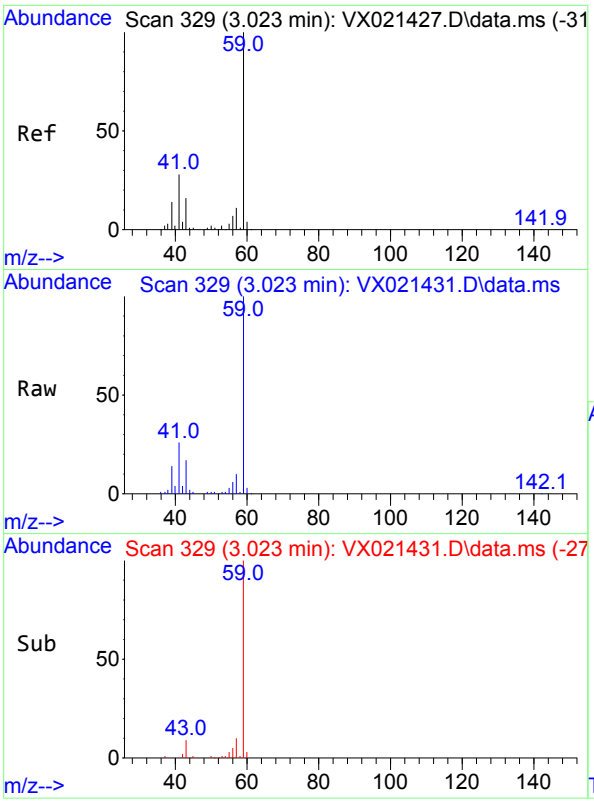
Tgt Ion:142 Resp: 31571

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 51.7 | 33.3 | 49.9# |
| 141 | 14.9 | 11.4 | 17.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

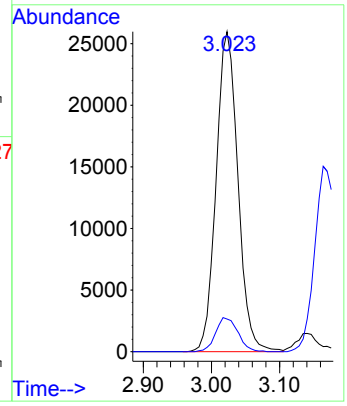
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

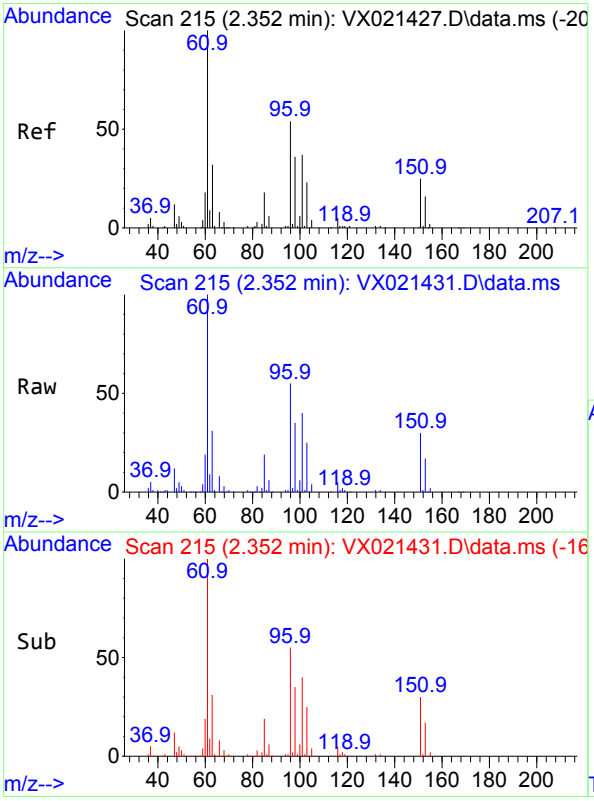



#11
Tert butyl alcohol
Concen: 244.24 ug/l
RT: 3.023 min Scan# 329
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 59 Resp: 57722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 10.9 | 7.8 | 11.8 |

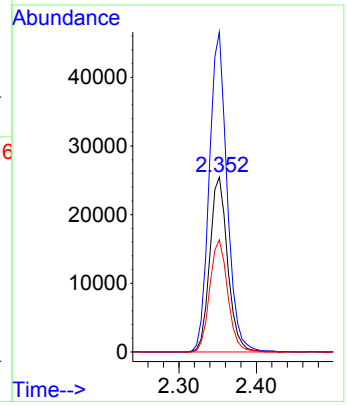



#12
1,1-Dichloroethene
Concen: 47.09 ug/l
RT: 2.352 min Scan# 215
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

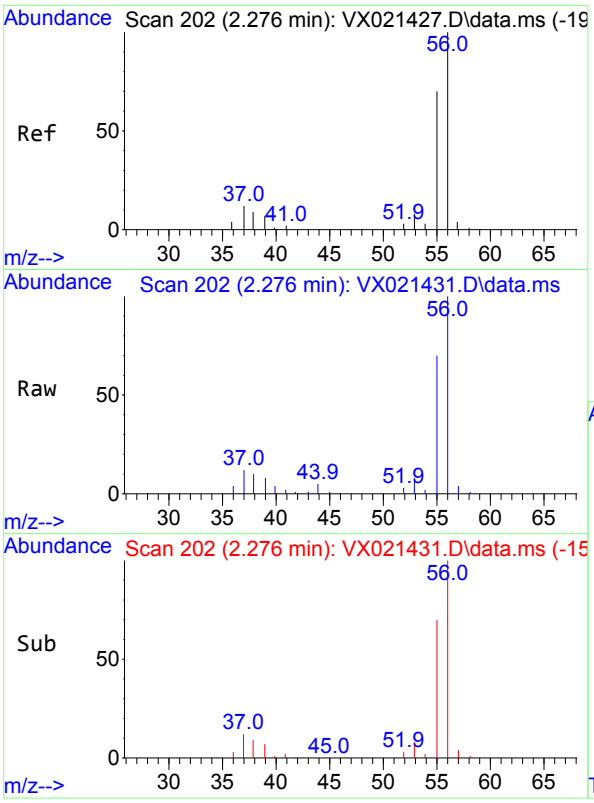
Tgt Ion: 96 Resp: 40773

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 183.0 | 124.6 | 187.0 |
| 98 | 64.1 | 50.6 | 76.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

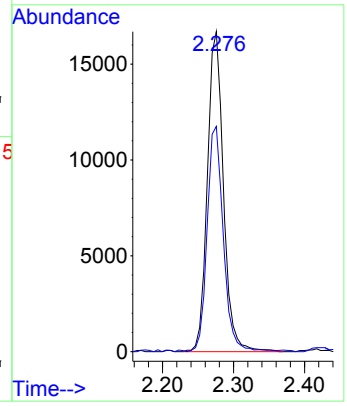
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3/25/2021 9:49:46 AM

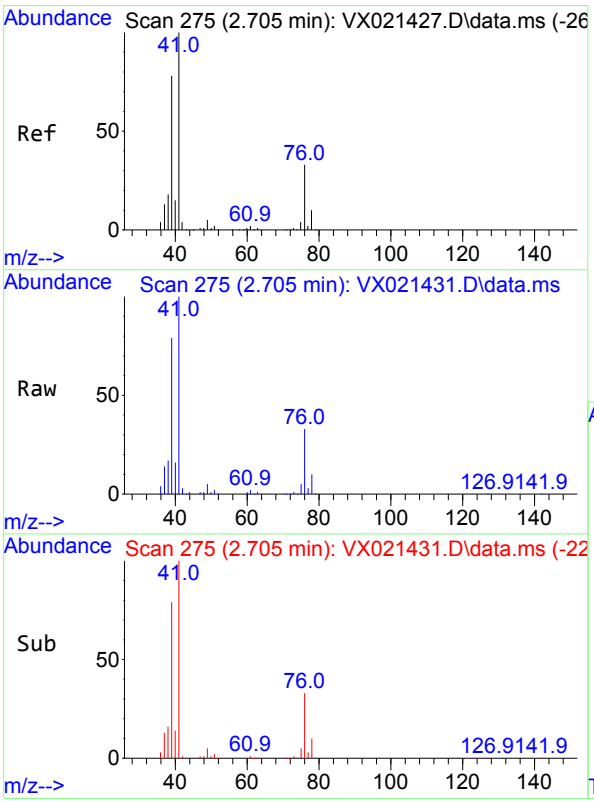



#13
Acrolein
Concen: 221.19 ug/l
RT: 2.276 min Scan# 202
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 56 Resp: 26307

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 70.9 | 56.4 | 84.6 |

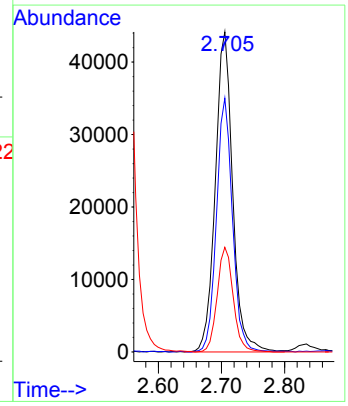



#14
Allyl chloride
Concen: 48.17 ug/l
RT: 2.705 min Scan# 275
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

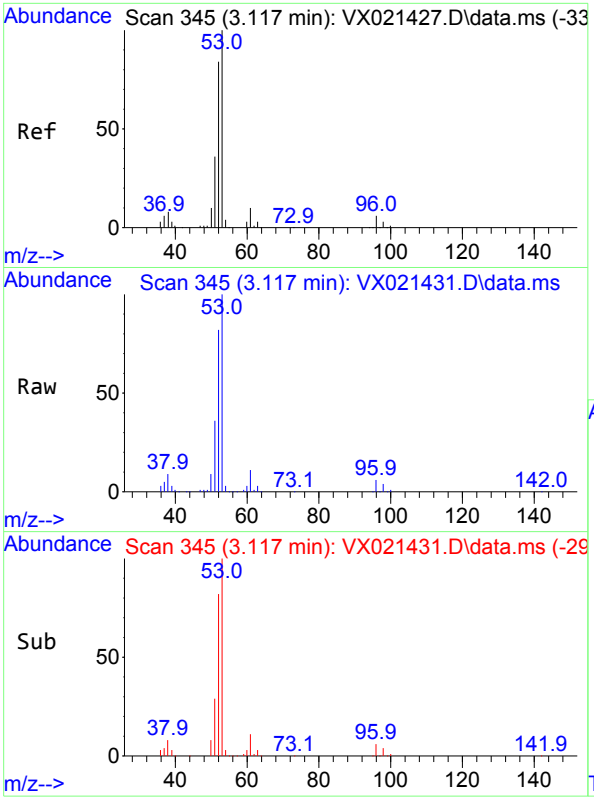
Tgt Ion: 41 Resp: 84659

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 73.2 | 51.6 | 77.4 |
| 76 | 30.2 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

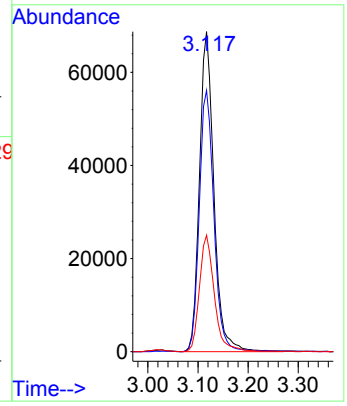
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

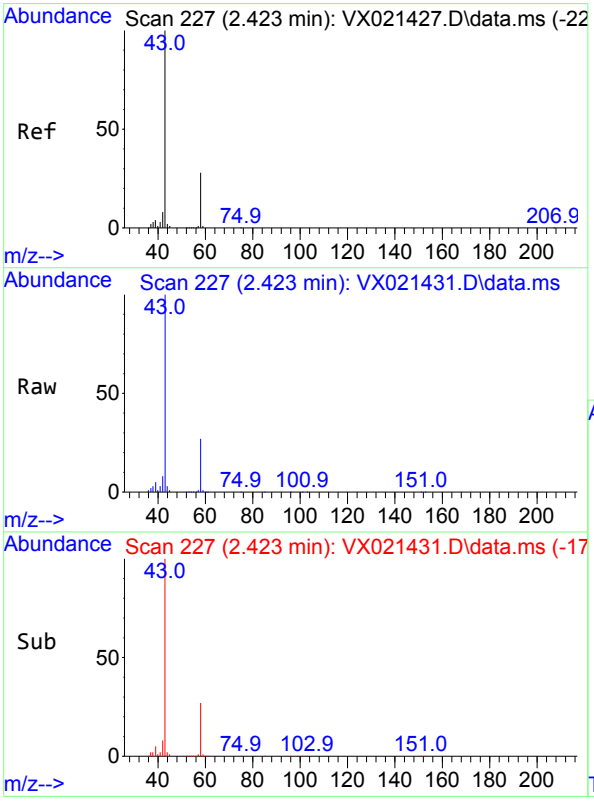



#15
Acrylonitrile
Concen: 244.42 ug/l
RT: 3.117 min Scan# 345
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 53 Resp: 137280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.9 | 65.3 | 97.9 |
| 51 | 37.7 | 28.2 | 42.2 |

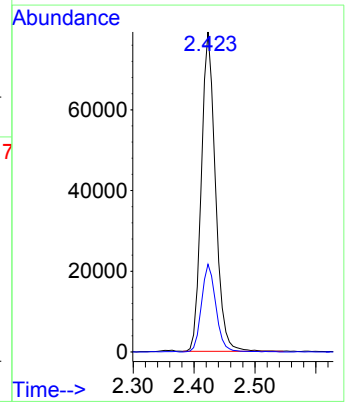



#16
Acetone
Concen: 235.02 ug/l
RT: 2.423 min Scan# 227
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

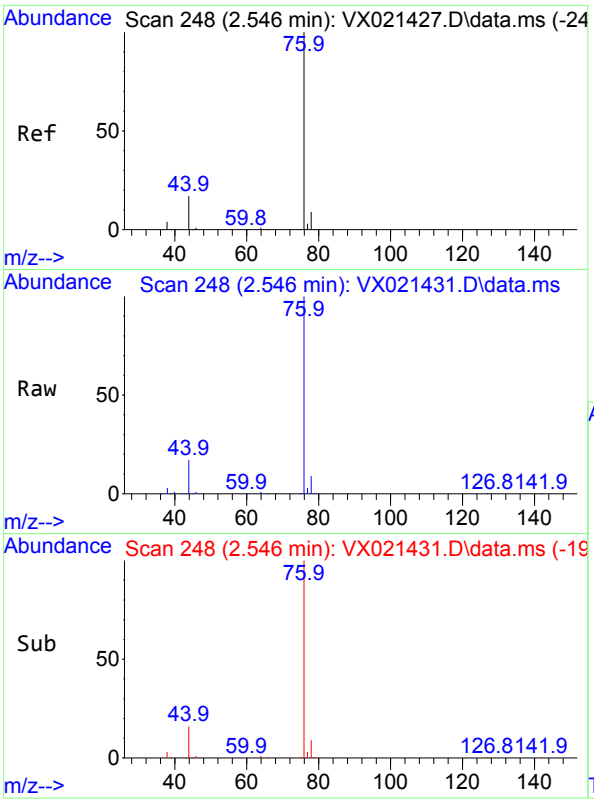
Tgt Ion: 43 Resp: 127030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.5 | 27.8 | 41.8# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

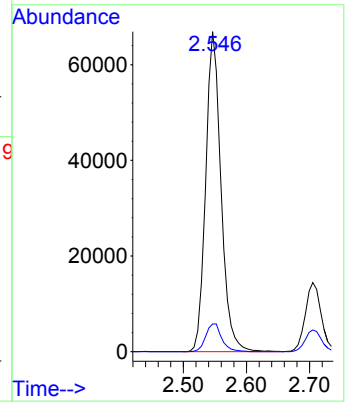
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

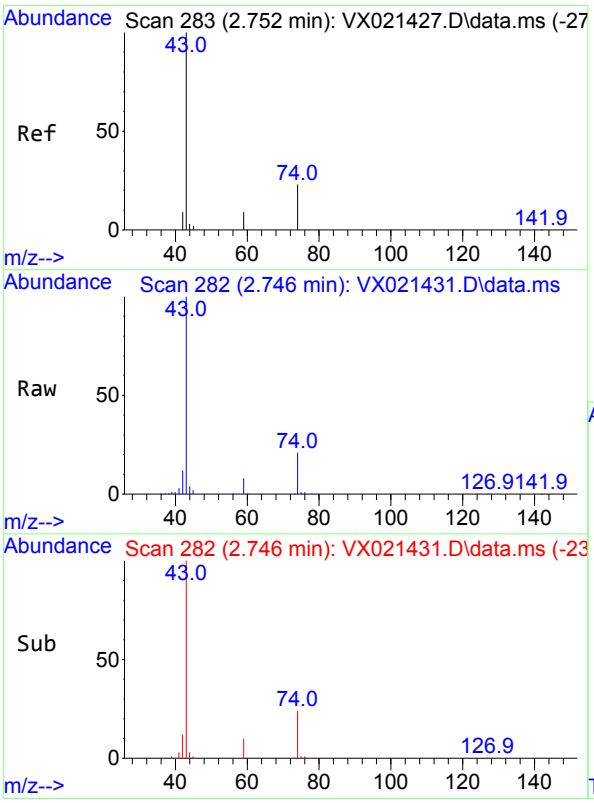



#17
Carbon Disulfide
Concen: 46.39 ug/l
RT: 2.546 min Scan# 248
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 76 Resp: 112777

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.7 | 7.2 | 10.8 |

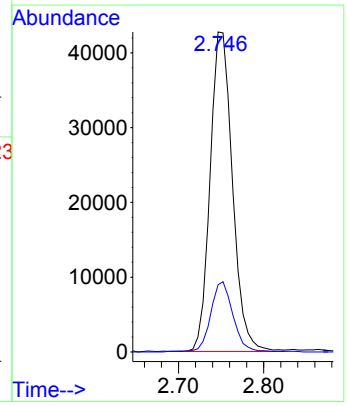



#18
Methyl Acetate
Concen: 49.92 ug/l
RT: 2.746 min Scan# 282
Delta R.T. -0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

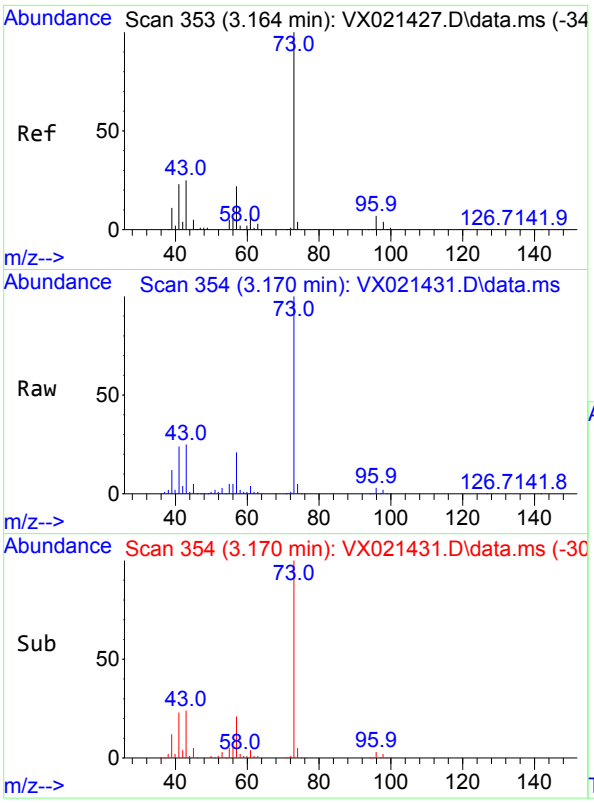
Tgt Ion: 43 Resp: 77947

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.0 | 21.9 | 32.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

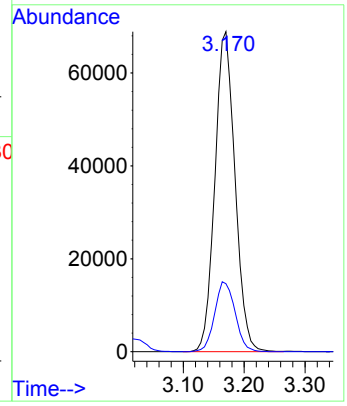
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

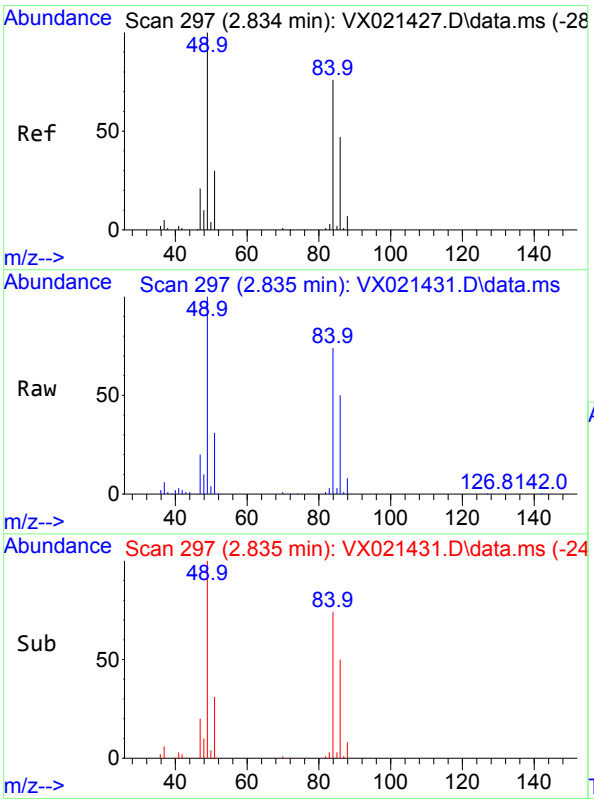



#19
Methyl tert-butyl Ether
Concen: 48.91 ug/l
RT: 3.170 min Scan# 354
Delta R.T. 0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 73 Resp: 158135

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.2 | 17.1 | 25.7 |

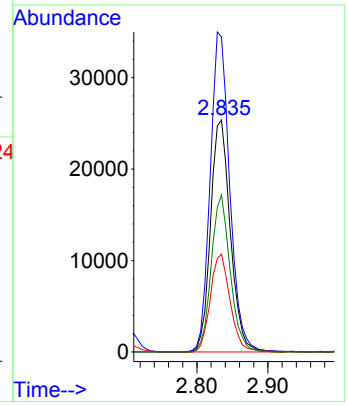



#20
Methylene Chloride
Concen: 46.61 ug/l
RT: 2.835 min Scan# 297
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

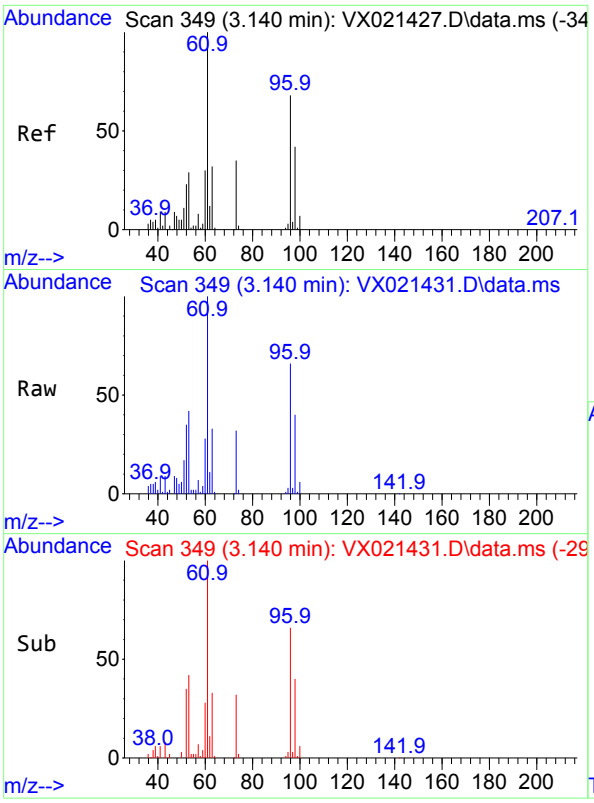
Tgt Ion: 84 Resp: 49164

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 135.7 | 88.6 | 132.8# |
| 51 | 42.2 | 27.0 | 40.6# |
| 86 | 67.7 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

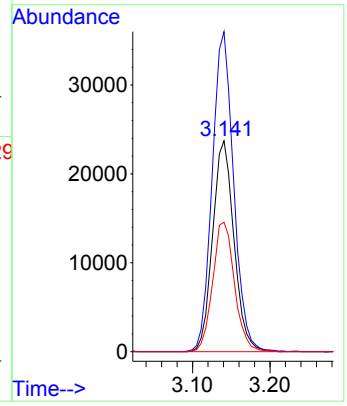
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

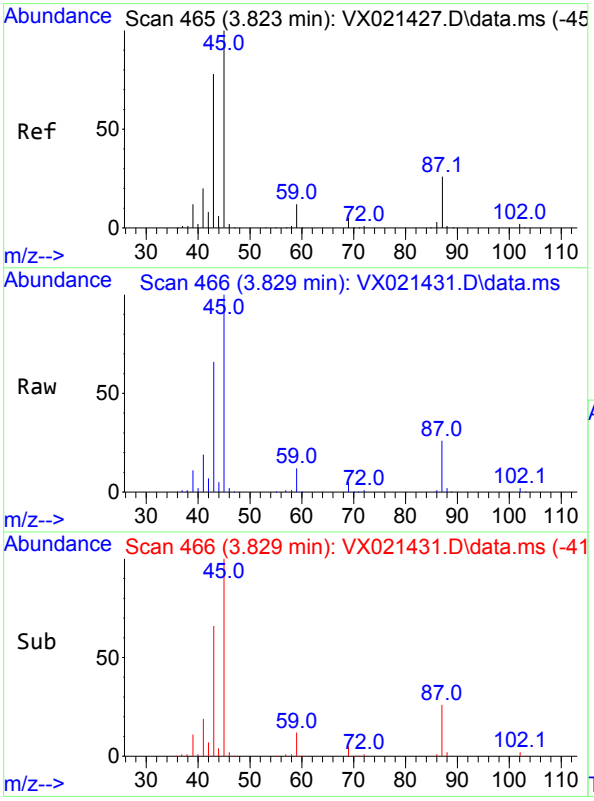



#21
trans-1,2-Dichloroethene
Concen: 47.83 ug/l
RT: 3.140 min Scan# 349
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 96 Resp: 45491

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 151.7 | 107.7 | 161.5 |
| 98 | 61.4 | 50.4 | 75.6 |

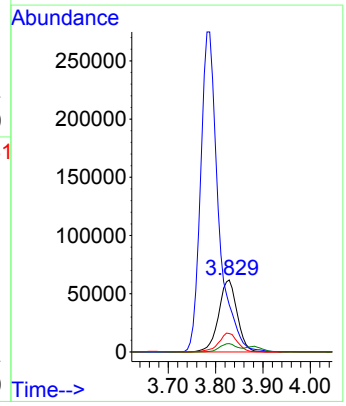



#22
Diisopropyl ether
Concen: 49.14 ug/l
RT: 3.829 min Scan# 466
Delta R.T. 0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

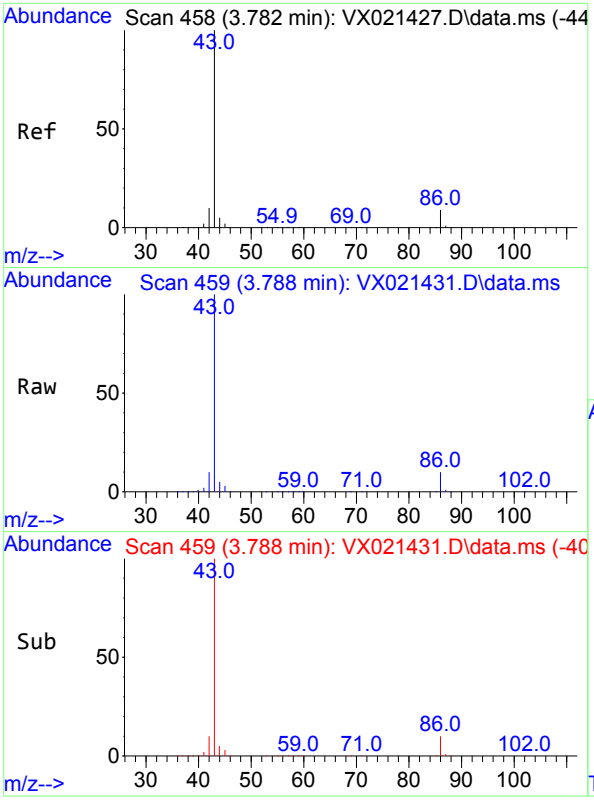
Tgt Ion: 45 Resp: 167782

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 65.4 | 58.0 | 87.0 |
| 87 | 25.6 | 25.4 | 38.0 |
| 59 | 11.5 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

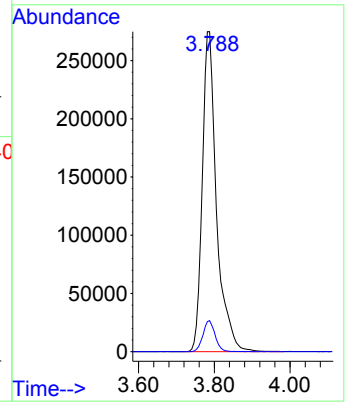
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

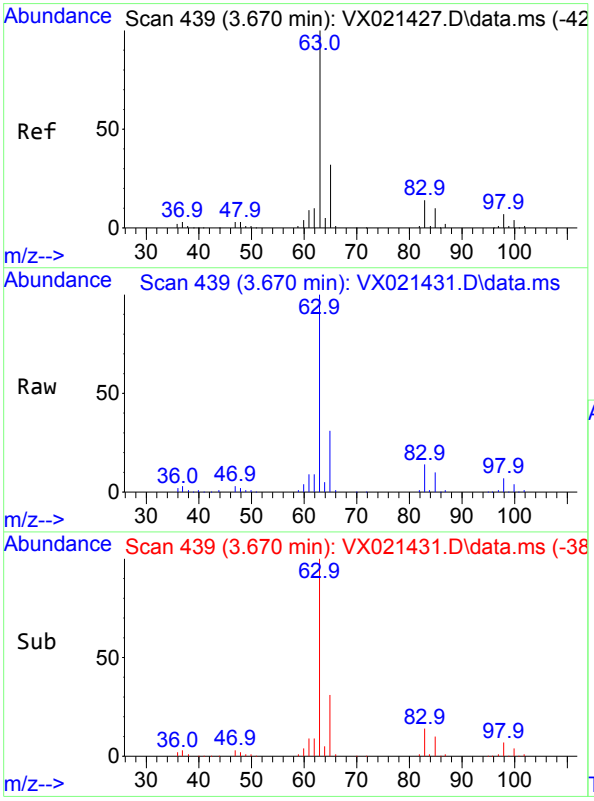



#23
Vinyl Acetate
Concen: 249.36 ug/l
RT: 3.788 min Scan# 459
Delta R.T. 0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 43 Resp: 720192

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.7 | 9.9 | 14.9# |

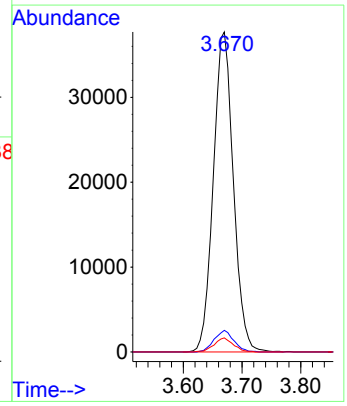



#24
1,1-Dichloroethane
Concen: 48.41 ug/l
RT: 3.670 min Scan# 439
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

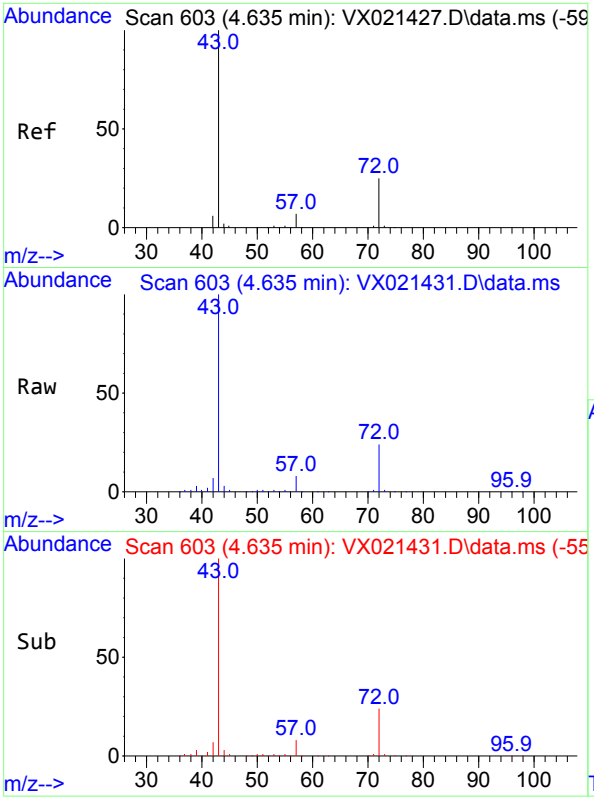
Tgt Ion: 63 Resp: 89112

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.7 | 3.8 | 11.2 |
| 100 | 4.4 | 2.5 | 7.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

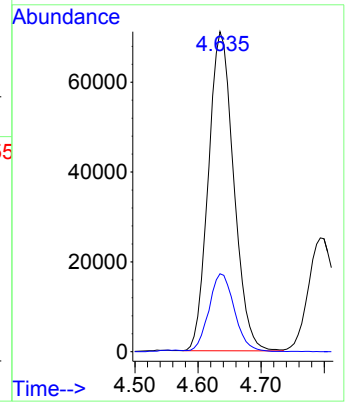
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

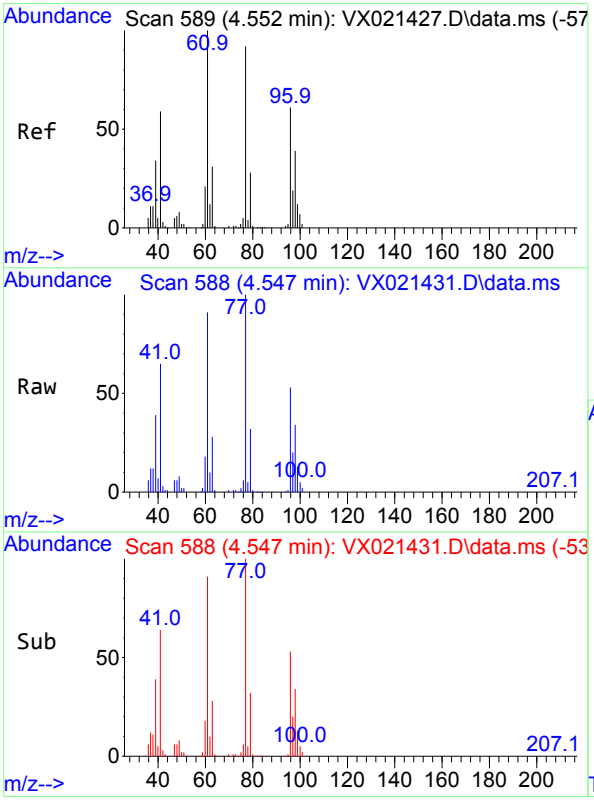



#25
2-Butanone
Concen: 241.71 ug/l
RT: 4.635 min Scan# 603
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 43 Resp: 198043

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.3 | 23.7 | 35.5 |

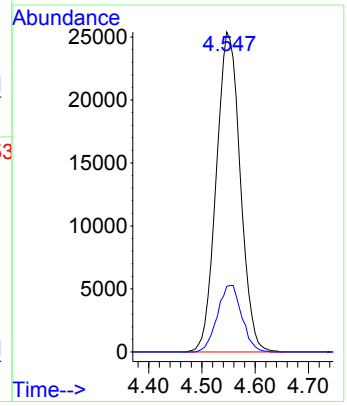



#26
2,2-Dichloropropane
Concen: 49.71 ug/l
RT: 4.547 min Scan# 588
Delta R.T. -0.005 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

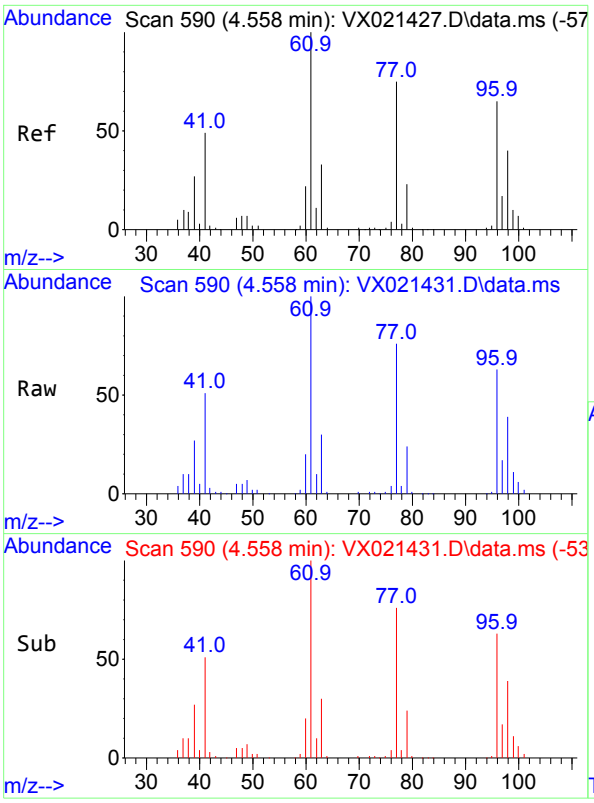
Tgt Ion: 77 Resp: 79270

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.2 | 11.7 | 35.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

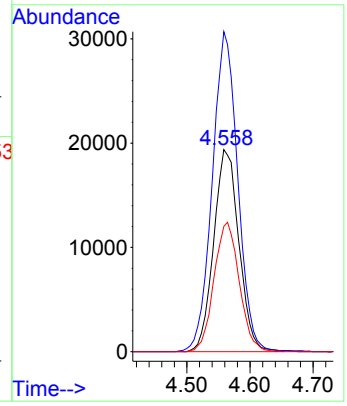
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

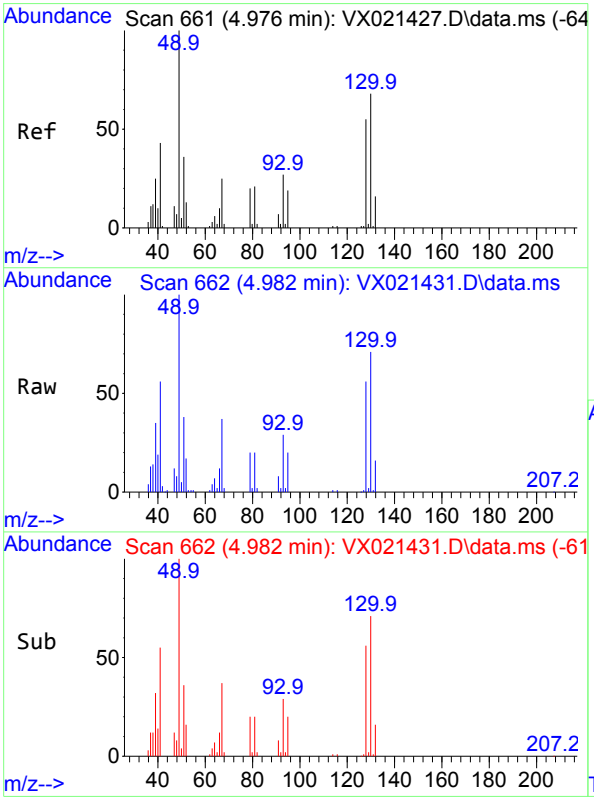



#27
cis-1,2-Dichloroethene
Concen: 48.74 ug/l
RT: 4.558 min Scan# 590
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 96 Resp: 53822

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 159.9 | 0.0 | 285.6 |
| 98 | 64.0 | 0.0 | 129.6 |

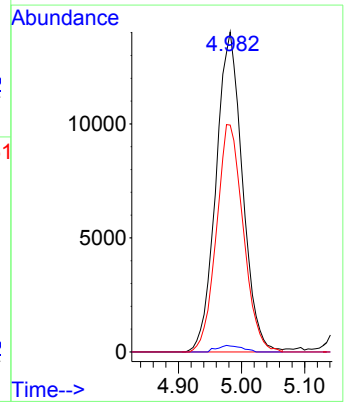



#28
Bromochloromethane
Concen: 44.31 ug/l
RT: 4.982 min Scan# 662
Delta R.T. 0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

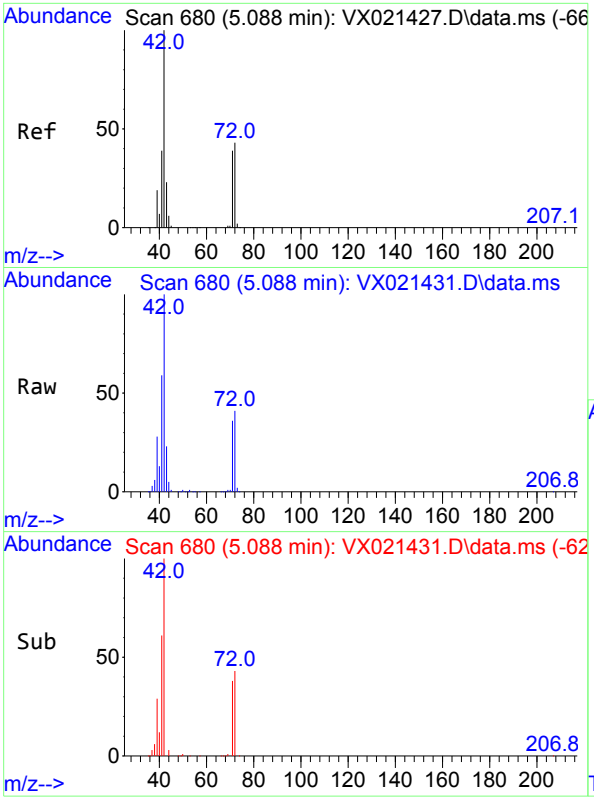
Tgt Ion: 49 Resp: 40839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 4.0 |
| 130 | 72.0 | 68.2 | 102.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

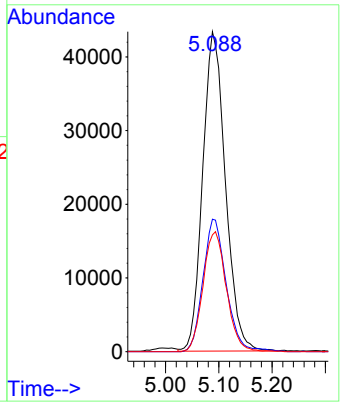
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

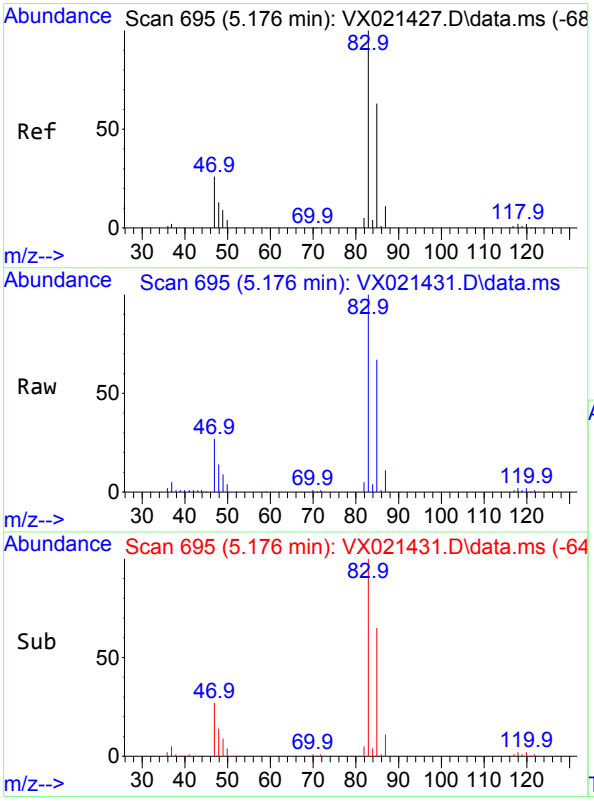



#29
Tetrahydrofuran
Concen: 241.79 ug/l
RT: 5.088 min Scan# 680
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 42 Resp: 128449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.4 | 41.7 | 62.5 |
| 71 | 38.6 | 38.4 | 57.6 |

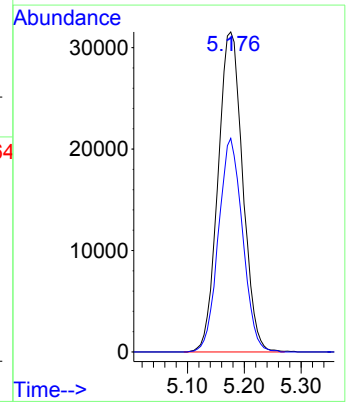



#30
Chloroform
Concen: 49.02 ug/l
RT: 5.176 min Scan# 695
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

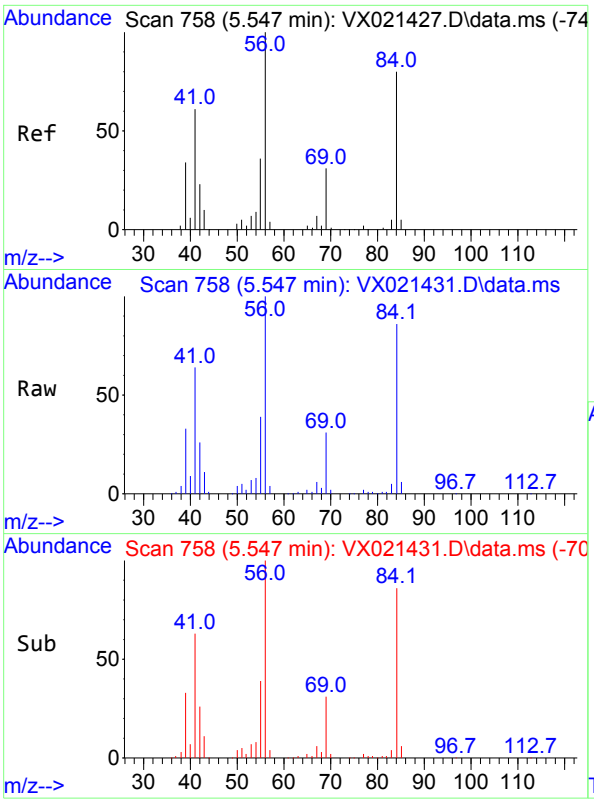
Tgt Ion: 83 Resp: 95242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.8 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

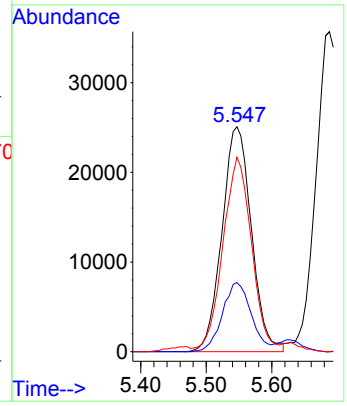
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

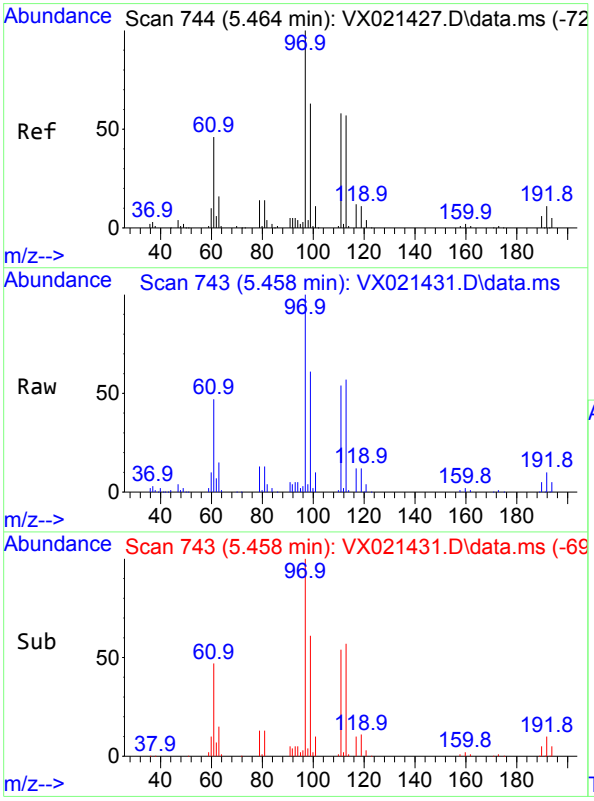



#31
Cyclohexane
Concen: 49.74 ug/l
RT: 5.547 min Scan# 758
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 56 Resp: 78196

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.7 | 25.3 | 37.9 |
| 84 | 84.3 | 71.4 | 107.0 |

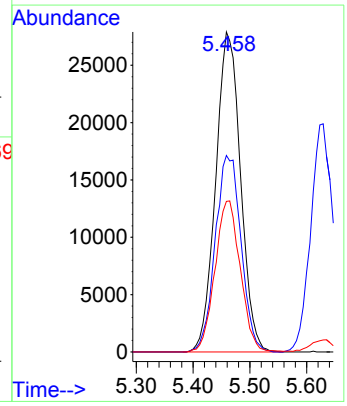



#32
1,1,1-Trichloroethane
Concen: 49.22 ug/l
RT: 5.458 min Scan# 743
Delta R.T. -0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

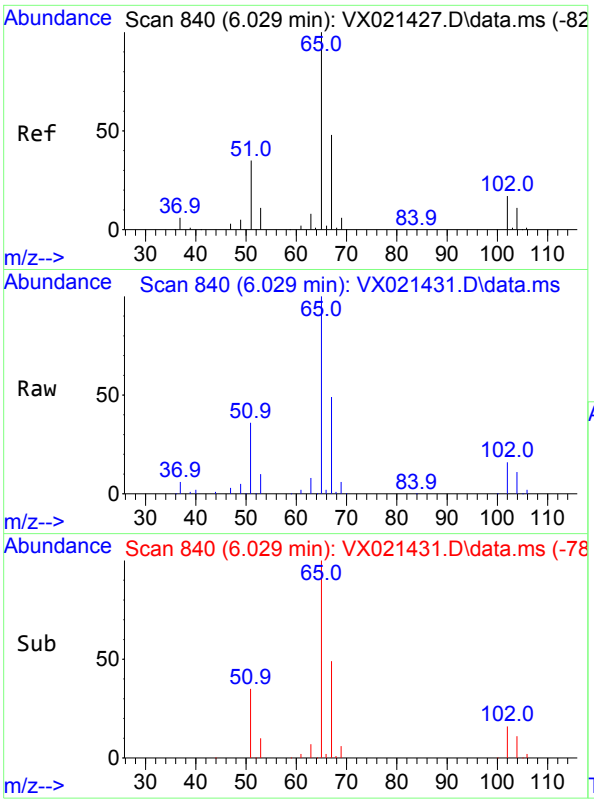
Tgt Ion: 97 Resp: 84744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 63.9 | 51.5 | 77.3 |
| 61 | 48.2 | 34.2 | 51.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

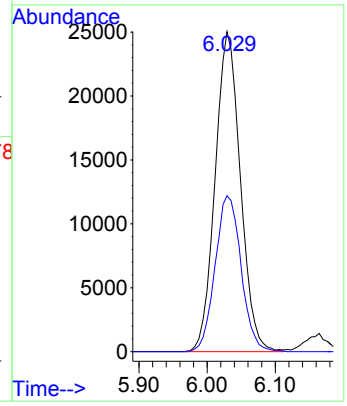
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

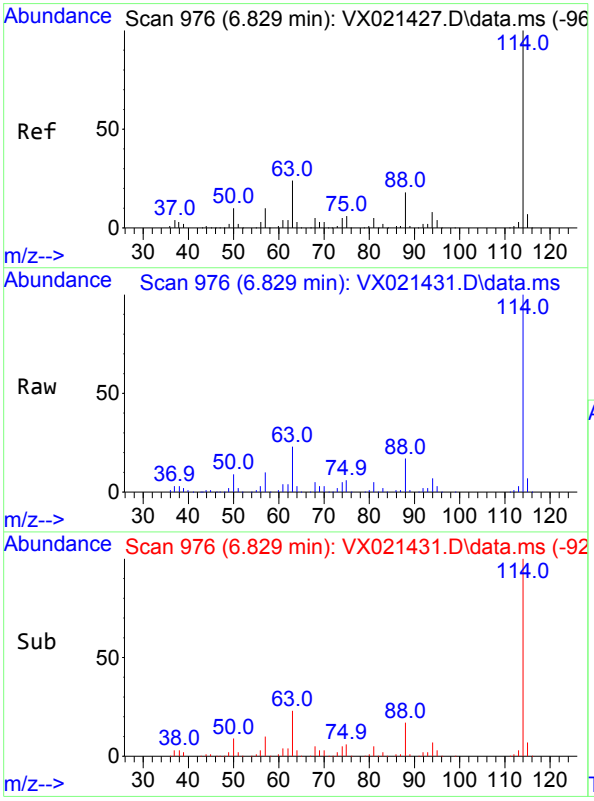



#33
1,2-Dichloroethane-d4
Concen: 45.11 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 65 Resp: 64489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.2 | 0.0 | 105.4 |

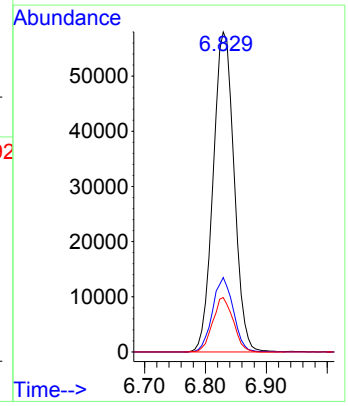



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

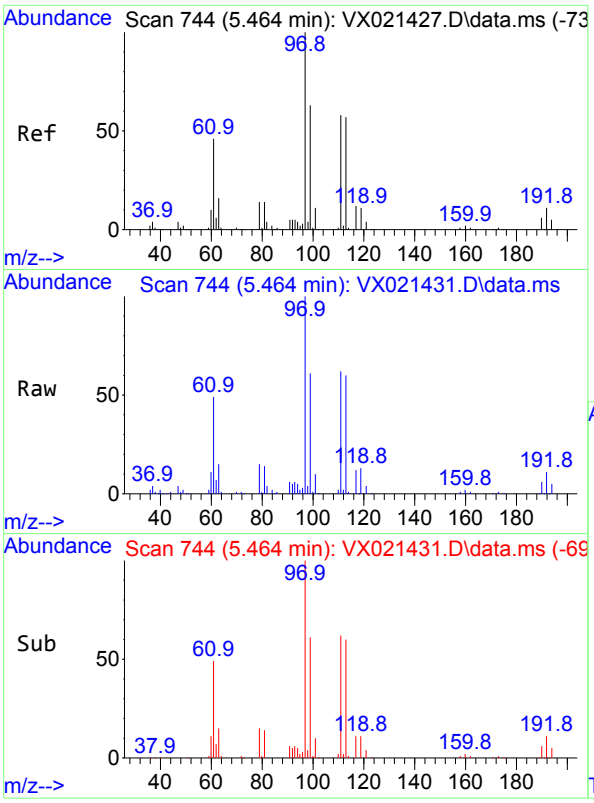
Tgt Ion:114 Resp: 138830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.2 | 0.0 | 40.8 |
| 88 | 17.0 | 0.0 | 32.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

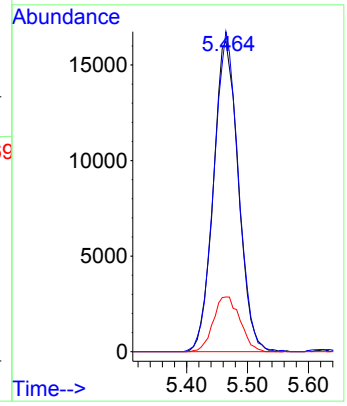
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

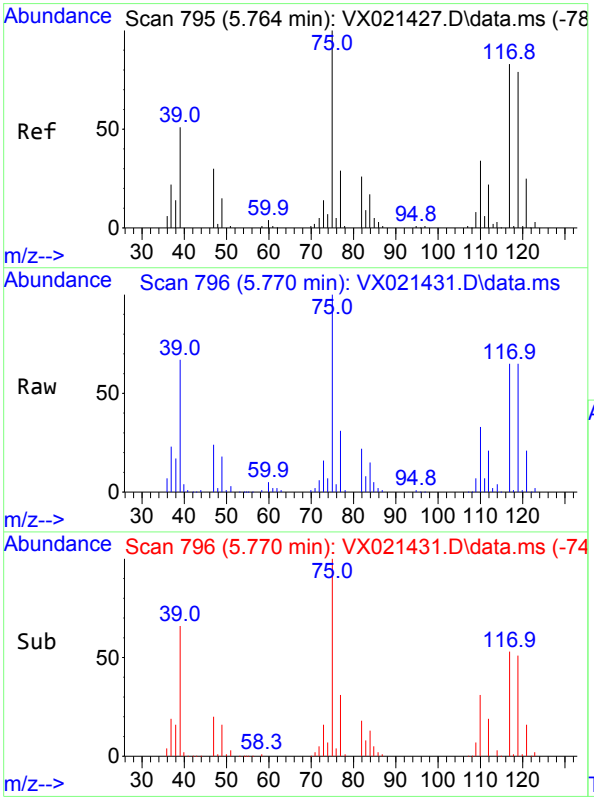



#35
Dibromofluoromethane
Concen: 46.95 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:113 Resp: 46301

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 100.9 | 81.9 | 122.9 |
| 192 | 18.9 | 16.7 | 25.1 |

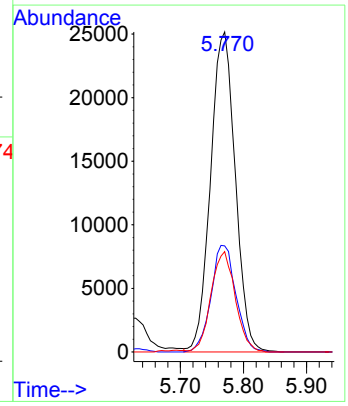



#36
1,1-Dichloropropene
Concen: 50.37 ug/l
RT: 5.770 min Scan# 796
Delta R.T. 0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

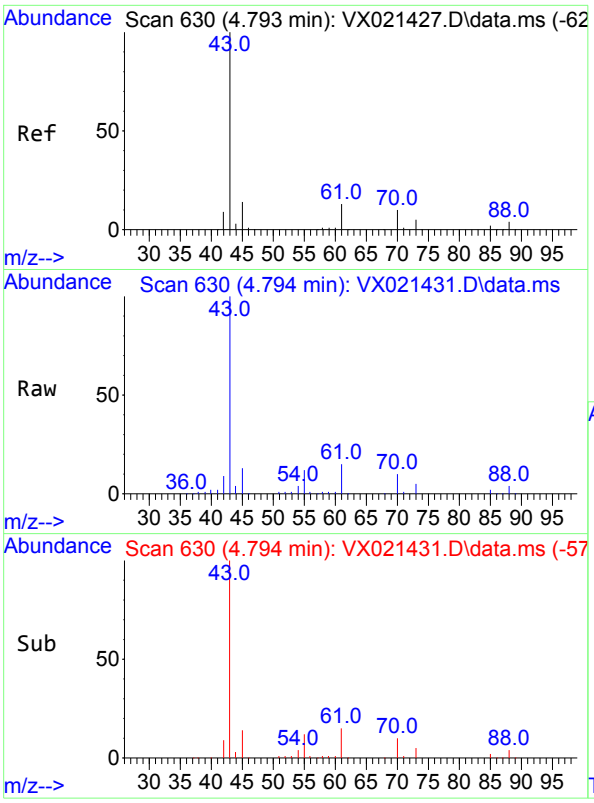
Tgt Ion: 75 Resp: 68516

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.5 | 18.1 | 54.4 |
| 77 | 30.8 | 25.3 | 37.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

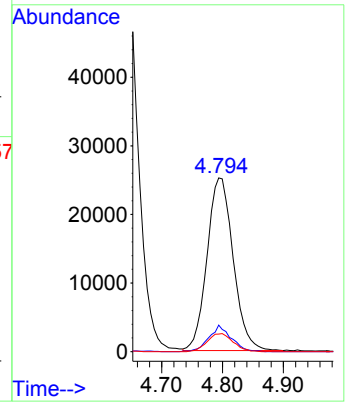
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

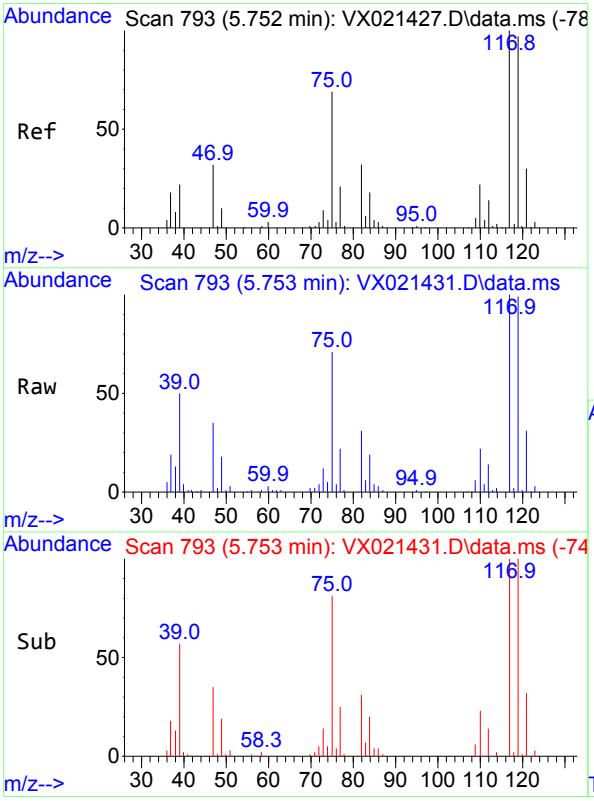



#37
Ethyl Acetate
Concen: 47.79 ug/l
RT: 4.794 min Scan# 630
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 43 Resp: 75175

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.1 | 12.8 | 19.2 |
| 70 | 10.4 | 10.5 | 15.7# |

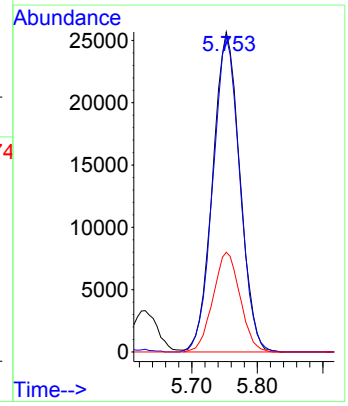



#38
Carbon Tetrachloride
Concen: 50.61 ug/l
RT: 5.753 min Scan# 793
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

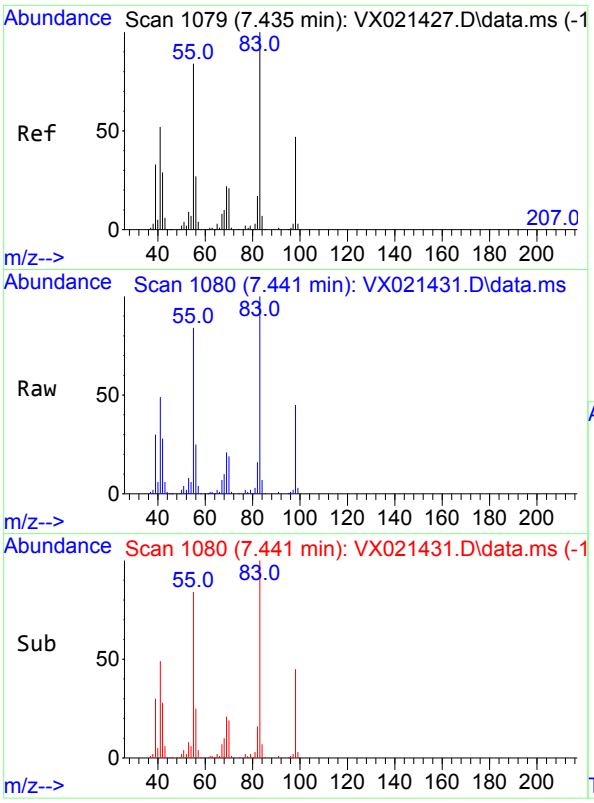
Tgt Ion:117 Resp: 73978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 98.6 | 76.2 | 114.2 |
| 121 | 31.1 | 24.8 | 37.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

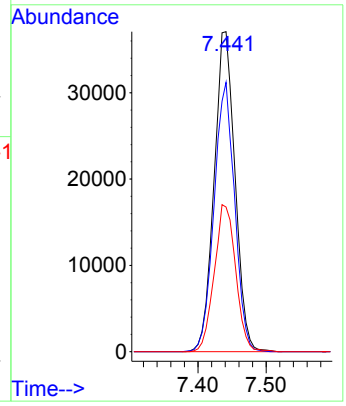
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

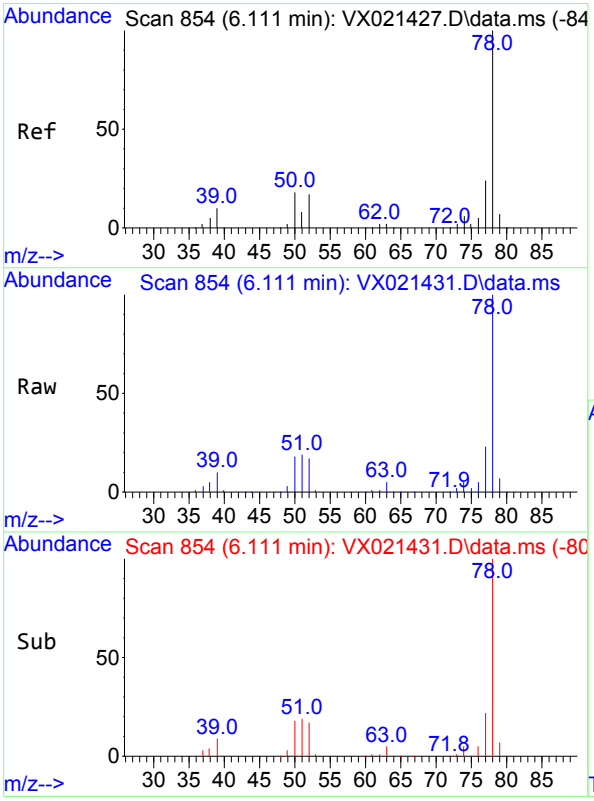



#39
Methylcyclohexane
Concen: 52.52 ug/l
RT: 7.441 min Scan# 1080
Delta R.T. 0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 83 Resp: 79198

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 84.2 | 58.9 | 88.3 |
| 98 | 45.2 | 38.1 | 57.1 |

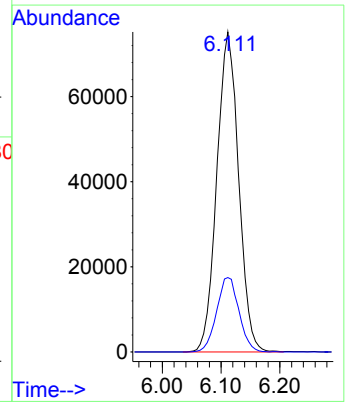



#40
Benzene
Concen: 50.11 ug/l
RT: 6.111 min Scan# 854
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

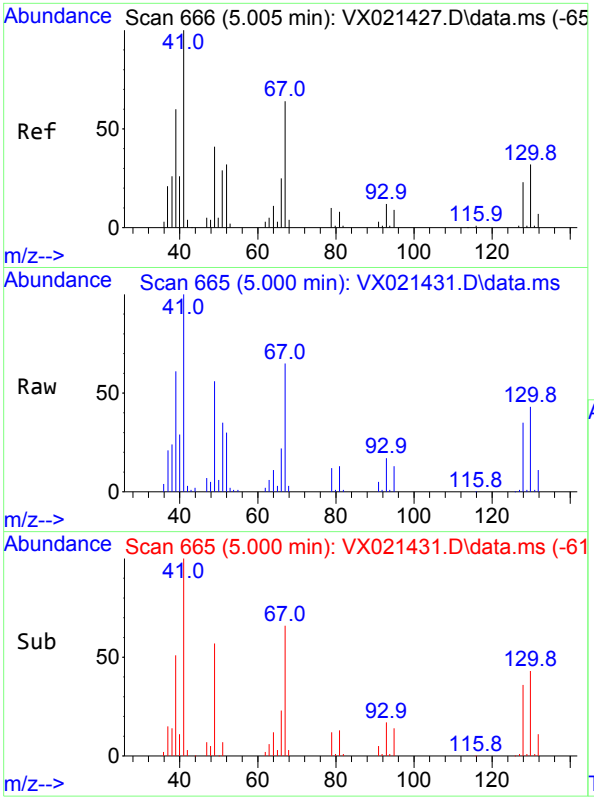
Tgt Ion: 78 Resp: 193565

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.2 | 18.9 | 28.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

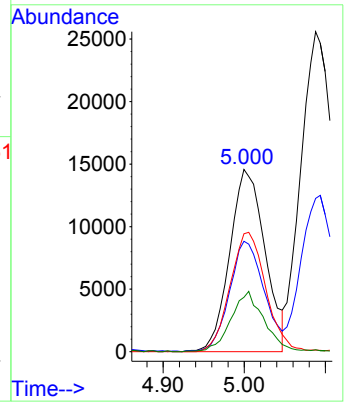
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

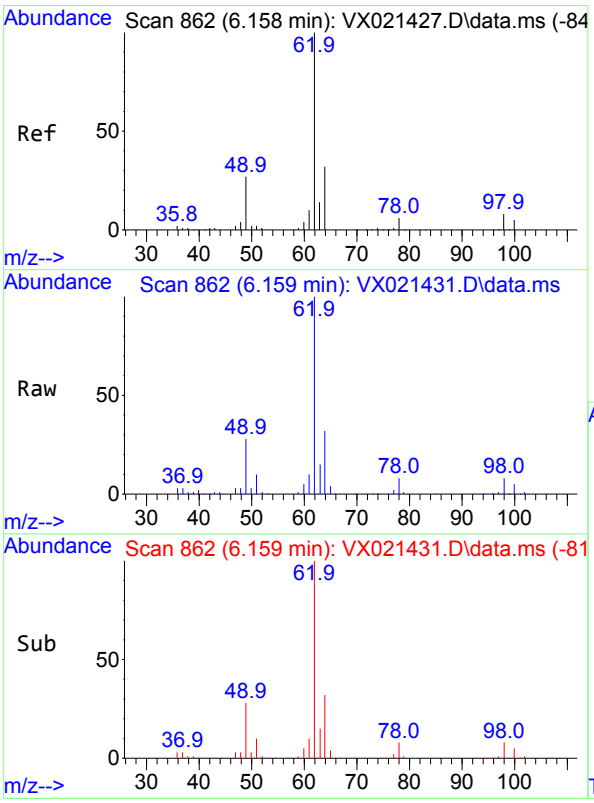



#41
Methacrylonitrile
Concen: 48.32 ug/l
RT: 5.000 min Scan# 665
Delta R.T. -0.005 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 41 Resp: 44080

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 59.7 | 42.5 | 63.7 |
| 67 | 66.4 | 65.0 | 97.6 |
| 52 | 31.4 | 25.3 | 37.9 |

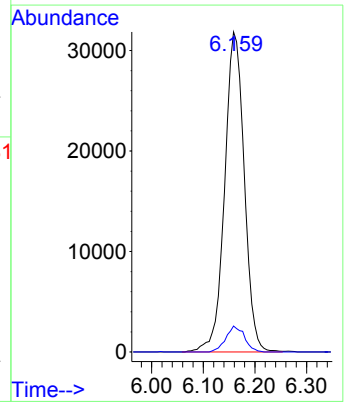



#42
1,2-Dichloroethane
Concen: 50.20 ug/l
RT: 6.159 min Scan# 862
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

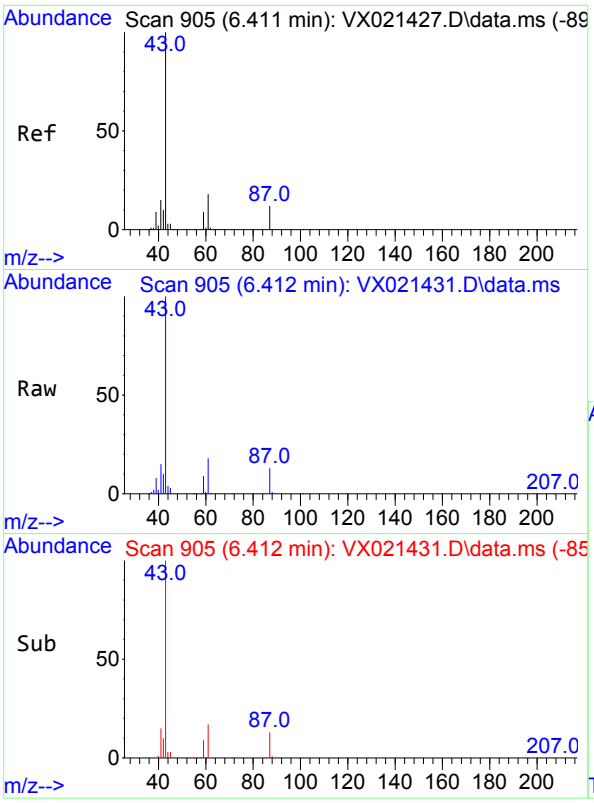
Tgt Ion: 62 Resp: 84072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.7 | 0.0 | 20.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

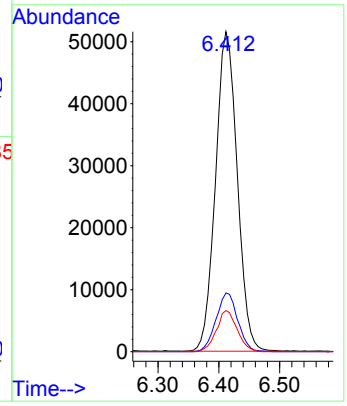
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

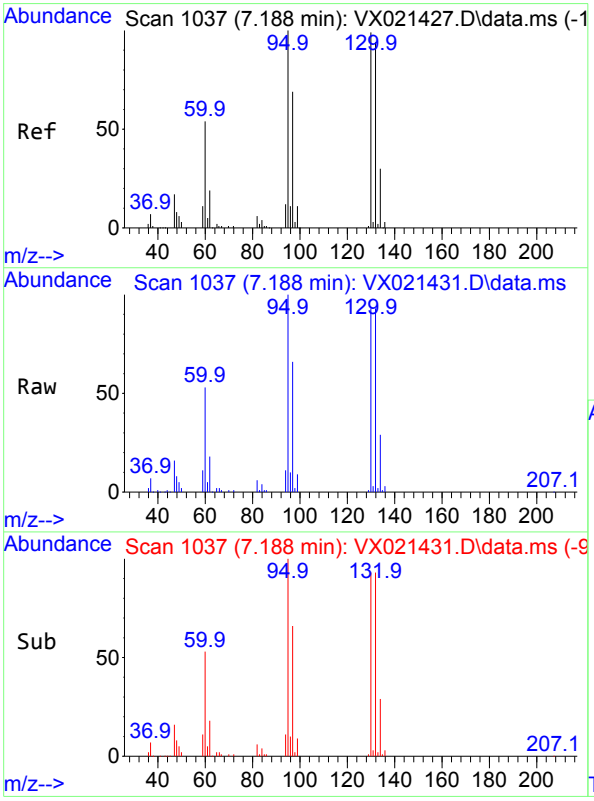



#43
Isopropyl Acetate
Concen: 49.99 ug/l
RT: 6.412 min Scan# 905
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 43 Resp: 127670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.4 | 18.2 | 27.4 |
| 87 | 12.2 | 12.5 | 18.7# |

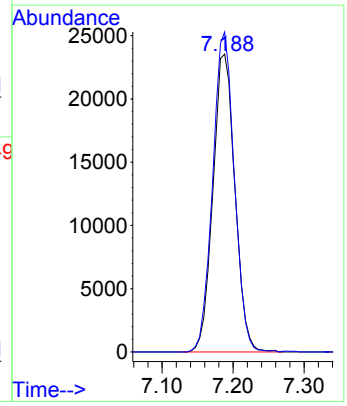



#44
Trichloroethene
Concen: 49.66 ug/l
RT: 7.188 min Scan# 1037
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

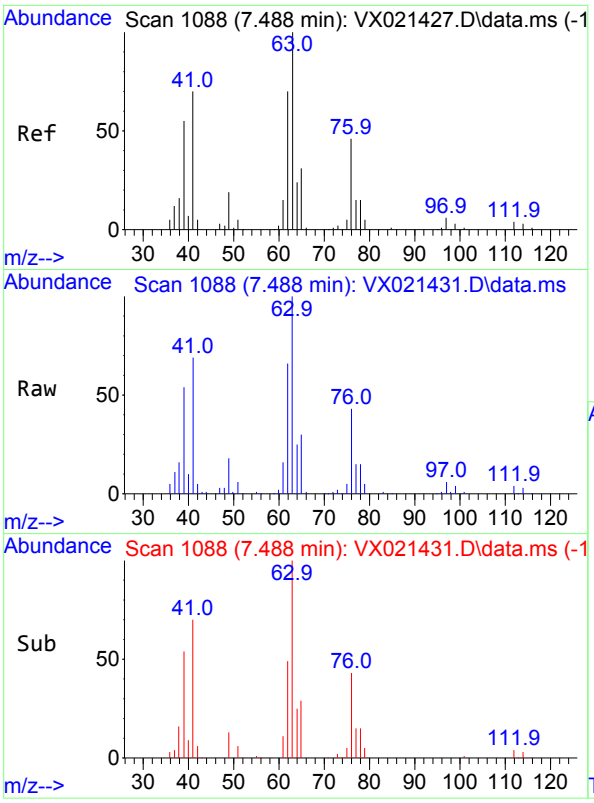
Tgt Ion:130 Resp: 50616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 107.4 | 0.0 | 198.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

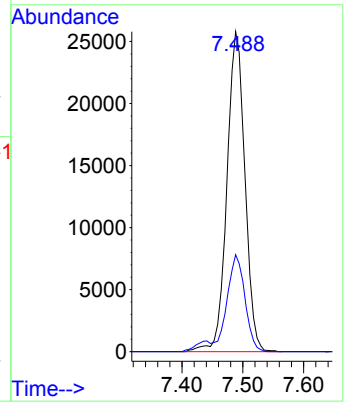
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

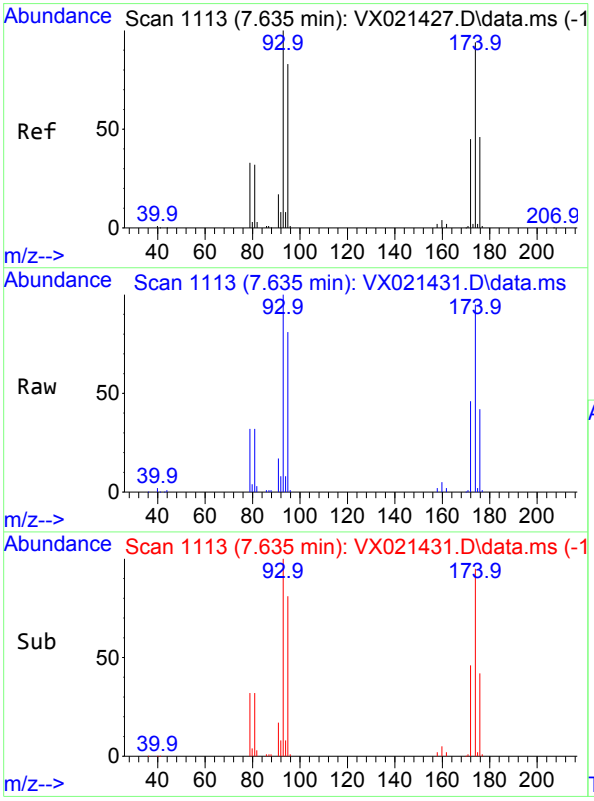



#45
1,2-Dichloropropane
Concen: 50.67 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 63 Resp: 53017

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.3 | 25.7 | 38.5 |

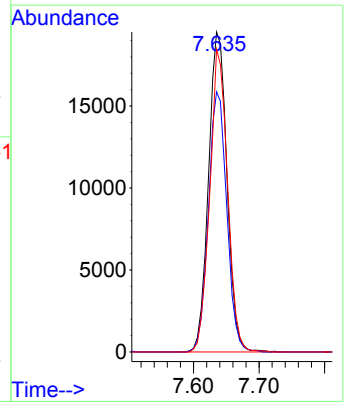



#46
Dibromomethane
Concen: 50.08 ug/l
RT: 7.635 min Scan# 1113
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

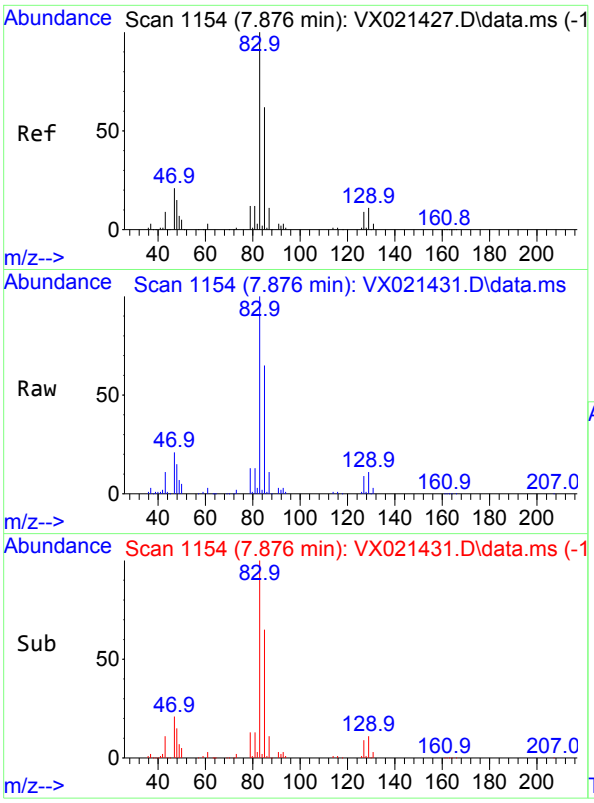
Tgt Ion: 93 Resp: 38191

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 81.2 | 66.8 | 100.2 |
| 174 | 91.2 | 83.1 | 124.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

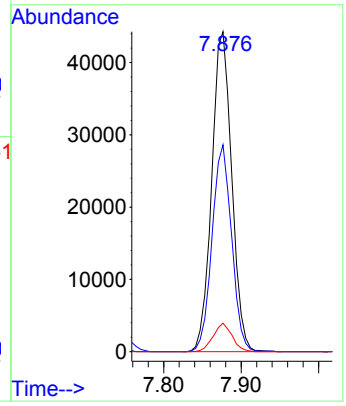
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

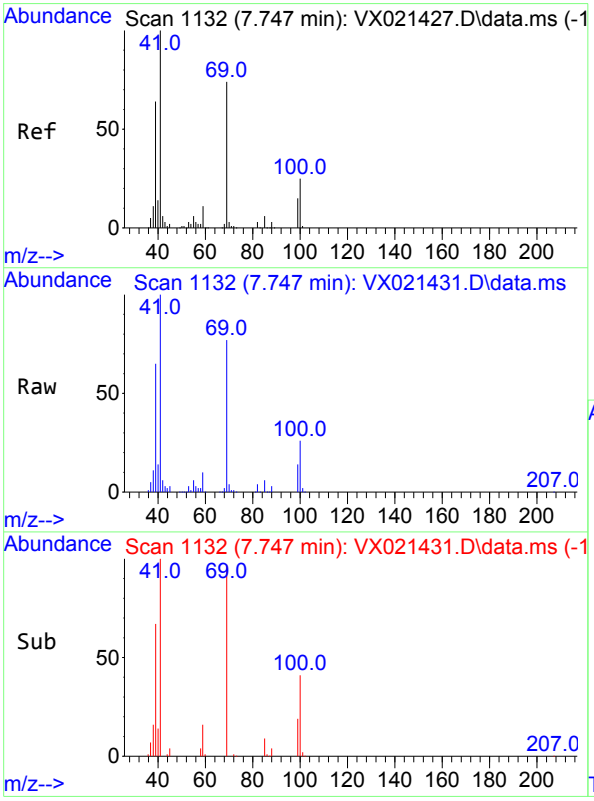



#47
Bromodichloromethane
Concen: 51.05 ug/l
RT: 7.876 min Scan# 1154
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 83 Resp: 79237

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.6 | 51.4 | 77.0 |
| 127 | 8.9 | 6.8 | 10.2 |

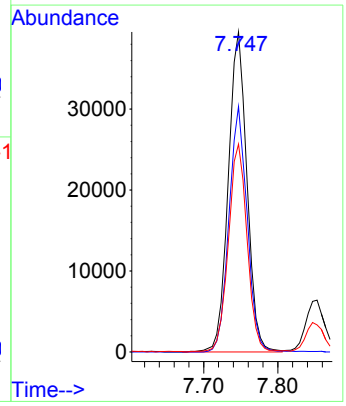



#48
Methyl methacrylate
Concen: 50.72 ug/l
RT: 7.747 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

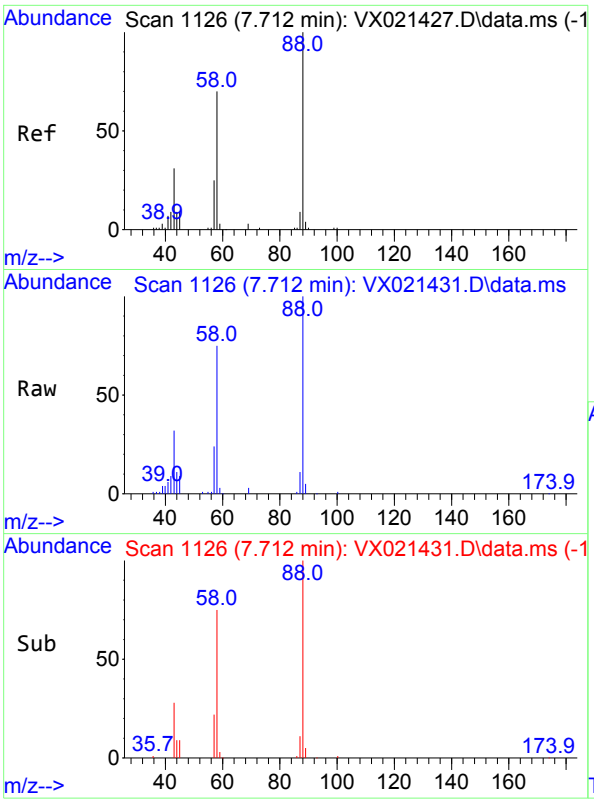
Tgt Ion: 41 Resp: 69096

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 74.8 | 76.0 | 114.0# |
| 39 | 65.1 | 44.6 | 67.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

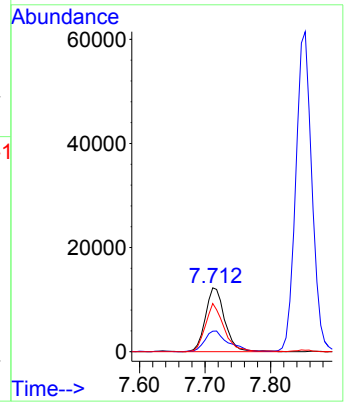
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

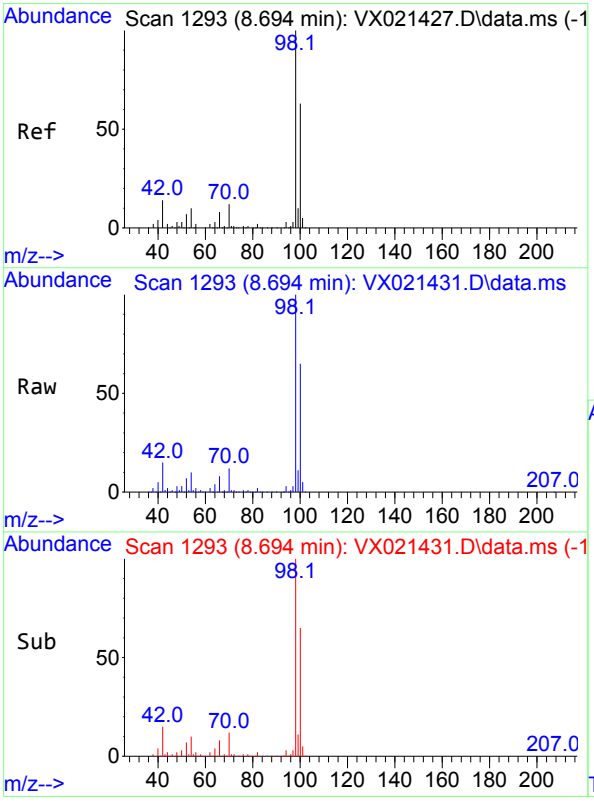



#49
1,4-Dioxane
Concen: 1025.81 ug/l
RT: 7.712 min Scan# 1126
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 88 Resp: 25020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 39.6 | 23.2 | 34.8# |
| 58 | 72.5 | 55.0 | 82.4 |

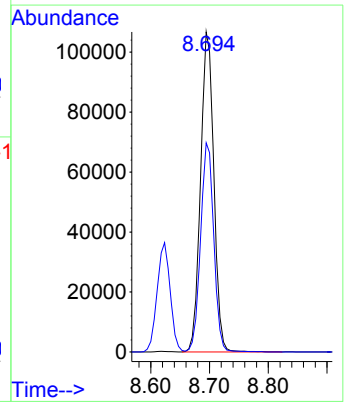



#50
Toluene-d8
Concen: 47.56 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

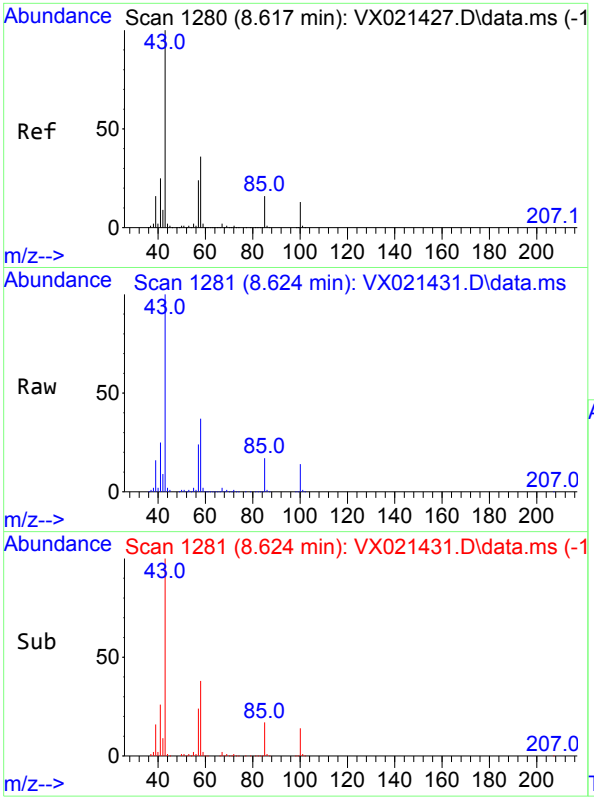
Tgt Ion: 98 Resp: 167144

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 65.1 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

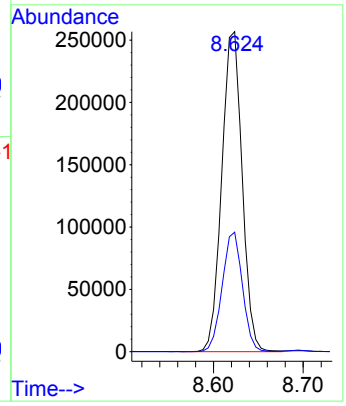
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

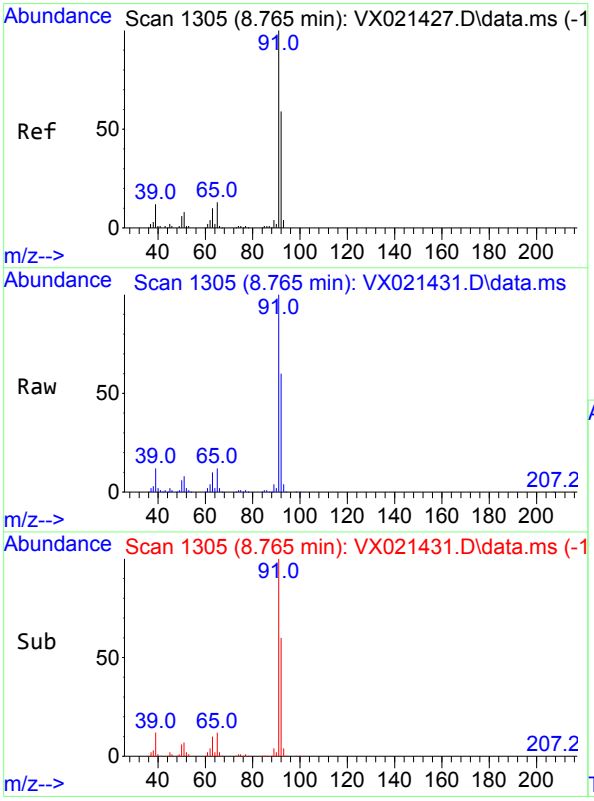



#51
4-Methyl-2-Pentanone
Concen: 258.01 ug/l
RT: 8.624 min Scan# 1281
Delta R.T. 0.007 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 43 Resp: 405305

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.0 | 35.4 | 53.0 |

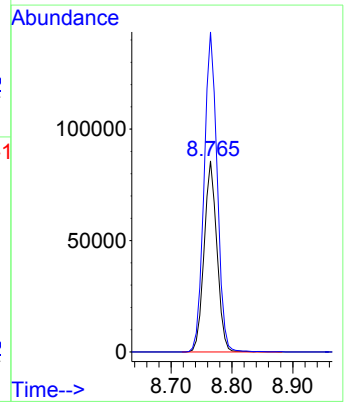



#52
Toluene
Concen: 52.62 ug/l
RT: 8.765 min Scan# 1305
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

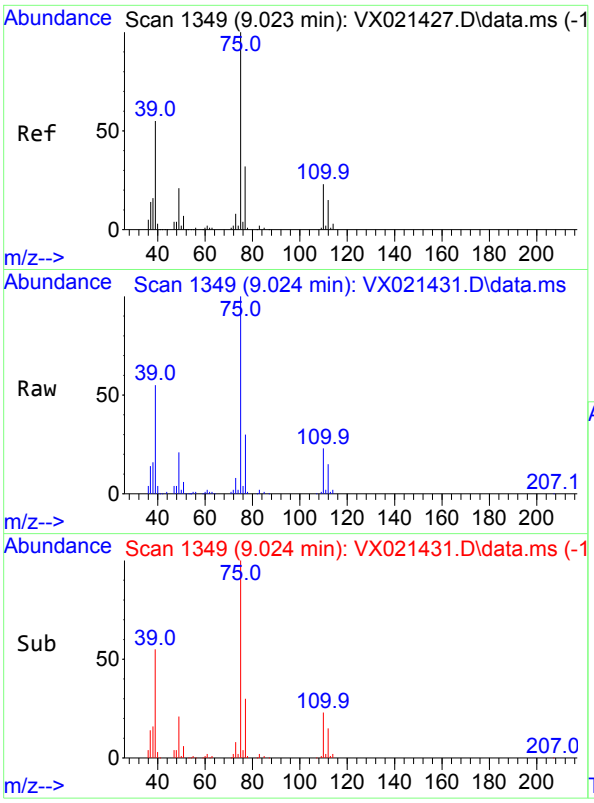
Tgt Ion: 92 Resp: 125547

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 170.9 | 137.1 | 205.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

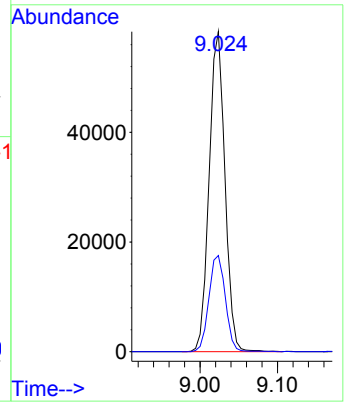
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

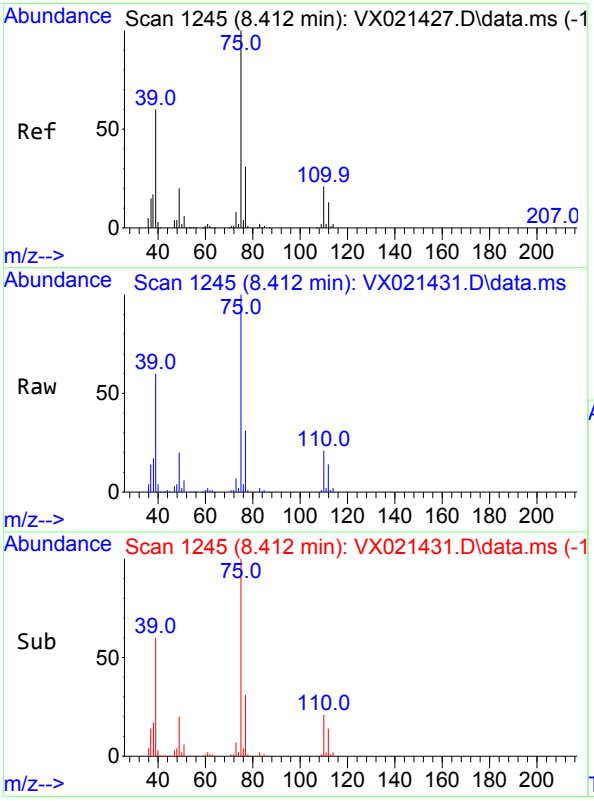



#53
t-1,3-Dichloropropene
Concen: 52.65 ug/l
RT: 9.024 min Scan# 1349
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 75 Resp: 82519

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.1 | 24.9 | 37.3 |

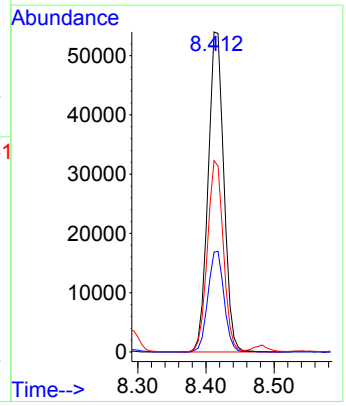



#54
cis-1,3-Dichloropropene
Concen: 52.12 ug/l
RT: 8.412 min Scan# 1245
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

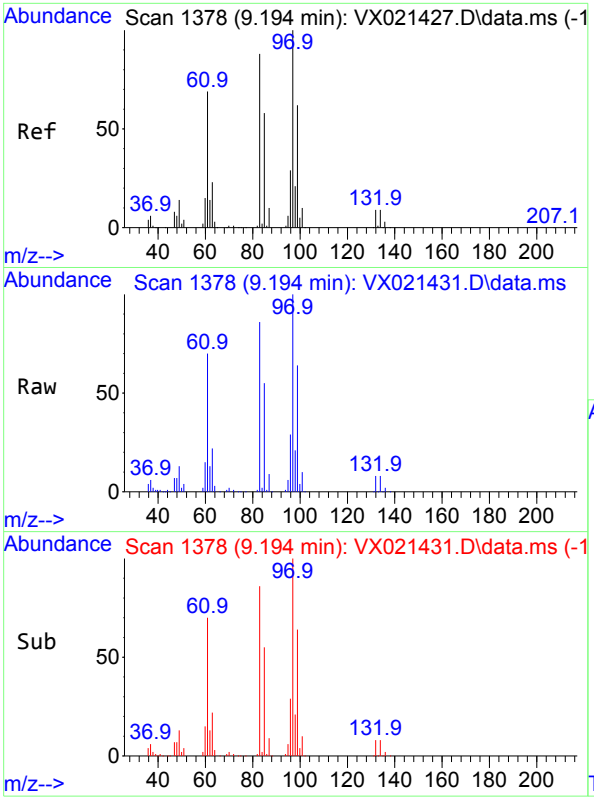
Tgt Ion: 75 Resp: 86927

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.2 | 25.7 | 38.5 |
| 39 | 59.6 | 35.1 | 52.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

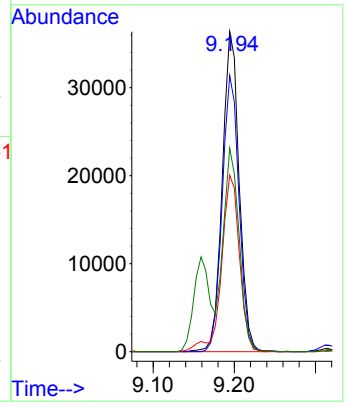
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

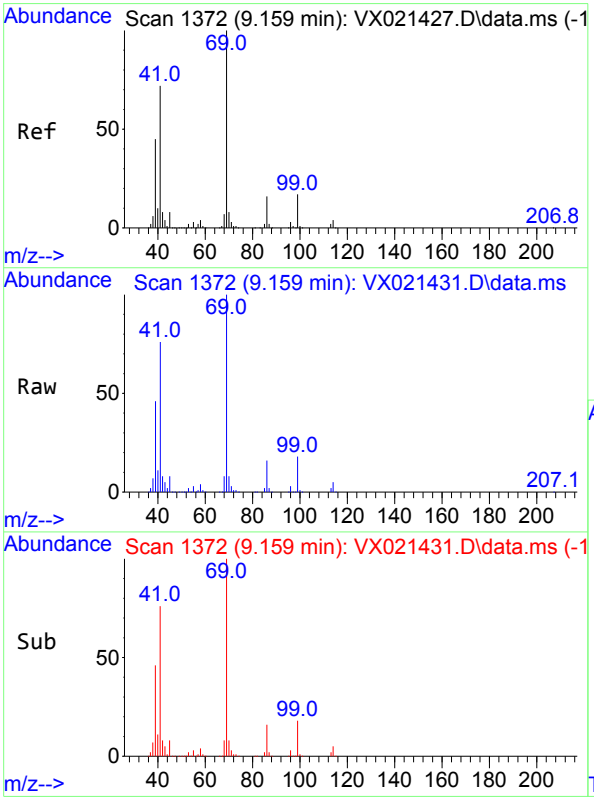



#55
1,1,2-Trichloroethane
Concen: 52.27 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 97 Resp: 52639

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 86.2 | 69.3 | 103.9 |
| 85 | 55.2 | 44.3 | 66.5 |
| 99 | 63.6 | 50.3 | 75.5 |

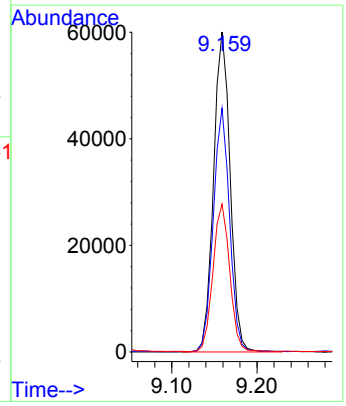



#56
Ethyl methacrylate
Concen: 47.91 ug/l
RT: 9.159 min Scan# 1372
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

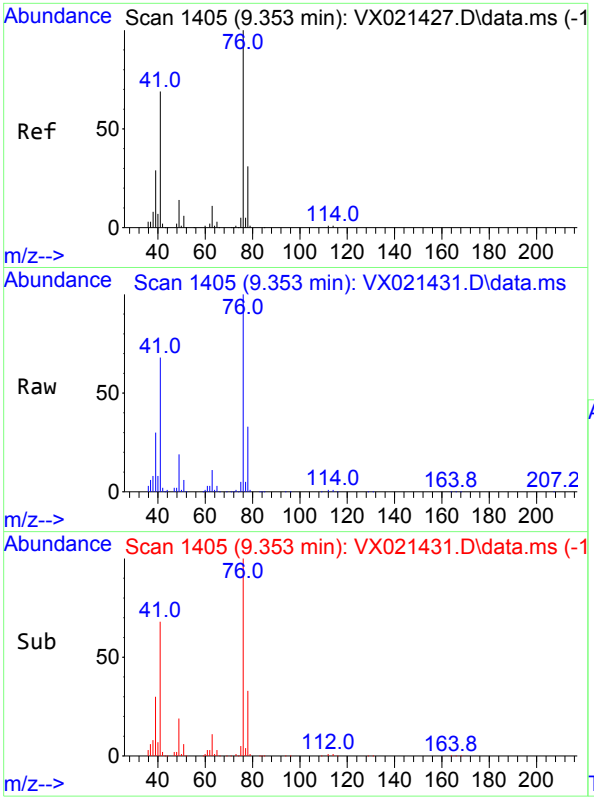
Tgt Ion: 69 Resp: 81341

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 74.7 | 46.8 | 70.2# |
| 39 | 46.5 | 24.7 | 37.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

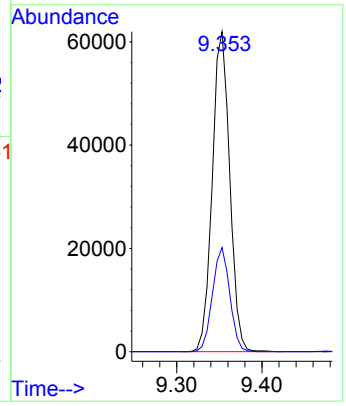
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

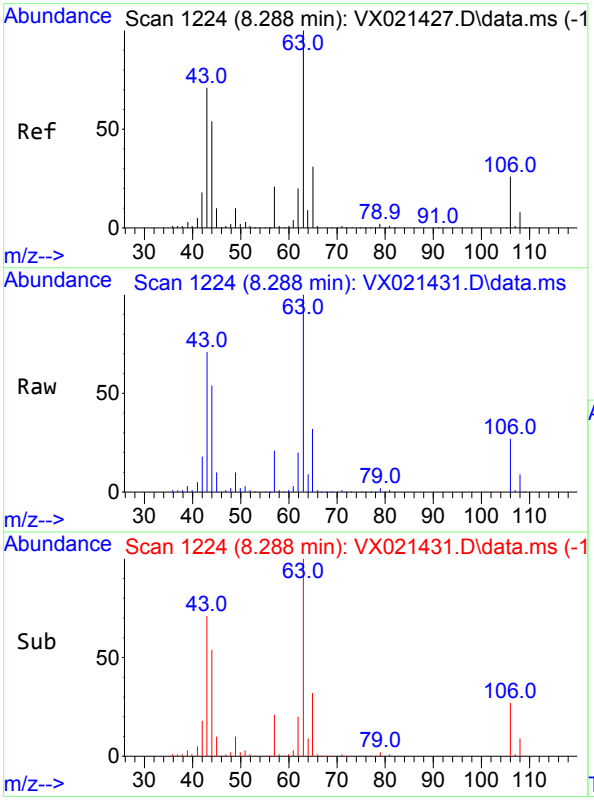



#57
1,3-Dichloropropane
Concen: 51.25 ug/l
RT: 9.353 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 76 Resp: 88319

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.2 | 26.2 | 39.2 |

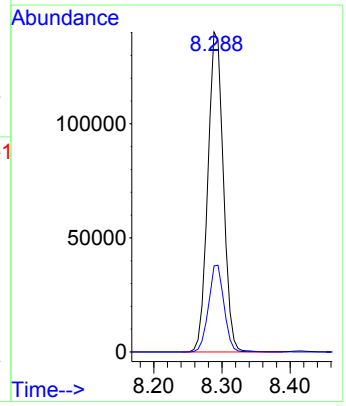



#58
2-Chloroethyl Vinyl ether
Concen: 260.72 ug/l
RT: 8.288 min Scan# 1224
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

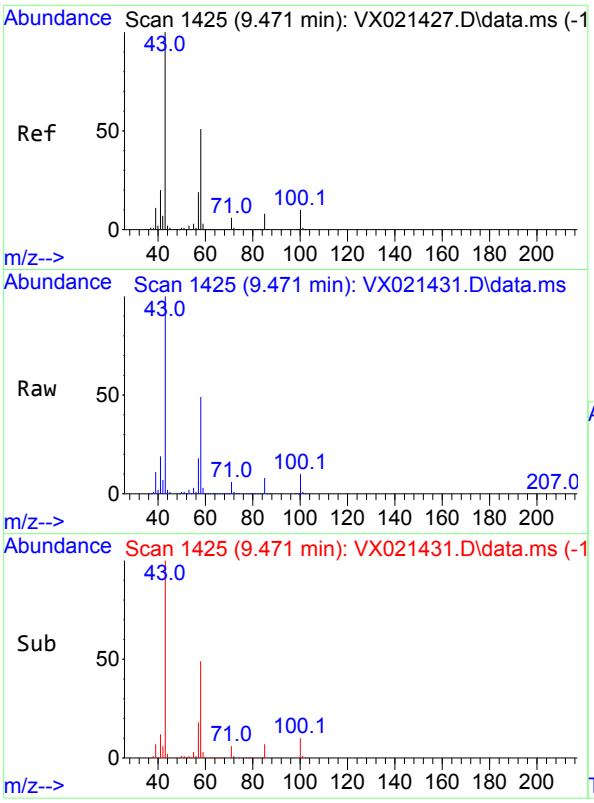
Tgt Ion: 63 Resp: 221880

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 27.0 | 23.5 | 35.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

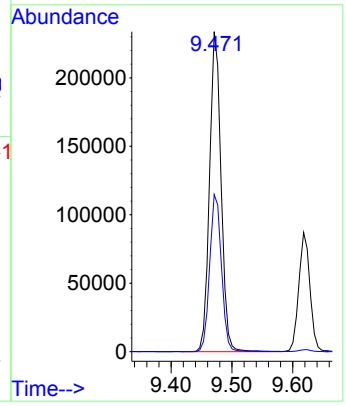
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

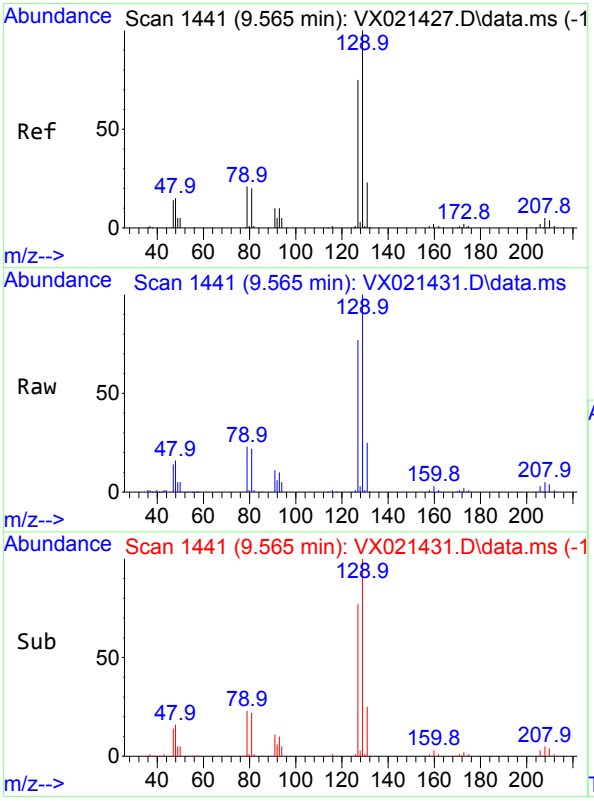



#59
2-Hexanone
Concen: 260.39 ug/l
RT: 9.471 min Scan# 1425
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 43 Resp: 307140

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 50.3 | 30.9 | 92.8 |

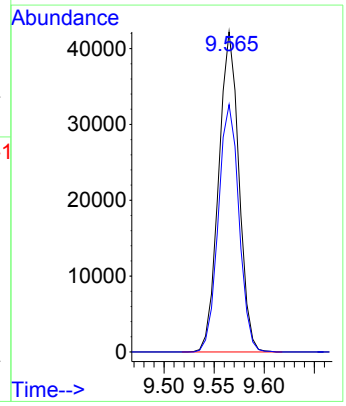



#60
Dibromochloromethane
Concen: 52.49 ug/l
RT: 9.565 min Scan# 1441
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

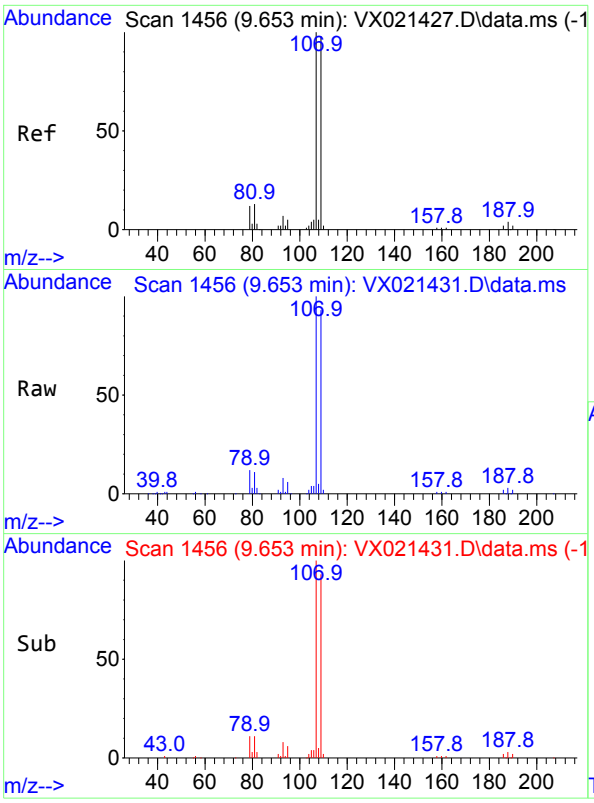
Tgt Ion:129 Resp: 59207

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.7 | 38.4 | 115.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

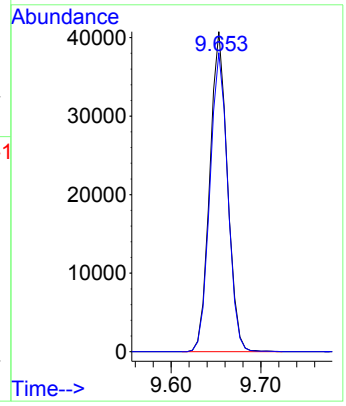
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

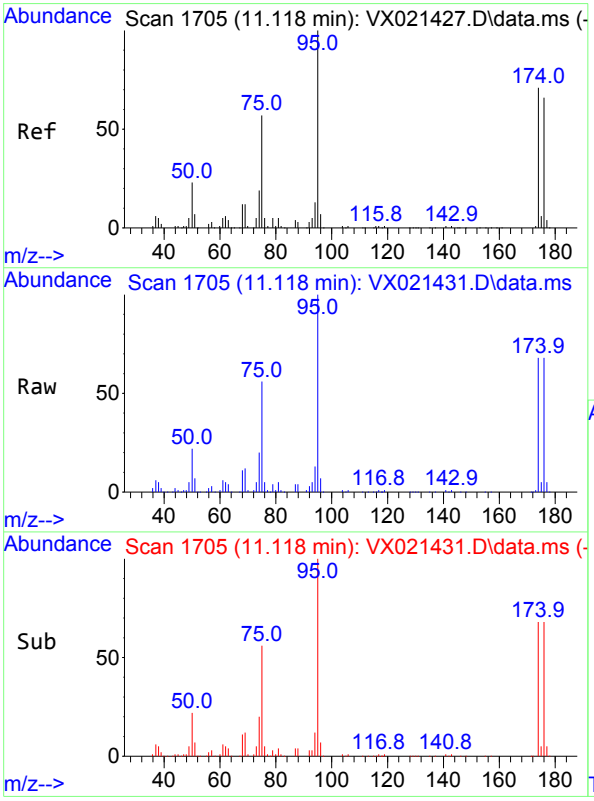



#61
1,2-Dibromoethane
Concen: 51.44 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:107 Resp: 55650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.5 | 75.8 | 113.6 |

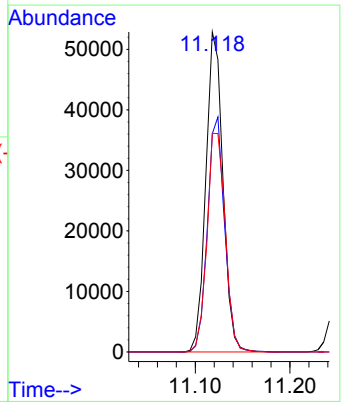



#62
4-Bromofluorobenzene
Concen: 48.40 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

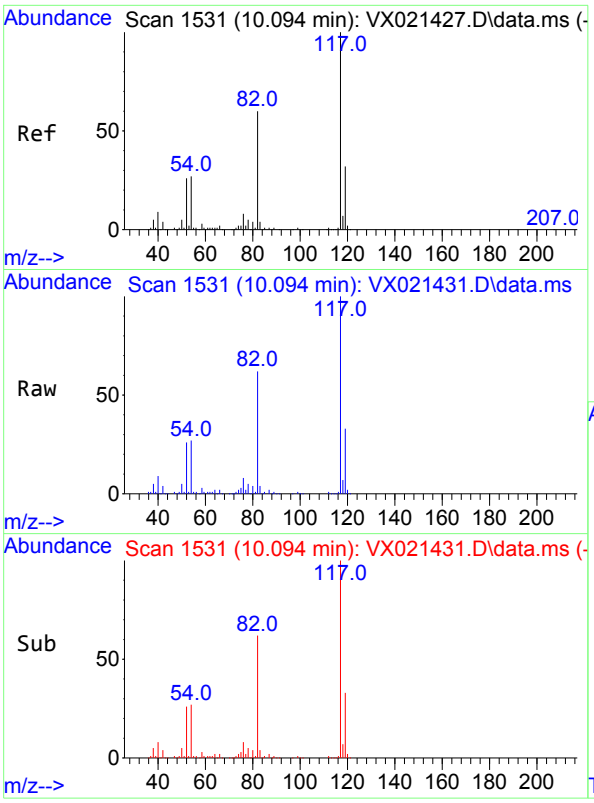
Tgt Ion: 95 Resp: 66126

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.8 | 0.0 | 154.6 |
| 176 | 73.1 | 0.0 | 155.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

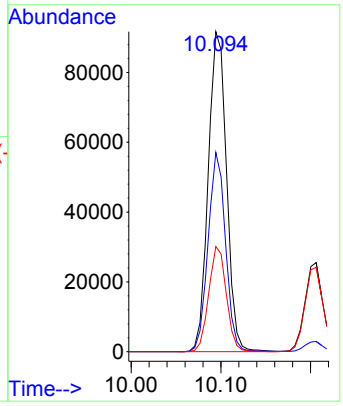
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

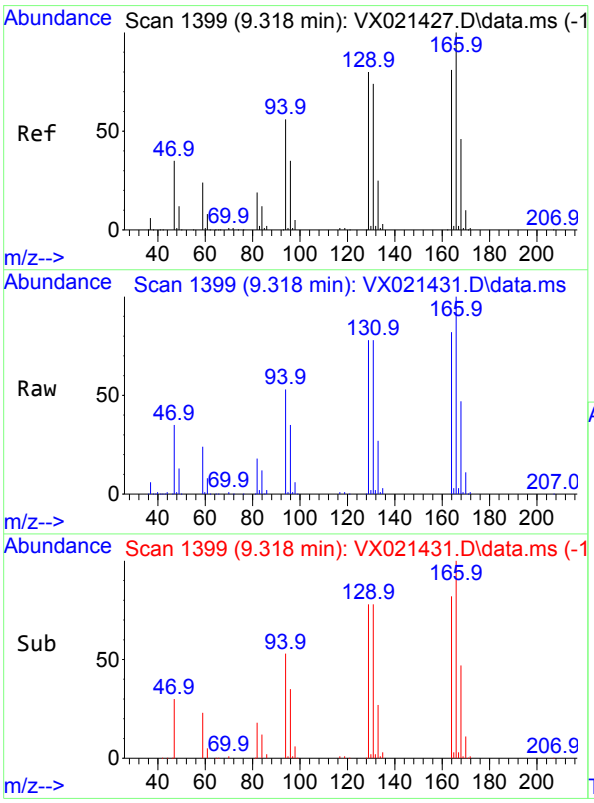



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:117 Resp: 129853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 62.2 | 47.4 | 71.2 |
| 119 | 32.8 | 26.6 | 39.8 |

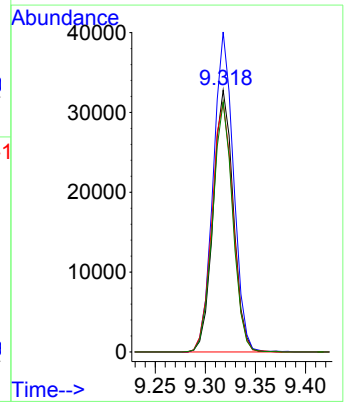



#64
Tetrachloroethene
Concen: 52.61 ug/l
RT: 9.318 min Scan# 1399
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

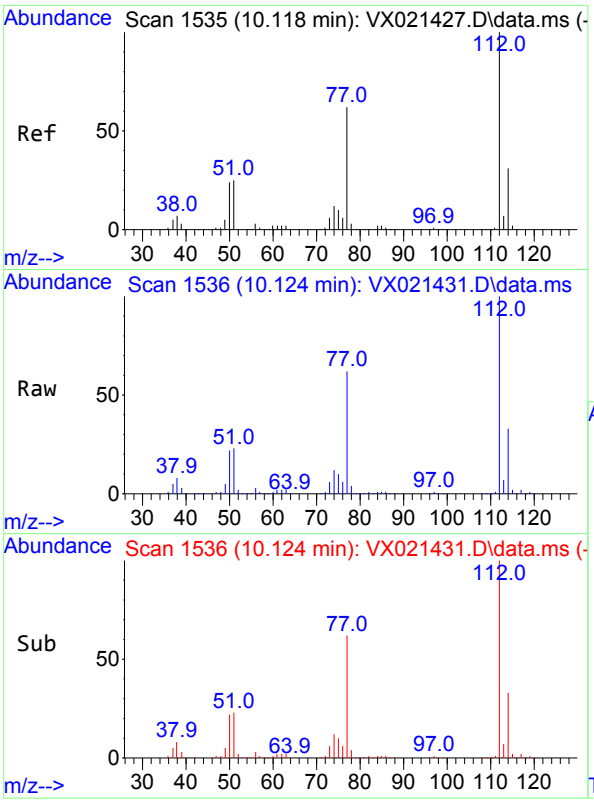
Tgt Ion:164 Resp: 45762

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 122.3 | 103.4 | 155.2 |
| 129 | 95.4 | 70.8 | 106.2 |
| 131 | 95.5 | 72.5 | 108.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

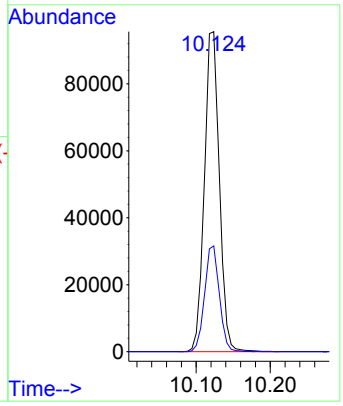
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

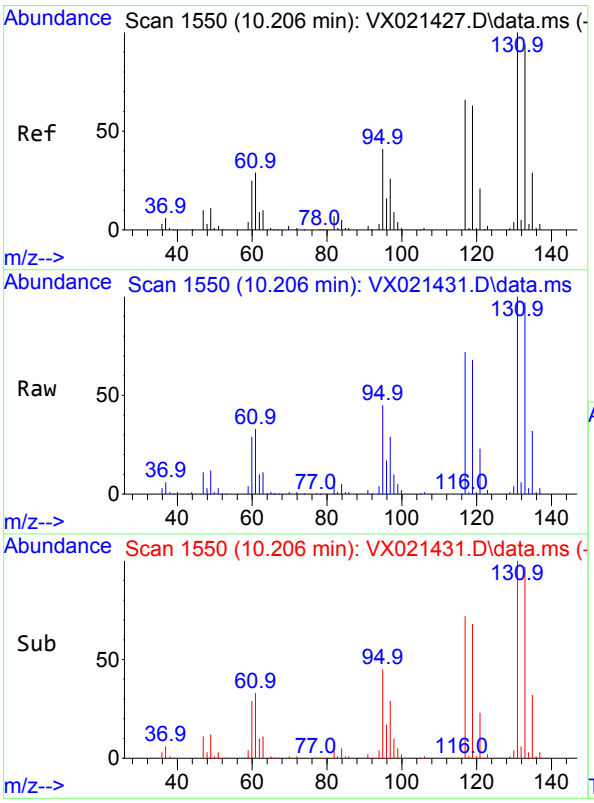



#65
Chlorobenzene
Concen: 51.40 ug/l
RT: 10.124 min Scan# 1536
Delta R.T. 0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:112 Resp: 134081

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 33.1 | 25.8 | 38.6 |

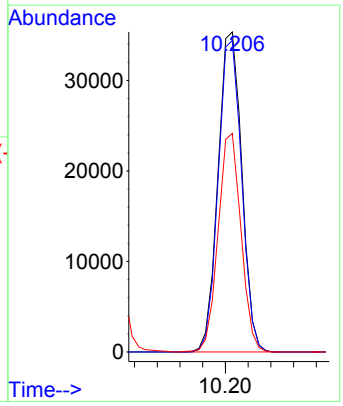



#66
1,1,1,2-Tetrachloroethane
Concen: 51.45 ug/l
RT: 10.206 min Scan# 1550
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

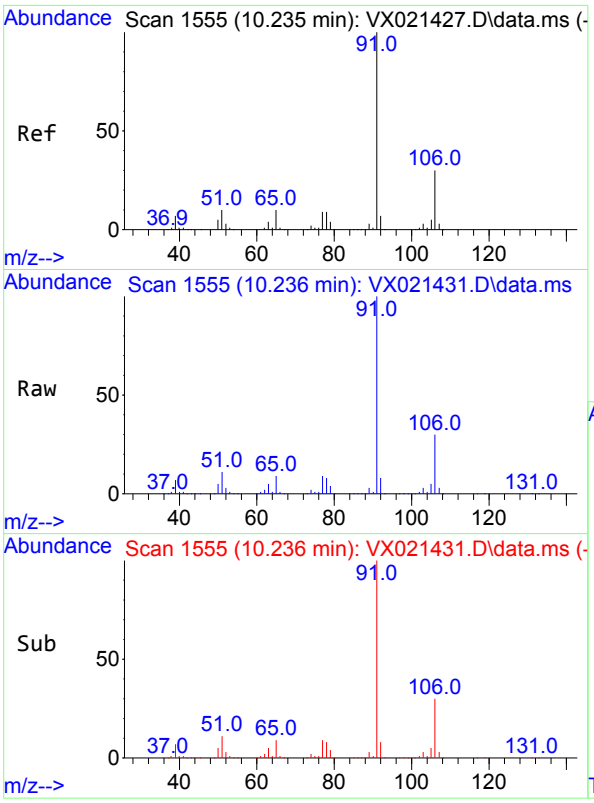
Tgt Ion:131 Resp: 51433

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 95.8 | 47.7 | 143.1 |
| 119 | 65.7 | 32.1 | 96.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

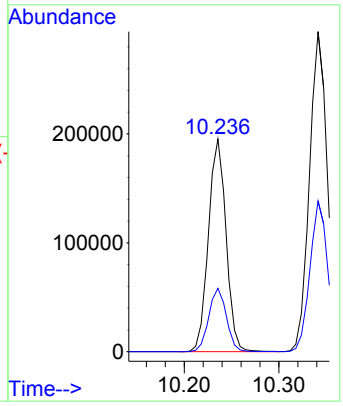
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

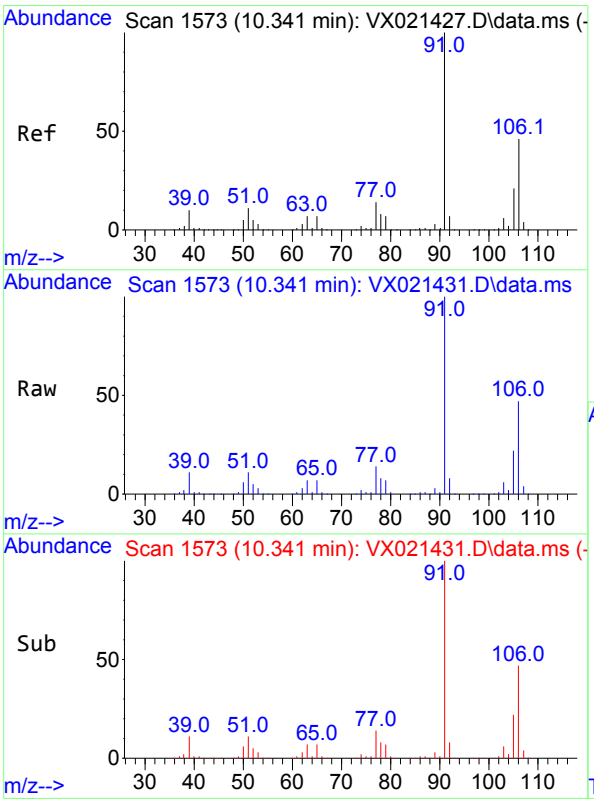



#67
Ethyl Benzene
Concen: 53.19 ug/l
RT: 10.236 min Scan# 1555
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 91 Resp: 252898

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.8 | 24.6 | 37.0 |

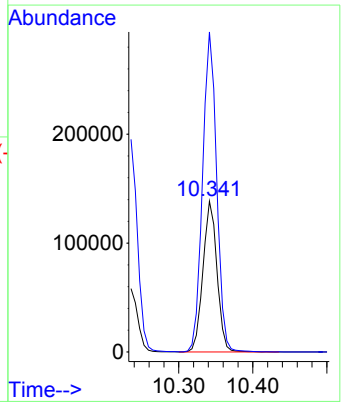



#68
m/p-Xylenes
Concen: 107.58 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

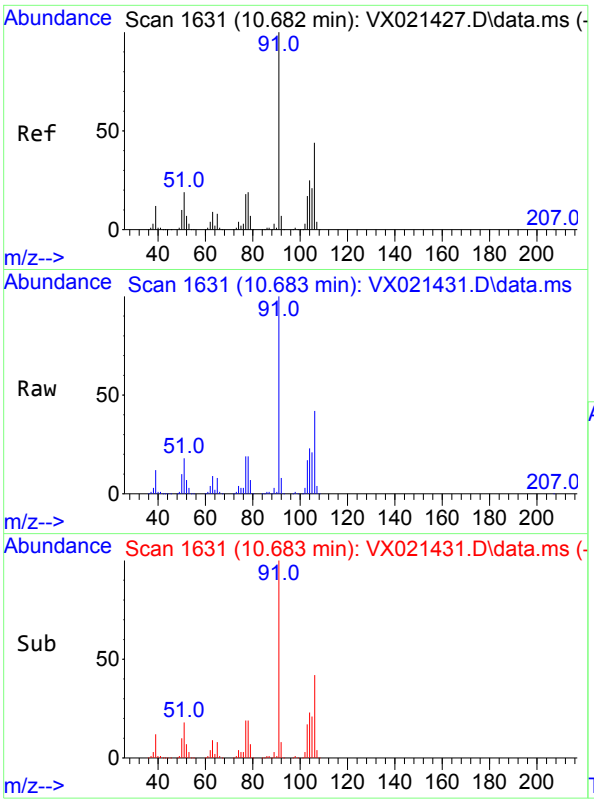
Tgt Ion:106 Resp: 182238

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 213.4 | 162.8 | 244.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

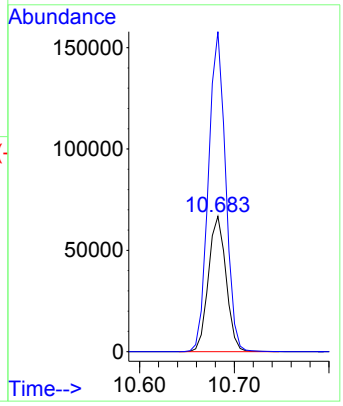
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

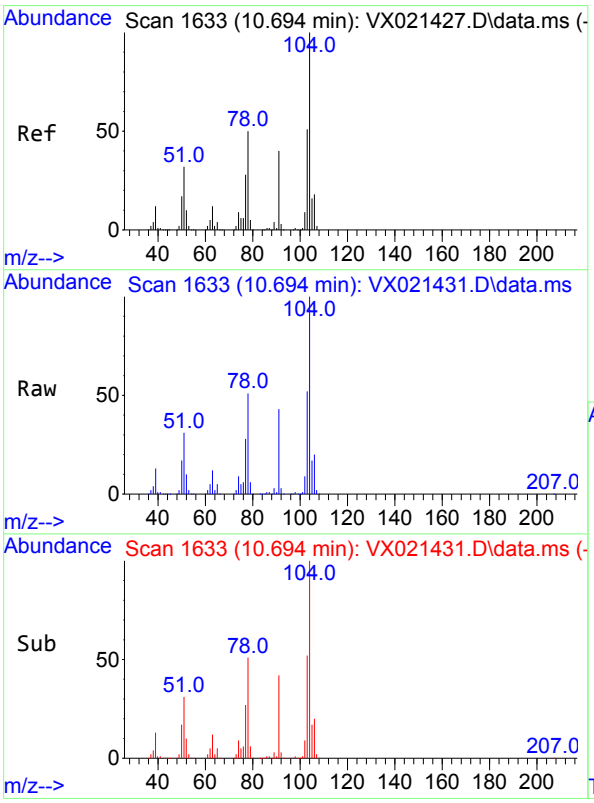



#69
o-Xylene
Concen: 52.83 ug/l
RT: 10.683 min Scan# 1631
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:106 Resp: 86685

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 229.3 | 108.1 | 324.2 |

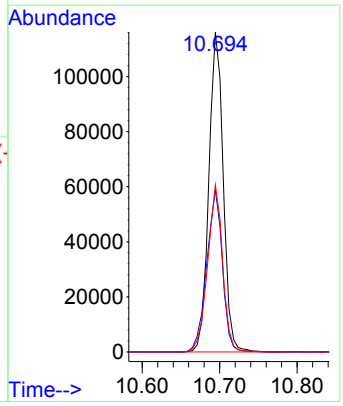



#70
Styrene
Concen: 53.19 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

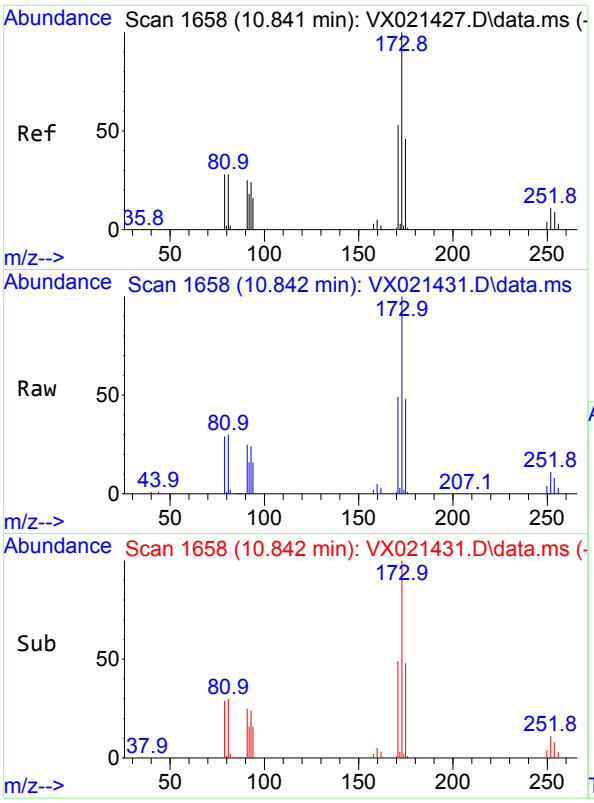
Tgt Ion:104 Resp: 150089

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 55.2 | 40.0 | 60.0 |
| 103 | 54.7 | 43.4 | 65.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

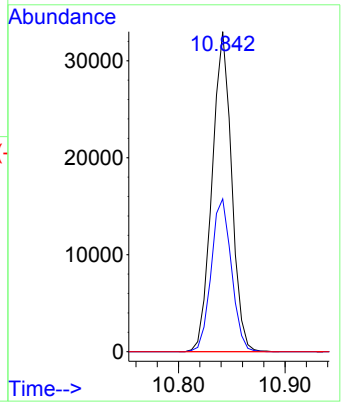
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

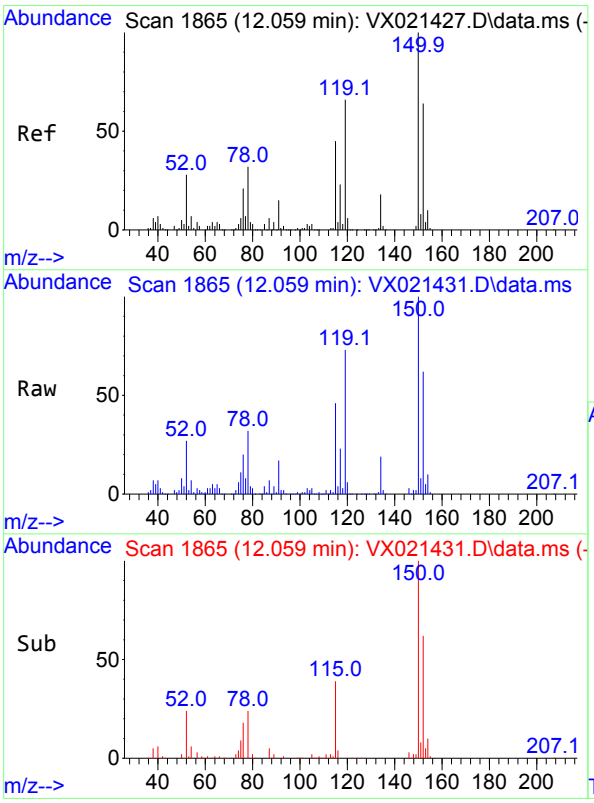



#71
Bromoform
Concen: 51.65 ug/l
RT: 10.842 min Scan# 1658
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:173 Resp: 41954

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.4 | 23.9 | 71.8 |
| 254 | 0.0 | 0.1 | 0.1# |

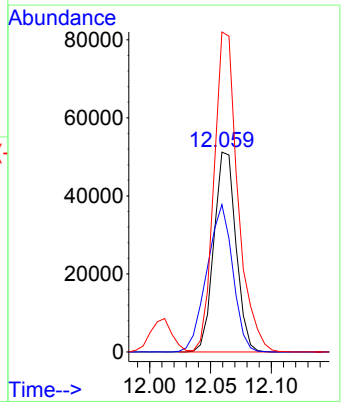



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

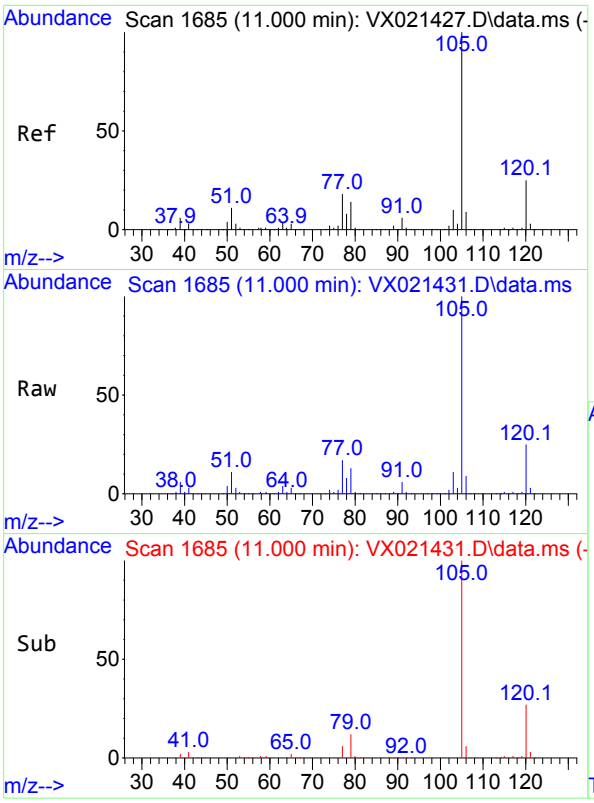
Tgt Ion:152 Resp: 64663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 86.4 | 41.1 | 123.3 |
| 150 | 173.2 | 0.0 | 349.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

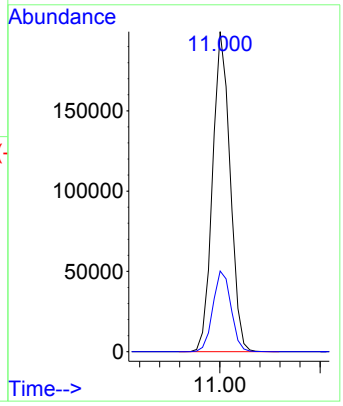
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

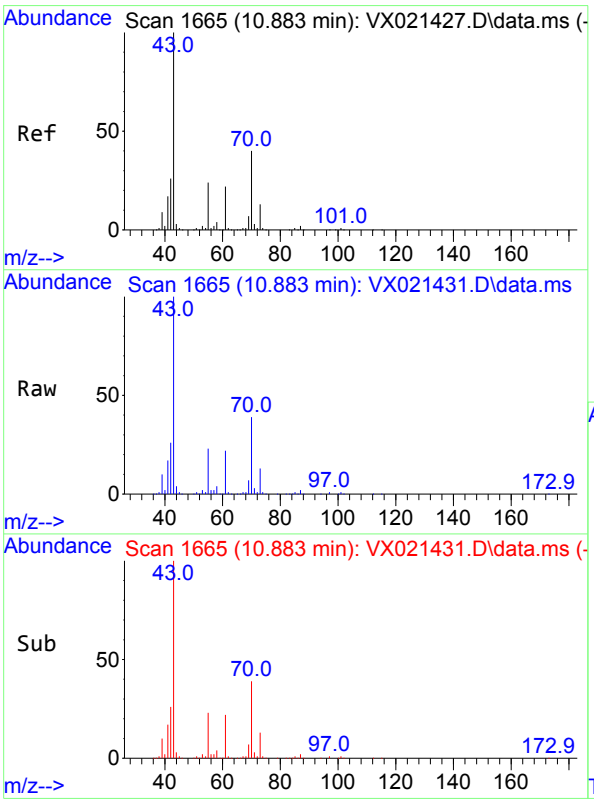



#73
Isopropylbenzene
Concen: 53.39 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:105 Resp: 242563

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.8 | 13.2 | 39.6 |

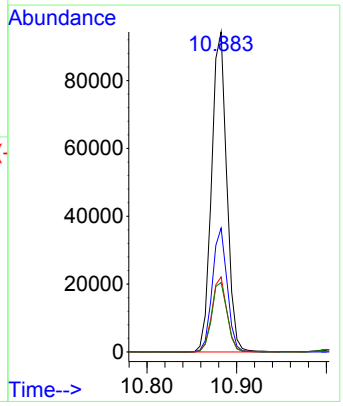



#74
N-amyl acetate
Concen: 50.47 ug/l
RT: 10.883 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

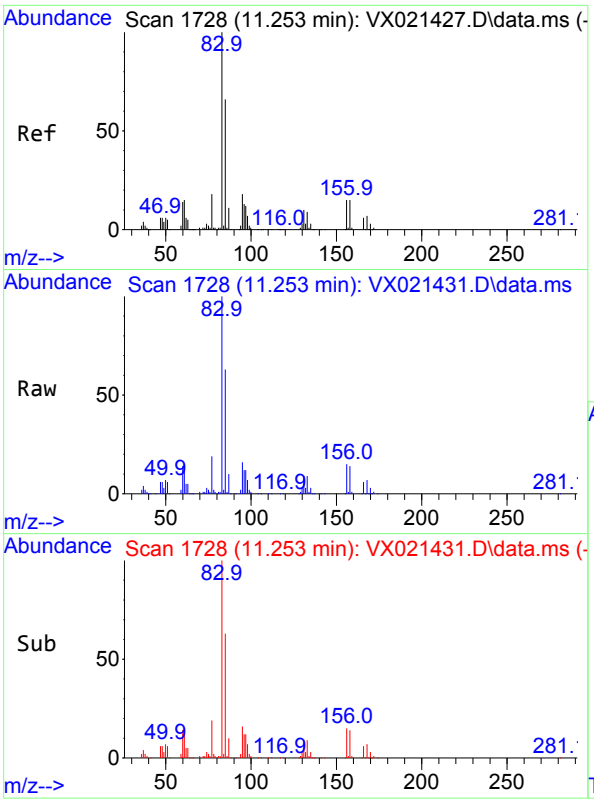
Tgt Ion: 43 Resp: 110943

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 37.9 | 39.0 | 58.6# |
| 55 | 23.5 | 21.5 | 32.3 |
| 61 | 22.0 | 22.1 | 33.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

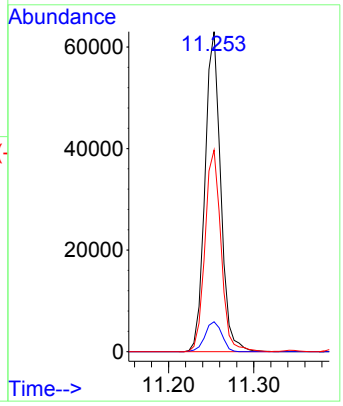
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

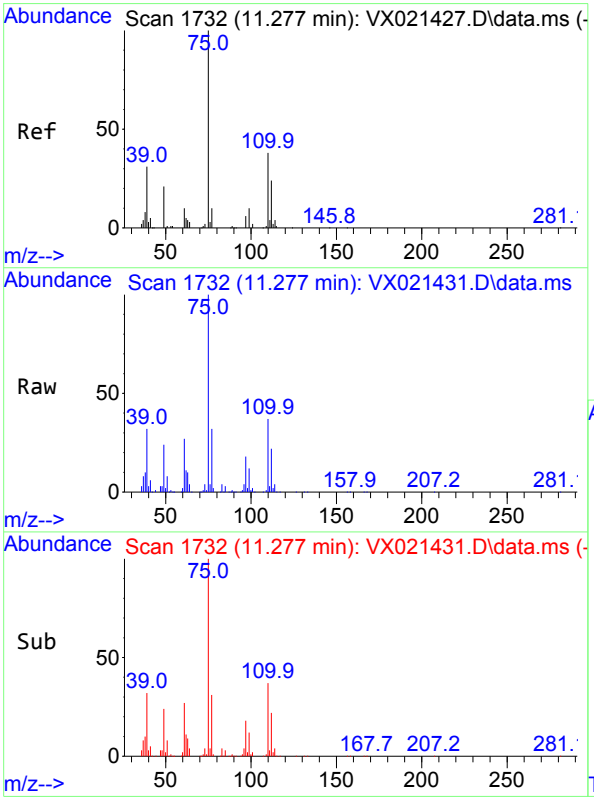



#75
1,1,2,2-Tetrachloroethane
Concen: 50.10 ug/l
RT: 11.253 min Scan# 1728
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 83 Resp: 80423

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.1 | 5.1 | 15.2 |
| 85 | 64.5 | 31.8 | 95.4 |

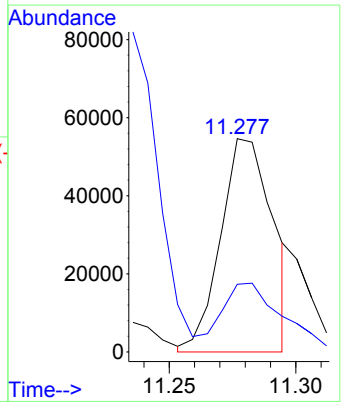



#76
1,2,3-Trichloropropane
Concen: 52.03 ug/l m
RT: 11.277 min Scan# 1732
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

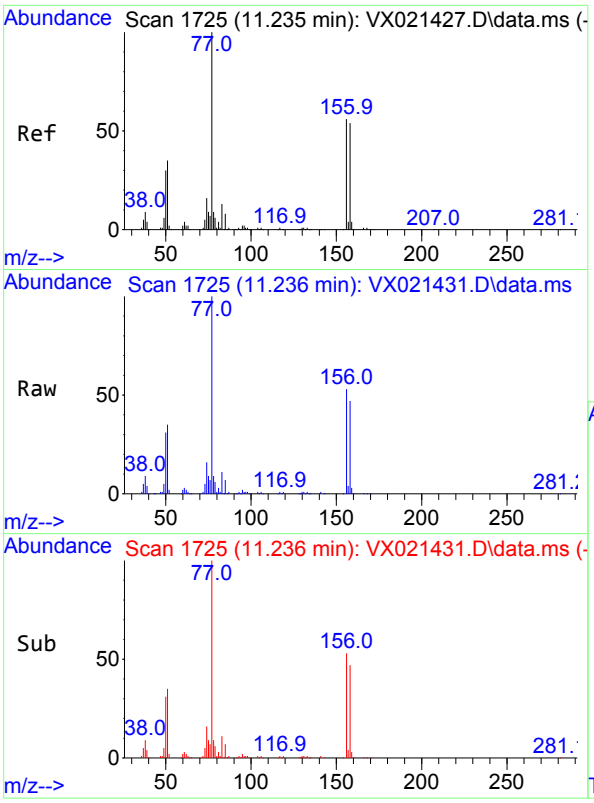
Tgt Ion: 75 Resp: 78320

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 38.4 | 19.1 | 57.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

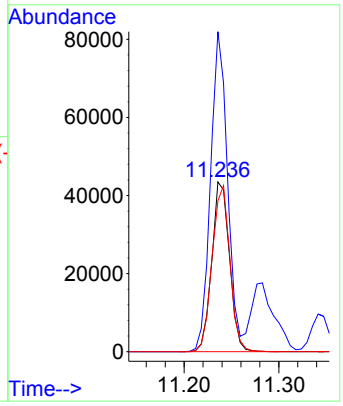
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

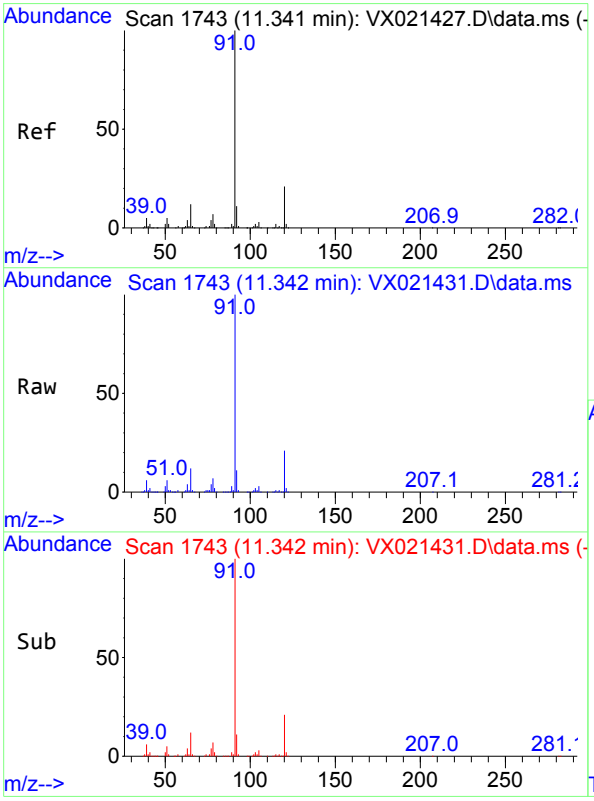



#77
Bromobenzene
Concen: 50.05 ug/l
RT: 11.236 min Scan# 1725
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:156 Resp: 56367

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 180.1 | 82.8 | 248.6 |
| 158 | 98.3 | 49.1 | 147.4 |

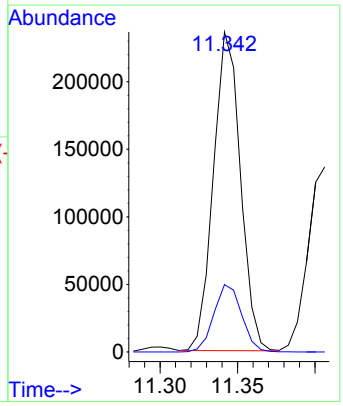



#78
n-propylbenzene
Concen: 53.31 ug/l
RT: 11.342 min Scan# 1743
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

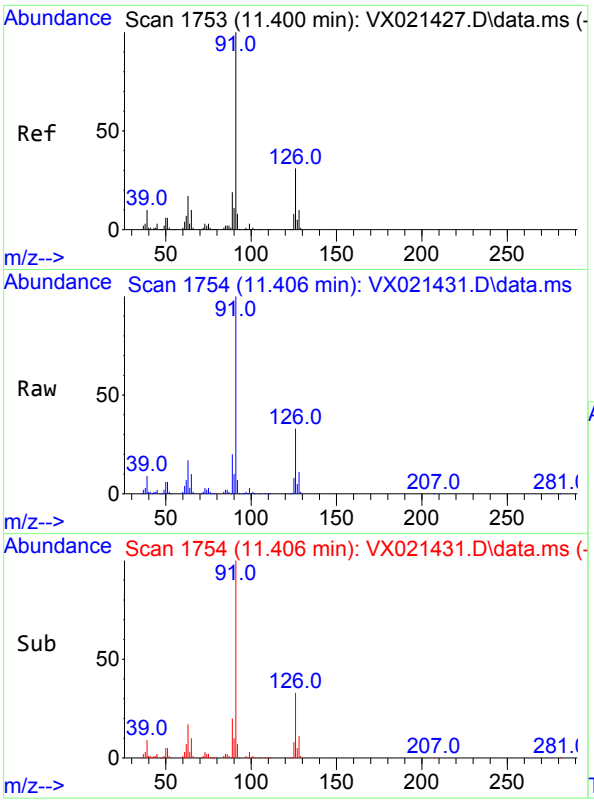
Tgt Ion: 91 Resp: 286011

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.7 | 11.5 | 34.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

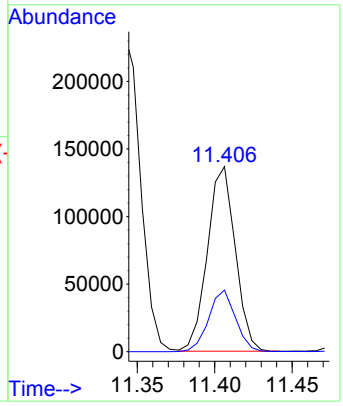
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

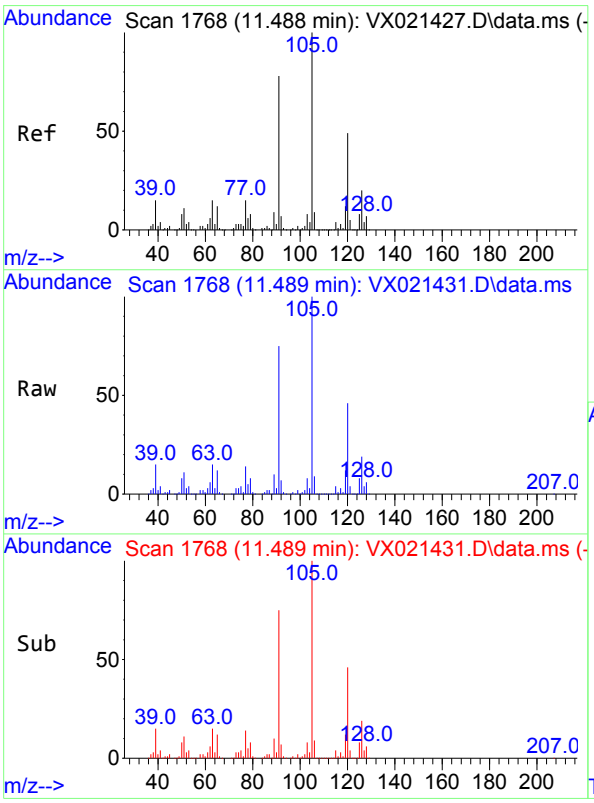



#79
2-Chlorotoluene
Concen: 52.48 ug/l
RT: 11.406 min Scan# 1754
Delta R.T. 0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 91 Resp: 170815

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.3 | 16.6 | 49.8 |

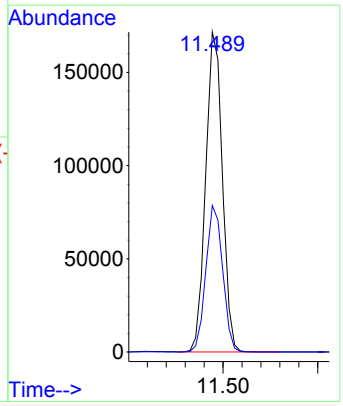



#80
1,3,5-Trimethylbenzene
Concen: 53.91 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

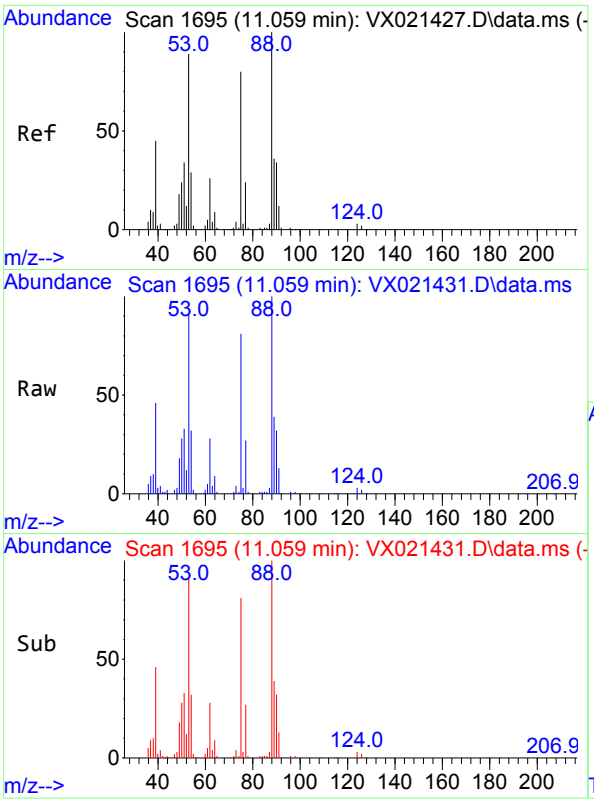
Tgt Ion:105 Resp: 209265

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.3 | 23.8 | 71.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

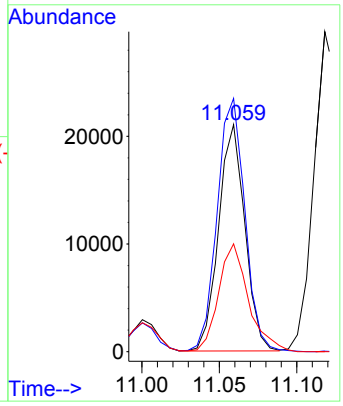
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

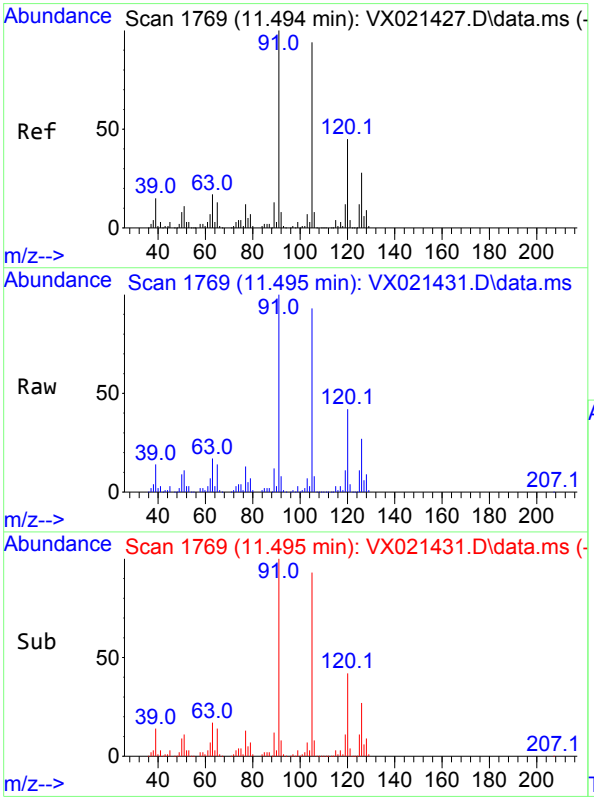



#81
trans-1,4-Dichloro-2-butene
Concen: 50.22 ug/l
RT: 11.059 min Scan# 1695
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 75 Resp: 24820

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 118.2 | 74.5 | 111.7# |
| 89 | 54.1 | 37.9 | 56.9 |

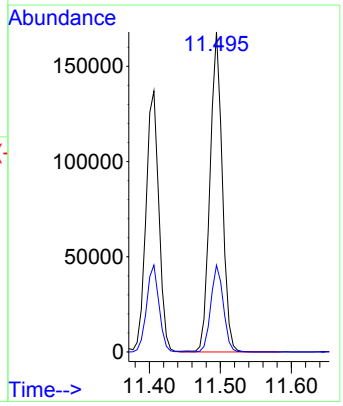



#82
4-Chlorotoluene
Concen: 52.37 ug/l
RT: 11.495 min Scan# 1769
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

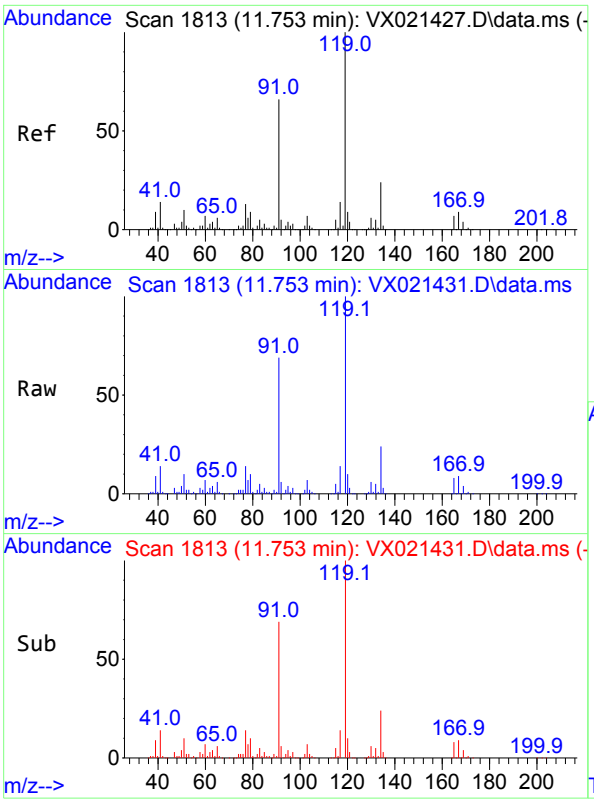
Tgt Ion: 91 Resp: 202393

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 27.4 | 14.9 | 44.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

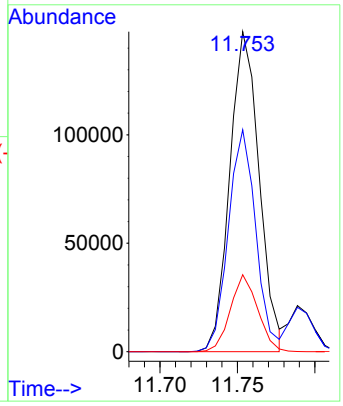
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MMDadoda
3/25/2021 9:49:46 AM

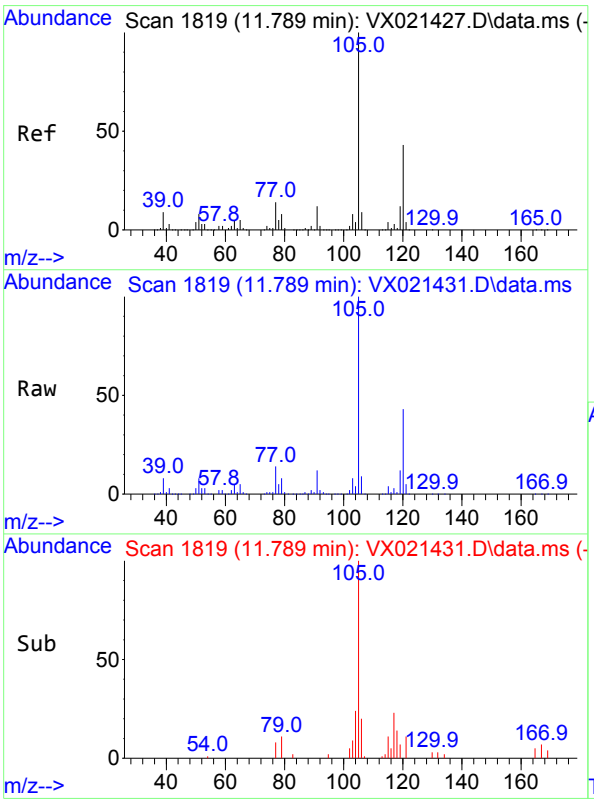



#83
tert-Butylbenzene
Concen: 51.52 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:119 Resp: 194705

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 65.0 | 27.9 | 83.7 |
| 134 | 22.4 | 11.3 | 33.9 |

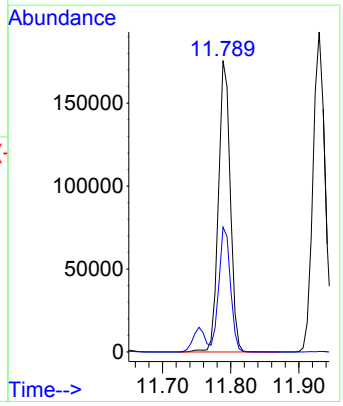



#84
1,2,4-Trimethylbenzene
Concen: 54.02 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

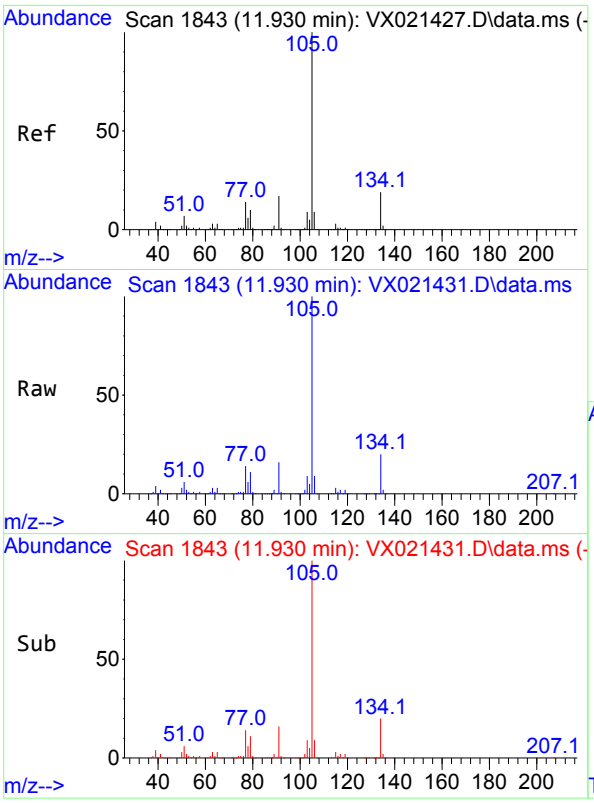
Tgt Ion:105 Resp: 211365

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 41.9 | 22.4 | 67.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

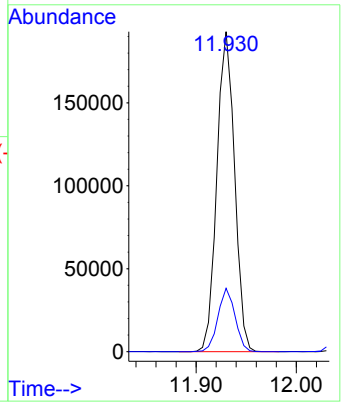
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

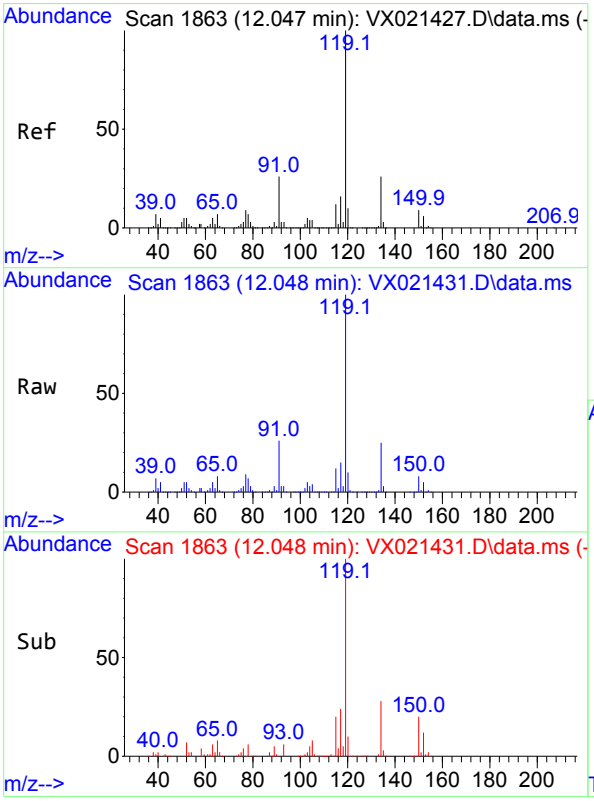



#85
sec-Butylbenzene
Concen: 54.14 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:105 Resp: 236006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.2 | 10.0 | 29.8 |

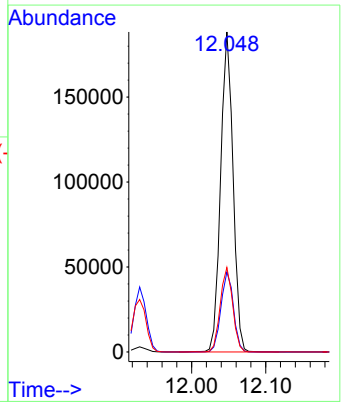



#86
p-Isopropyltoluene
Concen: 55.12 ug/l
RT: 12.048 min Scan# 1863
Delta R.T. 0.001 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

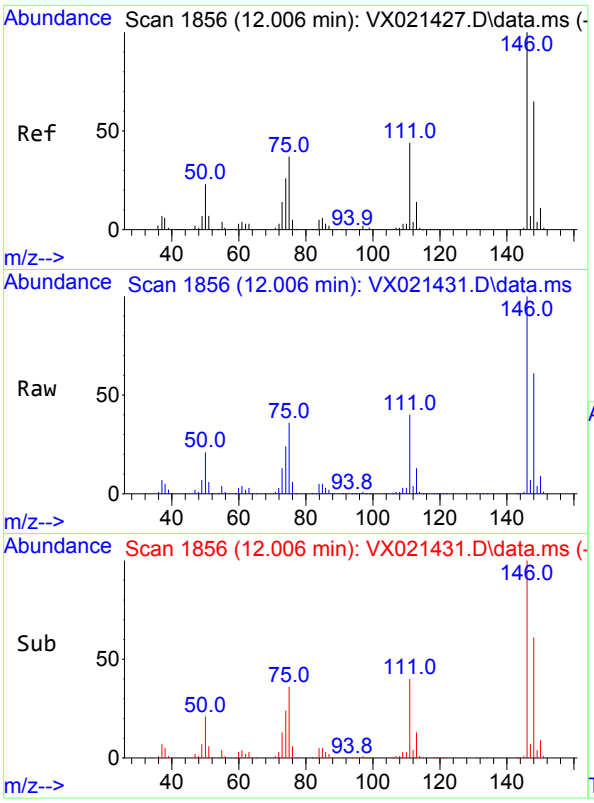
Tgt Ion:119 Resp: 218740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.2 | 12.9 | 38.7 |
| 91 | 26.5 | 11.7 | 35.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

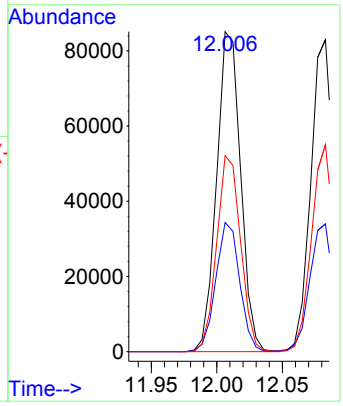
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

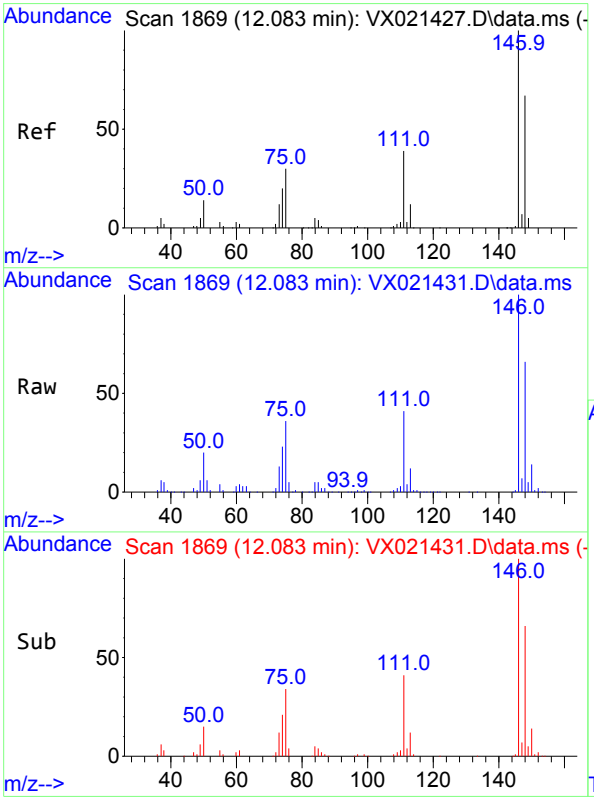



#87
1,3-Dichlorobenzene
Concen: 53.39 ug/l
RT: 12.006 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:146 Resp: 108272

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.3 | 20.2 | 60.5 |
| 148 | 61.1 | 31.9 | 95.7 |

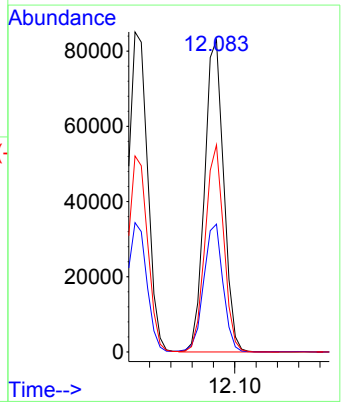



#88
1,4-Dichlorobenzene
Concen: 49.39 ug/l
RT: 12.083 min Scan# 1869
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

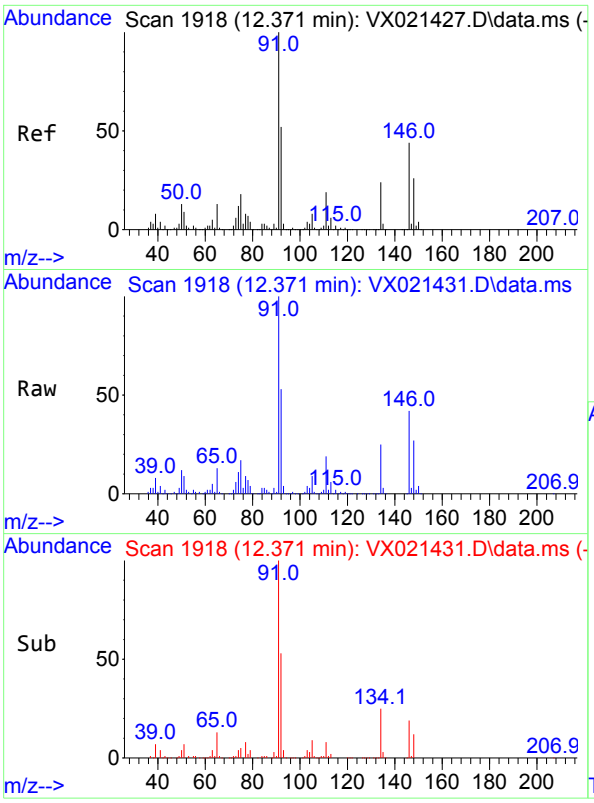
Tgt Ion:146 Resp: 103631

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.5 | 19.6 | 58.8 |
| 148 | 64.5 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

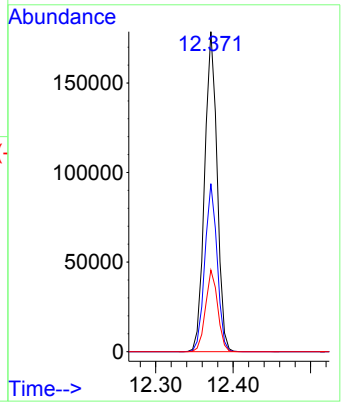
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

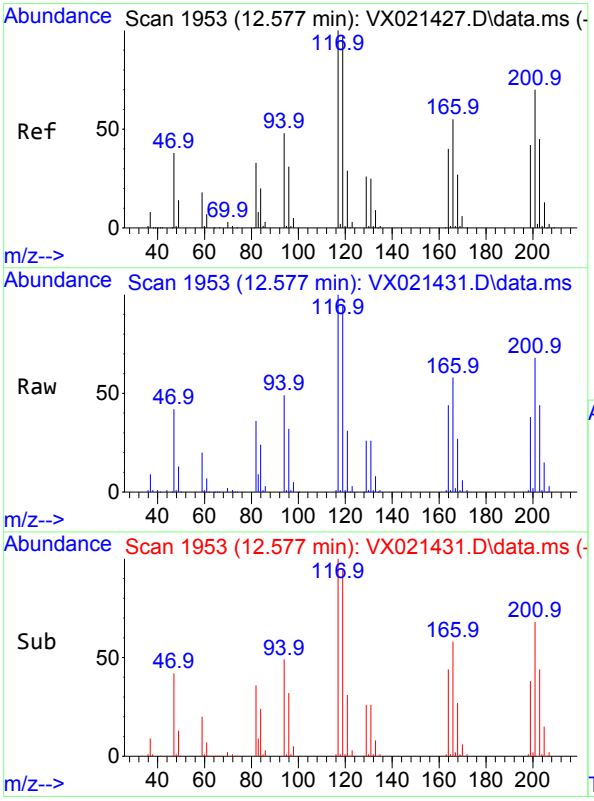



#89
n-Butylbenzene
Concen: 54.92 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion: 91 Resp: 199675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 51.7 | 27.4 | 82.0 |
| 134 | 24.8 | 13.2 | 39.5 |

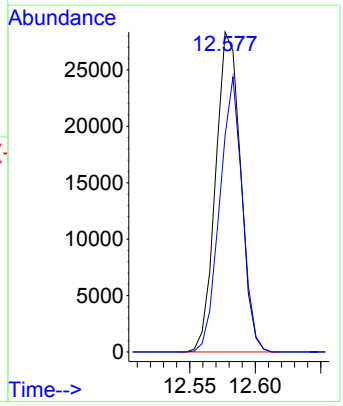



#90
Hexachloroethane
Concen: 52.16 ug/l
RT: 12.577 min Scan# 1953
Delta R.T. 0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

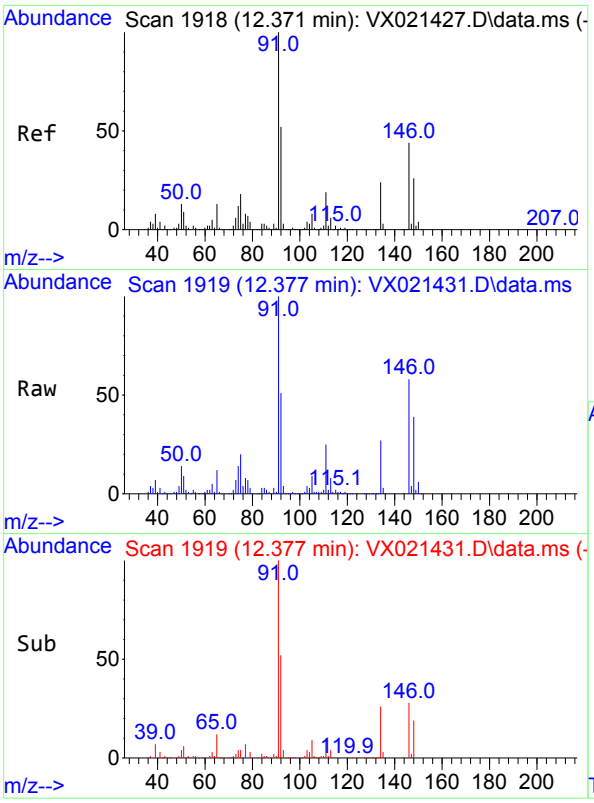
Tgt Ion:117 Resp: 37354

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 78.1 | 40.4 | 121.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

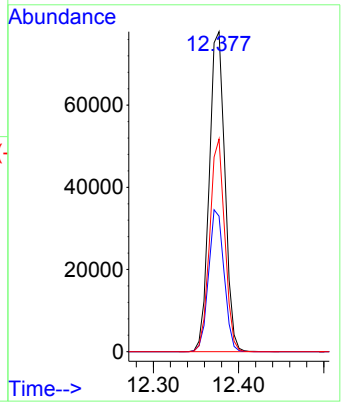
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

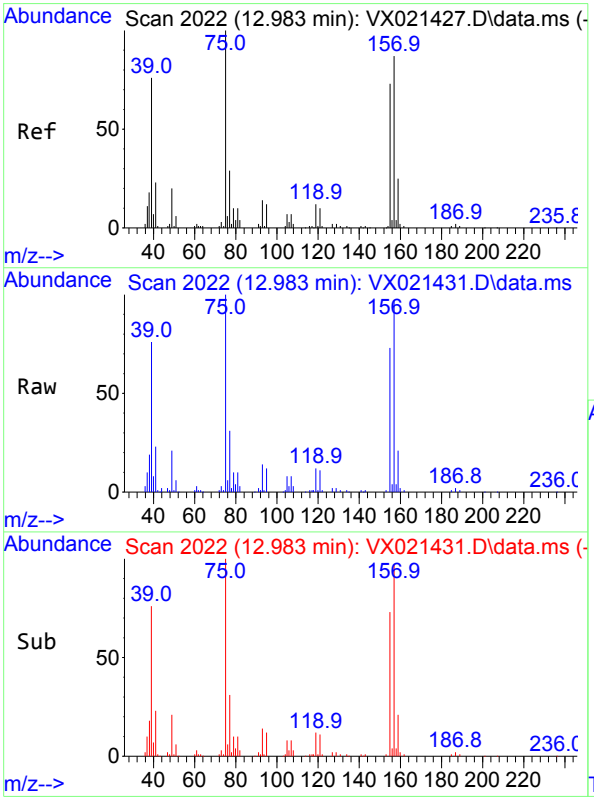



#91
1,2-Dichlorobenzene
Concen: 50.35 ug/l
RT: 12.377 min Scan# 1919
Delta R.T. 0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:146 Resp: 99280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.9 | 20.8 | 62.2 |
| 148 | 64.1 | 31.9 | 95.5 |

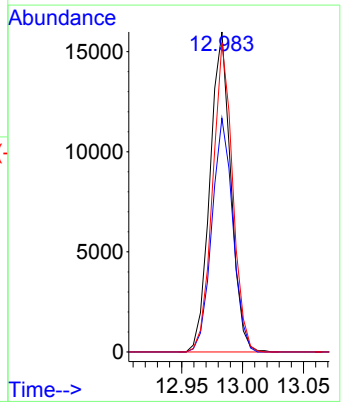



#92
1,2-Dibromo-3-Chloropropane
Concen: 47.06 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

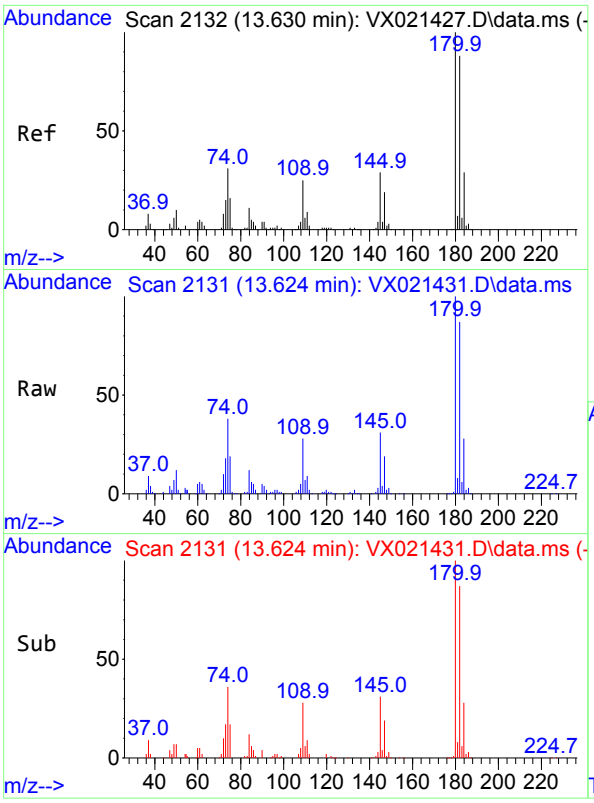
Tgt Ion: 75 Resp: 18989

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 73.5 | 45.3 | 135.9 |
| 157 | 93.2 | 57.7 | 173.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

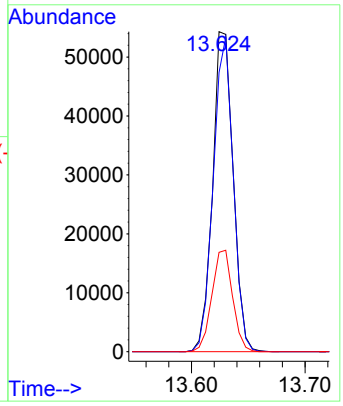
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

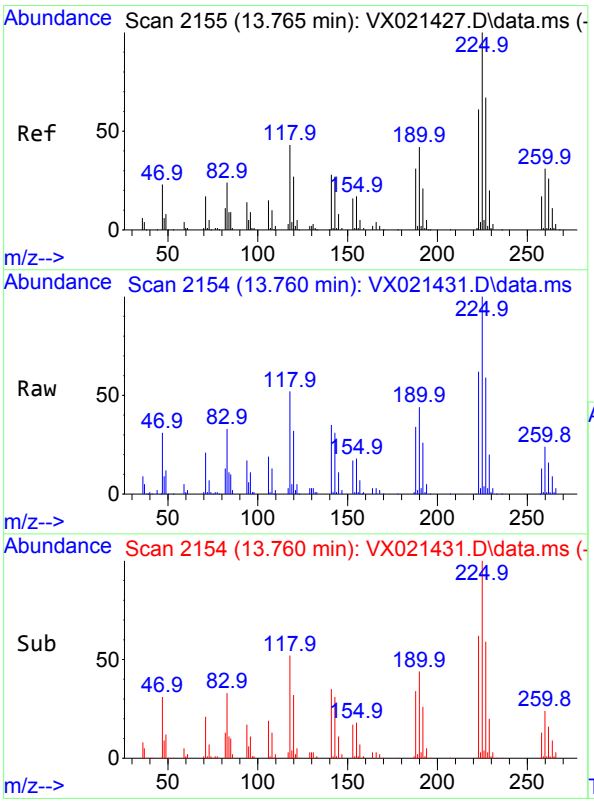



#93
1,2,4-Trichlorobenzene
Concen: 52.92 ug/l
RT: 13.624 min Scan# 2131
Delta R.T. -0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:180 Resp: 68389

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.5 | 47.7 | 143.1 |
| 145 | 32.0 | 15.0 | 45.0 |

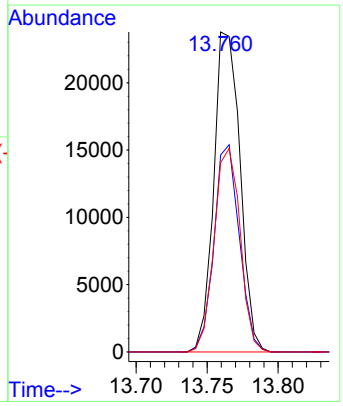



#94
Hexachlorobutadiene
Concen: 52.38 ug/l
RT: 13.760 min Scan# 2154
Delta R.T. -0.005 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

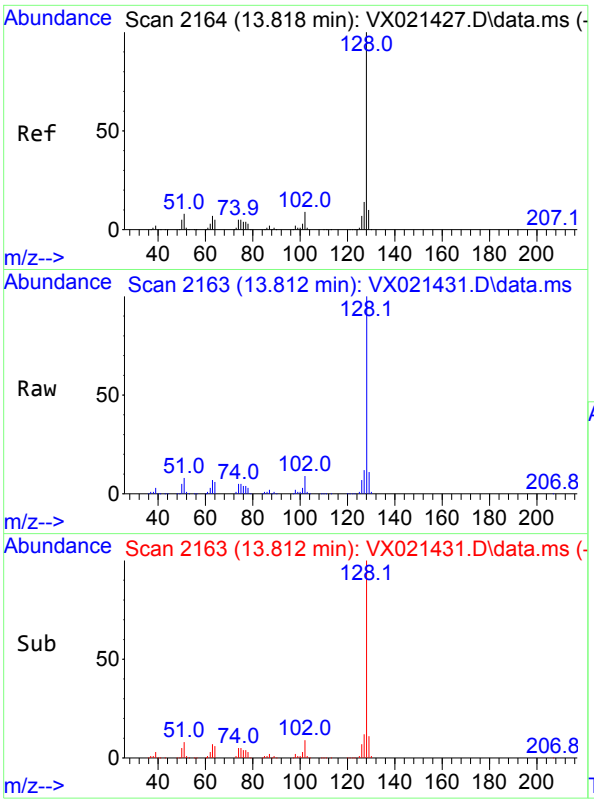
Tgt Ion:225 Resp: 30555

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.4 | 31.1 | 93.2 |
| 227 | 62.9 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

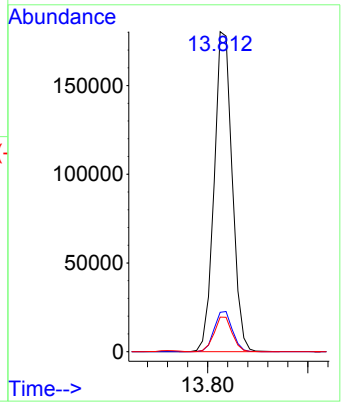
**Manual Integrations APPROVED**
MMDadoda
3/25/2021 9:49:46 AM

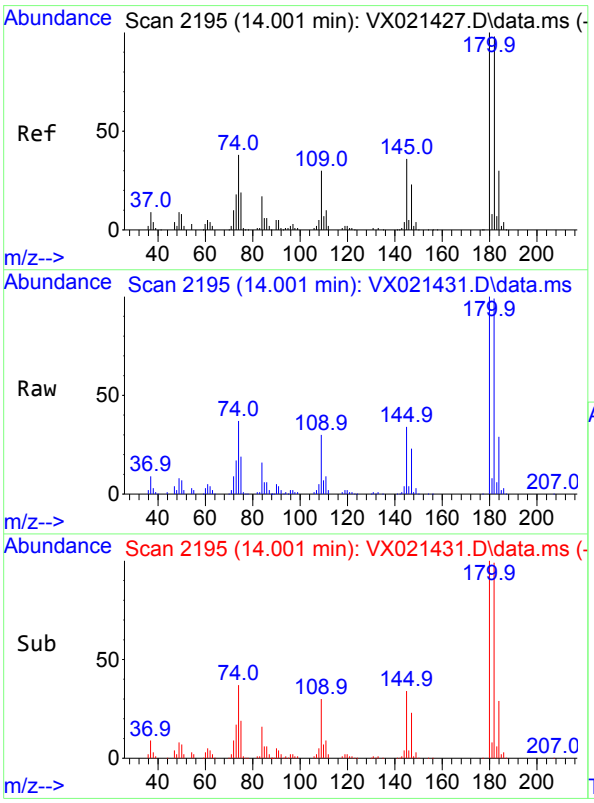



#95
Naphthalene
Concen: 53.36 ug/l
RT: 13.812 min Scan# 2163
Delta R.T. -0.006 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:128 Resp: 224939

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 12.7 | 10.3 | 15.5 |
| 129 | 10.9 | 8.8 | 13.2 |

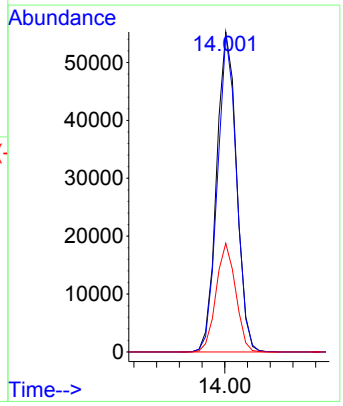



#96
1,2,3-Trichlorobenzene
Concen: 52.18 ug/l
RT: 14.001 min Scan# 2195
Delta R.T. -0.000 min
Lab File: VX021431.D
Acq: 24 Mar 2021 12:43

Tgt Ion:180 Resp: 67410

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 95.0 | 47.6 | 142.9 |
| 145 | 33.2 | 16.1 | 48.3 |



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021431.D
Acq On : 24 Mar 2021 12:43
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** MSVOA_X
**ClientSampleId :** ICVVX032421

Quant Time: Mar 24 17:16:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 106 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 0.550 | 0.549 | 0.2 | 105 | 0.00 |
| 3 | P | Chloromethane | 0.702 | 0.601 | 14.4 | 104 | 0.00 |
| 4 | C | Vinyl Chloride | 0.562 | 0.551 | 2.0# | 102 | 0.00 |
| 5 | T | Bromomethane | 0.226 | 0.229 | -1.3 | 110 | 0.00 |
| 6 | T | Chloroethane | 0.357 | 0.345 | 3.4 | 102 | 0.00 |
| 7 | T | Trichlorofluoromethane | 0.914 | 0.890 | 2.6 | 100 | 0.00 |
| 8 | T | Diethyl Ether | 0.317 | 0.309 | 2.5 | 104 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.515 | 0.507 | 1.6 | 105 | 0.00 |
| 10 | T | Methyl Iodide | 0.362 | 0.367 | -1.4 | 107 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.138 | 0.134 | 2.9 | 107 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 0.504 | 0.475 | 5.8# | 104 | 0.00 |
| 13 | T | Acrolein | 0.077 | 0.061 | 20.8 | 97 | 0.00 |
| 14 | T | Allyl chloride | 1.023 | 0.985 | 3.7 | 103 | 0.00 |
| 15 | T | Acrylonitrile | 0.327 | 0.320 | 2.1 | 102 | 0.00 |
| 16 | T | Acetone | 0.315 | 0.296 | 6.0 | 102 | 0.00 |
| 17 | T | Carbon Disulfide | 1.415 | 1.313 | 7.2 | 103 | 0.00 |
| 18 | T | Methyl Acetate | 0.909 | 0.907 | 0.2 | 102 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 1.882 | 1.841 | 2.2 | 102 | 0.00 |
| 20 | T | Methylene Chloride | 0.614 | 0.572 | 6.8 | 102 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.553 | 0.529 | 4.3 | 102 | 0.00 |
| 22 | T | Diisopropyl ether | 1.987 | 1.953 | 1.7 | 102 | 0.00 |
| 23 | T | Vinyl Acetate | 1.681 | 1.677 | 0.2 | 102 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.071 | 1.037 | 3.2 | 102 | 0.00 |
| 25 | T | 2-Butanone | 0.477 | 0.461 | 3.4 | 102 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.928 | 0.923 | 0.5 | 103 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.643 | 0.626 | 2.6 | 103 | 0.00 |
| 28 | T | Bromochloromethane | 0.536 | 0.475 | 11.4 | 100 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.309 | 0.299 | 3.2 | 102 | 0.00 |
| 30 | C | Chloroform | 1.131 | 1.109 | 1.9# | 102 | 0.00 |
| 31 | T | Cyclohexane | 0.915 | 0.910 | 0.5 | 103 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.002 | 0.986 | 1.6 | 102 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.832 | 0.751 | 9.7 | 102 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 105 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.355 | 0.334 | 5.9 | 104 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.490 | 0.494 | -0.8 | 104 | 0.00 |
| 37 | T | Ethyl Acetate | 0.566 | 0.541 | 4.4 | 102 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.526 | 0.533 | -1.3 | 102 | 0.00 |
| 39 | T | Methylcyclohexane | 0.543 | 0.570 | -5.0 | 104 | 0.00 |
| 40 | TM | Benzene | 1.391 | 1.394 | -0.2 | 102 | 0.00 |
| 41 | T | Methacrylonitrile | 0.329 | 0.318 | 3.3 | 101 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.603 | 0.606 | -0.5 | 102 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.920 | 0.920 | 0.0 | 102 | 0.00 |
| 44 | TM | Trichloroethene | 0.367 | 0.365 | 0.5 | 103 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.377 | 0.382 | -1.3# | 102 | 0.00 |
| 46 | T | Dibromomethane | 0.275 | 0.275 | 0.0 | 101 | 0.00 |
| 47 | T | Bromodichloromethane | 0.559 | 0.571 | -2.1 | 103 | 0.00 |
| 48 | T | Methyl methacrylate | 0.491 | 0.498 | -1.4 | 102 | 0.00 |

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021431.D
Acq On : 24 Mar 2021 12:43
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** MSVOA_X
**ClientSampleId :** ICVVX032421

Quant Time: Mar 24 17:16:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 0.009 | 0.009 | 0.0 | 104 | 0.00 |
| 50 | S | Toluene-d8 | 1.266 | 1.204 | 4.9 | 101 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.566 | 0.584 | -3.2 | 102 | 0.00 |
| 52 | CM | Toluene | 0.859 | 0.904 | -5.2# | 104 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.564 | 0.594 | -5.3 | 104 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.601 | 0.626 | -4.2 | 103 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.363 | 0.379 | -4.4 | 105 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.548 | 0.586 | -6.9 | 103 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.621 | 0.636 | -2.4 | 103 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.307 | 0.320 | -4.2 | 103 | 0.00 |
| 59 | T | 2-Hexanone | 0.425 | 0.442 | -4.0 | 103 | 0.00 |
| 60 | T | Dibromochloromethane | 0.406 | 0.426 | -4.9 | 103 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.390 | 0.401 | -2.8 | 102 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.492 | 0.476 | 3.3 | 105 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 103 | 0.00 |
| 64 | T | Tetrachloroethene | 0.335 | 0.352 | -5.1 | 105 | 0.00 |
| 65 | PM | Chlorobenzene | 1.004 | 1.033 | -2.9 | 103 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.385 | 0.396 | -2.9 | 102 | 0.00 |
| 67 | C | Ethyl Benzene | 1.831 | 1.948 | -6.4# | 105 | 0.00 |
| 68 | T | m/p-Xylenes | 0.652 | 0.702 | -7.7 | 105 | 0.00 |
| 69 | T | o-Xylene | 0.632 | 0.668 | -5.7 | 104 | 0.00 |
| 70 | T | Styrene | 1.086 | 1.156 | -6.4 | 105 | 0.00 |
| 71 | P | Bromoform | 0.313 | 0.323 | -3.2 | 102 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 106 | 0.00 |
| 73 | T | Isopropylbenzene | 3.513 | 3.751 | -6.8 | 106 | 0.00 |
| 74 | T | N-amyl acetate | 1.700 | 1.716 | -0.9 | 104 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.241 | 1.244 | -0.2 | 104 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.164 | 1.211 | -4.0 | 103 | 0.00 |
| 77 | T | Bromobenzene | 0.871 | 0.872 | -0.1 | 102 | 0.00 |
| 78 | T | n-propylbenzene | 4.149 | 4.423 | -6.6 | 107 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.517 | 2.642 | -5.0 | 106 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.001 | 3.236 | -7.8 | 107 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.382 | 0.384 | -0.5 | 102 | 0.00 |
| 82 | T | 4-Chlorotoluene | 2.988 | 3.130 | -4.8 | 106 | 0.00 |
| 83 | T | tert-Butylbenzene | 2.922 | 3.011 | -3.0 | 104 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.026 | 3.269 | -8.0 | 107 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.371 | 3.650 | -8.3 | 106 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.068 | 3.383 | -10.3 | 106 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.568 | 1.674 | -6.8 | 111 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.622 | 1.603 | 1.2 | 105 | 0.00 |
| 89 | T | n-Butylbenzene | 2.811 | 3.088 | -9.9 | 108 | 0.00 |
| 90 | T | Hexachloroethane | 0.554 | 0.578 | -4.3 | 106 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.525 | 1.535 | -0.7 | 106 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.286 | 0.294 | -2.8 | 103 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.999 | 1.058 | -5.9 | 109 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.451 | 0.473 | -4.9 | 110 | 0.00 |
| 95 | T | Naphthalene | 3.259 | 3.479 | -6.8 | 106 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021431.D
Acq On : 24 Mar 2021 12:43
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

Quant Time: Mar 24 17:16:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 0.999 | 1.042 | -4.3 | 107 | 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_X\Data\VX032421\
Data File : VX021431.D
Acq On : 24 Mar 2021 12:43
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** MSVOA_X
**ClientSampleId :** ICVVX032421

Quant Time: Mar 24 17:16:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 106 | 0.00 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 49.982 | 0.0 | 105 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 47.592 | 4.8 | 104 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 49.016 | 2.0# | 102 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 50.631 | -1.3 | 110 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 48.388 | 3.2 | 102 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 48.685 | 2.6 | 100 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 48.741 | 2.5 | 104 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 49.212 | 1.6 | 105 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 46.288 | 7.4 | 107 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 244.245 | 2.3 | 107 | 0.00 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 47.089 | 5.8# | 104 | 0.00 |
| 13 | T | Acrolein | 250.000 | 221.188 | 11.5 | 97 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 48.172 | 3.7 | 103 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 244.425 | 2.2 | 102 | 0.00 |
| 16 | T | Acetone | 250.000 | 235.020 | 6.0 | 102 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 46.385 | 7.2 | 103 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 49.917 | 0.2 | 102 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 48.907 | 2.2 | 102 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 46.611 | 6.8 | 102 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 47.832 | 4.3 | 102 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 49.138 | 1.7 | 102 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 249.364 | 0.3 | 102 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 48.409 | 3.2 | 102 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 241.707 | 3.3 | 102 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 49.711 | 0.6 | 103 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 48.735 | 2.5 | 103 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 44.315 | 11.4 | 100 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 241.791 | 3.3 | 102 | 0.00 |
| 30 | C | Chloroform | 50.000 | 49.022 | 2.0# | 102 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 49.745 | 0.5 | 103 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 49.224 | 1.6 | 102 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 45.112 | 9.8 | 102 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 105 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 46.951 | 6.1 | 104 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 50.370 | -0.7 | 104 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 47.795 | 4.4 | 102 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 50.609 | -1.2 | 102 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 52.517 | -5.0 | 104 | 0.00 |
| 40 | TM | Benzene | 50.000 | 50.112 | -0.2 | 102 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 48.320 | 3.4 | 101 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 50.200 | -0.4 | 102 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 49.991 | 0.0 | 102 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 49.655 | 0.7 | 103 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 50.665 | -1.3# | 102 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 50.075 | -0.2 | 101 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 51.051 | -2.1 | 103 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 50.717 | -1.4 | 102 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021431.D
Acq On : 24 Mar 2021 12:43
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :** MSVOA_X
**ClientSampleId :** ICVVX032421

Quant Time: Mar 24 17:16:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 1025.813 | -2.6 | 104 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 47.563 | 4.9 | 101 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 258.011 | -3.2 | 102 | 0.00 |
| 52 | CM | Toluene | 50.000 | 52.621 | -5.2# | 104 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 52.652 | -5.3 | 104 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 52.120 | -4.2 | 103 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 52.273 | -4.5 | 105 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 47.911 | 4.2 | 103 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 51.251 | -2.5 | 103 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 260.718 | -4.3 | 103 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 260.387 | -4.2 | 103 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 52.494 | -5.0 | 103 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 51.444 | -2.9 | 102 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 48.400 | 3.2 | 105 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 103 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 52.610 | -5.2 | 105 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 51.397 | -2.8 | 103 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 51.455 | -2.9 | 102 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 53.187 | -6.4# | 105 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 107.580 | -7.6 | 105 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 52.832 | -5.7 | 104 | 0.00 |
| 70 | T | Styrene | 50.000 | 53.191 | -6.4 | 105 | 0.00 |
| 71 | P | Bromoform | 50.000 | 51.648 | -3.3 | 102 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 106 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 53.390 | -6.8 | 106 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 50.467 | -0.9 | 104 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 50.098 | -0.2 | 104 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 52.027 | -4.1 | 103 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 50.048 | -0.1 | 102 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 53.305 | -6.6 | 107 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 52.481 | -5.0 | 106 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 53.911 | -7.8 | 107 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 50.221 | -0.4 | 102 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 52.374 | -4.7 | 106 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 51.521 | -3.0 | 104 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 54.018 | -8.0 | 107 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 54.139 | -8.3 | 106 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 55.124 | -10.2 | 106 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 53.385 | -6.8 | 111 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 49.394 | 1.2 | 105 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 54.922 | -9.8 | 108 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 52.160 | -4.3 | 106 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 50.346 | -0.7 | 106 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 47.057 | 5.9 | 103 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 52.915 | -5.8 | 109 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 52.378 | -4.8 | 110 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 53.362 | -6.7 | 106 | 0.00 |

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021431.D
Acq On : 24 Mar 2021 12:43
Operator : JC/MD
Sample : VSTDICV050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
ICVVX032421

Quant Time: Mar 24 17:16:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 52.180 | -4.4 | 107 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Raw Data: **VX021564.D**

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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHAZ02

Lab Code: CHEM Case No.: M1785 SAS No.: M1785 SDG No.: M1785

Instrument ID: MSVOA_X Calibration Date/Time: 03/29/2021 09:35

Lab File ID: VX021564.D Init. Calib. Date(s): 03/24/2021 03/24/2021

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:04 11:58

GC Column: DB-624UI ID: 0.18 (mm)

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.550 | 0.514 | | -6.55 | 20 |
| Chloromethane | 0.702 | 0.561 | 0.1 | -20.08 | 20 |
| Vinyl Chloride | 0.562 | 0.525 | | -6.58 | 20 |
| Bromomethane | 0.226 | 0.232 | | 2.65 | 20 |
| Chloroethane | 0.357 | 0.326 | | -8.68 | 20 |
| Trichlorofluoromethane | 0.914 | 0.879 | | -3.83 | 20 |
| 1,1,2-Trichlorotrifluoroethane | 0.515 | 0.492 | | -4.47 | 20 |
| 1,1-Dichloroethene | 0.504 | 0.457 | | -9.32 | 20 |
| Acetone | 0.315 | 0.256 | | -18.73 | 20 |
| Carbon Disulfide | 1.415 | 1.197 | | -15.41 | 20 |
| Methyl tert-butyl Ether | 1.882 | 1.769 | | -6 | 20 |
| Methyl Acetate | 0.909 | 0.865 | | -4.84 | 20 |
| Methylene Chloride | 0.614 | 0.554 | | -9.77 | 20 |
| trans-1,2-Dichloroethene | 0.553 | 0.502 | | -9.22 | 20 |
| 1,1-Dichloroethane | 1.071 | 1.006 | 0.1 | -6.07 | 20 |
| Cyclohexane | 0.915 | 0.847 | | -7.43 | 20 |
| 2-Butanone | 0.477 | 0.407 | | -14.68 | 20 |
| Carbon Tetrachloride | 0.526 | 0.524 | | -0.38 | 20 |
| cis-1,2-Dichloroethene | 0.643 | 0.605 | | -5.91 | 20 |
| Bromochloromethane | 0.536 | 0.484 | | -9.7 | 20 |
| Chloroform | 1.131 | 1.077 | | -4.78 | 20 |
| 1,1,1-Trichloroethane | 1.002 | 0.950 | | -5.19 | 20 |
| Methylcyclohexane | 0.543 | 0.530 | | -2.39 | 20 |
| Benzene | 1.391 | 1.334 | | -4.1 | 20 |
| 1,2-Dichloroethane | 0.603 | 0.586 | | -2.82 | 20 |
| Trichloroethene | 0.367 | 0.348 | | -5.18 | 20 |
| 1,2-Dichloropropane | 0.377 | 0.368 | | -2.39 | 20 |
| Bromodichloromethane | 0.559 | 0.557 | | -0.36 | 20 |
| 4-Methyl-2-Pentanone | 0.566 | 0.527 | | -6.89 | 20 |
| Toluene | 0.859 | 0.848 | | -1.28 | 20 |
| t-1,3-Dichloropropene | 0.564 | 0.564 | | 0 | 20 |
| cis-1,3-Dichloropropene | 0.601 | 0.608 | | 1.16 | 20 |
| 1,1,2-Trichloroethane | 0.363 | 0.361 | | -0.55 | 20 |
| 2-Hexanone | 0.425 | 0.398 | | -6.35 | 20 |
| Dibromochloromethane | 0.406 | 0.421 | | 3.69 | 20 |
| 1,2-Dibromoethane | 0.390 | 0.375 | | -3.85 | 20 |
| Tetrachloroethene | 0.335 | 0.335 | | 0 | 20 |
| Chlorobenzene | 1.004 | 0.975 | 0.3 | -2.89 | 20 |
| Ethyl Benzene | 1.831 | 1.787 | | -2.4 | 20 |

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Raw Data: **VX021564.D**

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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CHAZ02

Lab Code: CHEM Case No.: M1785 SAS No.: M1785 SDG No.: M1785

Instrument ID: MSVOA_X Calibration Date/Time: 03/29/2021 09:35

Lab File ID: VX021564.D Init. Calib. Date(s): 03/24/2021 03/24/2021

Heated Purge: (Y/N) N Init. Calib. Time(s): 10:04 11:58

GC Column: DB-624UI ID: 0.18 (mm)

| COMPOUND | RRF | RRF050 | MIN RRF | %D | MAX%D |
|---|---|---|---|---|---|
| m/p-Xylenes | 0.652 | 0.663 | | 1.69 | 20 |
| o-Xylene | 0.632 | 0.627 | | -0.79 | 20 |
| Styrene | 1.086 | 1.099 | | 1.2 | 20 |
| Bromoform | 0.313 | 0.317 | 0.1 | 1.28 | 20 |
| Isopropylbenzene | 3.513 | 3.556 | | 1.22 | 20 |
| 1,1,2,2-Tetrachloroethane | 1.241 | 1.137 | 0.3 | -8.38 | 20 |
| n-propylbenzene | 4.149 | 4.187 | | 0.92 | 20 |
| 1,3,5-Trimethylbenzene | 3.001 | 3.044 | | 1.43 | 20 |
| tert-Butylbenzene | 2.922 | 2.834 | | -3.01 | 20 |
| 1,2,4-Trimethylbenzene | 3.026 | 3.054 | | 0.93 | 20 |
| sec-Butylbenzene | 3.371 | 3.376 | | 0.15 | 20 |
| 1,3-Dichlorobenzene | 1.568 | 1.502 | | -4.21 | 20 |
| 1,4-Dichlorobenzene | 1.622 | 1.542 | | -4.93 | 20 |
| n-Butylbenzene | 2.811 | 2.871 | | 2.13 | 20 |
| 1,2-Dichlorobenzene | 1.525 | 1.455 | | -4.59 | 20 |
| 1,2-Dibromo-3-Chloropropane | 0.286 | 0.273 | | -4.55 | 20 |
| 1,2,4-Trichlorobenzene | 0.999 | 1.007 | | 0.8 | 20 |
| 1,2,3-Trichlorobenzene | 0.999 | 0.998 | | -0.1 | 20 |
| 1,2-Dichloroethane-d4 | 0.832 | 0.769 | | -7.57 | 20 |
| Dibromofluoromethane | 0.355 | 0.343 | | -3.38 | 20 |
| Toluene-d8 | 1.266 | 1.201 | | -5.13 | 20 |
| 4-Bromofluorobenzene | 0.492 | 0.471 | | -4.27 | 20 |
| 1,4-Dioxane | 8.784 | 7.964 | 0.05 | -9.34 | 50 |

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Quantitation Report (QT Reviewed)

Sample Results: **VX021564.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021564.D
Acq On : 29 Mar 2021 09:35
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

Quant Time: Mar 30 03:22:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.617 | 168 | 94419 | 50.00 | ug/l | | -0.01 |
| 34) 1,4-Difluorobenzene | 6.823 | 114 | 152632 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 141896 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 70614 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.023 | 65 | 72611 | 46.22 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 92.44% | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 52380 | 48.31 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 96.62% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 183345 | 47.46 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 94.92% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 71817 | 47.81 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 95.62% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.187 | 85 | 48495 | 46.73 | ug/l | | 99 |
| 3) Chloromethane | 1.311 | 50 | 53001 | 44.43 | ug/l | | 99 |
| 4) Vinyl Chloride | 1.393 | 62 | 49539 | 46.67 | ug/l | | 97 |
| 5) Bromomethane | 1.622 | 94 | 21924 | 51.32 | ug/l | | 95 |
| 6) Chloroethane | 1.705 | 64 | 30815 | 45.77 | ug/l | | 99 |
| 7) Trichlorofluoromethane | 1.911 | 101 | 82959 | 48.05 | ug/l | | 100 |
| 8) Diethyl Ether | 2.170 | 74 | 27831 | 46.45 | ug/l | | 82 |
| 9) 1,1,2-Trichlorotrifluo... | 2.358 | 101 | 46464 | 47.81 | ug/l | | 96 |
| 10) Methyl Iodide | 2.487 | 142 | 37799 | 49.83 | ug/l | # | 88 |
| 11) Tert butyl alcohol | 3.011 | 59 | 56472 | 217.44 | ug/l | | 97 |
| 12) 1,1-Dichloroethene | 2.352 | 96 | 43190 | 45.39 | ug/l | | 85 |
| 13) Acrolein | 2.270 | 56 | 24318 | 186.73 | ug/l | | 98 |
| 14) Allyl chloride | 2.705 | 41 | 88047 | 45.59 | ug/l | # | 88 |
| 15) Acrylonitrile | 3.111 | 53 | 137012 | 221.98 | ug/l | | 98 |
| 16) Acetone | 2.417 | 43 | 120744 | 203.27 | ug/l | | 88 |
| 17) Carbon Disulfide | 2.546 | 76 | 113047 | 42.31 | ug/l | | 99 |
| 18) Methyl Acetate | 2.746 | 43 | 81681 | 47.60 | ug/l | | 91 |
| 19) Methyl tert-butyl Ether | 3.164 | 73 | 166998 | 47.00 | ug/l | | 97 |
| 20) Methylene Chloride | 2.834 | 84 | 52311 | 45.13 | ug/l | # | 87 |
| 21) trans-1,2-Dichloroethene | 3.140 | 96 | 47366 | 45.32 | ug/l | | 92 |
| 22) Diisopropyl ether | 3.823 | 45 | 176843 | 47.13 | ug/l | | 94 |
| 23) Vinyl Acetate | 3.782 | 43 | 736949 | 232.19 | ug/l | # | 94 |
| 24) 1,1-Dichloroethane | 3.664 | 63 | 95018 | 46.97 | ug/l | | 97 |
| 25) 2-Butanone | 4.629 | 43 | 192197 | 213.45 | ug/l | | 89 |
| 26) 2,2-Dichloropropane | 4.546 | 77 | 86689 | 49.47 | ug/l | | 96 |
| 27) cis-1,2-Dichloroethene | 4.558 | 96 | 57088 | 47.04 | ug/l | | 91 |
| 28) Bromochloromethane | 4.970 | 49 | 45715 | 45.14 | ug/l | | 85 |
| 29) Tetrahydrofuran | 5.082 | 42 | 126753 | 217.11 | ug/l | | 86 |
| 30) Chloroform | 5.170 | 83 | 101736 | 47.65 | ug/l | | 97 |
| 31) Cyclohexane | 5.546 | 56 | 79944 | 46.28 | ug/l | | 92 |
| 32) 1,1,1-Trichloroethane | 5.458 | 97 | 89724 | 47.42 | ug/l | | 97 |
| 36) 1,1-Dichloropropene | 5.764 | 75 | 71496 | 47.81 | ug/l | | 97 |
| 37) Ethyl Acetate | 4.788 | 43 | 74023 | 42.81 | ug/l | # | 94 |
| 38) Carbon Tetrachloride | 5.746 | 117 | 80024 | 49.79 | ug/l | | 98 |
| 39) Methylcyclohexane | 7.435 | 83 | 80970 | 48.84 | ug/l | | 93 |
| 40) Benzene | 6.105 | 78 | 203627 | 47.95 | ug/l | | 98 |

Sample Results: **VX021564.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021564.D
Acq On : 29 Mar 2021 09:35
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

Quant Time: Mar 30 03:22:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.999 | 41 | 45134 | 45.00 | ug/l | | 89 |
| 42) 1,2-Dichloroethane | 6.152 | 62 | 89429 | 48.57 | ug/l | | 93 |
| 43) Isopropyl Acetate | 6.405 | 43 | 128646 | 45.82 | ug/l | # | 91 |
| 44) Trichloroethene | 7.182 | 130 | 53084 | 47.37 | ug/l | | 98 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 56224 | 48.87 | ug/l | | 97 |
| 46) Dibromomethane | 7.635 | 93 | 39497 | 47.10 | ug/l | | 94 |
| 47) Bromodichloromethane | 7.870 | 83 | 85017 | 49.82 | ug/l | | 99 |
| 48) Methyl methacrylate | 7.741 | 41 | 70354 | 46.97 | ug/l | # | 82 |
| 49) 1,4-Dioxane | 7.711 | 88 | 24310 | 906.57 | ug/l | # | 89 |
| 51) 4-Methyl-2-Pentanone | 8.617 | 43 | 402542 | 233.08 | ug/l | | 89 |
| 52) Toluene | 8.759 | 92 | 129409 | 49.33 | ug/l | | 98 |
| 53) t-1,3-Dichloropropene | 9.018 | 75 | 86012 | 49.92 | ug/l | | 98 |
| 54) cis-1,3-Dichloropropene | 8.412 | 75 | 92832 | 50.63 | ug/l | # | 86 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 55102 | 49.77 | ug/l | | 98 |
| 56) Ethyl methacrylate | 9.159 | 69 | 81077 | 43.63 | ug/l | # | 76 |
| 57) 1,3-Dichloropropane | 9.347 | 76 | 91480 | 48.28 | ug/l | | 99 |
| 58) 2-Chloroethyl Vinyl ether | 8.288 | 63 | 235217 | 251.40 | ug/l | | 95 |
| 59) 2-Hexanone | 9.470 | 43 | 304010 | 234.43 | ug/l | | 85 |
| 60) Dibromochloromethane | 9.565 | 129 | 64324 | 51.87 | ug/l | | 100 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 57198 | 48.09 | ug/l | | 100 |
| 64) Tetrachloroethene | 9.318 | 164 | 47581 | 50.06 | ug/l | | 91 |
| 65) Chlorobenzene | 10.118 | 112 | 138329 | 48.53 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 10.200 | 131 | 55612 | 50.91 | ug/l | | 99 |
| 67) Ethyl Benzene | 10.235 | 91 | 253616 | 48.81 | ug/l | | 99 |
| 68) m/p-Xylenes | 10.341 | 106 | 188271 | 101.71 | ug/l | | 94 |
| 69) o-Xylene | 10.682 | 106 | 88946 | 49.61 | ug/l | | 94 |
| 70) Styrene | 10.694 | 104 | 155898 | 50.56 | ug/l | | 96 |
| 71) Bromoform | 10.841 | 173 | 45000 | 50.70 | ug/l | # | 100 |
| 73) Isopropylbenzene | 11.000 | 105 | 251082 | 50.61 | ug/l | | 97 |
| 74) N-amyl acetate | 10.877 | 43 | 109888 | 45.77 | ug/l | # | 89 |
| 75) 1,1,2,2-Tetrachloroethane | 11.247 | 83 | 80299 | 45.81 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 11.277 | 75 | 79542m | 48.39 | ug/l | | |
| 77) Bromobenzene | 11.235 | 156 | 59808 | 48.63 | ug/l | | 96 |
| 78) n-propylbenzene | 11.341 | 91 | 295680 | 50.46 | ug/l | | 97 |
| 79) 2-Chlorotoluene | 11.400 | 91 | 174600 | 49.12 | ug/l | | 97 |
| 80) 1,3,5-Trimethylbenzene | 11.488 | 105 | 214978 | 50.72 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 11.059 | 75 | 26769 | 49.60 | ug/l | # | 67 |
| 82) 4-Chlorotoluene | 11.494 | 91 | 206745 | 48.99 | ug/l | | 97 |
| 83) tert-Butylbenzene | 11.753 | 119 | 200143 | 48.50 | ug/l | | 92 |
| 84) 1,2,4-Trimethylbenzene | 11.788 | 105 | 215634 | 50.46 | ug/l | | 97 |
| 85) sec-Butylbenzene | 11.930 | 105 | 238360 | 50.07 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 221586 | 51.14 | ug/l | | 97 |
| 87) 1,3-Dichlorobenzene | 12.006 | 146 | 106039 | 47.88 | ug/l | | 97 |
| 88) 1,4-Dichlorobenzene | 12.083 | 146 | 108920 | 47.54 | ug/l | | 98 |
| 89) n-Butylbenzene | 12.371 | 91 | 202746 | 51.07 | ug/l | | 95 |
| 90) Hexachloroethane | 12.577 | 117 | 40358 | 51.61 | ug/l | | 96 |
| 91) 1,2-Dichlorobenzene | 12.377 | 146 | 102769 | 47.72 | ug/l | | 94 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 19299 | 43.93 | ug/l | | 81 |
| 93) 1,2,4-Trichlorobenzene | 13.630 | 180 | 71119 | 50.39 | ug/l | | 97 |
| 94) Hexachlorobutadiene | 13.765 | 225 | 31327 | 49.18 | ug/l | | 98 |
| 95) Naphthalene | 13.818 | 128 | 224130 | 48.69 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 14.001 | 180 | 70462 | 49.95 | ug/l | | 99 |

Sample Results: **VX021564.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021564.D
Acq On : 29 Mar 2021 09:35
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

Quant Time: Mar 30 03:22:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

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

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

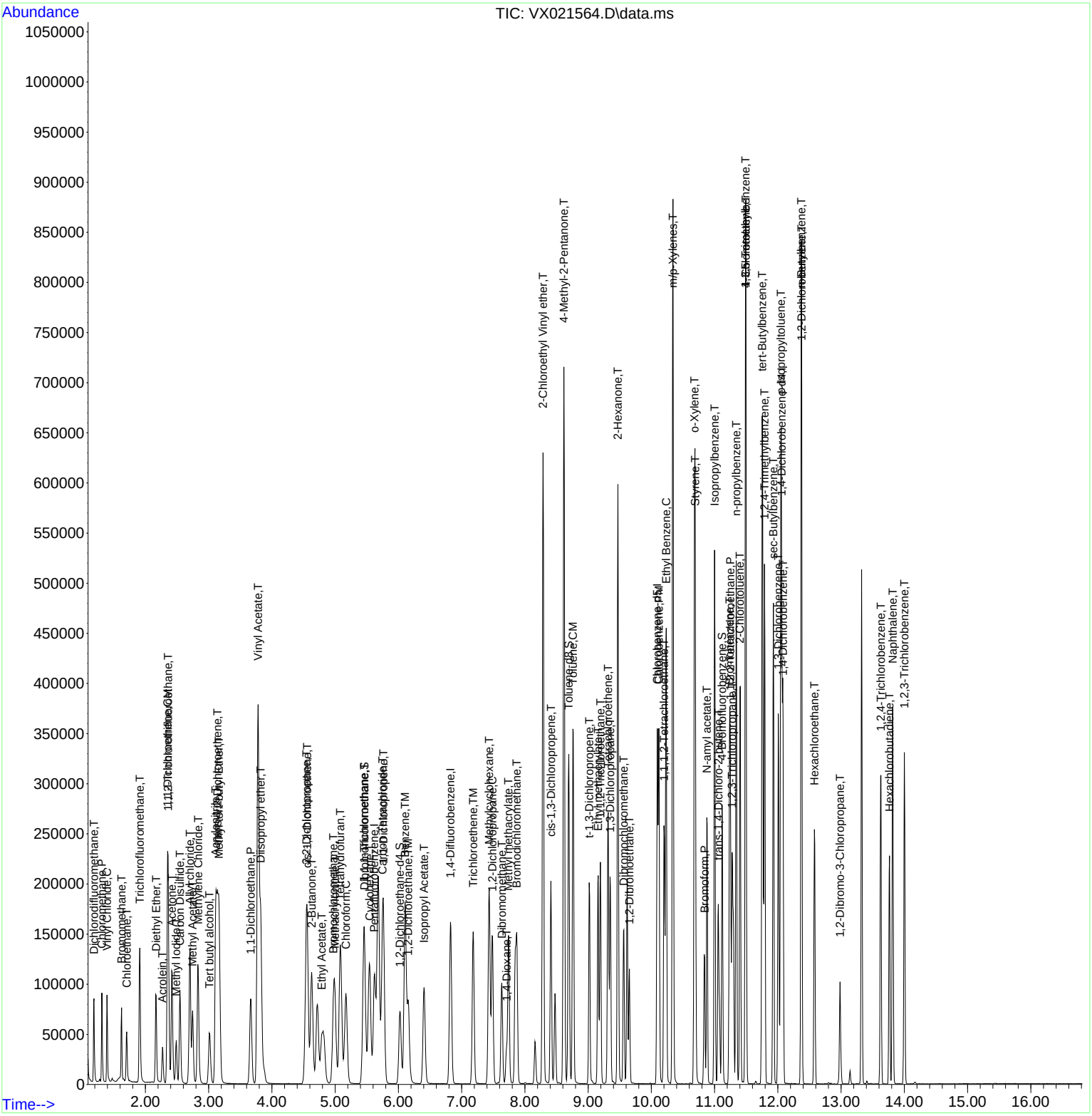
Sample Results: **VX021564.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021564.D
Acq On : 29 Mar 2021 09:35
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 30 03:22:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

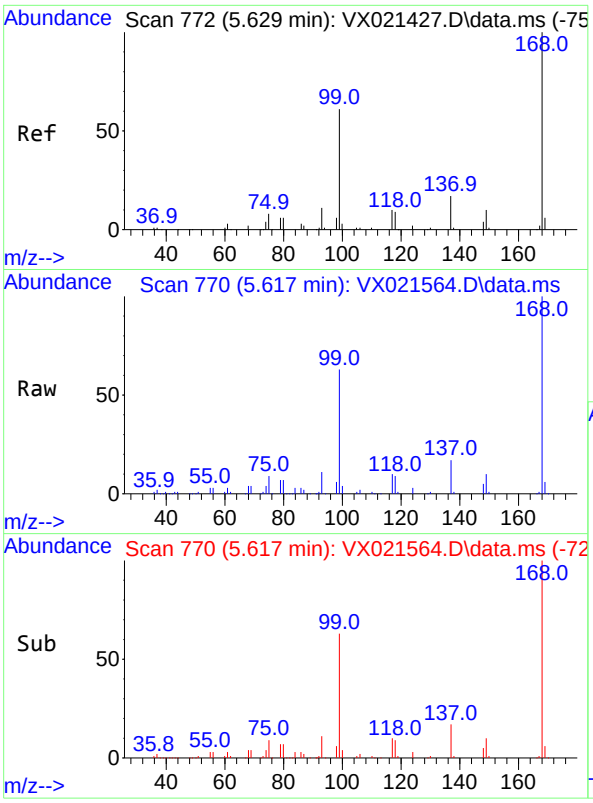
**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

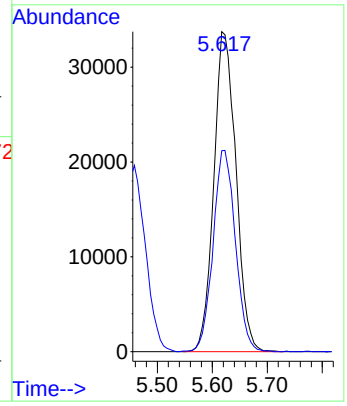
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

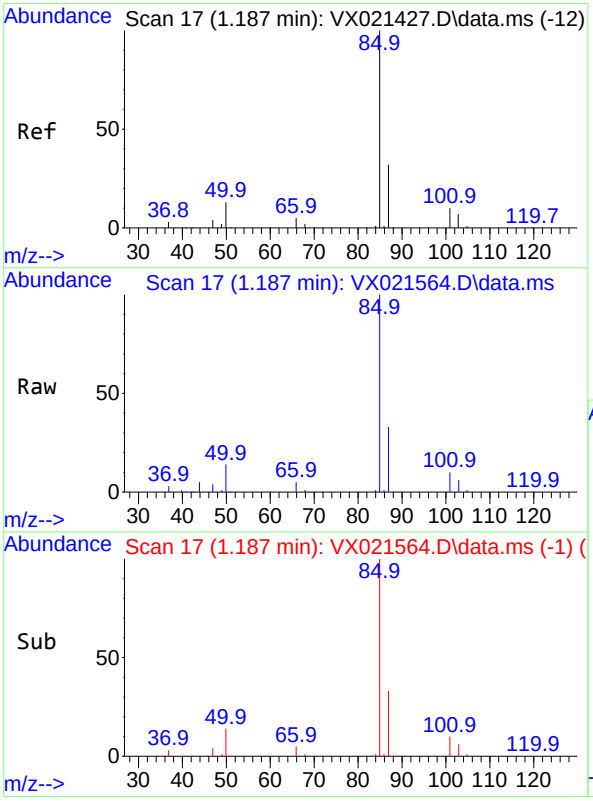



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.617 min Scan# 770
Delta R.T. -0.012 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:168 Resp: 94419

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 62.8 | 45.8 | 68.6 |

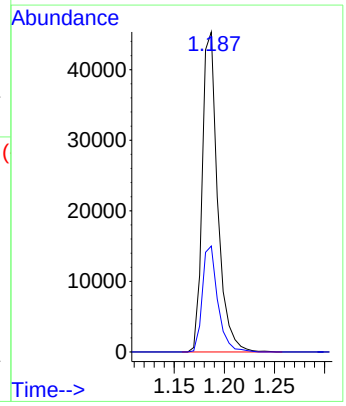



#2
Dichlorodifluoromethane
Concen: 46.73 ug/l
RT: 1.187 min Scan# 17
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

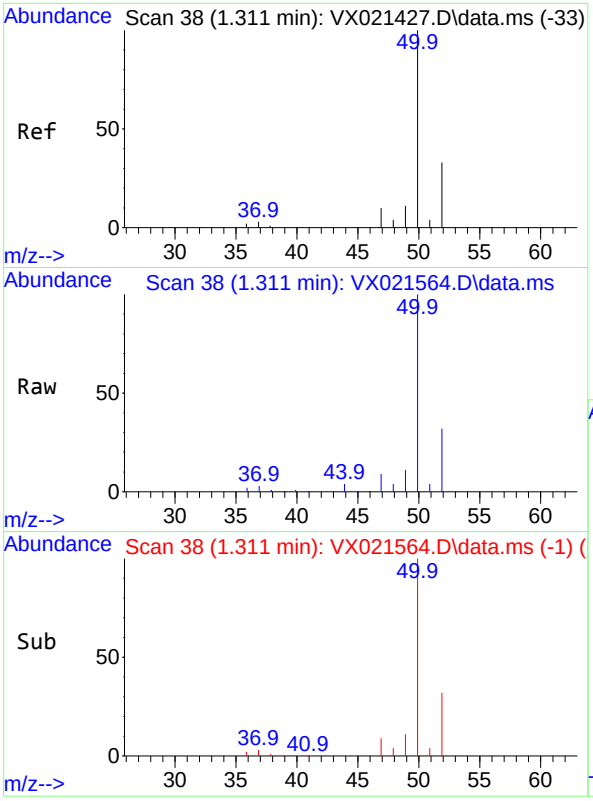
Tgt Ion: 85 Resp: 48495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.1 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

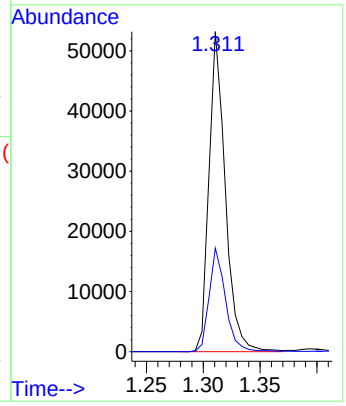
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

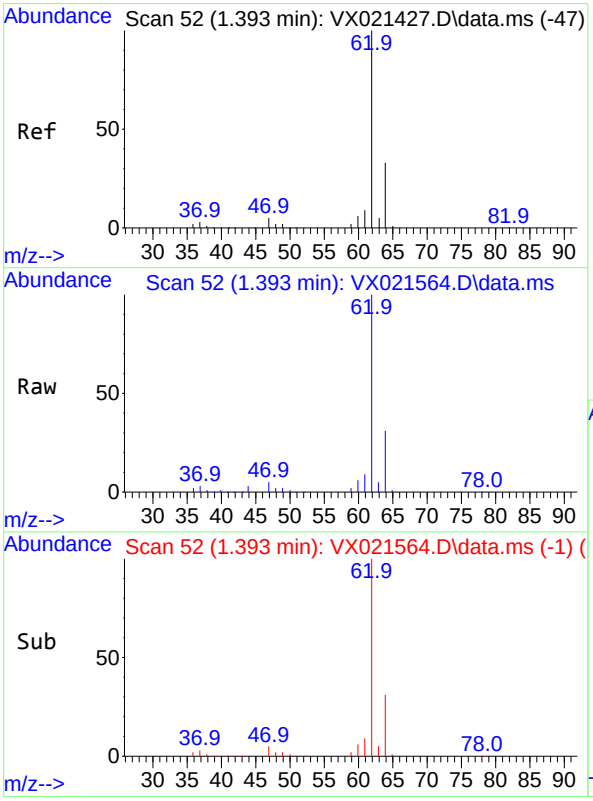



#3
Chloromethane
Concen: 44.43 ug/l
RT: 1.311 min Scan# 38
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 50 Resp: 53001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.4 | 26.4 | 39.6 |

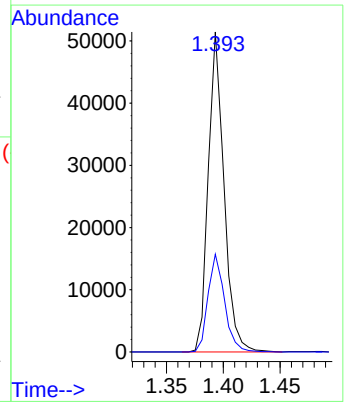



#4
Vinyl Chloride
Concen: 46.67 ug/l
RT: 1.393 min Scan# 52
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

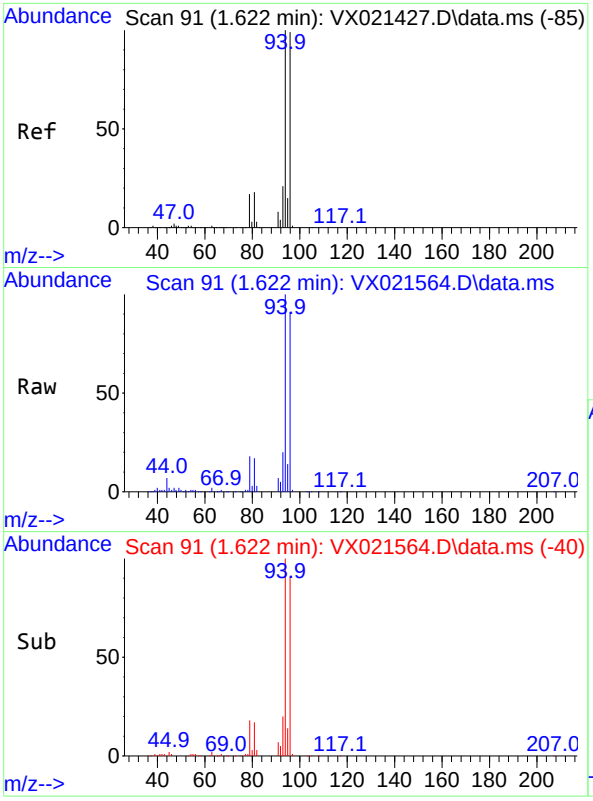
Tgt Ion: 62 Resp: 49539

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 30.6 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

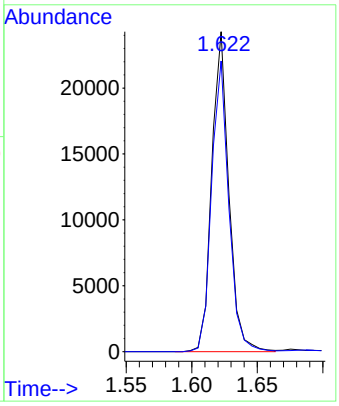
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

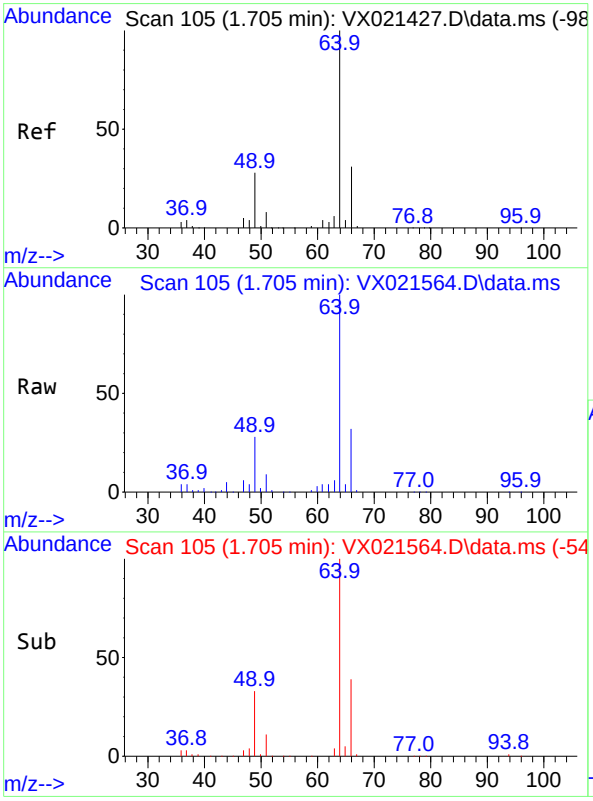



#5
Bromomethane
Concen: 51.32 ug/l
RT: 1.622 min Scan# 91
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 94 Resp: 21924

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 90.8 | 76.4 | 114.6 |

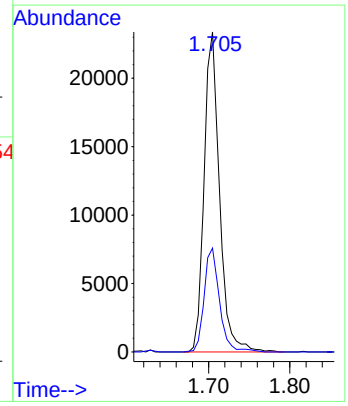



#6
Chloroethane
Concen: 45.77 ug/l
RT: 1.705 min Scan# 105
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

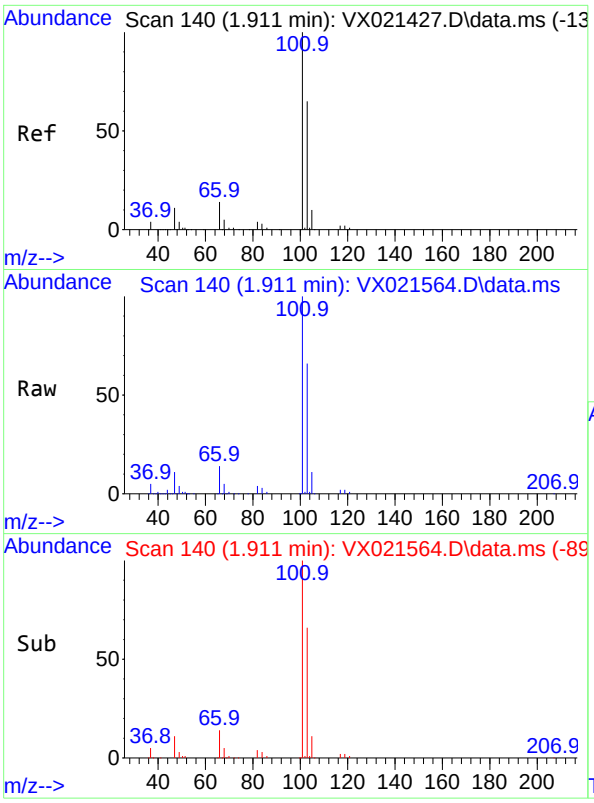
Tgt Ion: 64 Resp: 30815

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 32.5 | 25.4 | 38.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

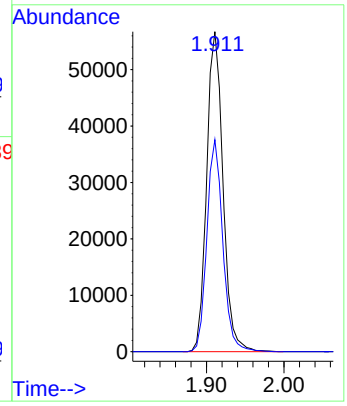
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

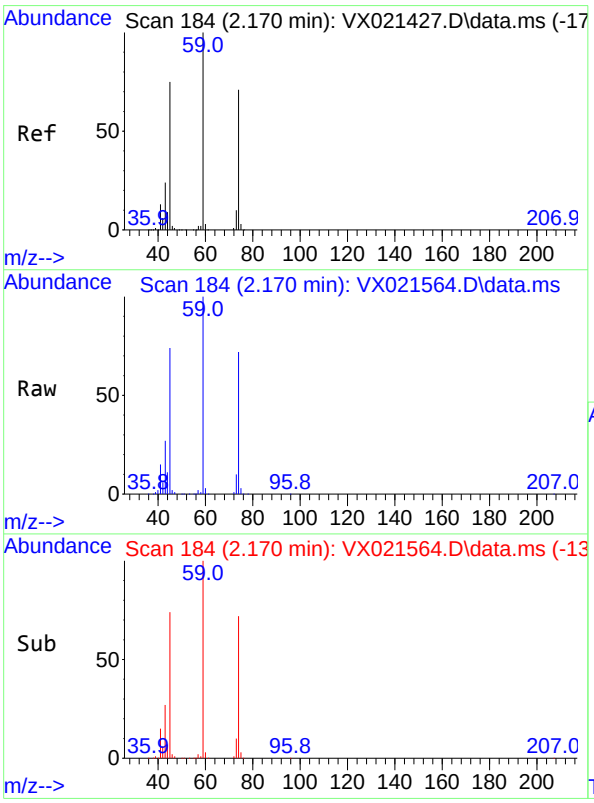



#7
Trichlorofluoromethane
Concen: 48.05 ug/l
RT: 1.911 min Scan# 140
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:101 Resp: 82959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 66.3 | 53.2 | 79.8 |

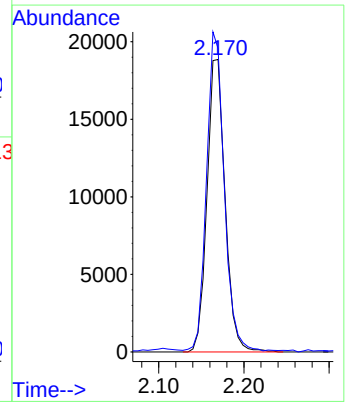



#8
Diethyl Ether
Concen: 46.45 ug/l
RT: 2.170 min Scan# 184
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

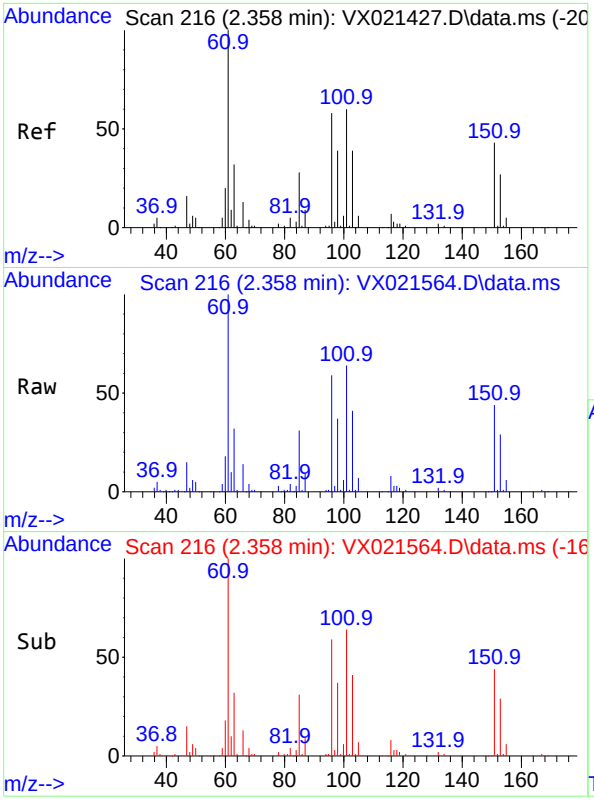
Tgt Ion: 74 Resp: 27831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 105.6 | 44.5 | 133.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

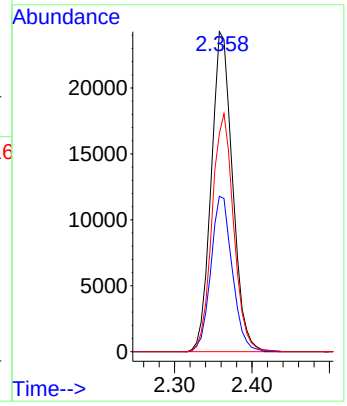
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

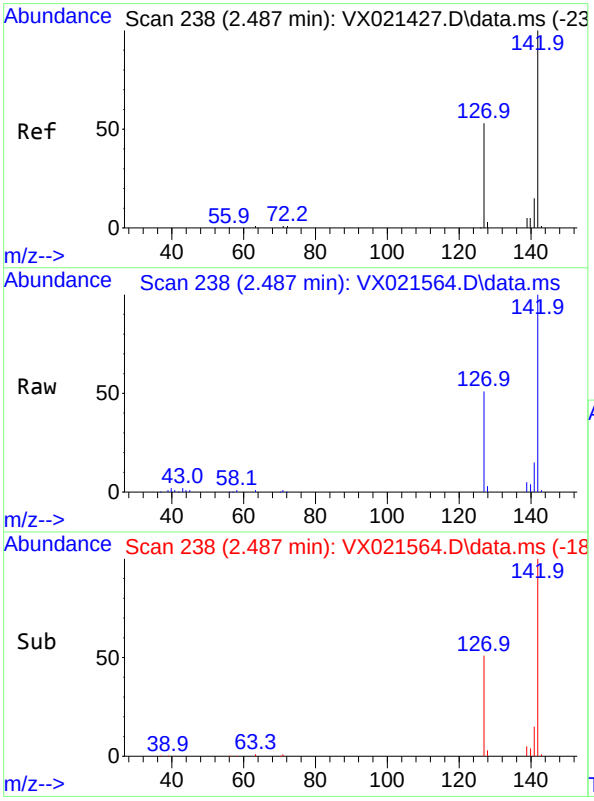



#9
1,1,2-Trichlorotrifluoroethane
Concen: 47.81 ug/l
RT: 2.358 min Scan# 216
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:101 Resp: 46464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 48.7 | 34.9 | 52.3 |
| 151 | 75.3 | 61.4 | 92.2 |

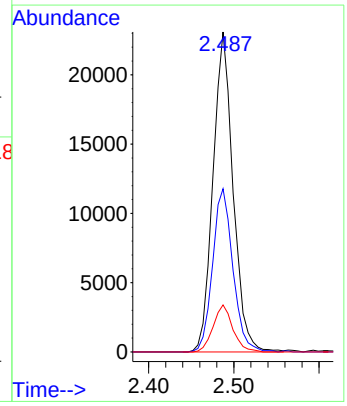



#10
Methyl Iodide
Concen: 49.83 ug/l
RT: 2.487 min Scan# 238
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

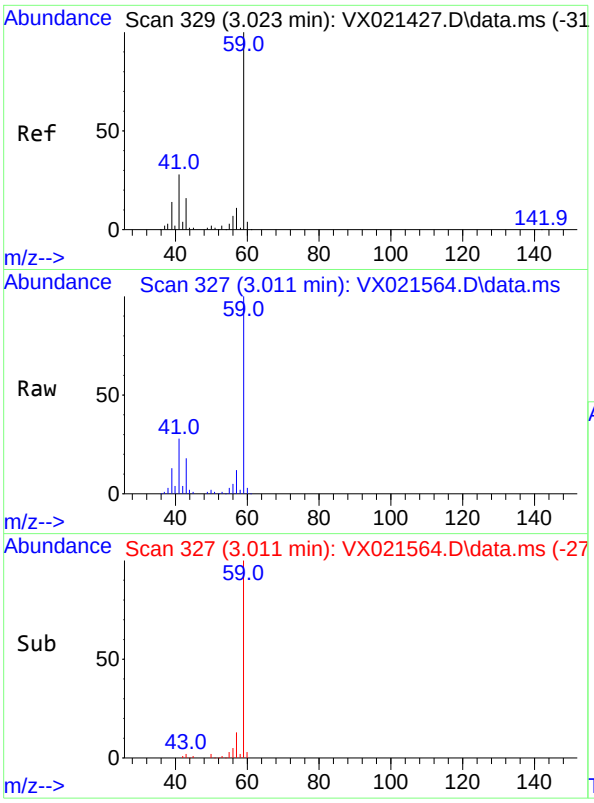
Tgt Ion:142 Resp: 37799

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 51.5 | 33.3 | 49.9# |
| 141 | 14.4 | 11.4 | 17.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

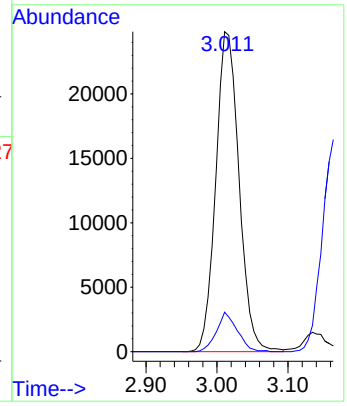
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

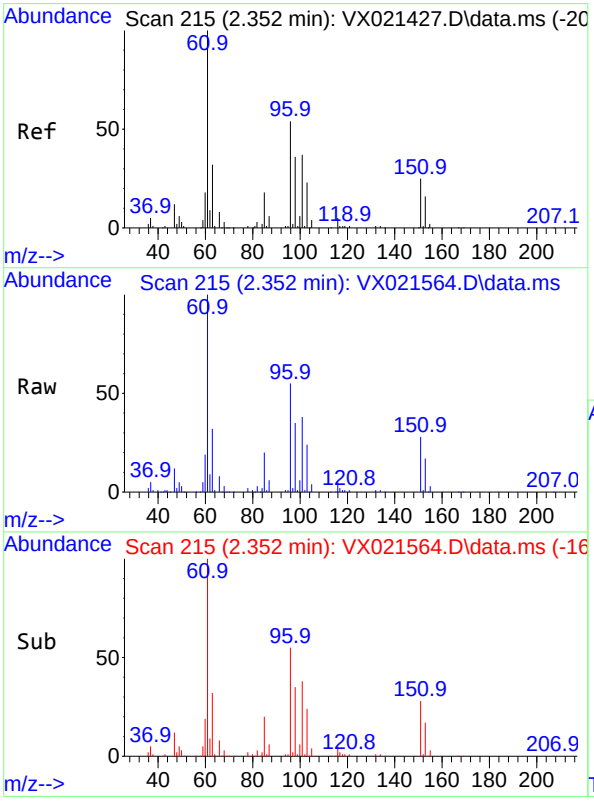



#11
Tert butyl alcohol
Concen: 217.44 ug/l
RT: 3.011 min Scan# 327
Delta R.T. -0.012 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 59 Resp: 56472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.0 | 7.8 | 11.8 |

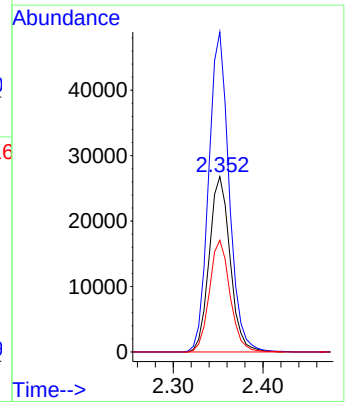



#12
1,1-Dichloroethene
Concen: 45.39 ug/l
RT: 2.352 min Scan# 215
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

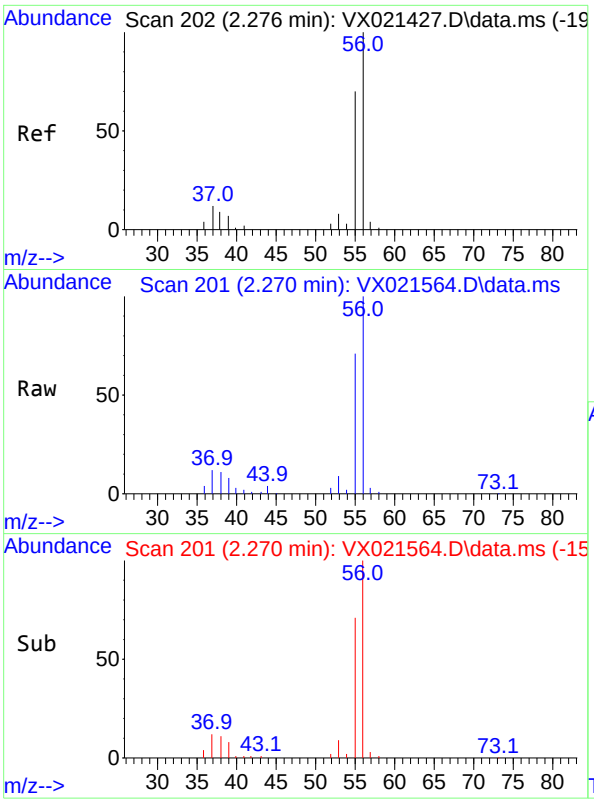
Tgt Ion: 96 Resp: 43190

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 182.5 | 124.6 | 187.0 |
| 98 | 63.7 | 50.6 | 76.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

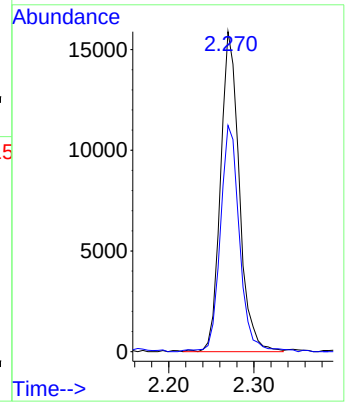
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

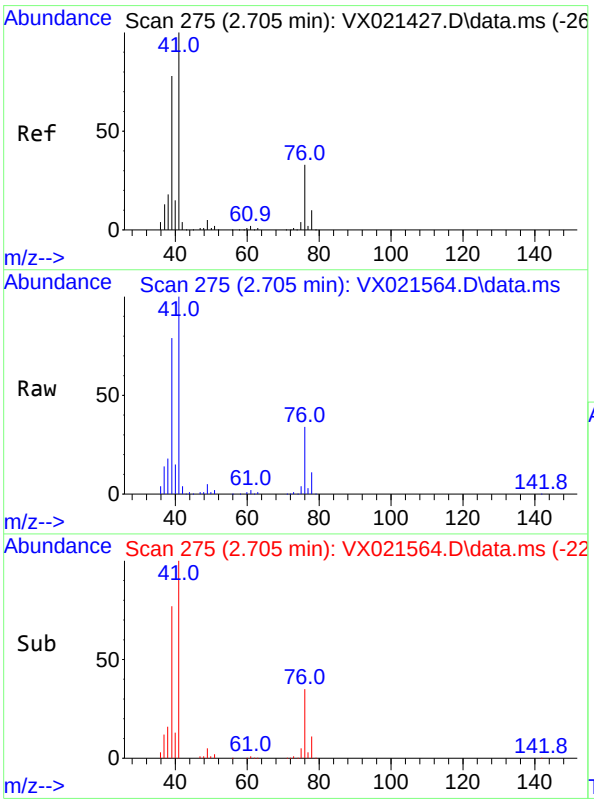



#13
Acrolein
Concen: 186.73 ug/l
RT: 2.270 min Scan# 201
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 56 Resp: 24318

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 72.2 | 56.4 | 84.6 |

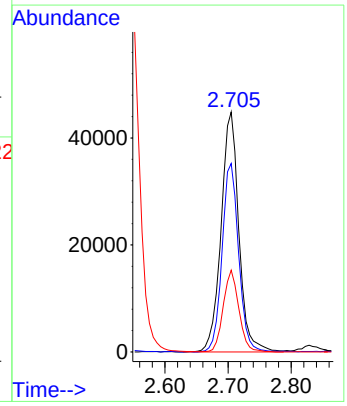



#14
Allyl chloride
Concen: 45.59 ug/l
RT: 2.705 min Scan# 275
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

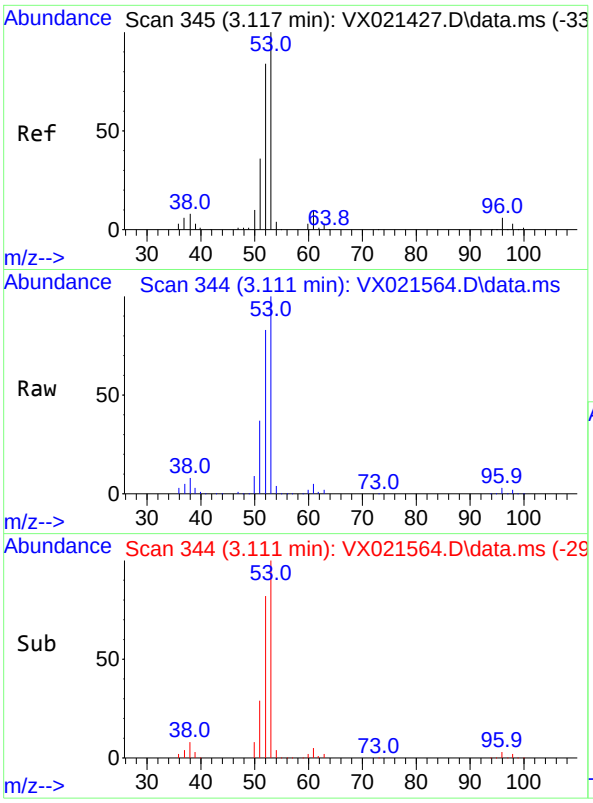
Tgt Ion: 41 Resp: 88047

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 73.1 | 51.6 | 77.4 |
| 76 | 29.9 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

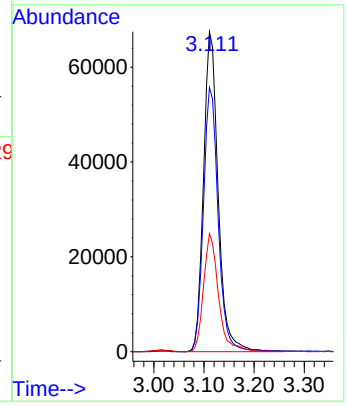
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

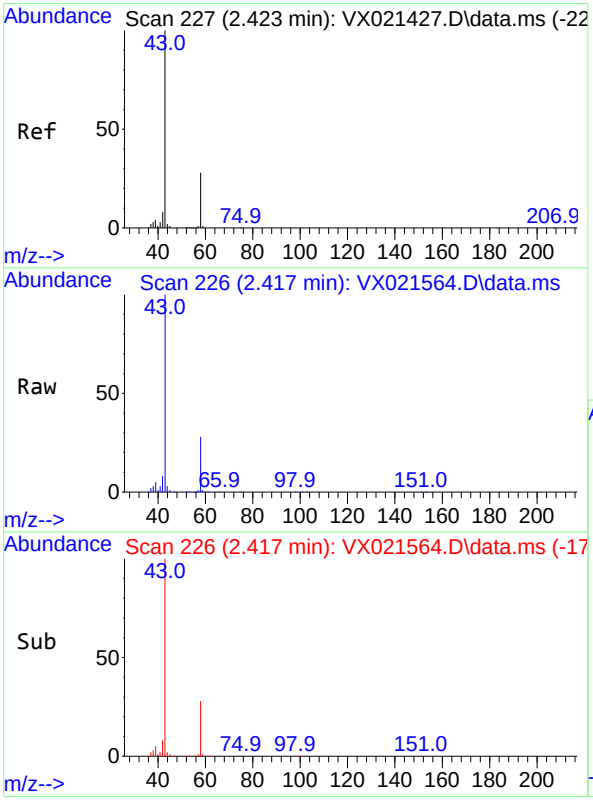



#15
Acrylonitrile
Concen: 221.98 ug/l
RT: 3.111 min Scan# 344
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 53 Resp: 137012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.1 | 65.3 | 97.9 |
| 51 | 37.8 | 28.2 | 42.2 |

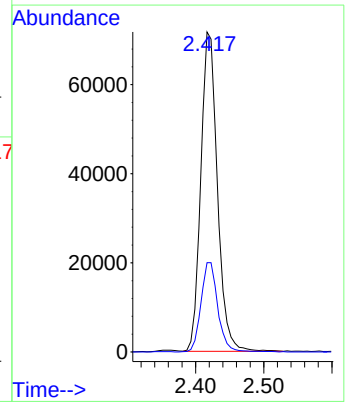



#16
Acetone
Concen: 203.27 ug/l
RT: 2.417 min Scan# 226
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

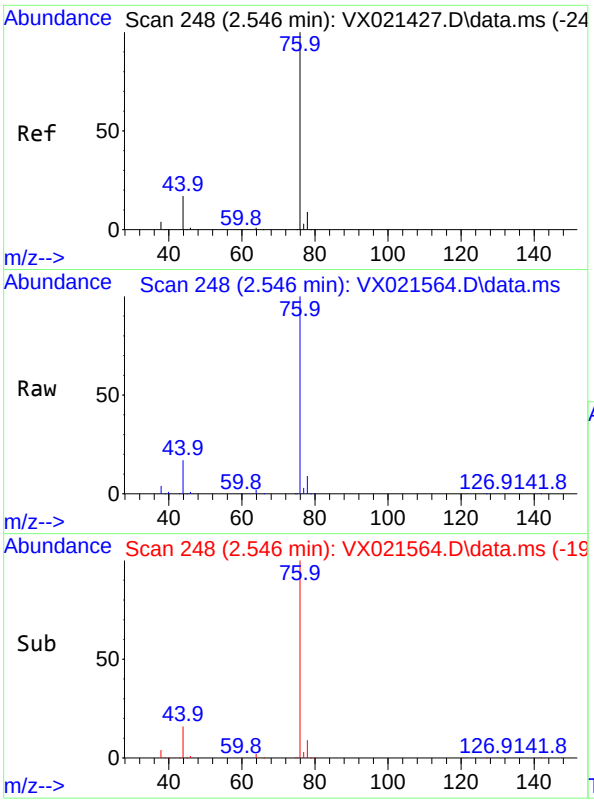
Tgt Ion: 43 Resp: 120744

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.9 | 27.8 | 41.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

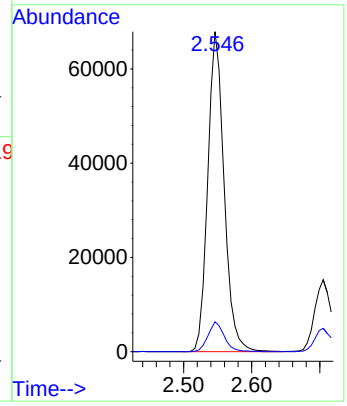
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

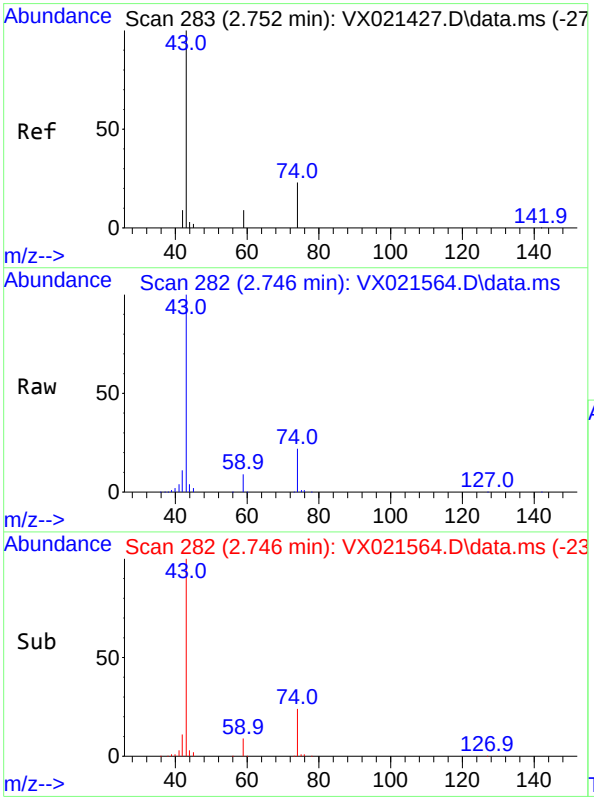



#17
Carbon Disulfide
Concen: 42.31 ug/l
RT: 2.546 min Scan# 248
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 76 Resp: 113047

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.3 | 7.2 | 10.8 |

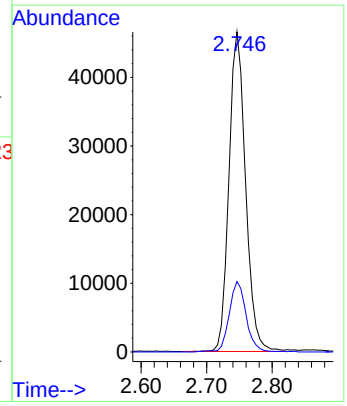



#18
Methyl Acetate
Concen: 47.60 ug/l
RT: 2.746 min Scan# 282
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

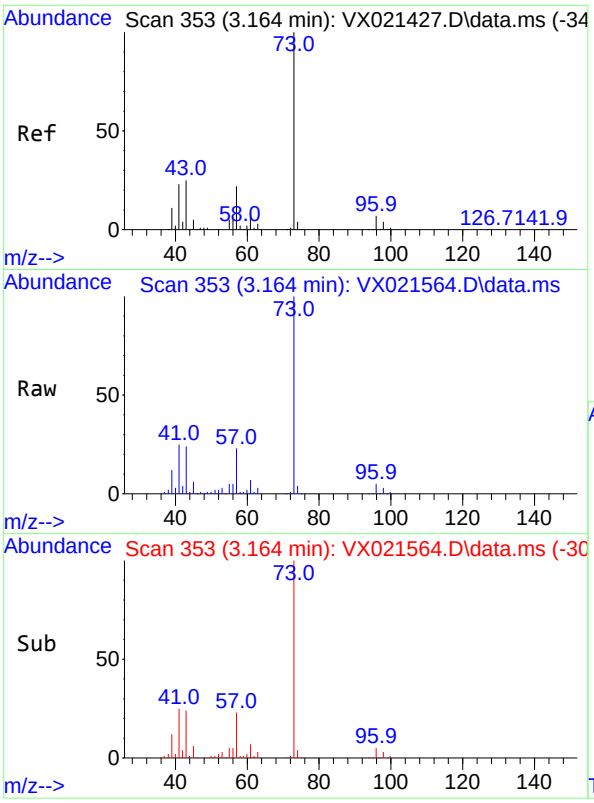
Tgt Ion: 43 Resp: 81681

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.6 | 21.9 | 32.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

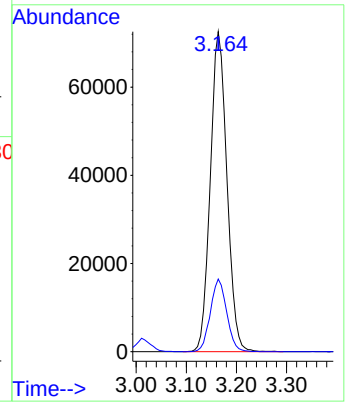
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

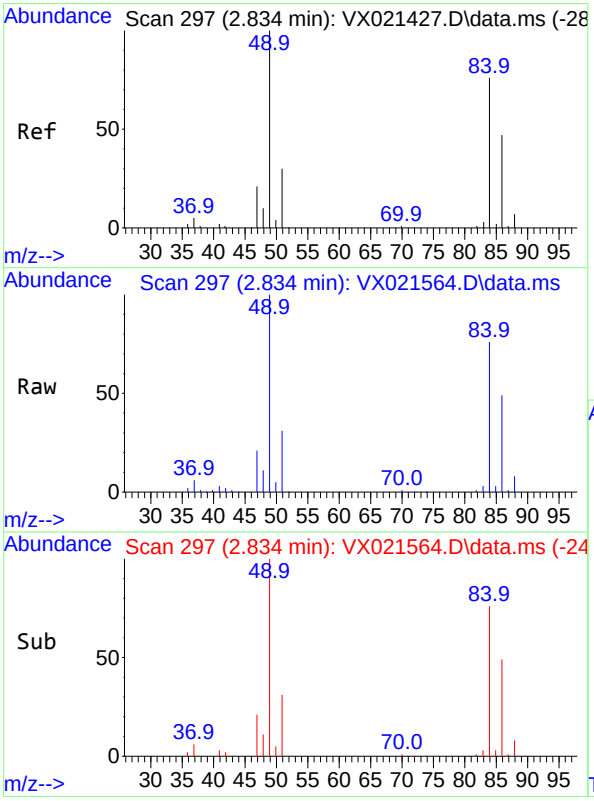



#19
Methyl tert-butyl Ether
Concen: 47.00 ug/l
RT: 3.164 min Scan# 353
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 73 Resp: 166998

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.7 | 17.1 | 25.7 |

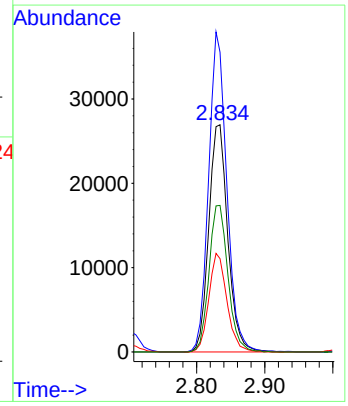



#20
Methylene Chloride
Concen: 45.13 ug/l
RT: 2.834 min Scan# 297
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

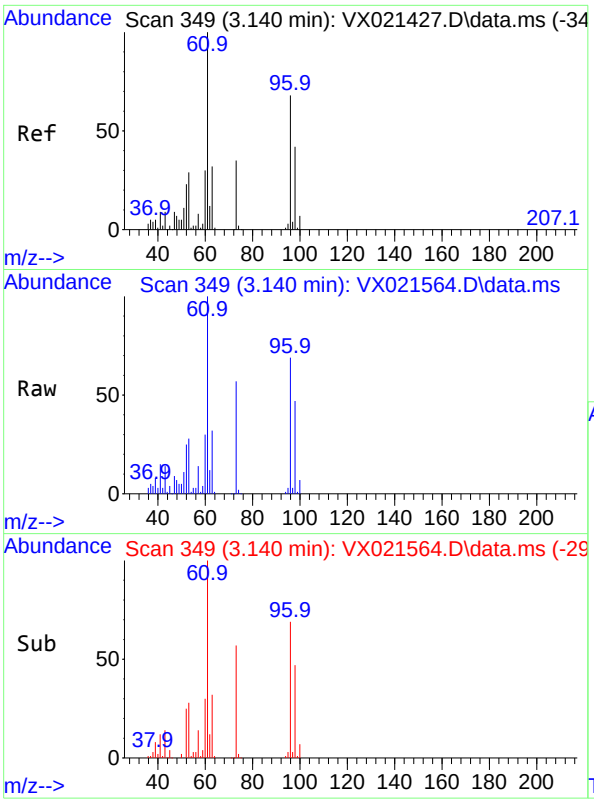
Tgt Ion: 84 Resp: 52311

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 131.8 | 88.6 | 132.8 |
| 51 | 41.0 | 27.0 | 40.6# |
| 86 | 64.5 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

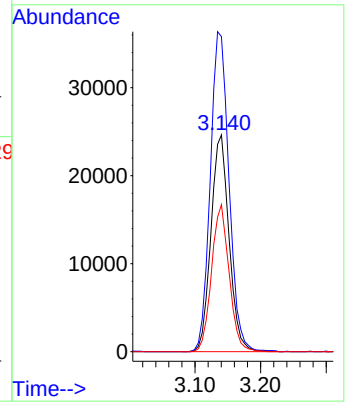
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

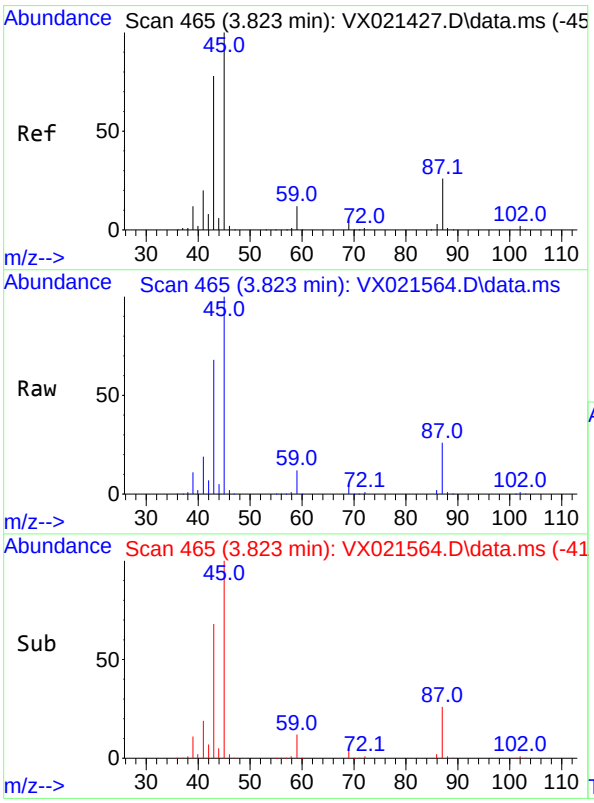



#21
trans-1,2-Dichloroethene
Concen: 45.32 ug/l
RT: 3.140 min Scan# 349
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 96 Resp: 47366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 145.4 | 107.7 | 161.5 |
| 98 | 67.8 | 50.4 | 75.6 |

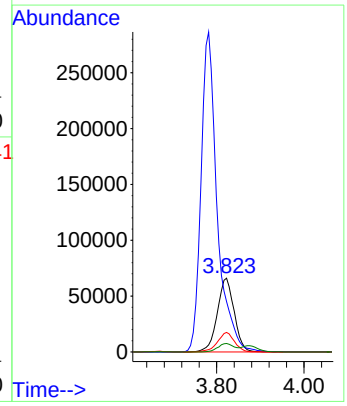



#22
Diisopropyl ether
Concen: 47.13 ug/l
RT: 3.823 min Scan# 465
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

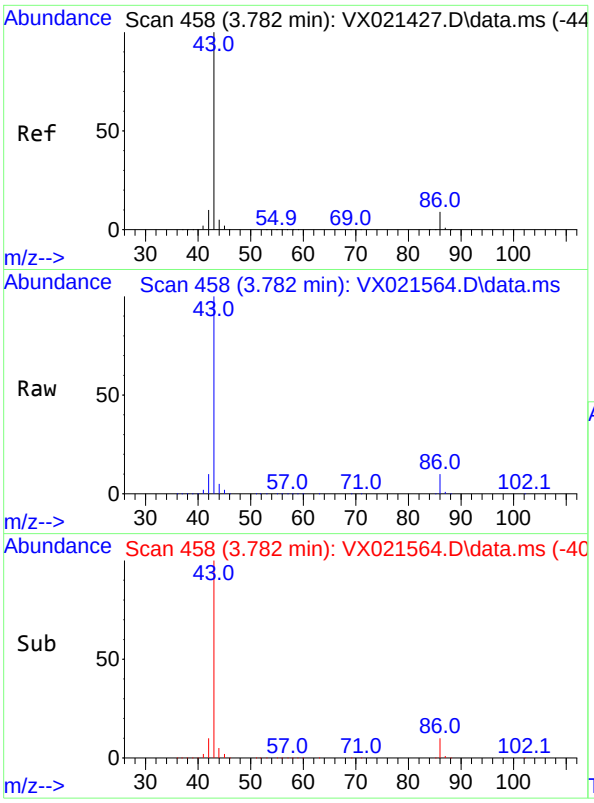
Tgt Ion: 45 Resp: 176843

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 68.2 | 58.0 | 87.0 |
| 87 | 26.5 | 25.4 | 38.0 |
| 59 | 11.5 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

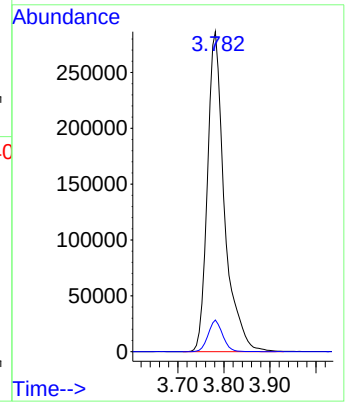
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

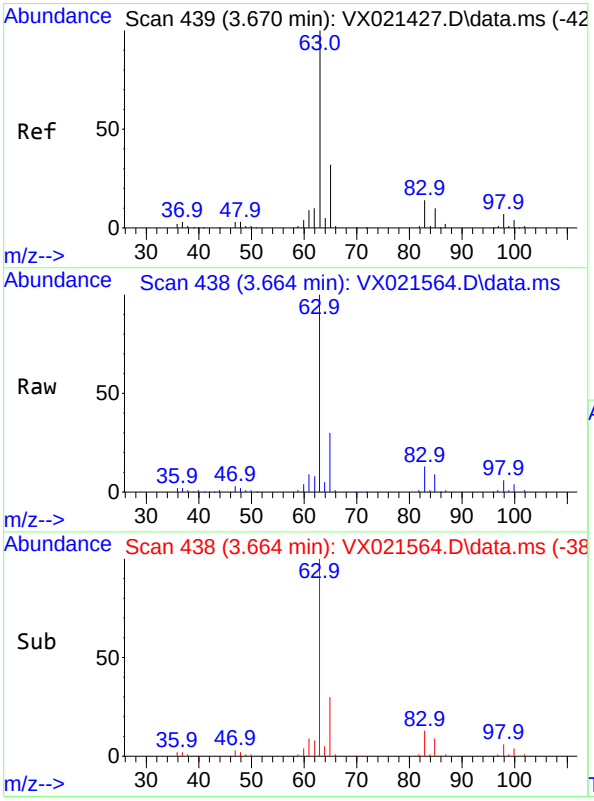



#23
Vinyl Acetate
Concen: 232.19 ug/l
RT: 3.782 min Scan# 458
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 43 Resp: 736949

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.9 | 9.9 | 14.9# |

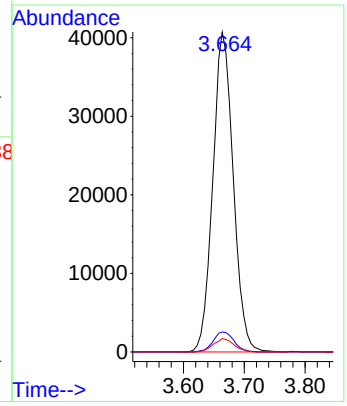



#24
1,1-Dichloroethane
Concen: 46.97 ug/l
RT: 3.664 min Scan# 438
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

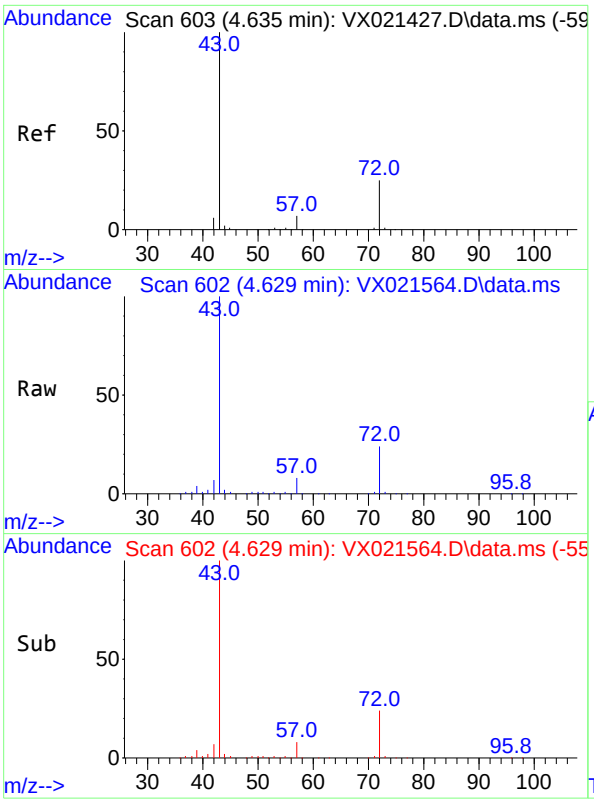
Tgt Ion: 63 Resp: 95018

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.2 | 3.8 | 11.2 |
| 100 | 4.2 | 2.5 | 7.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

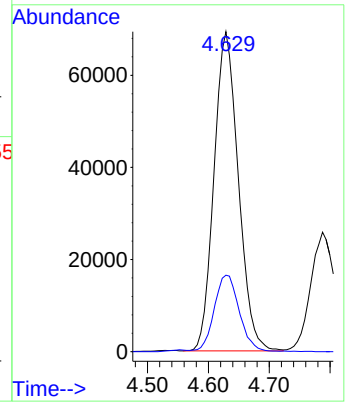
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

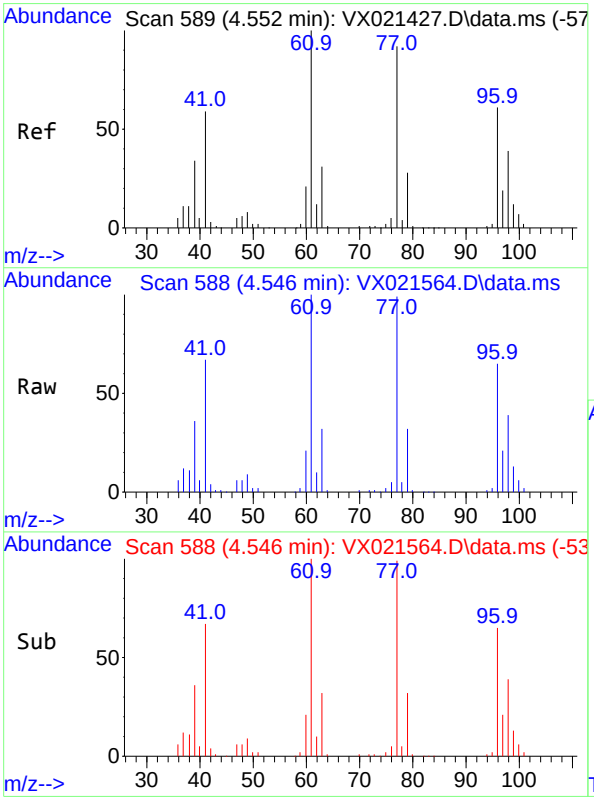



#25
2-Butanone
Concen: 213.45 ug/l
RT: 4.629 min Scan# 602
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 43 Resp: 192197

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 23.7 | 23.7 | 35.5 |

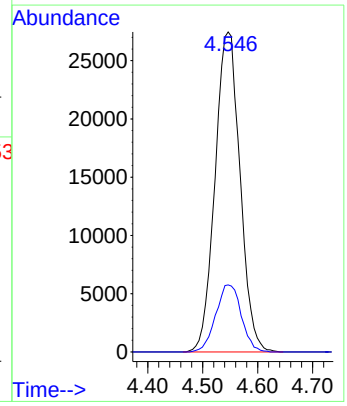



#26
2,2-Dichloropropane
Concen: 49.47 ug/l
RT: 4.546 min Scan# 588
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

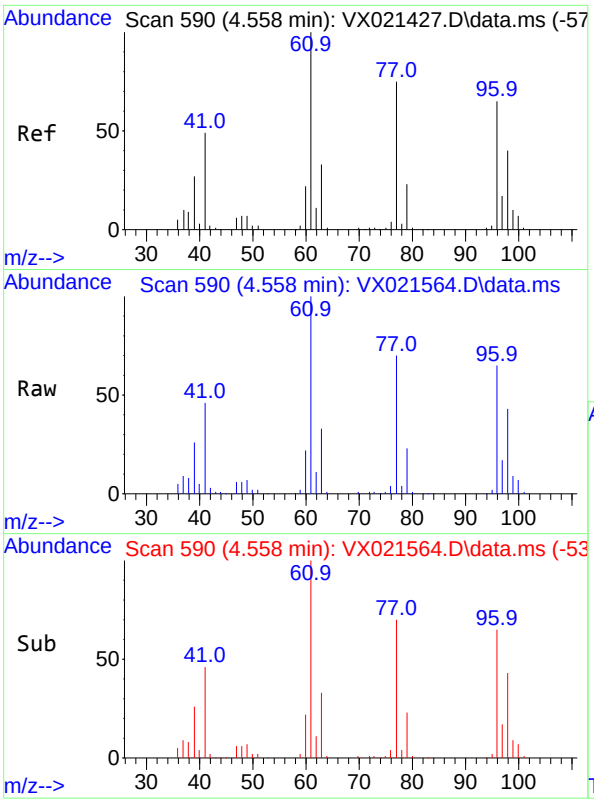
Tgt Ion: 77 Resp: 86689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.5 | 11.7 | 35.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

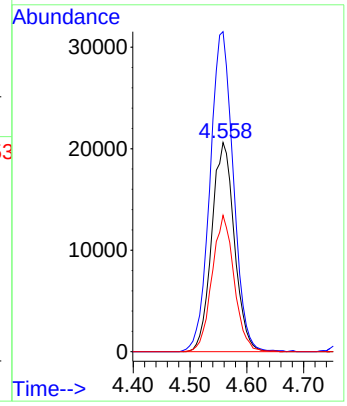
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

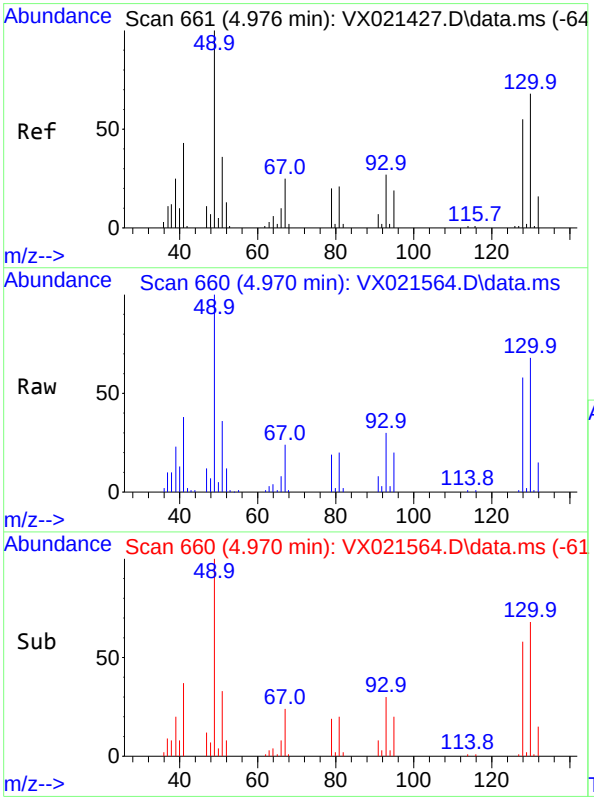



#27
cis-1,2-Dichloroethene
Concen: 47.04 ug/l
RT: 4.558 min Scan# 590
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 96 Resp: 57088

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 157.5 | 0.0 | 285.6 |
| 98 | 63.6 | 0.0 | 129.6 |

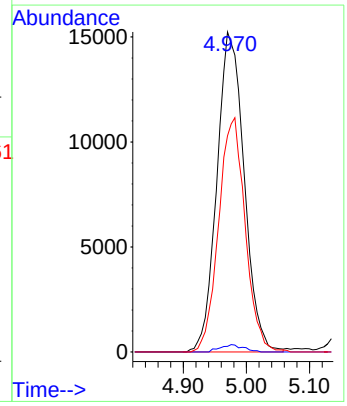



#28
Bromochloromethane
Concen: 45.14 ug/l
RT: 4.970 min Scan# 660
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

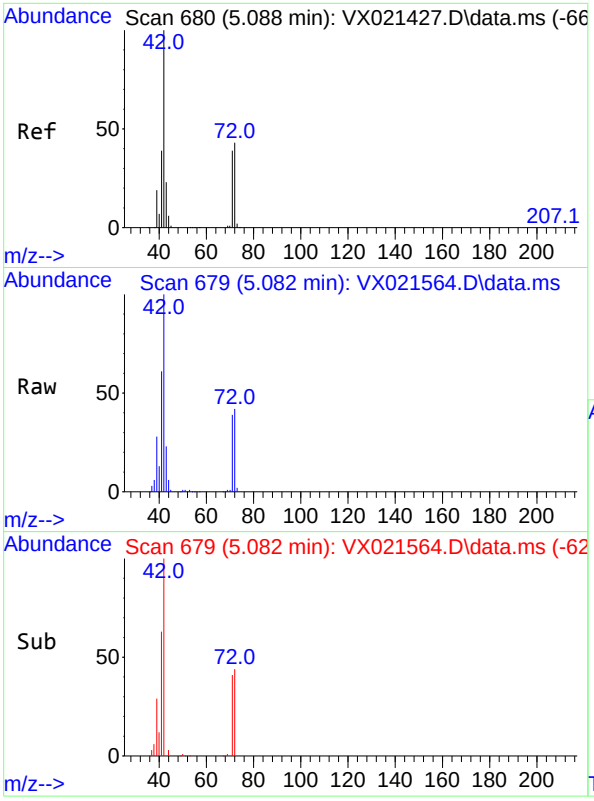
Tgt Ion: 49 Resp: 45715

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.9 | 0.0 | 4.0 |
| 130 | 71.4 | 68.2 | 102.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

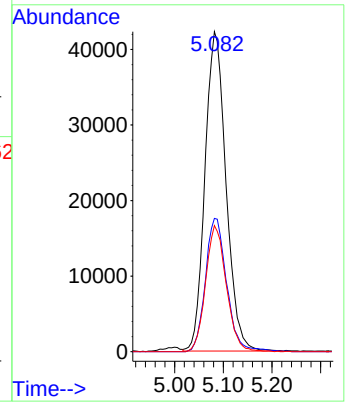
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

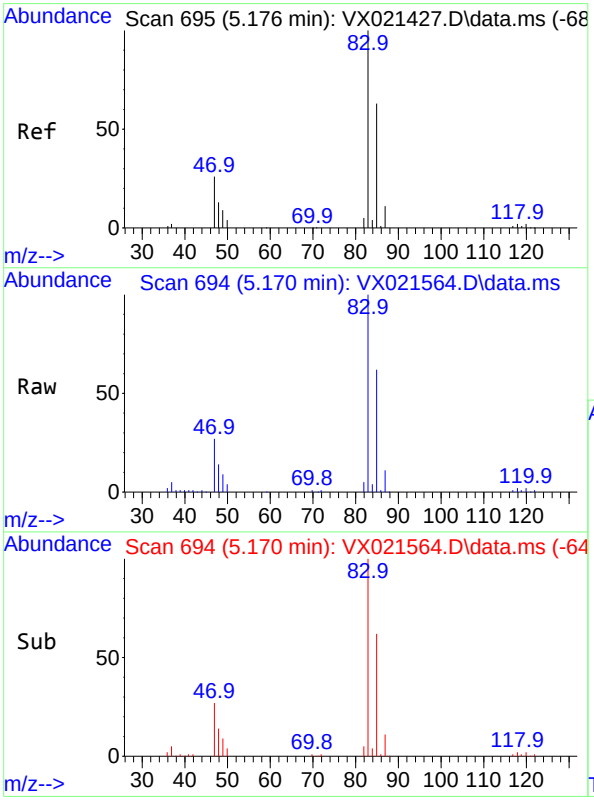



#29
Tetrahydrofuran
Concen: 217.11 ug/l
RT: 5.082 min Scan# 679
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 42 Resp: 126753

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.3 | 41.7 | 62.5 |
| 71 | 38.8 | 38.4 | 57.6 |

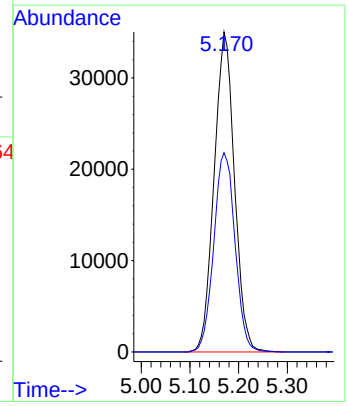



#30
Chloroform
Concen: 47.65 ug/l
RT: 5.170 min Scan# 694
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

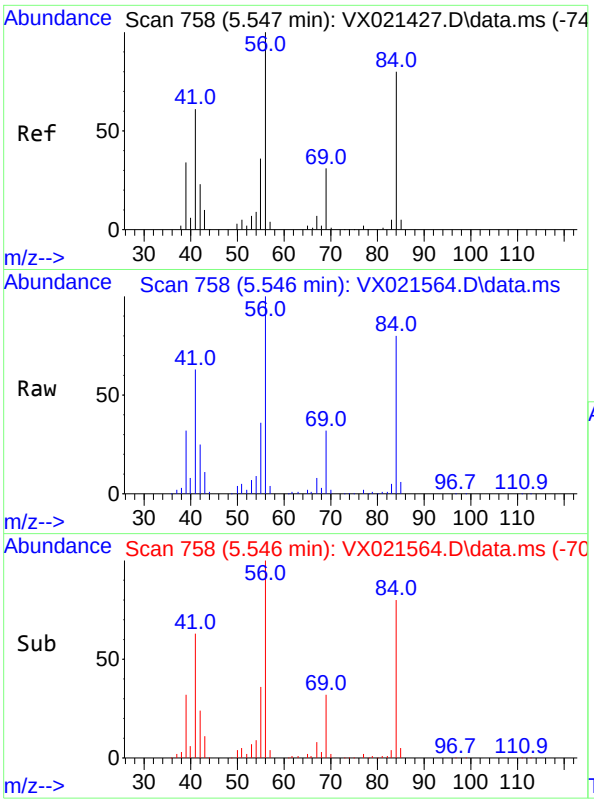
Tgt Ion: 83 Resp: 101736

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 62.3 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

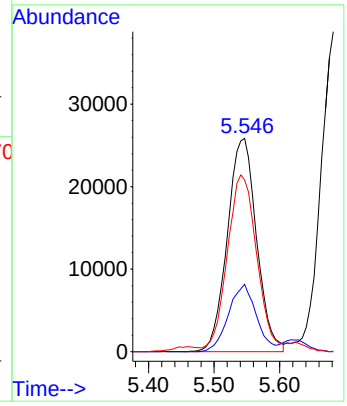
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

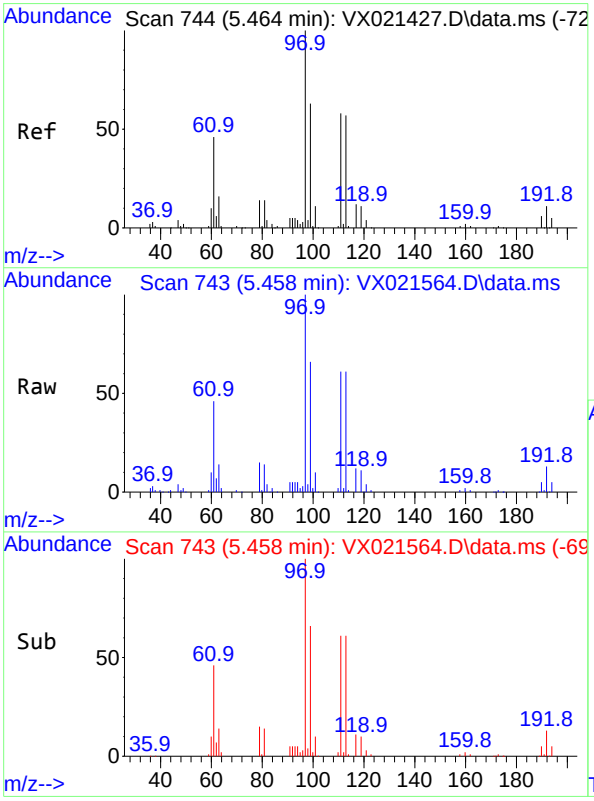



#31
Cyclohexane
Concen: 46.28 ug/l
RT: 5.546 min Scan# 758
Delta R.T. -0.001 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 56 Resp: 79944

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 31.6 | 25.3 | 37.9 |
| 84 | 78.5 | 71.4 | 107.0 |

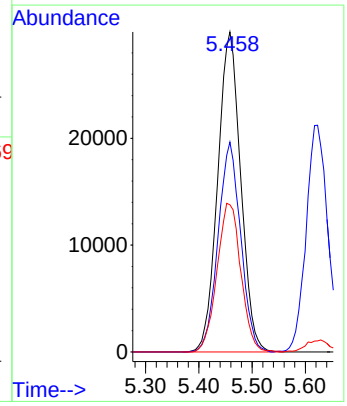



#32
1,1,1-Trichloroethane
Concen: 47.42 ug/l
RT: 5.458 min Scan# 743
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

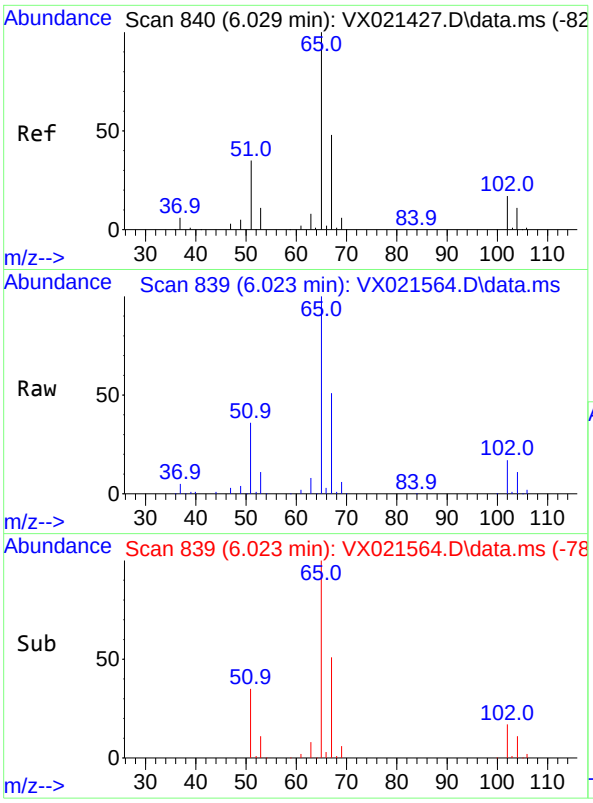
Tgt Ion: 97 Resp: 89724

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.4 | 51.5 | 77.3 |
| 61 | 48.2 | 34.2 | 51.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

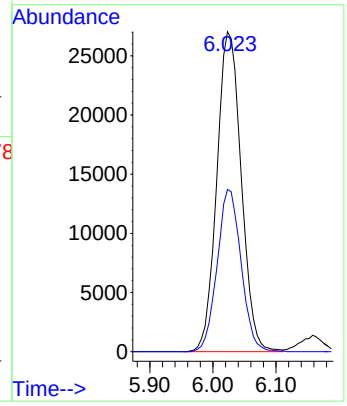
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

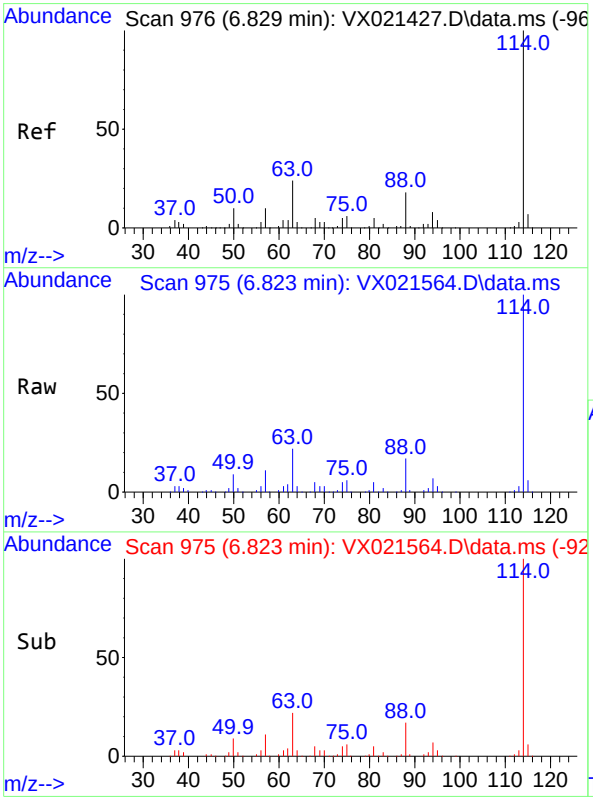



#33
1,2-Dichloroethane-d4
Concen: 46.22 ug/l
RT: 6.023 min Scan# 839
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 65 Resp: 72611

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.8 | 0.0 | 105.4 |

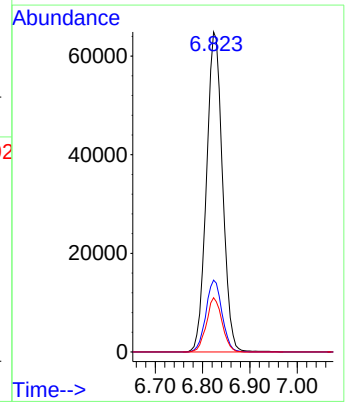



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.823 min Scan# 975
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

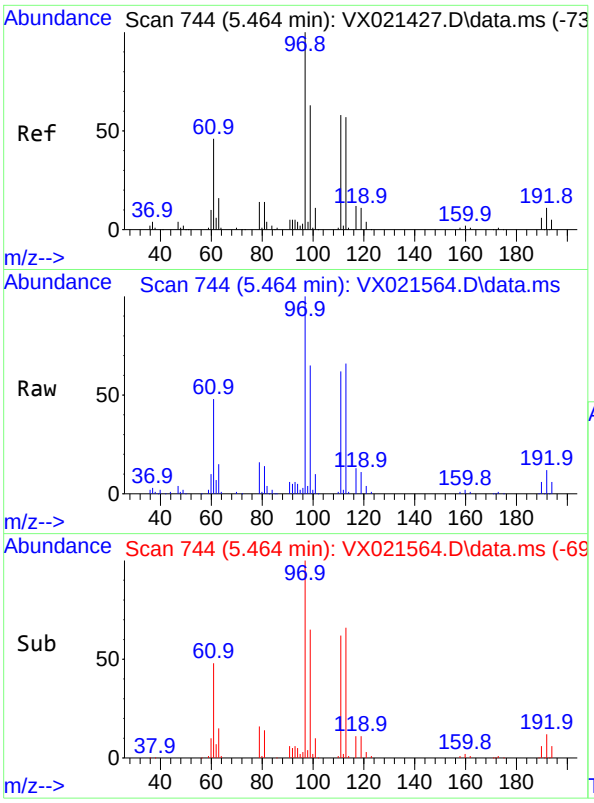
Tgt Ion:114 Resp: 152632

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.5 | 0.0 | 40.8 |
| 88 | 17.0 | 0.0 | 32.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

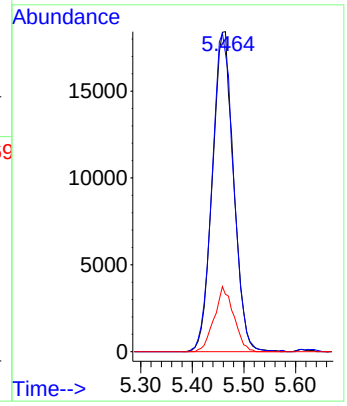
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

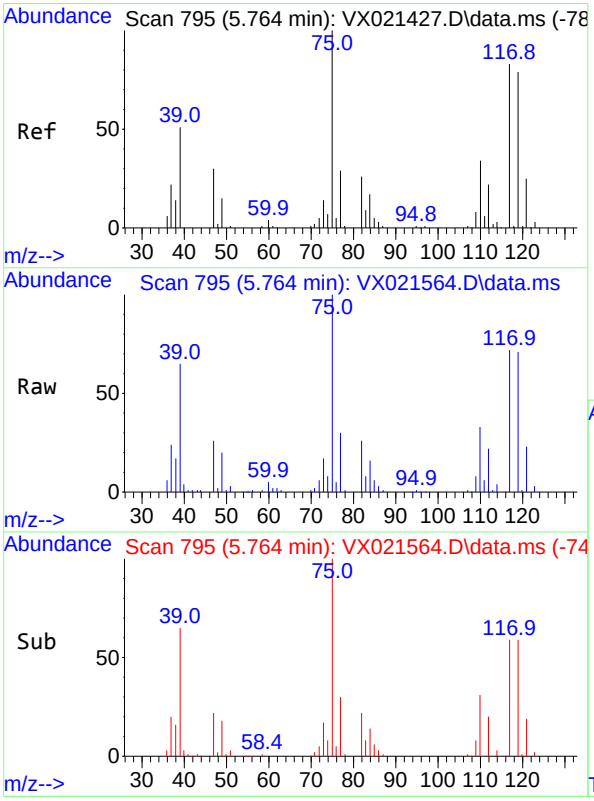



#35
Dibromofluoromethane
Concen: 48.31 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:113 Resp: 52380

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 100.6 | 81.9 | 122.9 |
| 192 | 18.7 | 16.7 | 25.1 |

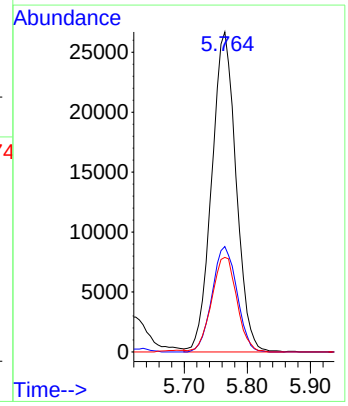



#36
1,1-Dichloropropene
Concen: 47.81 ug/l
RT: 5.764 min Scan# 795
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

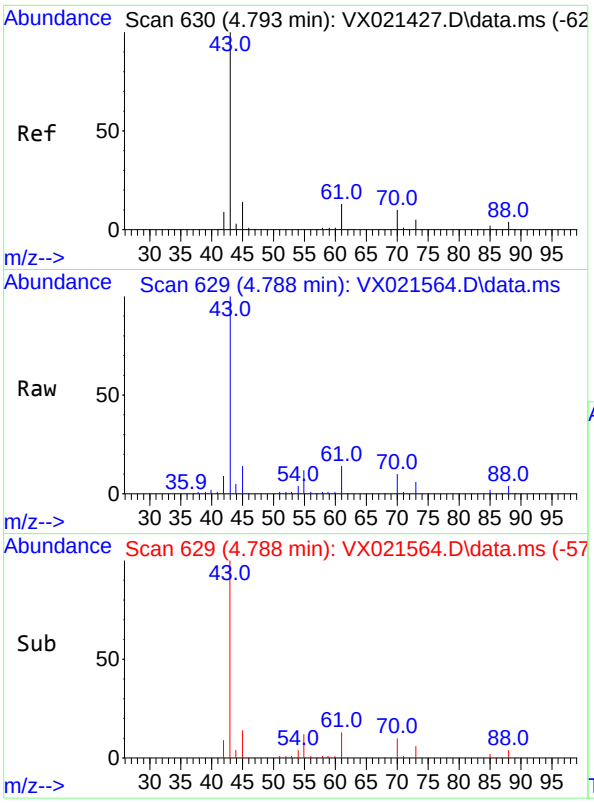
Tgt Ion: 75 Resp: 71496

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.5 | 18.1 | 54.4 |
| 77 | 30.6 | 25.3 | 37.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

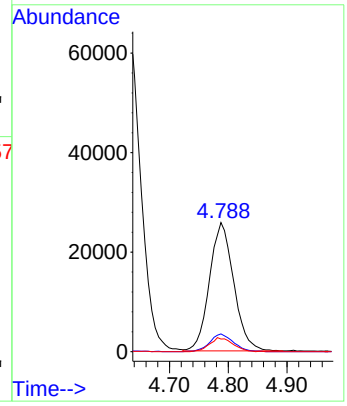
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

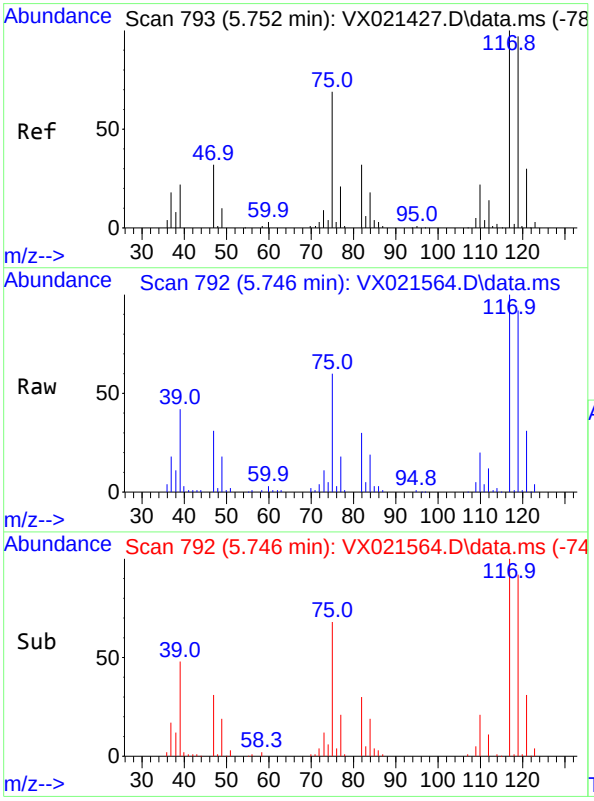



#37
Ethyl Acetate
Concen: 42.81 ug/l
RT: 4.788 min Scan# 629
Delta R.T. -0.005 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 43 Resp: 74023

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.5 | 12.8 | 19.2 |
| 70 | 10.4 | 10.5 | 15.7# |

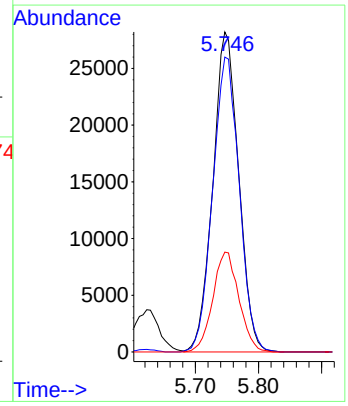



#38
Carbon Tetrachloride
Concen: 49.79 ug/l
RT: 5.746 min Scan# 792
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

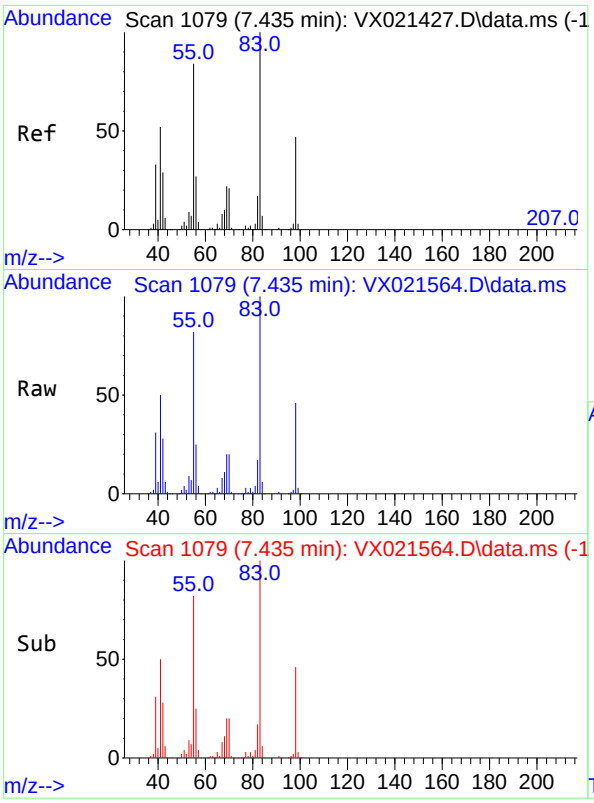
Tgt Ion:117 Resp: 80024

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 92.2 | 76.2 | 114.2 |
| 121 | 31.2 | 24.8 | 37.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

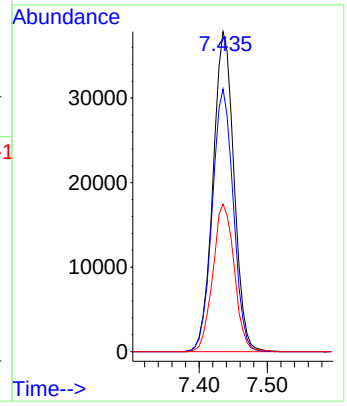
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

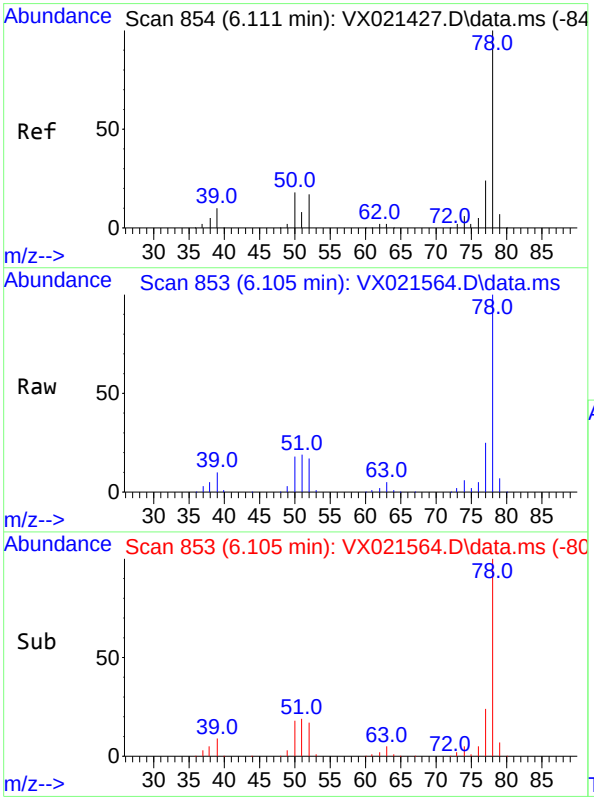



#39
Methylcyclohexane
Concen: 48.84 ug/l
RT: 7.435 min Scan# 1079
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 83 Resp: 80970

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 82.1 | 58.9 | 88.3 |
| 98 | 46.1 | 38.1 | 57.1 |

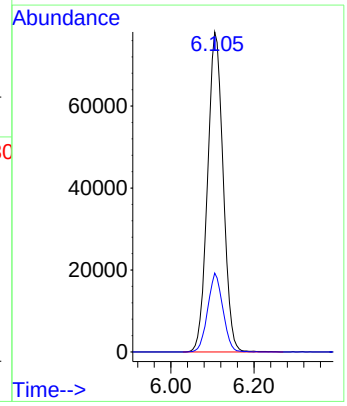



#40
Benzene
Concen: 47.95 ug/l
RT: 6.105 min Scan# 853
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

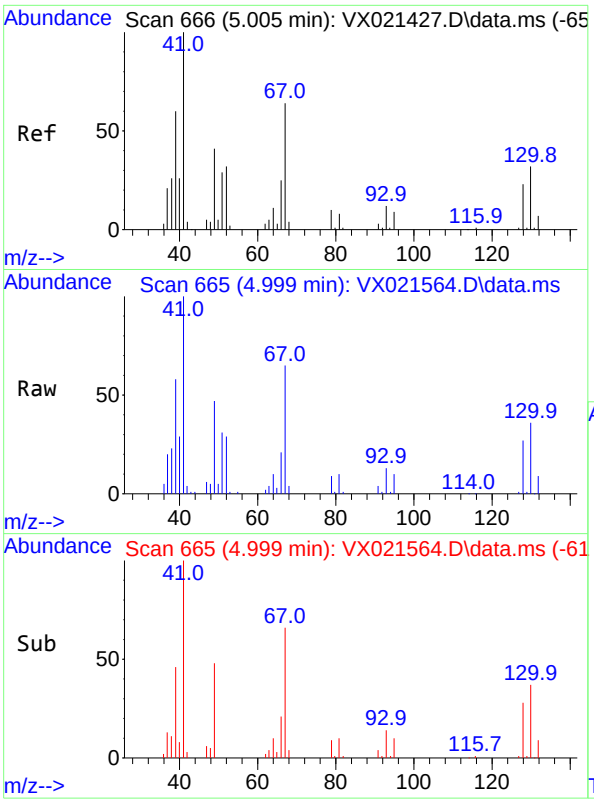
Tgt Ion: 78 Resp: 203627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.6 | 18.9 | 28.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

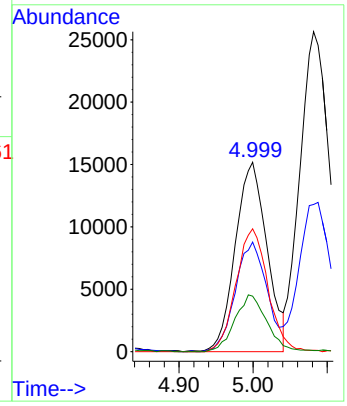
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

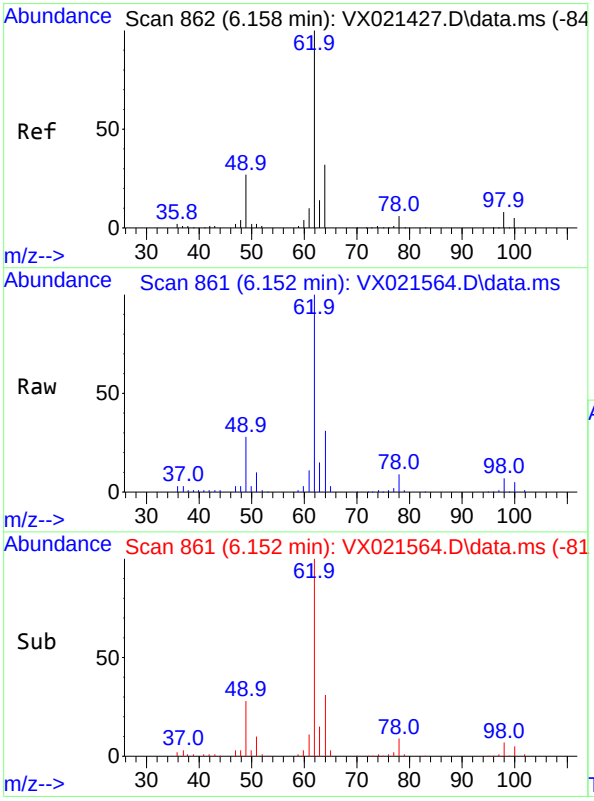



#41
Methacrylonitrile
Concen: 45.00 ug/l
RT: 4.999 min Scan# 665
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 41 Resp: 45134

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 56.9 | 42.5 | 63.7 |
| 67 | 65.3 | 65.0 | 97.6 |
| 52 | 30.4 | 25.3 | 37.9 |

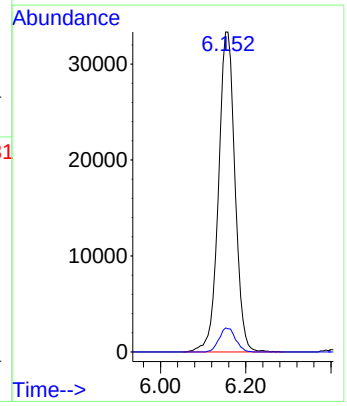



#42
1,2-Dichloroethane
Concen: 48.57 ug/l
RT: 6.152 min Scan# 861
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

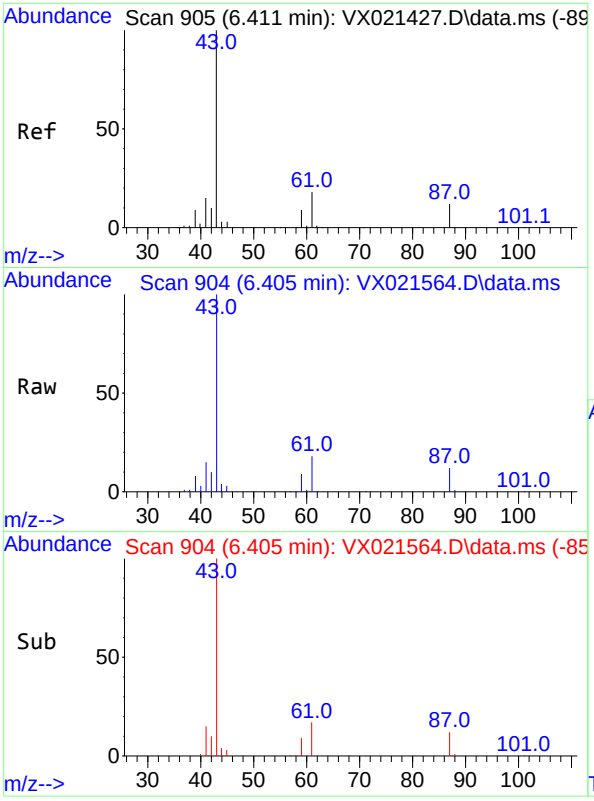
Tgt Ion: 62 Resp: 89429

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.5 | 0.0 | 20.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

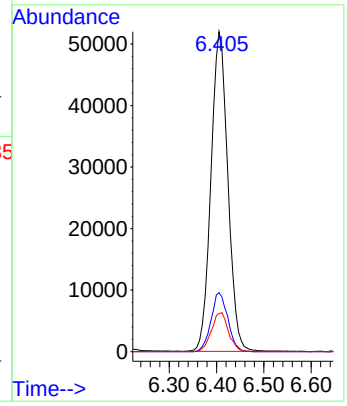
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

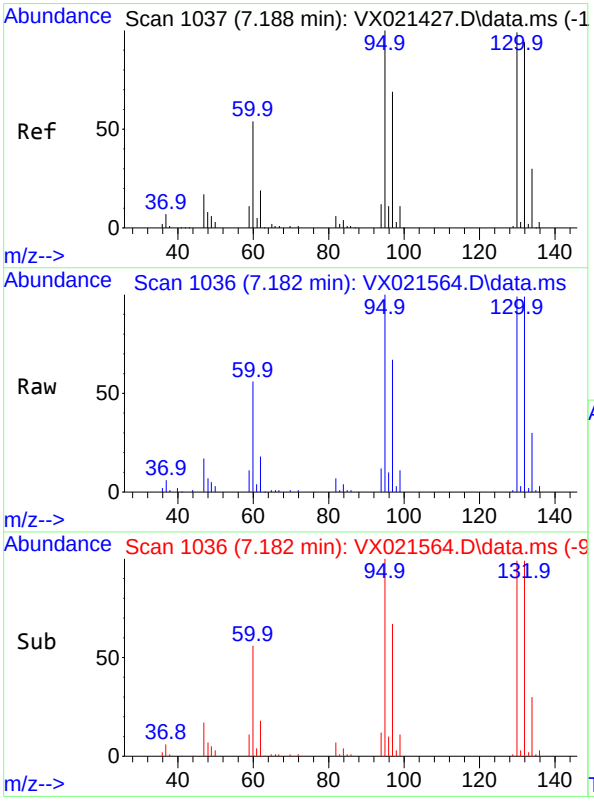



#43
Isopropyl Acetate
Concen: 45.82 ug/l
RT: 6.405 min Scan# 904
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 43 Resp: 128646

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.3 | 18.2 | 27.4 |
| 87 | 12.3 | 12.5 | 18.7# |

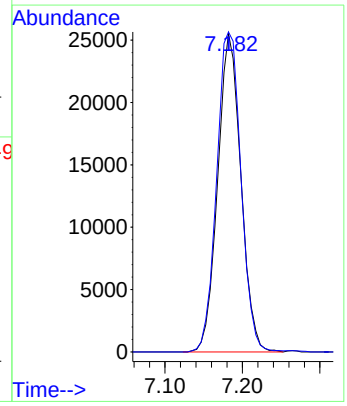



#44
Trichloroethene
Concen: 47.37 ug/l
RT: 7.182 min Scan# 1036
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

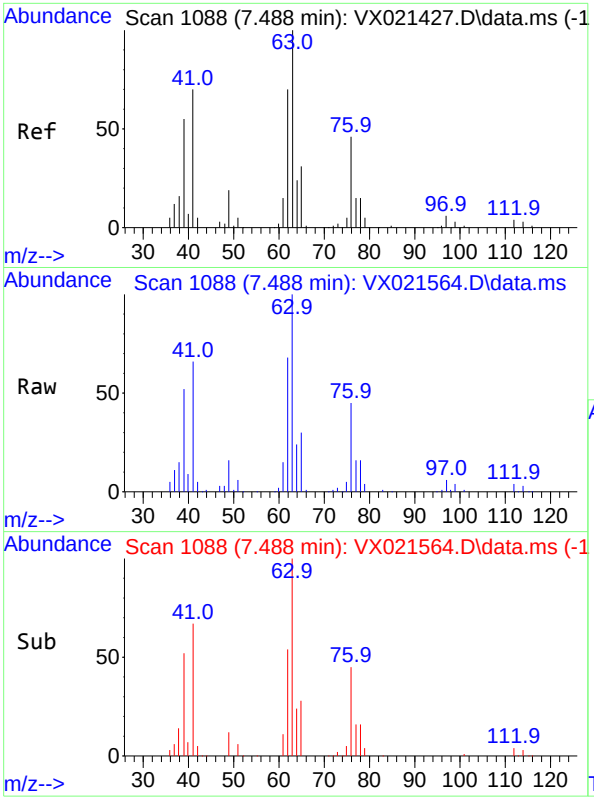
Tgt Ion:130 Resp: 53084

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 100.5 | 0.0 | 198.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

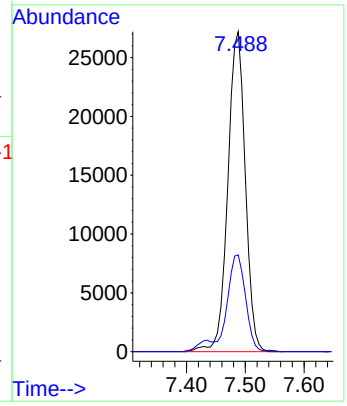
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

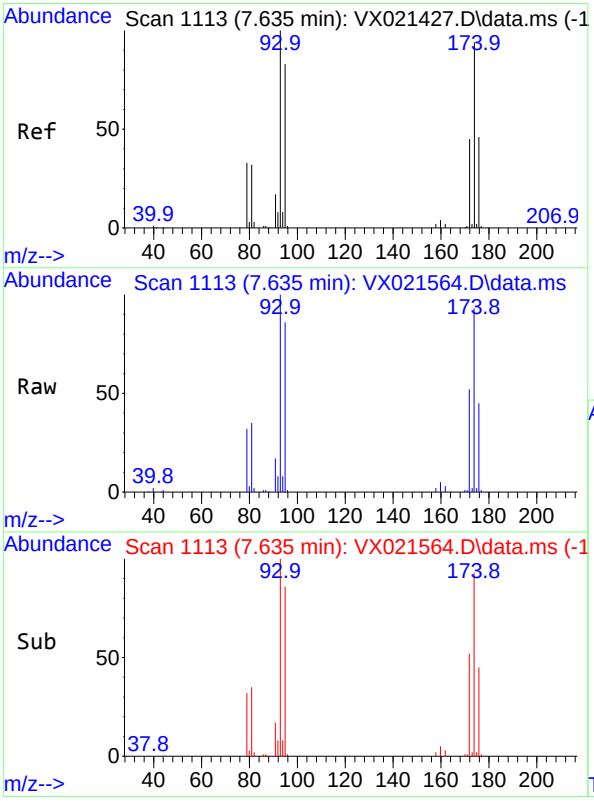



#45
1,2-Dichloropropane
Concen: 48.87 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 63 Resp: 56224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.3 | 25.7 | 38.5 |

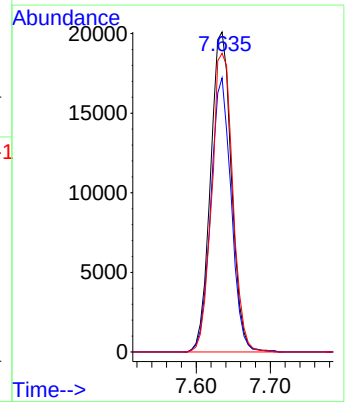



#46
Dibromomethane
Concen: 47.10 ug/l
RT: 7.635 min Scan# 1113
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

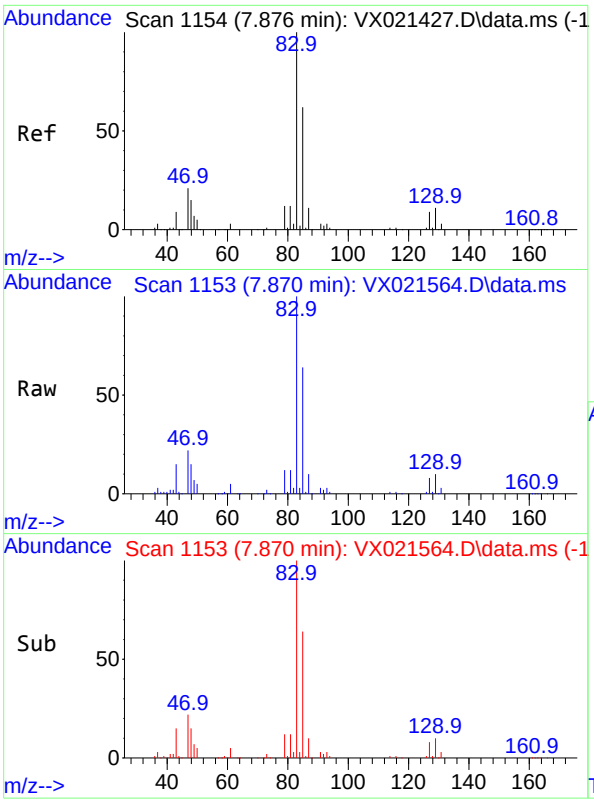
Tgt Ion: 93 Resp: 39497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 83.2 | 66.8 | 100.2 |
| 174 | 93.5 | 83.1 | 124.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

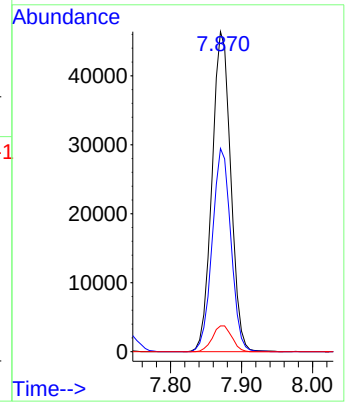
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

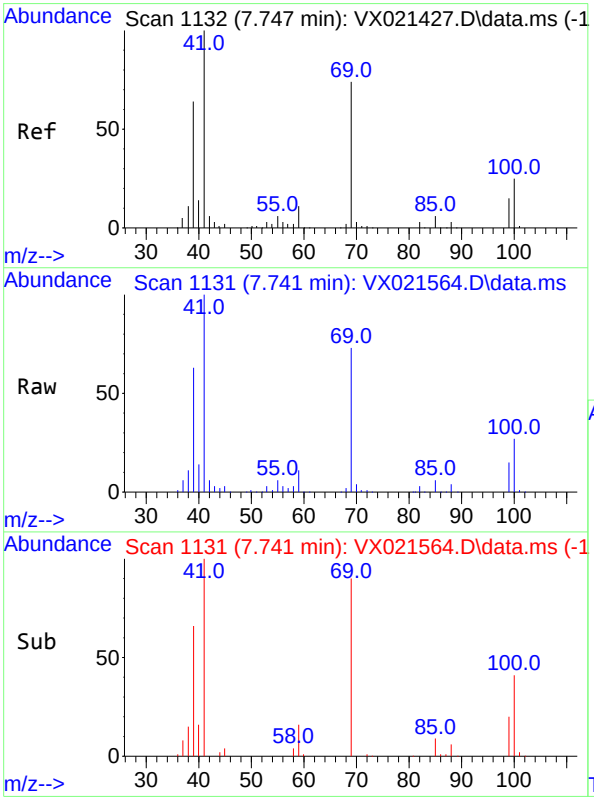



#47
Bromodichloromethane
Concen: 49.82 ug/l
RT: 7.870 min Scan# 1153
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 83 Resp: 85017

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 63.5 | 51.4 | 77.0 |
| 127 | 8.0 | 6.8 | 10.2 |

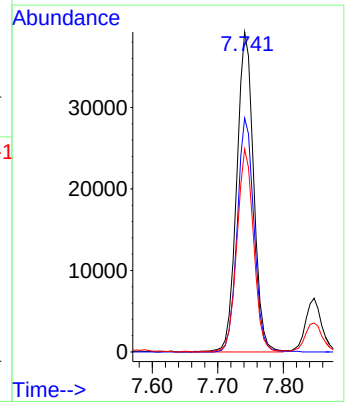



#48
Methyl methacrylate
Concen: 46.97 ug/l
RT: 7.741 min Scan# 1131
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

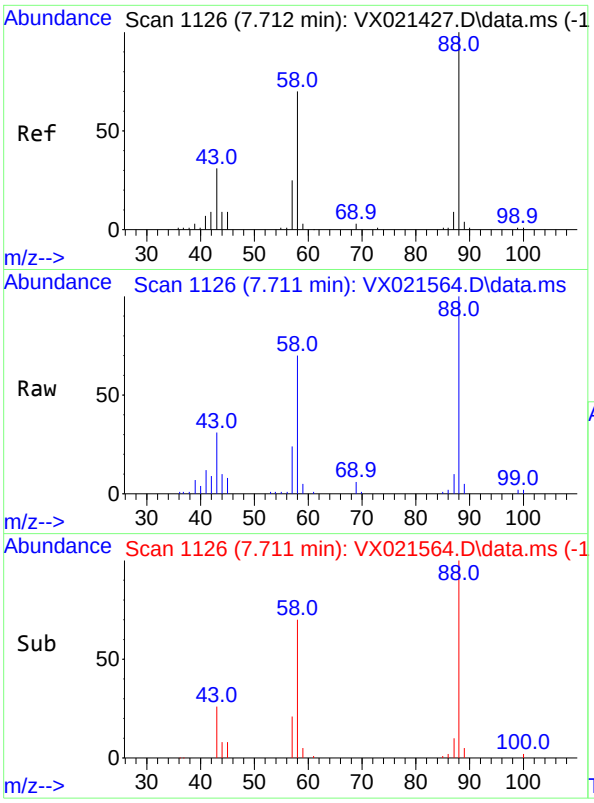
Tgt Ion: 41 Resp: 70354

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 72.4 | 76.0 | 114.0# |
| 39 | 62.9 | 44.6 | 67.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

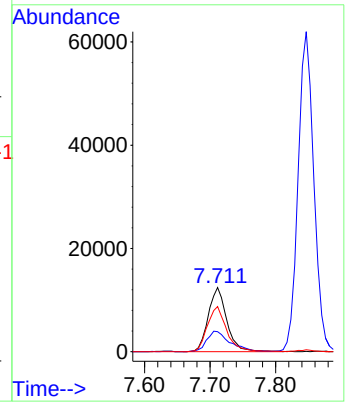
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

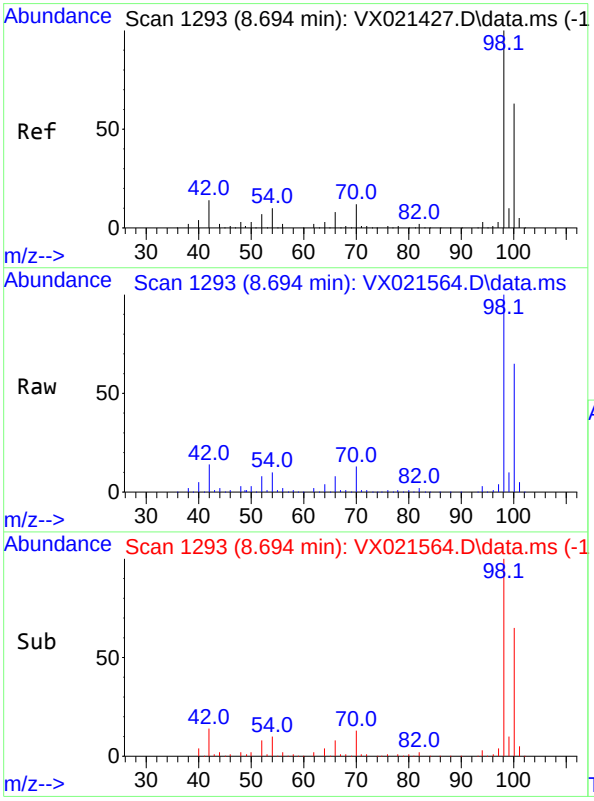



#49
1,4-Dioxane
Concen: 906.57 ug/l
RT: 7.711 min Scan# 1126
Delta R.T. -0.001 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 88 Resp: 24310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 40.5 | 23.2 | 34.8# |
| 58 | 74.0 | 55.0 | 82.4 |

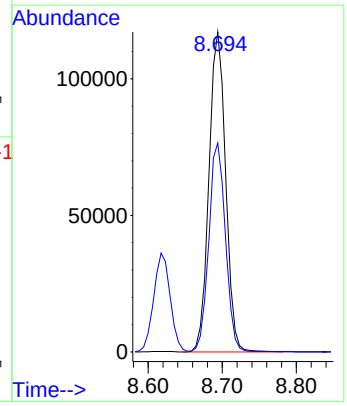



#50
Toluene-d8
Concen: 47.46 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

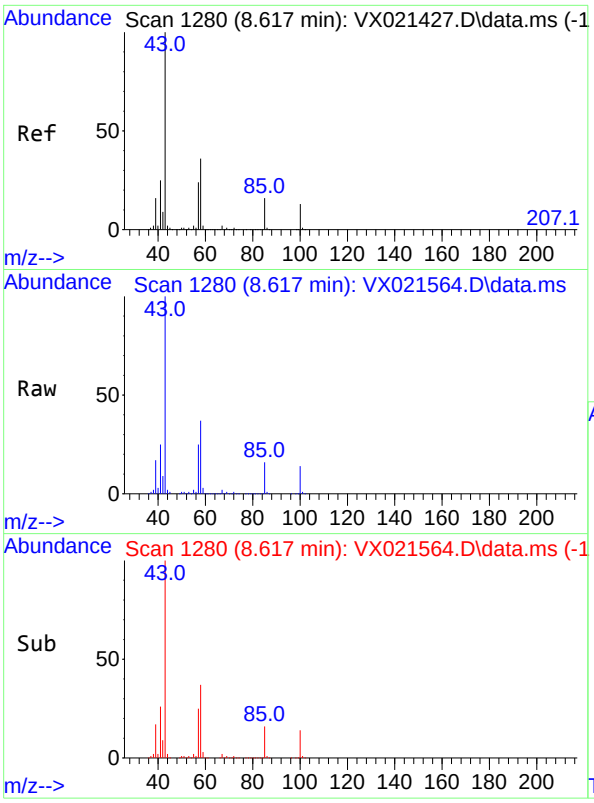
Tgt Ion: 98 Resp: 183345

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.7 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

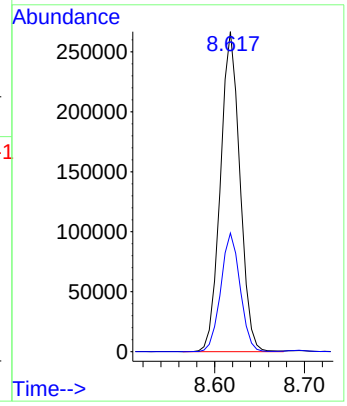
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

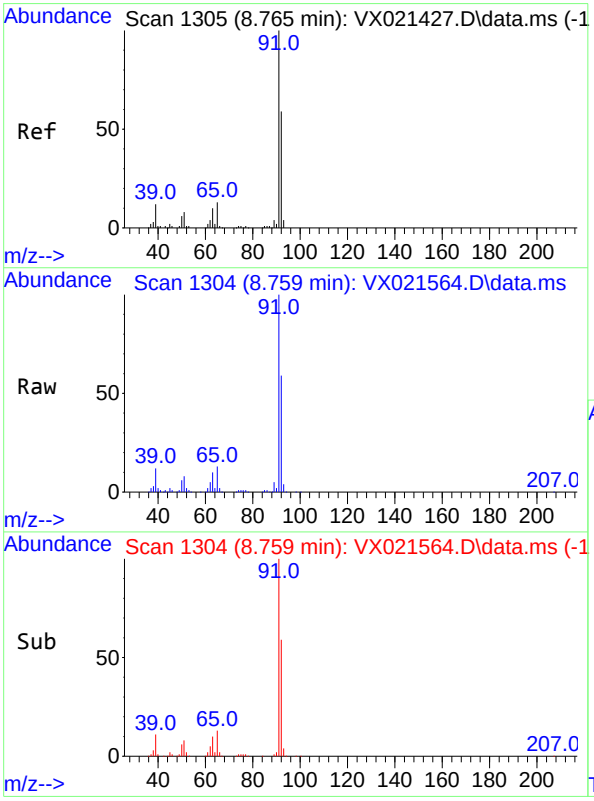



#51
4-Methyl-2-Pentanone
Concen: 233.08 ug/l
RT: 8.617 min Scan# 1280
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 43 Resp: 402542

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.8 | 35.4 | 53.0 |

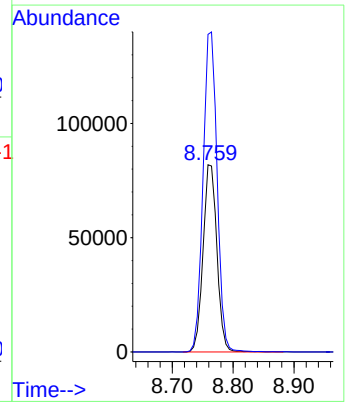



#52
Toluene
Concen: 49.33 ug/l
RT: 8.759 min Scan# 1304
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

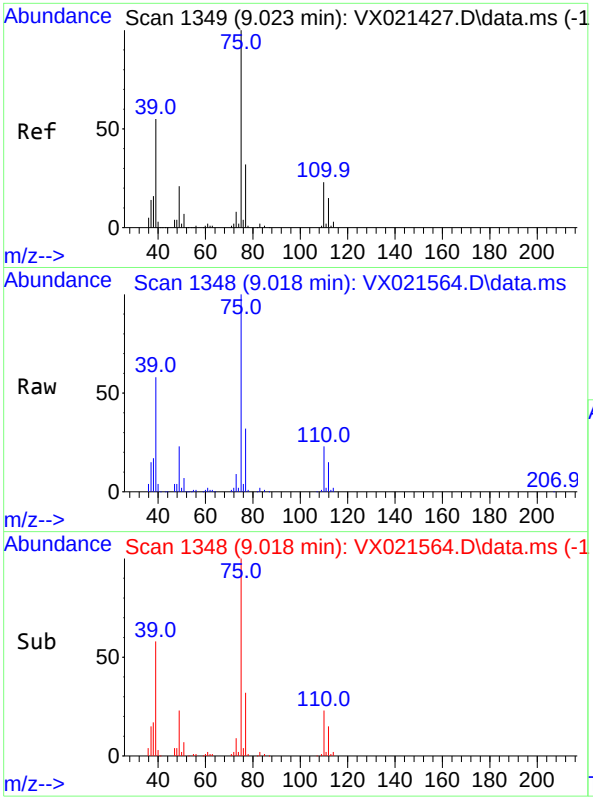
Tgt Ion: 92 Resp: 129409

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.5 | 137.1 | 205.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

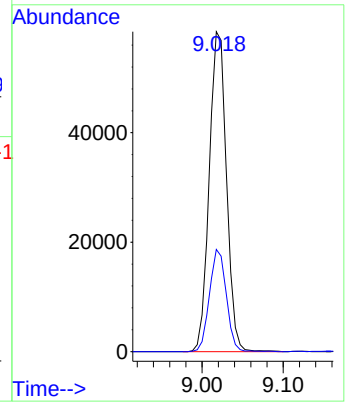
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

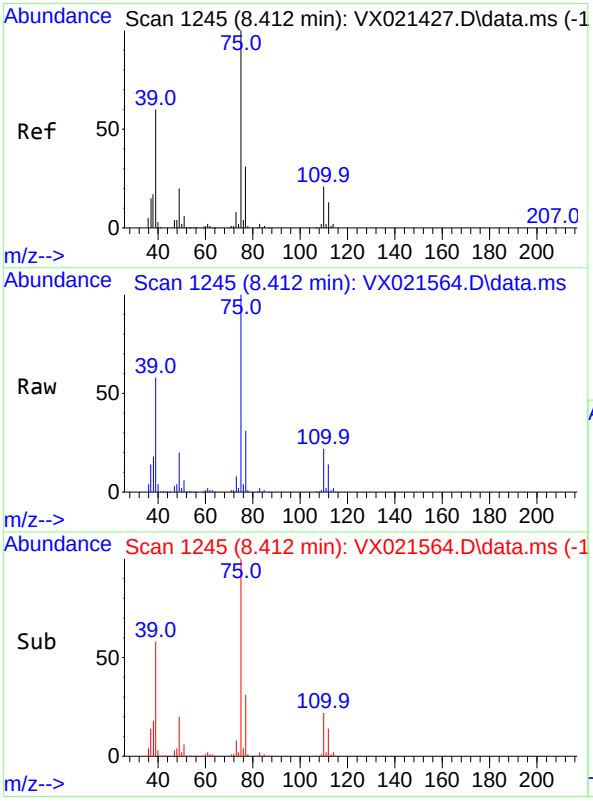



#53
t-1,3-Dichloropropene
Concen: 49.92 ug/l
RT: 9.018 min Scan# 1348
Delta R.T. -0.005 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 75 Resp: 86012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 24.9 | 37.3 |

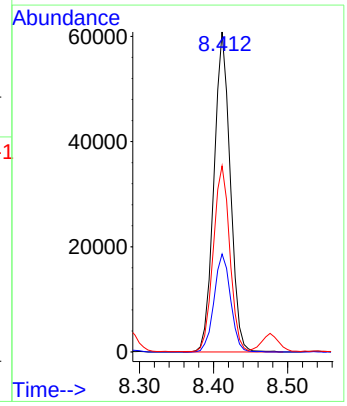



#54
cis-1,3-Dichloropropene
Concen: 50.63 ug/l
RT: 8.412 min Scan# 1245
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

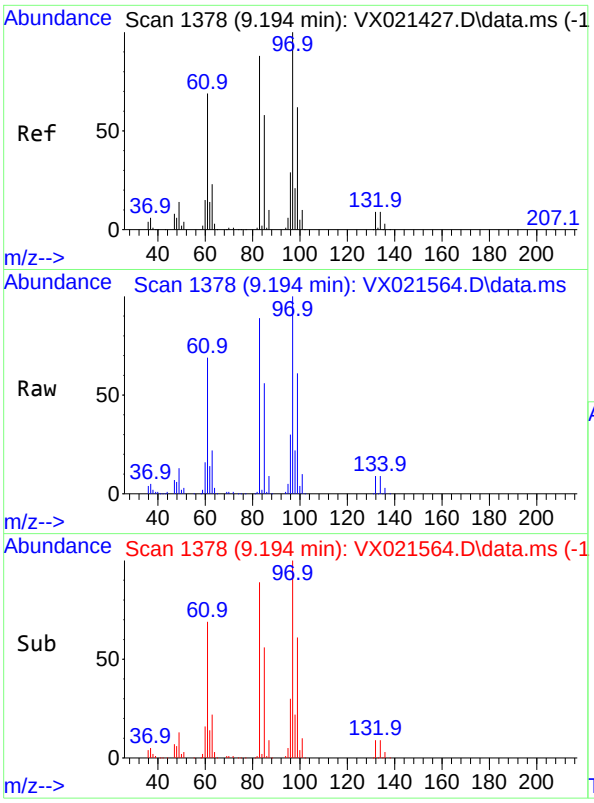
Tgt Ion: 75 Resp: 92832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 30.6 | 25.7 | 38.5 |
| 39 | 58.1 | 35.1 | 52.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

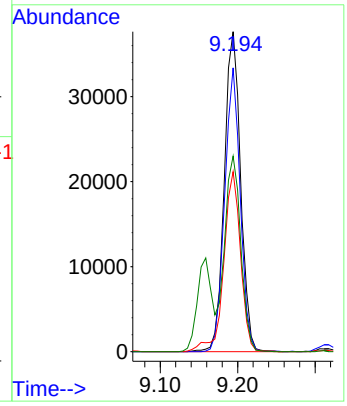
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

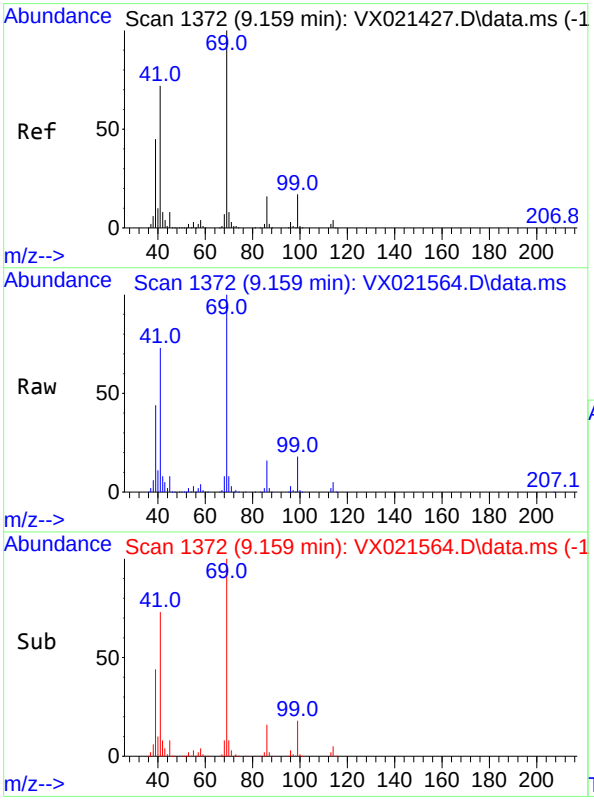



#55
1,1,2-Trichloroethane
Concen: 49.77 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 97 Resp: 55102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 88.7 | 69.3 | 103.9 |
| 85 | 56.2 | 44.3 | 66.5 |
| 99 | 61.1 | 50.3 | 75.5 |

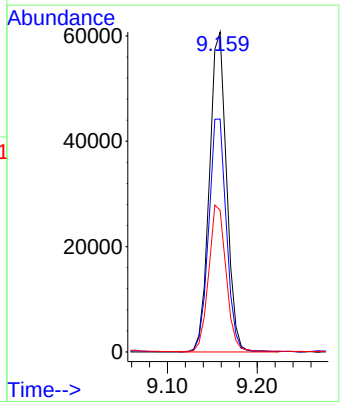



#56
Ethyl methacrylate
Concen: 43.63 ug/l
RT: 9.159 min Scan# 1372
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

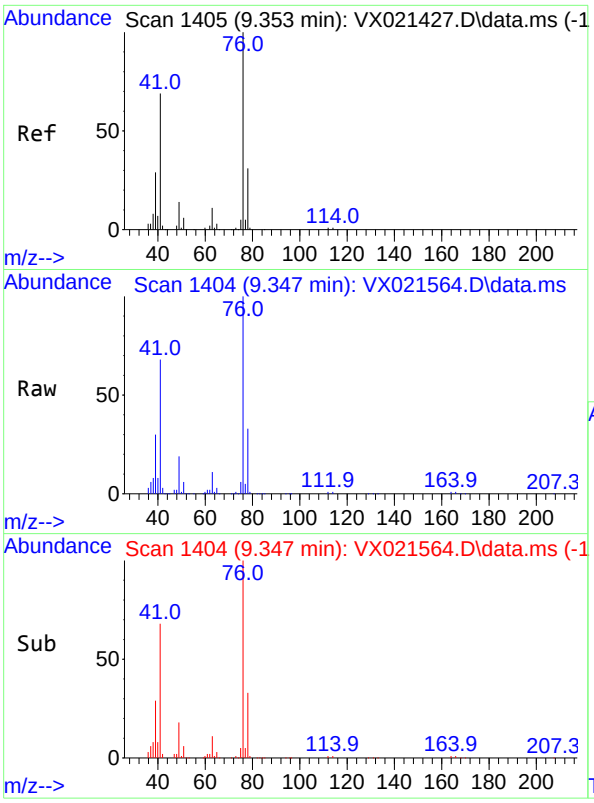
Tgt Ion: 69 Resp: 81077

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 75.0 | 46.8 | 70.2# |
| 39 | 46.7 | 24.7 | 37.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

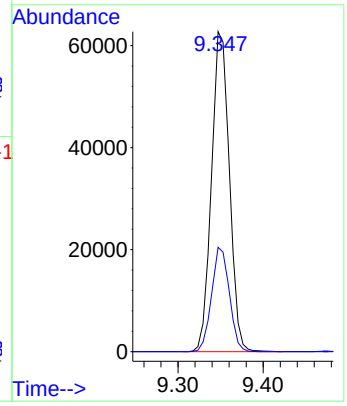
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

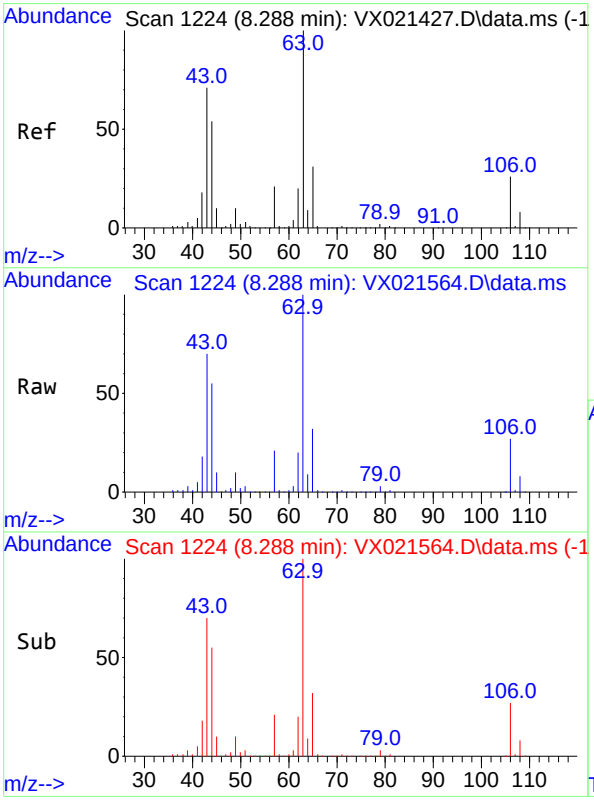



#57
1,3-Dichloropropane
Concen: 48.28 ug/l
RT: 9.347 min Scan# 1404
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 76 Resp: 91480

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.3 | 26.2 | 39.2 |

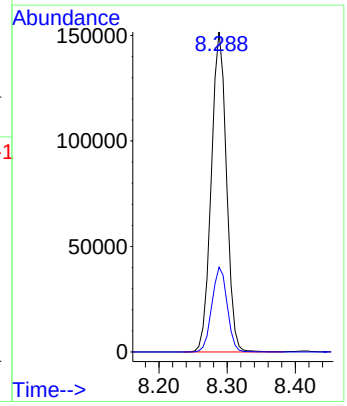



#58
2-Chloroethyl Vinyl ether
Concen: 251.40 ug/l
RT: 8.288 min Scan# 1224
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

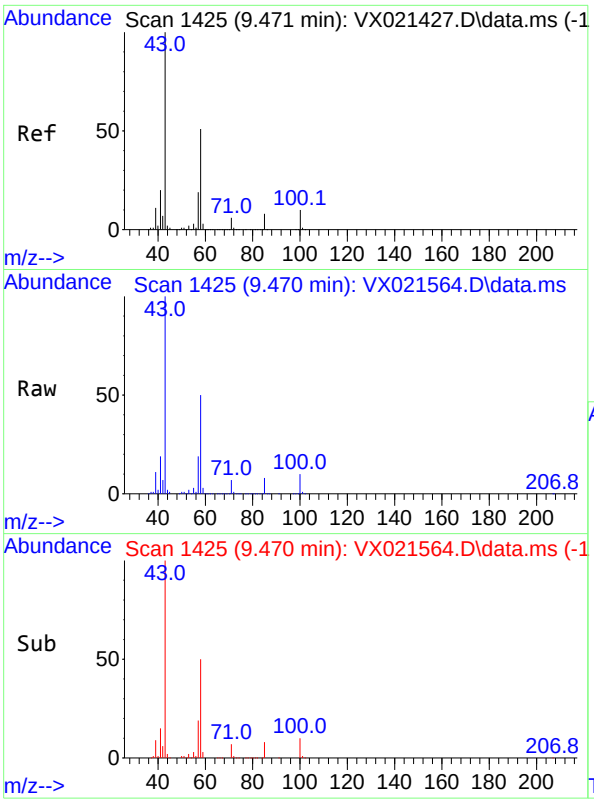
Tgt Ion: 63 Resp: 235217

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.7 | 23.5 | 35.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

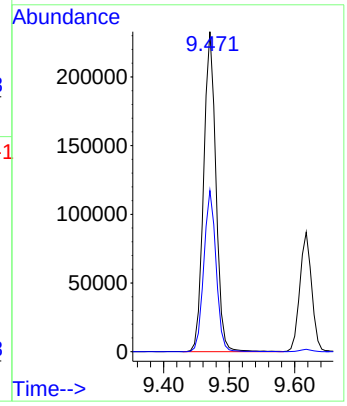
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

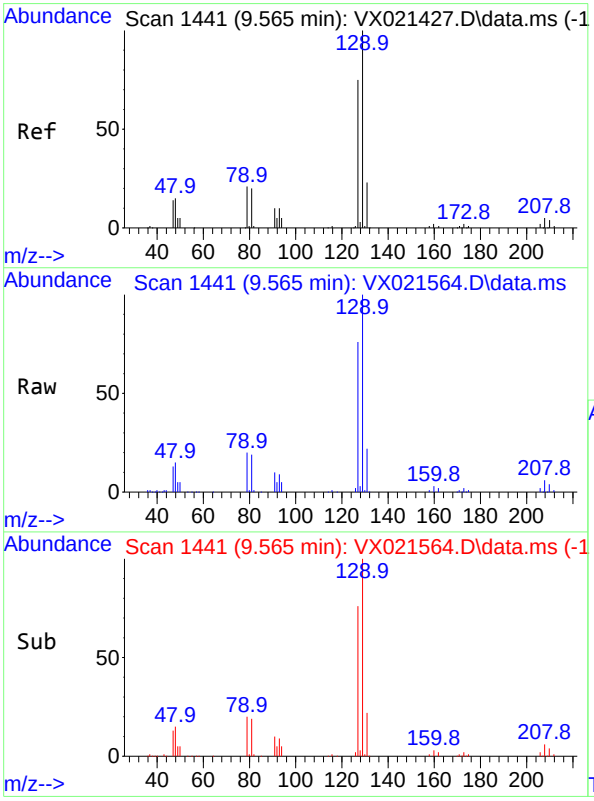



#59
2-Hexanone
Concen: 234.43 ug/l
RT: 9.470 min Scan# 1425
Delta R.T. -0.001 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 43 Resp: 304010

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 50.3 | 30.9 | 92.8 |

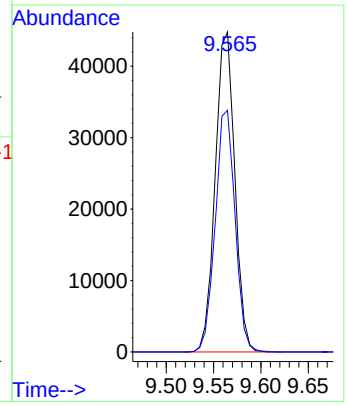



#60
Dibromochloromethane
Concen: 51.87 ug/l
RT: 9.565 min Scan# 1441
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

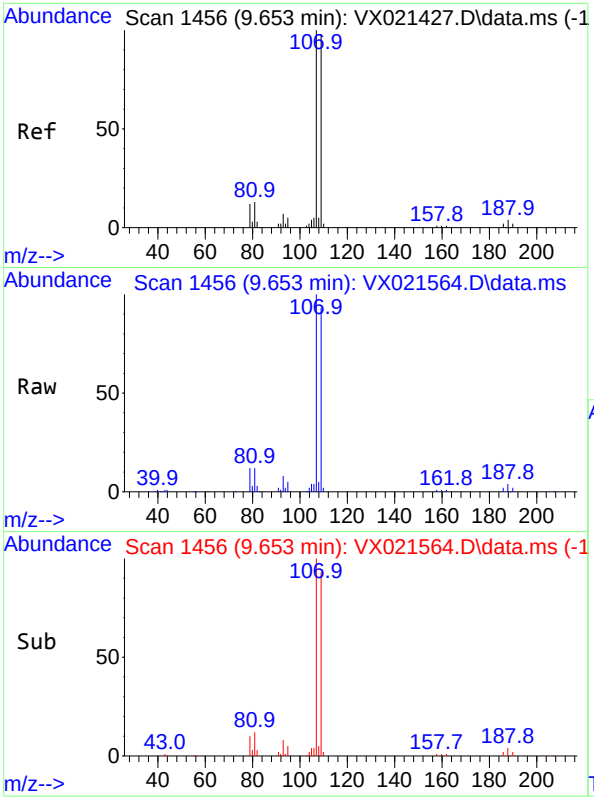
Tgt Ion:129 Resp: 64324

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 76.5 | 38.4 | 115.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

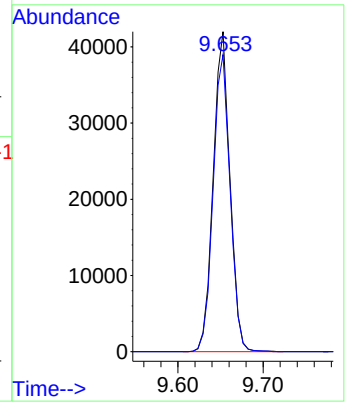
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

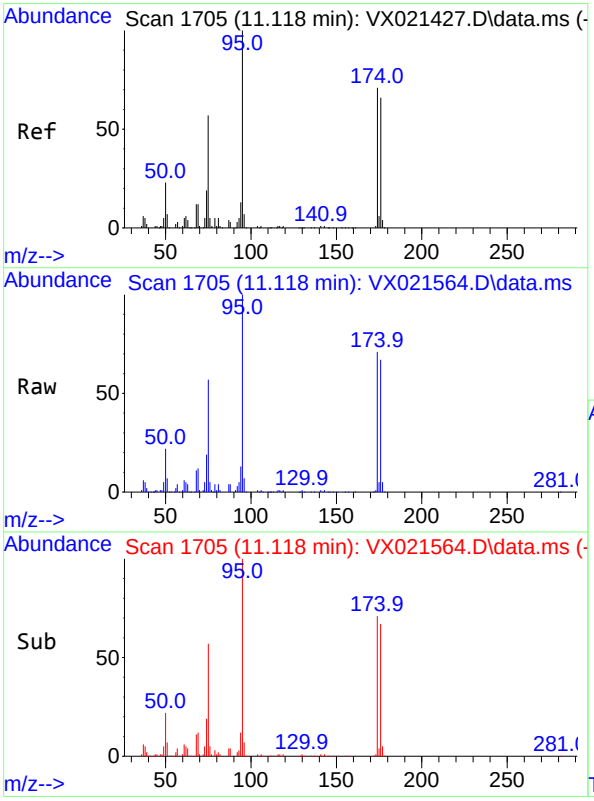



#61
1,2-Dibromoethane
Concen: 48.09 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:107 Resp: 57198

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.3 | 75.8 | 113.6 |

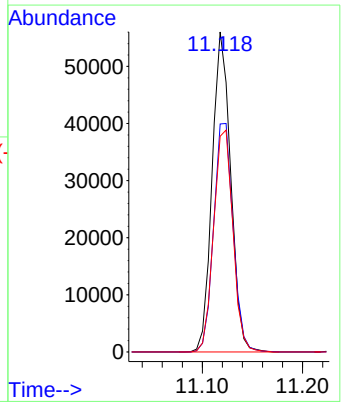



#62
4-Bromofluorobenzene
Concen: 47.81 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

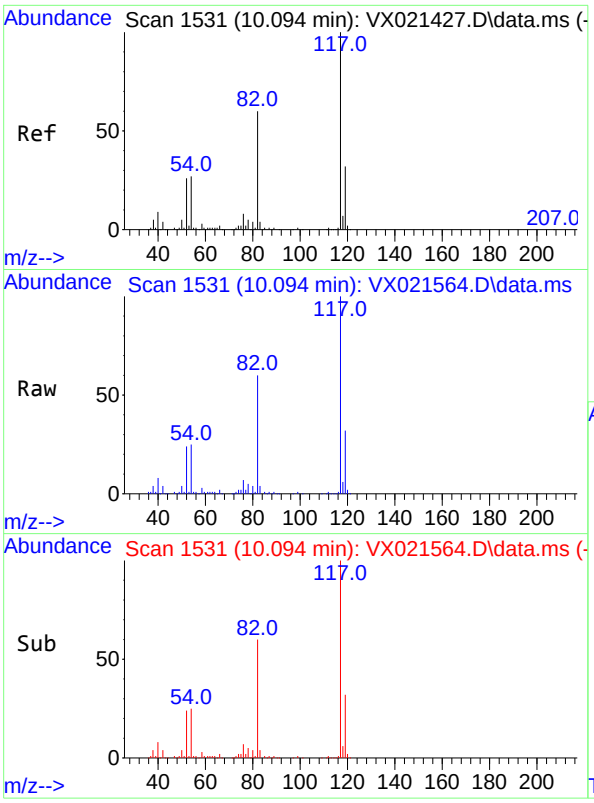
Tgt Ion: 95 Resp: 71817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 74.9 | 0.0 | 154.6 |
| 176 | 72.2 | 0.0 | 155.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

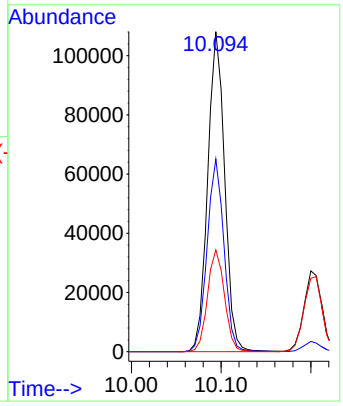
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

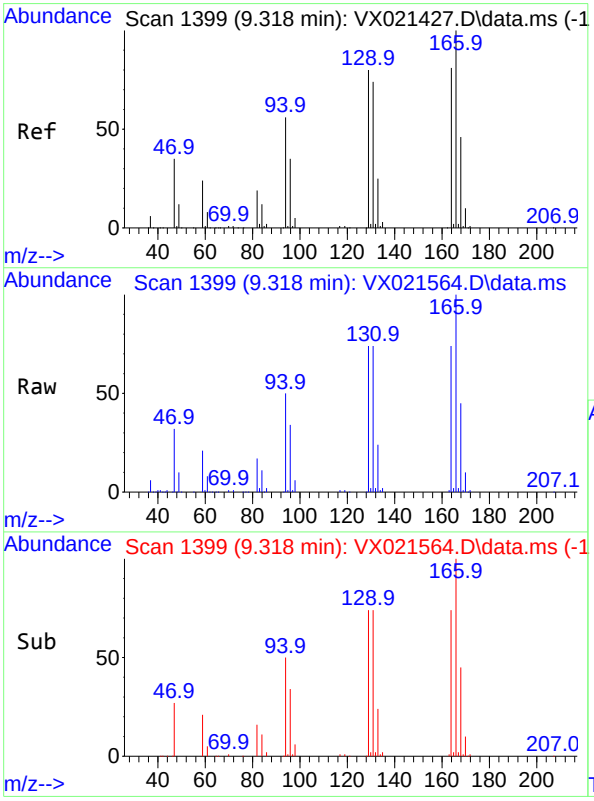



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:117 Resp: 141896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 60.2 | 47.4 | 71.2 |
| 119 | 31.8 | 26.6 | 39.8 |

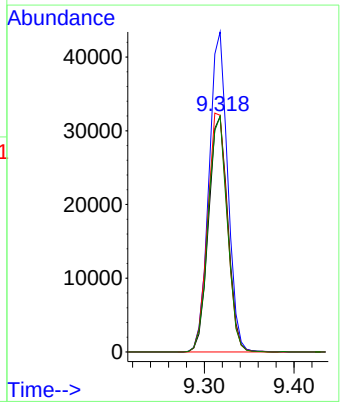



#64
Tetrachloroethene
Concen: 50.06 ug/l
RT: 9.318 min Scan# 1399
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

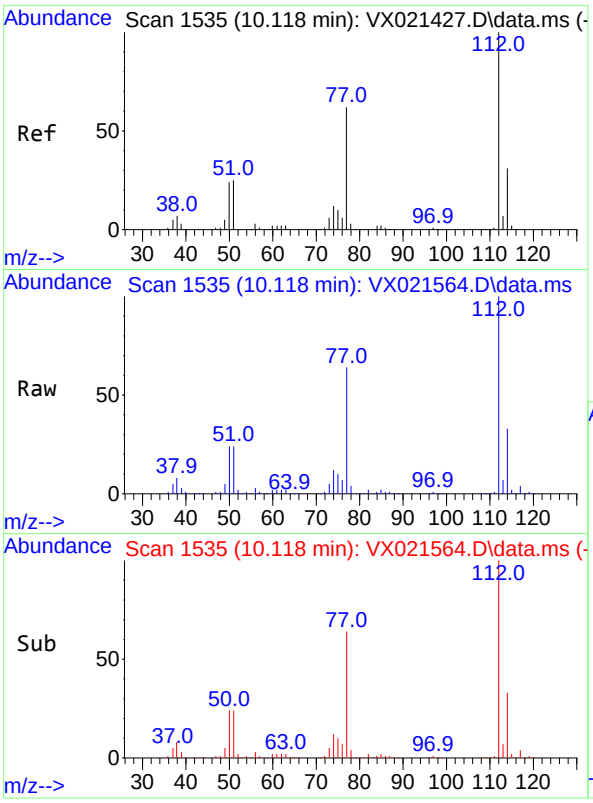
Tgt Ion:164 Resp: 47581

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 135.8 | 103.4 | 155.2 |
| 129 | 100.5 | 70.8 | 106.2 |
| 131 | 100.0 | 72.5 | 108.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

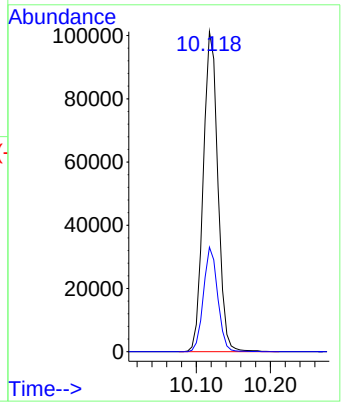
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

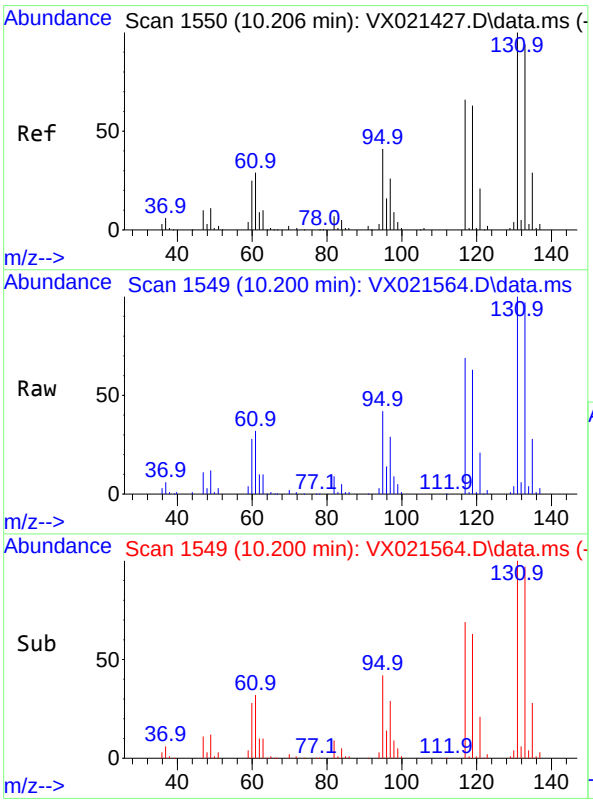



#65
Chlorobenzene
Concen: 48.53 ug/l
RT: 10.118 min Scan# 1535
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:112 Resp: 138329

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 32.6 | 25.8 | 38.6 |

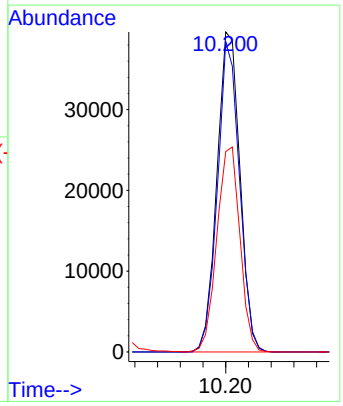



#66
1,1,1,2-Tetrachloroethane
Concen: 50.91 ug/l
RT: 10.200 min Scan# 1549
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

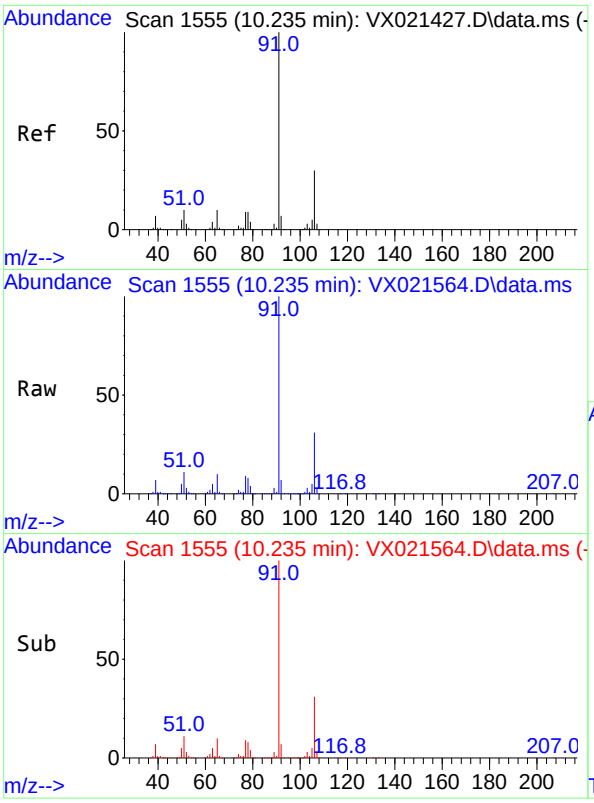
Tgt Ion:131 Resp: 55612

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 93.2 | 47.7 | 143.1 |
| 119 | 64.5 | 32.1 | 96.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

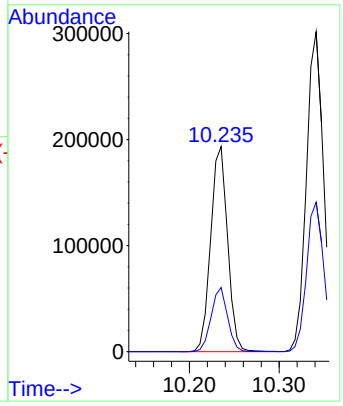
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

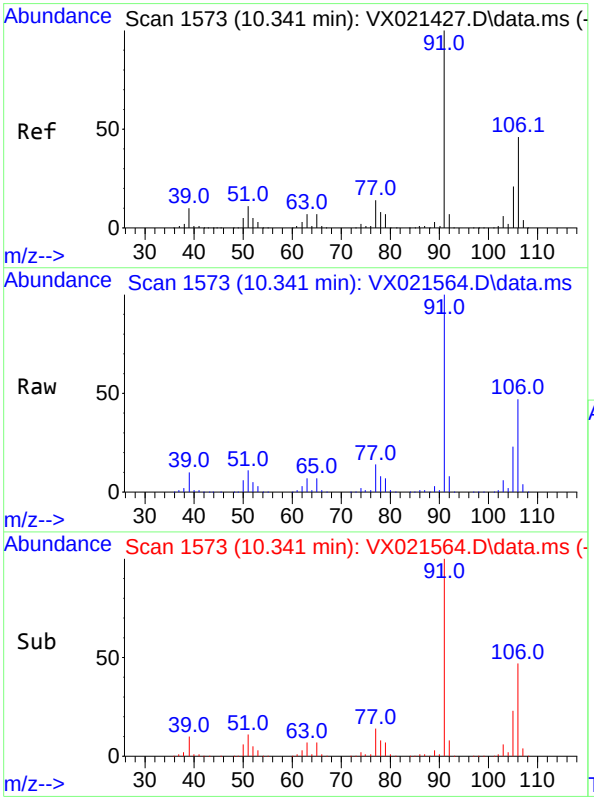



#67
Ethyl Benzene
Concen: 48.81 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 91 Resp: 253616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.2 | 24.6 | 37.0 |

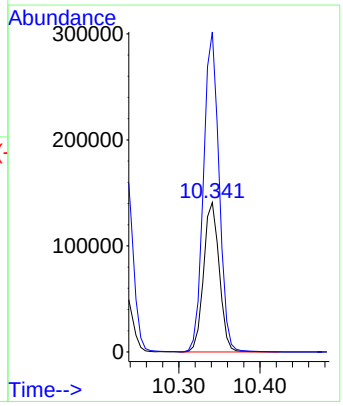



#68
m/p-Xylenes
Concen: 101.71 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

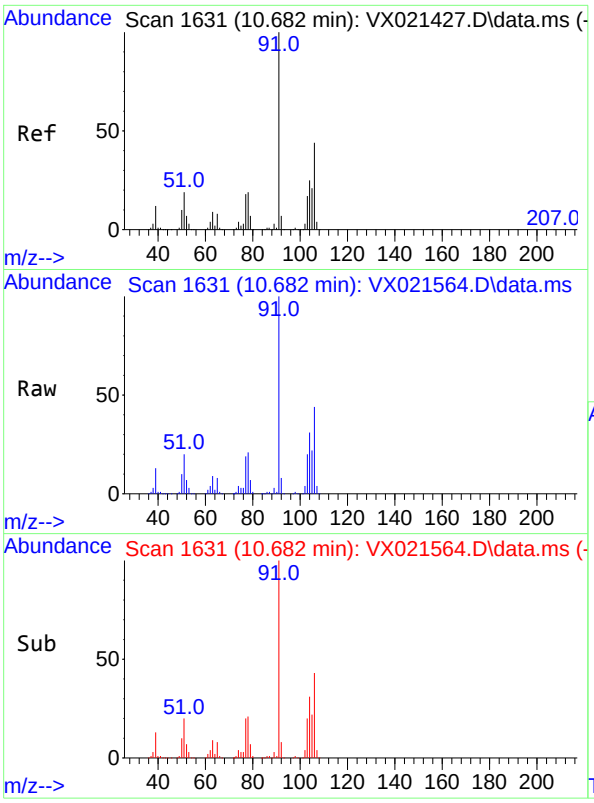
Tgt Ion:106 Resp: 188271

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 213.0 | 162.8 | 244.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

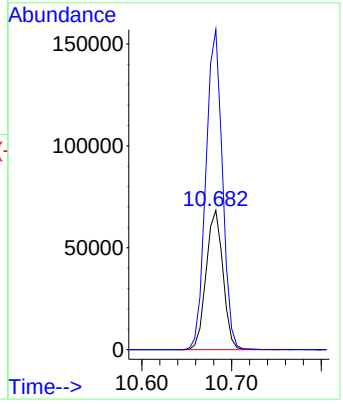
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

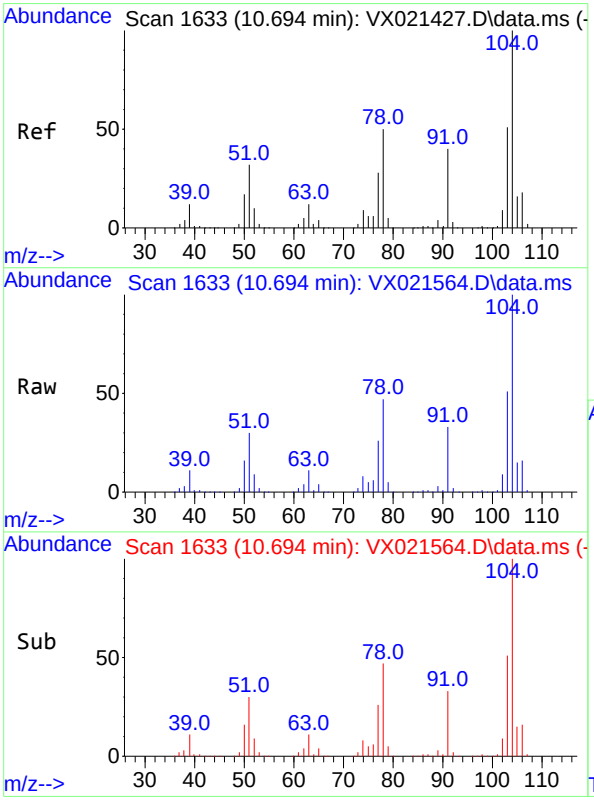



#69
o-Xylene
Concen: 49.61 ug/l
RT: 10.682 min Scan# 1631
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:106 Resp: 88946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 226.2 | 108.1 | 324.2 |

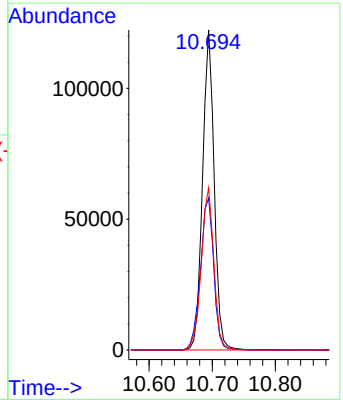



#70
Styrene
Concen: 50.56 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

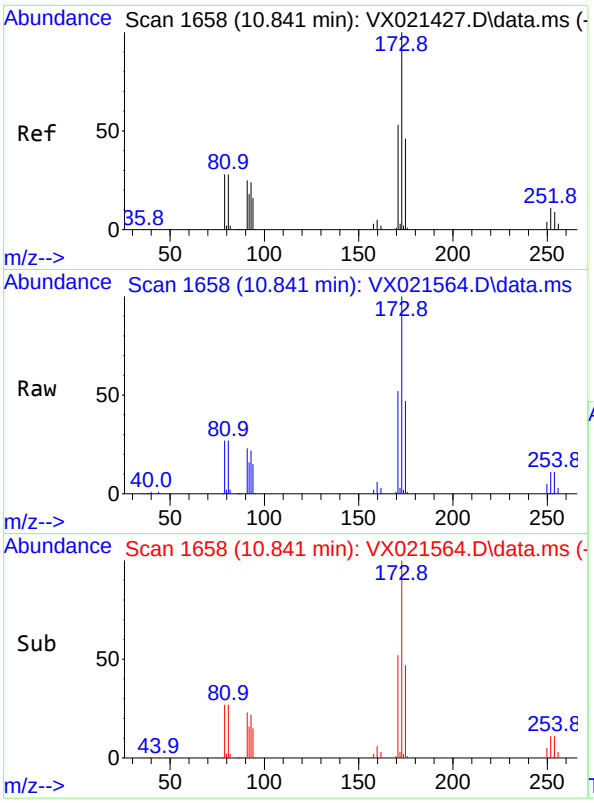
Tgt Ion:104 Resp: 155898

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 54.6 | 40.0 | 60.0 |
| 103 | 55.3 | 43.4 | 65.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

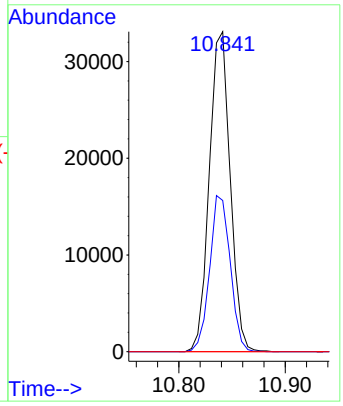
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

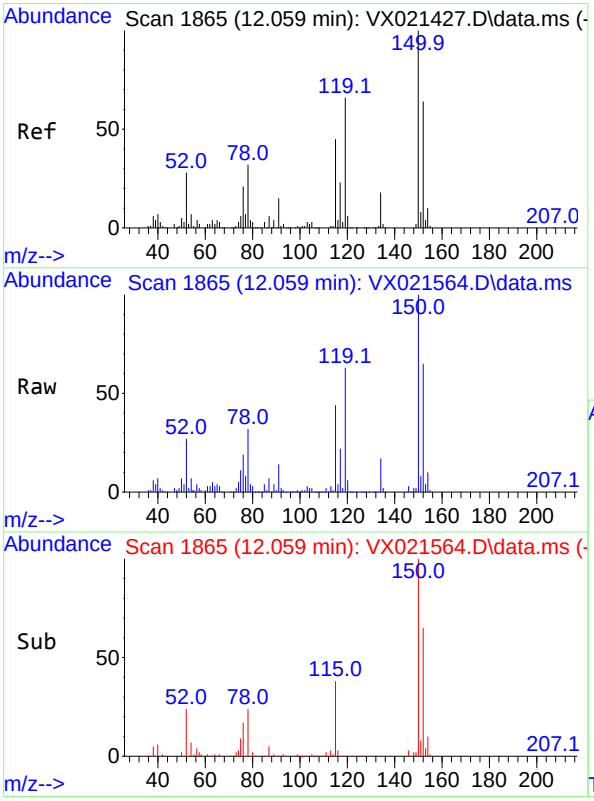



#71
Bromoform
Concen: 50.70 ug/l
RT: 10.841 min Scan# 1658
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:173 Resp: 45000

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 48.1 | 23.9 | 71.8 |
| 254 | 0.0 | 0.1 | 0.1# |

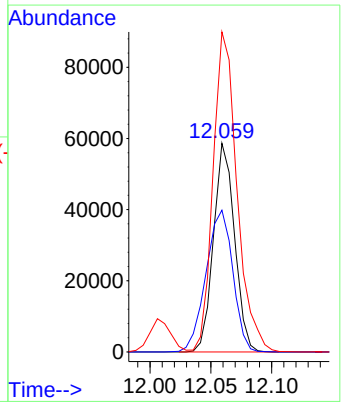



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

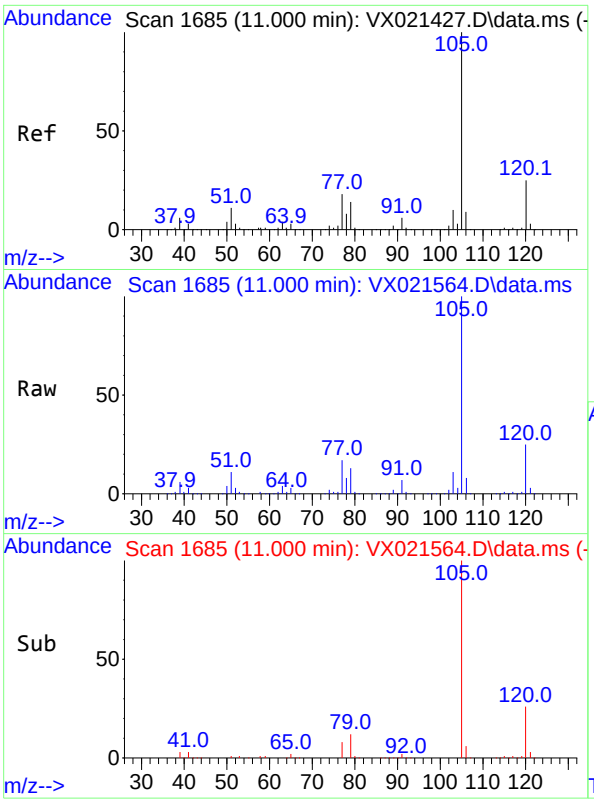
Tgt Ion:152 Resp: 70614

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 86.5 | 41.1 | 123.3 |
| 150 | 174.3 | 0.0 | 349.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

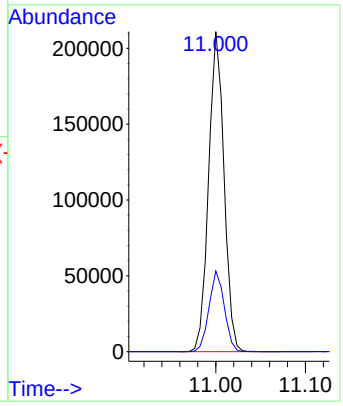
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

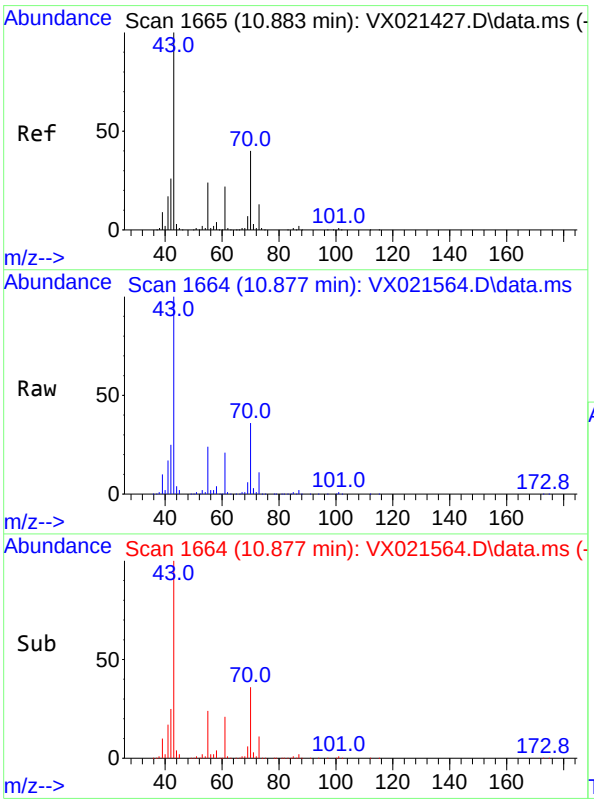



#73
Isopropylbenzene
Concen: 50.61 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:105 Resp: 251082

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 25.1 | 13.2 | 39.6 |

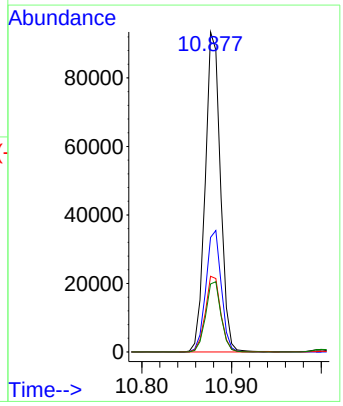



#74
N-amyl acetate
Concen: 45.77 ug/l
RT: 10.877 min Scan# 1664
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

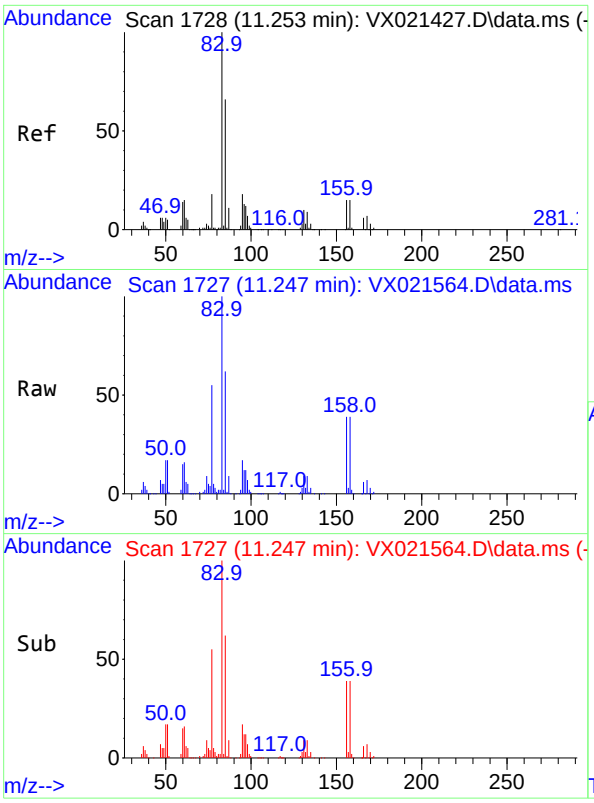
Tgt Ion: 43 Resp: 109888

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 38.4 | 39.0 | 58.6# |
| 55 | 24.2 | 21.5 | 32.3 |
| 61 | 22.1 | 22.1 | 33.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

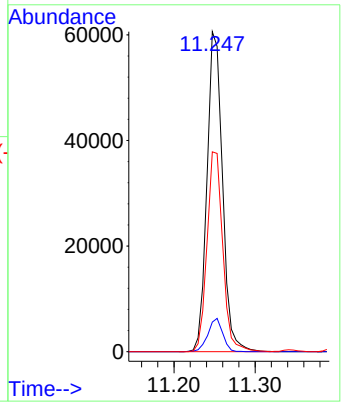
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

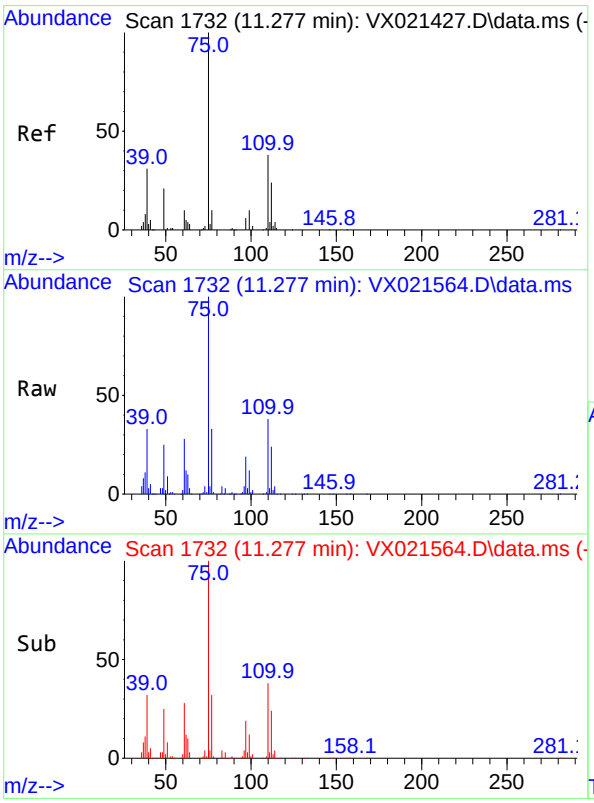



#75
1,1,2,2-Tetrachloroethane
Concen: 45.81 ug/l
RT: 11.247 min Scan# 1727
Delta R.T. -0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 83 Resp: 80299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.0 | 5.1 | 15.2 |
| 85 | 63.4 | 31.8 | 95.4 |

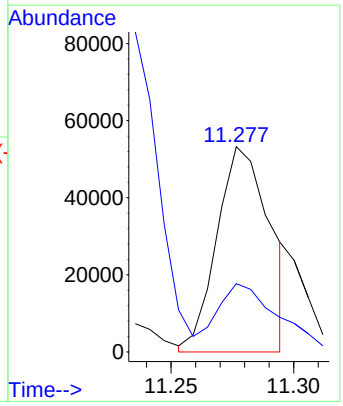



#76
1,2,3-Trichloropropane
Concen: 48.39 ug/l m
RT: 11.277 min Scan# 1732
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

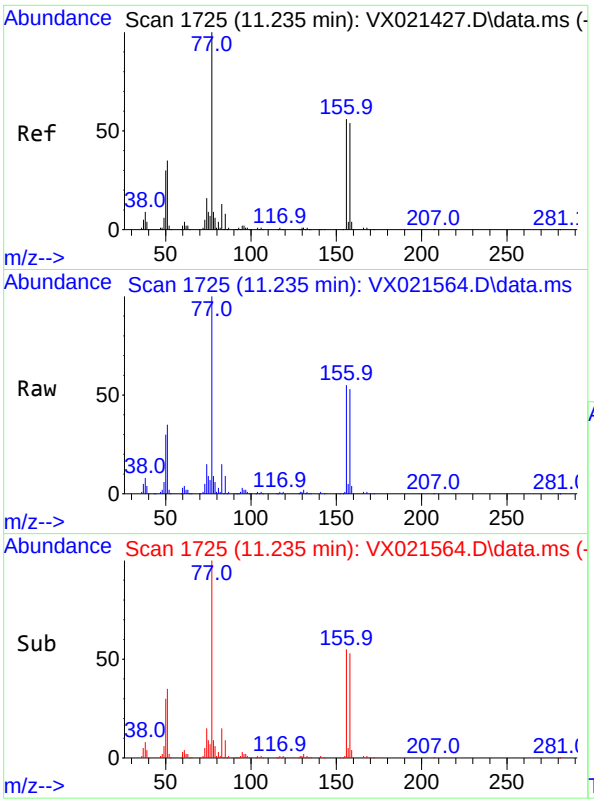
Tgt Ion: 75 Resp: 79542

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 38.8 | 19.1 | 57.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

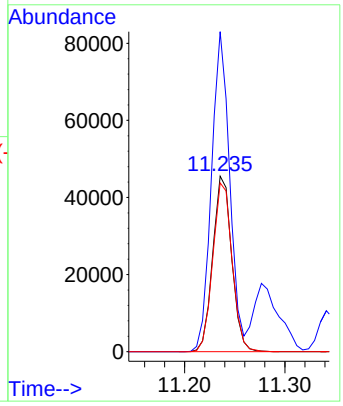
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

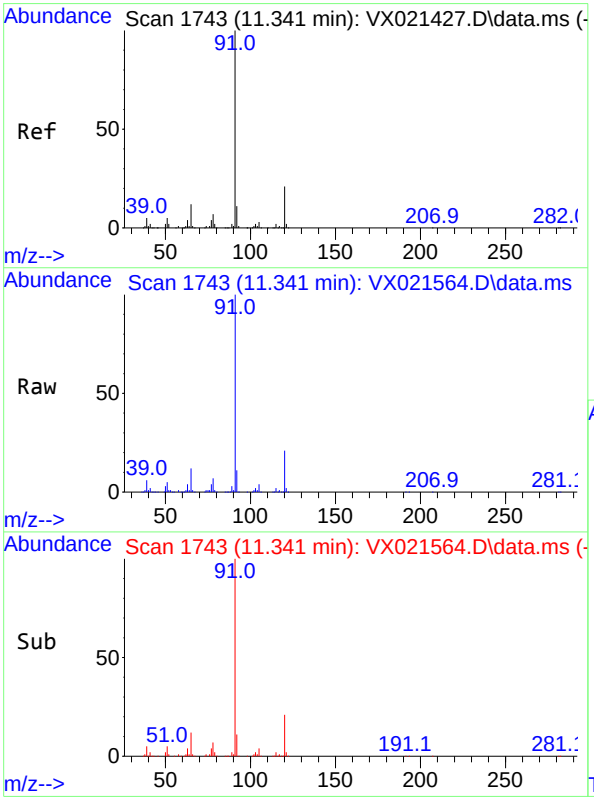



#77
Bromobenzene
Concen: 48.63 ug/l
RT: 11.235 min Scan# 1725
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:156 Resp: 59808

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 174.6 | 82.8 | 248.6 |
| 158 | 97.7 | 49.1 | 147.4 |

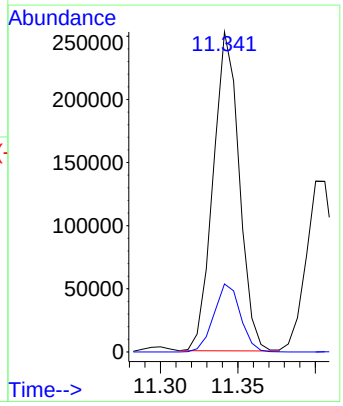



#78
n-propylbenzene
Concen: 50.46 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

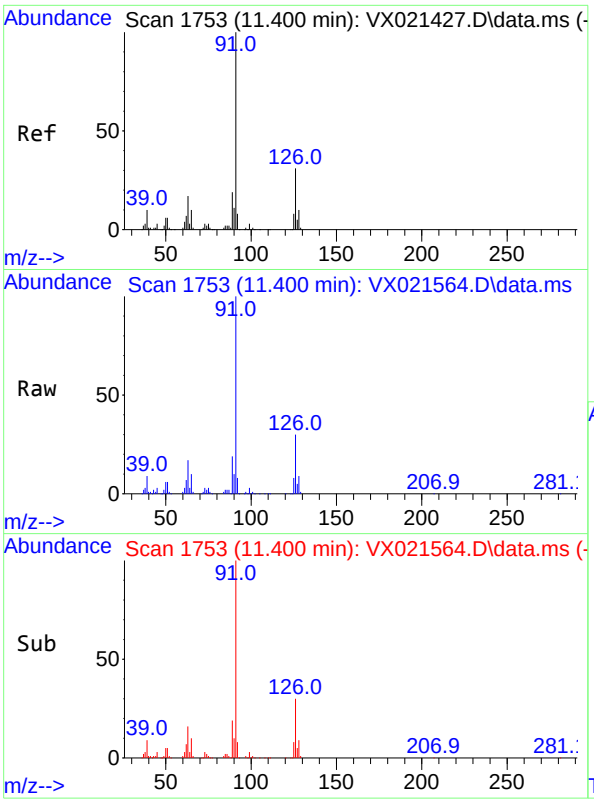
Tgt Ion: 91 Resp: 295680

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.8 | 11.5 | 34.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

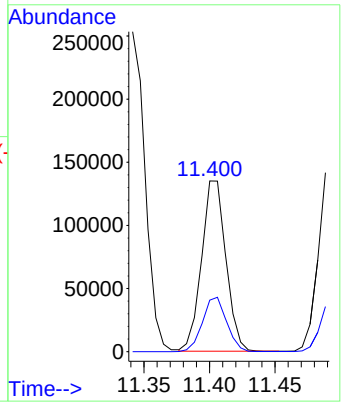
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

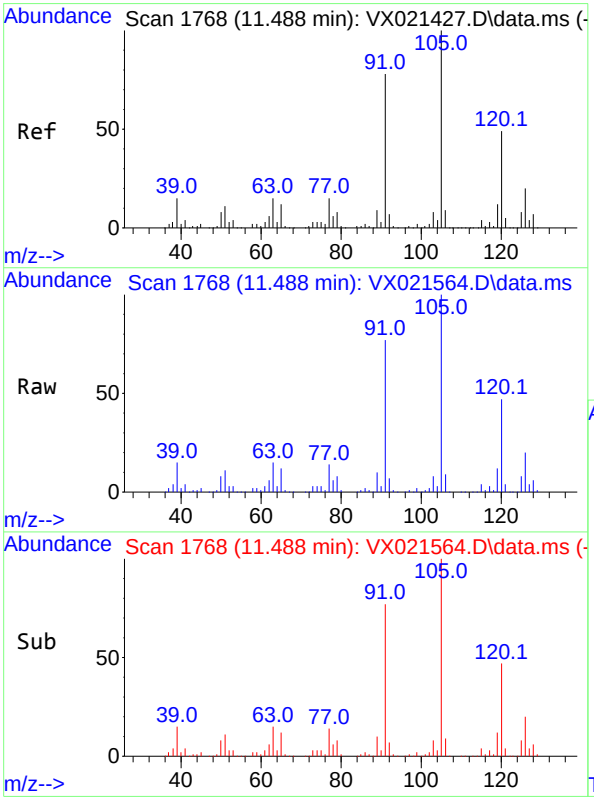



#79
2-Chlorotoluene
Concen: 49.12 ug/l
RT: 11.400 min Scan# 1753
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 91 Resp: 174600

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 31.8 | 16.6 | 49.8 |

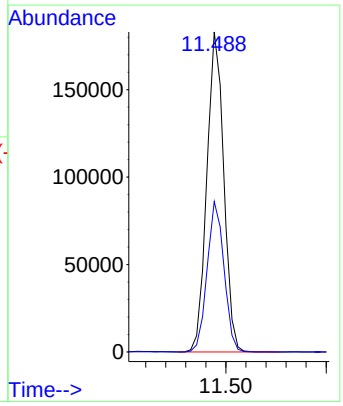



#80
1,3,5-Trimethylbenzene
Concen: 50.72 ug/l
RT: 11.488 min Scan# 1768
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

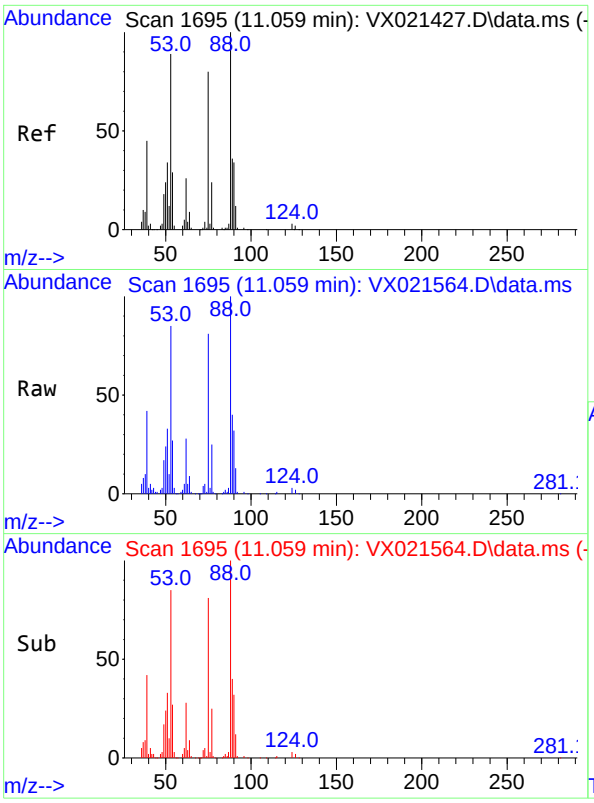
Tgt Ion:105 Resp: 214978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.9 | 23.8 | 71.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

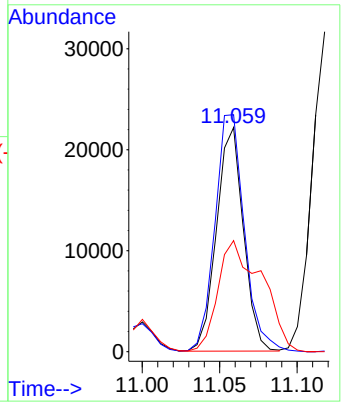
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

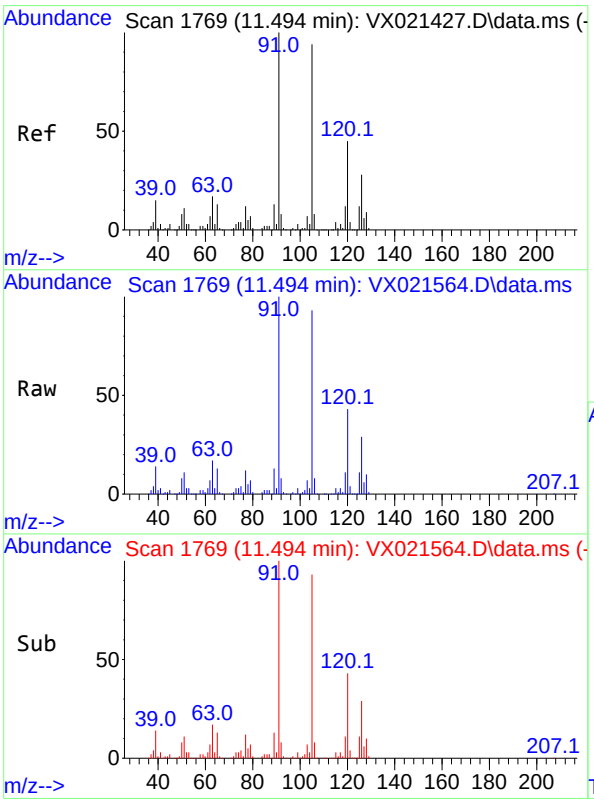



#81
trans-1,4-Dichloro-2-butene
Concen: 49.60 ug/l
RT: 11.059 min Scan# 1695
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 75 Resp: 26769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 116.2 | 74.5 | 111.7# |
| 89 | 80.9 | 37.9 | 56.9# |

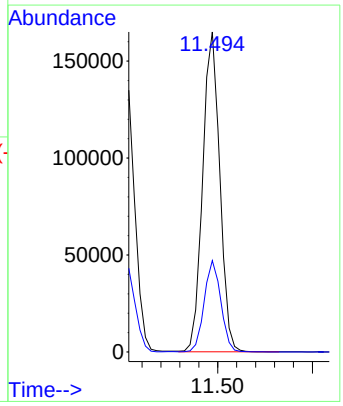



#82
4-Chlorotoluene
Concen: 48.99 ug/l
RT: 11.494 min Scan# 1769
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

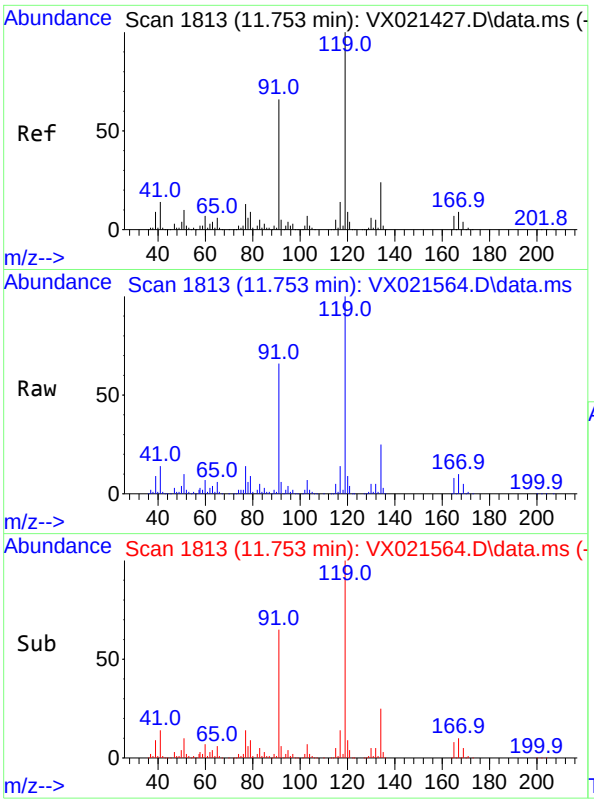
Tgt Ion: 91 Resp: 206745

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 27.9 | 14.9 | 44.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

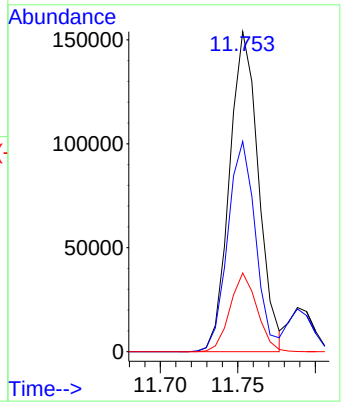
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

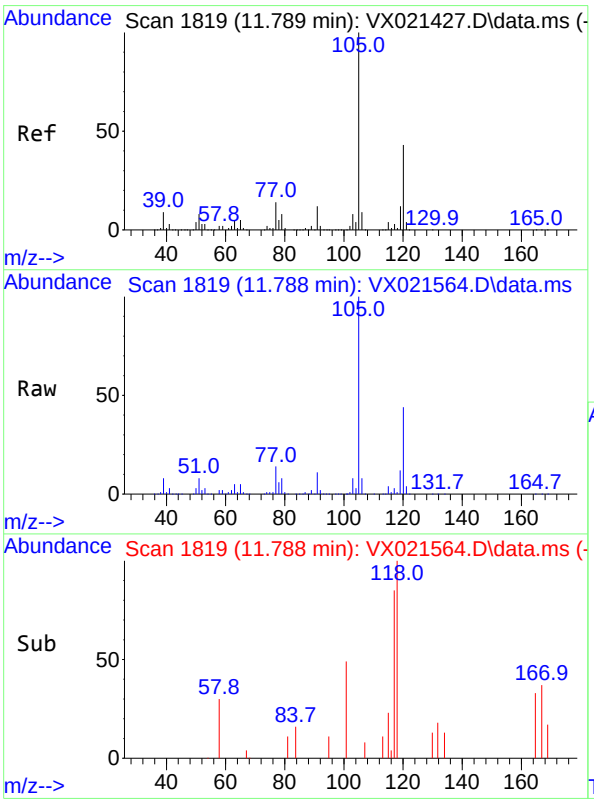



#83
tert-Butylbenzene
Concen: 48.50 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:119 Resp: 200143

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 63.5 | 27.9 | 83.7 |
| 134 | 22.9 | 11.3 | 33.9 |

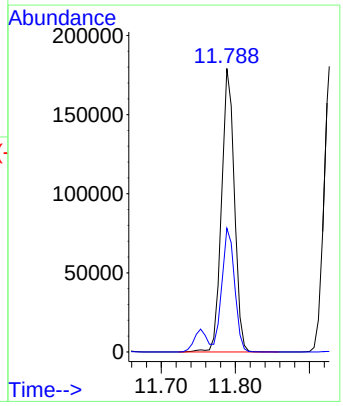



#84
1,2,4-Trimethylbenzene
Concen: 50.46 ug/l
RT: 11.788 min Scan# 1819
Delta R.T. -0.001 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

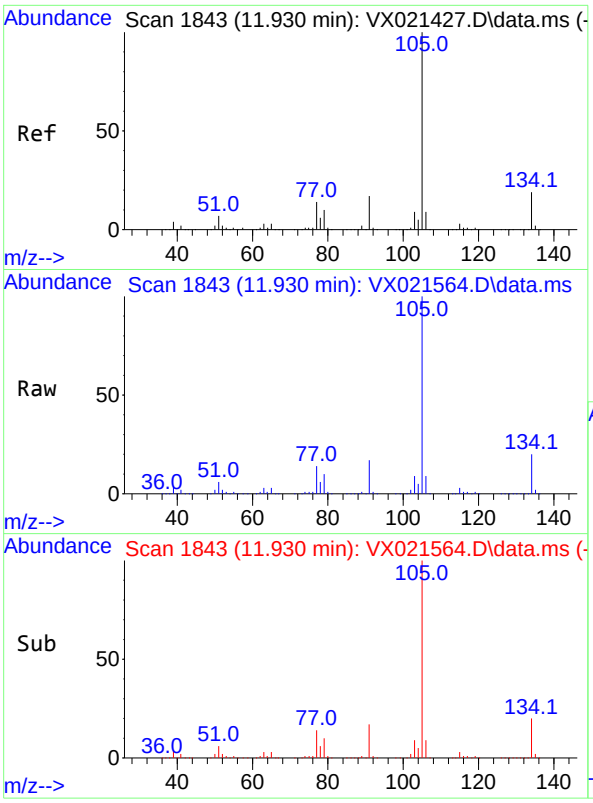
Tgt Ion:105 Resp: 215634

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.0 | 22.4 | 67.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

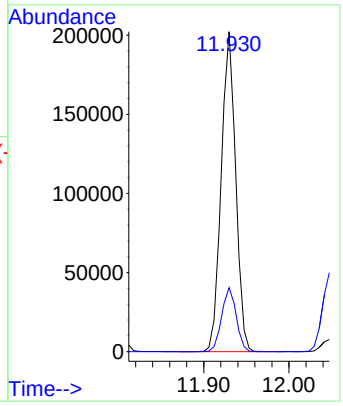
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

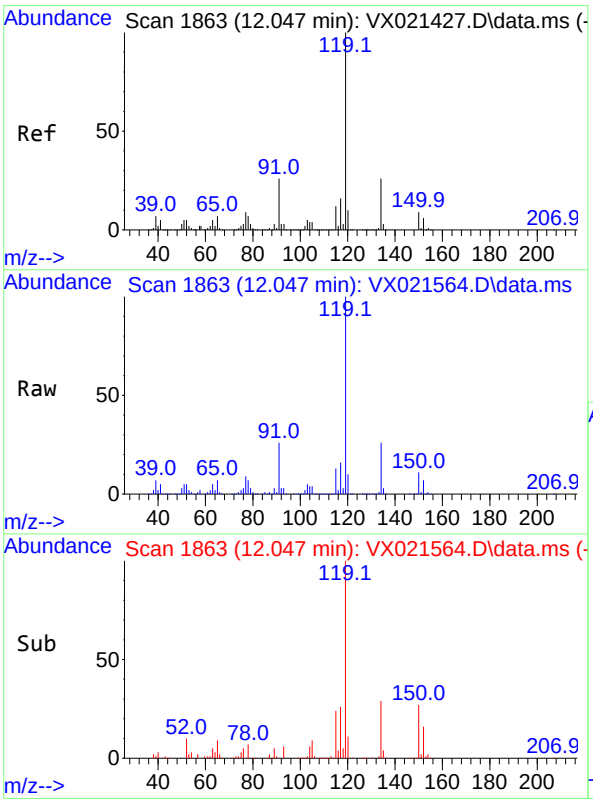



#85
sec-Butylbenzene
Concen: 50.07 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:105 Resp: 238360

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 20.0 | 10.0 | 29.8 |

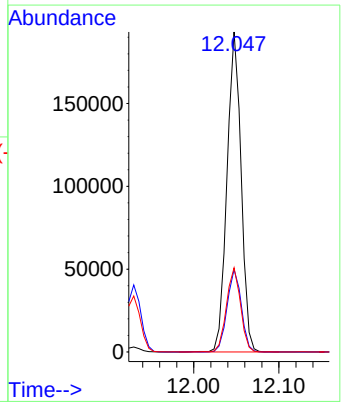



#86
p-Isopropyltoluene
Concen: 51.14 ug/l
RT: 12.047 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

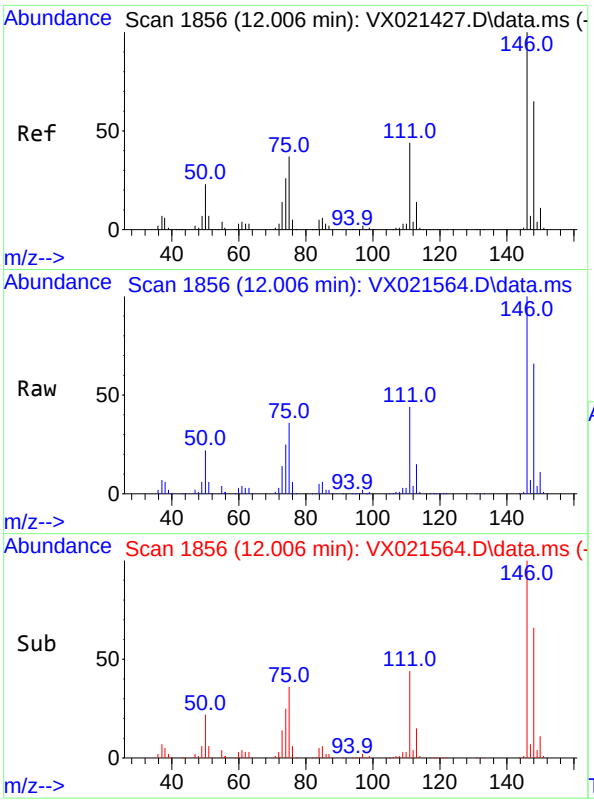
Tgt Ion:119 Resp: 221586

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.9 | 12.9 | 38.7 |
| 91 | 26.3 | 11.7 | 35.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

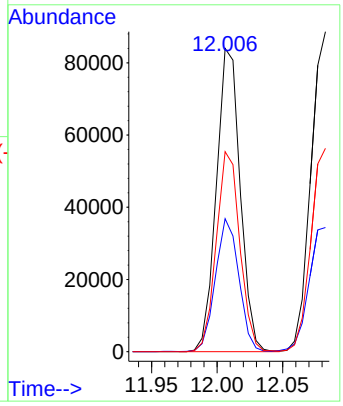
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

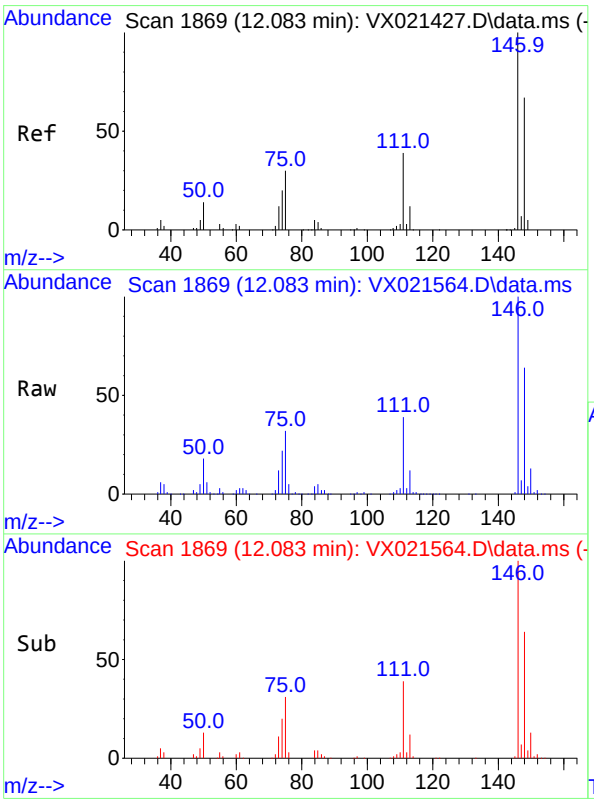



#87
1,3-Dichlorobenzene
Concen: 47.88 ug/l
RT: 12.006 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:146 Resp: 106039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.4 | 20.2 | 60.5 |
| 148 | 65.4 | 31.9 | 95.7 |

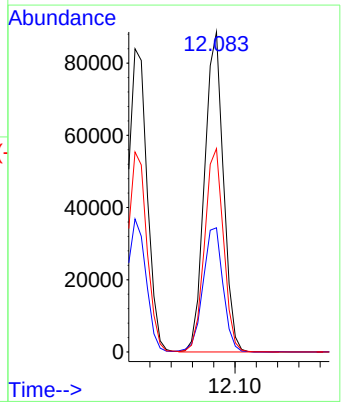



#88
1,4-Dichlorobenzene
Concen: 47.54 ug/l
RT: 12.083 min Scan# 1869
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

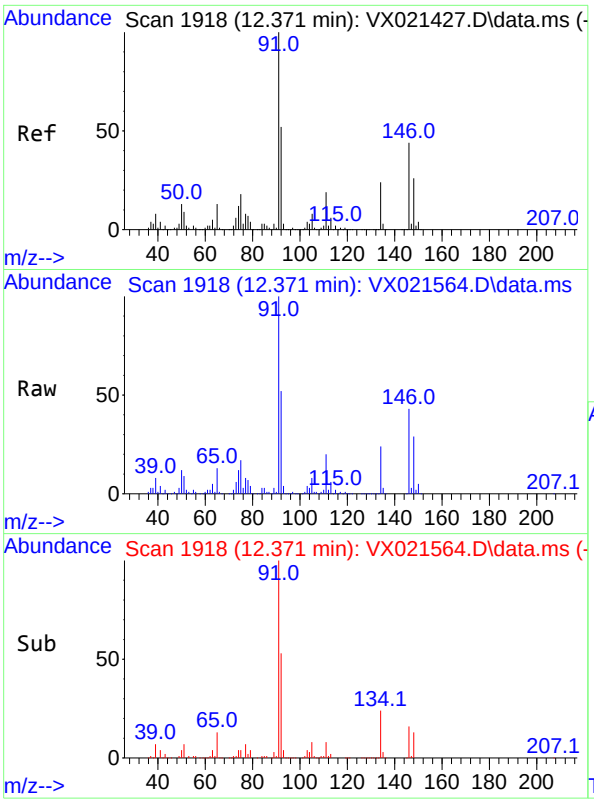
Tgt Ion:146 Resp: 108920

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.4 | 19.6 | 58.8 |
| 148 | 64.1 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

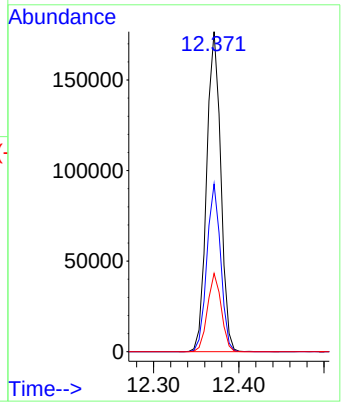
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

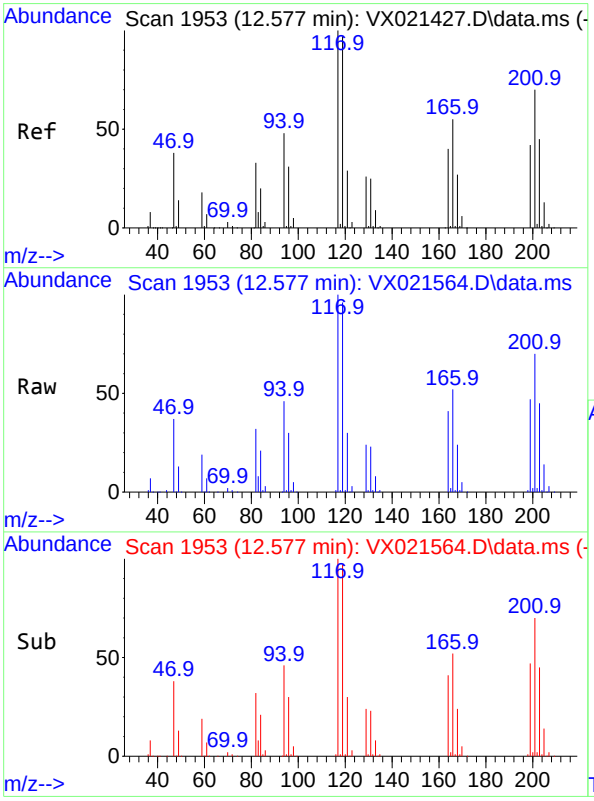



#89
n-Butylbenzene
Concen: 51.07 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion: 91 Resp: 202746

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 51.3 | 27.4 | 82.0 |
| 134 | 23.9 | 13.2 | 39.5 |

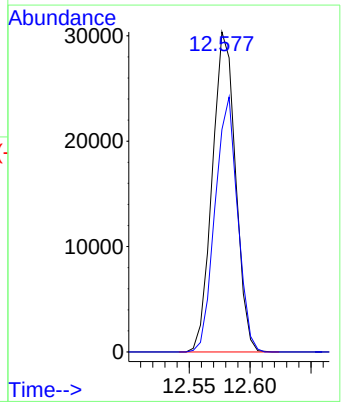



#90
Hexachloroethane
Concen: 51.61 ug/l
RT: 12.577 min Scan# 1953
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

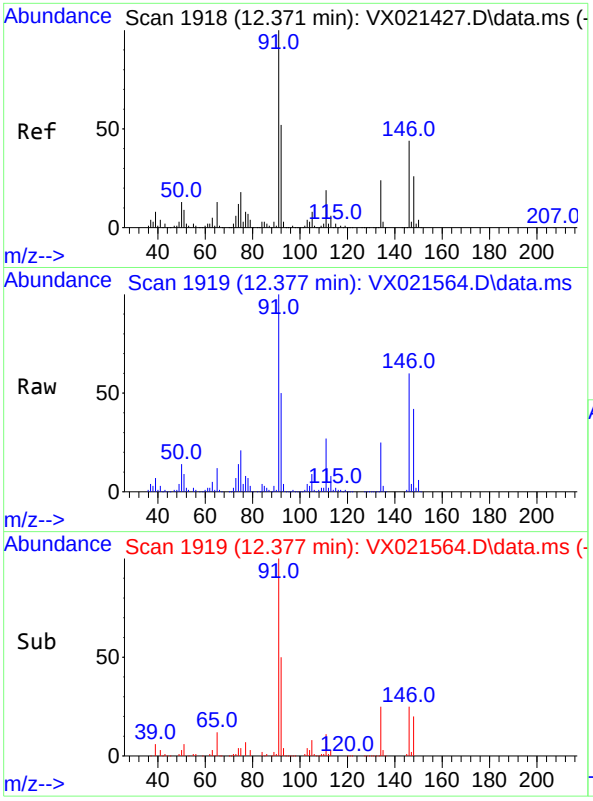
Tgt Ion:117 Resp: 40358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 77.2 | 40.4 | 121.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

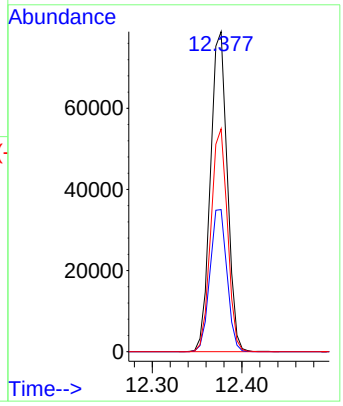
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

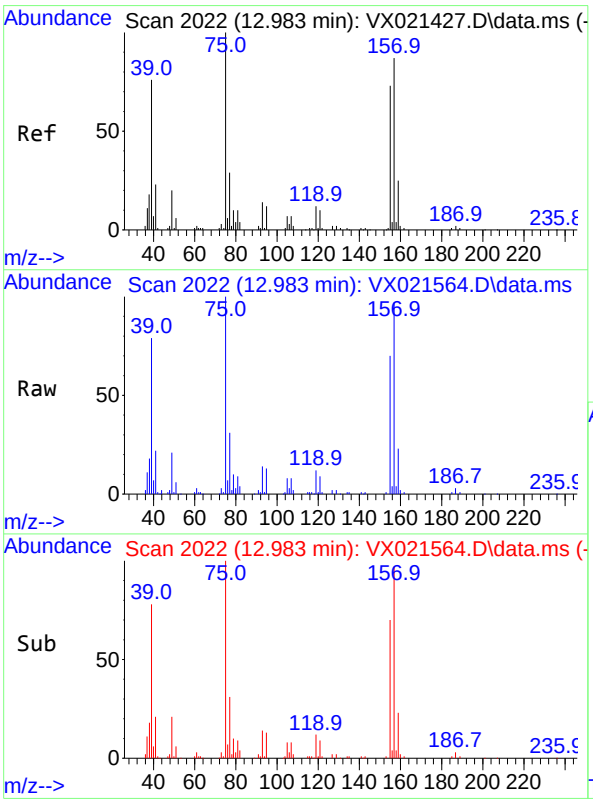



#91
1,2-Dichlorobenzene
Concen: 47.72 ug/l
RT: 12.377 min Scan# 1919
Delta R.T. 0.006 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:146 Resp: 102769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.8 | 20.8 | 62.2 |
| 148 | 68.5 | 31.9 | 95.5 |

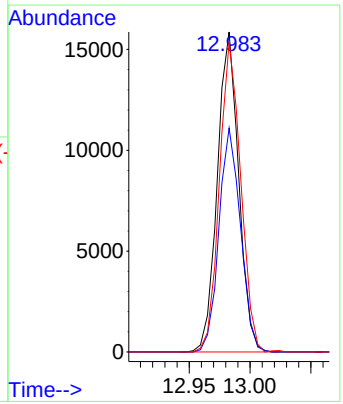



#92
1,2-Dibromo-3-Chloropropane
Concen: 43.93 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

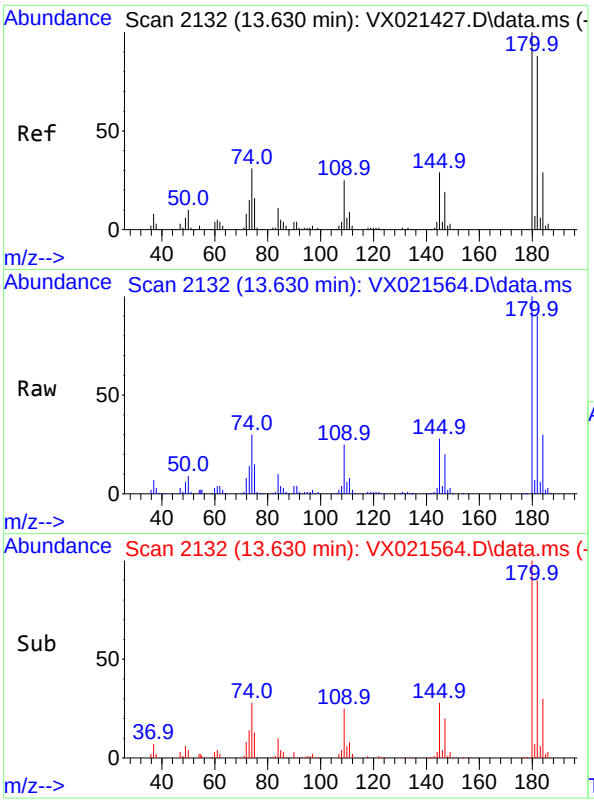
Tgt Ion: 75 Resp: 19299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 70.8 | 45.3 | 135.9 |
| 157 | 96.9 | 57.7 | 173.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

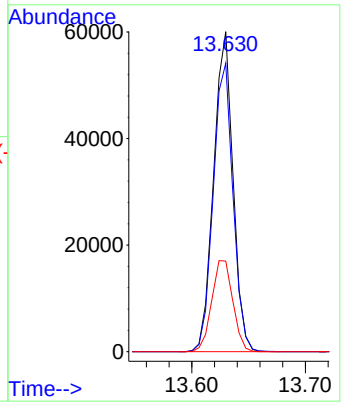
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

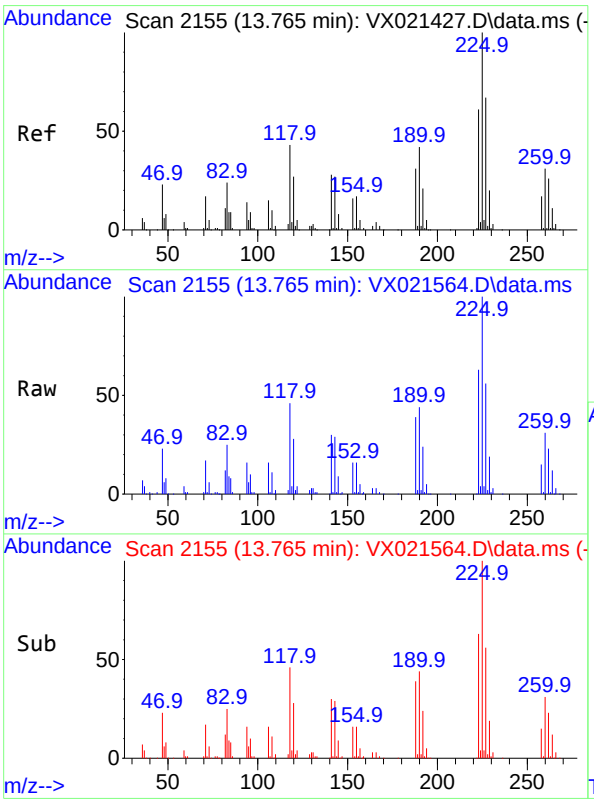



#93
1,2,4-Trichlorobenzene
Concen: 50.39 ug/l
RT: 13.630 min Scan# 2132
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:180 Resp: 71119

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 92.2 | 47.7 | 143.1 |
| 145 | 31.1 | 15.0 | 45.0 |

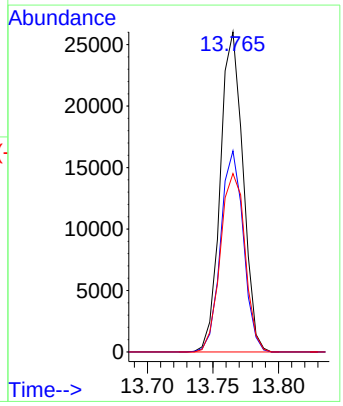



#94
Hexachlorobutadiene
Concen: 49.18 ug/l
RT: 13.765 min Scan# 2155
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

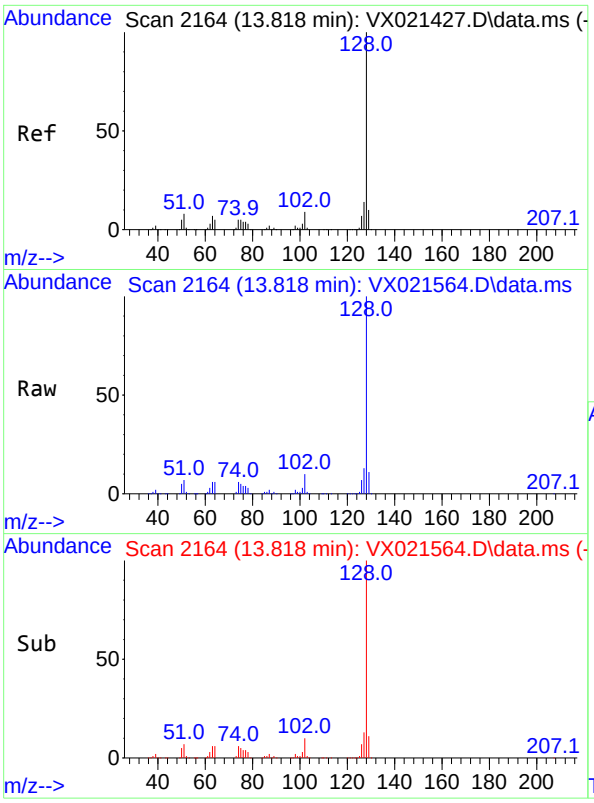
Tgt Ion:225 Resp: 31327

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 62.9 | 31.1 | 93.2 |
| 227 | 60.7 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VSTDCCC050

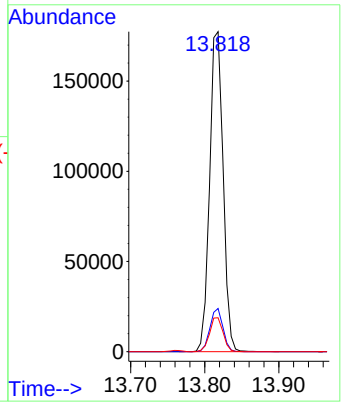
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:24 AM

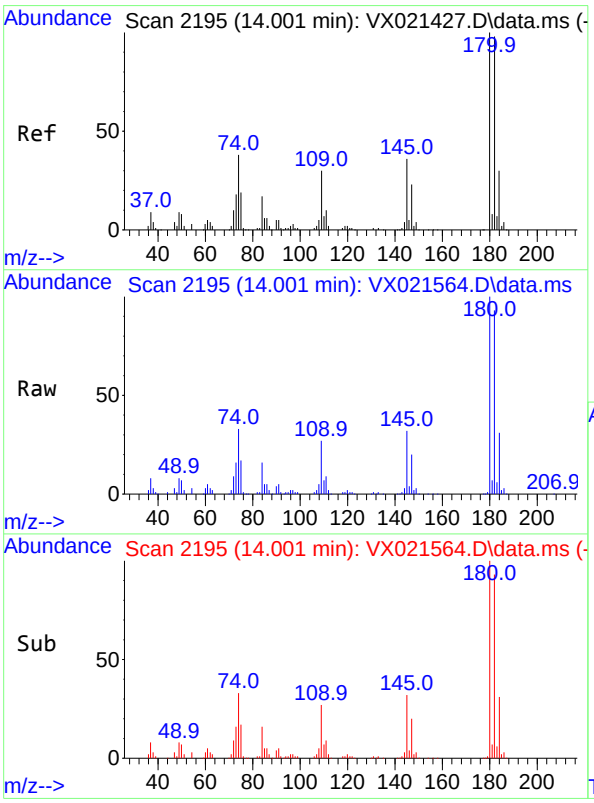



#95
Naphthalene
Concen: 48.69 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:128 Resp: 224130

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.0 | 10.3 | 15.5 |
| 129 | 10.7 | 8.8 | 13.2 |

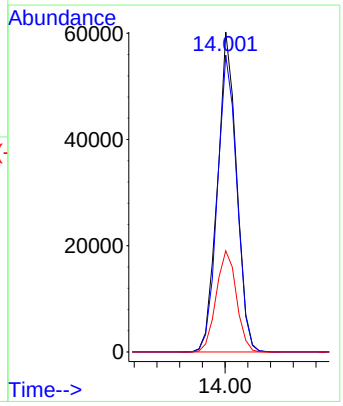



#96
1,2,3-Trichlorobenzene
Concen: 49.95 ug/l
RT: 14.001 min Scan# 2195
Delta R.T. -0.000 min
Lab File: VX021564.D
Acq: 29 Mar 2021 09:35

Tgt Ion:180 Resp: 70462

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 94.6 | 47.6 | 142.9 |
| 145 | 33.4 | 16.1 | 48.3 |



Evaluate Continuing Calibration Report

Sample Results: **VX021564.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021564.D
Acq On : 29 Mar 2021 09:35
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 30 03:22:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 116 | -0.01 |
| 2 | T | Dichlorodifluoromethane | 0.550 | 0.514 | 6.5 | 108 | 0.00 |
| 3 | P | Chloromethane | 0.702 | 0.561 | 20.1 | 107 | 0.00 |
| 4 | C | Vinyl Chloride | 0.562 | 0.525 | 6.6# | 107 | 0.00 |
| 5 | T | Bromomethane | 0.226 | 0.232 | -2.7 | 123 | 0.00 |
| 6 | T | Chloroethane | 0.357 | 0.326 | 8.7 | 106 | 0.00 |
| 7 | T | Trichlorofluoromethane | 0.914 | 0.879 | 3.8 | 109 | 0.00 |
| 8 | T | Diethyl Ether | 0.317 | 0.295 | 6.9 | 109 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 0.515 | 0.492 | 4.5 | 112 | 0.00 |
| 10 | T | Methyl Iodide | 0.362 | 0.400 | -10.5 | 128 | 0.00 |
| 11 | T | Tert butyl alcohol | 0.138 | 0.120 | 13.0 | 104 | -0.01 |
| 12 | CM | 1,1-Dichloroethene | 0.504 | 0.457 | 9.3# | 110 | 0.00 |
| 13 | T | Acrolein | 0.077 | 0.052 | 32.5# | 90 | 0.00 |
| 14 | T | Allyl chloride | 1.023 | 0.933 | 8.8 | 107 | 0.00 |
| 15 | T | Acrylonitrile | 0.327 | 0.290 | 11.3 | 102 | 0.00 |
| 16 | T | Acetone | 0.315 | 0.256 | 18.7 | 97 | 0.00 |
| 17 | T | Carbon Disulfide | 1.415 | 1.197 | 15.4 | 103 | 0.00 |
| 18 | T | Methyl Acetate | 0.909 | 0.865 | 4.8 | 107 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 1.882 | 1.769 | 6.0 | 108 | 0.00 |
| 20 | T | Methylene Chloride | 0.614 | 0.554 | 9.8 | 108 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 0.553 | 0.502 | 9.2 | 106 | 0.00 |
| 22 | T | Diisopropyl ether | 1.987 | 1.873 | 5.7 | 108 | 0.00 |
| 23 | T | Vinyl Acetate | 1.681 | 1.561 | 7.1 | 105 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 1.071 | 1.006 | 6.1 | 109 | 0.00 |
| 25 | T | 2-Butanone | 0.477 | 0.407 | 14.7 | 99 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 0.928 | 0.918 | 1.1 | 113 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 0.643 | 0.605 | 5.9 | 109 | 0.00 |
| 28 | T | Bromochloromethane | 0.536 | 0.484 | 9.7 | 111 | 0.00 |
| 29 | T | Tetrahydrofuran | 0.309 | 0.268 | 13.3 | 101 | 0.00 |
| 30 | C | Chloroform | 1.131 | 1.077 | 4.8# | 109 | 0.00 |
| 31 | T | Cyclohexane | 0.915 | 0.847 | 7.4 | 105 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 1.002 | 0.950 | 5.2 | 108 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 0.832 | 0.769 | 7.6 | 115 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 1.000 | 1.000 | 0.0 | 115 | 0.00 |
| 35 | S | Dibromofluoromethane | 0.355 | 0.343 | 3.4 | 117 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 0.490 | 0.468 | 4.5 | 109 | 0.00 |
| 37 | T | Ethyl Acetate | 0.566 | 0.485 | 14.3 | 101 | 0.00 |
| 38 | T | Carbon Tetrachloride | 0.526 | 0.524 | 0.4 | 110 | 0.00 |
| 39 | T | Methylcyclohexane | 0.543 | 0.530 | 2.4 | 107 | 0.00 |
| 40 | TM | Benzene | 1.391 | 1.334 | 4.1 | 107 | 0.00 |
| 41 | T | Methacrylonitrile | 0.329 | 0.296 | 10.0 | 103 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 0.603 | 0.586 | 2.8 | 109 | 0.00 |
| 43 | T | Isopropyl Acetate | 0.920 | 0.843 | 8.4 | 102 | 0.00 |
| 44 | TM | Trichloroethene | 0.367 | 0.348 | 5.2 | 108 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 0.377 | 0.368 | 2.4# | 108 | 0.00 |
| 46 | T | Dibromomethane | 0.275 | 0.259 | 5.8 | 105 | 0.00 |
| 47 | T | Bromodichloromethane | 0.559 | 0.557 | 0.4 | 110 | 0.00 |
| 48 | T | Methyl methacrylate | 0.491 | 0.461 | 6.1 | 103 | 0.00 |

Sample Results: **VX021564.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021564.D
Acq On : 29 Mar 2021 09:35
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 30 03:22:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 0.009 | 0.008 | 11.1 | 101 | 0.00 |
| 50 | S | Toluene-d8 | 1.266 | 1.201 | 5.1 | 111 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 0.566 | 0.527 | 6.9 | 102 | 0.00 |
| 52 | CM | Toluene | 0.859 | 0.848 | 1.3# | 108 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 0.564 | 0.564 | 0.0 | 108 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 0.601 | 0.608 | -1.2 | 109 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 0.363 | 0.361 | 0.6 | 110 | 0.00 |
| 56 | T | Ethyl methacrylate | 0.548 | 0.531 | 3.1 | 103 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 0.621 | 0.599 | 3.5 | 106 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 0.307 | 0.308 | -0.3 | 109 | 0.00 |
| 59 | T | 2-Hexanone | 0.425 | 0.398 | 6.4 | 102 | 0.00 |
| 60 | T | Dibromochloromethane | 0.406 | 0.421 | -3.7 | 112 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 0.390 | 0.375 | 3.8 | 104 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 0.492 | 0.471 | 4.3 | 114 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 112 | 0.00 |
| 64 | T | Tetrachloroethene | 0.335 | 0.335 | 0.0 | 109 | 0.00 |
| 65 | PM | Chlorobenzene | 1.004 | 0.975 | 2.9 | 106 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 0.385 | 0.392 | -1.8 | 110 | 0.00 |
| 67 | C | Ethyl Benzene | 1.831 | 1.787 | 2.4# | 105 | 0.00 |
| 68 | T | m/p-Xylenes | 0.652 | 0.663 | -1.7 | 108 | 0.00 |
| 69 | T | o-Xylene | 0.632 | 0.627 | 0.8 | 107 | 0.00 |
| 70 | T | Styrene | 1.086 | 1.099 | -1.2 | 109 | 0.00 |
| 71 | P | Bromoform | 0.313 | 0.317 | -1.3 | 109 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 115 | 0.00 |
| 73 | T | Isopropylbenzene | 3.513 | 3.556 | -1.2 | 109 | 0.00 |
| 74 | T | N-amyl acetate | 1.700 | 1.556 | 8.5 | 103 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 1.241 | 1.137 | 8.4 | 104 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 1.164 | 1.126 | 3.3 | 105 | 0.00 |
| 77 | T | Bromobenzene | 0.871 | 0.847 | 2.8 | 108 | 0.00 |
| 78 | T | n-propylbenzene | 4.149 | 4.187 | -0.9 | 110 | 0.00 |
| 79 | T | 2-Chlorotoluene | 2.517 | 2.473 | 1.7 | 108 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 3.001 | 3.044 | -1.4 | 109 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 0.382 | 0.379 | 0.8 | 110 | 0.00 |
| 82 | T | 4-Chlorotoluene | 2.988 | 2.928 | 2.0 | 108 | 0.00 |
| 83 | T | tert-Butylbenzene | 2.922 | 2.834 | 3.0 | 107 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 3.026 | 3.054 | -0.9 | 109 | 0.00 |
| 85 | T | sec-Butylbenzene | 3.371 | 3.376 | -0.1 | 107 | 0.00 |
| 86 | T | p-Isopropyltoluene | 3.068 | 3.138 | -2.3 | 108 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 1.568 | 1.502 | 4.2 | 109 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 1.622 | 1.542 | 4.9 | 111 | 0.00 |
| 89 | T | n-Butylbenzene | 2.811 | 2.871 | -2.1 | 110 | 0.00 |
| 90 | T | Hexachloroethane | 0.554 | 0.572 | -3.2 | 115 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 1.525 | 1.455 | 4.6 | 109 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 0.286 | 0.273 | 4.5 | 105 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 0.999 | 1.007 | -0.8 | 113 | 0.00 |
| 94 | T | Hexachlorobutadiene | 0.451 | 0.444 | 1.6 | 113 | 0.00 |
| 95 | T | Naphthalene | 3.259 | 3.174 | 2.6 | 106 | 0.00 |

Sample Results: **VX021564.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021564.D
Acq On : 29 Mar 2021 09:35
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 30 03:22:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 0.999 | 0.998 | 0.1 | 112 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

Sample Results: **VX021564.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021564.D
Acq On : 29 Mar 2021 09:35
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 30 03:22:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 116 | -0.01 |
| 2 | T | Dichlorodifluoromethane | 50.000 | 46.727 | 6.5 | 108 | 0.00 |
| 3 | P | Chloromethane | 50.000 | 44.429 | 11.1 | 107 | 0.00 |
| 4 | C | Vinyl Chloride | 50.000 | 46.669 | 6.7# | 107 | 0.00 |
| 5 | T | Bromomethane | 50.000 | 51.319 | -2.6 | 123 | 0.00 |
| 6 | T | Chloroethane | 50.000 | 45.773 | 8.5 | 106 | 0.00 |
| 7 | T | Trichlorofluoromethane | 50.000 | 48.052 | 3.9 | 109 | 0.00 |
| 8 | T | Diethyl Ether | 50.000 | 46.455 | 7.1 | 109 | 0.00 |
| 9 | T | 1,1,2-Trichlorotrifluoroeth | 50.000 | 47.809 | 4.4 | 112 | 0.00 |
| 10 | T | Methyl Iodide | 50.000 | 49.834 | 0.3 | 128 | 0.00 |
| 11 | T | Tert butyl alcohol | 250.000 | 217.436 | 13.0 | 104 | -0.01 |
| 12 | CM | 1,1-Dichloroethene | 50.000 | 45.388 | 9.2# | 110 | 0.00 |
| 13 | T | Acrolein | 250.000 | 186.734 | 25.3# | 90 | 0.00 |
| 14 | T | Allyl chloride | 50.000 | 45.588 | 8.8 | 107 | 0.00 |
| 15 | T | Acrylonitrile | 250.000 | 221.979 | 11.2 | 102 | 0.00 |
| 16 | T | Acetone | 250.000 | 203.272 | 18.7 | 97 | 0.00 |
| 17 | T | Carbon Disulfide | 50.000 | 42.309 | 15.4 | 103 | 0.00 |
| 18 | T | Methyl Acetate | 50.000 | 47.598 | 4.8 | 107 | 0.00 |
| 19 | T | Methyl tert-butyl Ether | 50.000 | 46.997 | 6.0 | 108 | 0.00 |
| 20 | T | Methylene Chloride | 50.000 | 45.128 | 9.7 | 108 | 0.00 |
| 21 | T | trans-1,2-Dichloroethene | 50.000 | 45.318 | 9.4 | 106 | 0.00 |
| 22 | T | Diisopropyl ether | 50.000 | 47.128 | 5.7 | 108 | 0.00 |
| 23 | T | Vinyl Acetate | 250.000 | 232.187 | 7.1 | 105 | 0.00 |
| 24 | P | 1,1-Dichloroethane | 50.000 | 46.969 | 6.1 | 109 | 0.00 |
| 25 | T | 2-Butanone | 250.000 | 213.448 | 14.6 | 99 | 0.00 |
| 26 | T | 2,2-Dichloropropane | 50.000 | 49.468 | 1.1 | 113 | 0.00 |
| 27 | T | cis-1,2-Dichloroethene | 50.000 | 47.037 | 5.9 | 109 | 0.00 |
| 28 | T | Bromochloromethane | 50.000 | 45.139 | 9.7 | 111 | 0.00 |
| 29 | T | Tetrahydrofuran | 250.000 | 217.111 | 13.2 | 101 | 0.00 |
| 30 | C | Chloroform | 50.000 | 47.649 | 4.7# | 109 | 0.00 |
| 31 | T | Cyclohexane | 50.000 | 46.277 | 7.4 | 105 | 0.00 |
| 32 | T | 1,1,1-Trichloroethane | 50.000 | 47.423 | 5.2 | 108 | 0.00 |
| 33 | S | 1,2-Dichloroethane-d4 | 50.000 | 46.219 | 7.6 | 115 | 0.00 |
| 34 | I | 1,4-Difluorobenzene | 50.000 | 50.000 | 0.0 | 115 | 0.00 |
| 35 | S | Dibromofluoromethane | 50.000 | 48.313 | 3.4 | 117 | 0.00 |
| 36 | T | 1,1-Dichloropropene | 50.000 | 47.808 | 4.4 | 109 | 0.00 |
| 37 | T | Ethyl Acetate | 50.000 | 42.806 | 14.4 | 101 | 0.00 |
| 38 | T | Carbon Tetrachloride | 50.000 | 49.795 | 0.4 | 110 | 0.00 |
| 39 | T | Methylcyclohexane | 50.000 | 48.836 | 2.3 | 107 | 0.00 |
| 40 | TM | Benzene | 50.000 | 47.950 | 4.1 | 107 | 0.00 |
| 41 | T | Methacrylonitrile | 50.000 | 45.001 | 10.0 | 103 | 0.00 |
| 42 | TM | 1,2-Dichloroethane | 50.000 | 48.570 | 2.9 | 109 | 0.00 |
| 43 | T | Isopropyl Acetate | 50.000 | 45.818 | 8.4 | 102 | 0.00 |
| 44 | TM | Trichloroethene | 50.000 | 47.367 | 5.3 | 108 | 0.00 |
| 45 | C | 1,2-Dichloropropane | 50.000 | 48.871 | 2.3# | 108 | 0.00 |
| 46 | T | Dibromomethane | 50.000 | 47.105 | 5.8 | 105 | 0.00 |
| 47 | T | Bromodichloromethane | 50.000 | 49.822 | 0.4 | 110 | 0.00 |
| 48 | T | Methyl methacrylate | 50.000 | 46.970 | 6.1 | 103 | 0.00 |

Sample Results: **VX021564.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021564.D
Acq On : 29 Mar 2021 09:35
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 30 03:22:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 906.575 | 9.3 | 101 | 0.00 |
| 50 | S | Toluene-d8 | 50.000 | 47.456 | 5.1 | 111 | 0.00 |
| 51 | T | 4-Methyl-2-Pentanone | 250.000 | 233.080 | 6.8 | 102 | 0.00 |
| 52 | CM | Toluene | 50.000 | 49.335 | 1.3# | 108 | 0.00 |
| 53 | T | t-1,3-Dichloropropene | 50.000 | 49.918 | 0.2 | 108 | 0.00 |
| 54 | T | cis-1,3-Dichloropropene | 50.000 | 50.627 | -1.3 | 109 | 0.00 |
| 55 | T | 1,1,2-Trichloroethane | 50.000 | 49.771 | 0.5 | 110 | 0.00 |
| 56 | T | Ethyl methacrylate | 50.000 | 43.632 | 12.7 | 103 | 0.00 |
| 57 | T | 1,3-Dichloropropane | 50.000 | 48.285 | 3.4 | 106 | 0.00 |
| 58 | T | 2-Chloroethyl Vinyl ether | 250.000 | 251.396 | -0.6 | 109 | 0.00 |
| 59 | T | 2-Hexanone | 250.000 | 234.427 | 6.2 | 102 | 0.00 |
| 60 | T | Dibromochloromethane | 50.000 | 51.874 | -3.7 | 112 | 0.00 |
| 61 | T | 1,2-Dibromoethane | 50.000 | 48.093 | 3.8 | 104 | 0.00 |
| 62 | S | 4-Bromofluorobenzene | 50.000 | 47.812 | 4.4 | 114 | 0.00 |
| 63 | I | Chlorobenzene-d5 | 50.000 | 50.000 | 0.0 | 112 | 0.00 |
| 64 | T | Tetrachloroethene | 50.000 | 50.058 | -0.1 | 109 | 0.00 |
| 65 | PM | Chlorobenzene | 50.000 | 48.525 | 3.0 | 106 | 0.00 |
| 66 | T | 1,1,1,2-Tetrachloroethane | 50.000 | 50.913 | -1.8 | 110 | 0.00 |
| 67 | C | Ethyl Benzene | 50.000 | 48.811 | 2.4# | 105 | 0.00 |
| 68 | T | m/p-Xylenes | 100.000 | 101.708 | -1.7 | 108 | 0.00 |
| 69 | T | o-Xylene | 50.000 | 49.609 | 0.8 | 107 | 0.00 |
| 70 | T | Styrene | 50.000 | 50.561 | -1.1 | 109 | 0.00 |
| 71 | P | Bromoform | 50.000 | 50.696 | -1.4 | 109 | 0.00 |
| 72 | I | 1,4-Dichlorobenzene-d4 | 50.000 | 50.000 | 0.0 | 115 | 0.00 |
| 73 | T | Isopropylbenzene | 50.000 | 50.607 | -1.2 | 109 | 0.00 |
| 74 | T | N-amyl acetate | 50.000 | 45.775 | 8.5 | 103 | 0.00 |
| 75 | P | 1,1,2,2-Tetrachloroethane | 50.000 | 45.805 | 8.4 | 104 | 0.00 |
| 76 | T | 1,2,3-Trichloropropane | 50.000 | 48.386 | 3.2 | 105 | 0.00 |
| 77 | T | Bromobenzene | 50.000 | 48.628 | 2.7 | 108 | 0.00 |
| 78 | T | n-propylbenzene | 50.000 | 50.463 | -0.9 | 110 | 0.00 |
| 79 | T | 2-Chlorotoluene | 50.000 | 49.124 | 1.8 | 108 | 0.00 |
| 80 | T | 1,3,5-Trimethylbenzene | 50.000 | 50.716 | -1.4 | 109 | 0.00 |
| 81 | T | trans-1,4-Dichloro-2-butene | 50.000 | 49.600 | 0.8 | 110 | 0.00 |
| 82 | T | 4-Chlorotoluene | 50.000 | 48.991 | 2.0 | 108 | 0.00 |
| 83 | T | tert-Butylbenzene | 50.000 | 48.497 | 3.0 | 107 | 0.00 |
| 84 | T | 1,2,4-Trimethylbenzene | 50.000 | 50.465 | -0.9 | 109 | 0.00 |
| 85 | T | sec-Butylbenzene | 50.000 | 50.071 | -0.1 | 107 | 0.00 |
| 86 | T | p-Isopropyltoluene | 50.000 | 51.136 | -2.3 | 108 | 0.00 |
| 87 | T | 1,3-Dichlorobenzene | 50.000 | 47.878 | 4.2 | 109 | 0.00 |
| 88 | T | 1,4-Dichlorobenzene | 50.000 | 47.540 | 4.9 | 111 | 0.00 |
| 89 | T | n-Butylbenzene | 50.000 | 51.067 | -2.1 | 110 | 0.00 |
| 90 | T | Hexachloroethane | 50.000 | 51.605 | -3.2 | 115 | 0.00 |
| 91 | T | 1,2-Dichlorobenzene | 50.000 | 47.723 | 4.6 | 109 | 0.00 |
| 92 | T | 1,2-Dibromo-3-Chloropropane | 50.000 | 43.932 | 12.1 | 105 | 0.00 |
| 93 | T | 1,2,4-Trichlorobenzene | 50.000 | 50.390 | -0.8 | 113 | 0.00 |
| 94 | T | Hexachlorobutadiene | 50.000 | 49.176 | 1.6 | 113 | 0.00 |
| 95 | T | Naphthalene | 50.000 | 48.689 | 2.6 | 106 | 0.00 |

Sample Results: **VX021564.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021564.D
Acq On : 29 Mar 2021 09:35
Operator : JC/MD
Sample : VSTDCCC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**LabSampleId :**
VSTDCCC050

Quant Time: Mar 30 03:22:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
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 | 49.946 | 0.1 | 112 | 0.00 |

(#) = Out of Range SPCC's out = 0 CCC's out = 6

CHEMTECH

# QC SAMPLE DATA

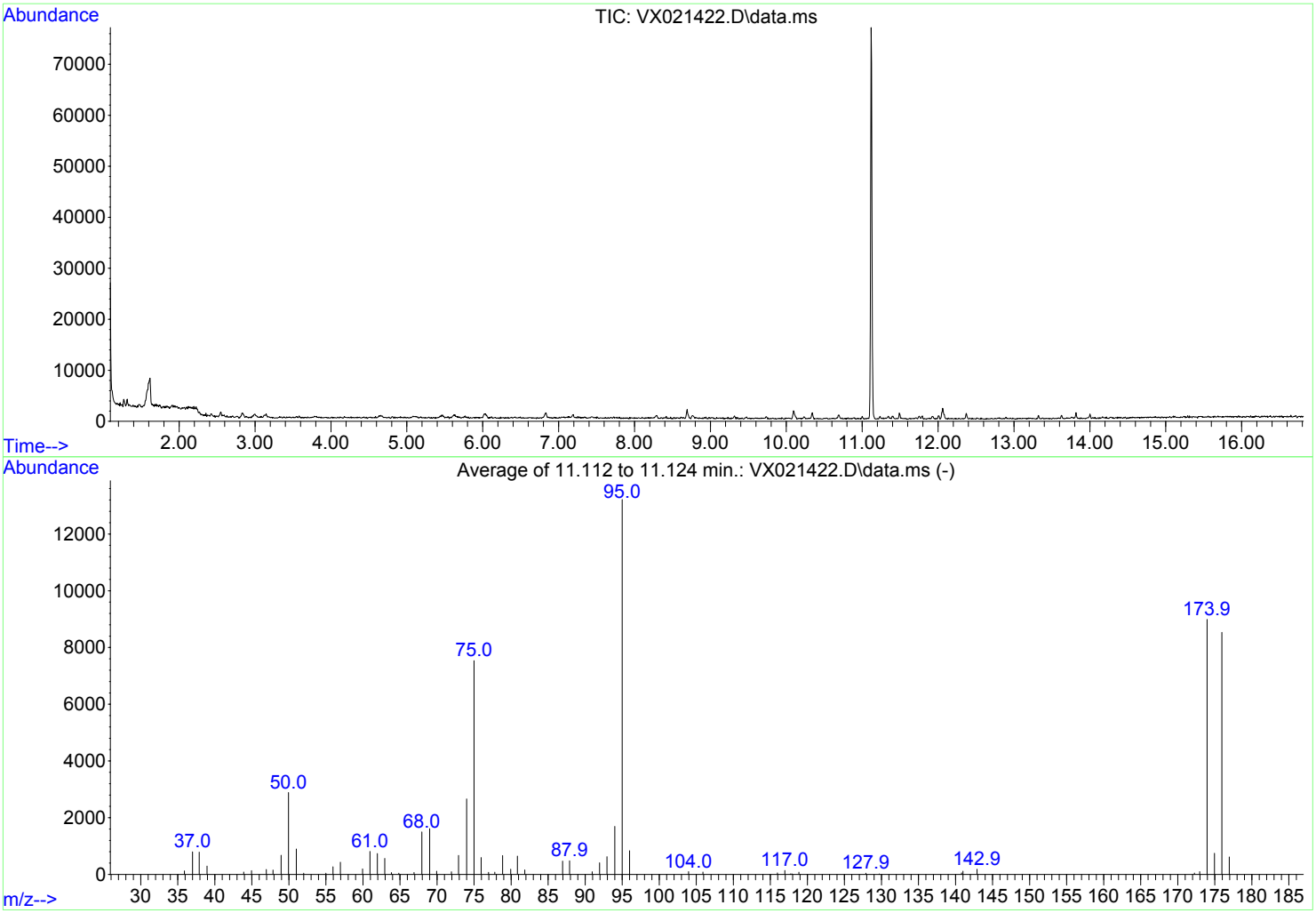
Sample Results: **VX021422.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032421\
Data File : VX021422.D
Acq On : 24 Mar 2021 08:21
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260
Last Update : Wed Mar 24 12:25:26 2021




Spectrum Information: Average of 11.112 to 11.124 min.

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 21.9 | 2888 | PASS |
| 75 | 95 | 30 | 60 | 57.0 | 7536 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 13217 | PASS |
| 96 | 95 | 5 | 9 | 6.3 | 838 | PASS |
| 173 | 174 | 0.00 | 2 | 1.1 | 98 | PASS |
| 174 | 95 | 50 | 100 | 68.0 | 8991 | PASS |
| 175 | 174 | 5 | 9 | 8.3 | 746 | PASS |
| 176 | 174 | 95 | 101 | 94.9 | 8535 | PASS |
| 177 | 176 | 5 | 9 | 7.3 | 619 | PASS |

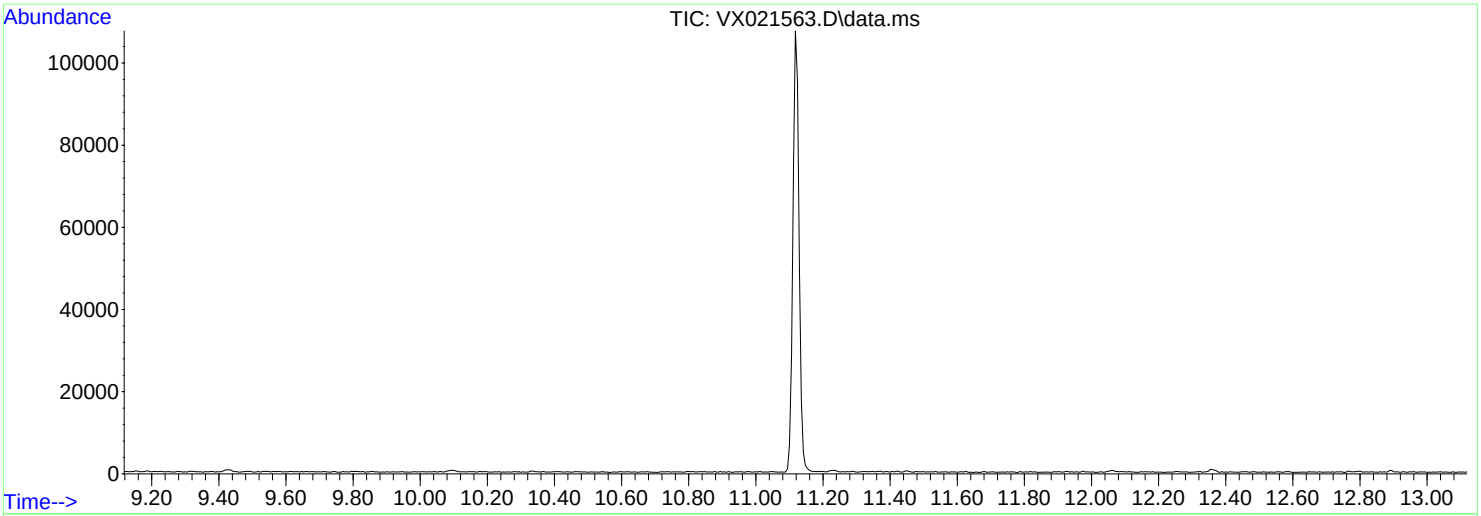
Sample Results: **VX021563.D**

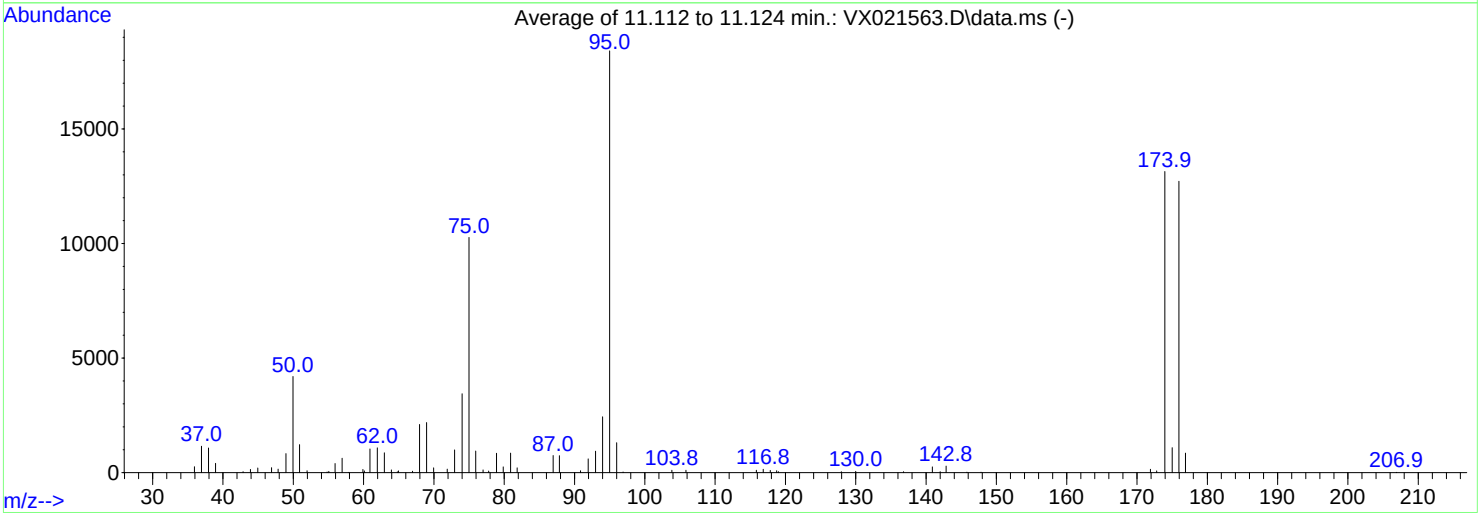
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021563.D
Acq On : 29 Mar 2021 09:02
Operator : JC/MD
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260
Last Update : Wed Mar 24 12:25:26 2021




AutoFind: Scans 1704, 1705, 1706; Background Corrected with Scan 1698

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 22.8 | 4200 | PASS |
| 75 | 95 | 30 | 60 | 55.8 | 10266 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 18410 | PASS |
| 96 | 95 | 5 | 9 | 7.1 | 1308 | PASS |
| 173 | 174 | 0.00 | 2 | 0.6 | 75 | PASS |
| 174 | 95 | 50 | 100 | 71.4 | 13141 | PASS |
| 175 | 174 | 5 | 9 | 8.3 | 1090 | PASS |
| 176 | 174 | 95 | 101 | 96.8 | 12718 | PASS |
| 177 | 176 | 5 | 9 | 6.7 | 852 | PASS |

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | |
| Client Sample ID: | VX0329WBL01 | SDG No.: | M1785 |
| Lab Sample ID: | VX0329WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021565.D | 1 | | 03/29/21 10:36 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 1.00 | U | 0.23 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 1.00 | U | 0.20 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 1.00 | U | 0.19 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 5.00 | U | 0.87 | 5.00 | ug/L |
| 75-00-3 | Chloroethane | 1.00 | U | 0.35 | 1.00 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 1.00 | U | 0.25 | 1.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 1.00 | U | 0.21 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 1.00 | U | 0.26 | 1.00 | ug/L |
| 67-64-1 | Acetone | 5.00 | U | 1.60 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 1.00 | U | 0.25 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 1.00 | U | 0.22 | 1.00 | ug/L |
| 79-20-9 | Methyl Acetate | 1.00 | U | 0.47 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 1.00 | U | 0.18 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 1.00 | U | 0.19 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 1.00 | U | 0.21 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 5.00 | U | 1.30 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 5.00 | U | 0.90 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 1.00 | U | 0.27 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 1.00 | U | 0.22 | 1.00 | ug/L |
| 74-97-5 | Bromochloromethane | 1.00 | U | 0.26 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 1.00 | U | 0.27 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 1.00 | U | 0.20 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 1.00 | U | 0.14 | 1.00 | ug/L |
| 71-43-2 | Benzene | 1.00 | U | 0.18 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 1.00 | U | 0.25 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 1.00 | U | 0.17 | 1.00 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 1.00 | U | 0.17 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 1.00 | U | 0.20 | 1.00 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.00 | U | 0.87 | 5.00 | ug/L |
| 108-88-3 | Toluene | 1.00 | U | 0.22 | 1.00 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 1.00 | U | 0.18 | 1.00 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 1.00 | U | 0.17 | 1.00 | ug/L |

Raw Data: **VX021565.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | |
| Client Sample ID: | VX0329WBL01 | SDG No.: | M1785 |
| Lab Sample ID: | VX0329WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021565.D | 1 | | 03/29/21 10:36 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 1.00 | U | 0.24 | 1.00 | ug/L |
| 591-78-6 | 2-Hexanone | 5.00 | U | 0.92 | 5.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 1.00 | U | 0.18 | 1.00 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 1.00 | U | 0.16 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 1.00 | U | 0.17 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 1.00 | U | 0.17 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 1.00 | U | 0.18 | 1.00 | ug/L |
| 1330-20-7 | Total Xylenes | 3.00 | U | 0.51 | 3.00 | ug/L |
| 100-42-5 | Styrene | 1.00 | U | 0.16 | 1.00 | ug/L |
| 75-25-2 | Bromoform | 1.00 | U | 0.19 | 1.00 | ug/L |
| 98-82-8 | Isopropylbenzene | 1.00 | U | 0.23 | 1.00 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.00 | U | 0.29 | 1.00 | ug/L |
| 103-65-1 | n-propylbenzene | 1.00 | U | 0.24 | 1.00 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 1.00 | U | 0.25 | 1.00 | ug/L |
| 98-06-6 | tert-Butylbenzene | 1.00 | U | 0.26 | 1.00 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1.00 | U | 0.20 | 1.00 | ug/L |
| 135-98-8 | sec-Butylbenzene | 1.00 | U | 0.23 | 1.00 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 1.00 | U | 0.19 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 1.00 | U | 0.20 | 1.00 | ug/L |
| 104-51-8 | n-Butylbenzene | 1.00 | U | 0.19 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 1.00 | U | 0.19 | 1.00 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 1.00 | U | 0.47 | 1.00 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 1.00 | U | 0.30 | 1.00 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 1.00 | U | 0.35 | 1.00 | ug/L |
| 123-91-1 | 1,4-Dioxane | 100 | U | 7.00 | 100 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 50.4 | | 78 - 117 | 101% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.0 | | 75 - 124 | 100% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 50.1 | | 92 - 112 | 100% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 53.7 | | 83 - 123 | 107% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 66200 | 5.623 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 120000 | 6.829 | | | |

Raw Data: **VX021565.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | |
| Client Sample ID: | VX0329WBL01 | SDG No.: | M1785 |
| Lab Sample ID: | VX0329WBL01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021565.D | 1 | | 03/29/21 10:36 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 126000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 57800 | 12.059 | | | |

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_X\Data\VX032921\
Data File : VX021565.D
Acq On : 29 Mar 2021 10:36
Operator : JC/MD
Sample : VX0329WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBL01

Quant Time: Mar 30 03:23:38 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Pentafluorobenzene | 5.623 | 168 | 66153 | 50.00 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 120176 | 50.00 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 126472 | 50.00 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 57784 | 50.00 | ug/l | 0.00 |
| System Monitoring Compounds | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 55523 | 50.44 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 100.88% | | | |
| 35) Dibromofluoromethane | 5.458 | 113 | 42686 | 50.00 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 100.00% | | | |
| 50) Toluene-d8 | 8.694 | 98 | 152275 | 50.06 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 100.12% | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 63508 | 53.70 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 107.40% | | | |
| Target Compounds | | | | | | Qvalue |

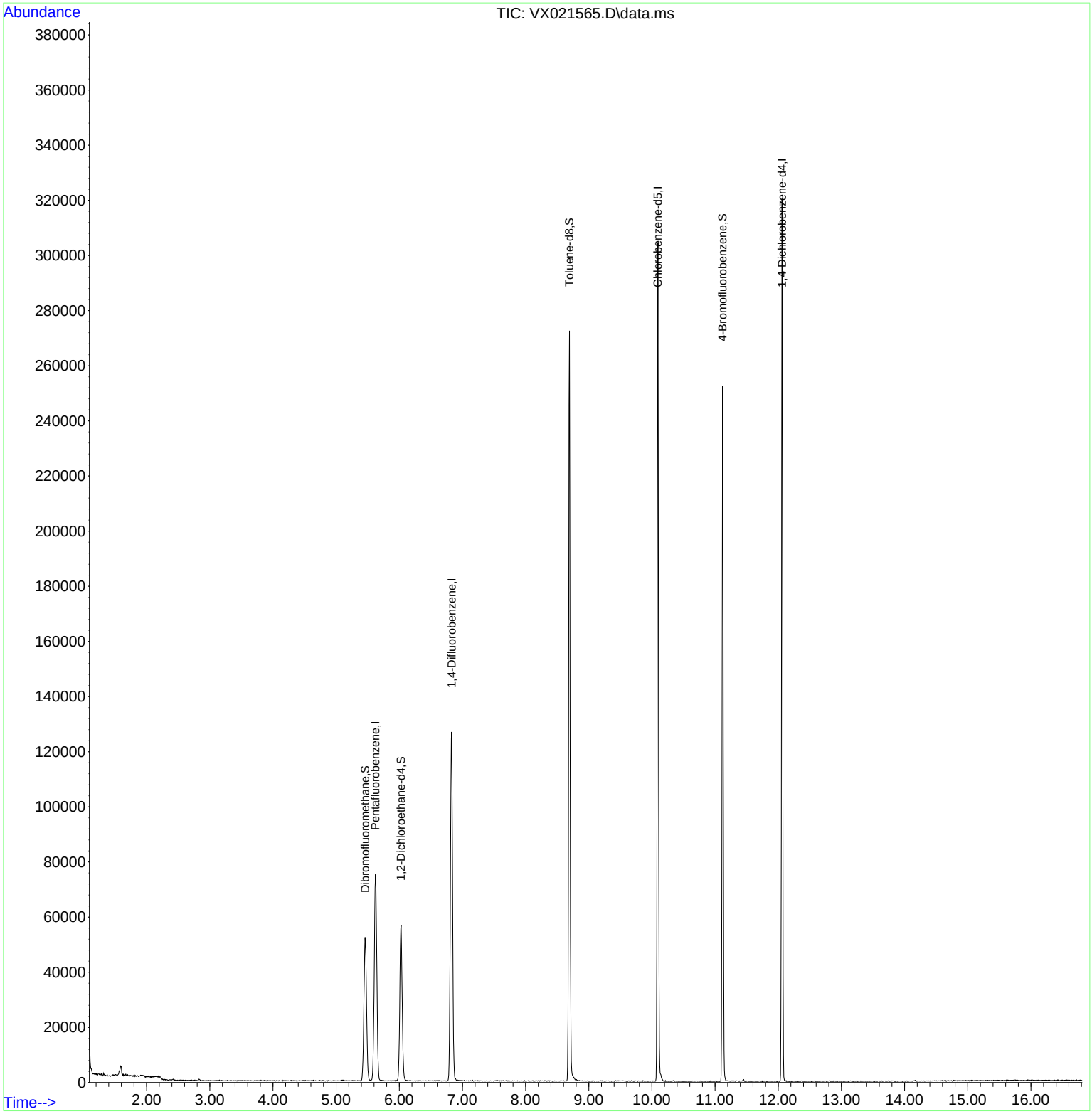
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample Results: **VX021565.D**

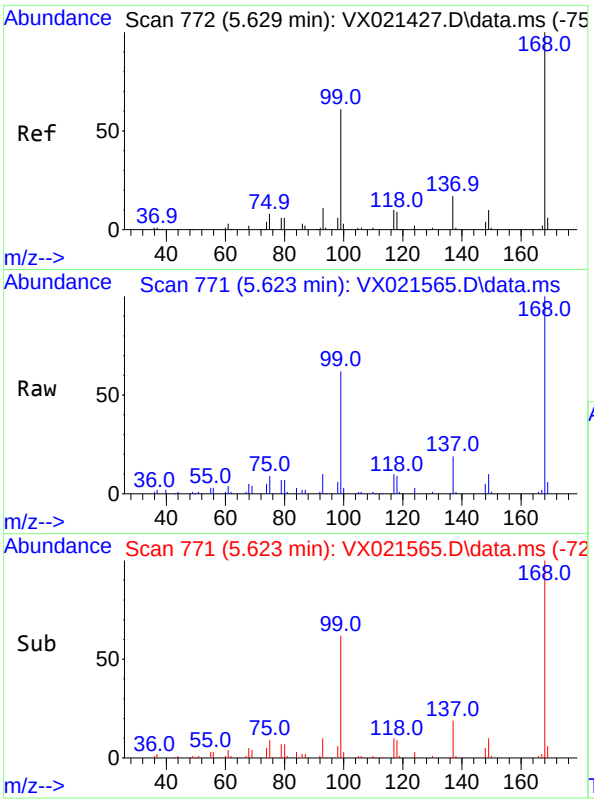
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021565.D
Acq On : 29 Mar 2021 10:36
Operator : JC/MD
Sample : VX0329WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBL01

Quant Time: Mar 30 03:23:38 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration



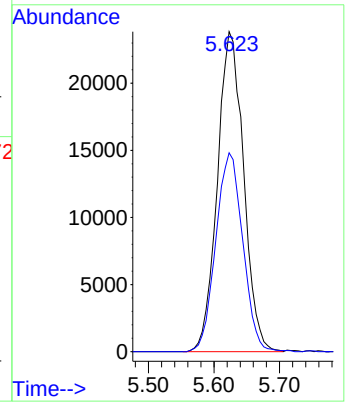
**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBL01

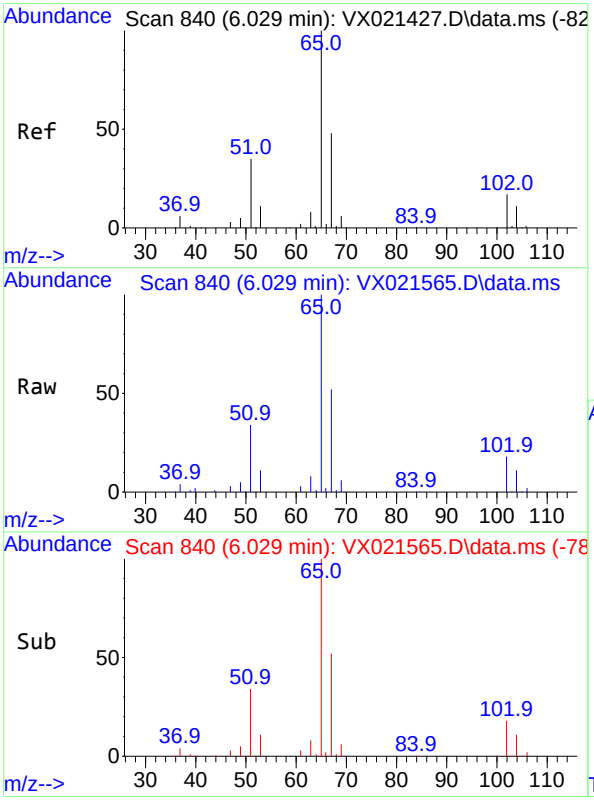



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.623 min Scan# 771
Delta R.T. -0.006 min
Lab File: VX021565.D
Acq: 29 Mar 2021 10:36

Tgt Ion:168 Resp: 66153

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 62.2 | 45.8 | 68.6 |

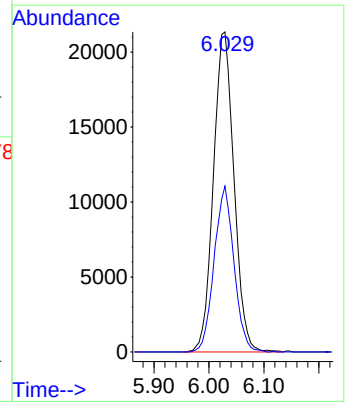


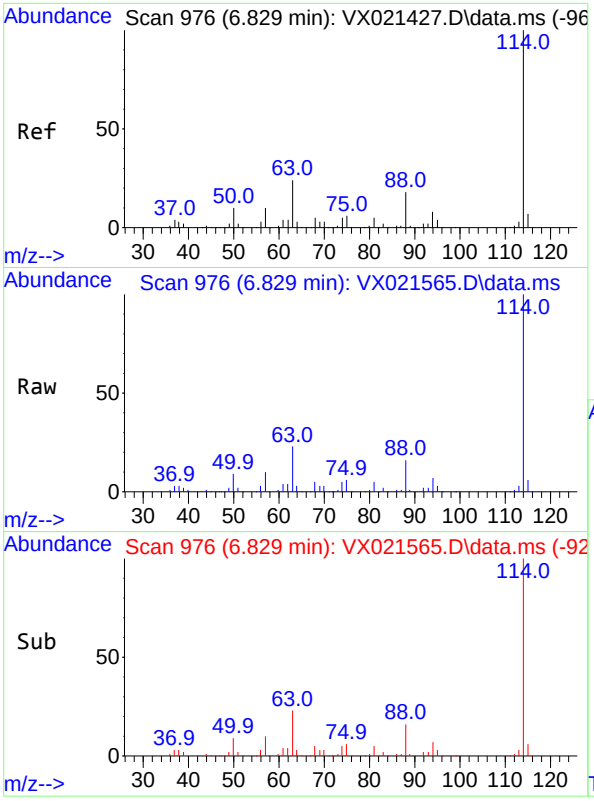

#33
1,2-Dichloroethane-d4
Concen: 50.44 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021565.D
Acq: 29 Mar 2021 10:36

Tgt Ion: 65 Resp: 55523

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 49.9 | 0.0 | 105.4 |



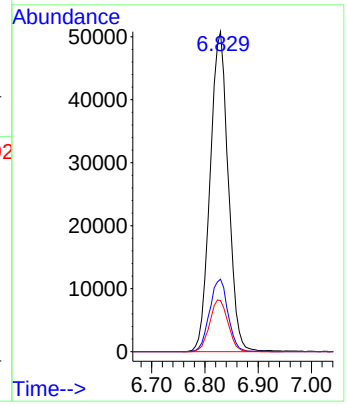
**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBL01

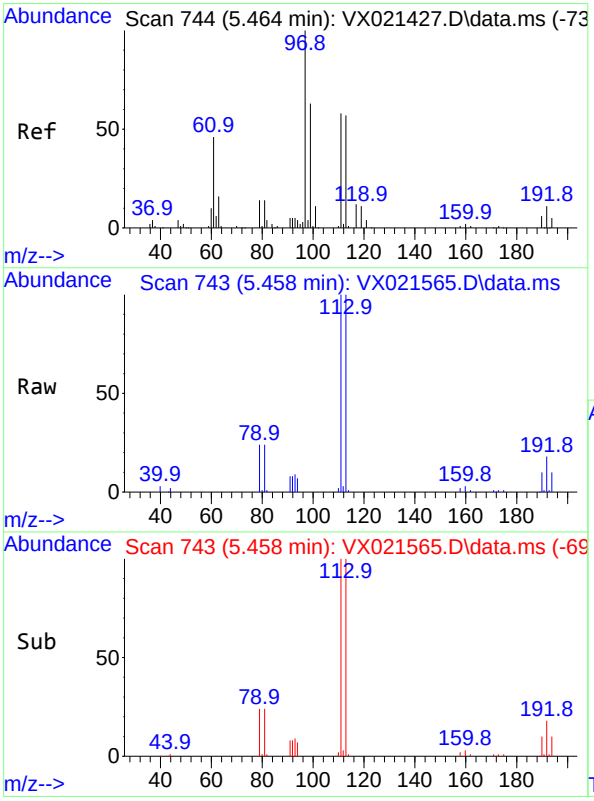



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021565.D
Acq: 29 Mar 2021 10:36

Tgt Ion:114 Resp: 120176

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.6 | 0.0 | 40.8 |
| 88 | 16.0 | 0.0 | 32.8 |

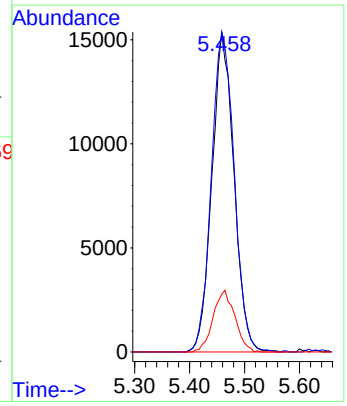


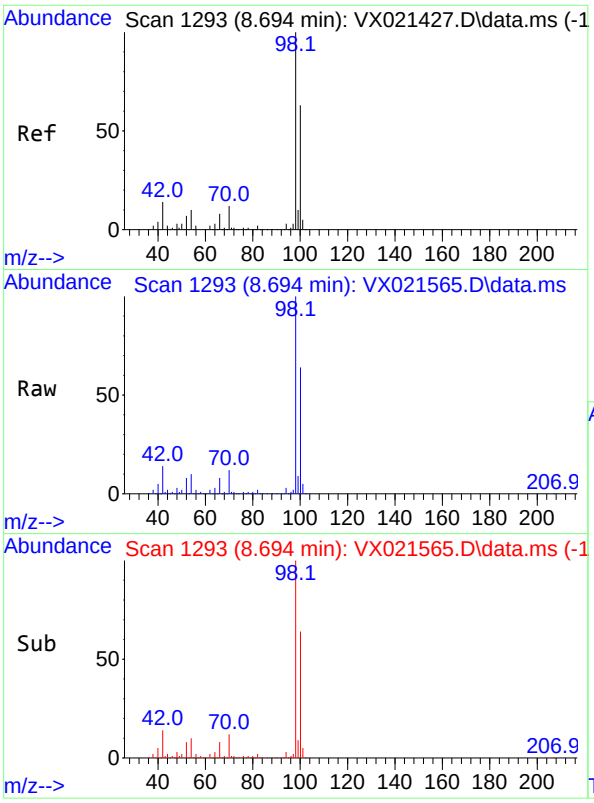

#35
Dibromofluoromethane
Concen: 50.00 ug/l
RT: 5.458 min Scan# 743
Delta R.T. -0.006 min
Lab File: VX021565.D
Acq: 29 Mar 2021 10:36

Tgt Ion:113 Resp: 42686

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 104.0 | 81.9 | 122.9 |
| 192 | 19.1 | 16.7 | 25.1 |



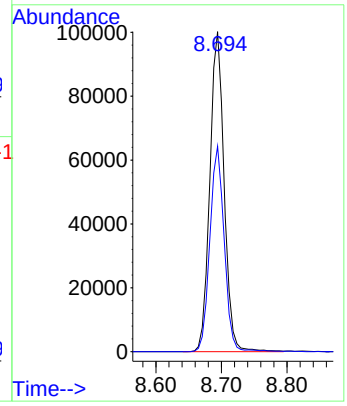
**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBL01

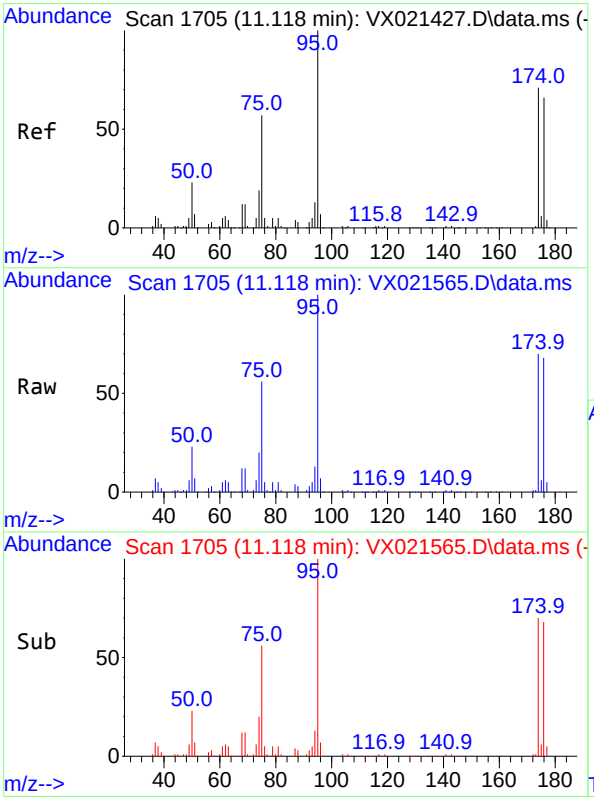



#50
Toluene-d8
Concen: 50.06 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021565.D
Acq: 29 Mar 2021 10:36

Tgt Ion: 98 Resp: 152275

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.5 | 51.9 | 77.9 |

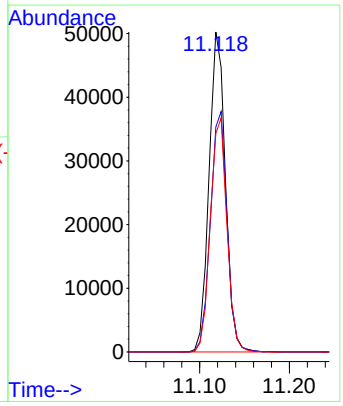


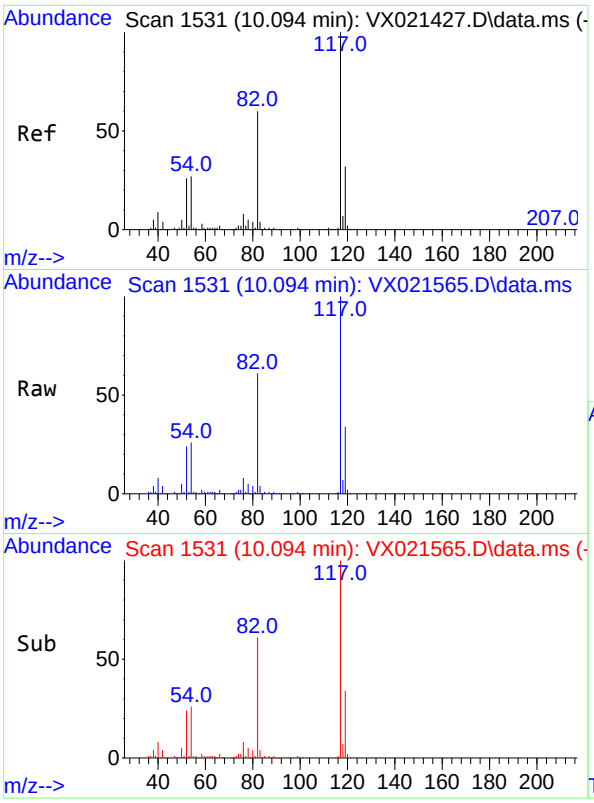

#62
4-Bromofluorobenzene
Concen: 53.70 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021565.D
Acq: 29 Mar 2021 10:36

Tgt Ion: 95 Resp: 63508

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 76.7 | 0.0 | 154.6 |
| 176 | 74.3 | 0.0 | 155.8 |



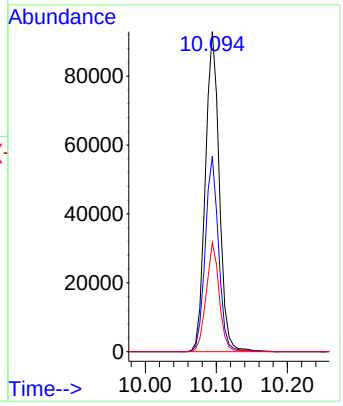
**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBL01

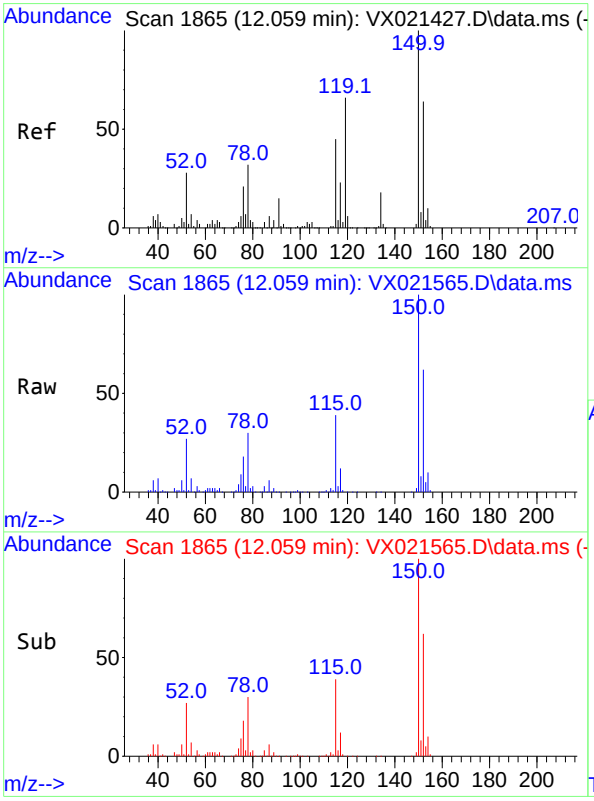



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021565.D
Acq: 29 Mar 2021 10:36

Tgt Ion:117 Resp: 126472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.0 | 47.4 | 71.2 |
| 119 | 34.0 | 26.6 | 39.8 |

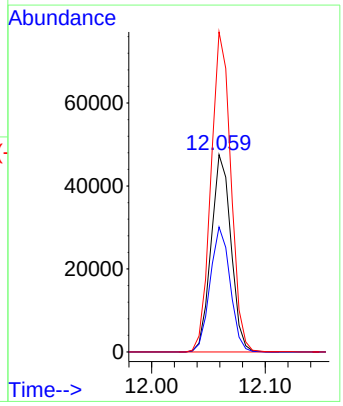



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021565.D
Acq: 29 Mar 2021 10:36

Tgt Ion:152 Resp: 57784

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 63.9 | 41.1 | 123.3 |
| 150 | 162.4 | 0.0 | 349.0 |



LSC Area Percent Report

Sample Results: **VX021565.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021565.D
Acq On : 29 Mar 2021 10:36
Operator : JC/MD
Sample : VX0329WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBL01

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Title : SW846 8260

Signal : TIC: VX021565.D\data.ms

| peak # | R.T. min | first scan | max scan | last scan | PK TY | peak height | corr. area | corr. % max. | % of total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.587 | 79 | 85 | 91 | rVB3 | 3310 | 6698 | 1.58% | 0.284% |
| 2 | 5.458 | 732 | 743 | 758 | rBV2 | 52097 | 147526 | 34.86% | 6.247% |
| 3 | 5.623 | 758 | 771 | 785 | rVV | 74748 | 210495 | 49.74% | 8.913% |
| 4 | 6.029 | 828 | 840 | 853 | rBV | 56386 | 146111 | 34.53% | 6.187% |
| 5 | 6.829 | 963 | 976 | 989 | rBV | 126683 | 303289 | 71.67% | 12.842% |
| 6 | 8.694 | 1284 | 1293 | 1308 | rBV | 272247 | 423185 | 100.00% | 17.919% |
| 7 | 10.094 | 1525 | 1531 | 1547 | rVB | 304301 | 410549 | 97.01% | 17.384% |
| 8 | 11.118 | 1699 | 1705 | 1715 | rBV | 252324 | 325300 | 76.87% | 13.774% |
| 9 | 12.059 | 1860 | 1865 | 1874 | rVB | 320137 | 388506 | 91.81% | 16.451% |

Sum of corrected areas: 2361659

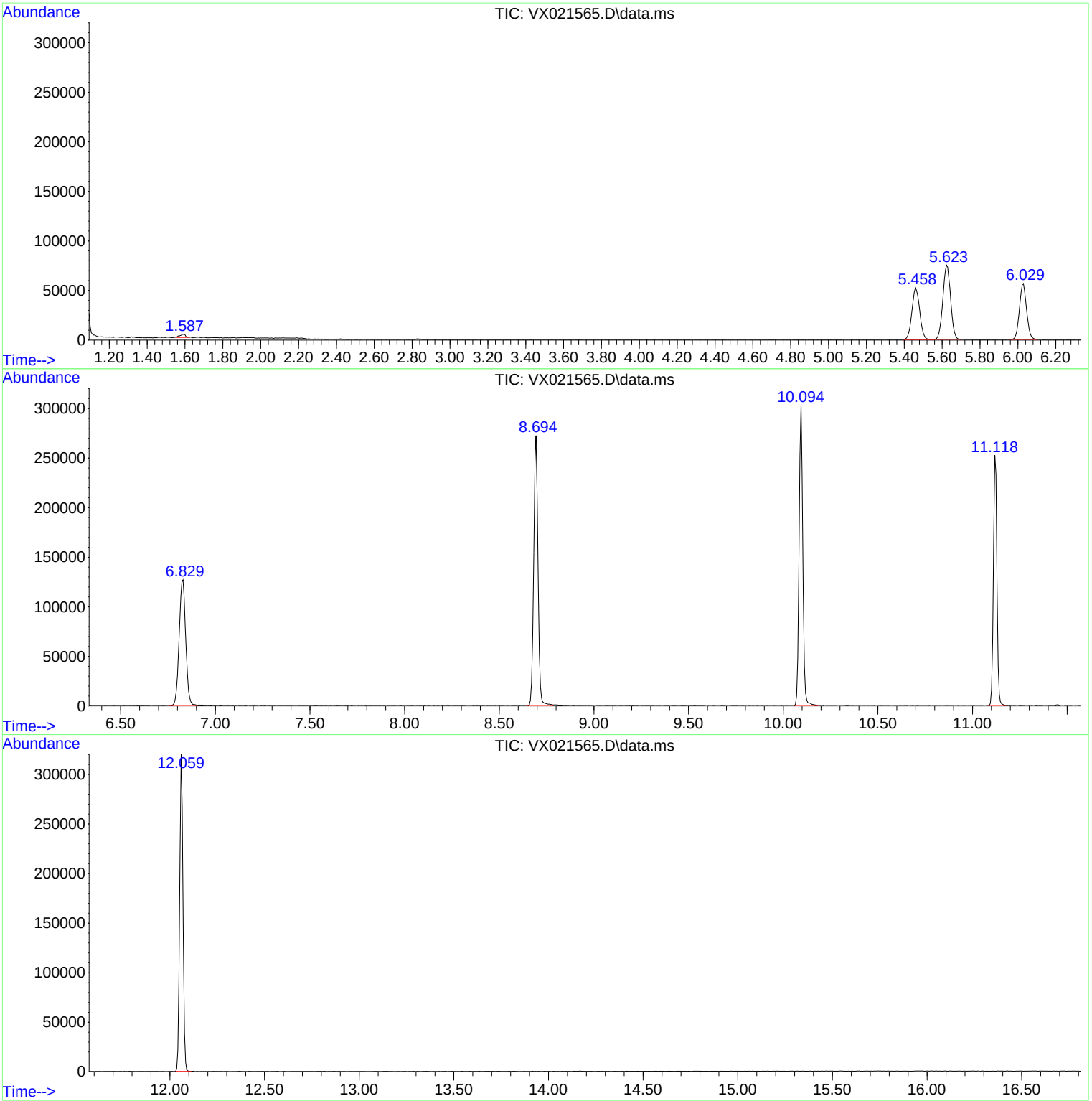
Sample Results: **VX021565.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021565.D
Acq On : 29 Mar 2021 10:36
Operator : JC/MD
Sample : VX0329WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Sample Results: **VX021565.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021565.D
Acq On : 29 Mar 2021 10:36
Operator : JC/MD
Sample : VX0329WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
**********

Sample Results: **VX021565.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021565.D
Acq On : 29 Mar 2021 10:36
Operator : JC/MD
Sample : VX0329WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260

TIC Library : C:\DATABASE\NIST11.L
TIC Integration Parameters: LSCINT.P

| | | | | | Internal Standard | | | |
|---|---|---|---|---|---|---|---|---|
| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |

Raw Data: **VX021566.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | |
| Client Sample ID: | VX0329WBS01 | SDG No.: | M1785 |
| Lab Sample ID: | VX0329WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021566.D | 1 | | 03/29/21 10:59 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 18.4 | | 0.23 | 1.00 | ug/L |
| 74-87-3 | Chloromethane | 18.6 | | 0.20 | 1.00 | ug/L |
| 75-01-4 | Vinyl Chloride | 19.1 | | 0.19 | 1.00 | ug/L |
| 74-83-9 | Bromomethane | 23.5 | | 0.87 | 5.00 | ug/L |
| 75-00-3 | Chloroethane | 18.7 | | 0.35 | 1.00 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 19.4 | | 0.25 | 1.00 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 19.3 | | 0.21 | 1.00 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 18.6 | | 0.26 | 1.00 | ug/L |
| 67-64-1 | Acetone | 94.1 | | 1.60 | 5.00 | ug/L |
| 75-15-0 | Carbon Disulfide | 17.0 | | 0.25 | 1.00 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 19.4 | | 0.22 | 1.00 | ug/L |
| 79-20-9 | Methyl Acetate | 20.8 | | 0.47 | 1.00 | ug/L |
| 75-09-2 | Methylene Chloride | 18.6 | | 0.18 | 1.00 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 18.5 | | 0.19 | 1.00 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 19.7 | | 0.21 | 1.00 | ug/L |
| 110-82-7 | Cyclohexane | 18.5 | | 1.30 | 5.00 | ug/L |
| 78-93-3 | 2-Butanone | 94.8 | | 0.90 | 5.00 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 20.1 | | 0.27 | 1.00 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 19.1 | | 0.22 | 1.00 | ug/L |
| 74-97-5 | Bromochloromethane | 20.7 | | 0.26 | 1.00 | ug/L |
| 67-66-3 | Chloroform | 19.7 | | 0.27 | 1.00 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 19.6 | | 0.20 | 1.00 | ug/L |
| 108-87-2 | Methylcyclohexane | 18.5 | | 0.14 | 1.00 | ug/L |
| 71-43-2 | Benzene | 19.7 | | 0.18 | 1.00 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 20.2 | | 0.25 | 1.00 | ug/L |
| 79-01-6 | Trichloroethene | 19.3 | | 0.17 | 1.00 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 19.9 | | 0.17 | 1.00 | ug/L |
| 75-27-4 | Bromodichloromethane | 20.2 | | 0.20 | 1.00 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 99.7 | | 0.87 | 5.00 | ug/L |
| 108-88-3 | Toluene | 19.9 | | 0.22 | 1.00 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 19.4 | | 0.18 | 1.00 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 19.9 | | 0.17 | 1.00 | ug/L |

Raw Data: **VX021566.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | |
| Client Sample ID: | VX0329WBS01 | SDG No.: | M1785 |
| Lab Sample ID: | VX0329WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021566.D | 1 | | 03/29/21 10:59 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 20.1 | | 0.24 | 1.00 | ug/L |
| 591-78-6 | 2-Hexanone | 98.8 | | 0.92 | 5.00 | ug/L |
| 124-48-1 | Dibromochloromethane | 20.3 | | 0.18 | 1.00 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 19.8 | | 0.16 | 1.00 | ug/L |
| 127-18-4 | Tetrachloroethene | 20.3 | | 0.17 | 1.00 | ug/L |
| 108-90-7 | Chlorobenzene | 19.2 | | 0.17 | 1.00 | ug/L |
| 100-41-4 | Ethyl Benzene | 19.2 | | 0.18 | 1.00 | ug/L |
| 1330-20-7 | Total Xylenes | 59.0 | | 0.51 | 3.00 | ug/L |
| 100-42-5 | Styrene | 19.2 | | 0.16 | 1.00 | ug/L |
| 75-25-2 | Bromoform | 20.2 | | 0.19 | 1.00 | ug/L |
| 98-82-8 | Isopropylbenzene | 20.2 | | 0.23 | 1.00 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20.1 | | 0.29 | 1.00 | ug/L |
| 103-65-1 | n-propylbenzene | 20.1 | | 0.24 | 1.00 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 20.4 | | 0.25 | 1.00 | ug/L |
| 98-06-6 | tert-Butylbenzene | 19.8 | | 0.26 | 1.00 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 20.2 | | 0.20 | 1.00 | ug/L |
| 135-98-8 | sec-Butylbenzene | 20.0 | | 0.23 | 1.00 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 19.8 | | 0.19 | 1.00 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 19.2 | | 0.20 | 1.00 | ug/L |
| 104-51-8 | n-Butylbenzene | 18.6 | | 0.19 | 1.00 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 19.4 | | 0.19 | 1.00 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 19.5 | | 0.47 | 1.00 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 19.0 | | 0.30 | 1.00 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 19.1 | | 0.35 | 1.00 | ug/L |
| 123-91-1 | 1,4-Dioxane | 400 | | 7.00 | 100 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 49.8 | | 78 - 117 | 100% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.6 | | 75 - 124 | 101% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 50.9 | | 92 - 112 | 102% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 49.9 | | 83 - 123 | 100% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 89700 | 5.623 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 146000 | 6.829 | | | |

Raw Data: **VX021566.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | |
| Client Sample ID: | VX0329WBS01 | SDG No.: | M1785 |
| Lab Sample ID: | VX0329WBS01 | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021566.D | 1 | | 03/29/21 10:59 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 138000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 65600 | 12.059 | | | |

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: **VX021566.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021566.D
Acq On : 29 Mar 2021 10:59
Operator : JC/MD
Sample : VX0329WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

Quant Time: Mar 30 03:23:55 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.623 | 168 | 89704 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 146257 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 138179 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 65643 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 74284 | 49.77 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 99.54% | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 52530 | 50.56 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.12% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 188512 | 50.92 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 101.84% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 71760 | 49.86 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 99.72% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.187 | 85 | 18128 | 18.39 | ug/l | | 98 |
| 3) Chloromethane | 1.311 | 50 | 21023 | 18.57 | ug/l | | 98 |
| 4) Vinyl Chloride | 1.393 | 62 | 19239 | 19.08 | ug/l | | 99 |
| 5) Bromomethane | 1.623 | 94 | 9551 | 23.53 | ug/l | | 99 |
| 6) Chloroethane | 1.705 | 64 | 11982 | 18.73 | ug/l | | 97 |
| 7) Trichlorofluoromethane | 1.911 | 101 | 31846 | 19.42 | ug/l | | 98 |
| 8) Diethyl Ether | 2.170 | 74 | 10829 | 19.03 | ug/l | | 72 |
| 9) 1,1,2-Trichlorotrifluo... | 2.364 | 101 | 17816 | 19.30 | ug/l | | 97 |
| 10) Methyl Iodide | 2.487 | 142 | 14275 | 23.81 | ug/l | # | 89 |
| 11) Tert butyl alcohol | 3.017 | 59 | 23633 | 95.78 | ug/l | | 96 |
| 12) 1,1-Dichloroethene | 2.352 | 96 | 16830 | 18.62 | ug/l | | 88 |
| 13) Acrolein | 2.270 | 56 | 8504 | 71.45 | ug/l | | 99 |
| 14) Allyl chloride | 2.705 | 41 | 34473 | 18.79 | ug/l | # | 88 |
| 15) Acrylonitrile | 3.117 | 53 | 56684 | 96.66 | ug/l | | 97 |
| 16) Acetone | 2.423 | 43 | 53114 | 94.12 | ug/l | | 90 |
| 17) Carbon Disulfide | 2.546 | 76 | 43030 | 16.95 | ug/l | | 99 |
| 18) Methyl Acetate | 2.746 | 43 | 33973 | 20.84 | ug/l | | 90 |
| 19) Methyl tert-butyl Ether | 3.164 | 73 | 65333 | 19.35 | ug/l | | 99 |
| 20) Methylene Chloride | 2.834 | 84 | 20496 | 18.61 | ug/l | | 88 |
| 21) trans-1,2-Dichloroethene | 3.140 | 96 | 18412 | 18.54 | ug/l | | 92 |
| 22) Diisopropyl ether | 3.823 | 45 | 69356 | 19.45 | ug/l | | 93 |
| 23) Vinyl Acetate | 3.782 | 43 | 286871 | 95.13 | ug/l | # | 92 |
| 24) 1,1-Dichloroethane | 3.670 | 63 | 37779 | 19.66 | ug/l | | 98 |
| 25) 2-Butanone | 4.635 | 43 | 81056 | 94.75 | ug/l | | 90 |
| 26) 2,2-Dichloropropane | 4.552 | 77 | 32141 | 19.30 | ug/l | | 96 |
| 27) cis-1,2-Dichloroethene | 4.564 | 96 | 22049 | 19.12 | ug/l | | 90 |
| 28) Bromochloromethane | 4.982 | 49 | 19930 | 20.71 | ug/l | | 82 |
| 29) Tetrahydrofuran | 5.088 | 42 | 52042 | 93.83 | ug/l | | 87 |
| 30) Chloroform | 5.176 | 83 | 39901 | 19.67 | ug/l | | 99 |
| 31) Cyclohexane | 5.547 | 56 | 30431 | 18.54 | ug/l | | 93 |
| 32) 1,1,1-Trichloroethane | 5.464 | 97 | 35267 | 19.62 | ug/l | | 96 |
| 36) 1,1-Dichloropropene | 5.764 | 75 | 27360 | 19.09 | ug/l | | 97 |
| 37) Ethyl Acetate | 4.794 | 43 | 30400 | 18.35 | ug/l | # | 93 |
| 38) Carbon Tetrachloride | 5.752 | 117 | 30918 | 20.08 | ug/l | | 99 |
| 39) Methylcyclohexane | 7.441 | 83 | 29397 | 18.50 | ug/l | | 95 |
| 40) Benzene | 6.111 | 78 | 80058 | 19.67 | ug/l | | 99 |

Sample Results: **VX021566.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021566.D
Acq On : 29 Mar 2021 10:59
Operator : JC/MD
Sample : VX0329WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

Quant Time: Mar 30 03:23:55 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.999 | 41 | 17703 | 18.42 | ug/l | | 88 |
| 42) 1,2-Dichloroethane | 6.158 | 62 | 35590 | 20.17 | ug/l | | 94 |
| 43) Isopropyl Acetate | 6.411 | 43 | 51001 | 18.96 | ug/l | # | 91 |
| 44) Trichloroethene | 7.188 | 130 | 20670 | 19.25 | ug/l | | 83 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 21909 | 19.87 | ug/l | | 95 |
| 46) Dibromomethane | 7.635 | 93 | 16100 | 20.04 | ug/l | | 92 |
| 47) Bromodichloromethane | 7.870 | 83 | 33055 | 20.22 | ug/l | # | 99 |
| 48) Methyl methacrylate | 7.741 | 41 | 27512 | 19.17 | ug/l | # | 81 |
| 49) 1,4-Dioxane | 7.712 | 88 | 10253 | 399.02 | ug/l | # | 87 |
| 51) 4-Methyl-2-Pentanone | 8.618 | 43 | 164938 | 99.67 | ug/l | | 88 |
| 52) Toluene | 8.765 | 92 | 50109 | 19.94 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 9.024 | 75 | 32092 | 19.44 | ug/l | | 96 |
| 54) cis-1,3-Dichloropropene | 8.412 | 75 | 34896 | 19.86 | ug/l | # | 85 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 21357 | 20.13 | ug/l | | 93 |
| 56) Ethyl methacrylate | 9.159 | 69 | 30897 | 18.61 | ug/l | # | 76 |
| 57) 1,3-Dichloropropane | 9.353 | 76 | 36148 | 19.91 | ug/l | | 98 |
| 58) 2-Chloroethyl Vinyl ether | 8.288 | 63 | 87464 | 97.55 | ug/l | | 94 |
| 59) 2-Hexanone | 9.471 | 43 | 122813 | 98.83 | ug/l | | 86 |
| 60) Dibromochloromethane | 9.565 | 129 | 24174 | 20.34 | ug/l | | 97 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 22616 | 19.84 | ug/l | | 100 |
| 64) Tetrachloroethene | 9.318 | 164 | 18750 | 20.26 | ug/l | # | 87 |
| 65) Chlorobenzene | 10.118 | 112 | 53184 | 19.16 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 10.200 | 131 | 21561 | 20.27 | ug/l | | 98 |
| 67) Ethyl Benzene | 10.235 | 91 | 97158 | 19.20 | ug/l | | 100 |
| 68) m/p-Xylenes | 10.341 | 106 | 70986 | 39.38 | ug/l | | 95 |
| 69) o-Xylene | 10.683 | 106 | 34158 | 19.56 | ug/l | | 96 |
| 70) Styrene | 10.694 | 104 | 57638 | 19.20 | ug/l | | 95 |
| 71) Bromoform | 10.836 | 173 | 17442 | 20.18 | ug/l | # | 98 |
| 73) Isopropylbenzene | 11.000 | 105 | 93349 | 20.24 | ug/l | | 99 |
| 74) N-amyl acetate | 10.877 | 43 | 42517 | 19.05 | ug/l | # | 89 |
| 75) 1,1,2,2-Tetrachloroethane | 11.253 | 83 | 32807 | 20.13 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.277 | 75 | 32295m | 21.13 | ug/l | | |
| 77) Bromobenzene | 11.236 | 156 | 23230 | 20.32 | ug/l | | 97 |
| 78) n-propylbenzene | 11.341 | 91 | 109704 | 20.14 | ug/l | | 97 |
| 79) 2-Chlorotoluene | 11.406 | 91 | 64829 | 19.62 | ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 80414 | 20.41 | ug/l | | 99 |
| 81) trans-1,4-Dichloro-2-b... | 11.059 | 75 | 9727 | 19.39 | ug/l | # | 81 |
| 82) 4-Chlorotoluene | 11.494 | 91 | 77619 | 19.79 | ug/l | | 96 |
| 83) tert-Butylbenzene | 11.753 | 119 | 75831 | 19.77 | ug/l | | 92 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 80349 | 20.23 | ug/l | | 97 |
| 85) sec-Butylbenzene | 11.930 | 105 | 88533 | 20.01 | ug/l | | 100 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 79017 | 19.62 | ug/l | | 96 |
| 87) 1,3-Dichlorobenzene | 12.006 | 146 | 40769 | 19.80 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 12.083 | 146 | 40922 | 19.21 | ug/l | | 97 |
| 89) n-Butylbenzene | 12.371 | 91 | 68727 | 18.62 | ug/l | | 97 |
| 90) Hexachloroethane | 12.577 | 117 | 14623 | 20.11 | ug/l | | 91 |
| 91) 1,2-Dichlorobenzene | 12.371 | 146 | 38859 | 19.41 | ug/l | | 95 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 7477 | 19.46 | ug/l | | 81 |
| 93) 1,2,4-Trichlorobenzene | 13.630 | 180 | 24944 | 19.01 | ug/l | | 97 |
| 94) Hexachlorobutadiene | 13.765 | 225 | 11525 | 19.46 | ug/l | | 96 |
| 95) Naphthalene | 13.812 | 128 | 83384 | 19.49 | ug/l | | 100 |
| 96) 1,2,3-Trichlorobenzene | 14.001 | 180 | 25072 | 19.12 | ug/l | | 96 |

Sample Results: **VX021566.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021566.D
Acq On : 29 Mar 2021 10:59
Operator : JC/MD
Sample : VX0329WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

Quant Time: Mar 30 03:23:55 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

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

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

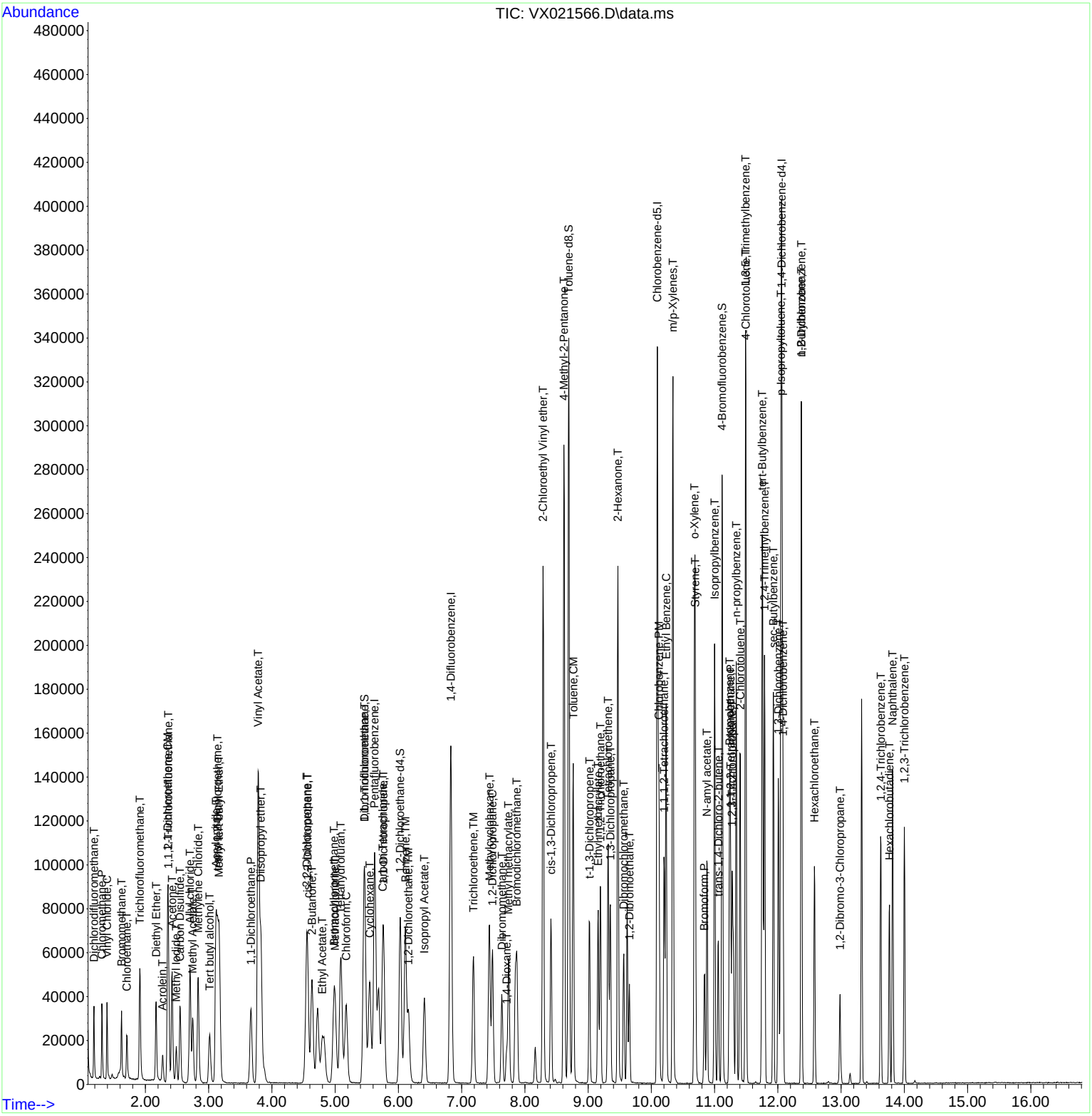
Sample Results: **VX021566.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021566.D
Acq On : 29 Mar 2021 10:59
Operator : JC/MD
Sample : VX0329WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 30 03:23:55 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

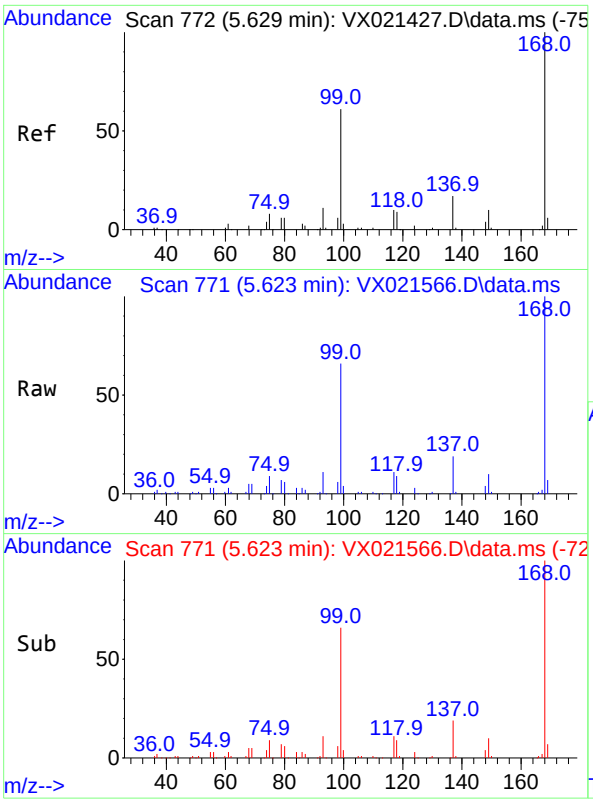
**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

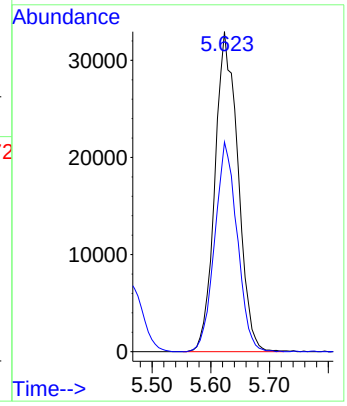
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

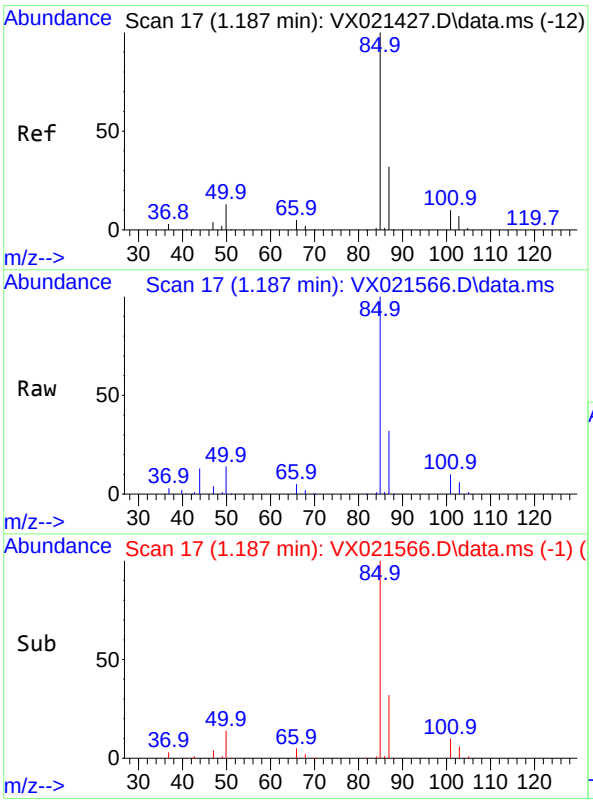



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.623 min Scan# 771
Delta R.T. -0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:168 Resp: 89704

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 65.5 | 45.8 | 68.6 |

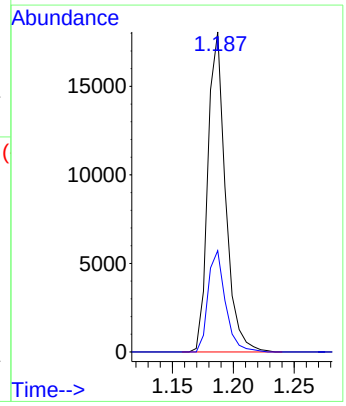



#2
Dichlorodifluoromethane
Concen: 18.39 ug/l
RT: 1.187 min Scan# 17
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

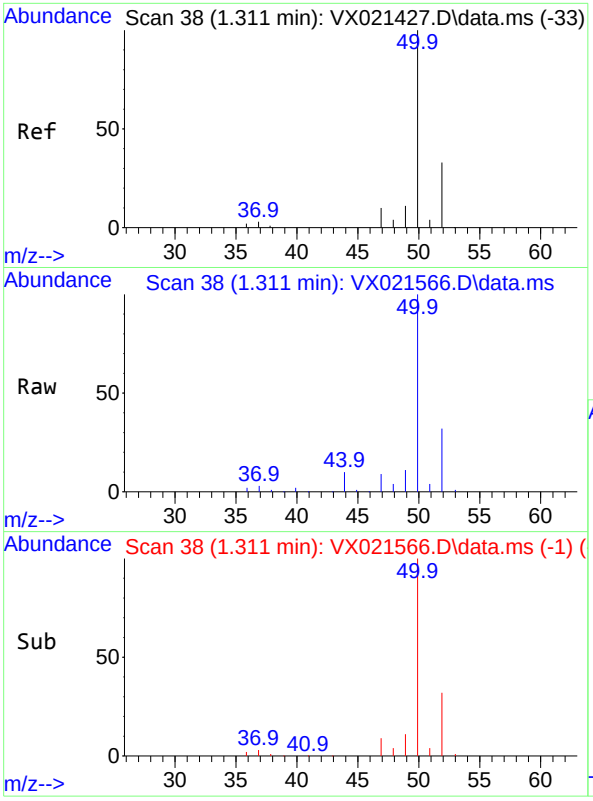
Tgt Ion: 85 Resp: 18128

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 31.6 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

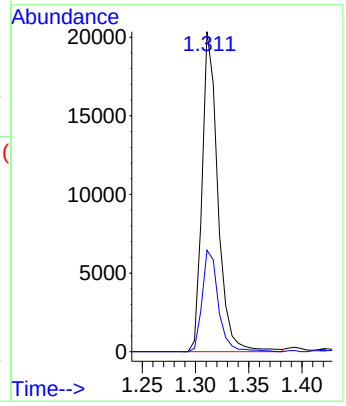
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

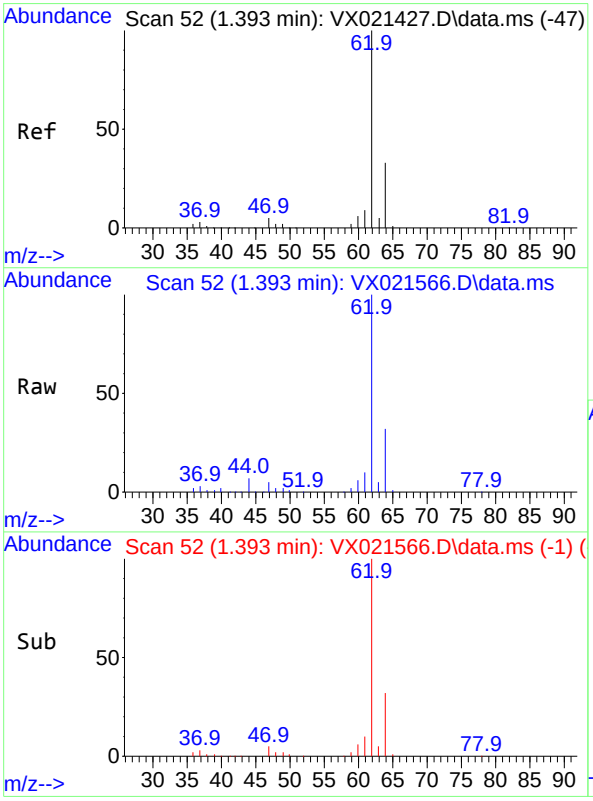



#3
Chloromethane
Concen: 18.57 ug/l
RT: 1.311 min Scan# 38
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 50 Resp: 21023

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 31.7 | 26.4 | 39.6 |

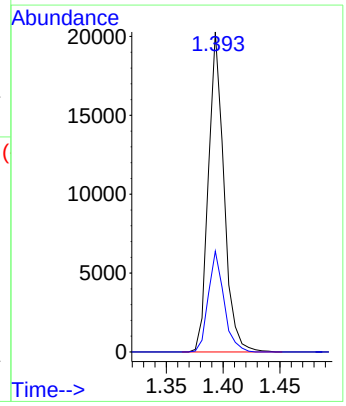



#4
Vinyl Chloride
Concen: 19.08 ug/l
RT: 1.393 min Scan# 52
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

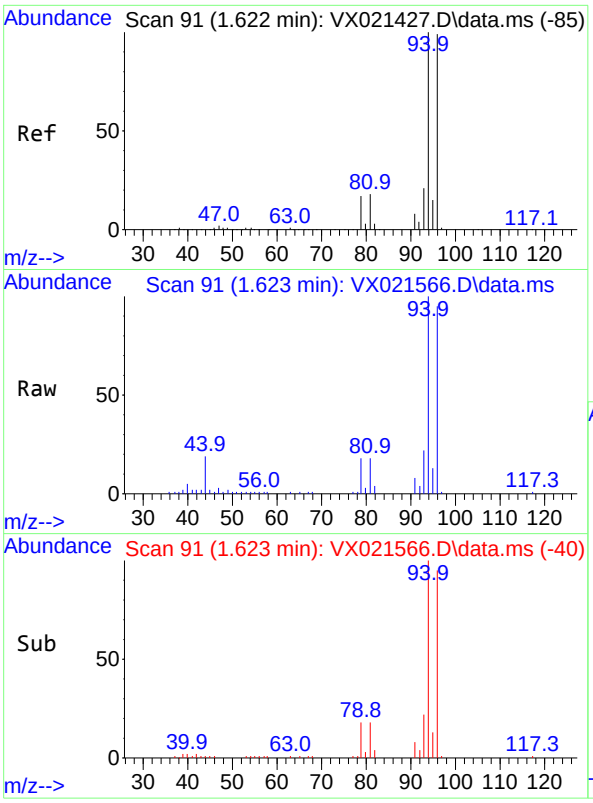
Tgt Ion: 62 Resp: 19239

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.5 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

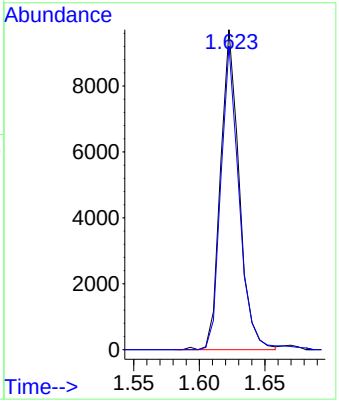
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

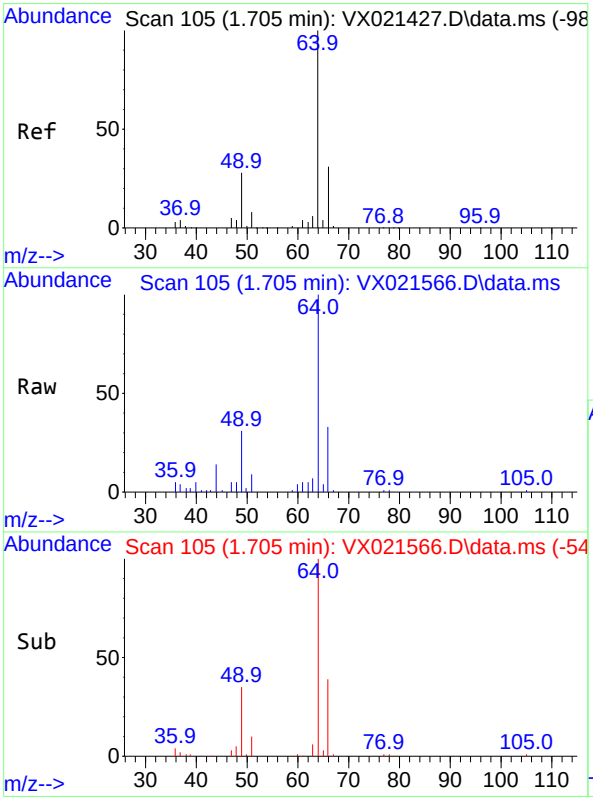



#5
Bromomethane
Concen: 23.53 ug/l
RT: 1.623 min Scan# 91
Delta R.T. 0.001 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 94 Resp: 9551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 94.9 | 76.4 | 114.6 |

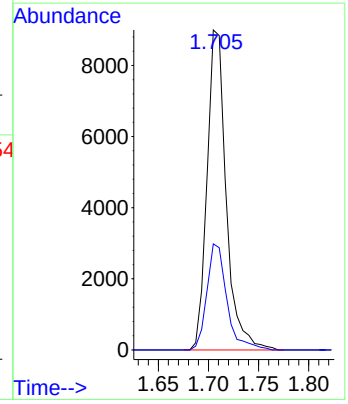



#6
Chloroethane
Concen: 18.73 ug/l
RT: 1.705 min Scan# 105
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

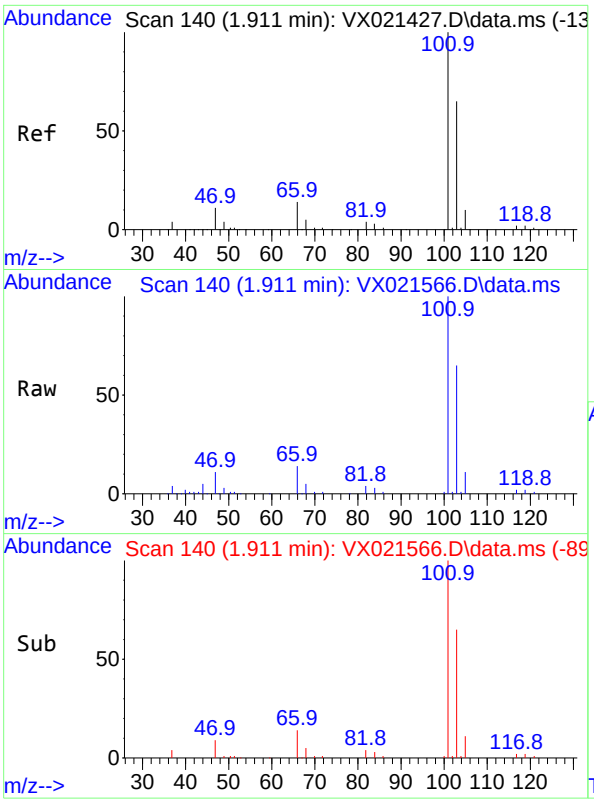
Tgt Ion: 64 Resp: 11982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 33.2 | 25.4 | 38.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

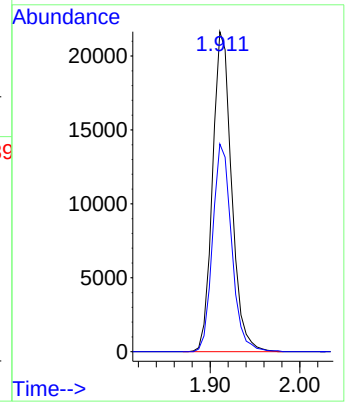
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

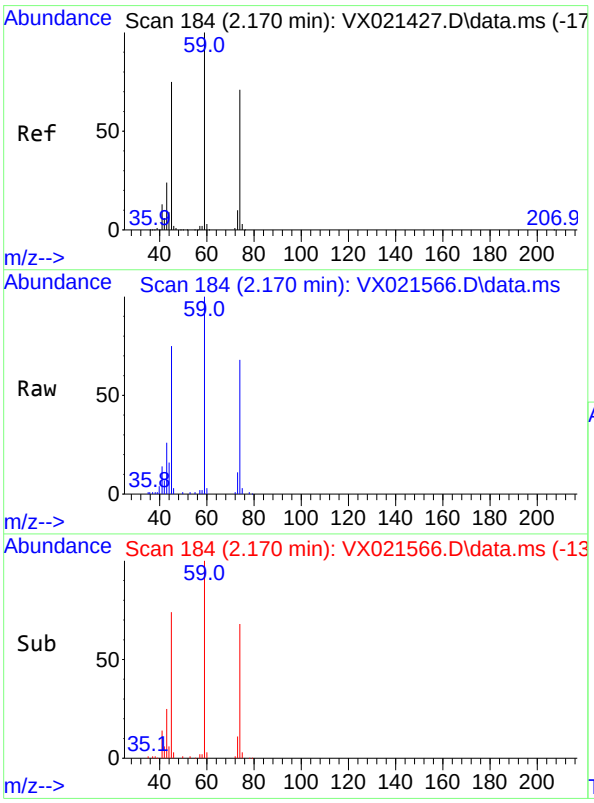



#7
Trichlorofluoromethane
Concen: 19.42 ug/l
RT: 1.911 min Scan# 140
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:101 Resp: 31846

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.9 | 53.2 | 79.8 |

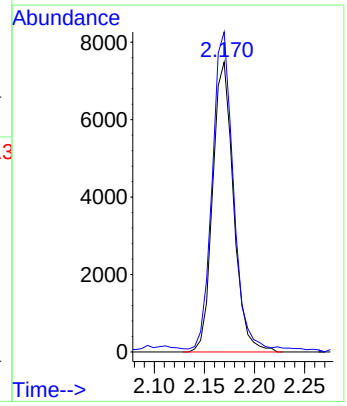



#8
Diethyl Ether
Concen: 19.03 ug/l
RT: 2.170 min Scan# 184
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

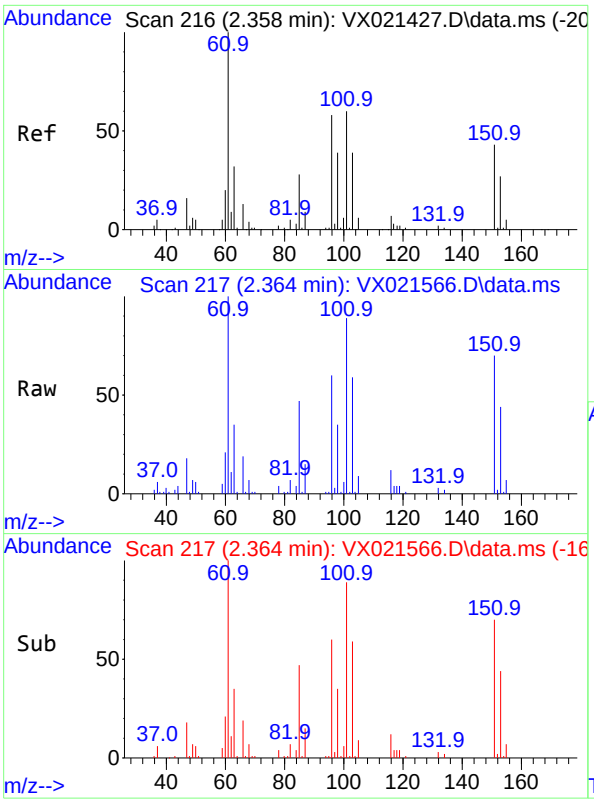
Tgt Ion: 74 Resp: 10829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 114.9 | 44.5 | 133.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

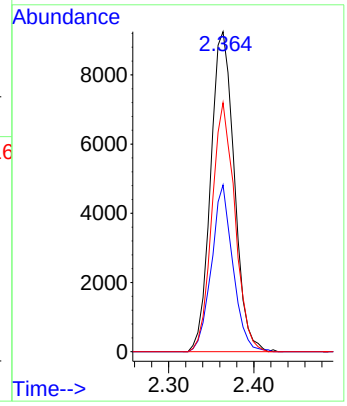
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

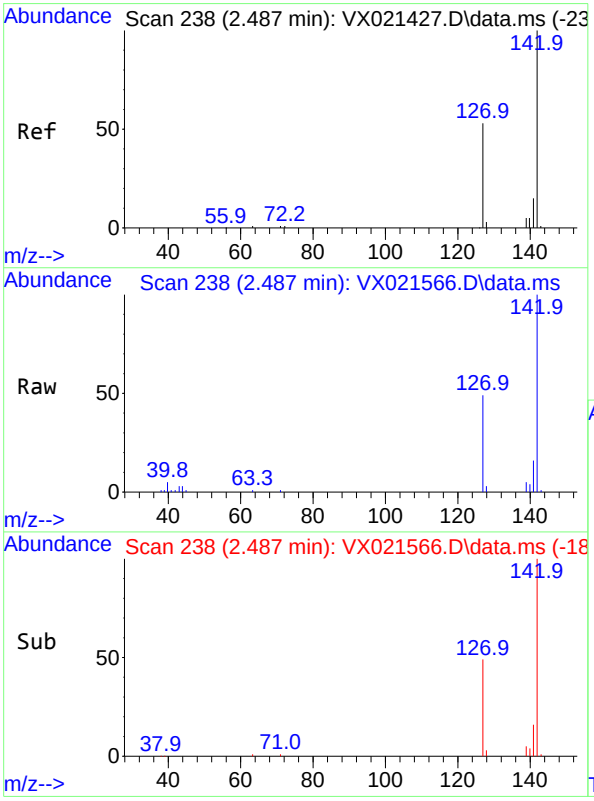



#9
1,1,2-Trichlorotrifluoroethane
Concen: 19.30 ug/l
RT: 2.364 min Scan# 217
Delta R.T. 0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:101 Resp: 17816

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 47.3 | 34.9 | 52.3 |
| 151 | 75.7 | 61.4 | 92.2 |

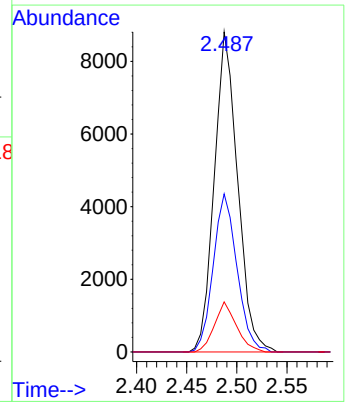



#10
Methyl Iodide
Concen: 23.81 ug/l
RT: 2.487 min Scan# 238
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

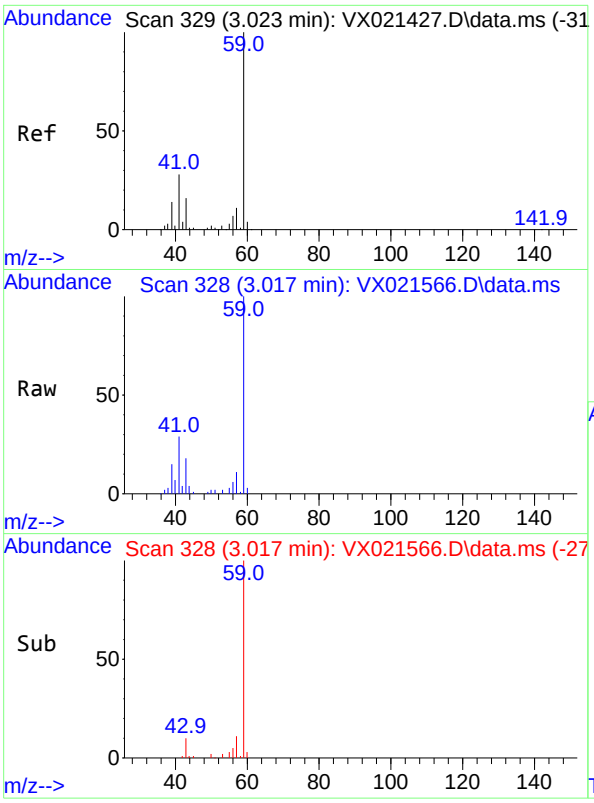
Tgt Ion:142 Resp: 14275

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 50.3 | 33.3 | 49.9# |
| 141 | 14.8 | 11.4 | 17.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

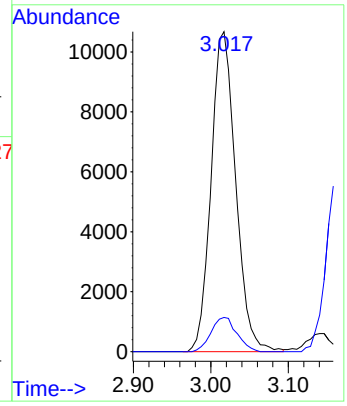
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

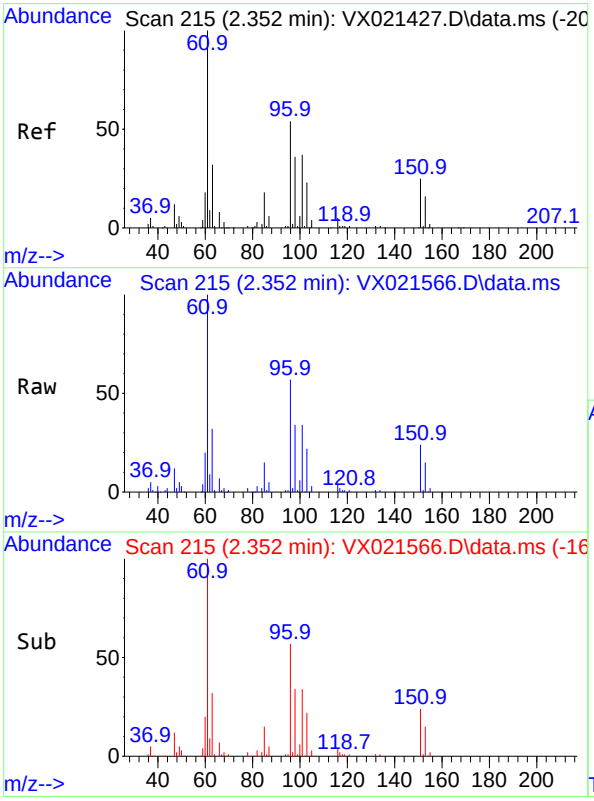



#11
Tert butyl alcohol
Concen: 95.78 ug/l
RT: 3.017 min Scan# 328
Delta R.T. -0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 59 Resp: 23633

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.2 | 7.8 | 11.8 |

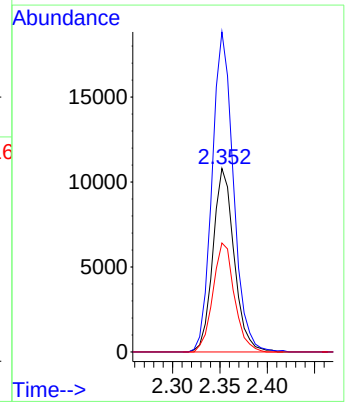



#12
1,1-Dichloroethene
Concen: 18.62 ug/l
RT: 2.352 min Scan# 215
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

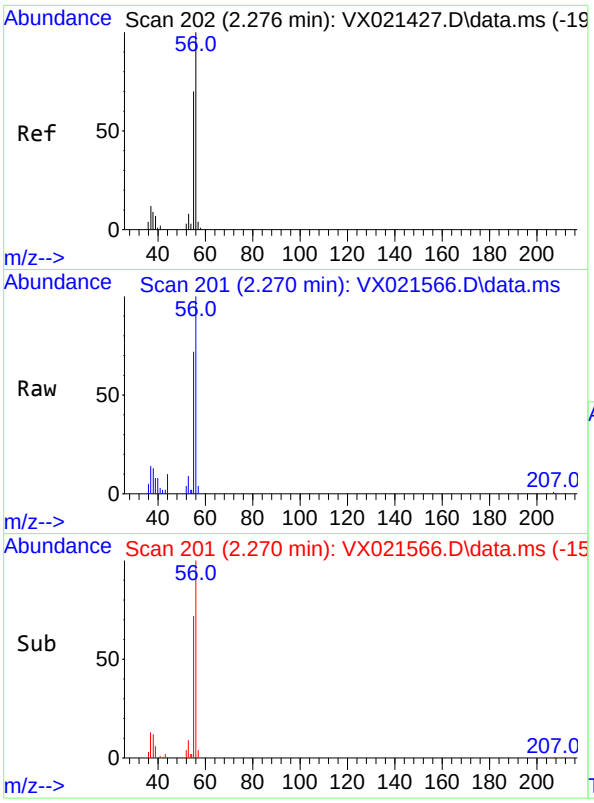
Tgt Ion: 96 Resp: 16830

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 174.4 | 124.6 | 187.0 |
| 98 | 59.4 | 50.6 | 76.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

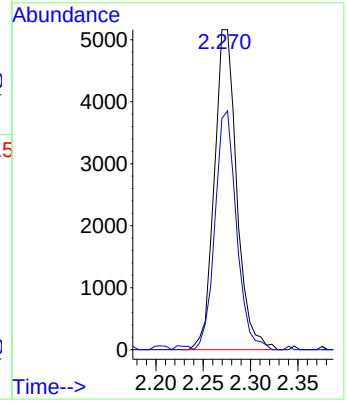
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

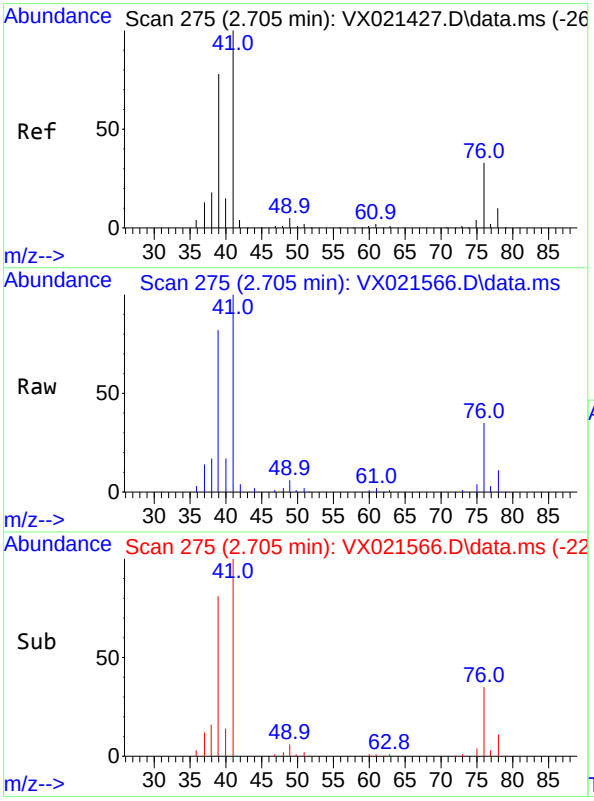



#13
Acrolein
Concen: 71.45 ug/l
RT: 2.270 min Scan# 201
Delta R.T. -0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 56 Resp: 8504

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 71.7 | 56.4 | 84.6 |

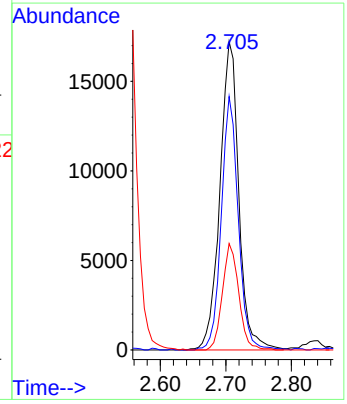



#14
Allyl chloride
Concen: 18.79 ug/l
RT: 2.705 min Scan# 275
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

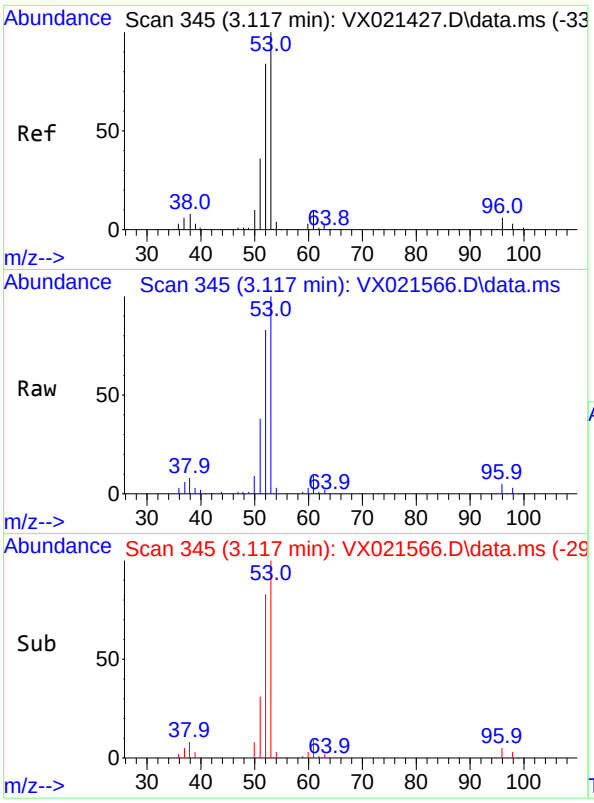
Tgt Ion: 41 Resp: 34473

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 73.6 | 51.6 | 77.4 |
| 76 | 29.7 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

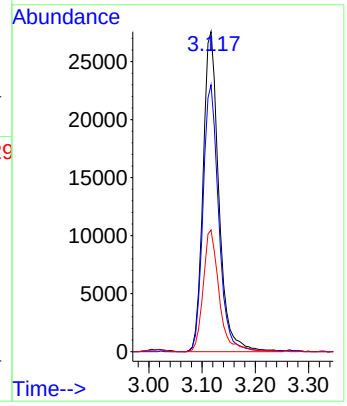
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

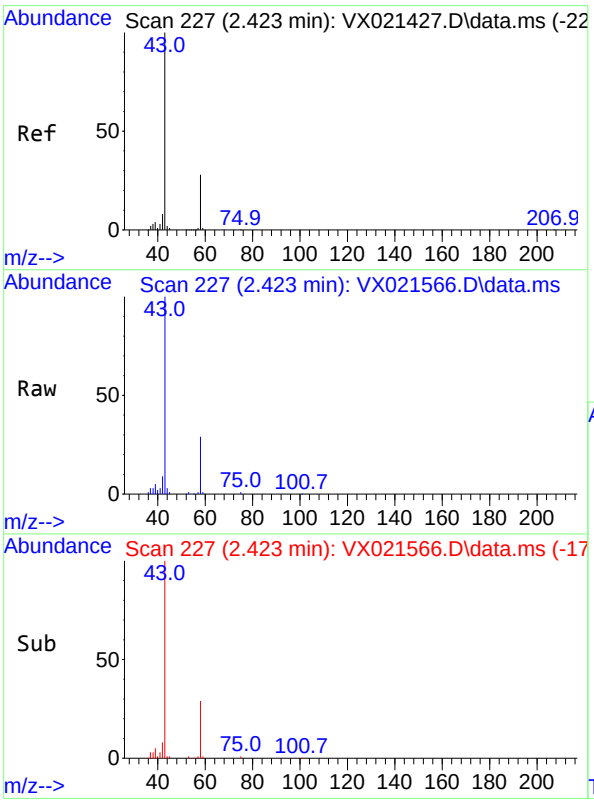



#15
Acrylonitrile
Concen: 96.66 ug/l
RT: 3.117 min Scan# 345
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 53 Resp: 56684

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 82.8 | 65.3 | 97.9 |
| 51 | 38.7 | 28.2 | 42.2 |

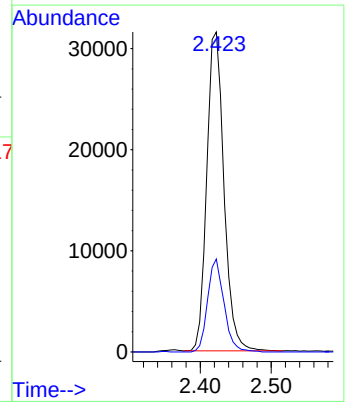



#16
Acetone
Concen: 94.12 ug/l
RT: 2.423 min Scan# 227
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

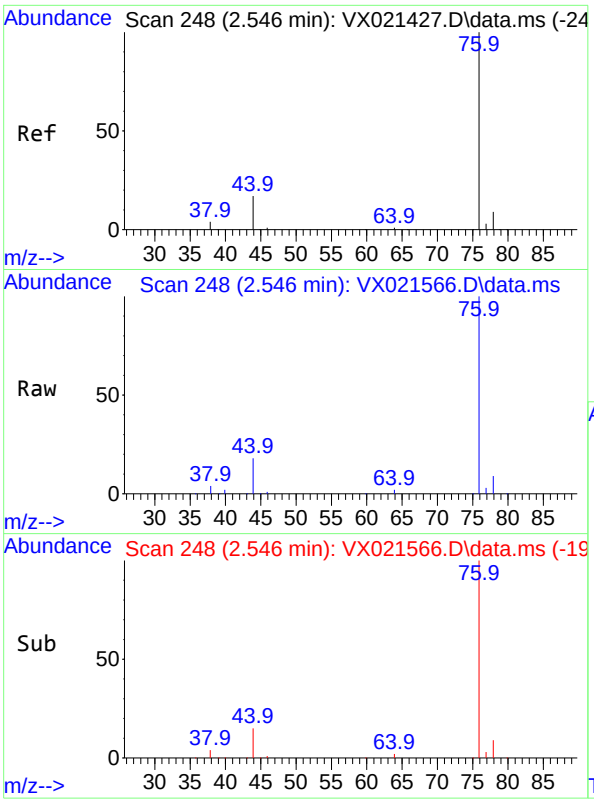
Tgt Ion: 43 Resp: 53114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 29.2 | 27.8 | 41.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

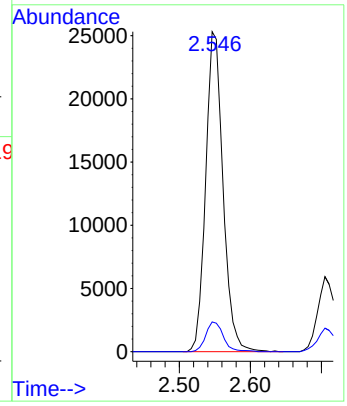
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

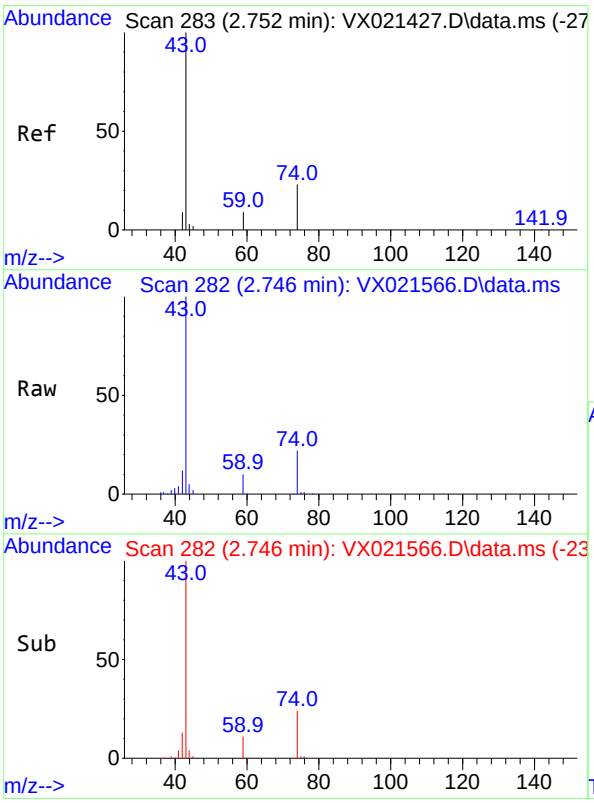



#17
Carbon Disulfide
Concen: 16.95 ug/l
RT: 2.546 min Scan# 248
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 76 Resp: 43030

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.3 | 7.2 | 10.8 |

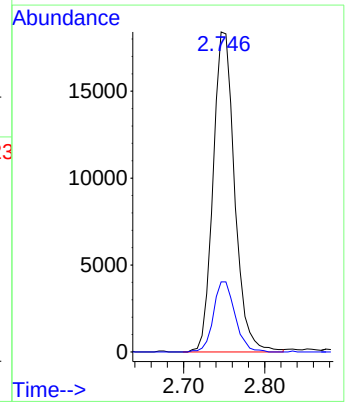



#18
Methyl Acetate
Concen: 20.84 ug/l
RT: 2.746 min Scan# 282
Delta R.T. -0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

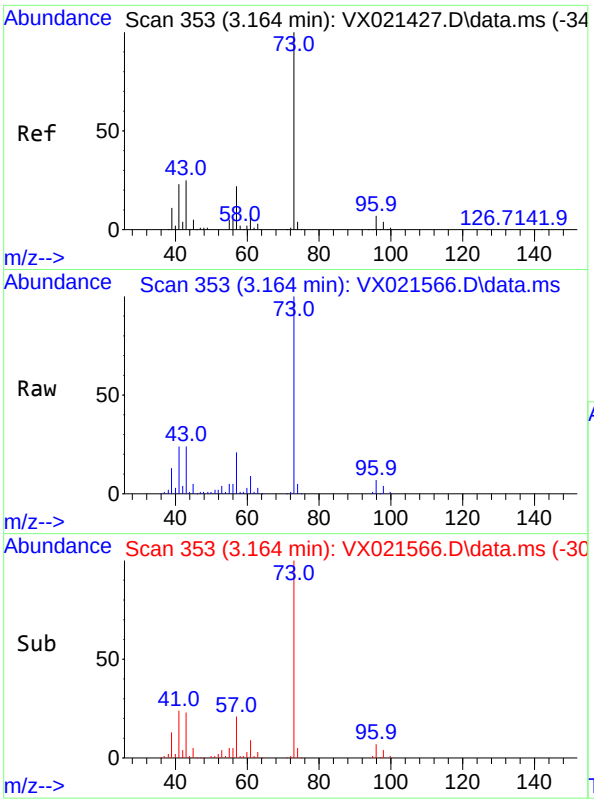
Tgt Ion: 43 Resp: 33973

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 21.9 | 21.9 | 32.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

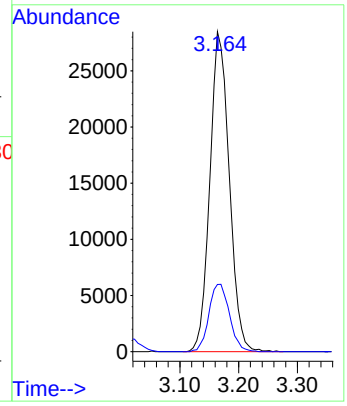
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

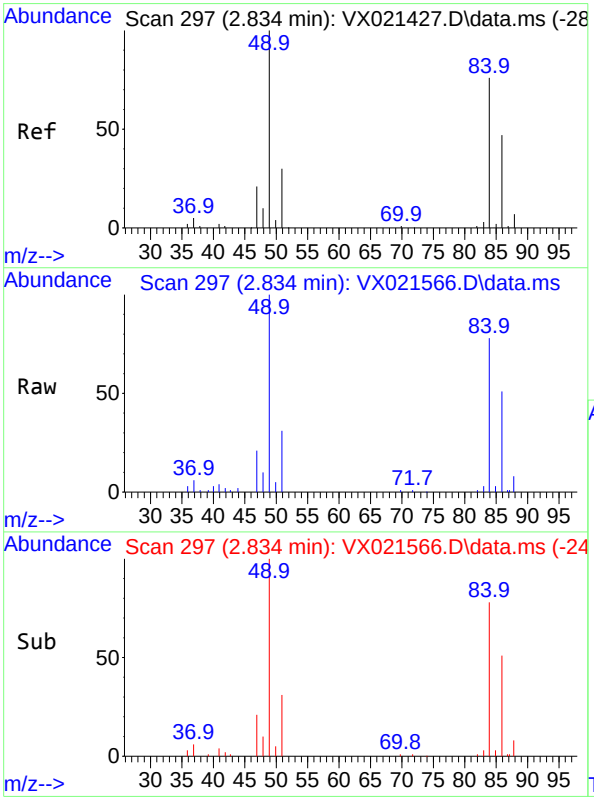



#19
Methyl tert-butyl Ether
Concen: 19.35 ug/l
RT: 3.164 min Scan# 353
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 73 Resp: 65333

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.0 | 17.1 | 25.7 |

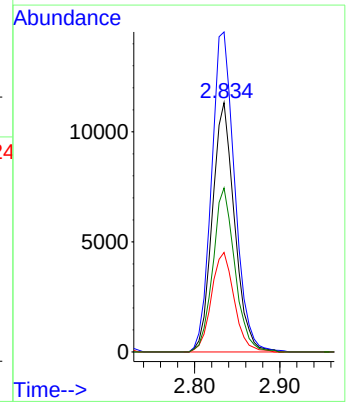



#20
Methylene Chloride
Concen: 18.61 ug/l
RT: 2.834 min Scan# 297
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

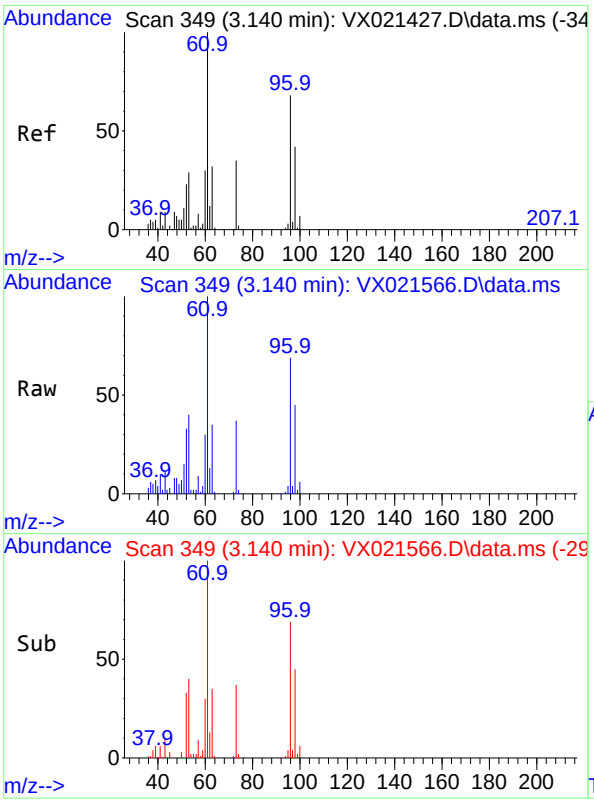
Tgt Ion: 84 Resp: 20496

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 128.3 | 88.6 | 132.8 |
| 51 | 39.9 | 27.0 | 40.6 |
| 86 | 65.8 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

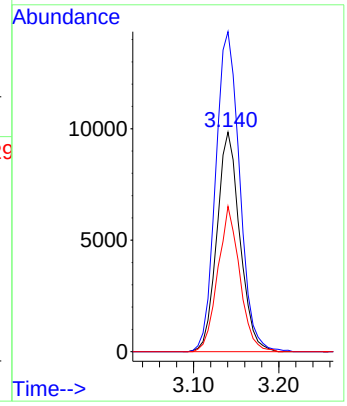
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

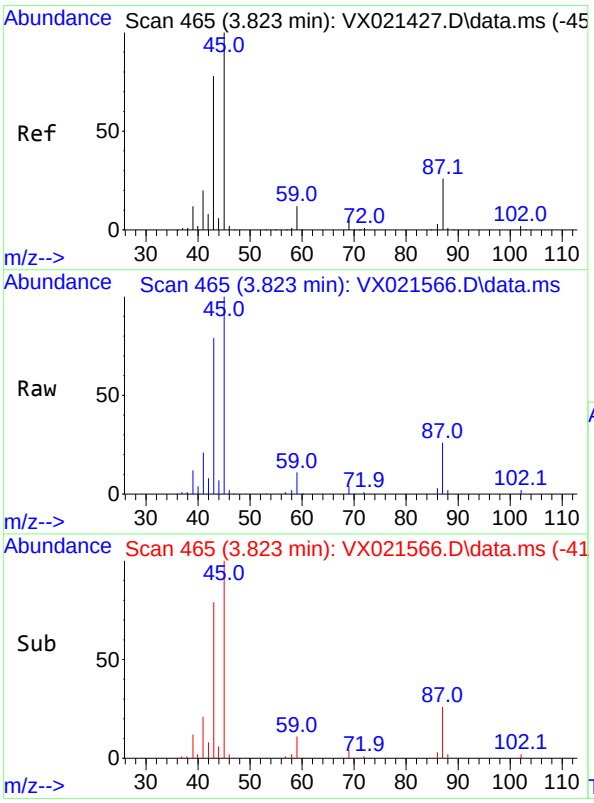



#21
trans-1,2-Dichloroethene
Concen: 18.54 ug/l
RT: 3.140 min Scan# 349
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 96 Resp: 18412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 145.8 | 107.7 | 161.5 |
| 98 | 66.2 | 50.4 | 75.6 |

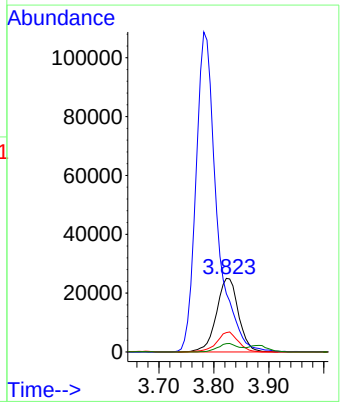



#22
Diisopropyl ether
Concen: 19.45 ug/l
RT: 3.823 min Scan# 465
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

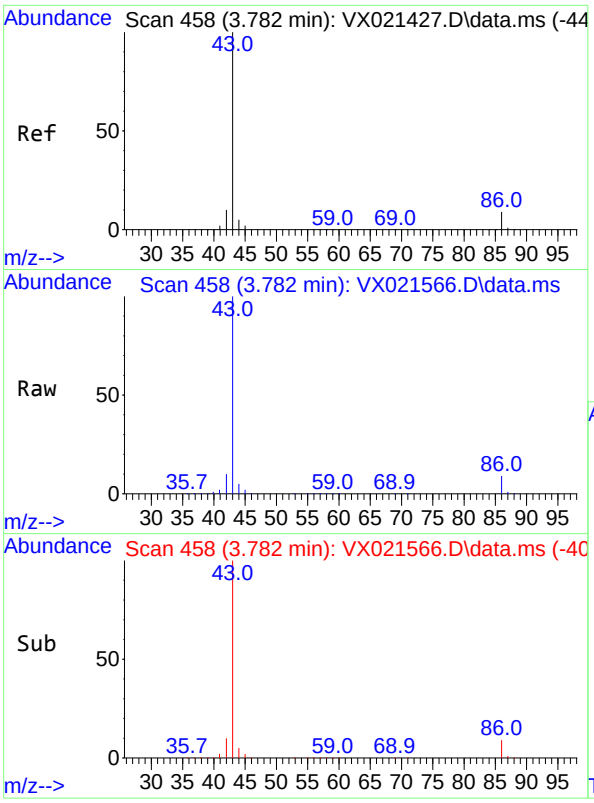
Tgt Ion: 45 Resp: 69356

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 78.2 | 58.0 | 87.0 |
| 87 | 26.2 | 25.4 | 38.0 |
| 59 | 11.3 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

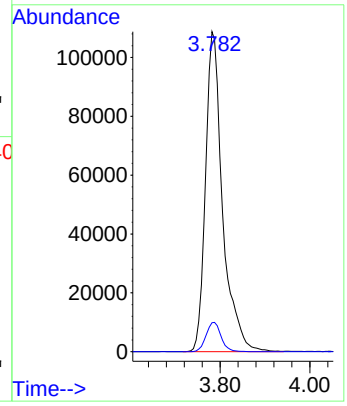
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

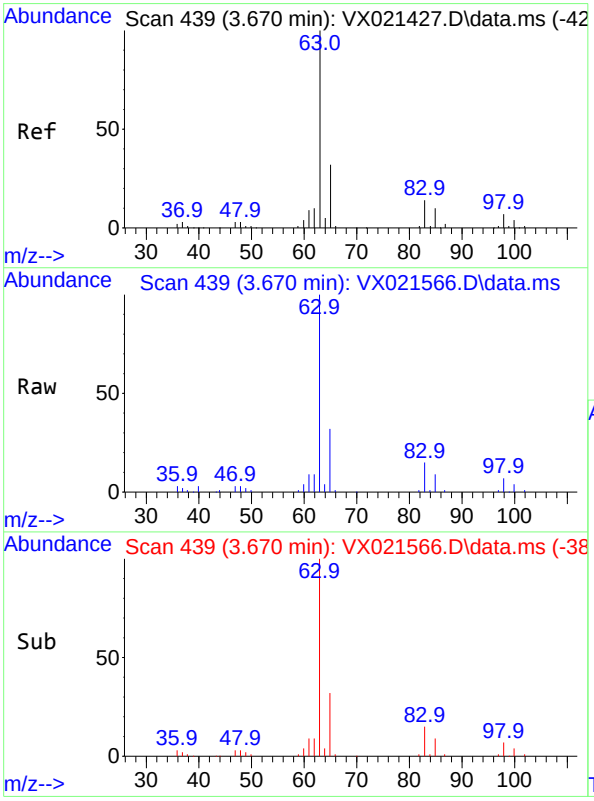



#23
Vinyl Acetate
Concen: 95.13 ug/l
RT: 3.782 min Scan# 458
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 43 Resp: 286871

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.1 | 9.9 | 14.9# |

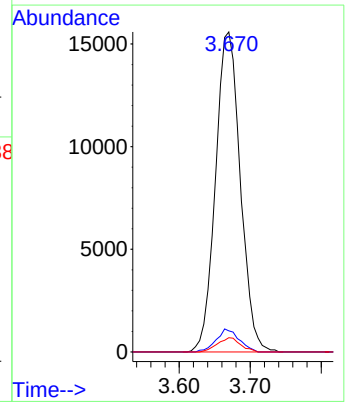



#24
1,1-Dichloroethane
Concen: 19.66 ug/l
RT: 3.670 min Scan# 439
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

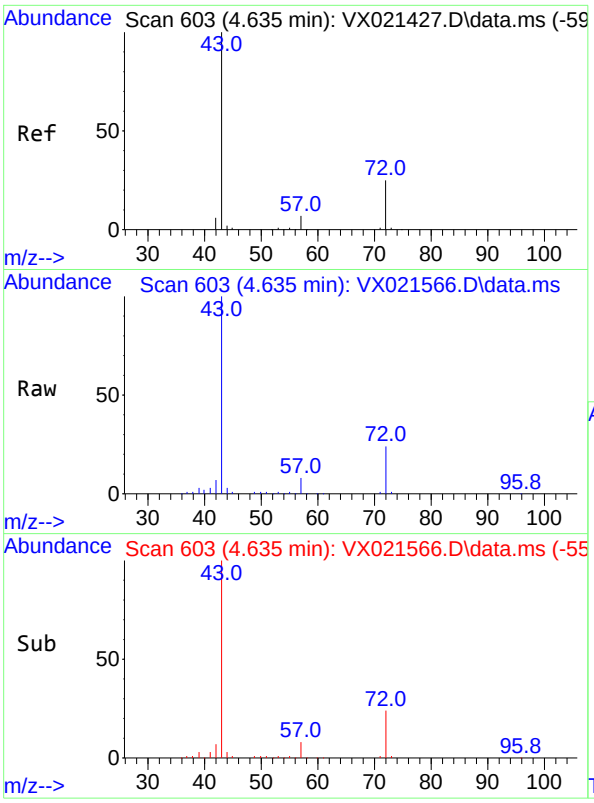
Tgt Ion: 63 Resp: 37779

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.6 | 3.8 | 11.2 |
| 100 | 4.4 | 2.5 | 7.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

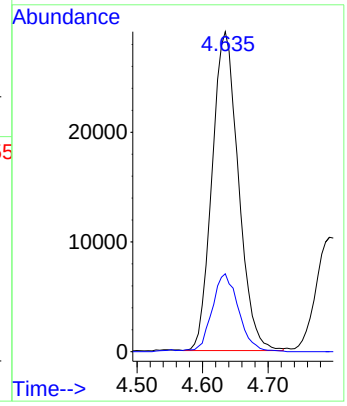
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

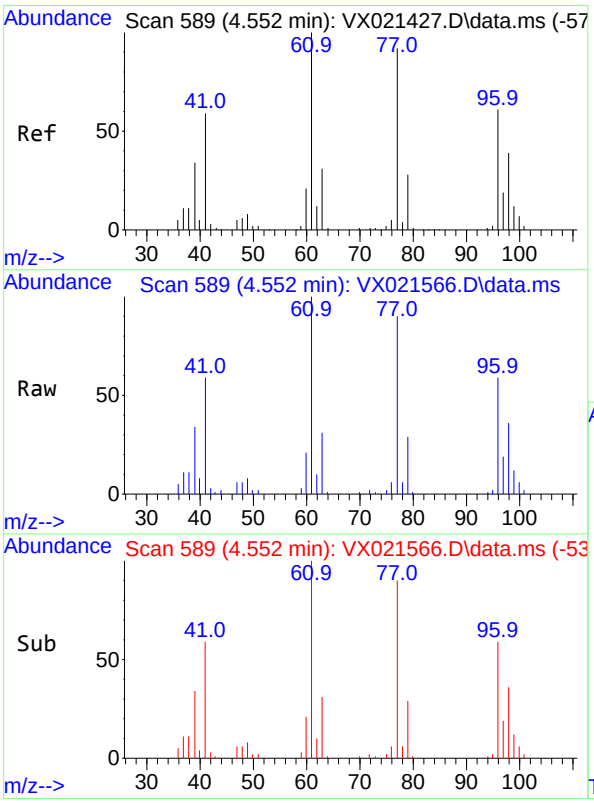



#25
2-Butanone
Concen: 94.75 ug/l
RT: 4.635 min Scan# 603
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 43 Resp: 81056

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.3 | 23.7 | 35.5 |

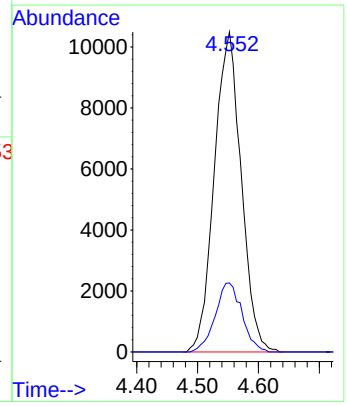



#26
2,2-Dichloropropane
Concen: 19.30 ug/l
RT: 4.552 min Scan# 589
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

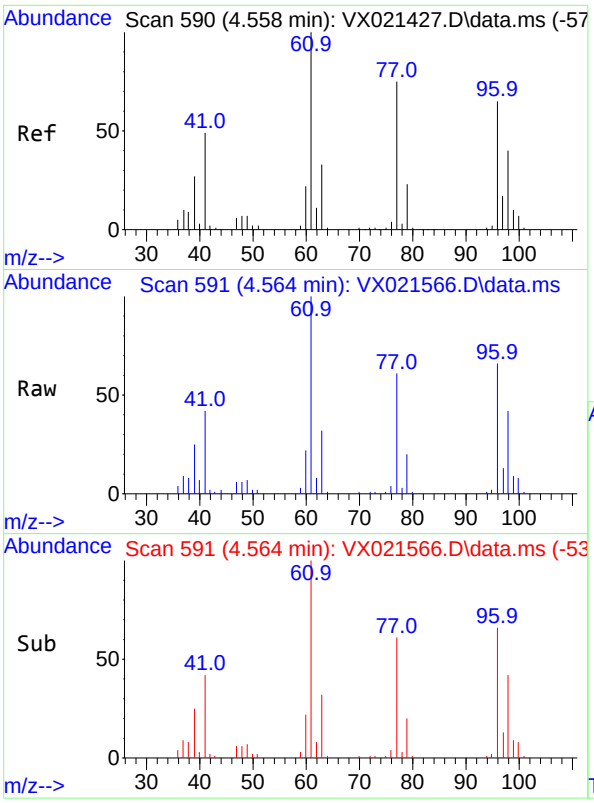
Tgt Ion: 77 Resp: 32141

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.5 | 11.7 | 35.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

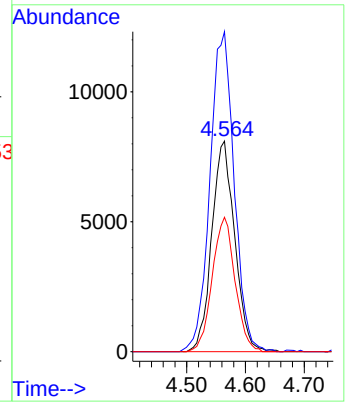
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

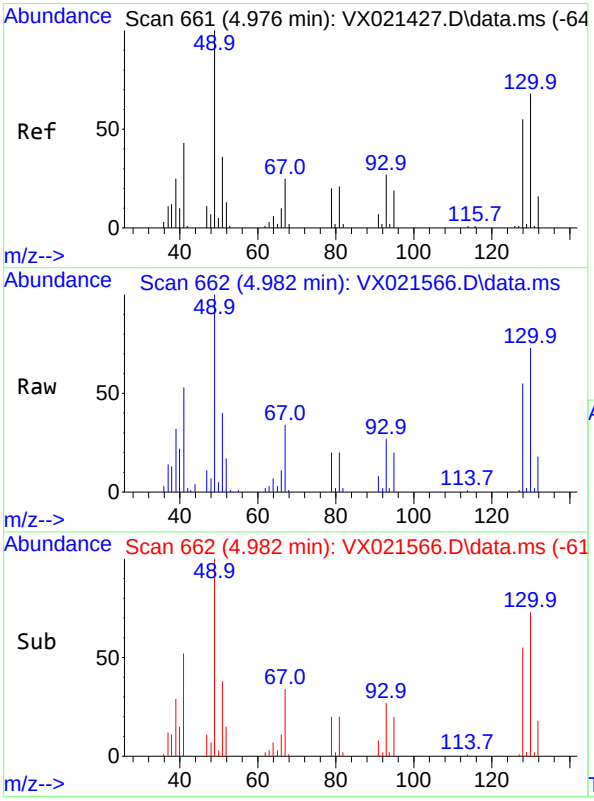



#27
cis-1,2-Dichloroethene
Concen: 19.12 ug/l
RT: 4.564 min Scan# 591
Delta R.T. 0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 96 Resp: 22049

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 159.8 | 0.0 | 285.6 |
| 98 | 63.3 | 0.0 | 129.6 |

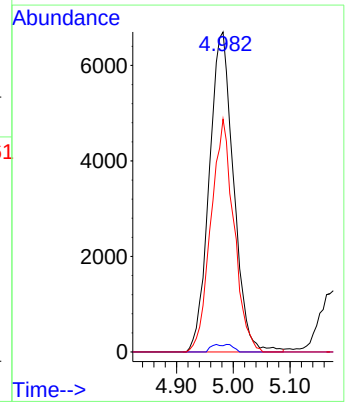



#28
Bromochloromethane
Concen: 20.71 ug/l
RT: 4.982 min Scan# 662
Delta R.T. 0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

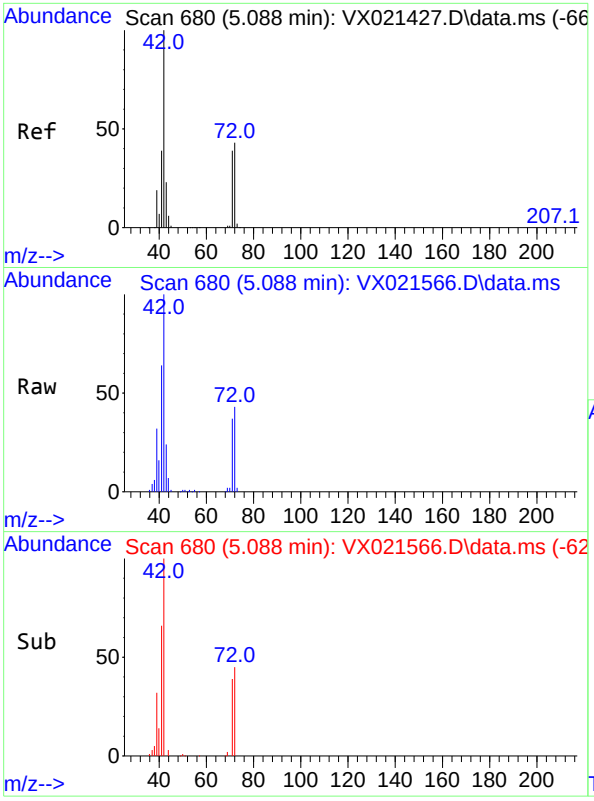
Tgt Ion: 49 Resp: 19930

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.2 | 0.0 | 4.0 |
| 130 | 68.8 | 68.2 | 102.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

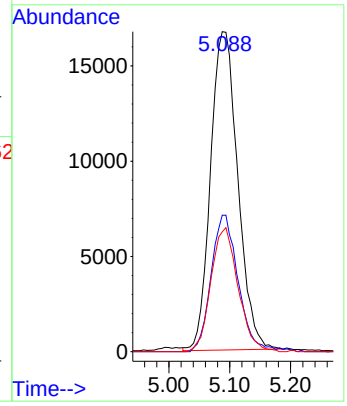
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

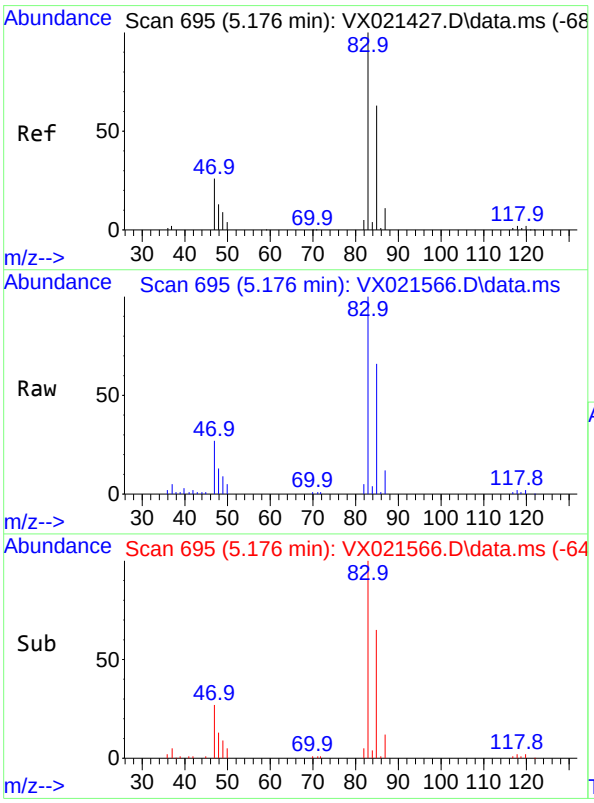



#29
Tetrahydrofuran
Concen: 93.83 ug/l
RT: 5.088 min Scan# 680
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 42 Resp: 52042

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.8 | 41.7 | 62.5 |
| 71 | 38.8 | 38.4 | 57.6 |

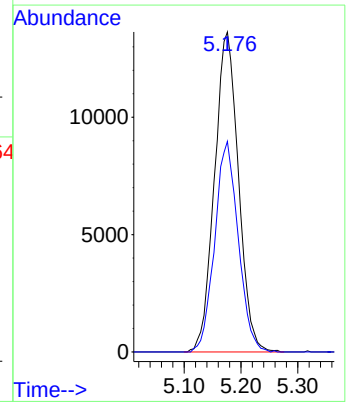



#30
Chloroform
Concen: 19.67 ug/l
RT: 5.176 min Scan# 695
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

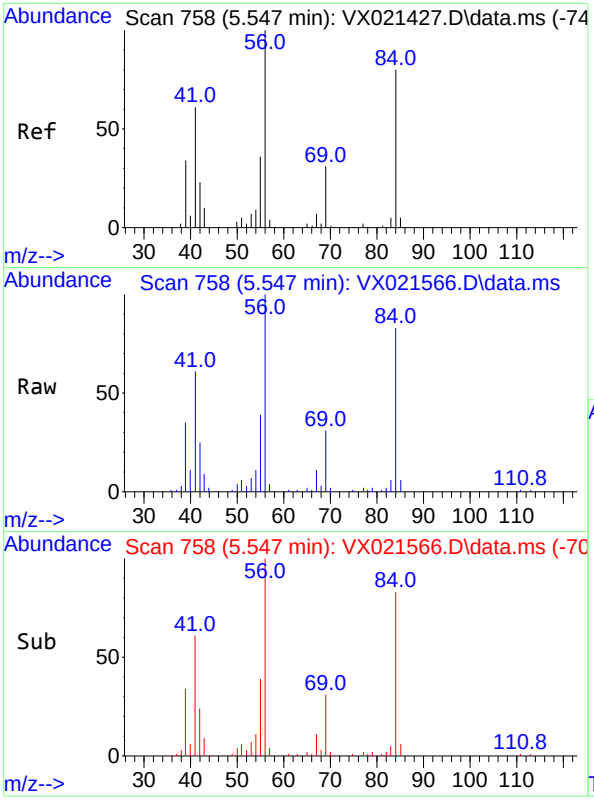
Tgt Ion: 83 Resp: 39901

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.8 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

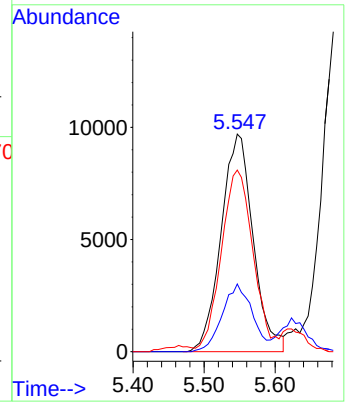
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

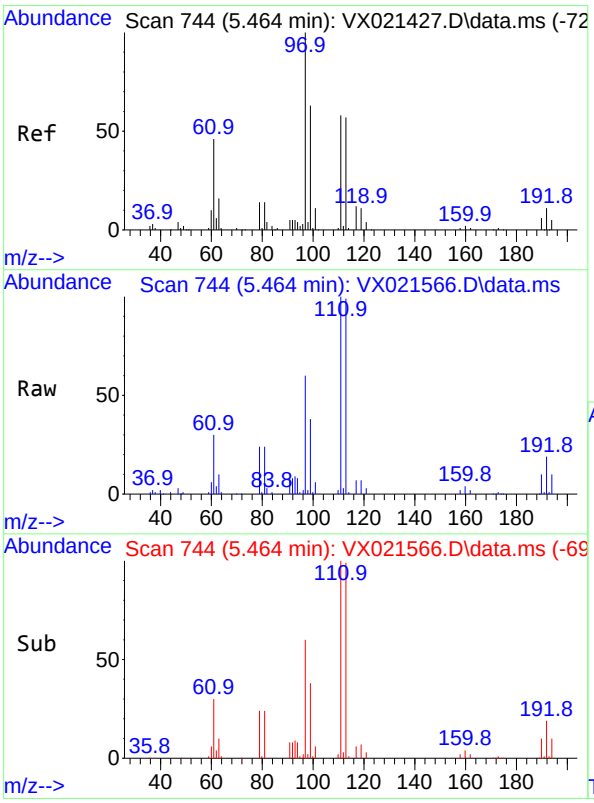



#31
Cyclohexane
Concen: 18.54 ug/l
RT: 5.547 min Scan# 758
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 56 Resp: 30431

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 30.4 | 25.3 | 37.9 |
| 84 | 81.2 | 71.4 | 107.0 |

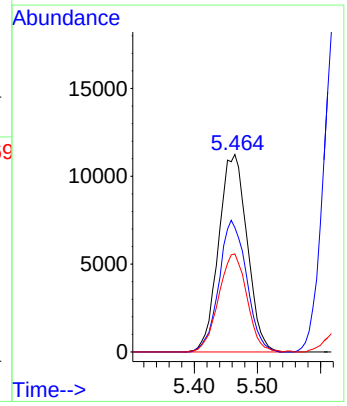



#32
1,1,1-Trichloroethane
Concen: 19.62 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

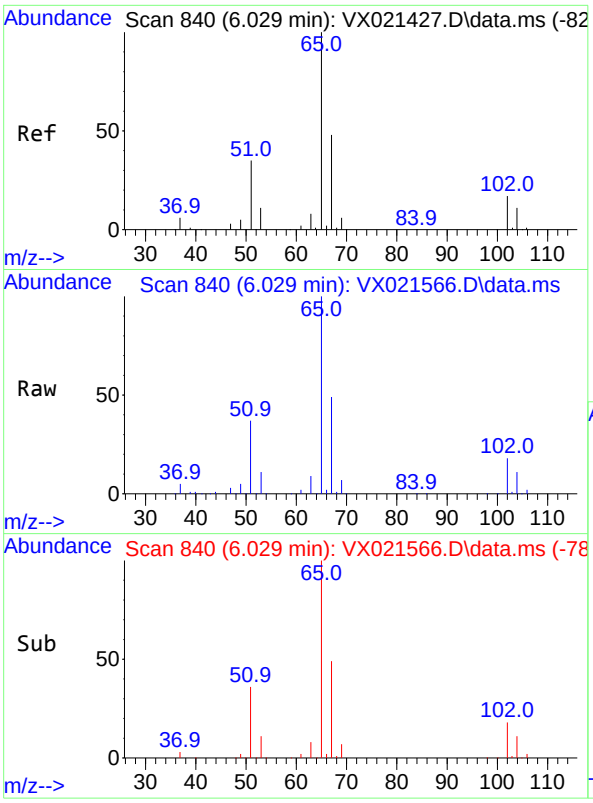
Tgt Ion: 97 Resp: 35267

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.3 | 51.5 | 77.3 |
| 61 | 49.5 | 34.2 | 51.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

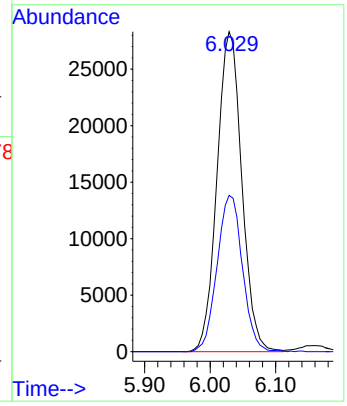
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

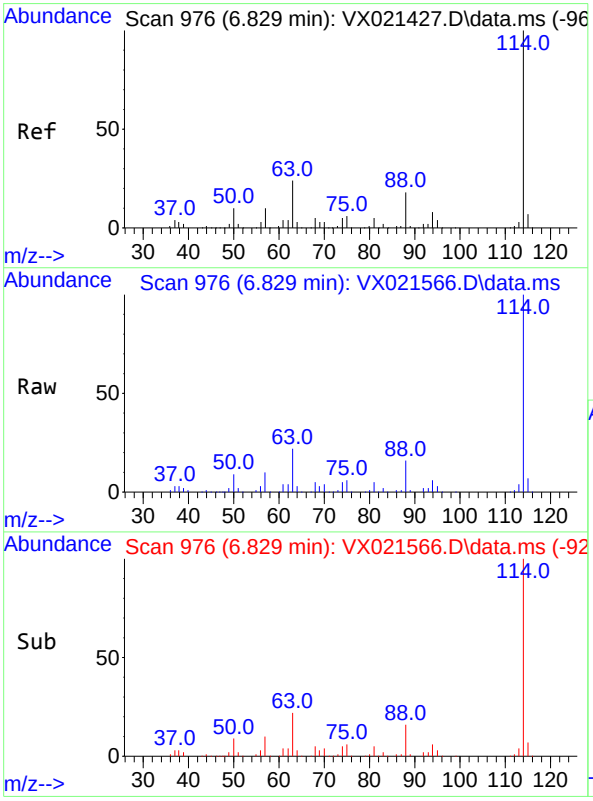



#33
1,2-Dichloroethane-d4
Concen: 49.77 ug/l
RT: 6.029 min Scan# 840
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 65 Resp: 74284

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.0 | 0.0 | 105.4 |

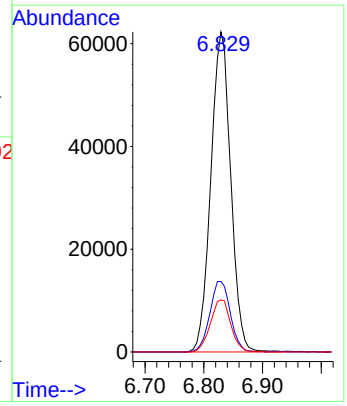



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

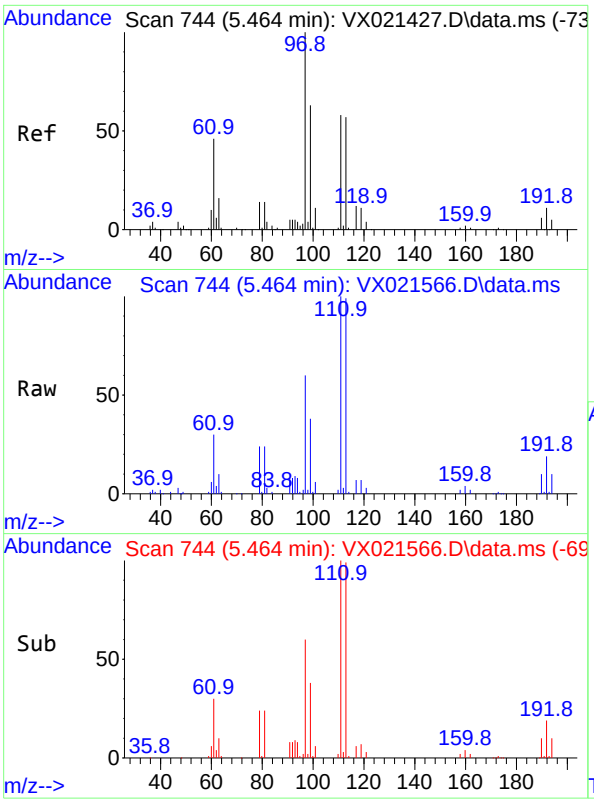
Tgt Ion:114 Resp: 146257

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 22.0 | 0.0 | 40.8 |
| 88 | 16.2 | 0.0 | 32.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

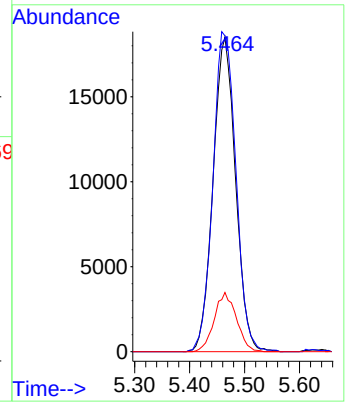
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

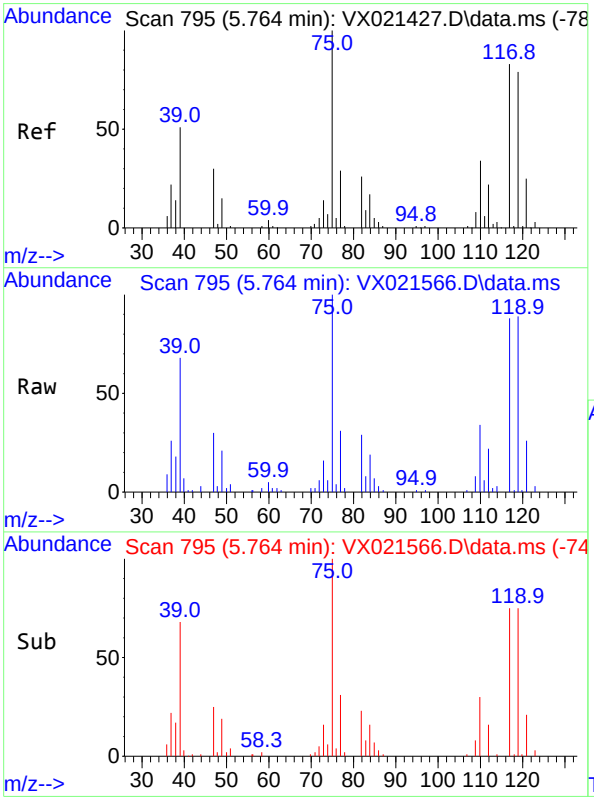



#35
Dibromofluoromethane
Concen: 50.56 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:113 Resp: 52530

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 104.1 | 81.9 | 122.9 |
| 192 | 18.6 | 16.7 | 25.1 |

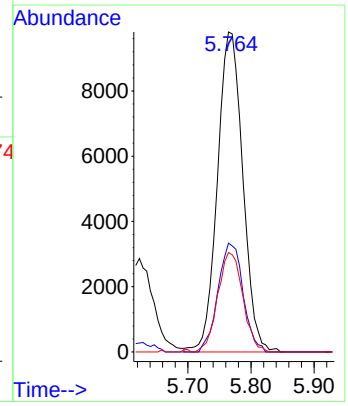



#36
1,1-Dichloropropene
Concen: 19.09 ug/l
RT: 5.764 min Scan# 795
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

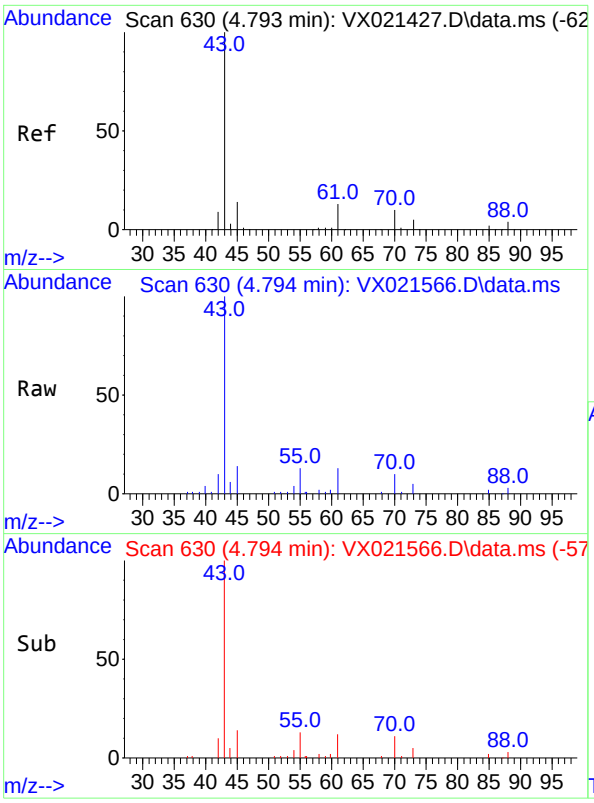
Tgt Ion: 75 Resp: 27360

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 33.6 | 18.1 | 54.4 |
| 77 | 30.6 | 25.3 | 37.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

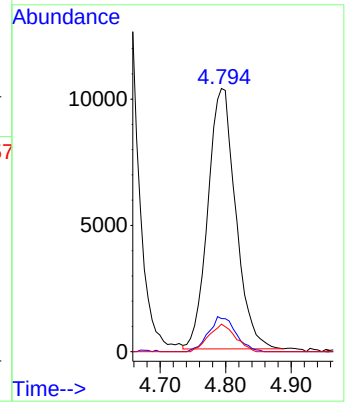
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

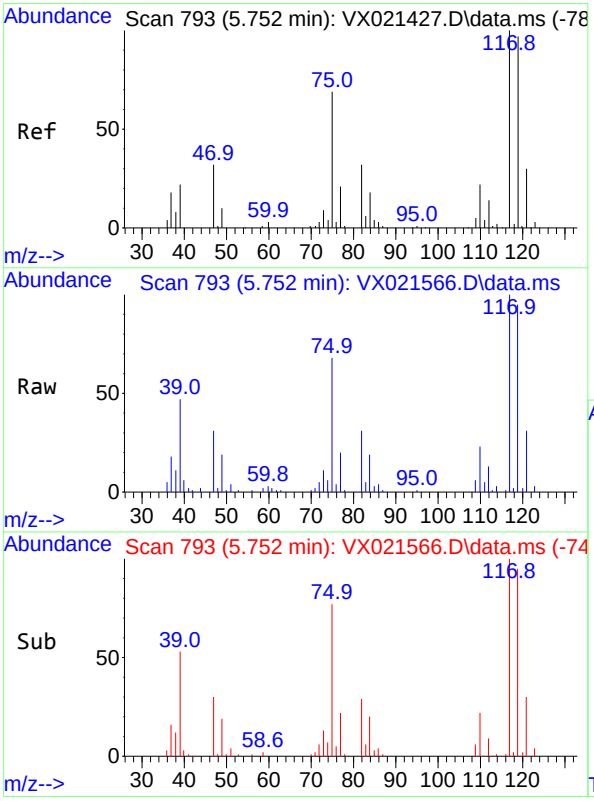



#37
Ethyl Acetate
Concen: 18.35 ug/l
RT: 4.794 min Scan# 630
Delta R.T. 0.001 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 43 Resp: 30400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.2 | 12.8 | 19.2 |
| 70 | 10.0 | 10.5 | 15.7# |

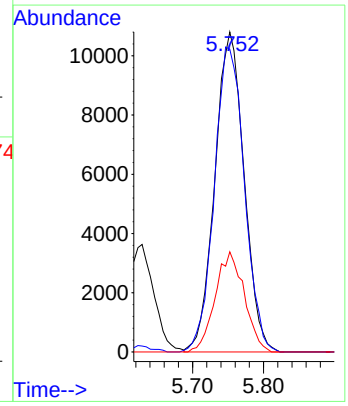



#38
Carbon Tetrachloride
Concen: 20.08 ug/l
RT: 5.752 min Scan# 793
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

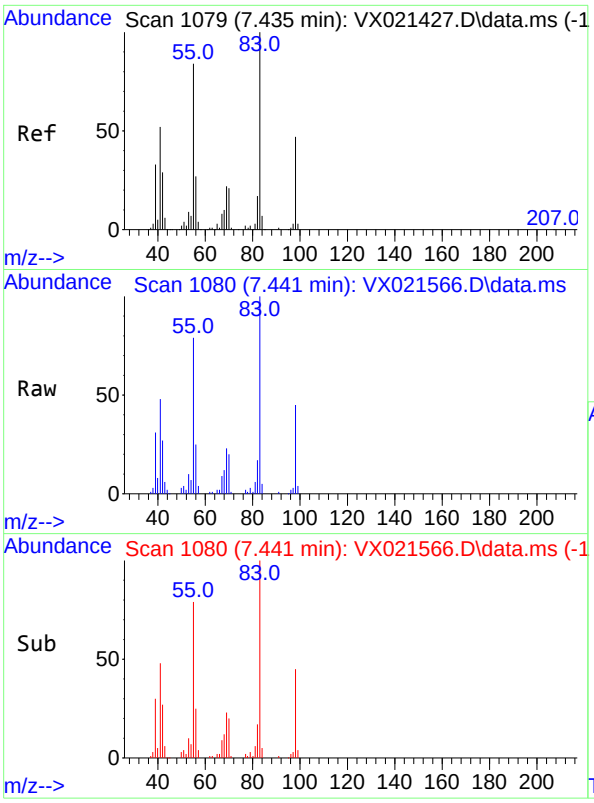
Tgt Ion:117 Resp: 30918

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.6 | 76.2 | 114.2 |
| 121 | 31.3 | 24.8 | 37.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

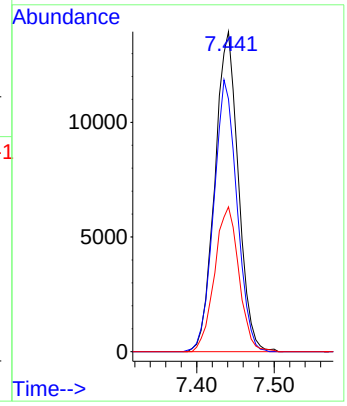
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

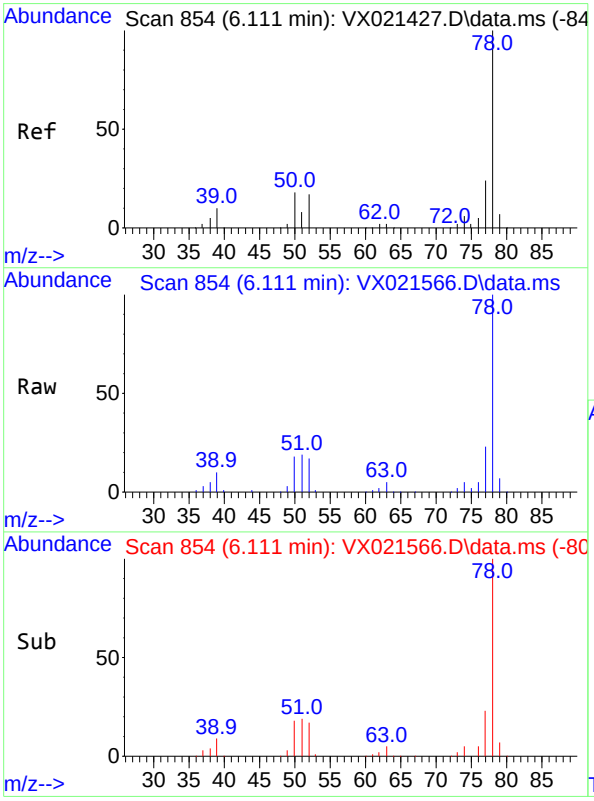



#39
Methylcyclohexane
Concen: 18.50 ug/l
RT: 7.441 min Scan# 1080
Delta R.T. 0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 83 Resp: 29397

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 79.0 | 58.9 | 88.3 |
| 98 | 45.3 | 38.1 | 57.1 |

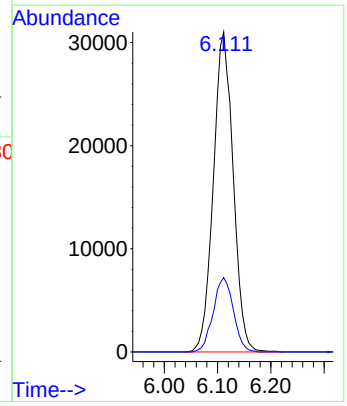



#40
Benzene
Concen: 19.67 ug/l
RT: 6.111 min Scan# 854
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

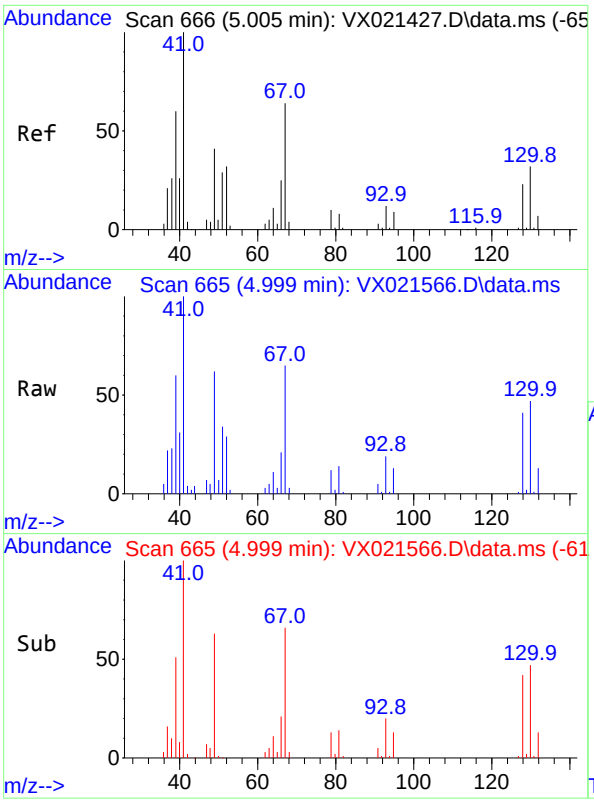
Tgt Ion: 78 Resp: 80058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.2 | 18.9 | 28.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

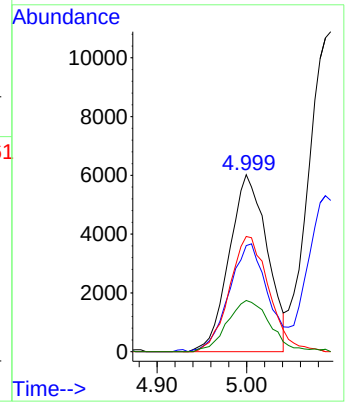
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

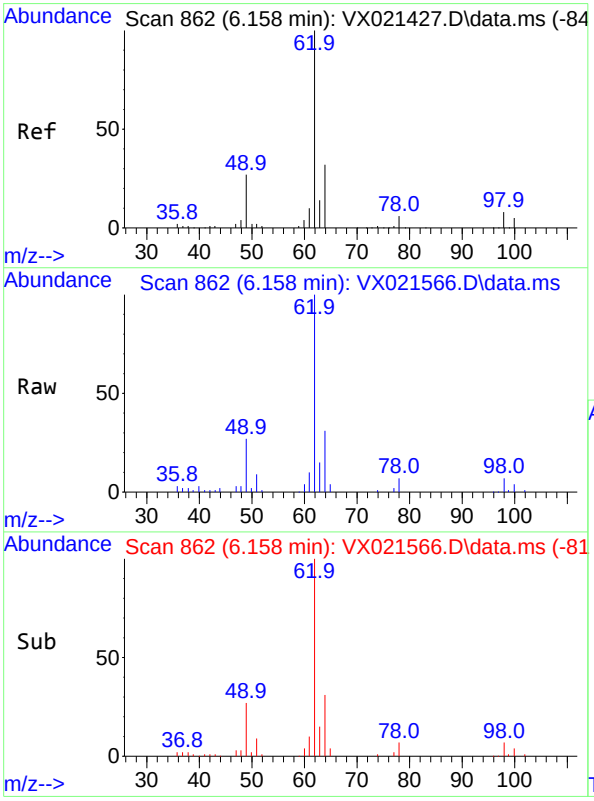



#41
Methacrylonitrile
Concen: 18.42 ug/l
RT: 4.999 min Scan# 665
Delta R.T. -0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 41 Resp: 17703

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 62.9 | 42.5 | 63.7 |
| 67 | 67.8 | 65.0 | 97.6 |
| 52 | 32.9 | 25.3 | 37.9 |

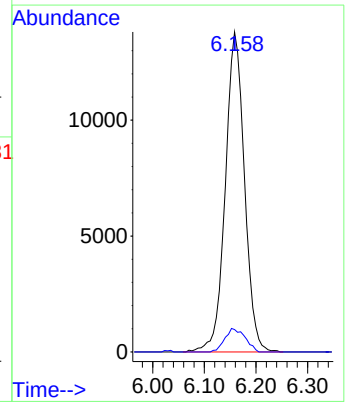



#42
1,2-Dichloroethane
Concen: 20.17 ug/l
RT: 6.158 min Scan# 862
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

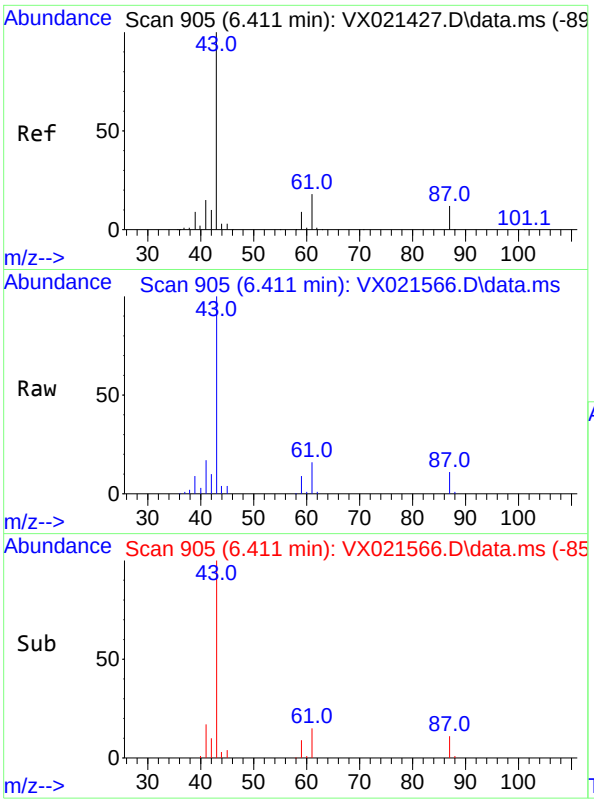
Tgt Ion: 62 Resp: 35590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.8 | 0.0 | 20.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

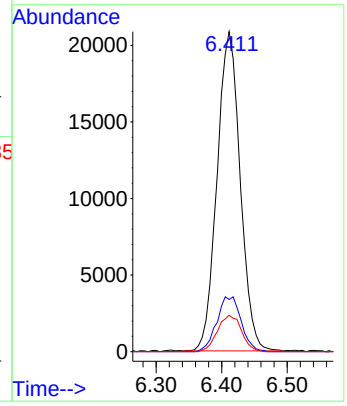
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

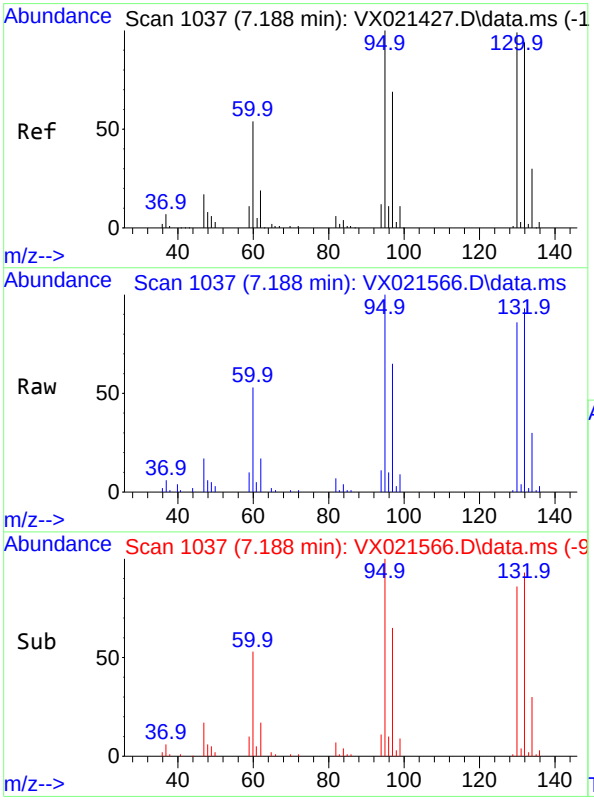



#43
Isopropyl Acetate
Concen: 18.96 ug/l
RT: 6.411 min Scan# 905
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 43 Resp: 51001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 18.2 | 18.2 | 27.4# |
| 87 | 11.8 | 12.5 | 18.7# |

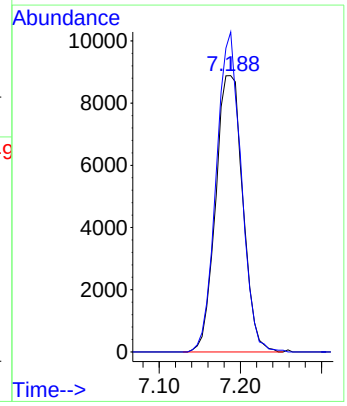



#44
Trichloroethene
Concen: 19.25 ug/l
RT: 7.188 min Scan# 1037
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

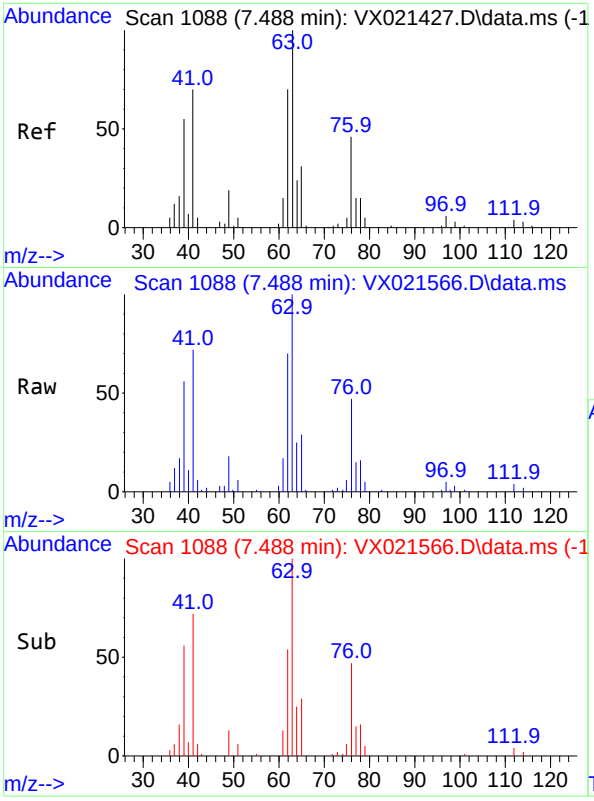
Tgt Ion:130 Resp: 20670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 115.8 | 0.0 | 198.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

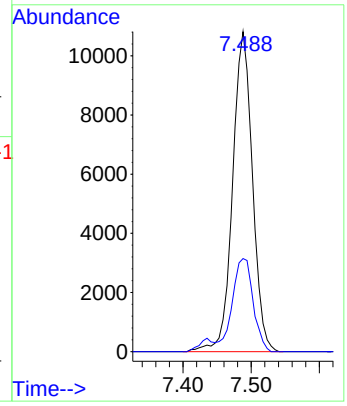
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

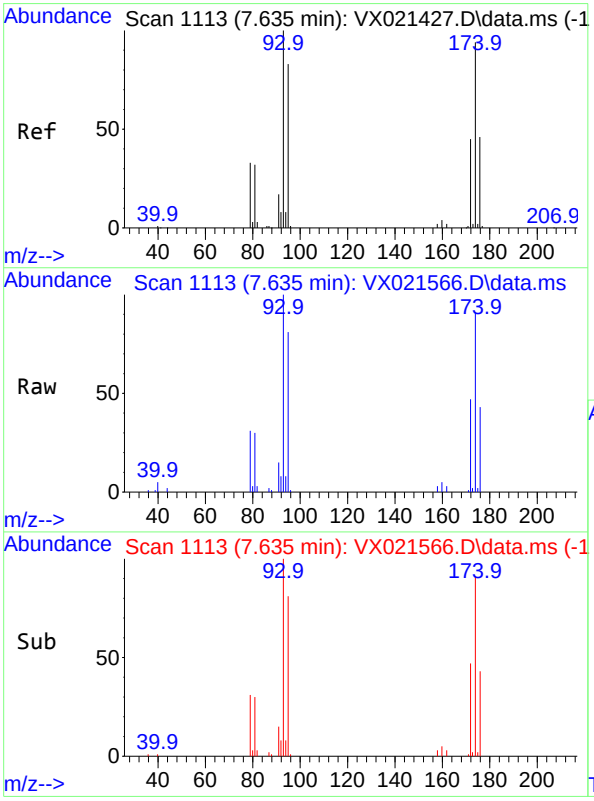



#45
1,2-Dichloropropane
Concen: 19.87 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 63 Resp: 21909

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 29.1 | 25.7 | 38.5 |

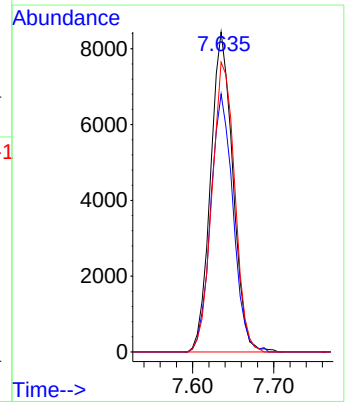



#46
Dibromomethane
Concen: 20.04 ug/l
RT: 7.635 min Scan# 1113
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

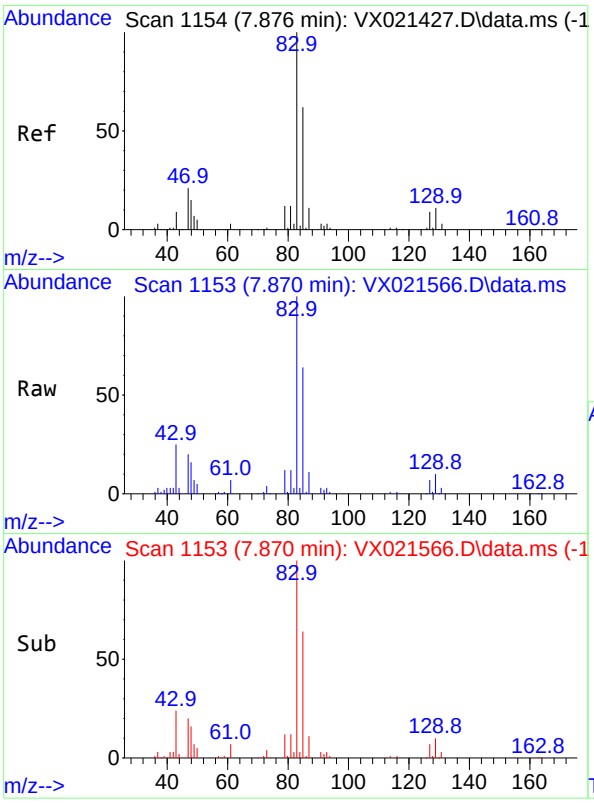
Tgt Ion: 93 Resp: 16100

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 80.8 | 66.8 | 100.2 |
| 174 | 92.3 | 83.1 | 124.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

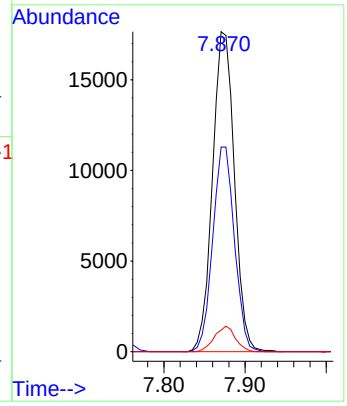
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

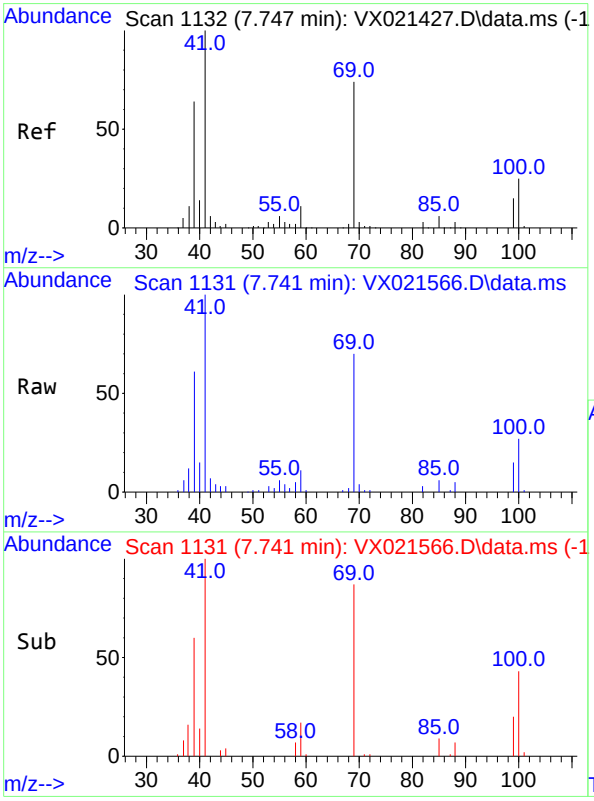



#47
Bromodichloromethane
Concen: 20.22 ug/l
RT: 7.870 min Scan# 1153
Delta R.T. -0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 83 Resp: 33055

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.0 | 51.4 | 77.0 |
| 127 | 6.8 | 6.8 | 10.2# |

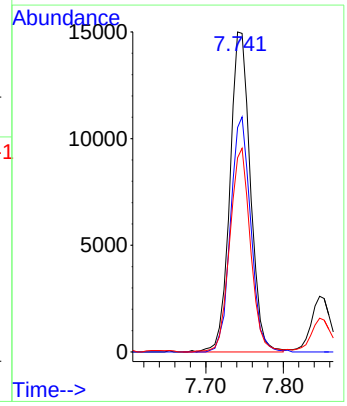



#48
Methyl methacrylate
Concen: 19.17 ug/l
RT: 7.741 min Scan# 1131
Delta R.T. -0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

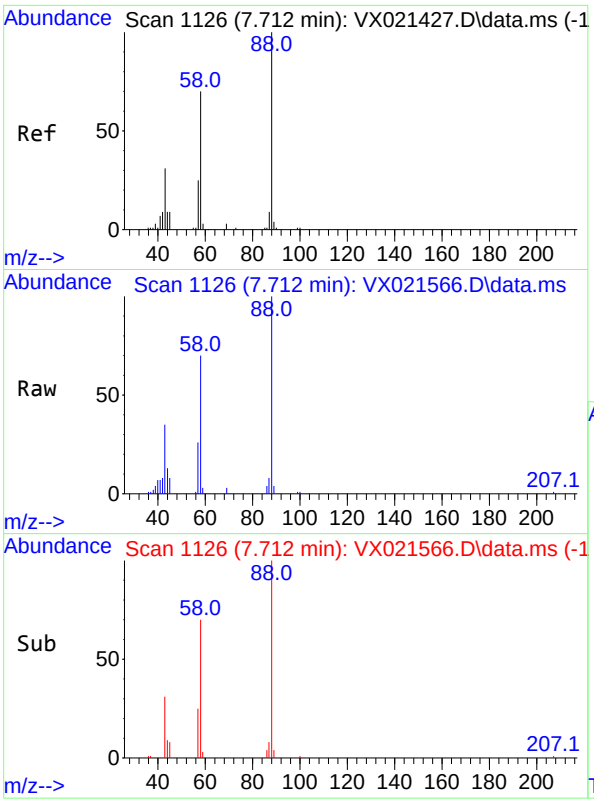
Tgt Ion: 41 Resp: 27512

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 72.7 | 76.0 | 114.0# |
| 39 | 64.3 | 44.6 | 67.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

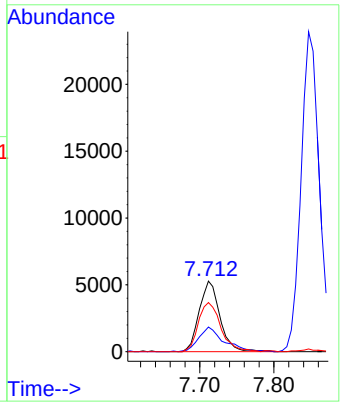
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

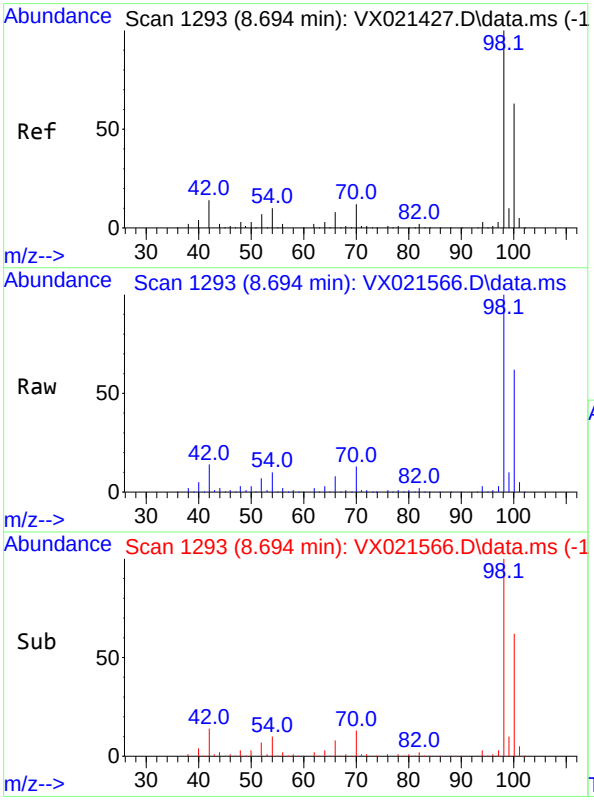



#49
1,4-Dioxane
Concen: 399.02 ug/l
RT: 7.712 min Scan# 1126
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 88 Resp: 10253

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 42.3 | 23.2 | 34.8# |
| 58 | 75.7 | 55.0 | 82.4 |

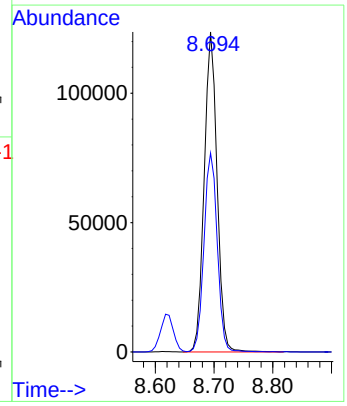



#50
Toluene-d8
Concen: 50.92 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

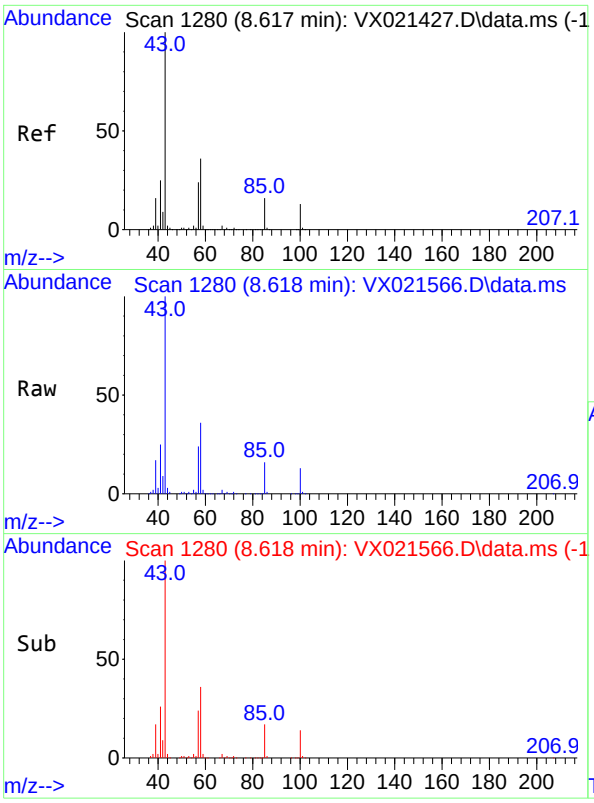
Tgt Ion: 98 Resp: 188512

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.1 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

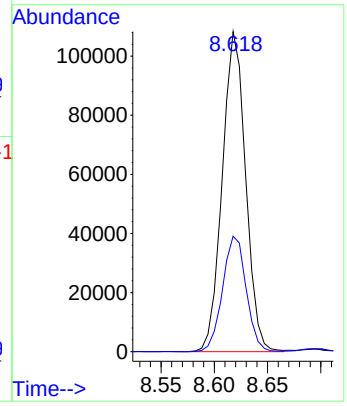
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

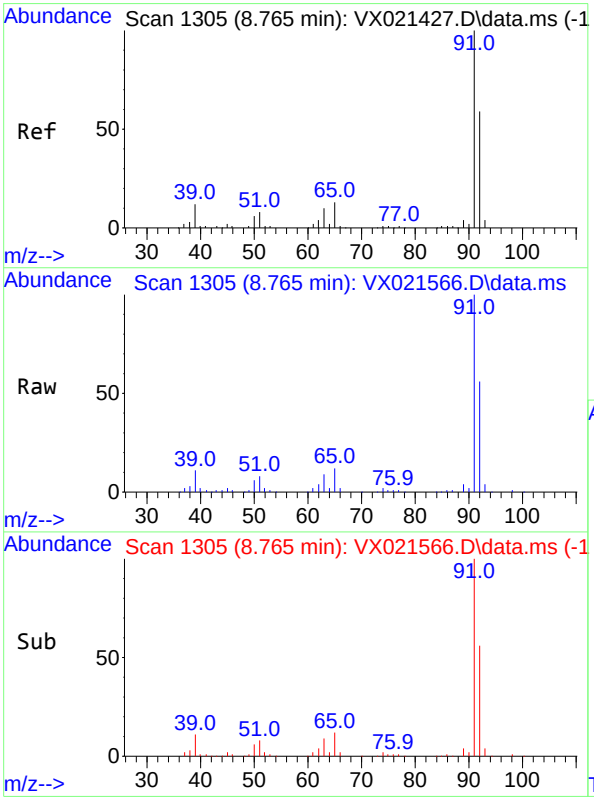



#51
4-Methyl-2-Pentanone
Concen: 99.67 ug/l
RT: 8.618 min Scan# 1280
Delta R.T. 0.001 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 43 Resp: 164938

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.5 | 35.4 | 53.0 |

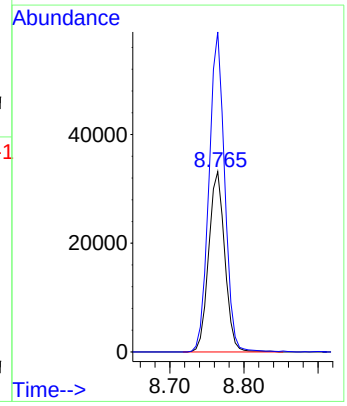



#52
Toluene
Concen: 19.94 ug/l
RT: 8.765 min Scan# 1305
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

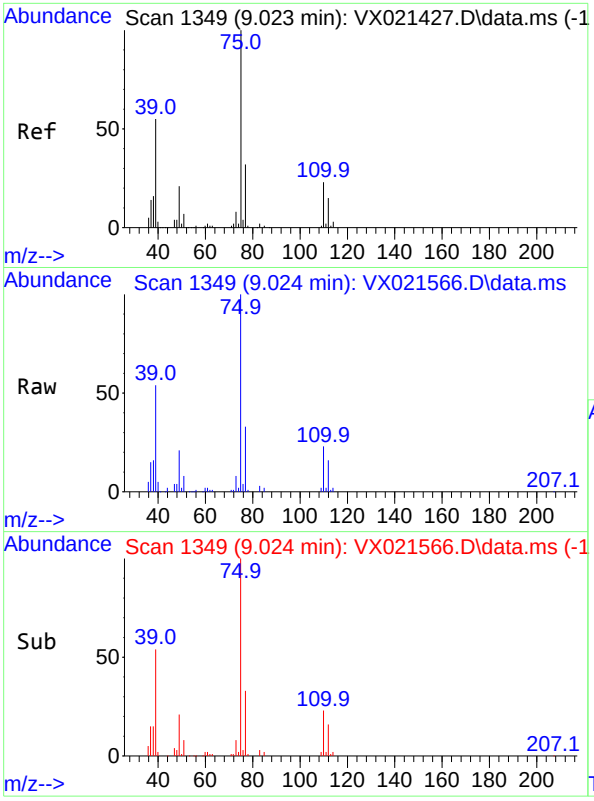
Tgt Ion: 92 Resp: 50109

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.0 | 137.1 | 205.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

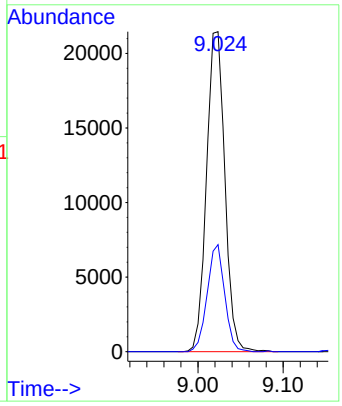
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

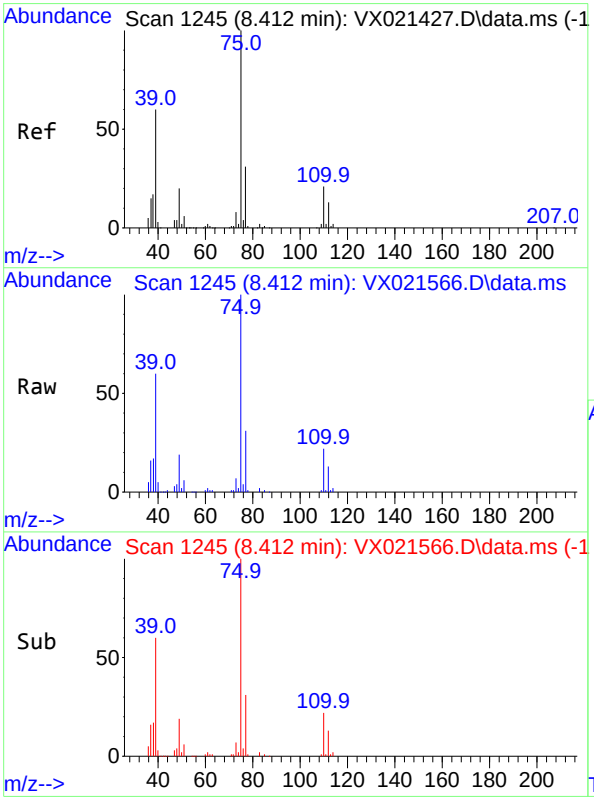



#53
t-1,3-Dichloropropene
Concen: 19.44 ug/l
RT: 9.024 min Scan# 1349
Delta R.T. 0.001 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 75 Resp: 32092

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 33.4 | 24.9 | 37.3 |

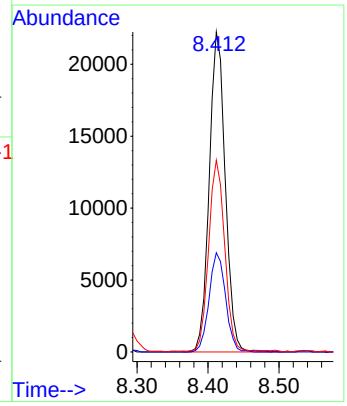



#54
cis-1,3-Dichloropropene
Concen: 19.86 ug/l
RT: 8.412 min Scan# 1245
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

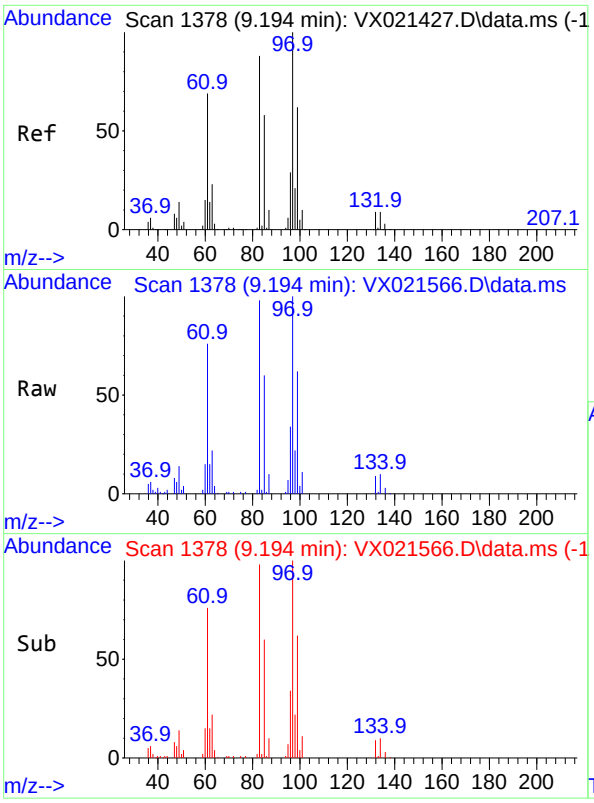
Tgt Ion: 75 Resp: 34896

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.0 | 25.7 | 38.5 |
| 39 | 59.9 | 35.1 | 52.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

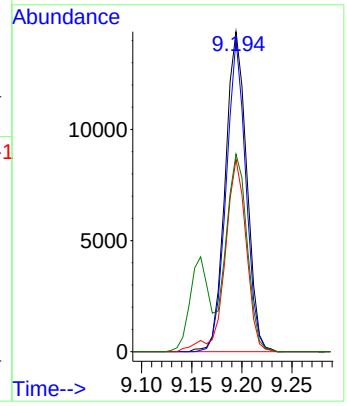
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

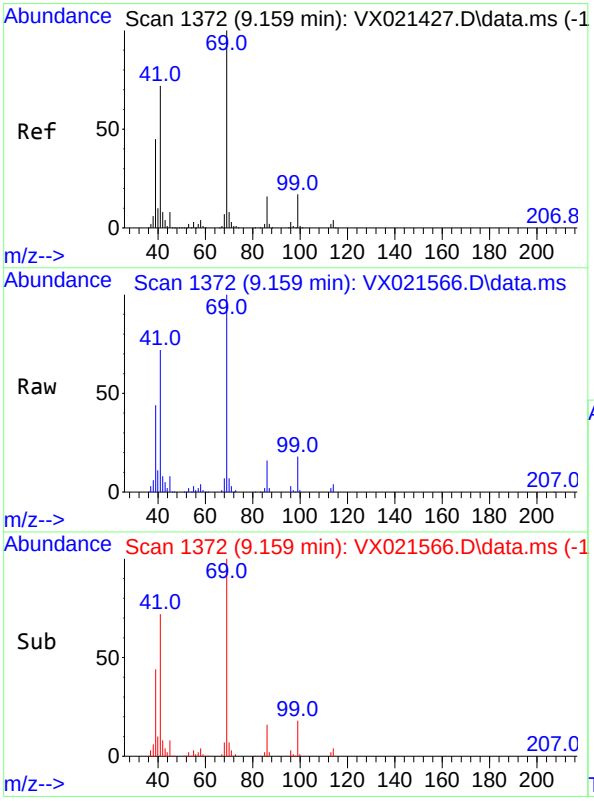



#55
1,1,2-Trichloroethane
Concen: 20.13 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 97 Resp: 21357

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 97.8 | 69.3 | 103.9 |
| 85 | 60.1 | 44.3 | 66.5 |
| 99 | 61.7 | 50.3 | 75.5 |

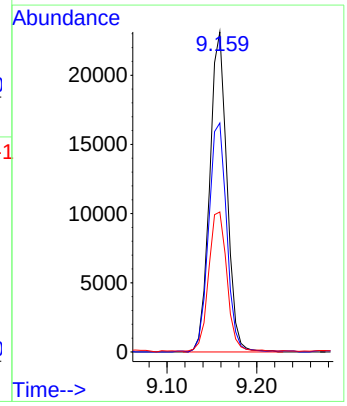



#56
Ethyl methacrylate
Concen: 18.61 ug/l
RT: 9.159 min Scan# 1372
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

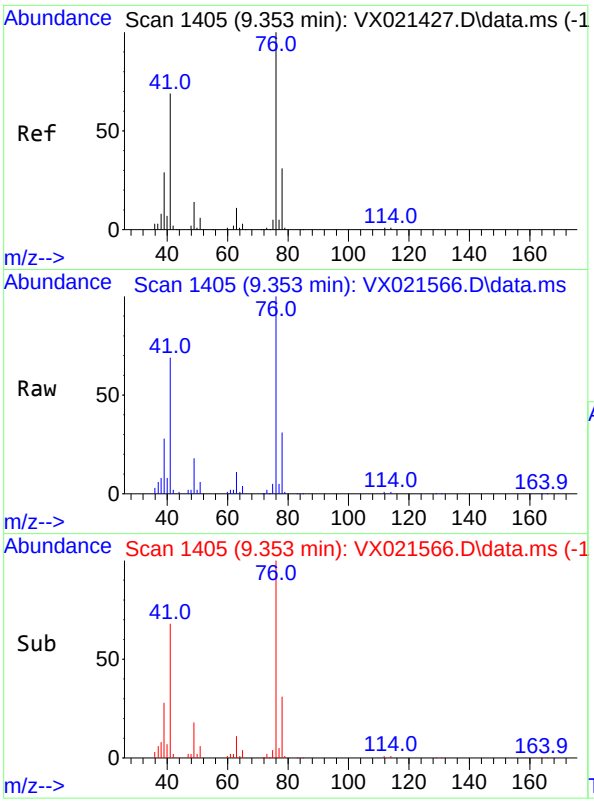
Tgt Ion: 69 Resp: 30897

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 74.9 | 46.8 | 70.2# |
| 39 | 46.2 | 24.7 | 37.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

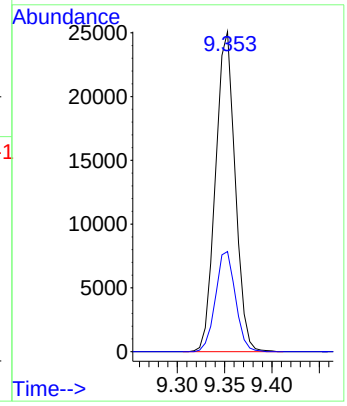
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

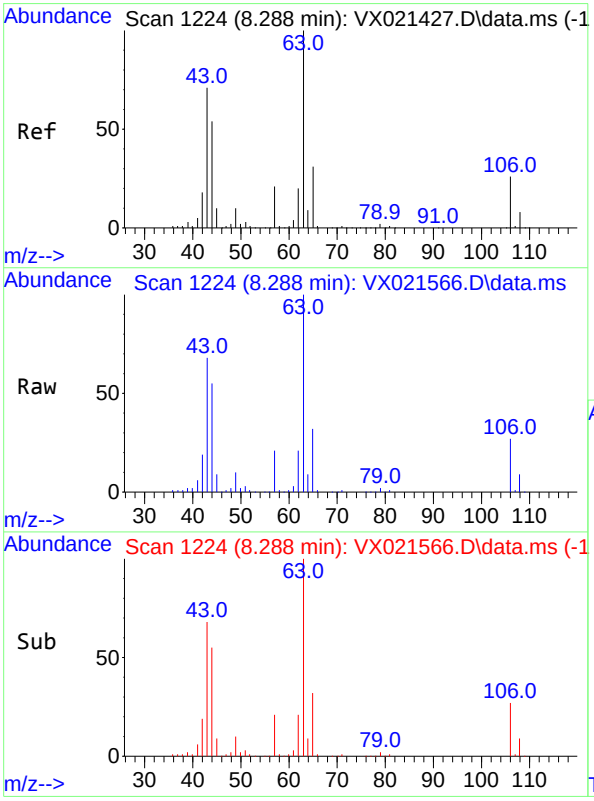



#57
1,3-Dichloropropane
Concen: 19.91 ug/l
RT: 9.353 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 76 Resp: 36148

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 31.7 | 26.2 | 39.2 |

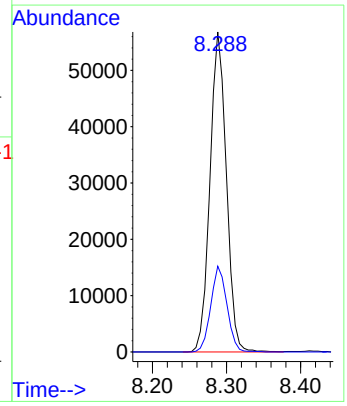



#58
2-Chloroethyl Vinyl ether
Concen: 97.55 ug/l
RT: 8.288 min Scan# 1224
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

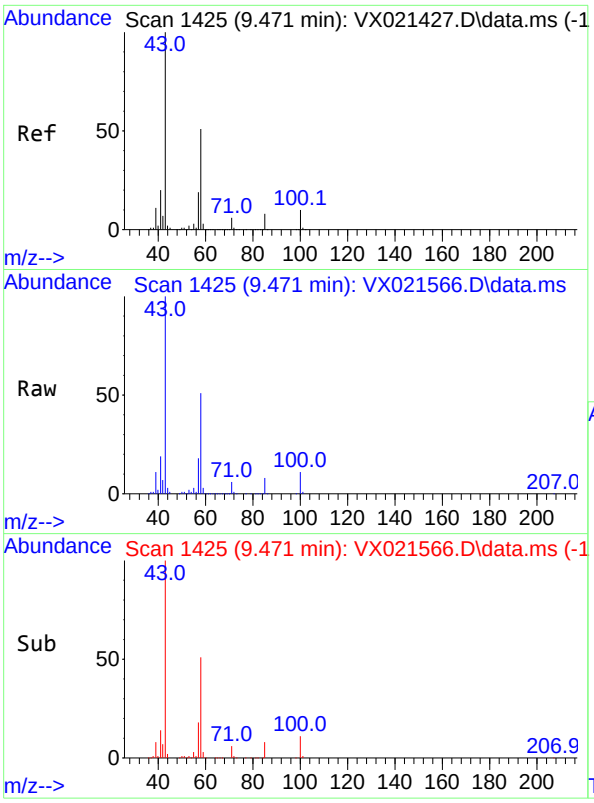
Tgt Ion: 63 Resp: 87464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 26.4 | 23.5 | 35.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

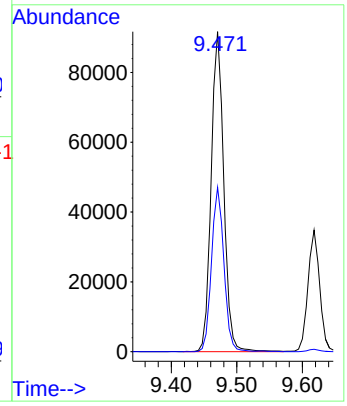
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

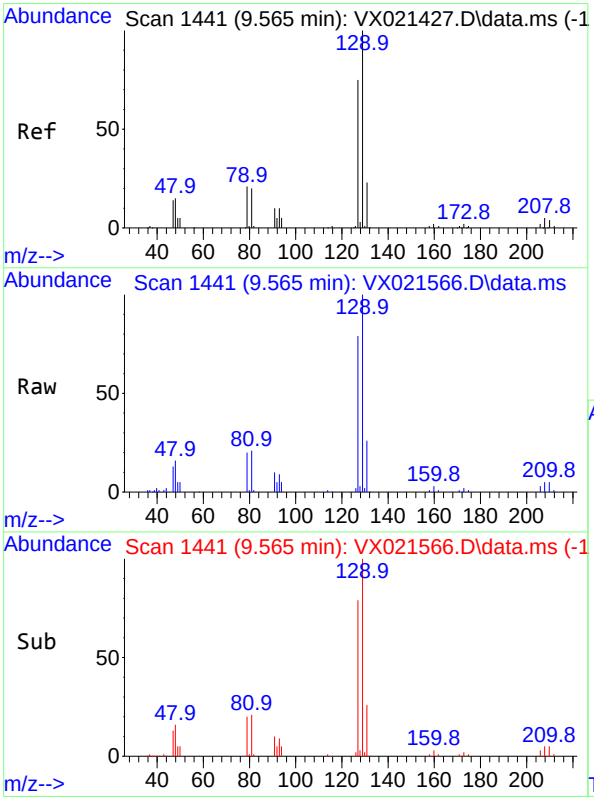



#59
2-Hexanone
Concen: 98.83 ug/l
RT: 9.471 min Scan# 1425
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 43 Resp: 122813

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 50.8 | 30.9 | 92.8 |

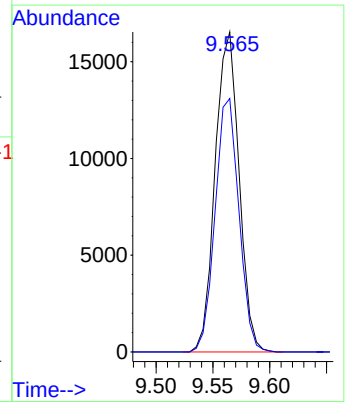



#60
Dibromochloromethane
Concen: 20.34 ug/l
RT: 9.565 min Scan# 1441
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

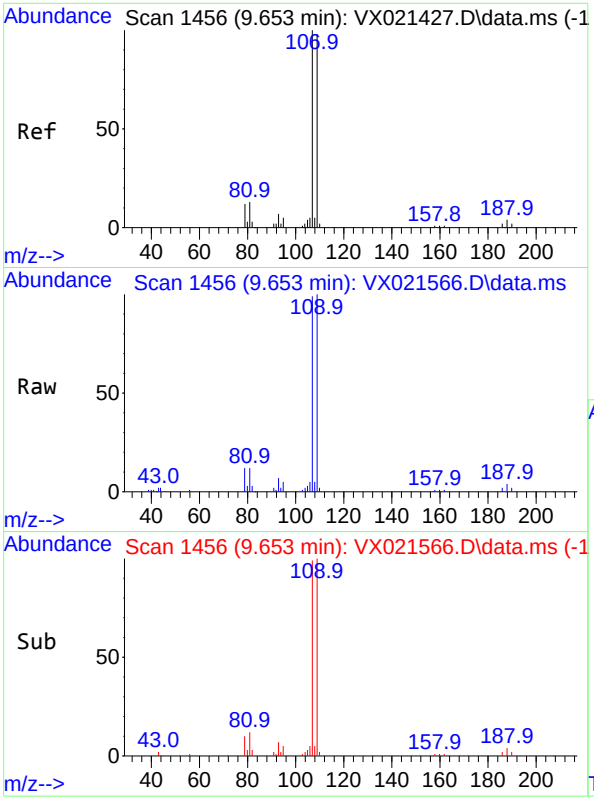
Tgt Ion:129 Resp: 24174

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 79.2 | 38.4 | 115.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

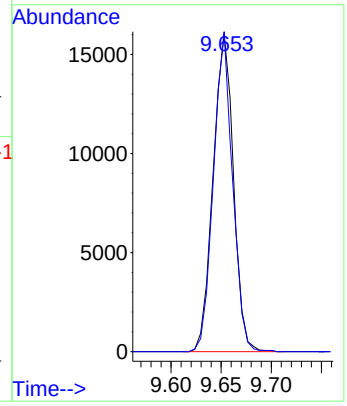
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

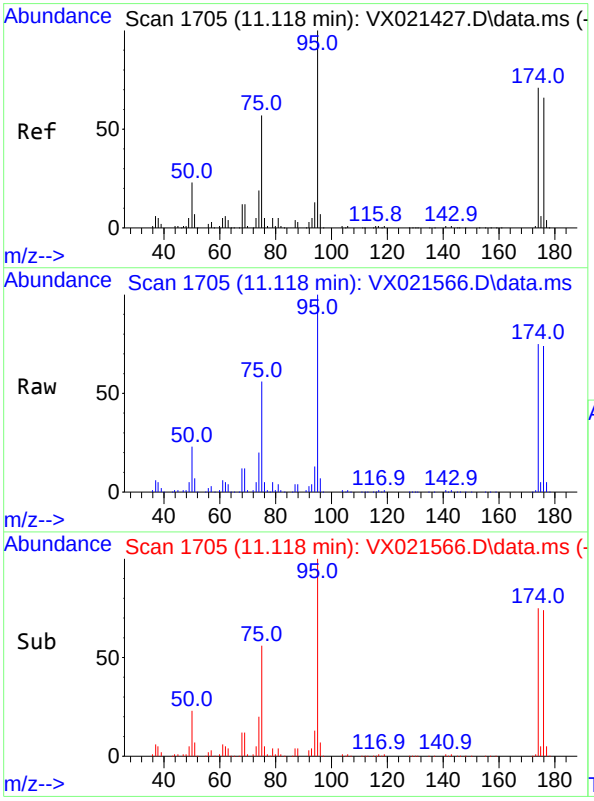



#61
1,2-Dibromoethane
Concen: 19.84 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:107 Resp: 22616

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 94.5 | 75.8 | 113.6 |

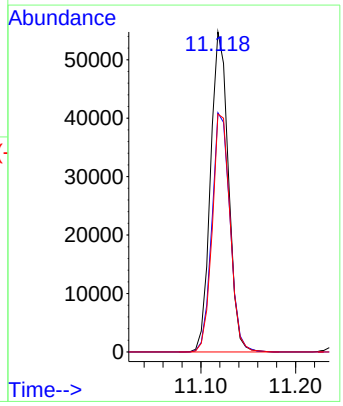



#62
4-Bromofluorobenzene
Concen: 49.86 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

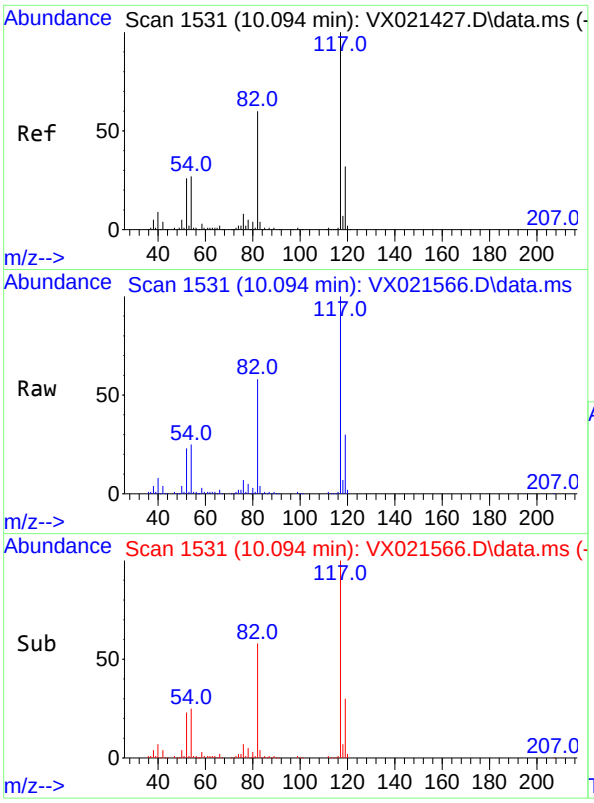
Tgt Ion: 95 Resp: 71760

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.5 | 0.0 | 154.6 |
| 176 | 74.0 | 0.0 | 155.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

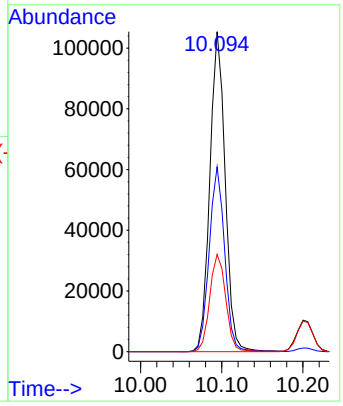
**Manual Integrations APPROVED**
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3/31/2021 9:41:34 AM

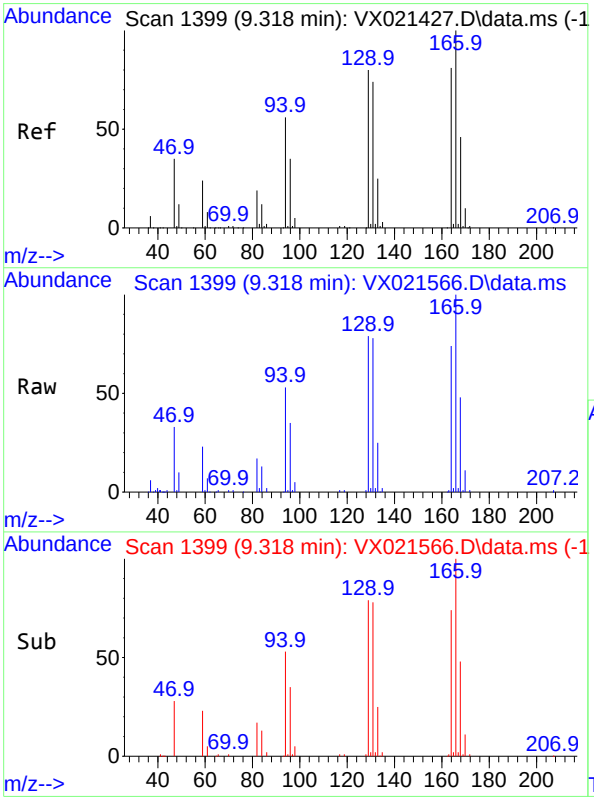



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:117 Resp: 138179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 57.8 | 47.4 | 71.2 |
| 119 | 30.4 | 26.6 | 39.8 |

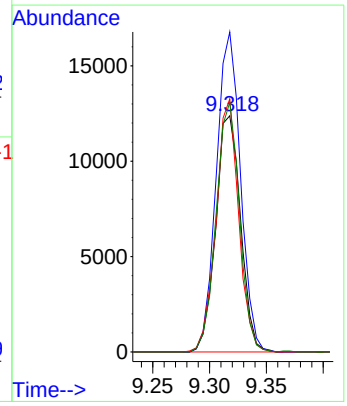



#64
Tetrachloroethene
Concen: 20.26 ug/l
RT: 9.318 min Scan# 1399
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

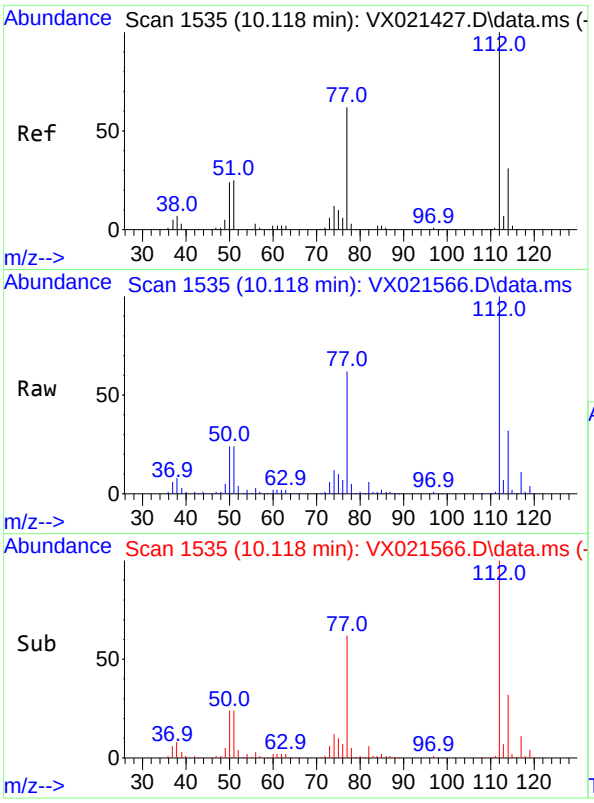
Tgt Ion:164 Resp: 18750

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 135.5 | 103.4 | 155.2 |
| 129 | 107.1 | 70.8 | 106.2# |
| 131 | 105.7 | 72.5 | 108.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

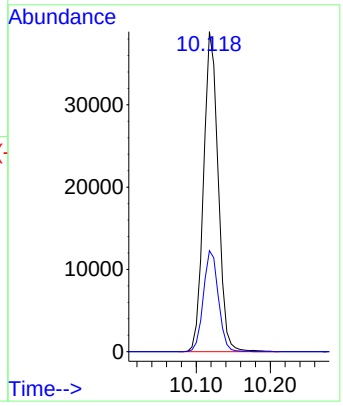
**Manual Integrations APPROVED**
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3/31/2021 9:41:34 AM

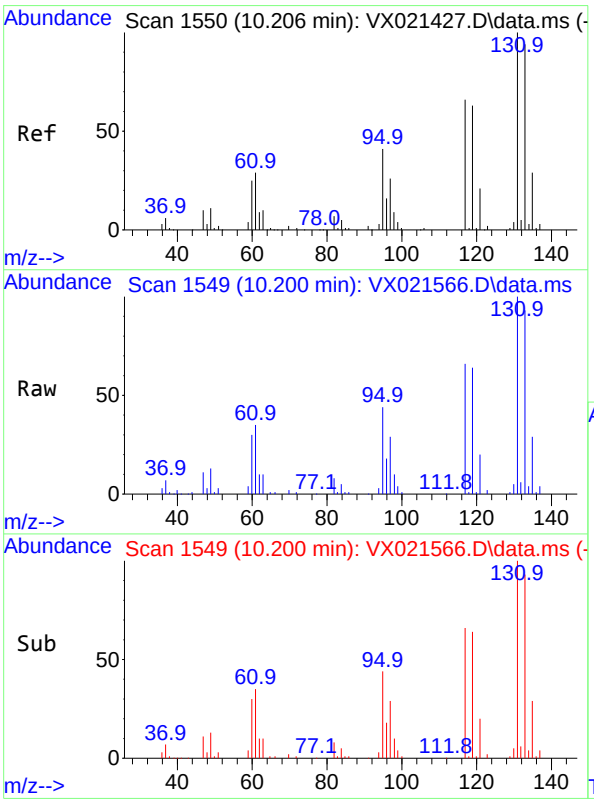



#65
Chlorobenzene
Concen: 19.16 ug/l
RT: 10.118 min Scan# 1535
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:112 Resp: 53184

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.6 | 25.8 | 38.6 |

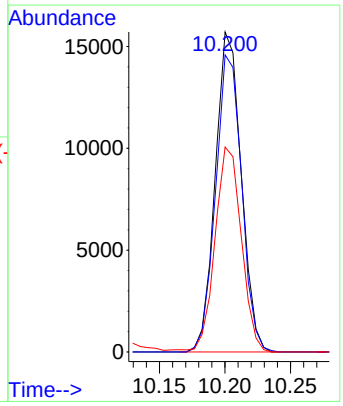



#66
1,1,1,2-Tetrachloroethane
Concen: 20.27 ug/l
RT: 10.200 min Scan# 1549
Delta R.T. -0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

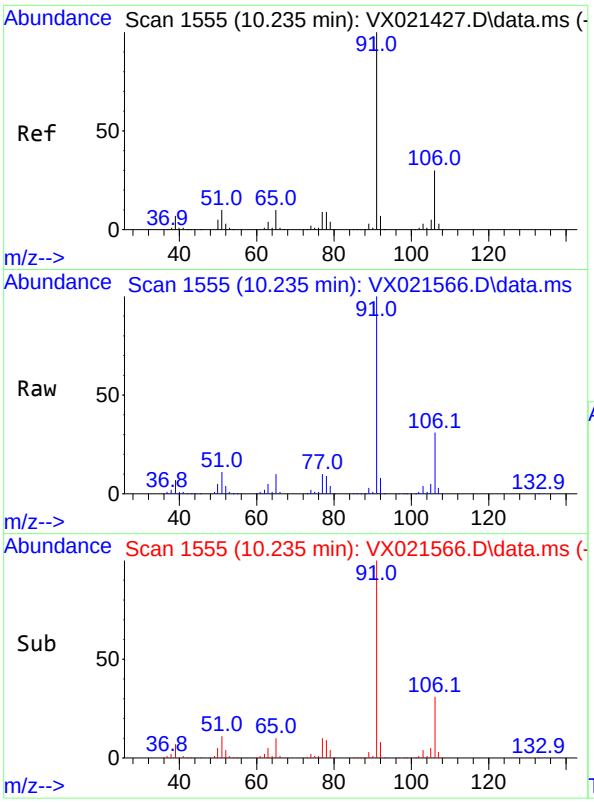
Tgt Ion:131 Resp: 21561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 93.5 | 47.7 | 143.1 |
| 119 | 65.2 | 32.1 | 96.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

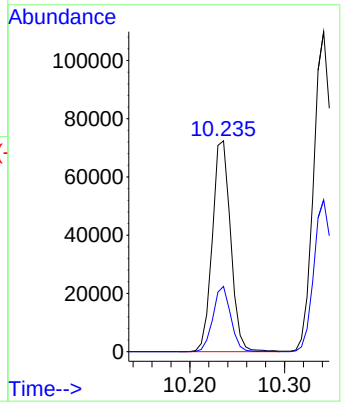
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3/31/2021 9:41:34 AM

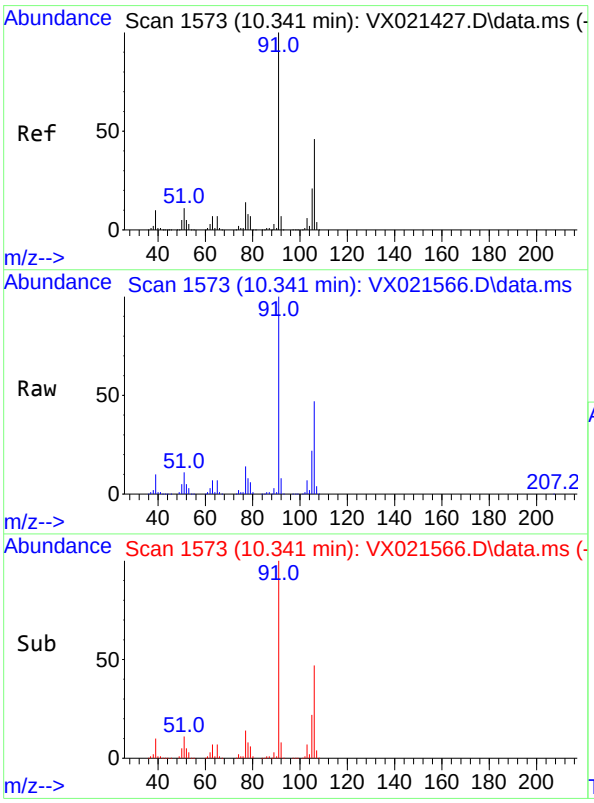



#67
Ethyl Benzene
Concen: 19.20 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 91 Resp: 97158

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.0 | 24.6 | 37.0 |

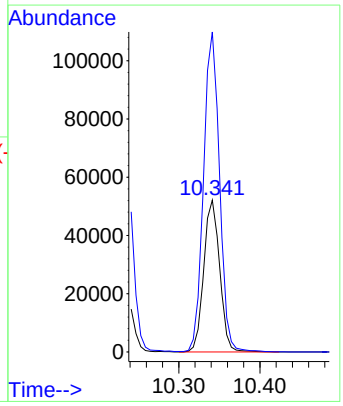



#68
m/p-Xylenes
Concen: 39.38 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

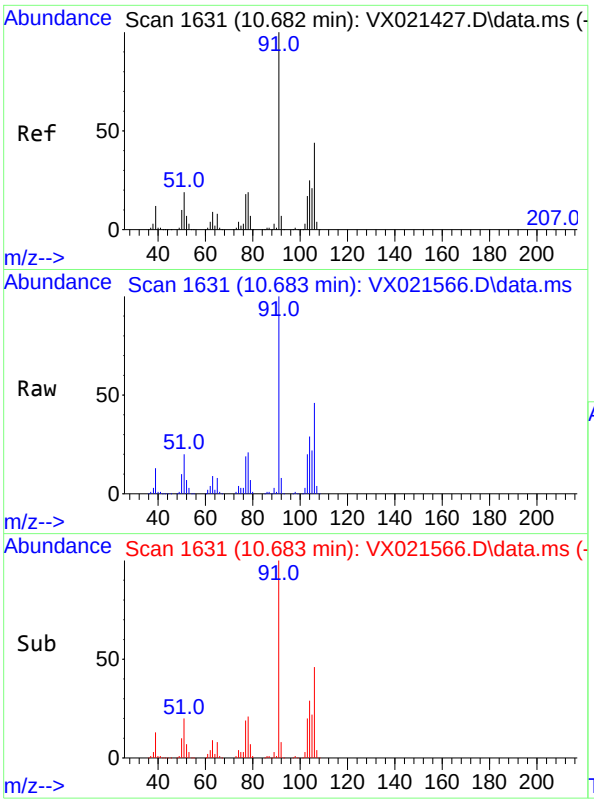
Tgt Ion:106 Resp: 70986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 211.6 | 162.8 | 244.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

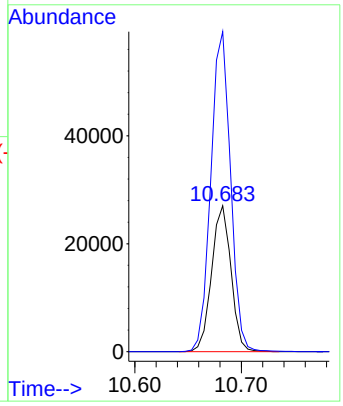
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

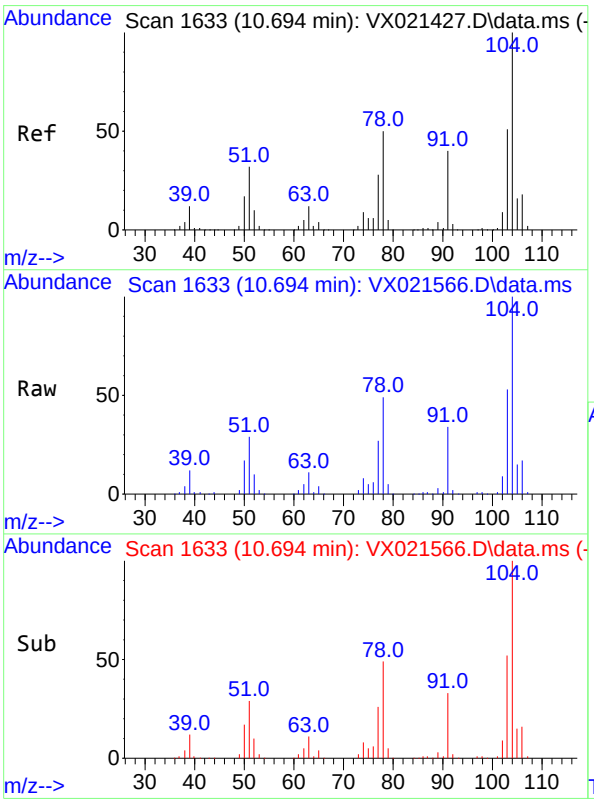



#69
o-Xylene
Concen: 19.56 ug/l
RT: 10.683 min Scan# 1631
Delta R.T. 0.001 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:106 Resp: 34158

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 222.9 | 108.1 | 324.2 |

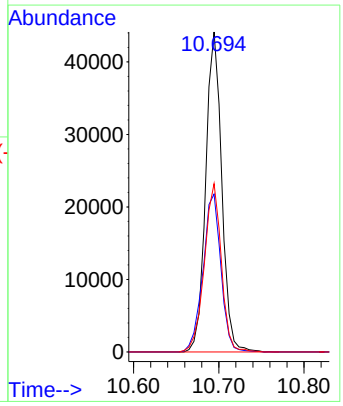



#70
Styrene
Concen: 19.20 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

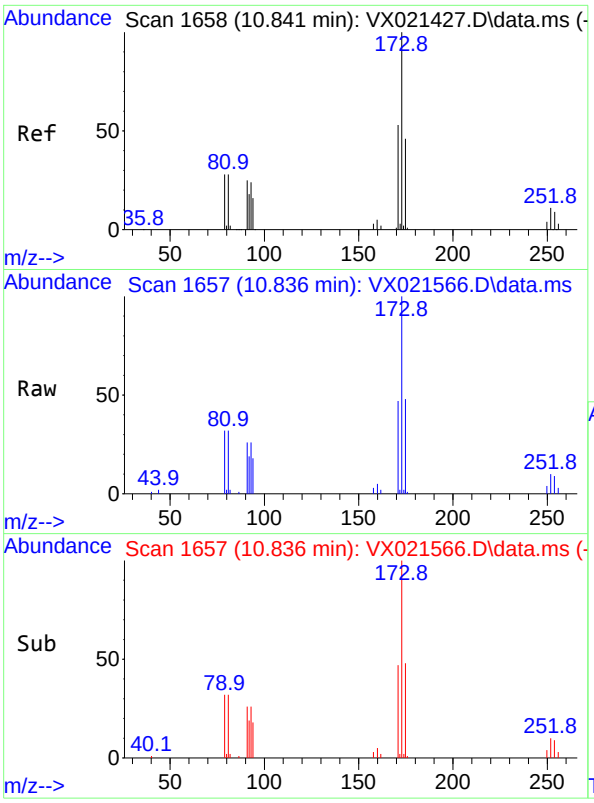
Tgt Ion:104 Resp: 57638

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 55.3 | 40.0 | 60.0 |
| 103 | 56.1 | 43.4 | 65.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

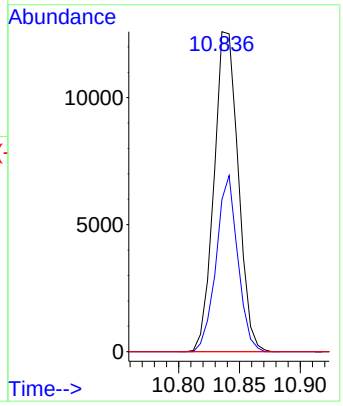
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

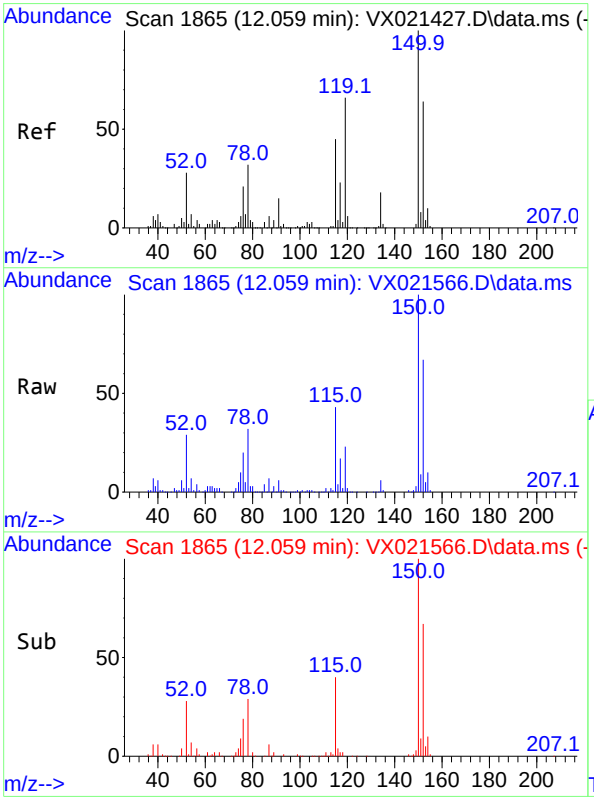



#71
Bromoform
Concen: 20.18 ug/l
RT: 10.836 min Scan# 1657
Delta R.T. -0.005 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:173 Resp: 17442

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 49.0 | 23.9 | 71.8 |
| 254 | 0.0 | 0.1 | 0.1# |

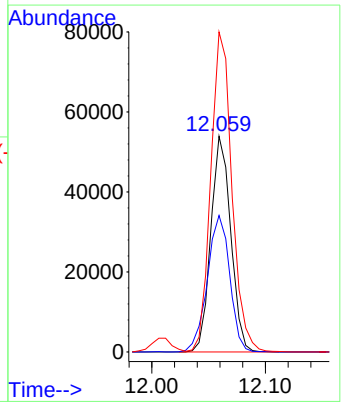



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

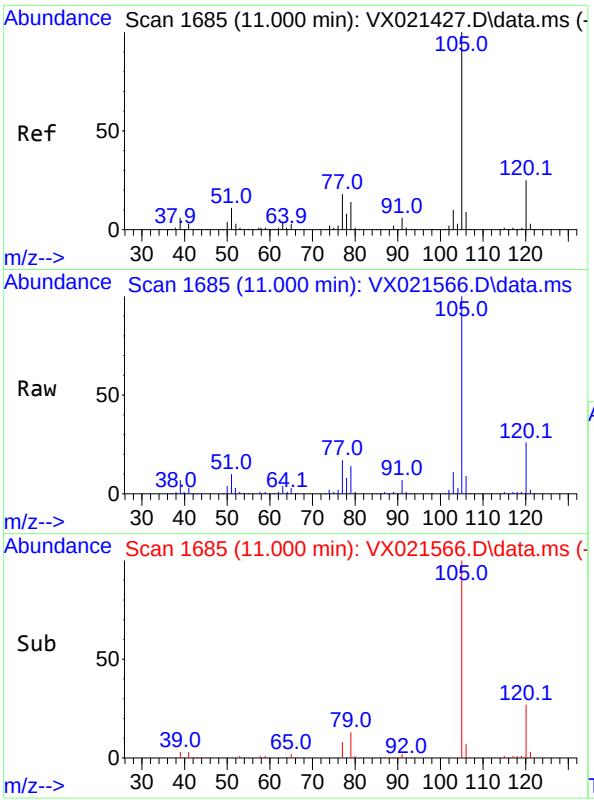
Tgt Ion:152 Resp: 65643

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 71.3 | 41.1 | 123.3 |
| 150 | 157.4 | 0.0 | 349.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

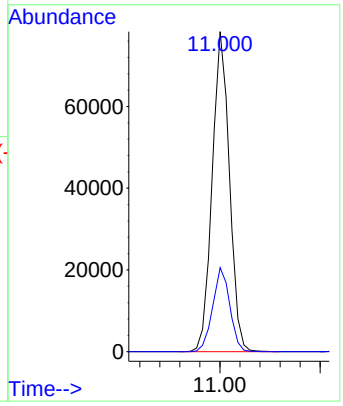
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

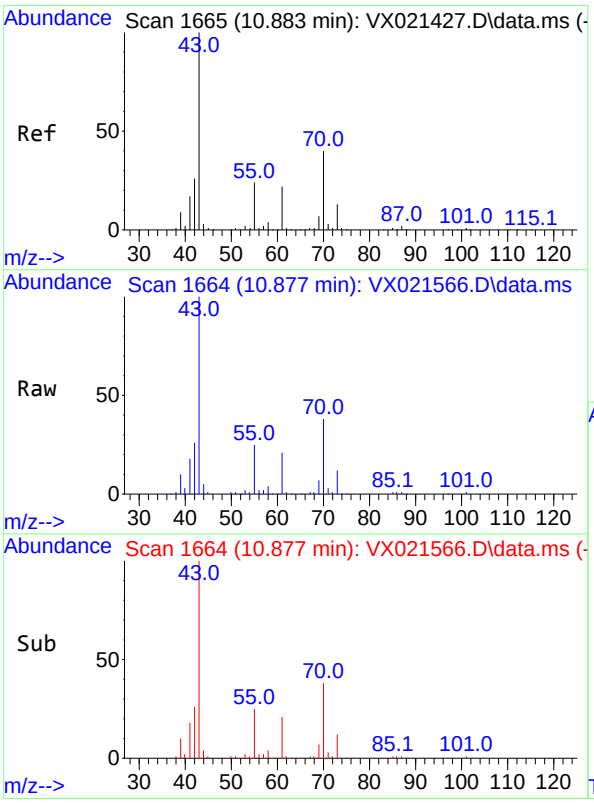



#73
Isopropylbenzene
Concen: 20.24 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:105 Resp: 93349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.1 | 13.2 | 39.6 |

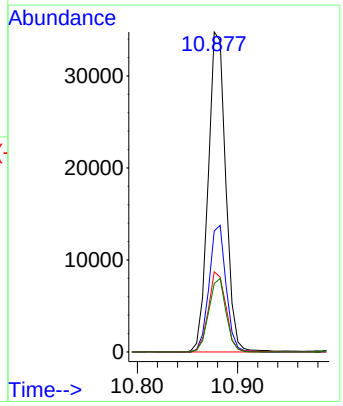



#74
N-amyl acetate
Concen: 19.05 ug/l
RT: 10.877 min Scan# 1664
Delta R.T. -0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

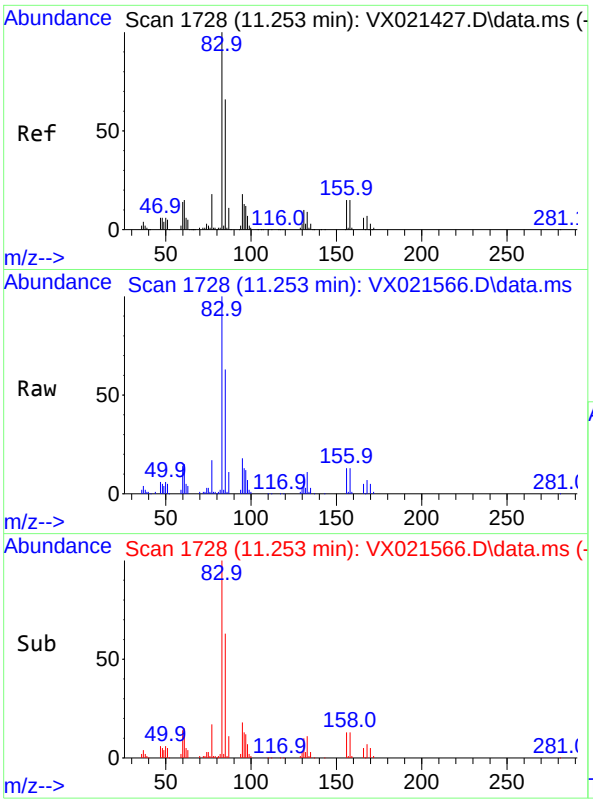
Tgt Ion: 43 Resp: 42517

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 38.2 | 39.0 | 58.6# |
| 55 | 25.1 | 21.5 | 32.3 |
| 61 | 22.5 | 22.1 | 33.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

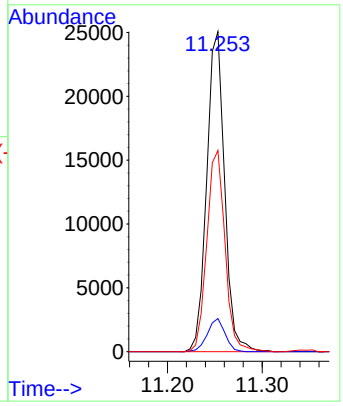
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

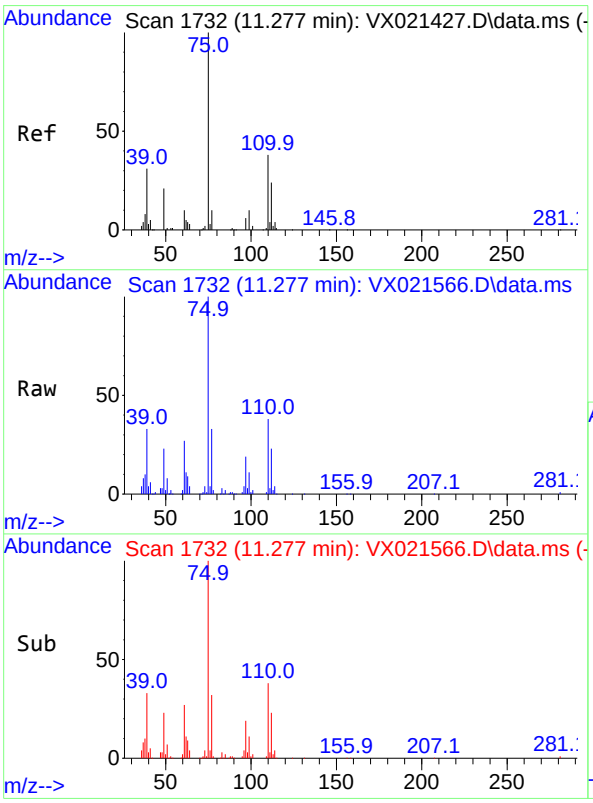



#75
1,1,2,2-Tetrachloroethane
Concen: 20.13 ug/l
RT: 11.253 min Scan# 1728
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 83 Resp: 32807

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.2 | 5.1 | 15.2 |
| 85 | 64.1 | 31.8 | 95.4 |

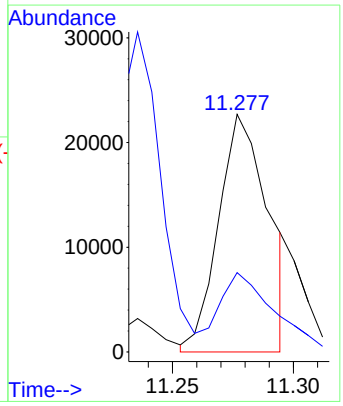



#76
1,2,3-Trichloropropane
Concen: 21.13 ug/l m
RT: 11.277 min Scan# 1732
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

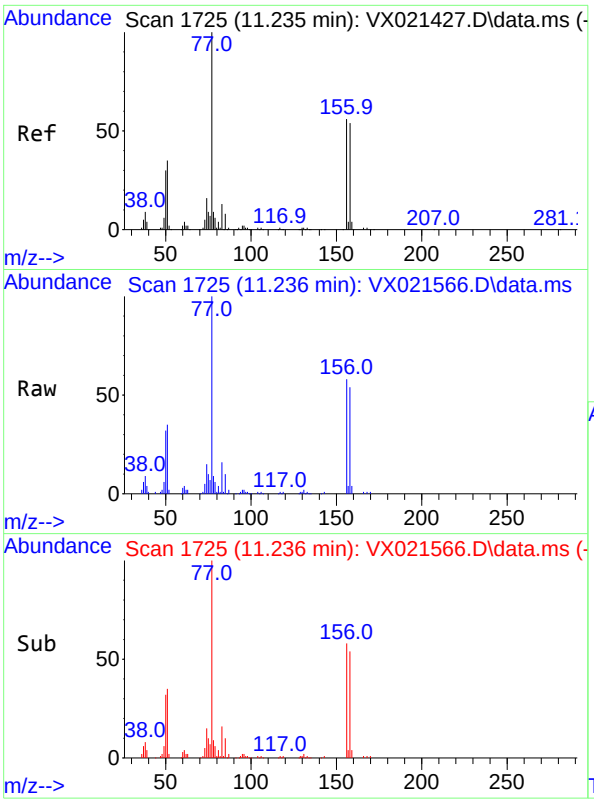
Tgt Ion: 75 Resp: 32295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 37.6 | 19.1 | 57.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

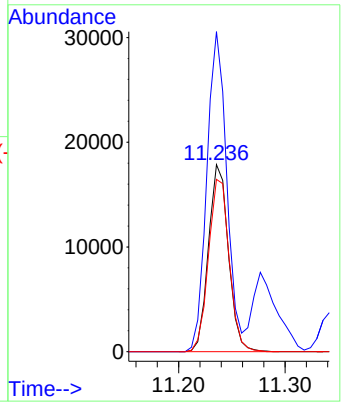
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

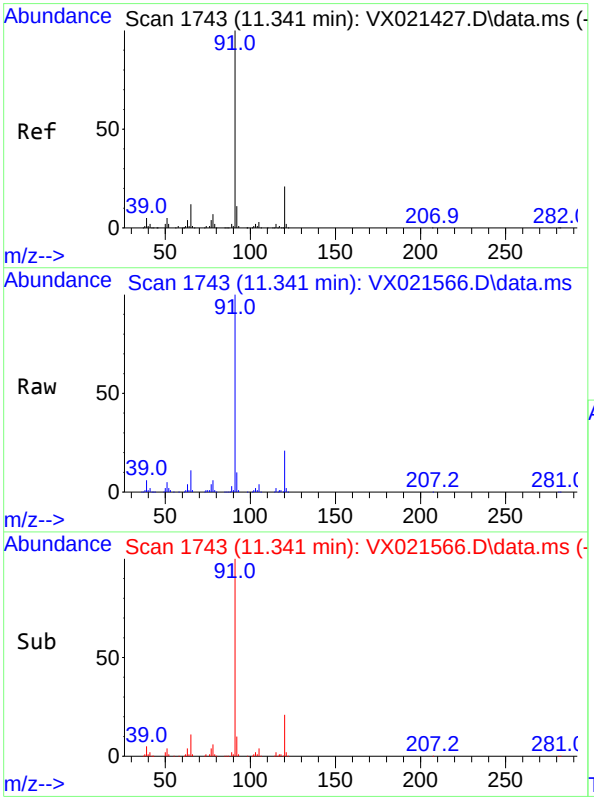



#77
Bromobenzene
Concen: 20.32 ug/l
RT: 11.236 min Scan# 1725
Delta R.T. 0.001 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:156 Resp: 23230

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 170.2 | 82.8 | 248.6 |
| 158 | 95.7 | 49.1 | 147.4 |

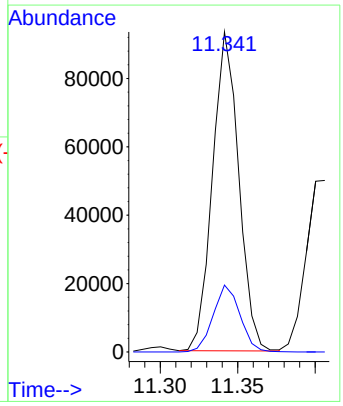



#78
n-propylbenzene
Concen: 20.14 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

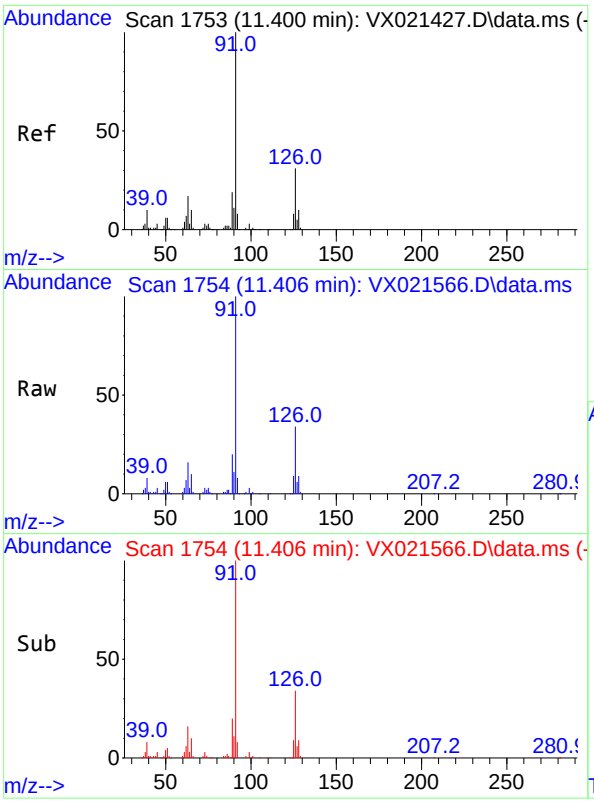
Tgt Ion: 91 Resp: 109704

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 21.5 | 11.5 | 34.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

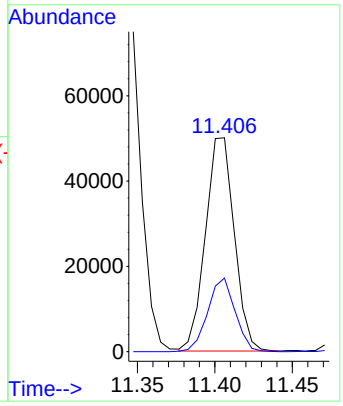
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

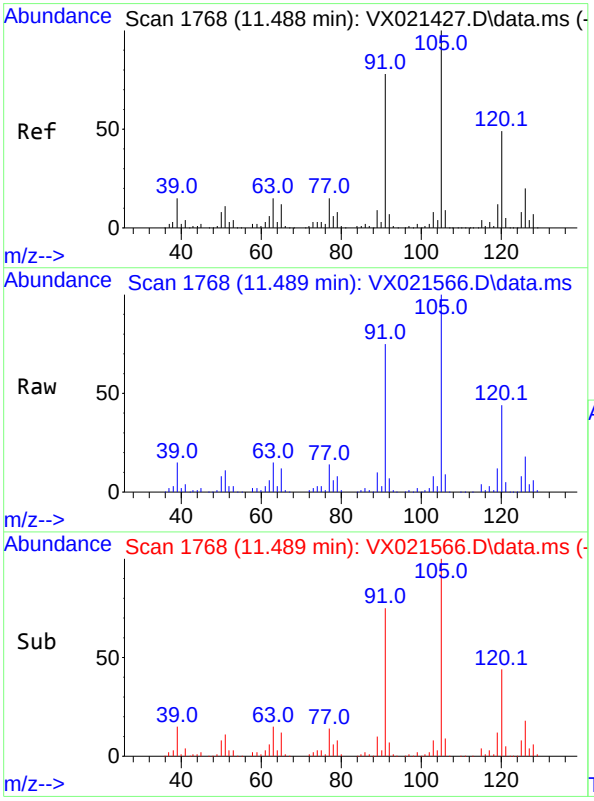



#79
2-Chlorotoluene
Concen: 19.62 ug/l
RT: 11.406 min Scan# 1754
Delta R.T. 0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 91 Resp: 64829

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.7 | 16.6 | 49.8 |

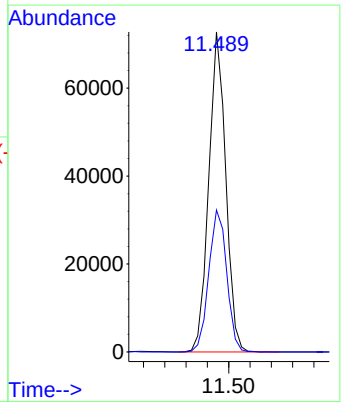



#80
1,3,5-Trimethylbenzene
Concen: 20.41 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.001 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

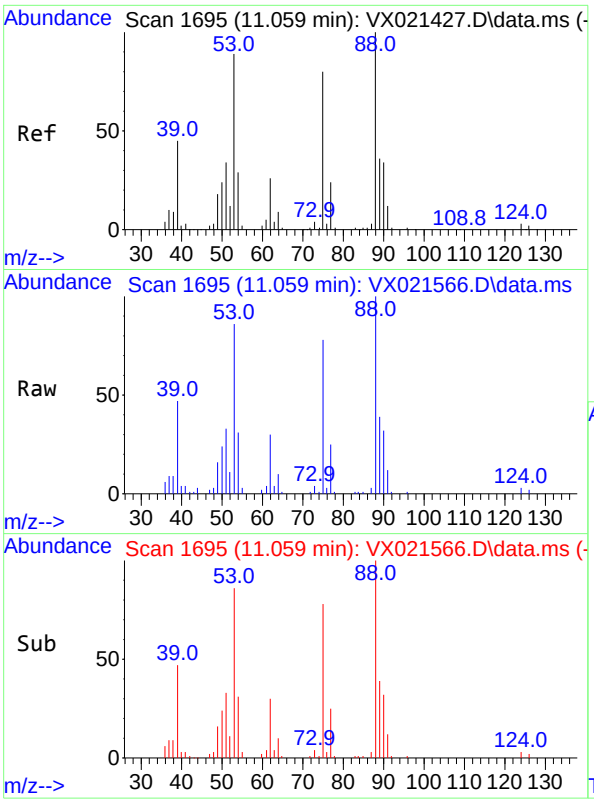
Tgt Ion:105 Resp: 80414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 46.9 | 23.8 | 71.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

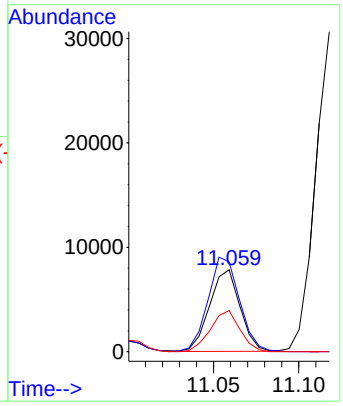
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

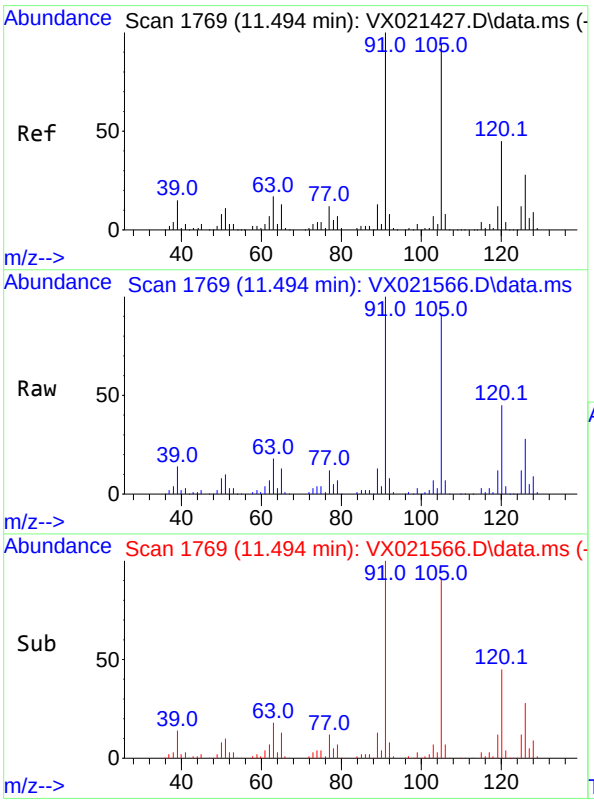



#81
trans-1,4-Dichloro-2-butene
Concen: 19.39 ug/l
RT: 11.059 min Scan# 1695
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 75 Resp: 9727

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 120.2 | 74.5 | 111.7# |
| 89 | 48.9 | 37.9 | 56.9 |

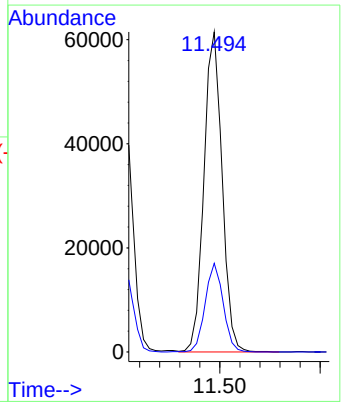



#82
4-Chlorotoluene
Concen: 19.79 ug/l
RT: 11.494 min Scan# 1769
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

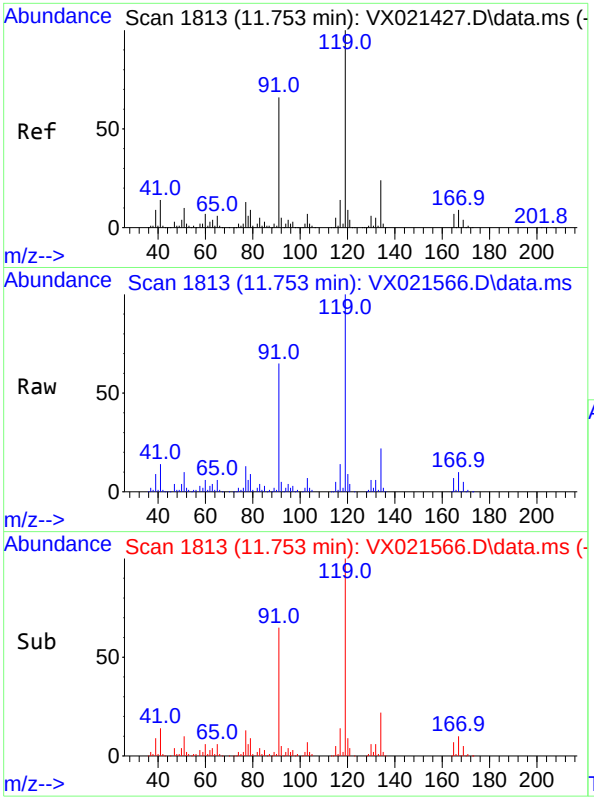
Tgt Ion: 91 Resp: 77619

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 27.4 | 14.9 | 44.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

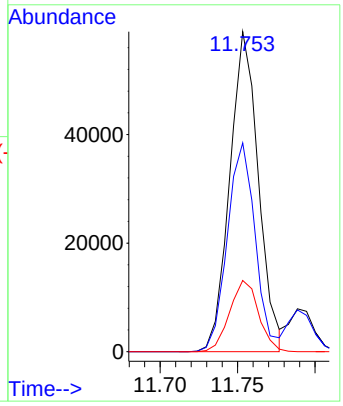
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

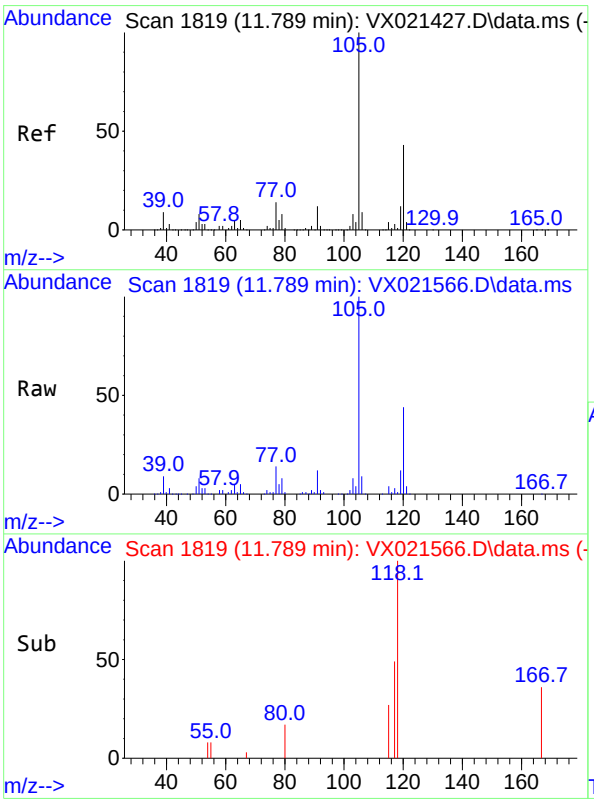



#83
tert-Butylbenzene
Concen: 19.77 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:119 Resp: 75831

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 63.8 | 27.9 | 83.7 |
| 134 | 22.5 | 11.3 | 33.9 |

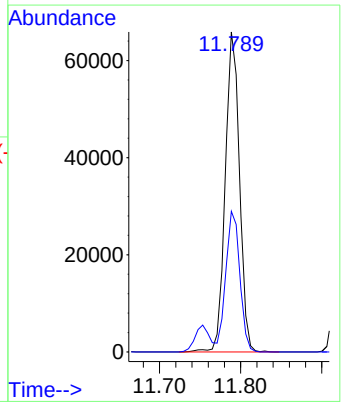



#84
1,2,4-Trimethylbenzene
Concen: 20.23 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

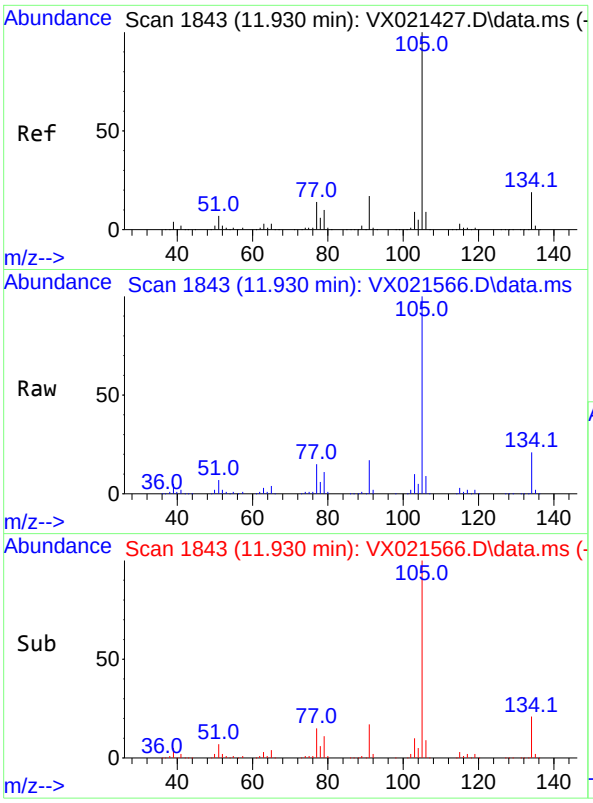
Tgt Ion:105 Resp: 80349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.1 | 22.4 | 67.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

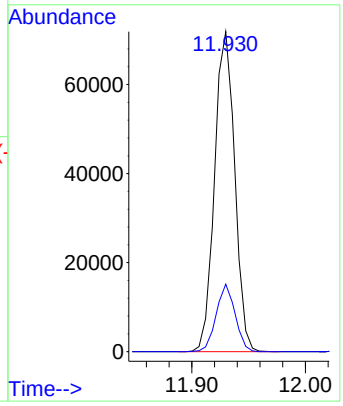
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

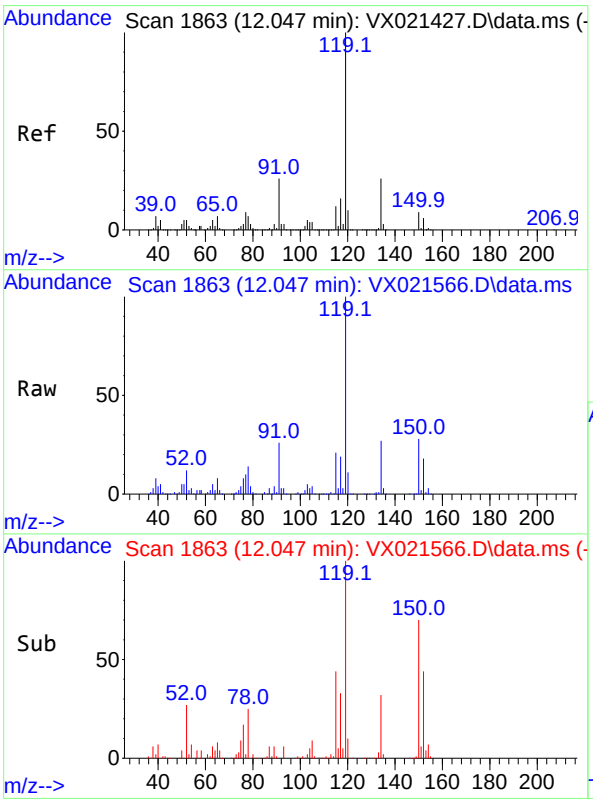



#85
sec-Butylbenzene
Concen: 20.01 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:105 Resp: 88533

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 19.8 | 10.0 | 29.8 |

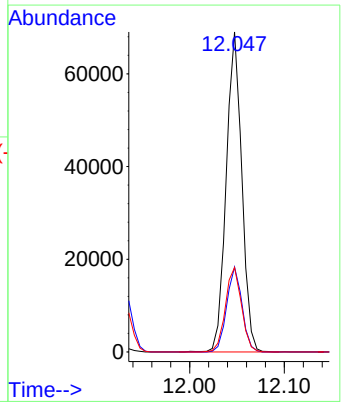



#86
p-Isopropyltoluene
Concen: 19.62 ug/l
RT: 12.047 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

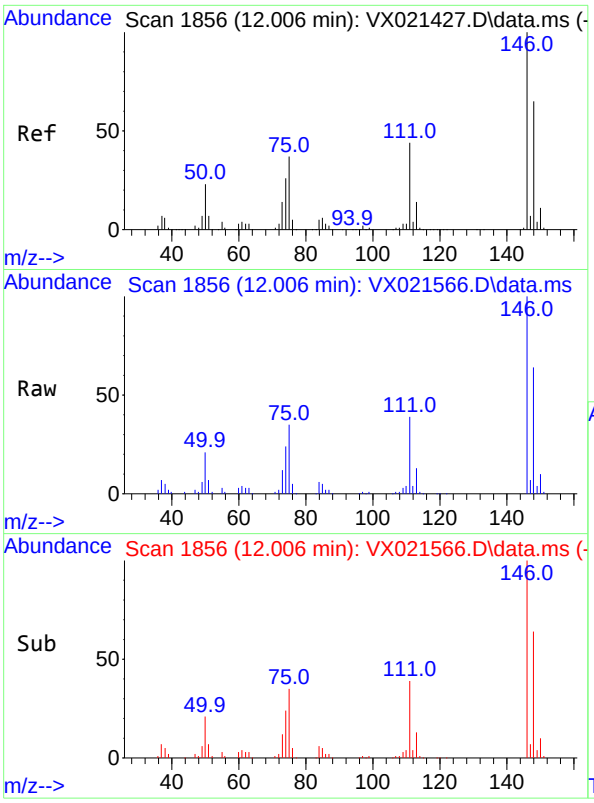
Tgt Ion:119 Resp: 79017

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.0 | 12.9 | 38.7 |
| 91 | 27.2 | 11.7 | 35.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

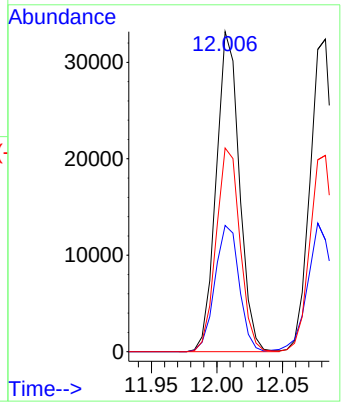
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

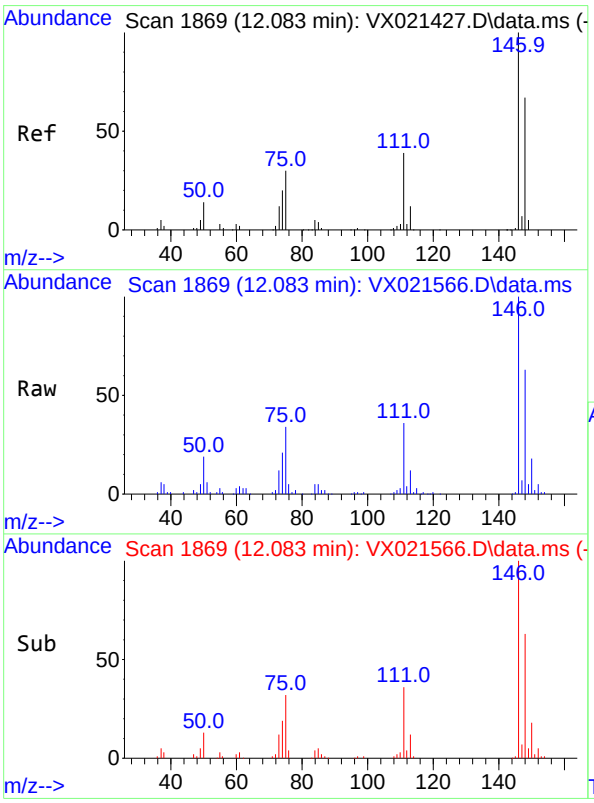



#87
1,3-Dichlorobenzene
Concen: 19.80 ug/l
RT: 12.006 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:146 Resp: 40769

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.3 | 20.2 | 60.5 |
| 148 | 65.6 | 31.9 | 95.7 |

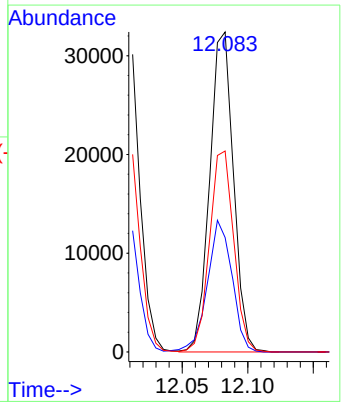



#88
1,4-Dichlorobenzene
Concen: 19.21 ug/l
RT: 12.083 min Scan# 1869
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

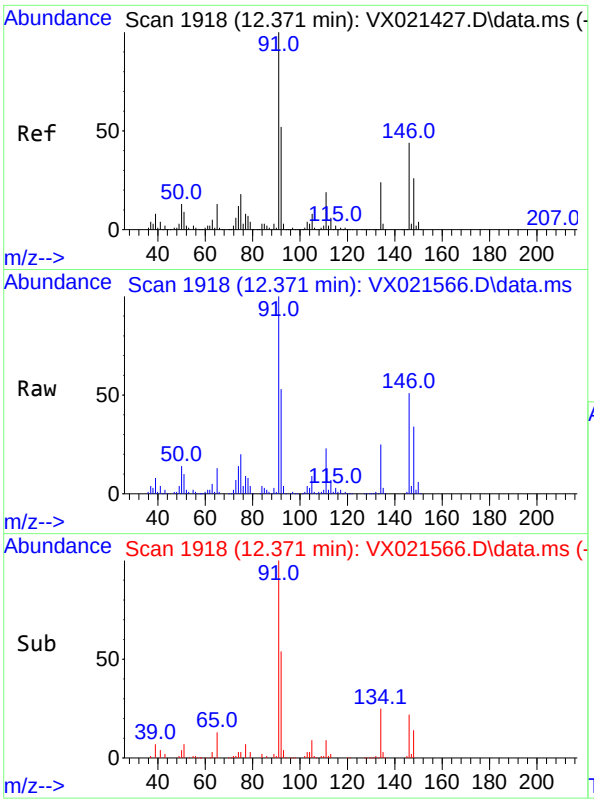
Tgt Ion:146 Resp: 40922

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.7 | 19.6 | 58.8 |
| 148 | 64.1 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

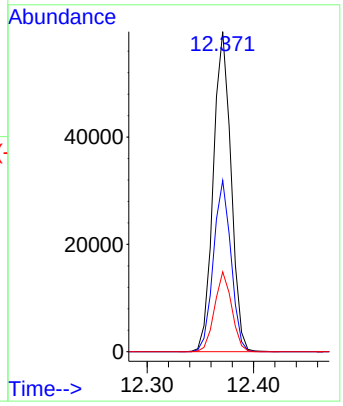
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

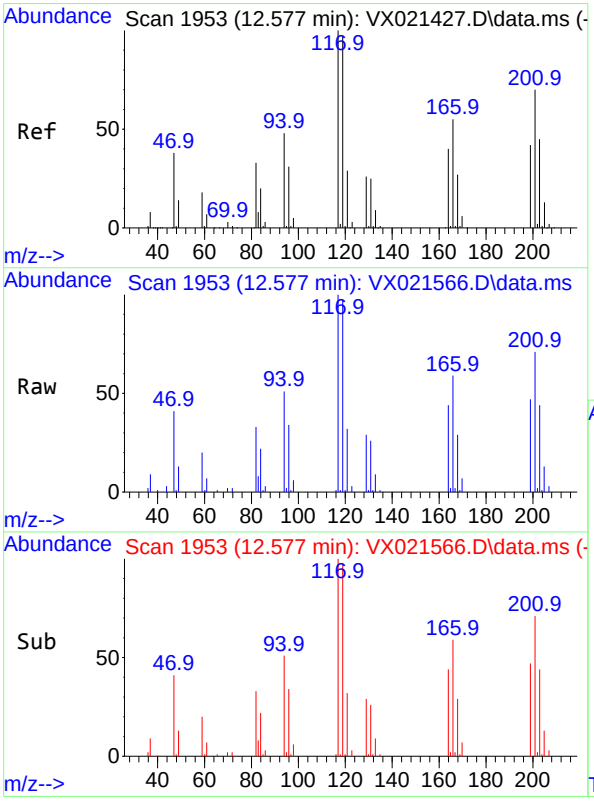



#89
n-Butylbenzene
Concen: 18.62 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion: 91 Resp: 68727

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 52.9 | 27.4 | 82.0 |
| 134 | 24.1 | 13.2 | 39.5 |

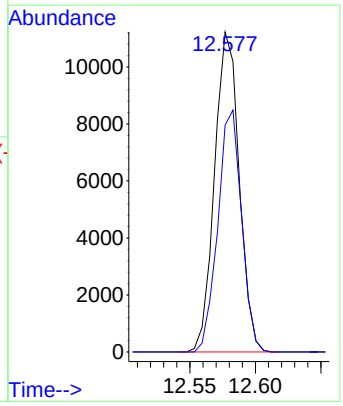



#90
Hexachloroethane
Concen: 20.11 ug/l
RT: 12.577 min Scan# 1953
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

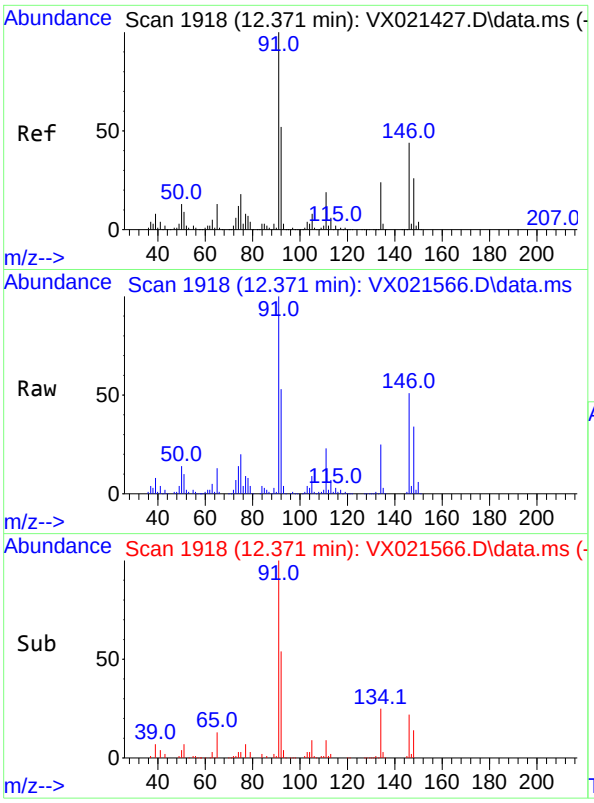
Tgt Ion:117 Resp: 14623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 73.2 | 40.4 | 121.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

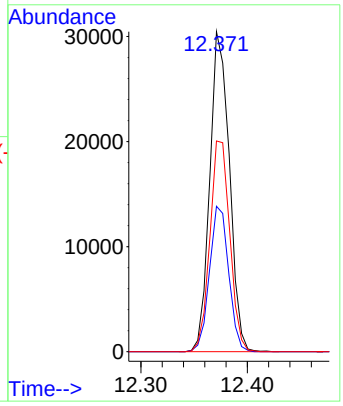
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

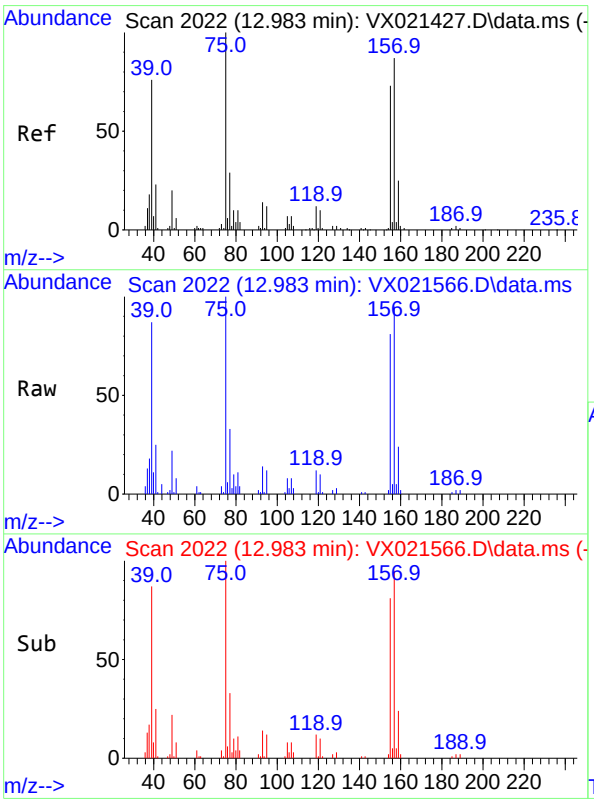



#91
1,2-Dichlorobenzene
Concen: 19.41 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:146 Resp: 38859

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.6 | 20.8 | 62.2 |
| 148 | 67.0 | 31.9 | 95.5 |

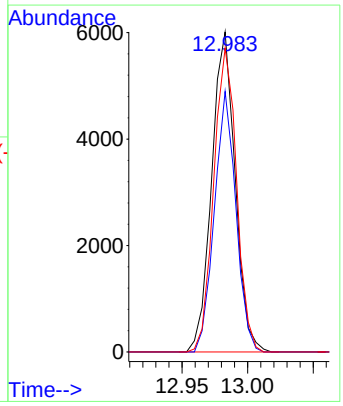



#92
1,2-Dibromo-3-Chloropropane
Concen: 19.46 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

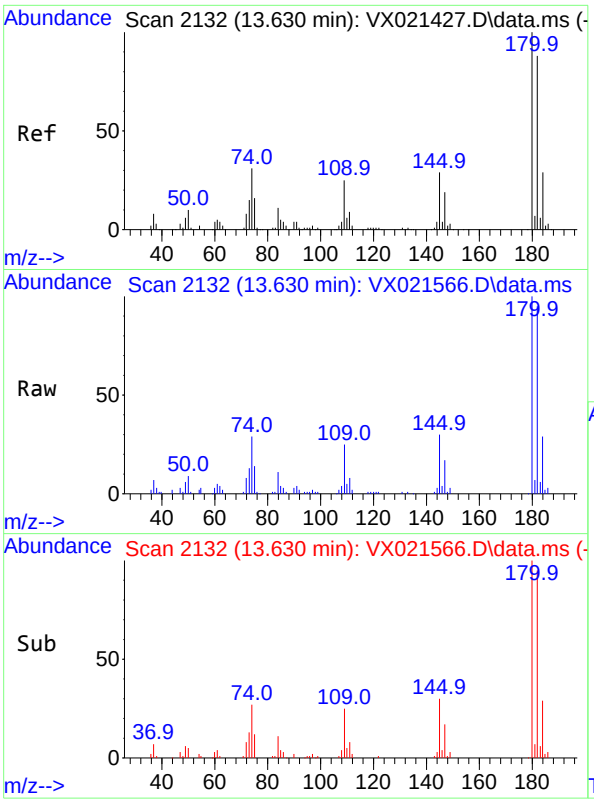
Tgt Ion: 75 Resp: 7477

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 74.5 | 45.3 | 135.9 |
| 157 | 92.2 | 57.7 | 173.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

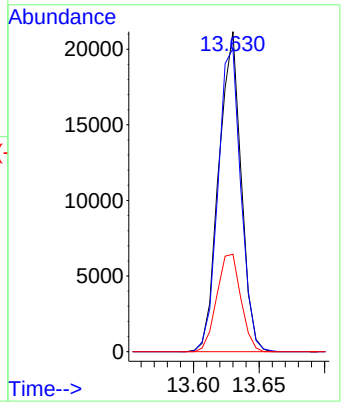
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

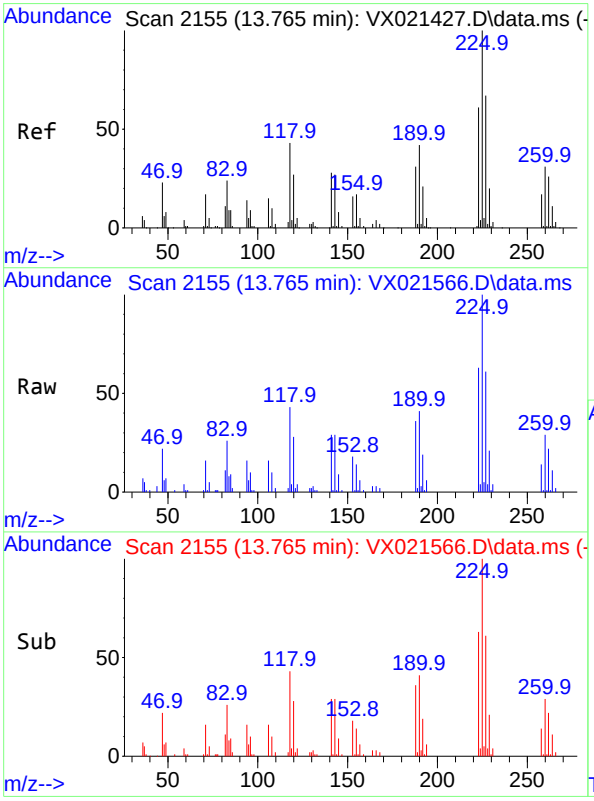



#93
1,2,4-Trichlorobenzene
Concen: 19.01 ug/l
RT: 13.630 min Scan# 2132
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:180 Resp: 24944

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.3 | 47.7 | 143.1 |
| 145 | 33.0 | 15.0 | 45.0 |

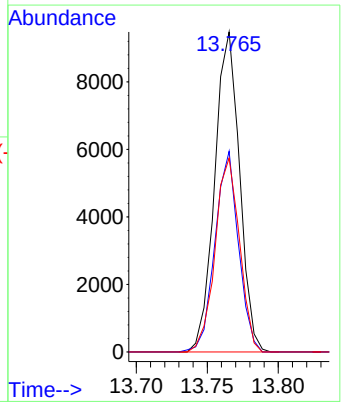



#94
Hexachlorobutadiene
Concen: 19.46 ug/l
RT: 13.765 min Scan# 2155
Delta R.T. 0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

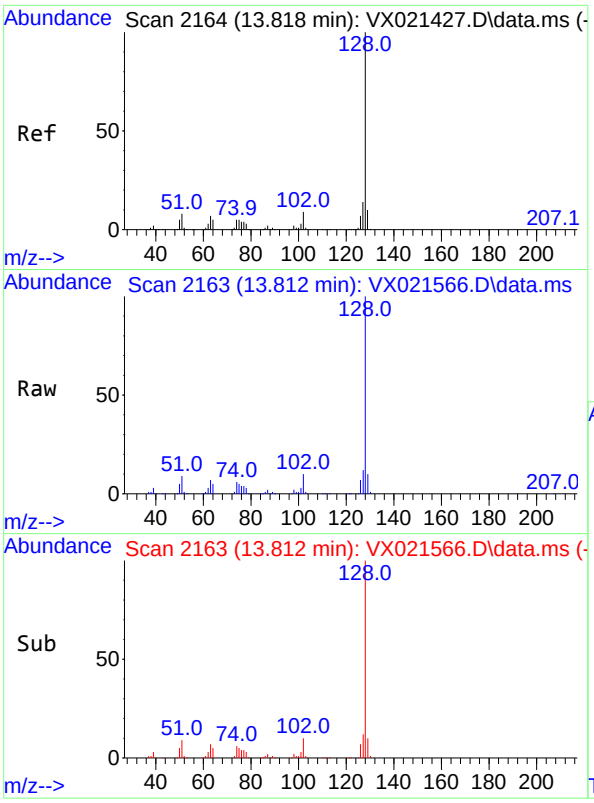
Tgt Ion:225 Resp: 11525

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 59.2 | 31.1 | 93.2 |
| 227 | 59.6 | 31.6 | 95.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
VX0329WBS01

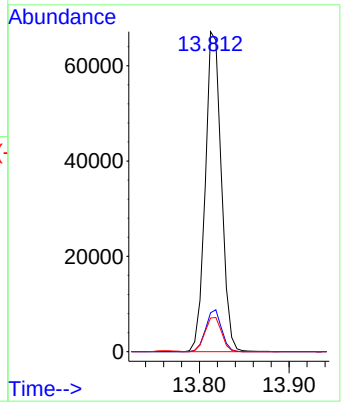
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:41:34 AM

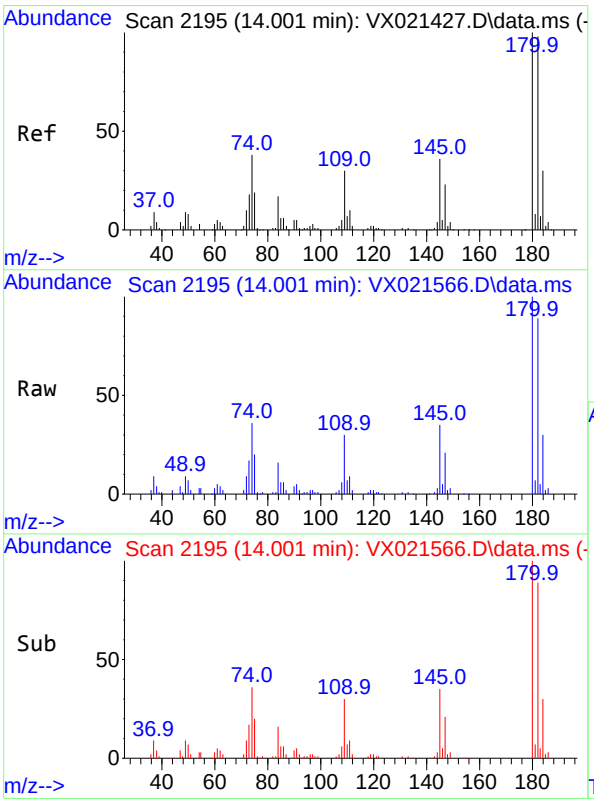



#95
Naphthalene
Concen: 19.49 ug/l
RT: 13.812 min Scan# 2163
Delta R.T. -0.006 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:128 Resp: 83384

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.0 | 10.3 | 15.5 |
| 129 | 11.1 | 8.8 | 13.2 |

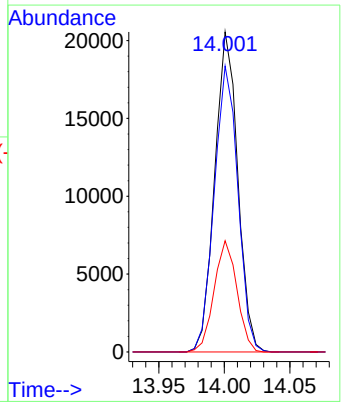



#96
1,2,3-Trichlorobenzene
Concen: 19.12 ug/l
RT: 14.001 min Scan# 2195
Delta R.T. -0.000 min
Lab File: VX021566.D
Acq: 29 Mar 2021 10:59

Tgt Ion:180 Resp: 25072

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 91.7 | 47.6 | 142.9 |
| 145 | 34.6 | 16.1 | 48.3 |



Raw Data: **VX021589.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-1MS | SDG No.: | M1785 |
| Lab Sample ID: | M1785-11MS | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021589.D | 10 | | 03/29/21 19:57 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 450 | | 2.30 | 10.0 | ug/L |
| 74-87-3 | Chloromethane | 460 | | 2.00 | 10.0 | ug/L |
| 75-01-4 | Vinyl Chloride | 480 | | 1.90 | 10.0 | ug/L |
| 74-83-9 | Bromomethane | 520 | | 8.70 | 50.0 | ug/L |
| 75-00-3 | Chloroethane | 470 | | 3.50 | 10.0 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 480 | | 2.50 | 10.0 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 470 | | 2.10 | 10.0 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 460 | | 2.60 | 10.0 | ug/L |
| 67-64-1 | Acetone | 2400 | | 16.1 | 50.0 | ug/L |
| 75-15-0 | Carbon Disulfide | 410 | | 2.50 | 10.0 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 480 | | 2.20 | 10.0 | ug/L |
| 79-20-9 | Methyl Acetate | 530 | | 4.70 | 10.0 | ug/L |
| 75-09-2 | Methylene Chloride | 460 | | 1.80 | 10.0 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 460 | | 1.90 | 10.0 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 480 | | 2.10 | 10.0 | ug/L |
| 110-82-7 | Cyclohexane | 460 | | 13.0 | 50.0 | ug/L |
| 78-93-3 | 2-Butanone | 2500 | | 9.00 | 50.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 500 | | 2.70 | 10.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 470 | | 2.20 | 10.0 | ug/L |
| 74-97-5 | Bromochloromethane | 490 | | 2.60 | 10.0 | ug/L |
| 67-66-3 | Chloroform | 490 | | 2.70 | 10.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 480 | | 2.00 | 10.0 | ug/L |
| 108-87-2 | Methylcyclohexane | 460 | | 1.40 | 10.0 | ug/L |
| 71-43-2 | Benzene | 480 | | 1.80 | 10.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 490 | | 2.50 | 10.0 | ug/L |
| 79-01-6 | Trichloroethene | 480 | | 1.70 | 10.0 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 490 | | 1.70 | 10.0 | ug/L |
| 75-27-4 | Bromodichloromethane | 500 | | 2.00 | 10.0 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 2600 | | 8.70 | 50.0 | ug/L |
| 108-88-3 | Toluene | 500 | | 2.20 | 10.0 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 490 | | 1.80 | 10.0 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 480 | | 1.70 | 10.0 | ug/L |

Raw Data: **VX021589.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-1MS | SDG No.: | M1785 |
| Lab Sample ID: | M1785-11MS | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021589.D | 10 | | 03/29/21 19:57 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 500 | | 2.40 | 10.0 | ug/L |
| 591-78-6 | 2-Hexanone | 2700 | | 9.20 | 50.0 | ug/L |
| 124-48-1 | Dibromochloromethane | 520 | | 1.80 | 10.0 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 500 | | 1.60 | 10.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 500 | | 1.70 | 10.0 | ug/L |
| 108-90-7 | Chlorobenzene | 490 | | 1.70 | 10.0 | ug/L |
| 100-41-4 | Ethyl Benzene | 500 | | 1.80 | 10.0 | ug/L |
| 1330-20-7 | Total Xylenes | 1500 | | 5.10 | 30.0 | ug/L |
| 100-42-5 | Styrene | 500 | | 1.60 | 10.0 | ug/L |
| 75-25-2 | Bromoform | 500 | | 1.90 | 10.0 | ug/L |
| 98-82-8 | Isopropylbenzene | 730 | | 2.30 | 10.0 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 510 | | 2.90 | 10.0 | ug/L |
| 103-65-1 | n-propylbenzene | 880 | | 2.40 | 10.0 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 510 | | 2.50 | 10.0 | ug/L |
| 98-06-6 | tert-Butylbenzene | 540 | | 2.60 | 10.0 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1100 | | 2.00 | 10.0 | ug/L |
| 135-98-8 | sec-Butylbenzene | 610 | | 2.30 | 10.0 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 500 | | 1.90 | 10.0 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 490 | | 2.00 | 10.0 | ug/L |
| 104-51-8 | n-Butylbenzene | 550 | | 1.90 | 10.0 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 510 | | 1.90 | 10.0 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 490 | | 4.70 | 10.0 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 510 | | 3.00 | 10.0 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 480 | | 3.50 | 10.0 | ug/L |
| 123-91-1 | 1,4-Dioxane | 10100 | | 69.8 | 1000 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 50.9 | | 78 - 117 | 102% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 52.7 | | 75 - 124 | 105% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 53.1 | | 92 - 112 | 106% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 54.4 | | 83 - 123 | 109% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 80900 | 5.629 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 132000 | 6.829 | | | |

Raw Data: **VX021589.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-1MS | SDG No.: | M1785 |
| Lab Sample ID: | M1785-11MS | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021589.D | 10 | | 03/29/21 19:57 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 126000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 60900 | 12.059 | | | |

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

Quantitation Report (QT Reviewed)

Sample Results: **VX021589.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021589.D
Acq On : 29 Mar 2021 19:57
Operator : JC/MD
Sample : M1785-11MS 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 27 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

Quant Time: Mar 30 03:32:18 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 80858 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 132095 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 125590 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 60876 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 68504 | 50.92 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 101.84% | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 49400 | 52.65 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 105.30% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 177446 | 53.07 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 106.14% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 70685 | 54.37 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 108.74% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.181 | 85 | 40430 | 45.49 | ug/l | | 100 |
| 3) Chloromethane | 1.311 | 50 | 47201 | 46.20 | ug/l | | 98 |
| 4) Vinyl Chloride | 1.393 | 62 | 43397 | 47.74 | ug/l | | 99 |
| 5) Bromomethane | 1.623 | 94 | 18878 | 51.60 | ug/l | | 99 |
| 6) Chloroethane | 1.699 | 64 | 27175 | 47.14 | ug/l | | 97 |
| 7) Trichlorofluoromethane | 1.911 | 101 | 71686 | 48.49 | ug/l | | 98 |
| 8) Diethyl Ether | 2.170 | 74 | 24561 | 47.87 | ug/l | | 79 |
| 9) 1,1,2-Trichlorotrifluo... | 2.358 | 101 | 38821 | 46.64 | ug/l | | 97 |
| 10) Methyl Iodide | 2.487 | 142 | 32502 | 50.01 | ug/l | # | 86 |
| 11) Tert butyl alcohol | 3.023 | 59 | 53490 | 240.50 | ug/l | | 96 |
| 12) 1,1-Dichloroethene | 2.352 | 96 | 37088 | 45.51 | ug/l | | 87 |
| 13) Acrolein | 2.276 | 56 | 17034 | 153.52 | ug/l | | 97 |
| 14) Allyl chloride | 2.705 | 41 | 75734 | 45.79 | ug/l | # | 89 |
| 15) Acrylonitrile | 3.117 | 53 | 130888 | 247.62 | ug/l | | 97 |
| 16) Acetone | 2.423 | 43 | 123684 | 243.14 | ug/l | # | 87 |
| 17) Carbon Disulfide | 2.546 | 76 | 93663 | 40.93 | ug/l | | 100 |
| 18) Methyl Acetate | 2.746 | 43 | 77295 | 52.60 | ug/l | | 90 |
| 19) Methyl tert-butyl Ether | 3.170 | 73 | 146288 | 48.07 | ug/l | | 98 |
| 20) Methylene Chloride | 2.834 | 84 | 45493 | 45.83 | ug/l | # | 83 |
| 21) trans-1,2-Dichloroethene | 3.140 | 96 | 40770 | 45.55 | ug/l | | 94 |
| 22) Diisopropyl ether | 3.829 | 45 | 155845 | 48.50 | ug/l | | 92 |
| 23) Vinyl Acetate | 3.782 | 43 | 654282 | 240.71 | ug/l | # | 92 |
| 24) 1,1-Dichloroethane | 3.670 | 63 | 82808 | 47.80 | ug/l | | 97 |
| 25) 2-Butanone | 4.635 | 43 | 189652 | 245.95 | ug/l | | 90 |
| 26) 2,2-Dichloropropane | 4.546 | 77 | 63170 | 42.09 | ug/l | | 96 |
| 27) cis-1,2-Dichloroethene | 4.558 | 96 | 49084 | 47.23 | ug/l | | 93 |
| 28) Bromochloromethane | 4.976 | 49 | 42725 | 49.26 | ug/l | | 87 |
| 29) Tetrahydrofuran | 5.088 | 42 | 122364 | 244.75 | ug/l | # | 85 |
| 30) Chloroform | 5.176 | 83 | 89811 | 49.12 | ug/l | | 100 |
| 31) Cyclohexane | 5.547 | 56 | 67637 | 45.72 | ug/l | | 93 |
| 32) 1,1,1-Trichloroethane | 5.458 | 97 | 77936 | 48.10 | ug/l | | 96 |
| 36) 1,1-Dichloropropene | 5.770 | 75 | 62114 | 47.99 | ug/l | | 95 |
| 37) Ethyl Acetate | 4.794 | 43 | 71146 | 47.54 | ug/l | # | 92 |
| 38) Carbon Tetrachloride | 5.752 | 117 | 69090 | 49.67 | ug/l | | 94 |
| 39) Methylcyclohexane | 7.441 | 83 | 65817 | 45.87 | ug/l | | 95 |
| 40) Benzene | 6.111 | 78 | 178102 | 48.46 | ug/l | | 100 |

Sample Results: **VX021589.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021589.D
Acq On : 29 Mar 2021 19:57
Operator : JC/MD
Sample : M1785-11MS 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 27 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

Quant Time: Mar 30 03:32:18 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 4.999 | 41 | 41358 | 47.65 | ug/l | | 88 |
| 42) 1,2-Dichloroethane | 6.158 | 62 | 78288 | 49.13 | ug/l | | 93 |
| 43) Isopropyl Acetate | 6.411 | 43 | 119166 | 49.04 | ug/l | # | 91 |
| 44) Trichloroethene | 7.188 | 130 | 46472 | 47.91 | ug/l | | 99 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 48778 | 48.99 | ug/l | | 98 |
| 46) Dibromomethane | 7.635 | 93 | 35319 | 48.67 | ug/l | | 93 |
| 47) Bromodichloromethane | 7.876 | 83 | 73402 | 49.70 | ug/l | | 98 |
| 48) Methyl methacrylate | 7.747 | 41 | 64621 | 49.85 | ug/l | # | 82 |
| 49) 1,4-Dioxane | 7.712 | 88 | 23482 | 1011.84 | ug/l | # | 89 |
| 51) 4-Methyl-2-Pentanone | 8.618 | 43 | 389208 | 260.40 | ug/l | | 88 |
| 52) Toluene | 8.765 | 92 | 112689 | 49.64 | ug/l | | 98 |
| 53) t-1,3-Dichloropropene | 9.023 | 75 | 73220 | 49.10 | ug/l | | 100 |
| 54) cis-1,3-Dichloropropene | 8.412 | 75 | 76892 | 48.45 | ug/l | # | 85 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 48371 | 50.48 | ug/l | | 96 |
| 56) Ethyl methacrylate | 9.159 | 69 | 73224 | 45.44 | ug/l | # | 75 |
| 57) 1,3-Dichloropropane | 9.353 | 76 | 82098 | 50.07 | ug/l | | 99 |
| 59) 2-Hexanone | 9.471 | 43 | 298619 | 266.07 | ug/l | | 84 |
| 60) Dibromochloromethane | 9.565 | 129 | 56155 | 52.33 | ug/l | | 99 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 51635 | 50.17 | ug/l | | 98 |
| 64) Tetrachloroethene | 9.318 | 164 | 42221 | 50.19 | ug/l | | 95 |
| 65) Chlorobenzene | 10.118 | 112 | 122567 | 48.58 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 10.206 | 131 | 48792 | 50.47 | ug/l | | 98 |
| 67) Ethyl Benzene | 10.235 | 91 | 227904 | 49.56 | ug/l | | 100 |
| 68) m/p-Xylenes | 10.341 | 106 | 164754 | 100.56 | ug/l | | 92 |
| 69) o-Xylene | 10.683 | 106 | 79627 | 50.18 | ug/l | | 94 |
| 70) Styrene | 10.694 | 104 | 135716 | 49.73 | ug/l | | 94 |
| 71) Bromoform | 10.841 | 173 | 39524 | 50.31 | ug/l | # | 96 |
| 73) Isopropylbenzene | 11.000 | 105 | 312344 | 73.03 | ug/l | | 100 |
| 74) N-amyl acetate | 10.883 | 43 | 105675 | 51.06 | ug/l | # | 89 |
| 75) 1,1,2,2-Tetrachloroethane | 11.253 | 83 | 77128 | 51.03 | ug/l | | 100 |
| 76) 1,2,3-Trichloropropane | 11.277 | 75 | 74481m | 52.56 | ug/l | | |
| 77) Bromobenzene | 11.236 | 156 | 53921 | 50.85 | ug/l | | 96 |
| 78) n-propylbenzene | 11.341 | 91 | 444975 | 88.09 | ug/l | | 98 |
| 79) 2-Chlorotoluene | 11.406 | 91 | 154661 | 50.47 | ug/l | | 98 |
| 80) 1,3,5-Trimethylbenzene | 11.489 | 105 | 187231 | 51.24 | ug/l | | 100 |
| 81) trans-1,4-Dichloro-2-b... | 11.059 | 75 | 23249 | 49.97 | ug/l | # | 83 |
| 82) 4-Chlorotoluene | 11.494 | 91 | 181113 | 49.78 | ug/l | | 97 |
| 83) tert-Butylbenzene | 11.753 | 119 | 190630 | 53.58 | ug/l | | 93 |
| 84) 1,2,4-Trimethylbenzene | 11.789 | 105 | 411854 | 111.80 | ug/l | | 99 |
| 85) sec-Butylbenzene | 11.930 | 105 | 249721 | 60.85 | ug/l | | 96 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 193995 | 51.93 | ug/l | | 96 |
| 87) 1,3-Dichlorobenzene | 12.006 | 146 | 95276 | 49.90 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 12.083 | 146 | 96129 | 48.67 | ug/l | | 98 |
| 89) n-Butylbenzene | 12.371 | 91 | 189224 | 55.29 | ug/l | | 96 |
| 90) Hexachloroethane | 12.577 | 117 | 36484 | 54.11 | ug/l | | 88 |
| 91) 1,2-Dichlorobenzene | 12.377 | 146 | 94819 | 51.08 | ug/l | | 99 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 18624 | 48.94 | ug/l | | 81 |
| 93) 1,2,4-Trichlorobenzene | 13.630 | 180 | 62266 | 51.17 | ug/l | | 96 |
| 94) Hexachlorobutadiene | 13.765 | 225 | 24193 | 44.05 | ug/l | | 97 |
| 95) Naphthalene | 13.818 | 128 | 211826 | 53.38 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 14.001 | 180 | 58650 | 48.22 | ug/l | | 97 |

Sample Results: **VX021589.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021589.D
Acq On : 29 Mar 2021 19:57
Operator : JC/MD
Sample : M1785-11MS 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 27 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

Quant Time: Mar 30 03:32:18 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

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

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

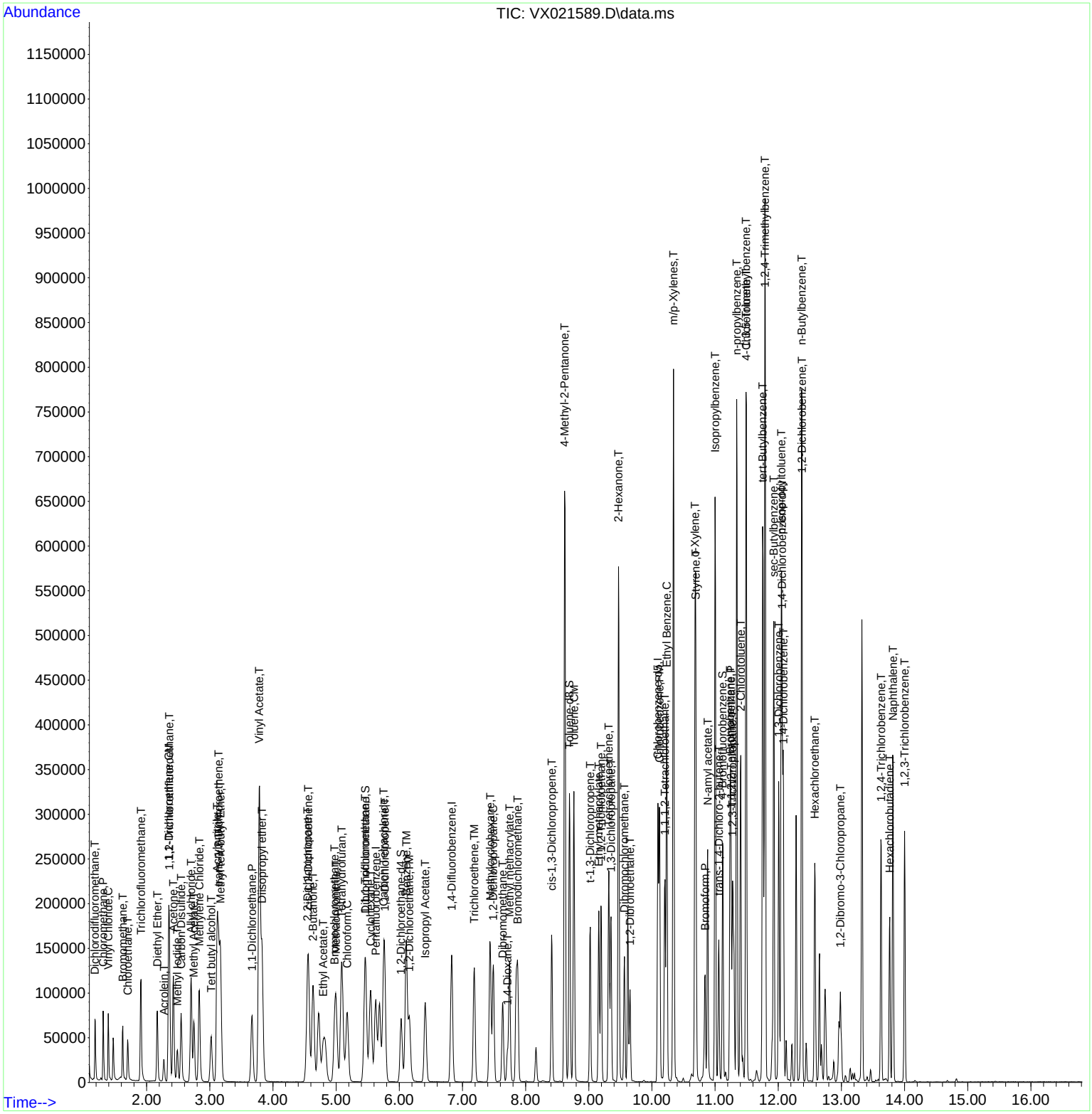
Sample Results: **VX021589.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021589.D
Acq On : 29 Mar 2021 19:57
Operator : JC/MD
Sample : M1785-11MS 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Mar 30 03:32:18 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

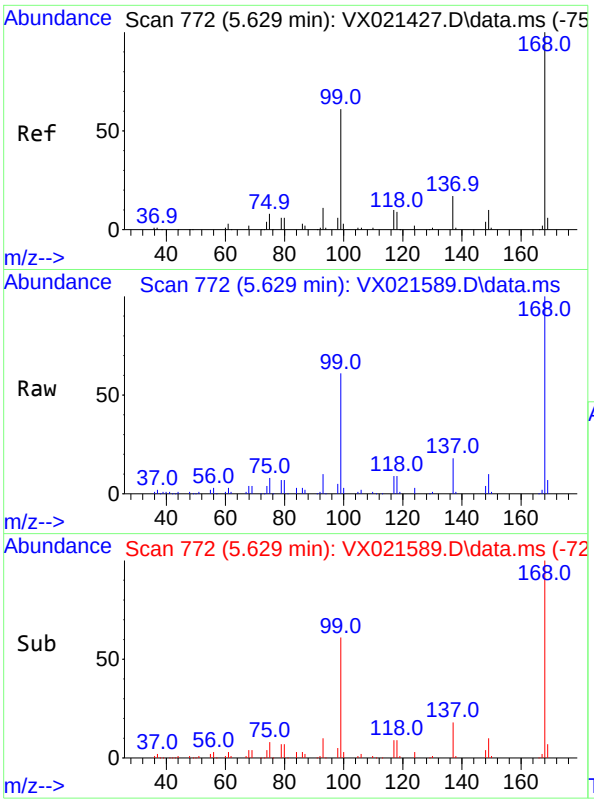
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

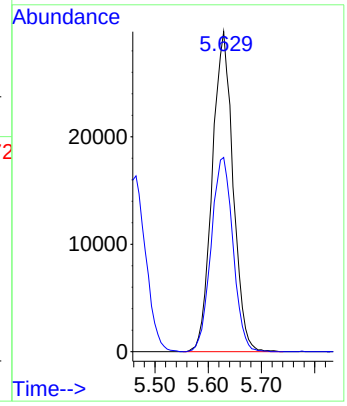
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

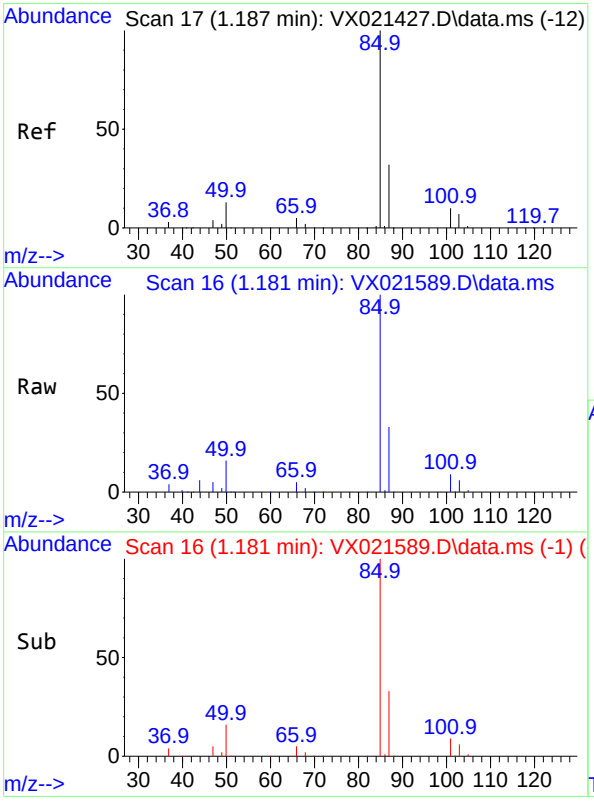



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:168 Resp: 80858

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 60.7 | 45.8 | 68.6 |

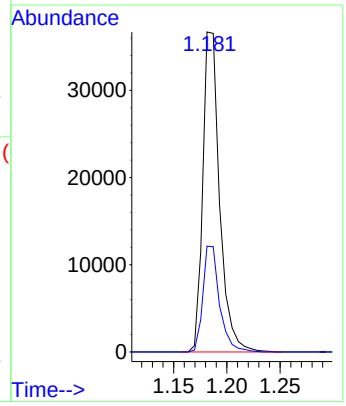



#2
Dichlorodifluoromethane
Concen: 45.49 ug/l
RT: 1.181 min Scan# 16
Delta R.T. -0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

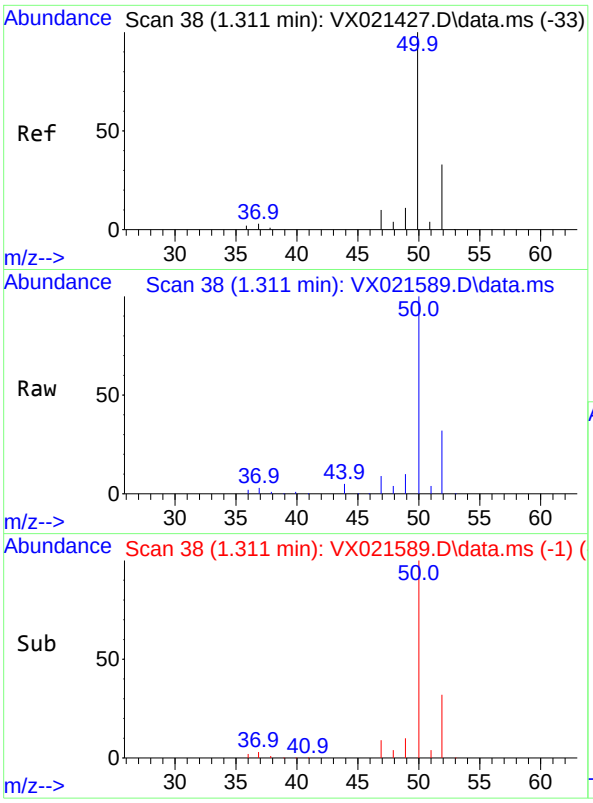
Tgt Ion: 85 Resp: 40430

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.1 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

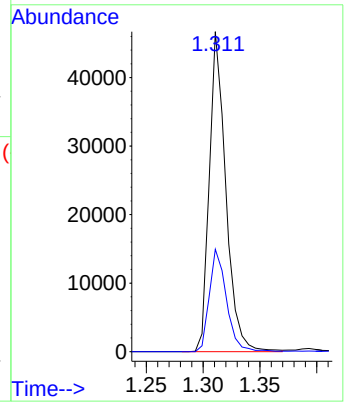
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

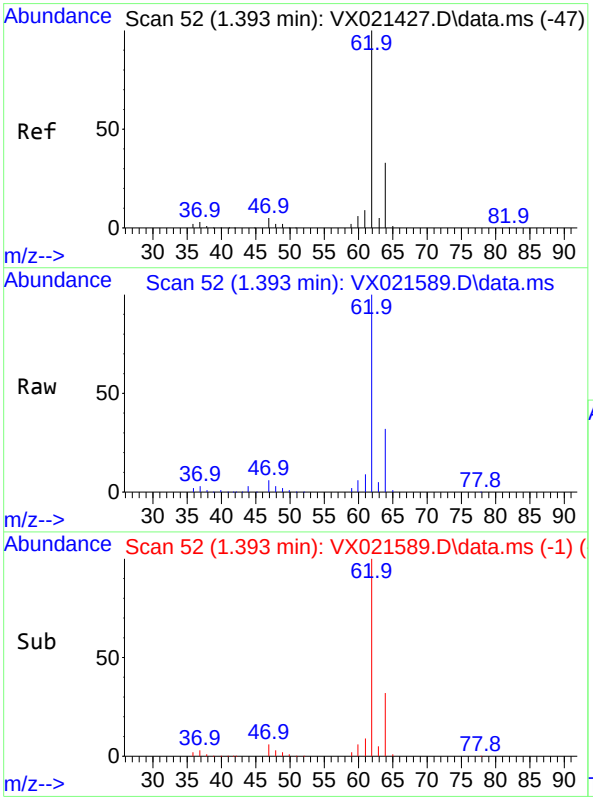



#3
Chloromethane
Concen: 46.20 ug/l
RT: 1.311 min Scan# 38
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 50 Resp: 47201

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.0 | 26.4 | 39.6 |

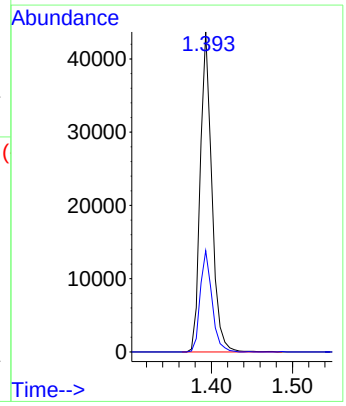



#4
Vinyl Chloride
Concen: 47.74 ug/l
RT: 1.393 min Scan# 52
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

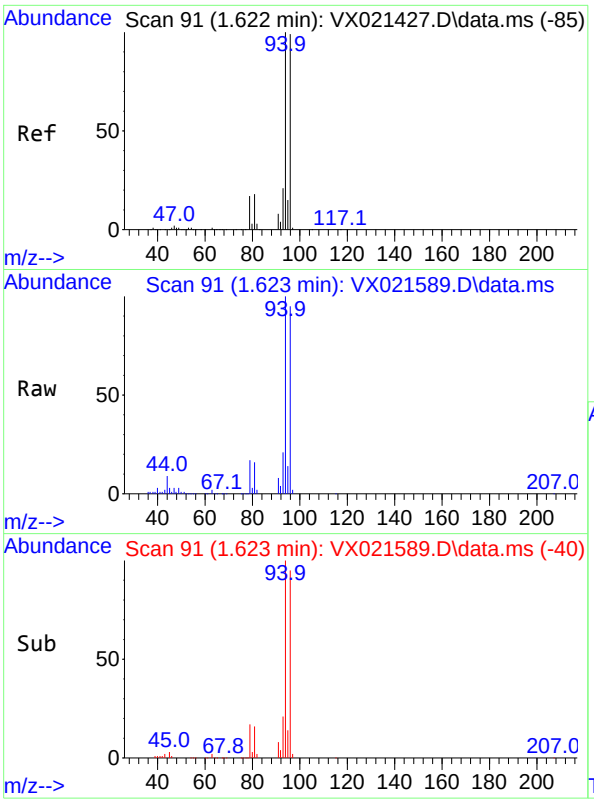
Tgt Ion: 62 Resp: 43397

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.7 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

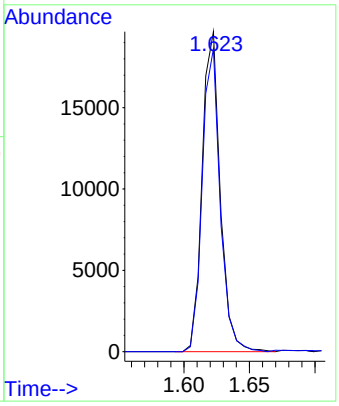
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

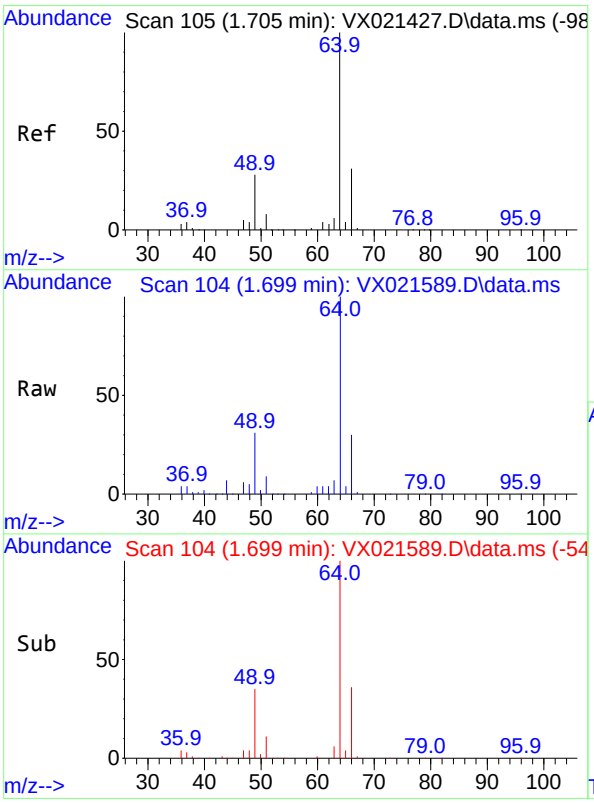



#5
Bromomethane
Concen: 51.60 ug/l
RT: 1.623 min Scan# 91
Delta R.T. 0.001 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 94 Resp: 18878

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 94.7 | 76.4 | 114.6 |

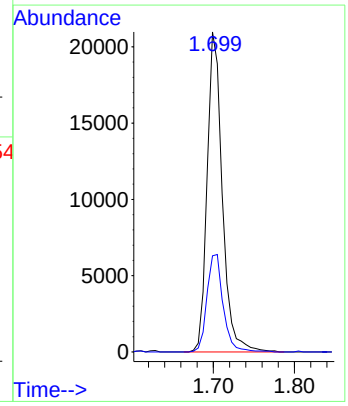



#6
Chloroethane
Concen: 47.14 ug/l
RT: 1.699 min Scan# 104
Delta R.T. -0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

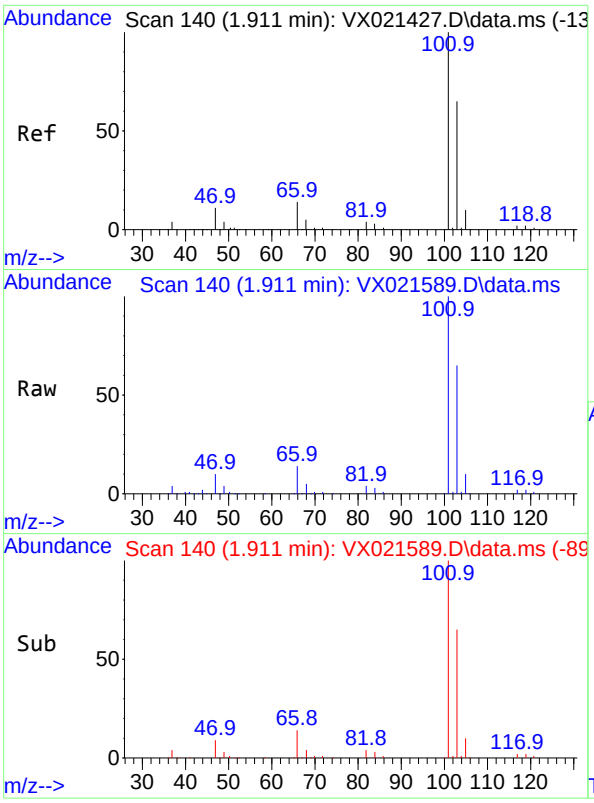
Tgt Ion: 64 Resp: 27175

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 30.1 | 25.4 | 38.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

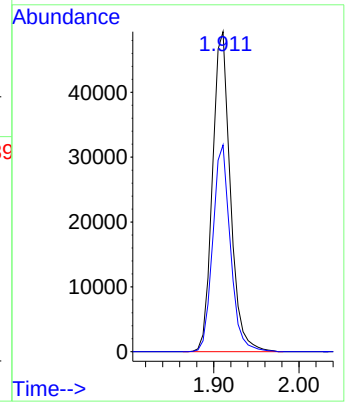
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

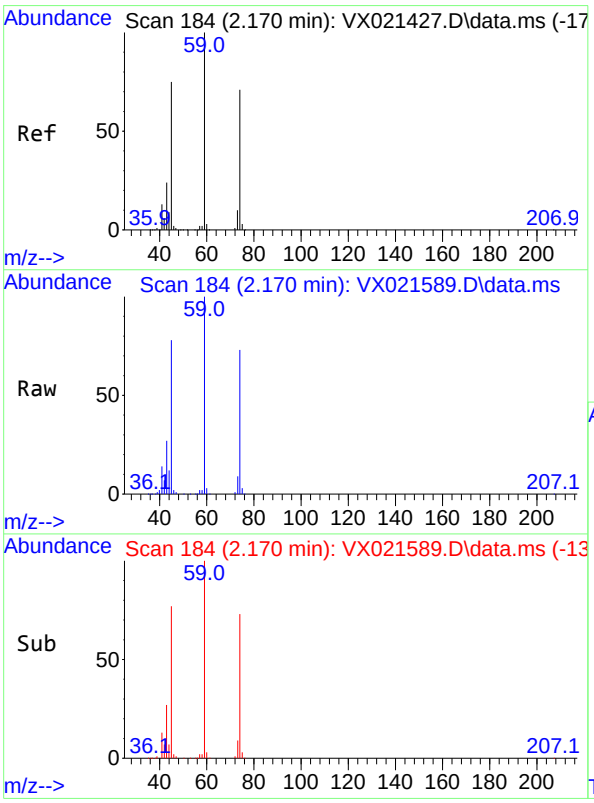



#7
Trichlorofluoromethane
Concen: 48.49 ug/l
RT: 1.911 min Scan# 140
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:101 Resp: 71686

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.6 | 53.2 | 79.8 |

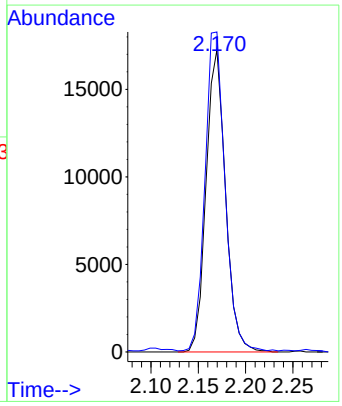



#8
Diethyl Ether
Concen: 47.87 ug/l
RT: 2.170 min Scan# 184
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

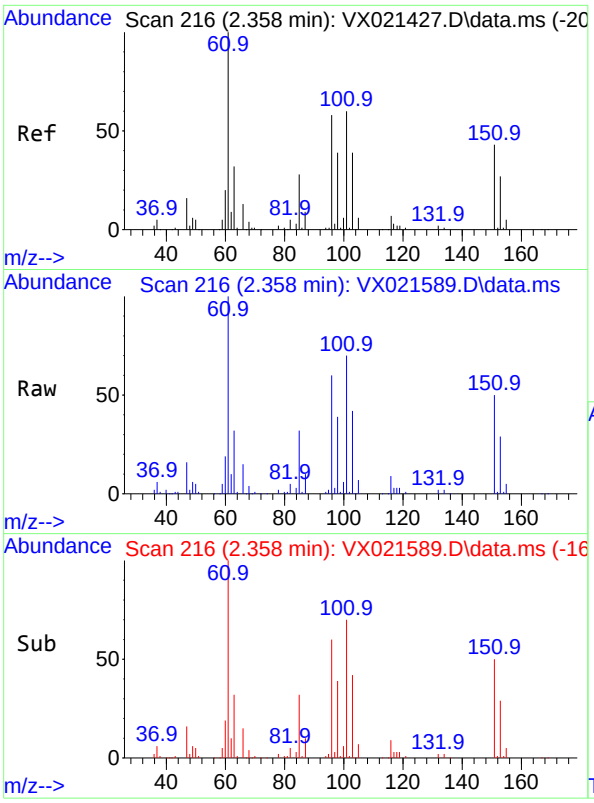
Tgt Ion: 74 Resp: 24561

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 108.5 | 44.5 | 133.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

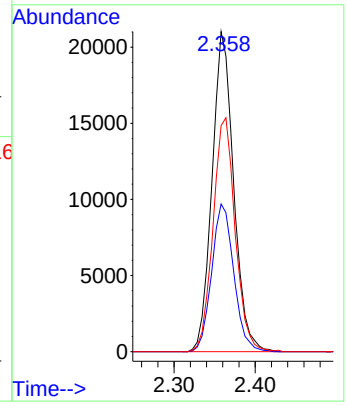
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

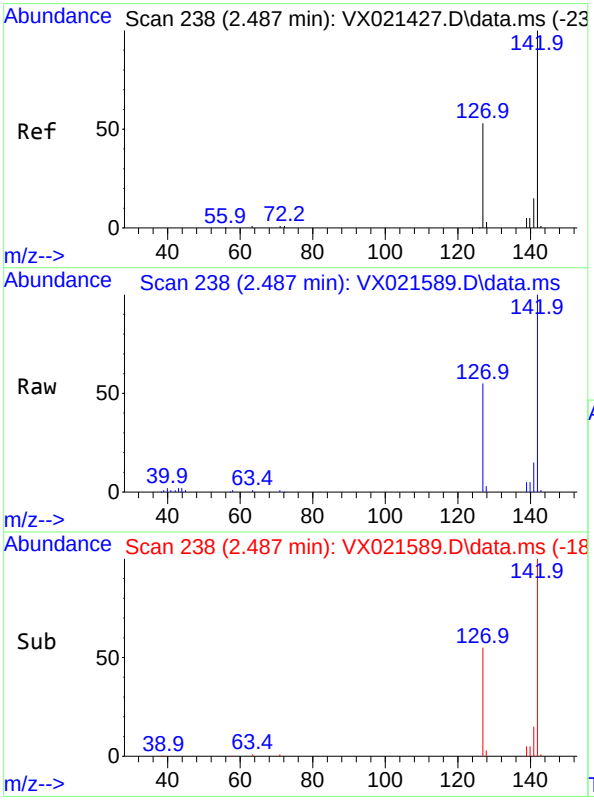



#9
1,1,2-Trichlorotrifluoroethane
Concen: 46.64 ug/l
RT: 2.358 min Scan# 216
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:101 Resp: 38821

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 47.2 | 34.9 | 52.3 |
| 151 | 75.1 | 61.4 | 92.2 |

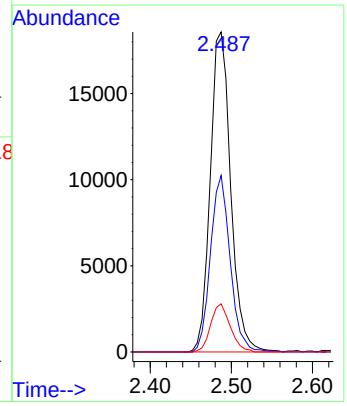



#10
Methyl Iodide
Concen: 50.01 ug/l
RT: 2.487 min Scan# 238
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

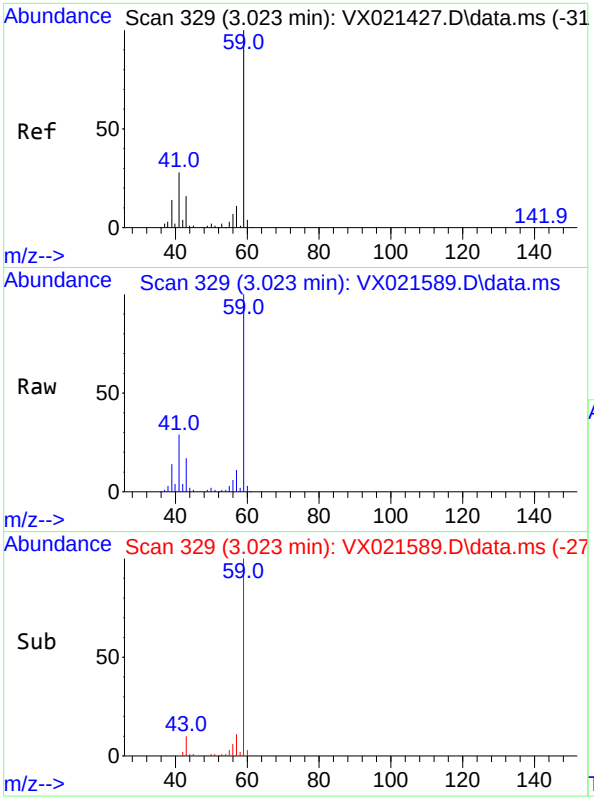
Tgt Ion:142 Resp: 32502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 53.1 | 33.3 | 49.9# |
| 141 | 14.4 | 11.4 | 17.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

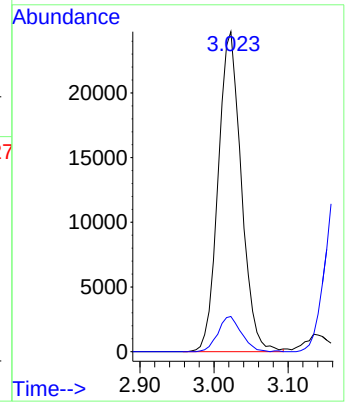
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

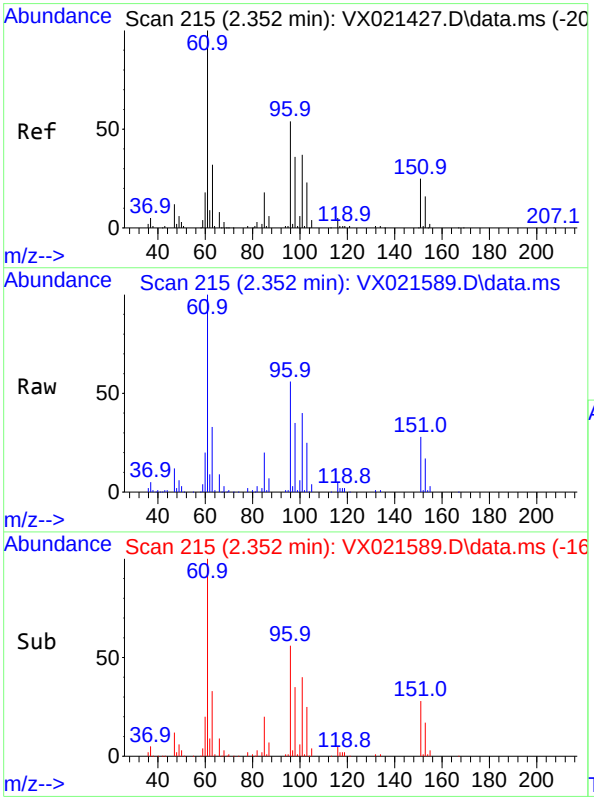



#11
Tert butyl alcohol
Concen: 240.50 ug/l
RT: 3.023 min Scan# 329
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 59 Resp: 53490

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.2 | 7.8 | 11.8 |

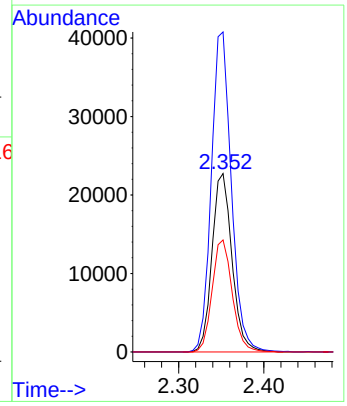



#12
1,1-Dichloroethene
Concen: 45.51 ug/l
RT: 2.352 min Scan# 215
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

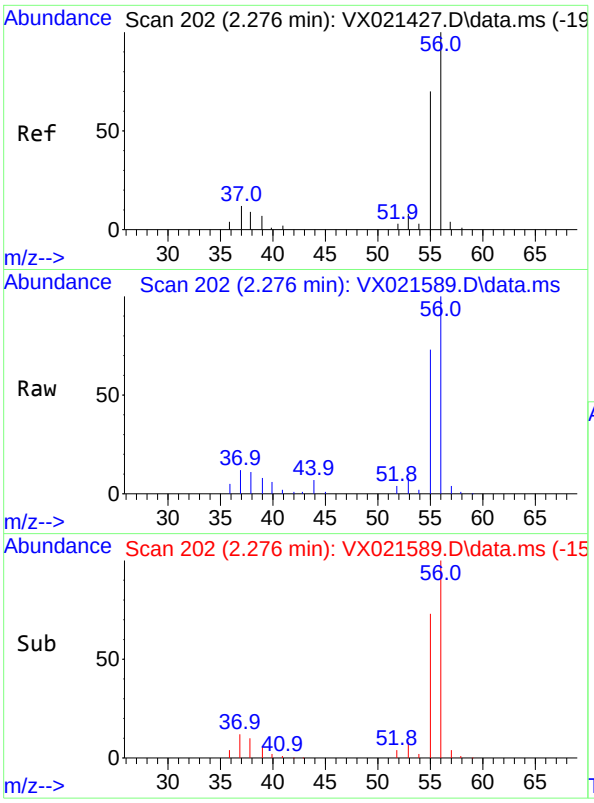
Tgt Ion: 96 Resp: 37088

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 179.3 | 124.6 | 187.0 |
| 98 | 62.8 | 50.6 | 76.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

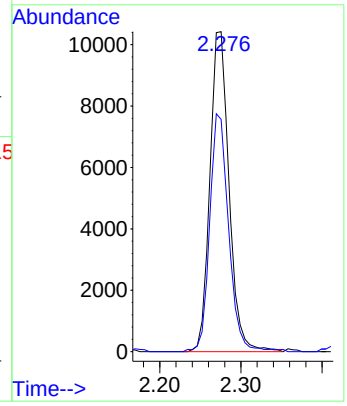
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

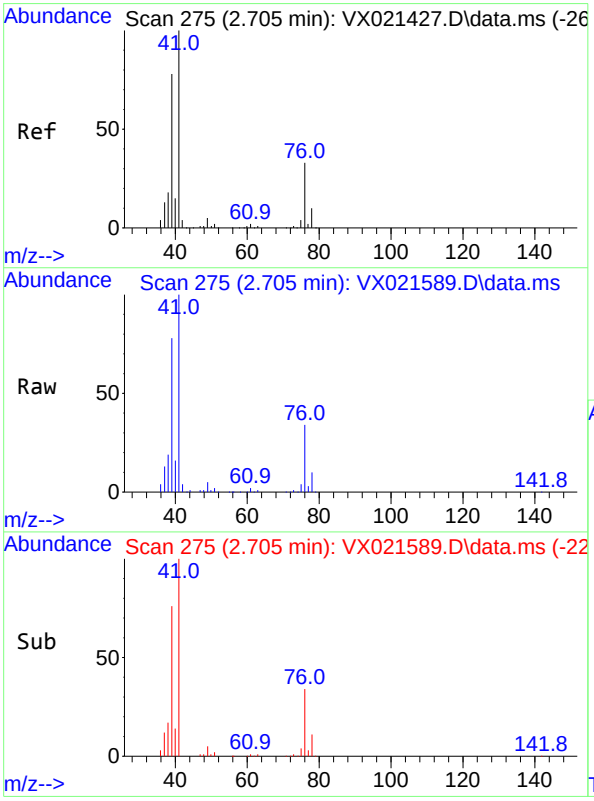



#13
Acrolein
Concen: 153.52 ug/l
RT: 2.276 min Scan# 202
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 56 Resp: 17034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 73.2 | 56.4 | 84.6 |

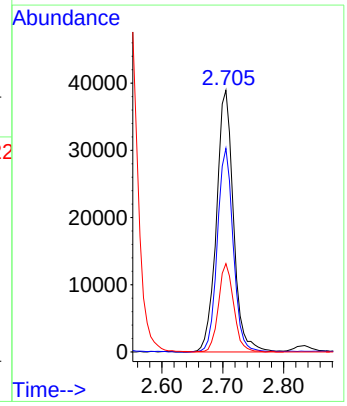



#14
Allyl chloride
Concen: 45.79 ug/l
RT: 2.705 min Scan# 275
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

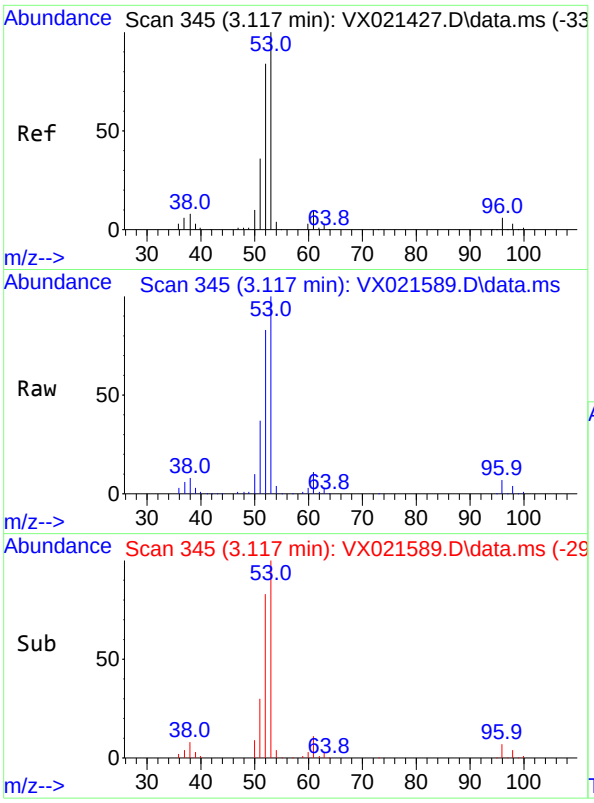
Tgt Ion: 41 Resp: 75734

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 72.4 | 51.6 | 77.4 |
| 76 | 30.2 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

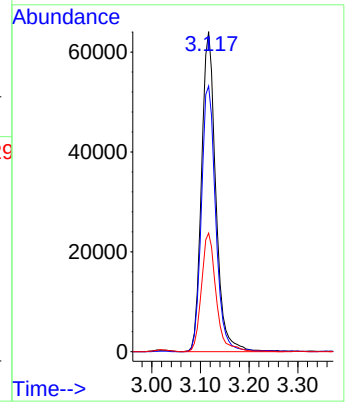
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

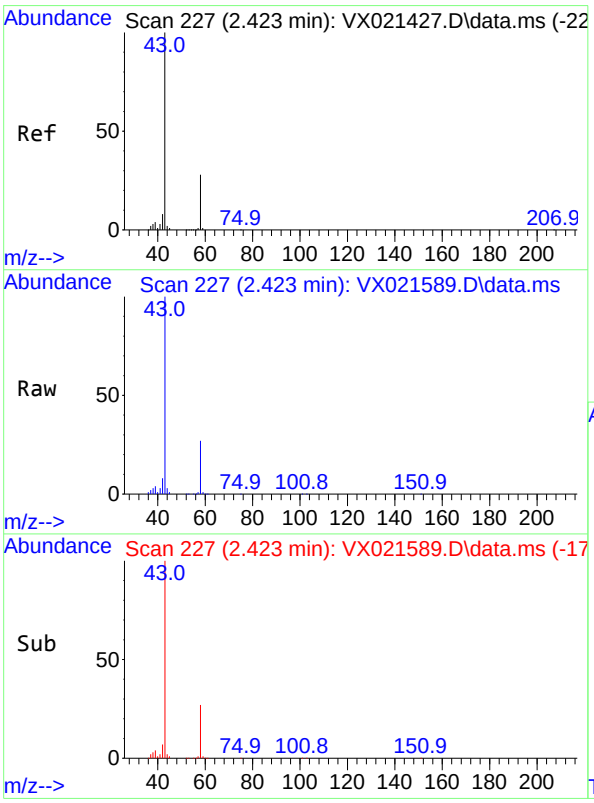



#15
Acrylonitrile
Concen: 247.62 ug/l
RT: 3.117 min Scan# 345
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 53 Resp: 130888

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 83.0 | 65.3 | 97.9 |
| 51 | 38.1 | 28.2 | 42.2 |

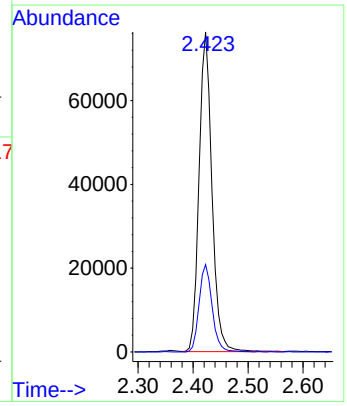



#16
Acetone
Concen: 243.14 ug/l
RT: 2.423 min Scan# 227
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

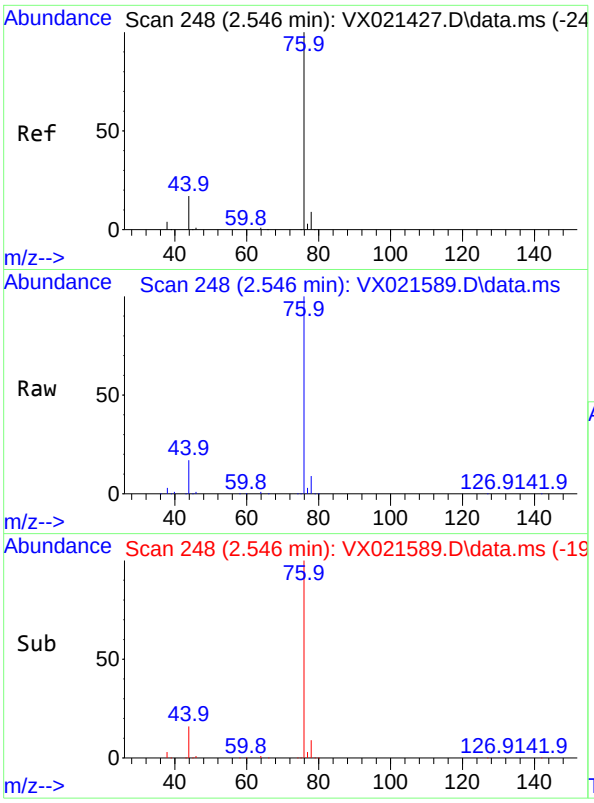
Tgt Ion: 43 Resp: 123684

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 27.3 | 27.8 | 41.8# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

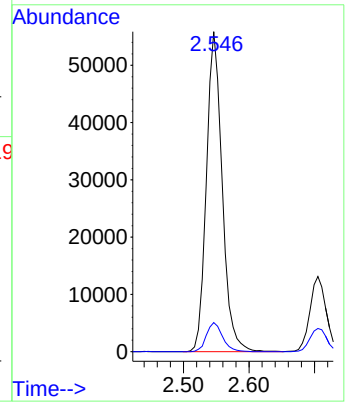
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

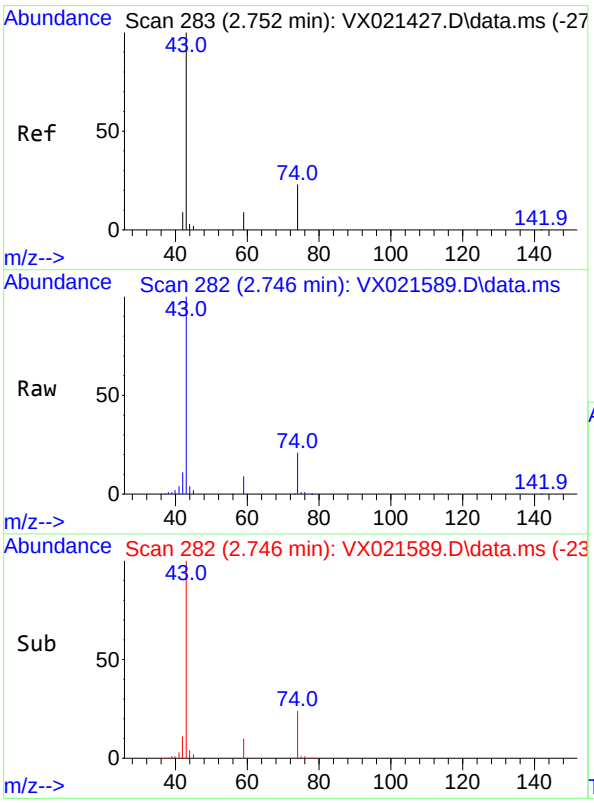



#17
Carbon Disulfide
Concen: 40.93 ug/l
RT: 2.546 min Scan# 248
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 76 Resp: 93663

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 9.1 | 7.2 | 10.8 |

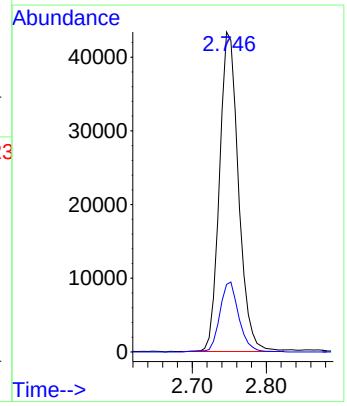



#18
Methyl Acetate
Concen: 52.60 ug/l
RT: 2.746 min Scan# 282
Delta R.T. -0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

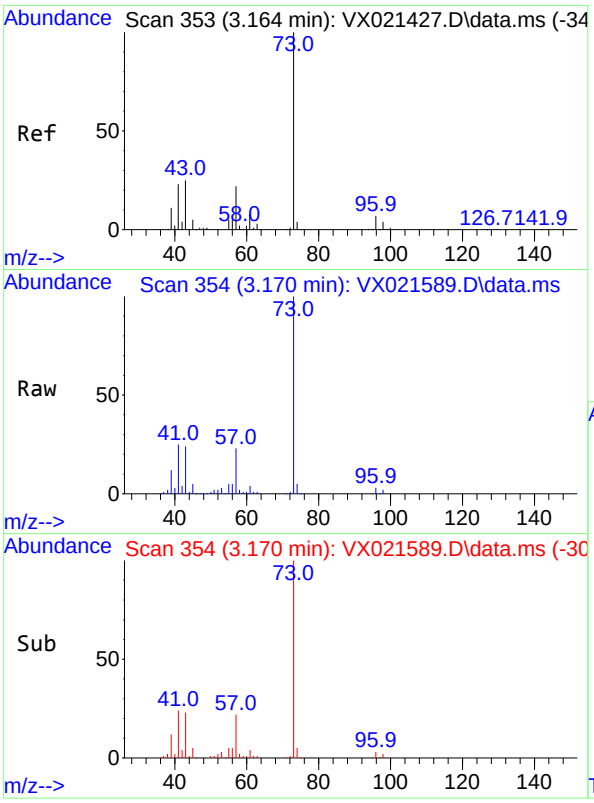
Tgt Ion: 43 Resp: 77295

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.0 | 21.9 | 32.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

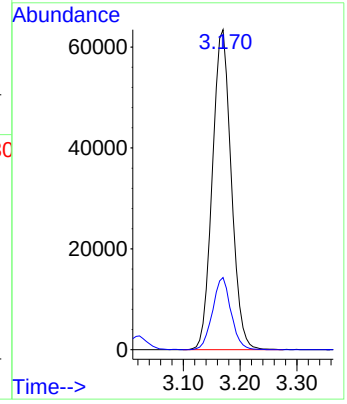
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

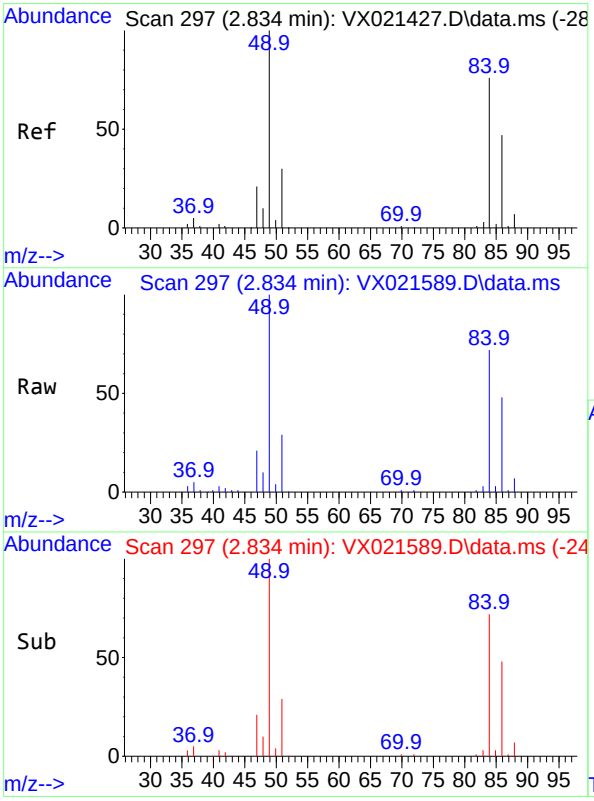



#19
Methyl tert-butyl Ether
Concen: 48.07 ug/l
RT: 3.170 min Scan# 354
Delta R.T. 0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 73 Resp: 146288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 22.5 | 17.1 | 25.7 |

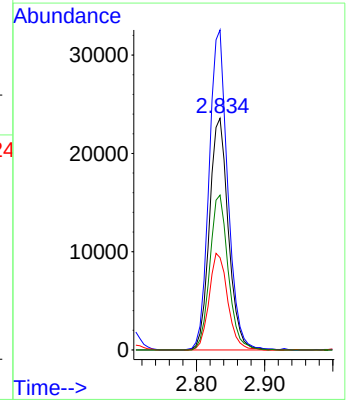



#20
Methylene Chloride
Concen: 45.83 ug/l
RT: 2.834 min Scan# 297
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

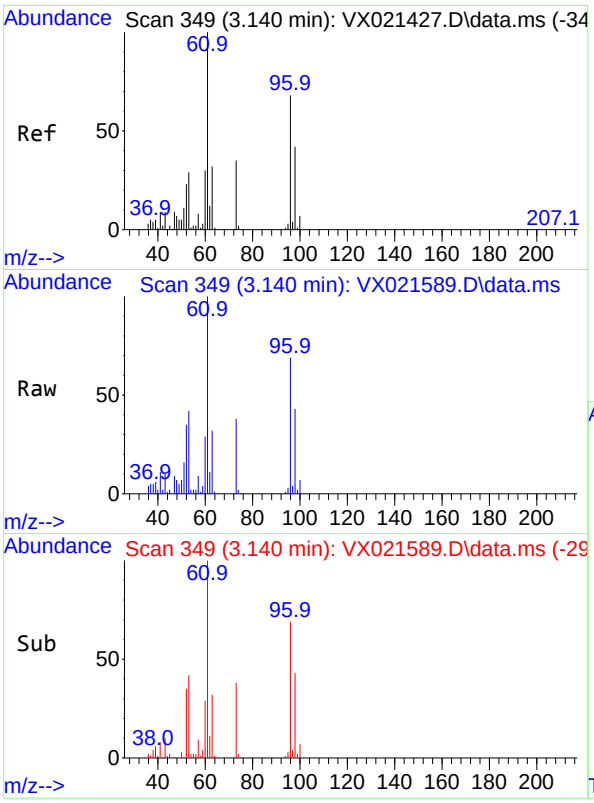
Tgt Ion: 84 Resp: 45493

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 138.2 | 88.6 | 132.8# |
| 51 | 39.9 | 27.0 | 40.6 |
| 86 | 66.9 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

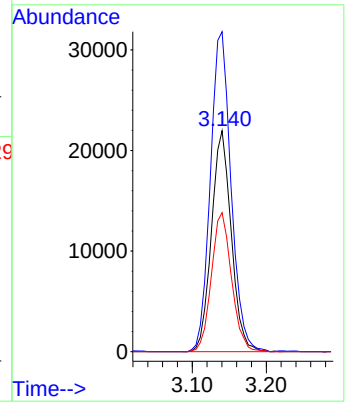
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

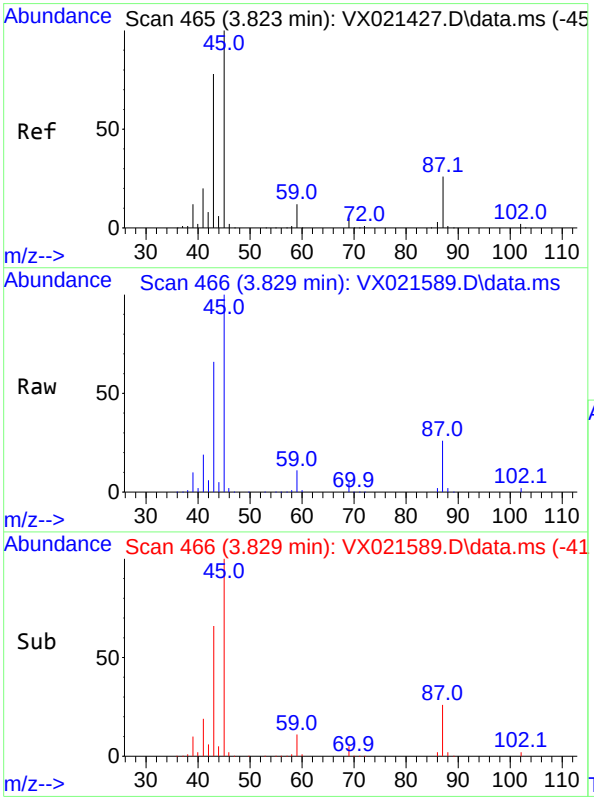



#21
trans-1,2-Dichloroethene
Concen: 45.55 ug/l
RT: 3.140 min Scan# 349
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 96 Resp: 40770

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 144.8 | 107.7 | 161.5 |
| 98 | 62.9 | 50.4 | 75.6 |

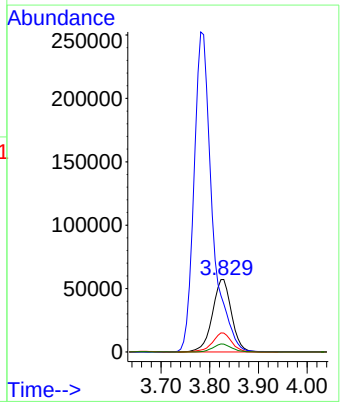



#22
Diisopropyl ether
Concen: 48.50 ug/l
RT: 3.829 min Scan# 466
Delta R.T. 0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

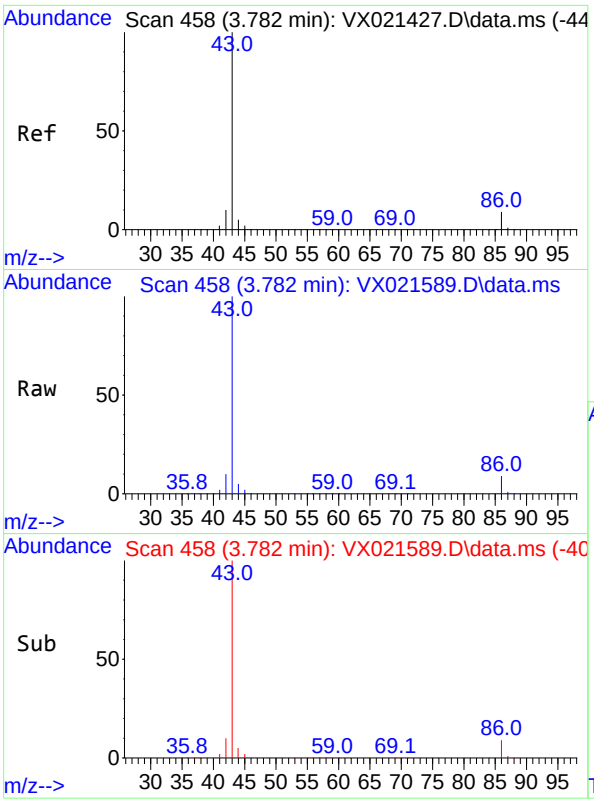
Tgt Ion: 45 Resp: 155845

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 65.9 | 58.0 | 87.0 |
| 87 | 26.1 | 25.4 | 38.0 |
| 59 | 10.9 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

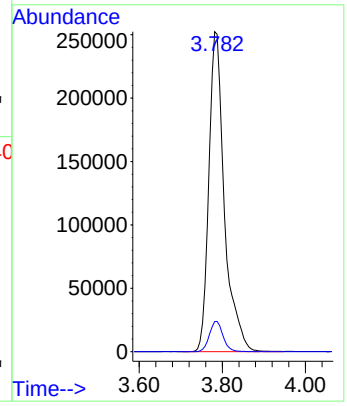
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

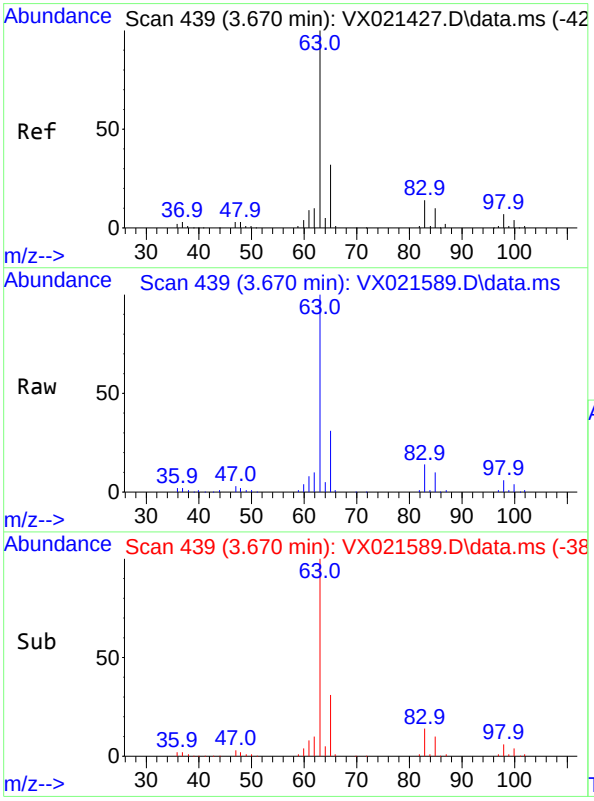



#23
Vinyl Acetate
Concen: 240.71 ug/l
RT: 3.782 min Scan# 458
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 43 Resp: 654282

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.4 | 9.9 | 14.9# |

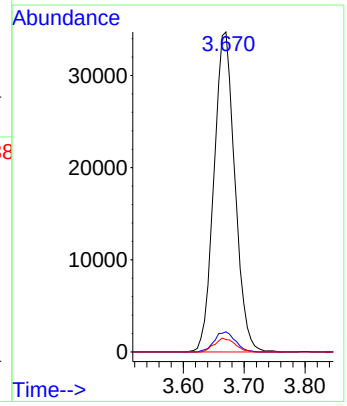



#24
1,1-Dichloroethane
Concen: 47.80 ug/l
RT: 3.670 min Scan# 439
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

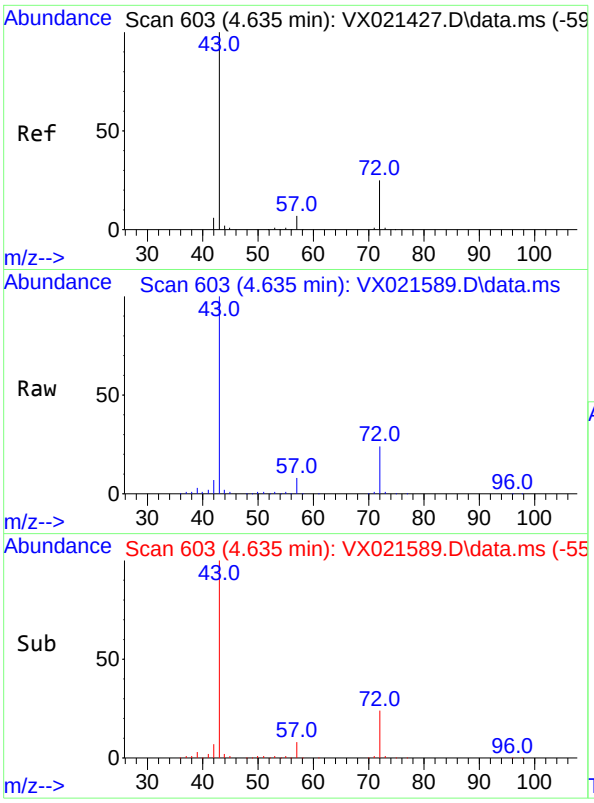
Tgt Ion: 63 Resp: 82808

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.3 | 3.8 | 11.2 |
| 100 | 3.8 | 2.5 | 7.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

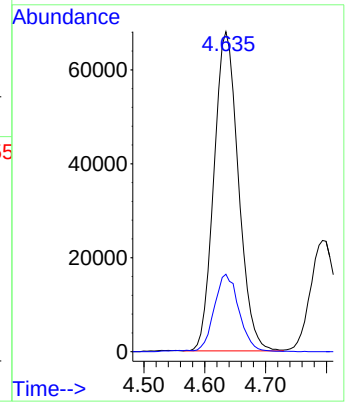
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

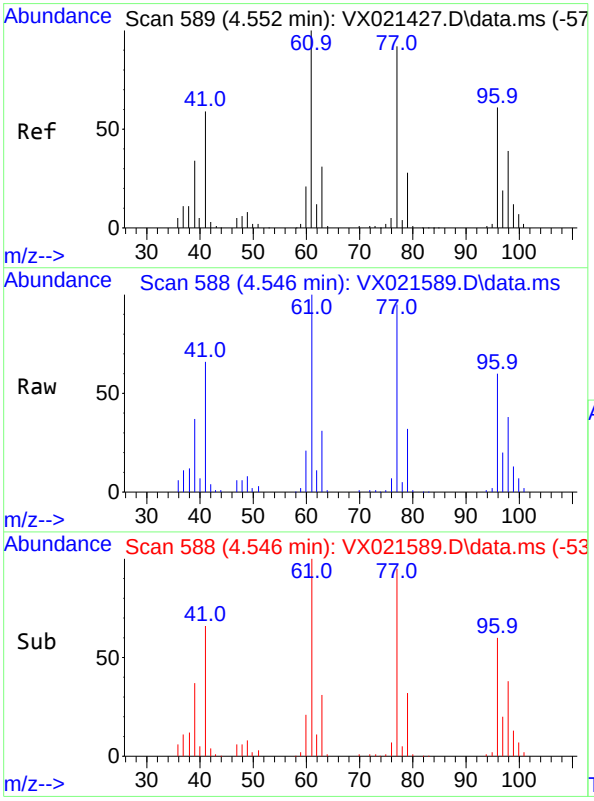



#25
2-Butanone
Concen: 245.95 ug/l
RT: 4.635 min Scan# 603
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 43 Resp: 189652

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.2 | 23.7 | 35.5 |

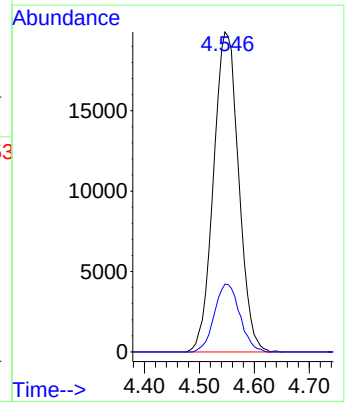



#26
2,2-Dichloropropane
Concen: 42.09 ug/l
RT: 4.546 min Scan# 588
Delta R.T. -0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

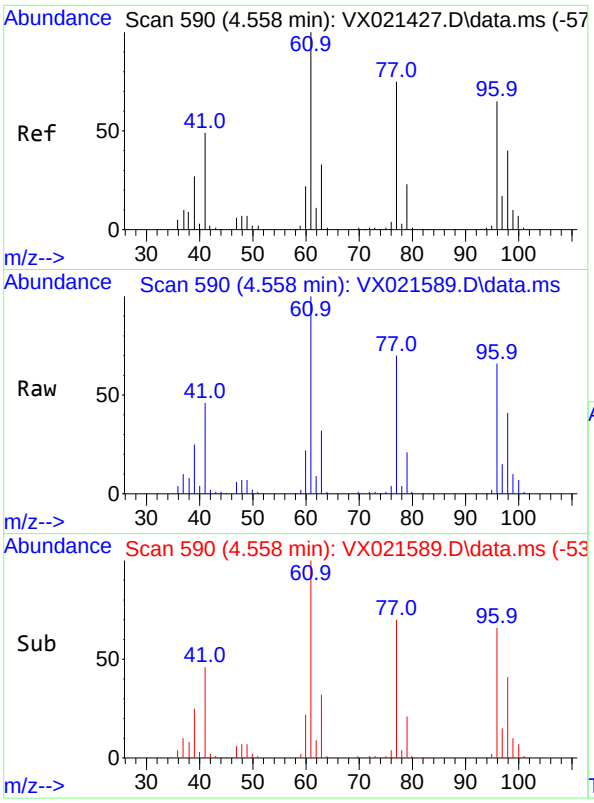
Tgt Ion: 77 Resp: 63170

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.4 | 11.7 | 35.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

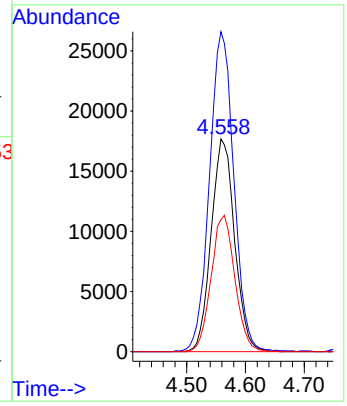
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

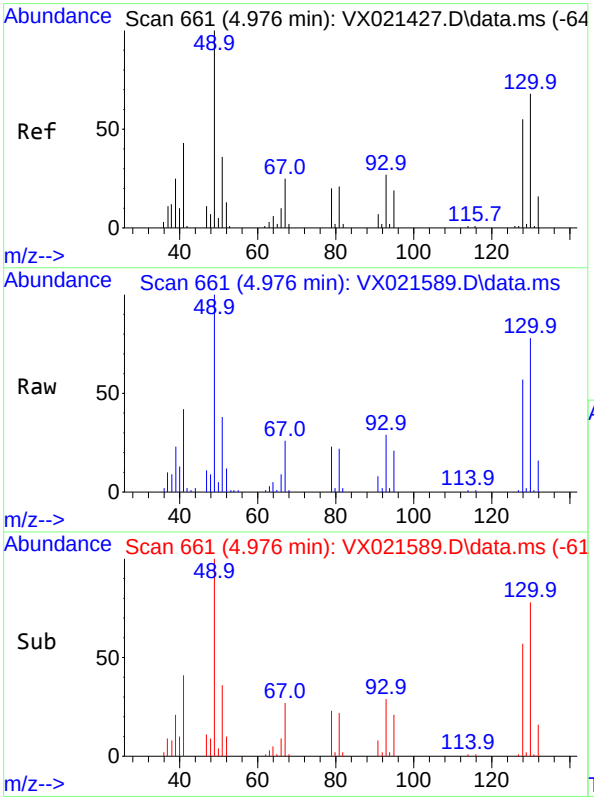



#27
cis-1,2-Dichloroethene
Concen: 47.23 ug/l
RT: 4.558 min Scan# 590
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 96 Resp: 49084

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 156.1 | 0.0 | 285.6 |
| 98 | 64.9 | 0.0 | 129.6 |

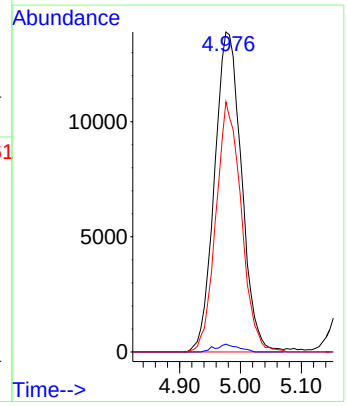



#28
Bromochloromethane
Concen: 49.26 ug/l
RT: 4.976 min Scan# 661
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

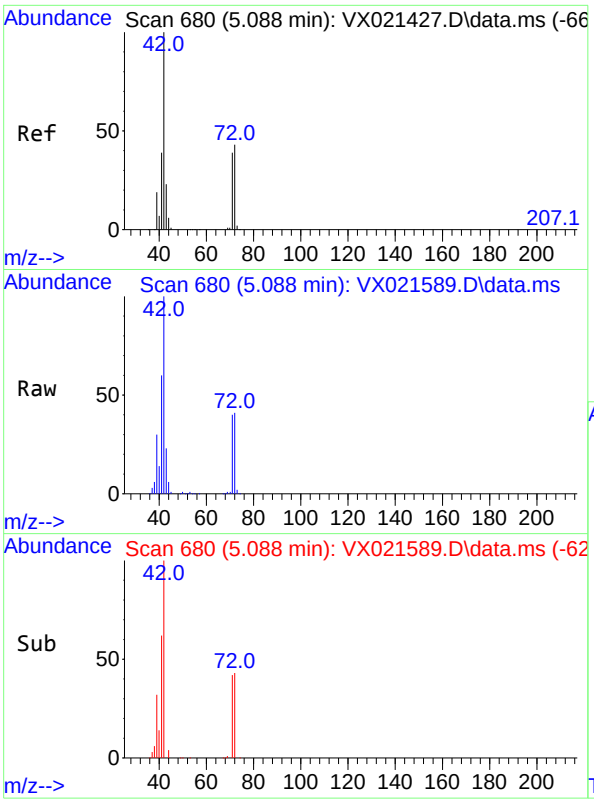
Tgt Ion: 49 Resp: 42725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 2.1 | 0.0 | 4.0 |
| 130 | 73.5 | 68.2 | 102.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

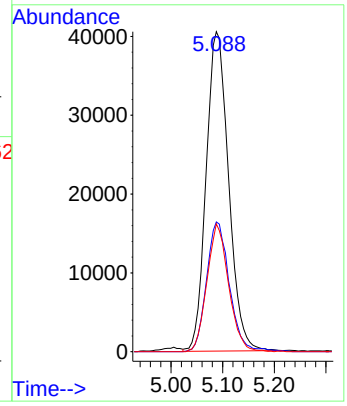
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

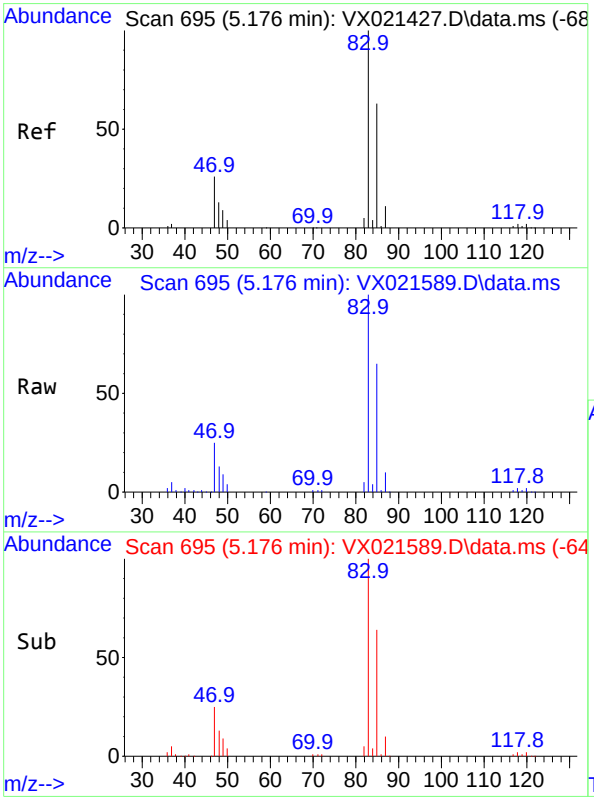



#29
Tetrahydrofuran
Concen: 244.75 ug/l
RT: 5.088 min Scan# 680
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 42 Resp: 122364

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 41.5 | 41.7 | 62.5# |
| 71 | 38.6 | 38.4 | 57.6 |

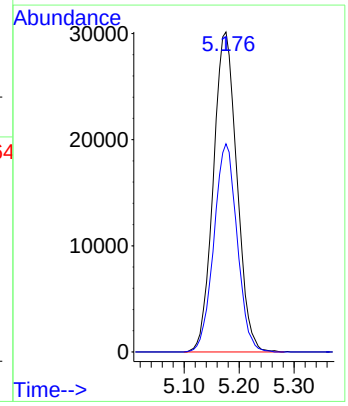



#30
Chloroform
Concen: 49.12 ug/l
RT: 5.176 min Scan# 695
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

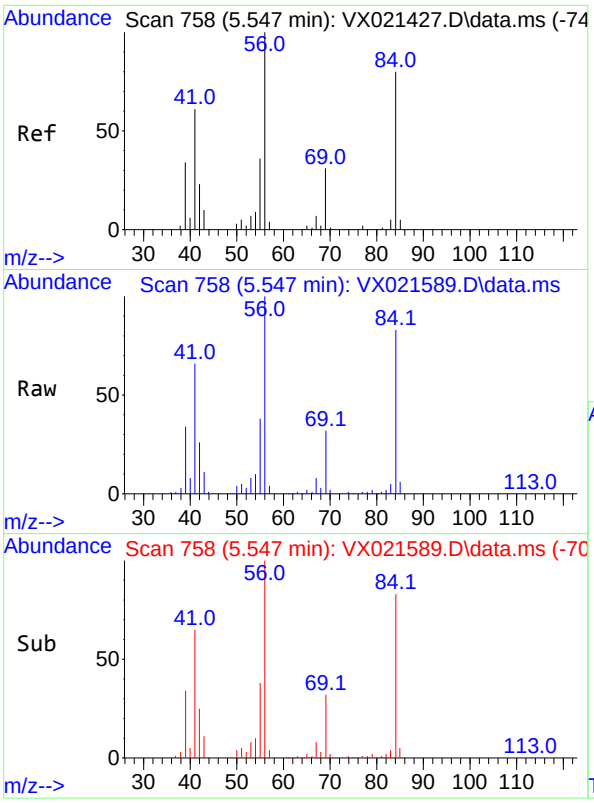
Tgt Ion: 83 Resp: 89811

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 65.0 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

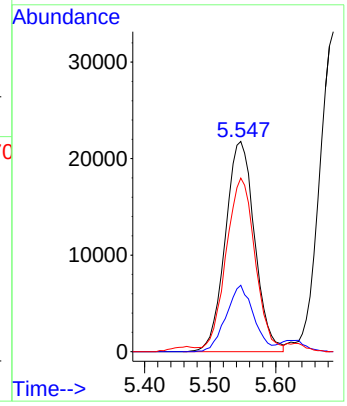
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

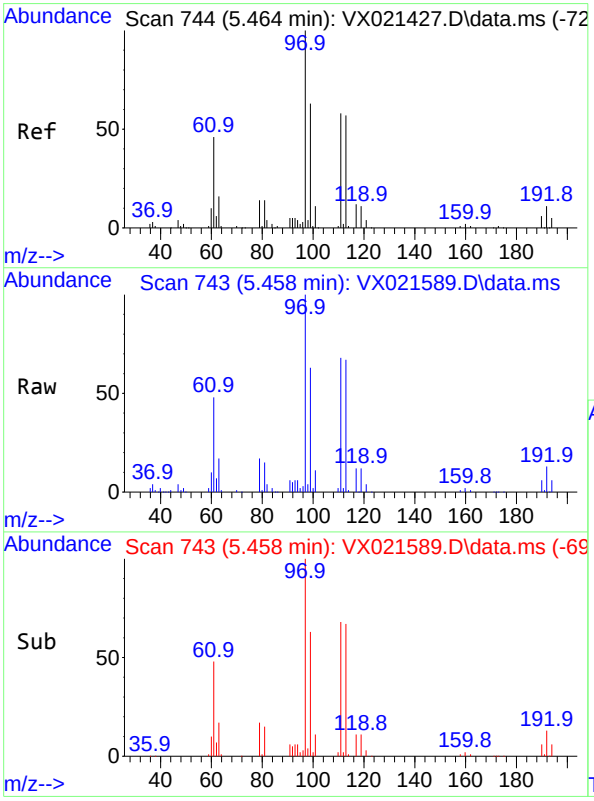



#31
Cyclohexane
Concen: 45.72 ug/l
RT: 5.547 min Scan# 758
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 56 Resp: 67637

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 31.6 | 25.3 | 37.9 |
| 84 | 80.5 | 71.4 | 107.0 |

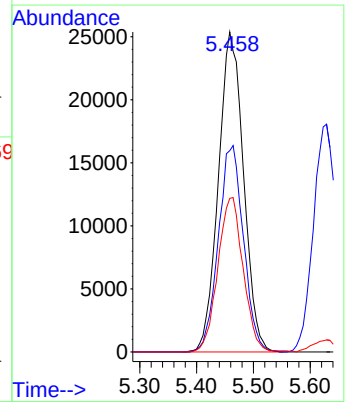



#32
1,1,1-Trichloroethane
Concen: 48.10 ug/l
RT: 5.458 min Scan# 743
Delta R.T. -0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

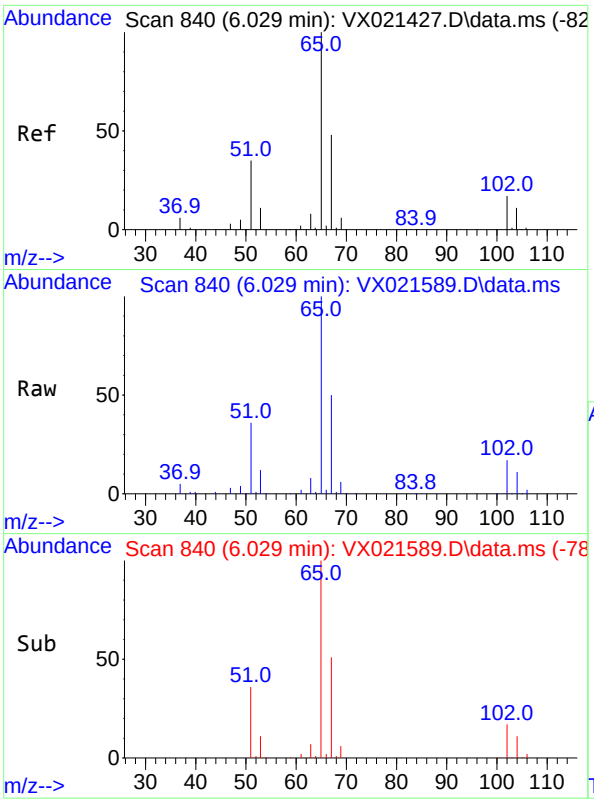
Tgt Ion: 97 Resp: 77936

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.5 | 51.5 | 77.3 |
| 61 | 48.7 | 34.2 | 51.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

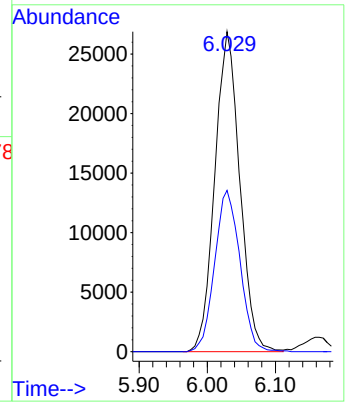
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

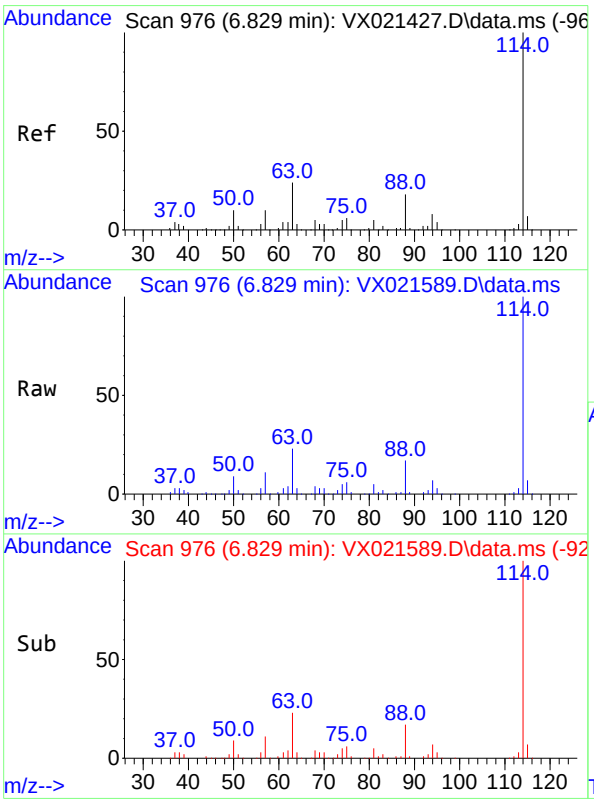



#33
1,2-Dichloroethane-d4
Concen: 50.92 ug/l
RT: 6.029 min Scan# 840
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 65 Resp: 68504

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 51.2 | 0.0 | 105.4 |

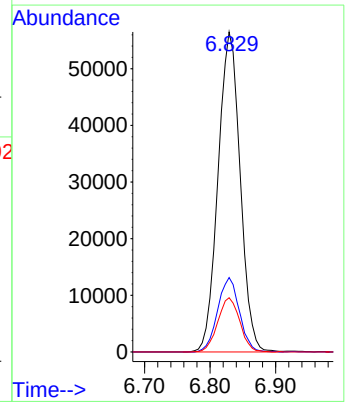



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

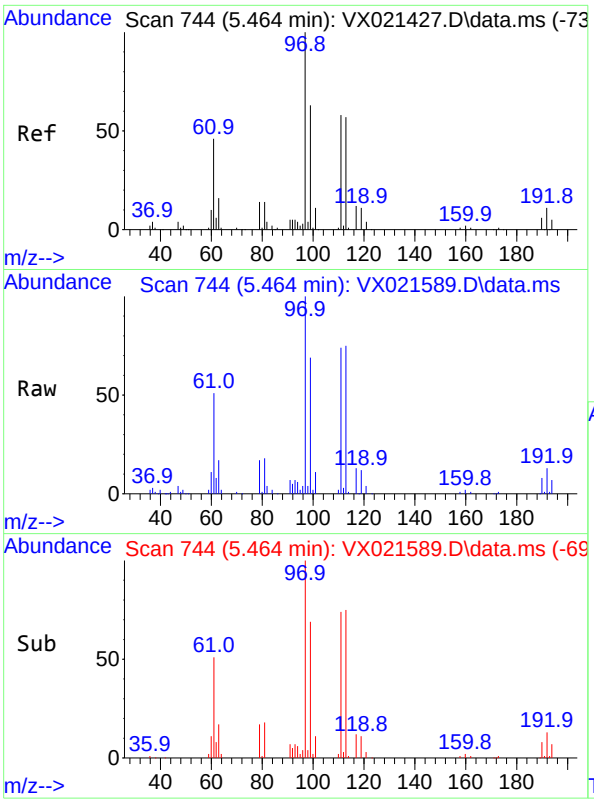
Tgt Ion:114 Resp: 132095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.3 | 0.0 | 40.8 |
| 88 | 17.0 | 0.0 | 32.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

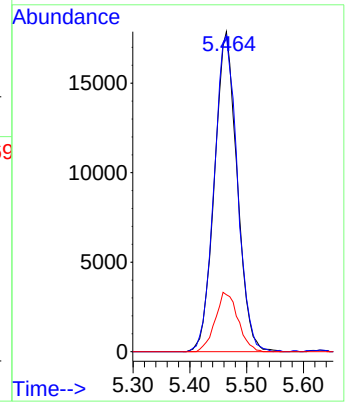
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

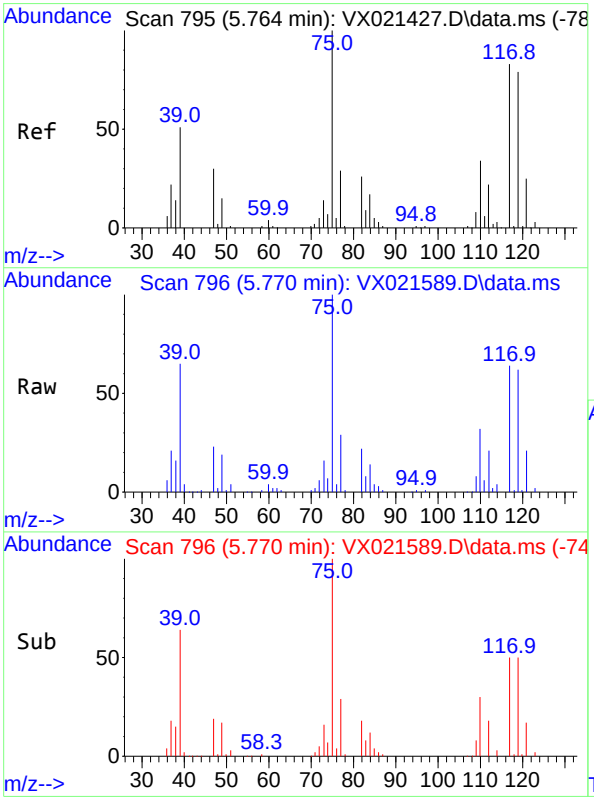



#35
Dibromofluoromethane
Concen: 52.65 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:113 Resp: 49400

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.2 | 81.9 | 122.9 |
| 192 | 18.7 | 16.7 | 25.1 |

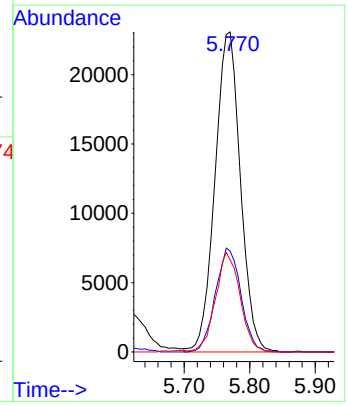



#36
1,1-Dichloropropene
Concen: 47.99 ug/l
RT: 5.770 min Scan# 796
Delta R.T. 0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

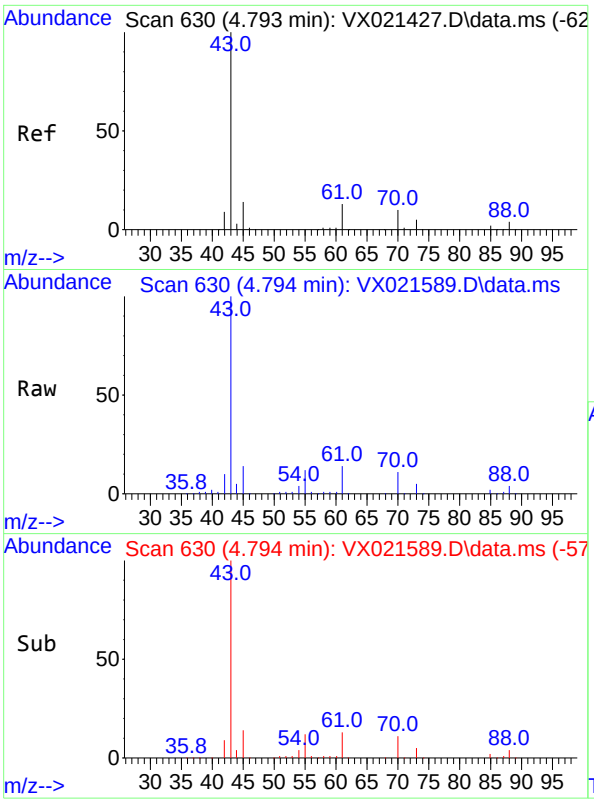
Tgt Ion: 75 Resp: 62114

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 32.5 | 18.1 | 54.4 |
| 77 | 30.1 | 25.3 | 37.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

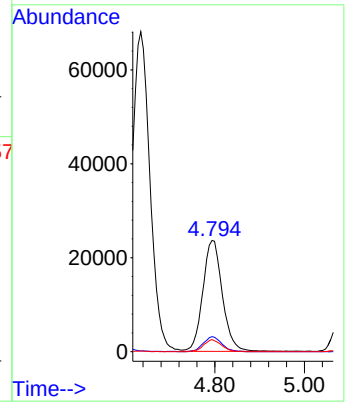
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

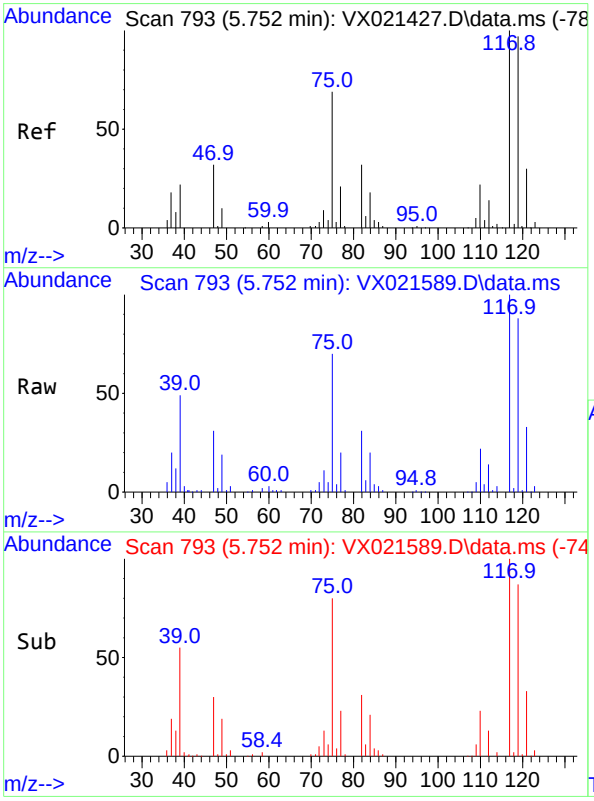



#37
Ethyl Acetate
Concen: 47.54 ug/l
RT: 4.794 min Scan# 630
Delta R.T. 0.001 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 43 Resp: 71146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 12.9 | 12.8 | 19.2 |
| 70 | 9.9 | 10.5 | 15.7# |

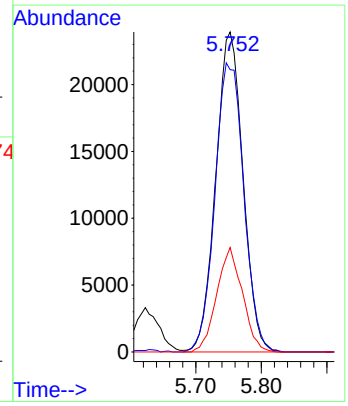



#38
Carbon Tetrachloride
Concen: 49.67 ug/l
RT: 5.752 min Scan# 793
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

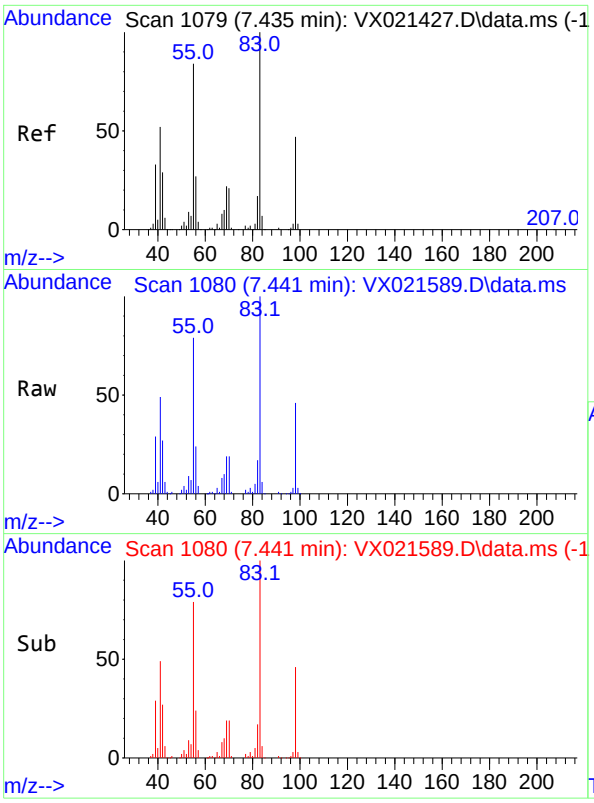
Tgt Ion:117 Resp: 69090

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 88.2 | 76.2 | 114.2 |
| 121 | 32.6 | 24.8 | 37.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

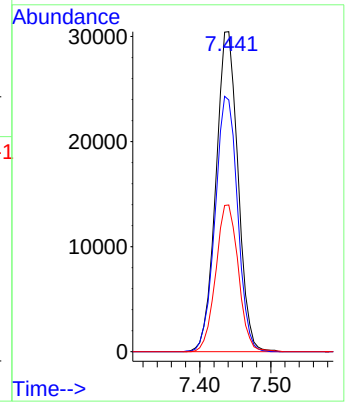
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

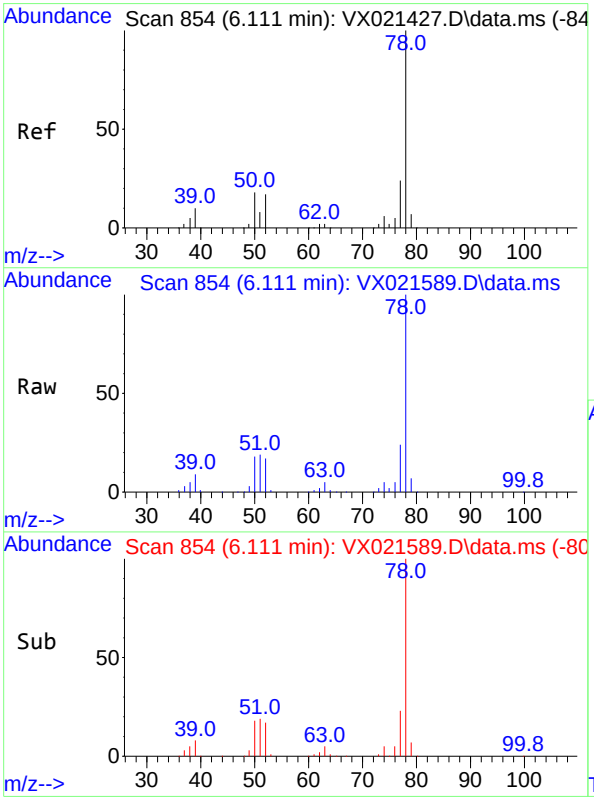



#39
Methylcyclohexane
Concen: 45.87 ug/l
RT: 7.441 min Scan# 1080
Delta R.T. 0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 83 Resp: 65817

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 78.7 | 58.9 | 88.3 |
| 98 | 45.8 | 38.1 | 57.1 |

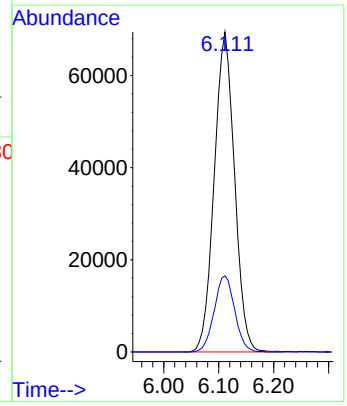



#40
Benzene
Concen: 48.46 ug/l
RT: 6.111 min Scan# 854
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

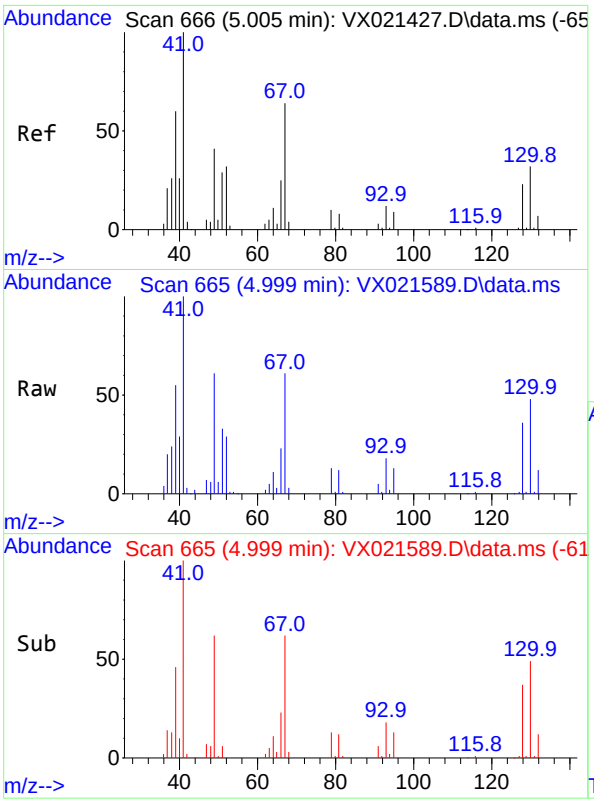
Tgt Ion: 78 Resp: 178102

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 23.8 | 18.9 | 28.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

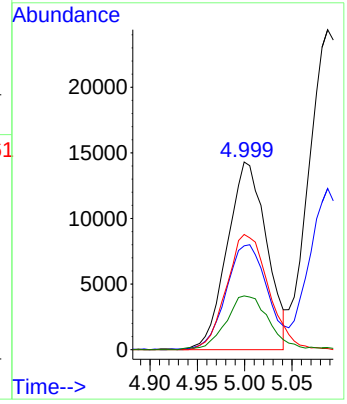
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

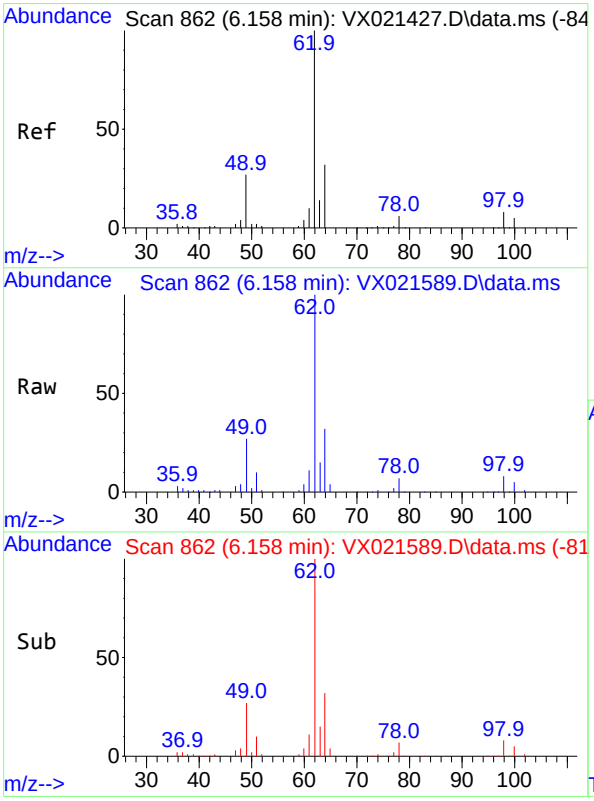



#41
Methacrylonitrile
Concen: 47.65 ug/l
RT: 4.999 min Scan# 665
Delta R.T. -0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 41 Resp: 41358

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 59.7 | 42.5 | 63.7 |
| 67 | 65.5 | 65.0 | 97.6 |
| 52 | 31.8 | 25.3 | 37.9 |

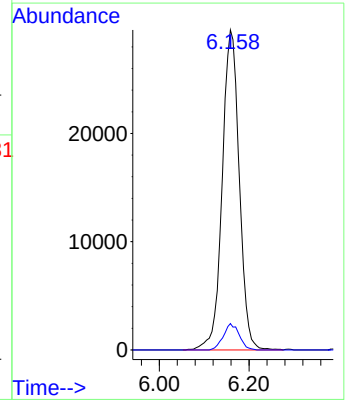



#42
1,2-Dichloroethane
Concen: 49.13 ug/l
RT: 6.158 min Scan# 862
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

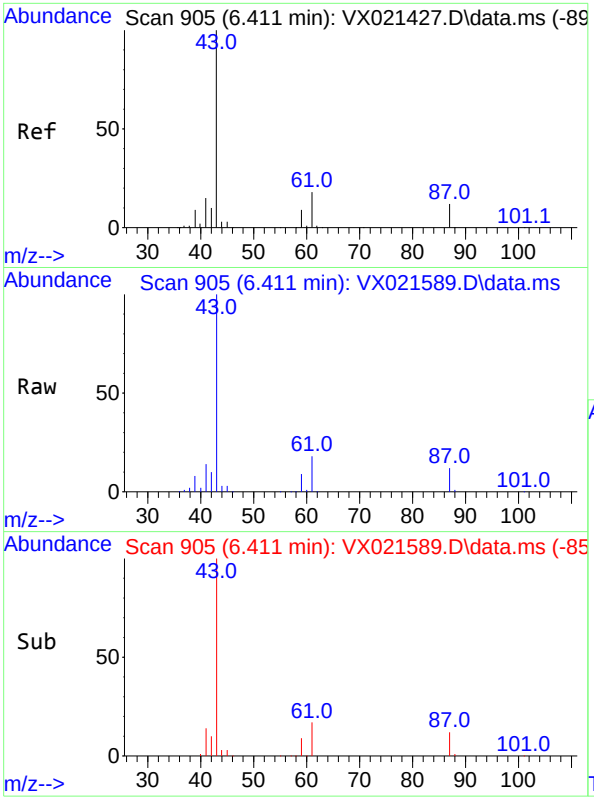
Tgt Ion: 62 Resp: 78288

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.7 | 0.0 | 20.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

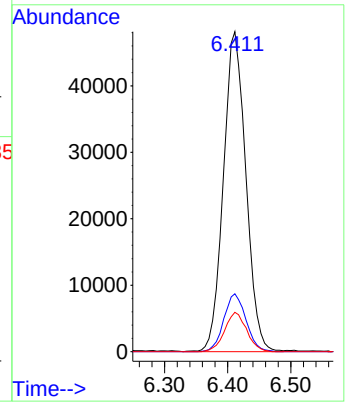
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

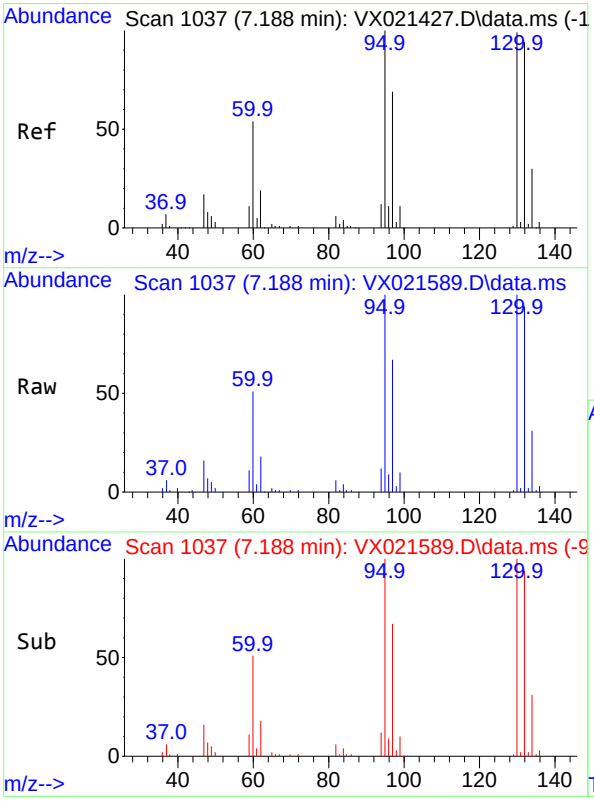



#43
Isopropyl Acetate
Concen: 49.04 ug/l
RT: 6.411 min Scan# 905
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 43 Resp: 119166

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 17.9 | 18.2 | 27.4# |
| 87 | 12.0 | 12.5 | 18.7# |

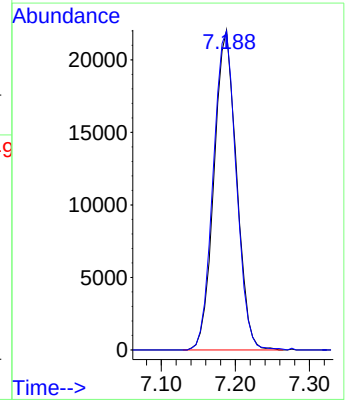



#44
Trichloroethene
Concen: 47.91 ug/l
RT: 7.188 min Scan# 1037
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

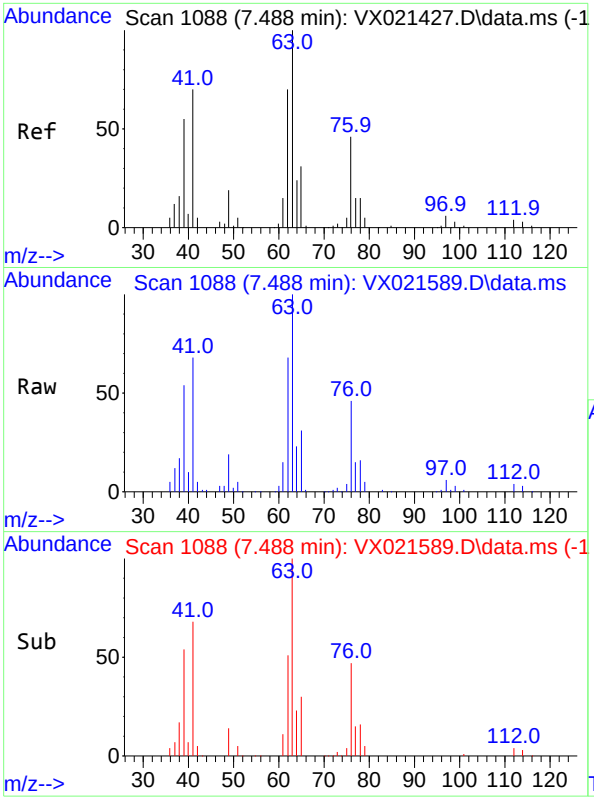
Tgt Ion:130 Resp: 46472

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 99.7 | 0.0 | 198.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

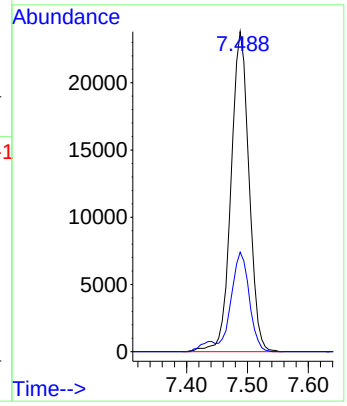
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

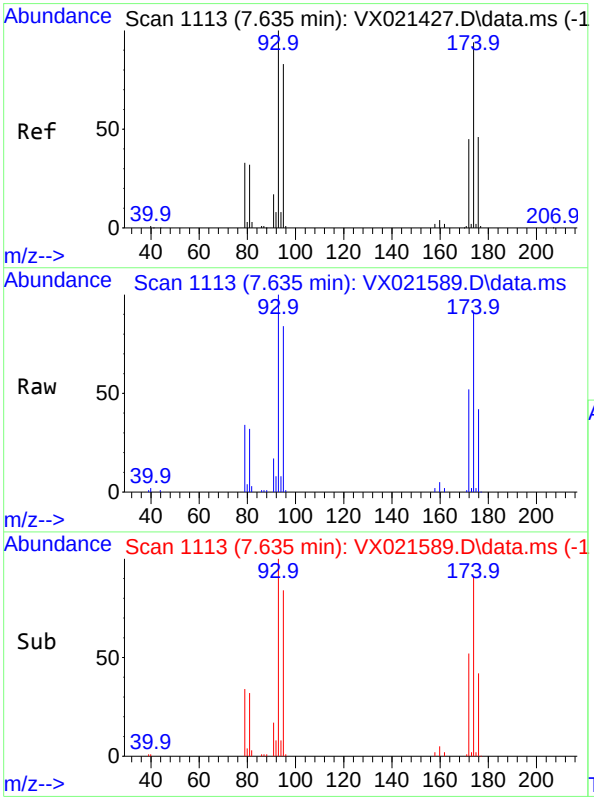



#45
1,2-Dichloropropane
Concen: 48.99 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 63 Resp: 48778

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 31.1 | 25.7 | 38.5 |

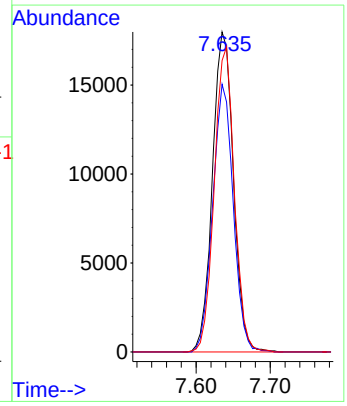



#46
Dibromomethane
Concen: 48.67 ug/l
RT: 7.635 min Scan# 1113
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

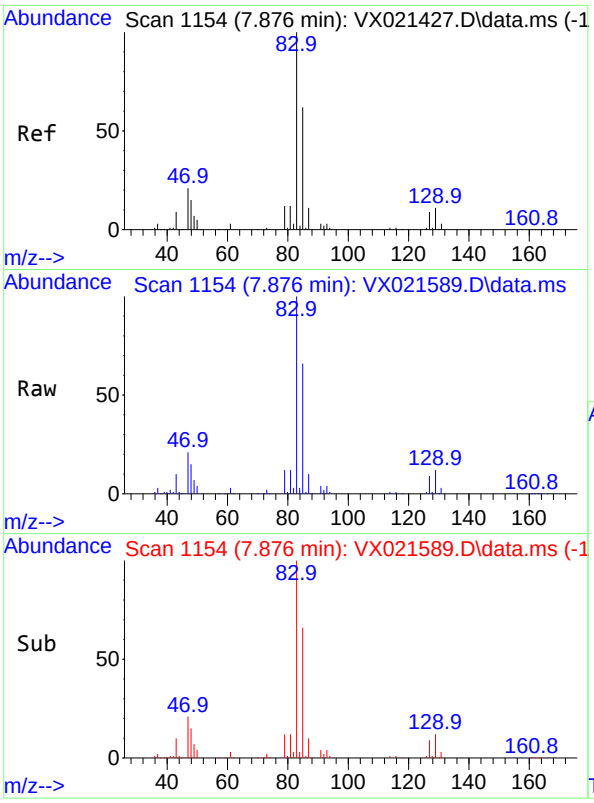
Tgt Ion: 93 Resp: 35319

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.3 | 66.8 | 100.2 |
| 174 | 91.4 | 83.1 | 124.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

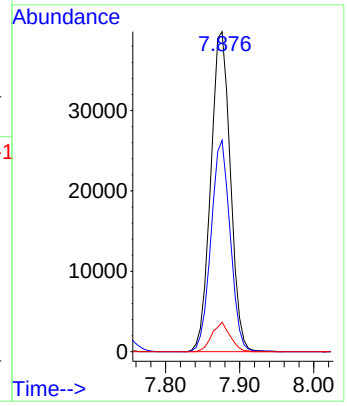
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

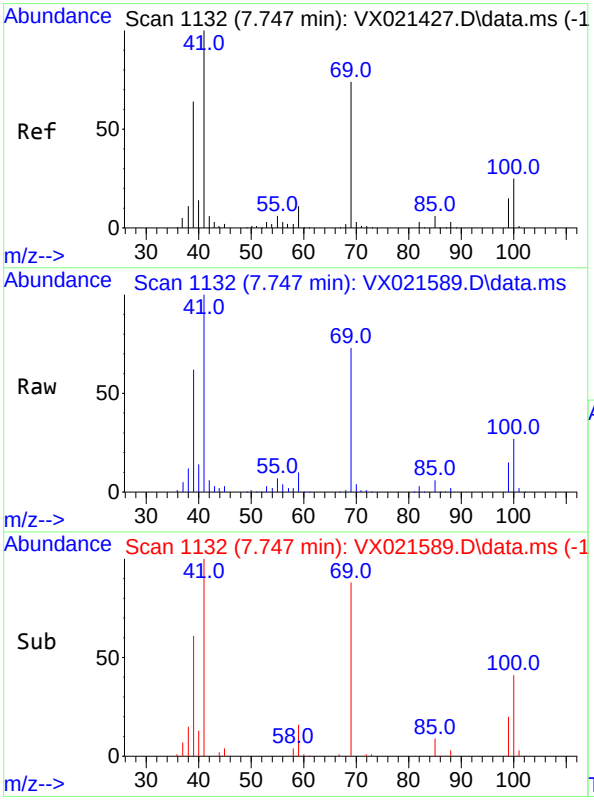



#47
Bromodichloromethane
Concen: 49.70 ug/l
RT: 7.876 min Scan# 1154
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 83 Resp: 73402

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 66.1 | 51.4 | 77.0 |
| 127 | 9.2 | 6.8 | 10.2 |

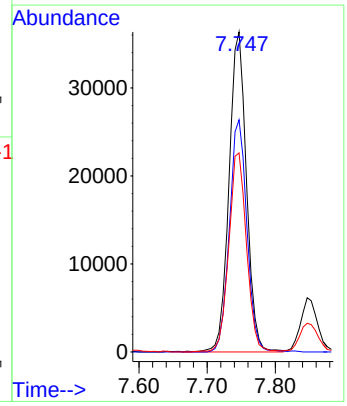



#48
Methyl methacrylate
Concen: 49.85 ug/l
RT: 7.747 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

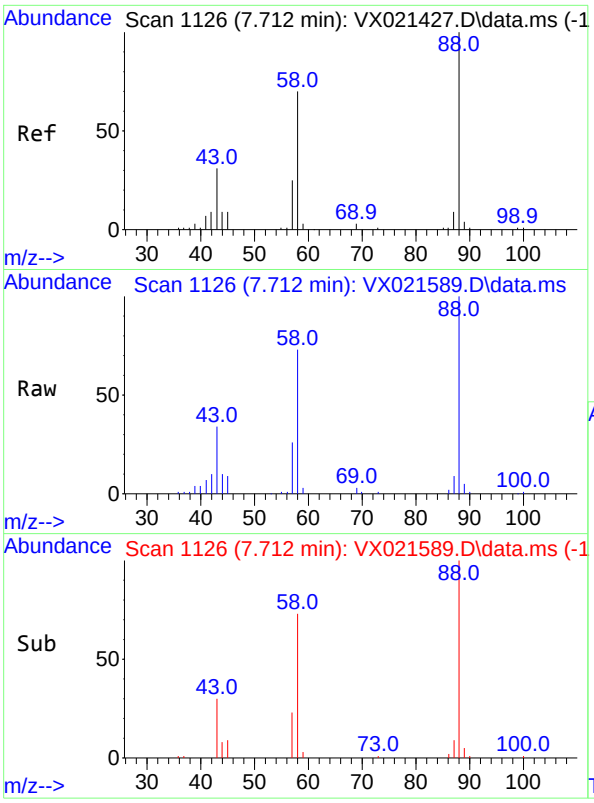
Tgt Ion: 41 Resp: 64621

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 73.0 | 76.0 | 114.0# |
| 39 | 63.5 | 44.6 | 67.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

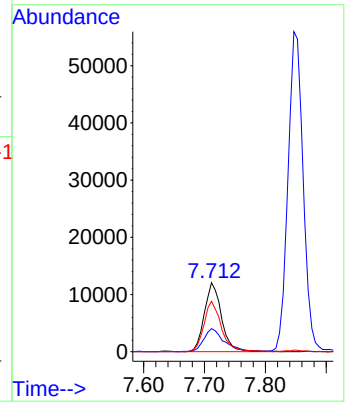
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

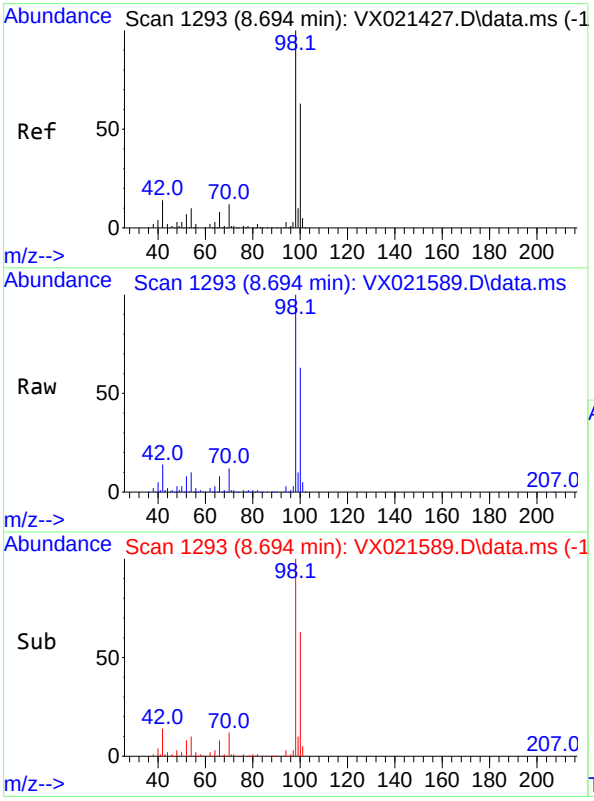



#49
1,4-Dioxane
Concen: 1011.84 ug/l
RT: 7.712 min Scan# 1126
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 88 Resp: 23482

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 39.9 | 23.2 | 34.8# |
| 58 | 74.4 | 55.0 | 82.4 |

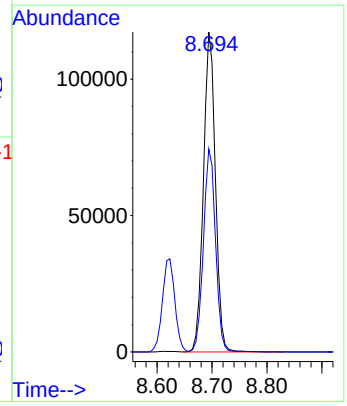



#50
Toluene-d8
Concen: 53.07 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

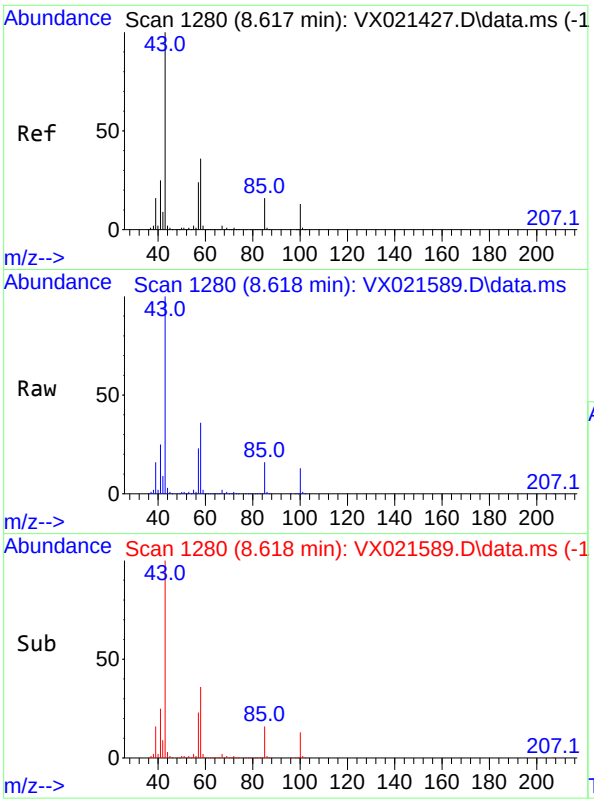
Tgt Ion: 98 Resp: 177446

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.2 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

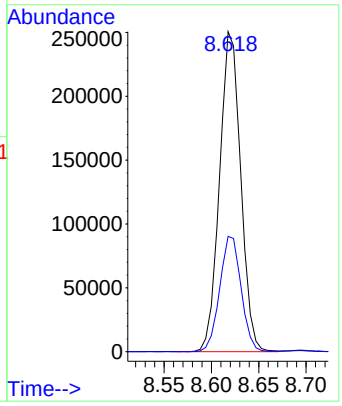
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

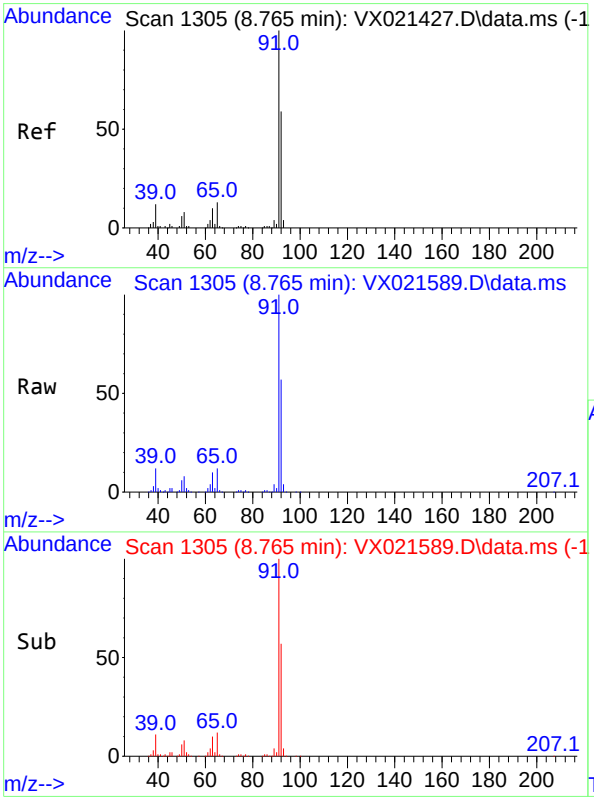



#51
4-Methyl-2-Pentanone
Concen: 260.40 ug/l
RT: 8.618 min Scan# 1280
Delta R.T. 0.001 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 43 Resp: 389208

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.5 | 35.4 | 53.0 |

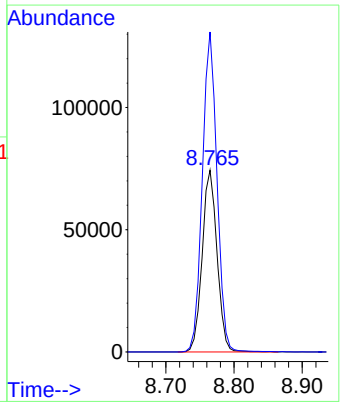



#52
Toluene
Concen: 49.64 ug/l
RT: 8.765 min Scan# 1305
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

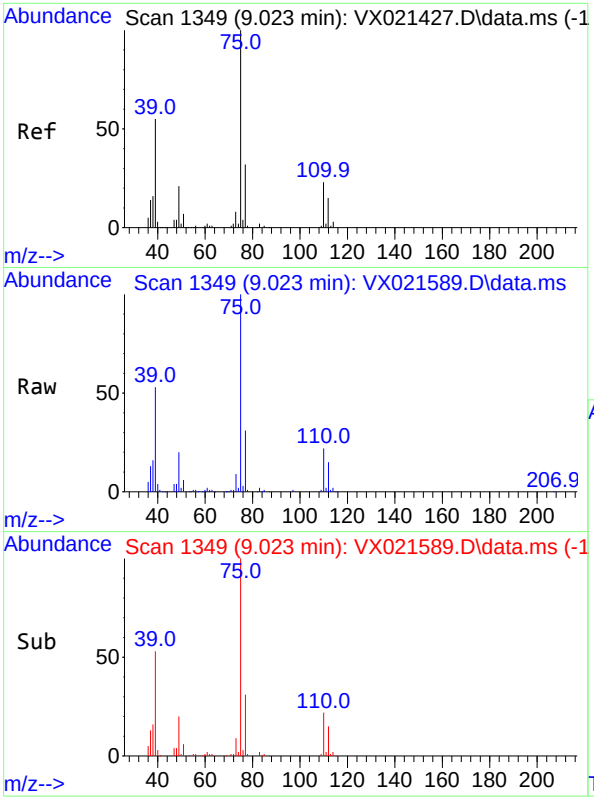
Tgt Ion: 92 Resp: 112689

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 173.8 | 137.1 | 205.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

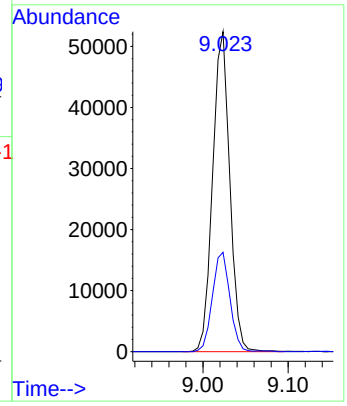
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

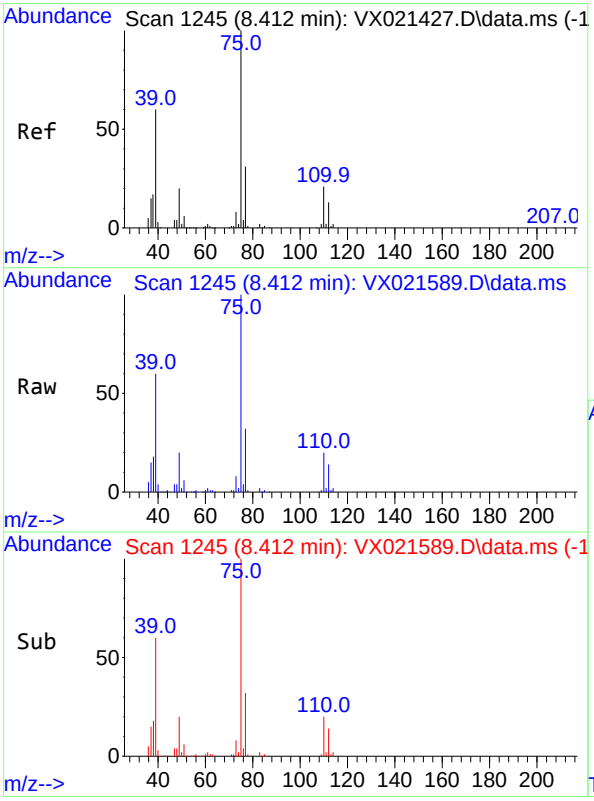



#53
t-1,3-Dichloropropene
Concen: 49.10 ug/l
RT: 9.023 min Scan# 1349
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 75 Resp: 73220

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.1 | 24.9 | 37.3 |

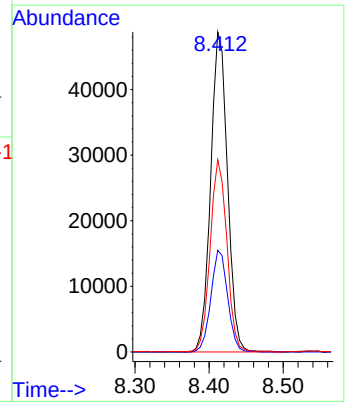



#54
cis-1,3-Dichloropropene
Concen: 48.45 ug/l
RT: 8.412 min Scan# 1245
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

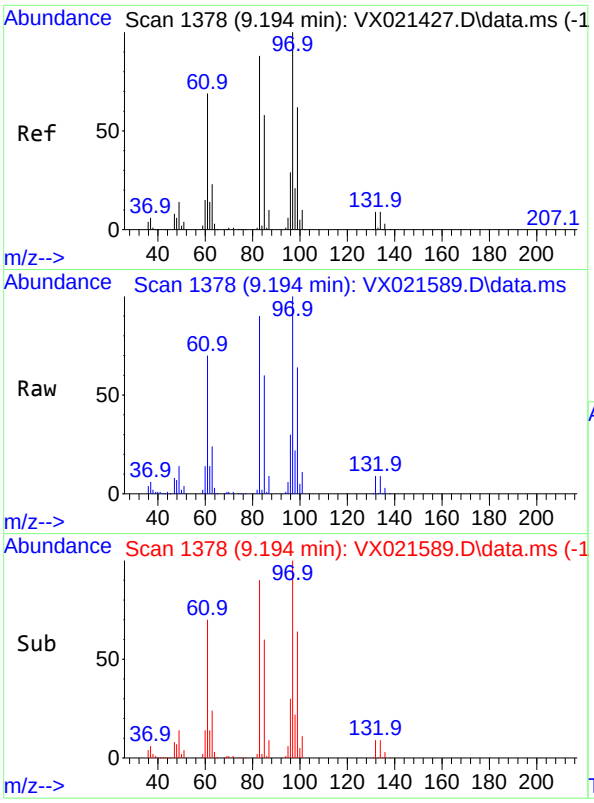
Tgt Ion: 75 Resp: 76892

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.7 | 25.7 | 38.5 |
| 39 | 60.0 | 35.1 | 52.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

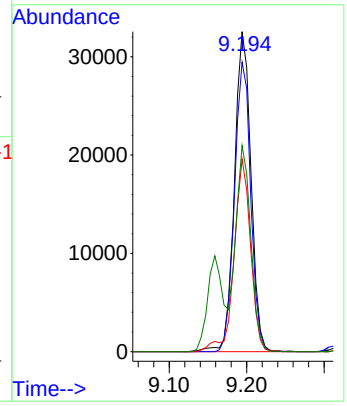
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

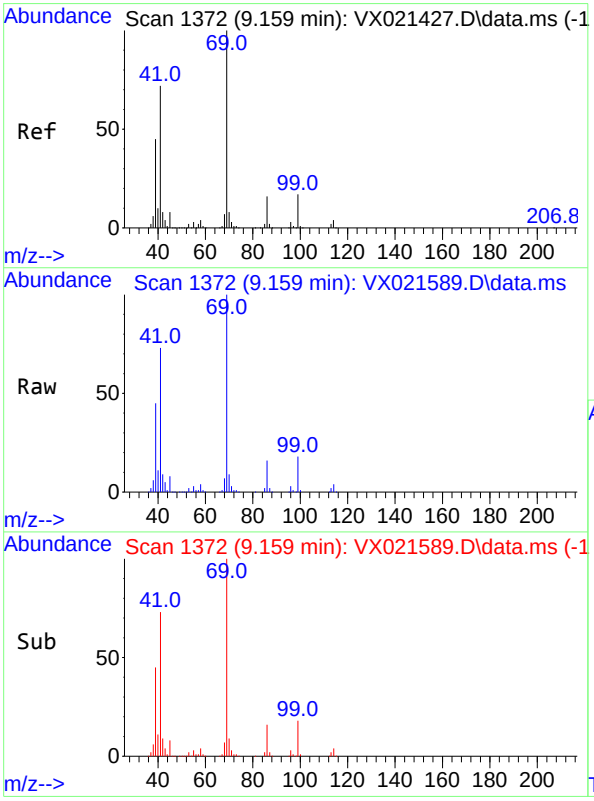



#55
1,1,2-Trichloroethane
Concen: 50.48 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 97 Resp: 48371

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 90.5 | 69.3 | 103.9 |
| 85 | 60.2 | 44.3 | 66.5 |
| 99 | 64.4 | 50.3 | 75.5 |

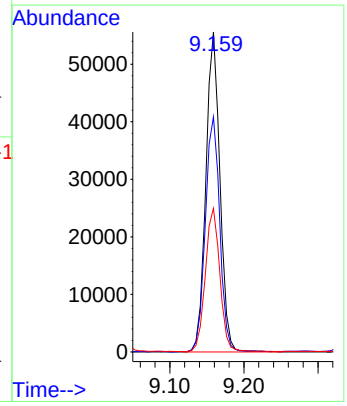



#56
Ethyl methacrylate
Concen: 45.44 ug/l
RT: 9.159 min Scan# 1372
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

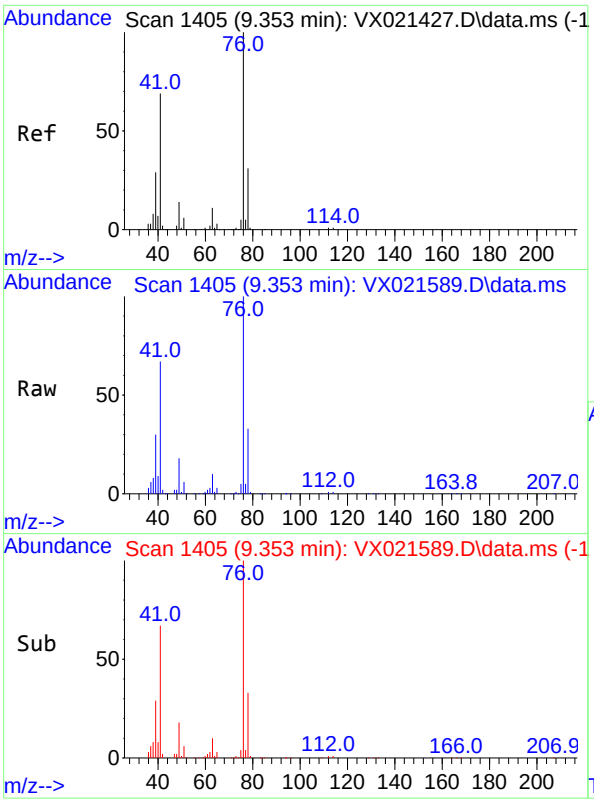
Tgt Ion: 69 Resp: 73224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 76.0 | 46.8 | 70.2# |
| 39 | 46.3 | 24.7 | 37.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

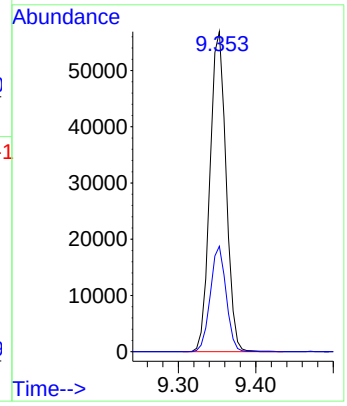
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

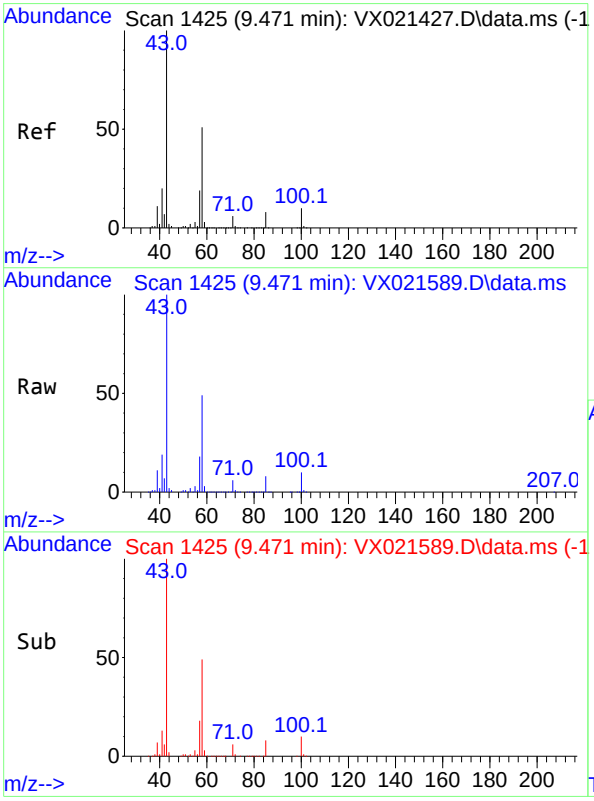



#57
1,3-Dichloropropane
Concen: 50.07 ug/l
RT: 9.353 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 76 Resp: 82098

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.3 | 26.2 | 39.2 |

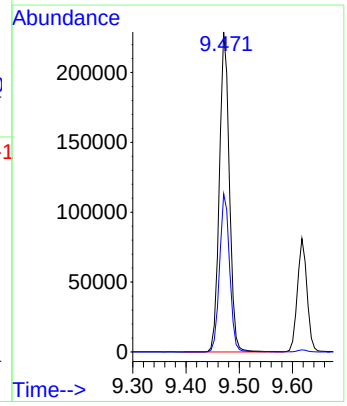



#59
2-Hexanone
Concen: 266.07 ug/l
RT: 9.471 min Scan# 1425
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

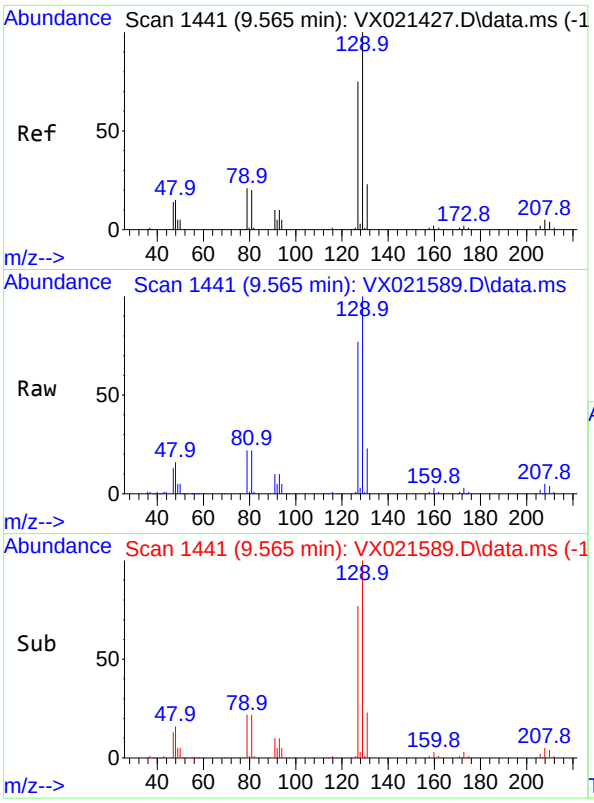
Tgt Ion: 43 Resp: 298619

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 49.7 | 30.9 | 92.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

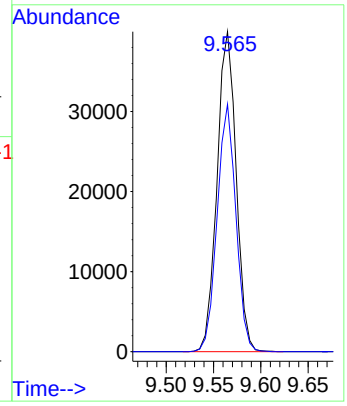
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

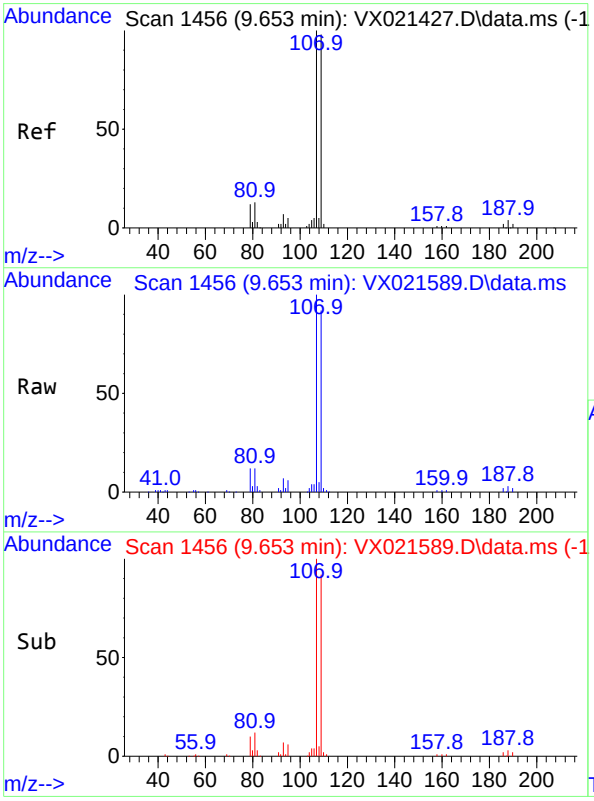



#60
Dibromochloromethane
Concen: 52.33 ug/l
RT: 9.565 min Scan# 1441
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:129 Resp: 56155

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 75.8 | 38.4 | 115.2 |

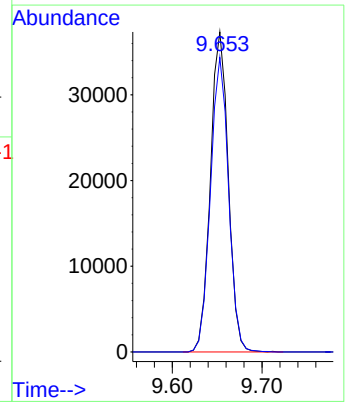



#61
1,2-Dibromoethane
Concen: 50.17 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

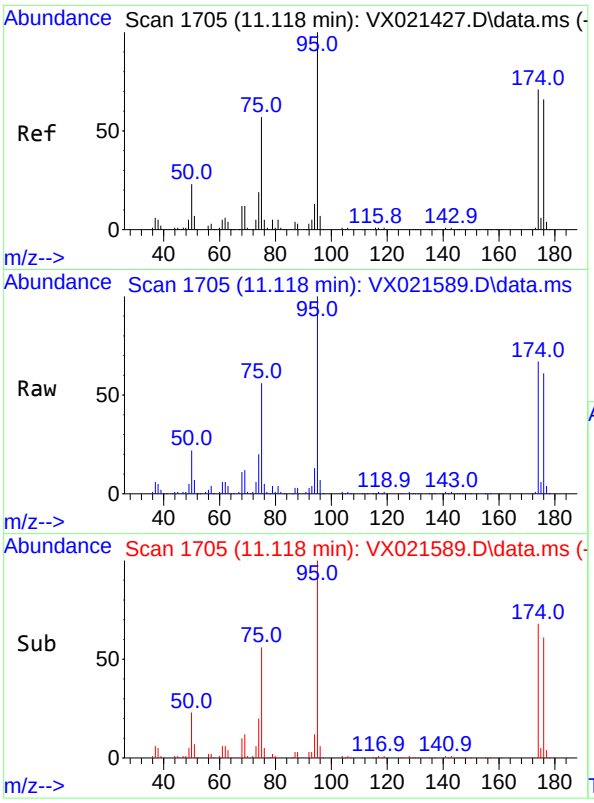
Tgt Ion:107 Resp: 51635

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.1 | 75.8 | 113.6 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

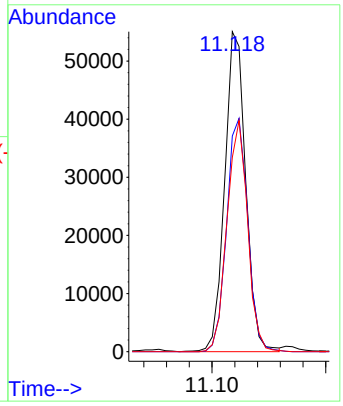
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

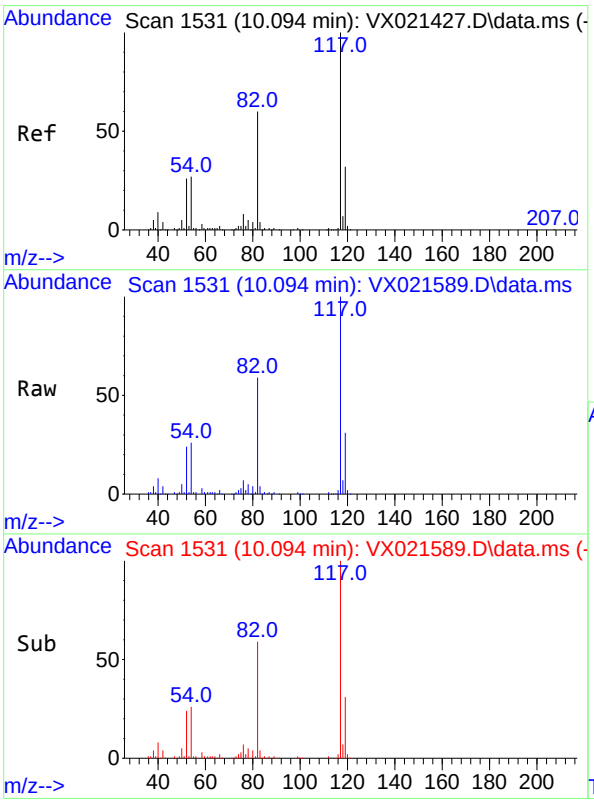



#62
4-Bromofluorobenzene
Concen: 54.37 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 95 Resp: 70685

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 73.5 | 0.0 | 154.6 |
| 176 | 70.9 | 0.0 | 155.8 |

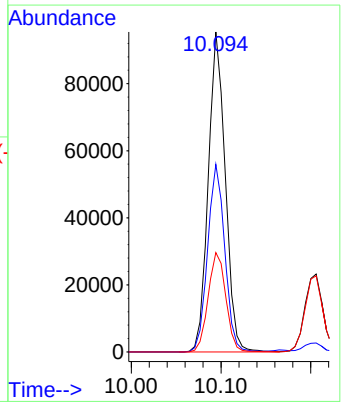



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

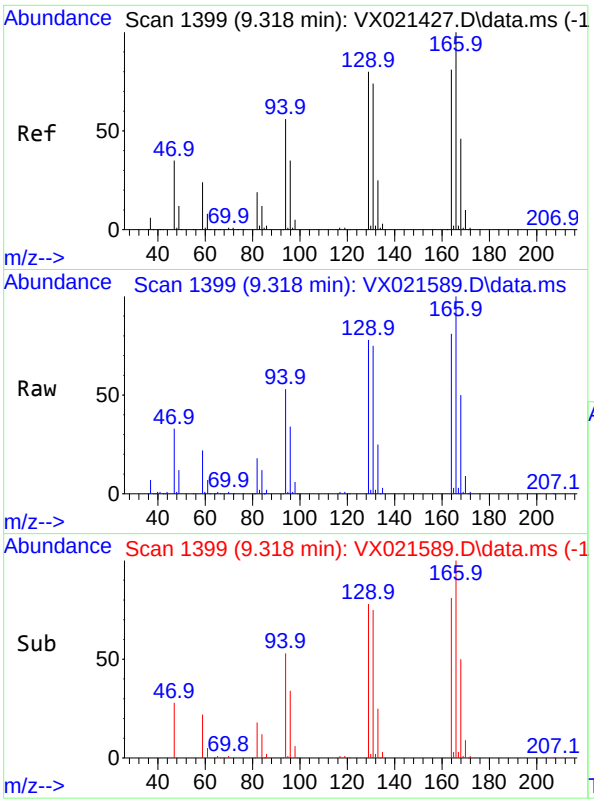
Tgt Ion:117 Resp: 125590

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 58.6 | 47.4 | 71.2 |
| 119 | 31.0 | 26.6 | 39.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

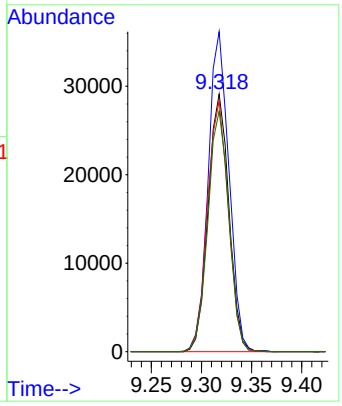
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

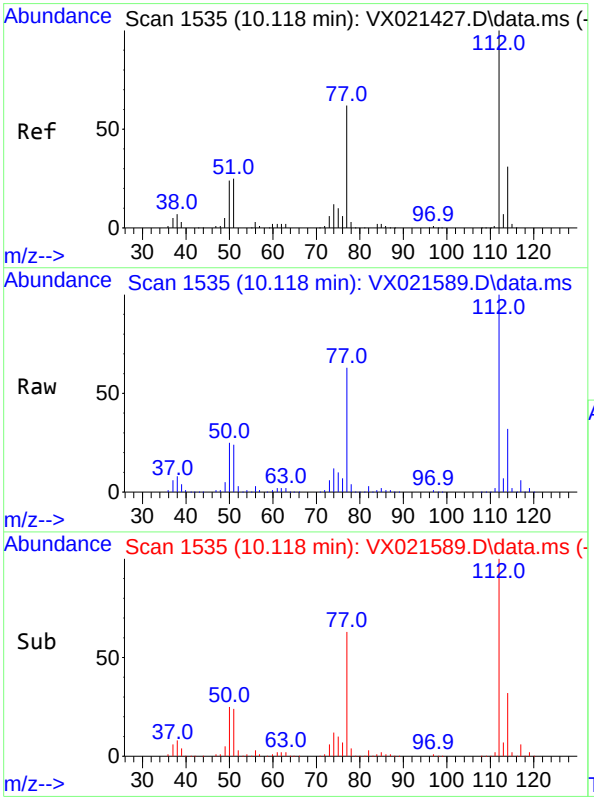



#64
Tetrachloroethene
Concen: 50.19 ug/l
RT: 9.318 min Scan# 1399
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:164 Resp: 42221

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 124.2 | 103.4 | 155.2 |
| 129 | 97.3 | 70.8 | 106.2 |
| 131 | 93.4 | 72.5 | 108.7 |

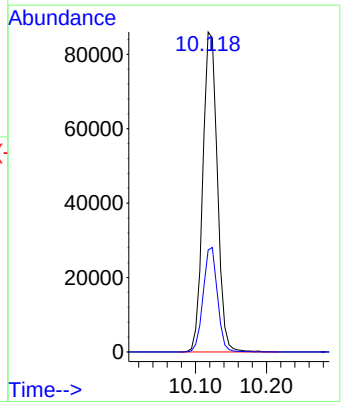



#65
Chlorobenzene
Concen: 48.58 ug/l
RT: 10.118 min Scan# 1535
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

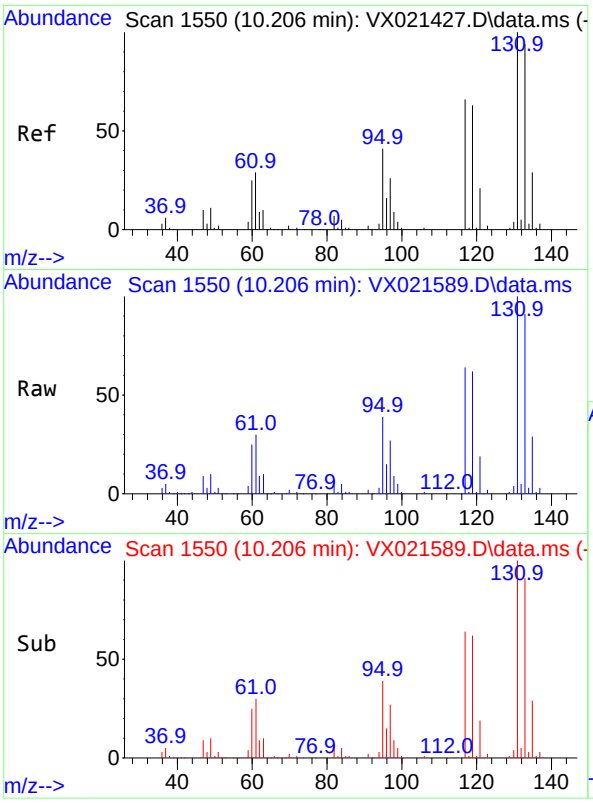
Tgt Ion:112 Resp: 122567

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.9 | 25.8 | 38.6 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

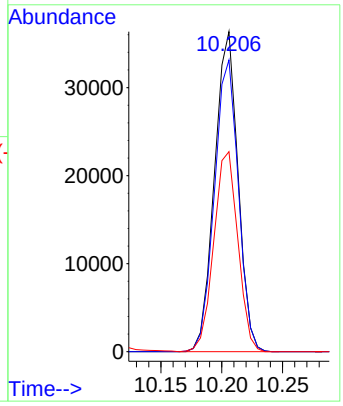
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

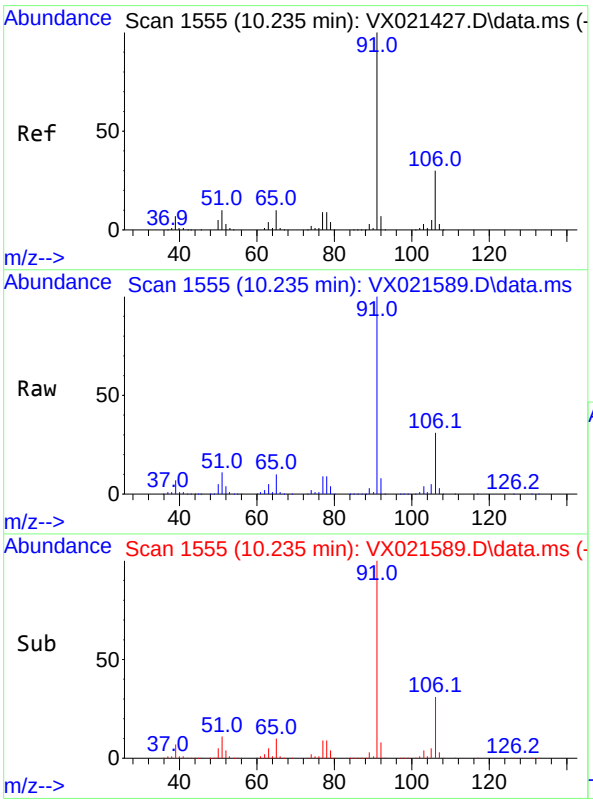



#66
1,1,1,2-Tetrachloroethane
Concen: 50.47 ug/l
RT: 10.206 min Scan# 1550
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:131 Resp: 48792

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 93.0 | 47.7 | 143.1 |
| 119 | 64.2 | 32.1 | 96.5 |

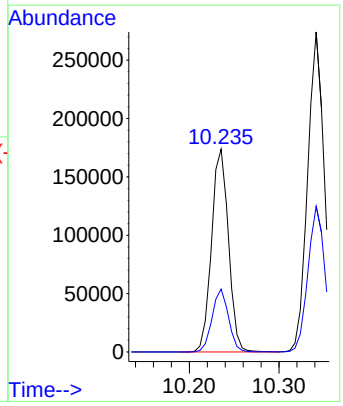



#67
Ethyl Benzene
Concen: 49.56 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

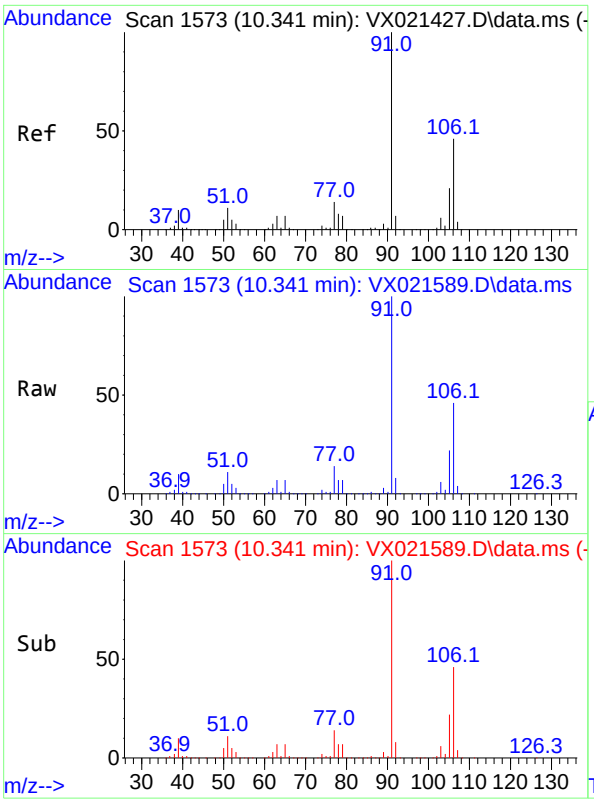
Tgt Ion: 91 Resp: 227904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 31.0 | 24.6 | 37.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

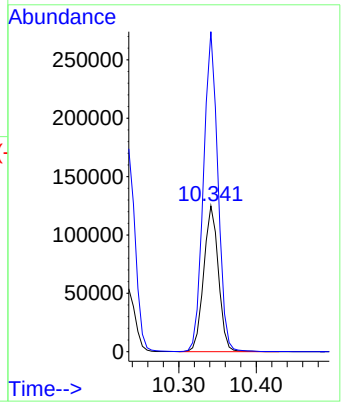
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

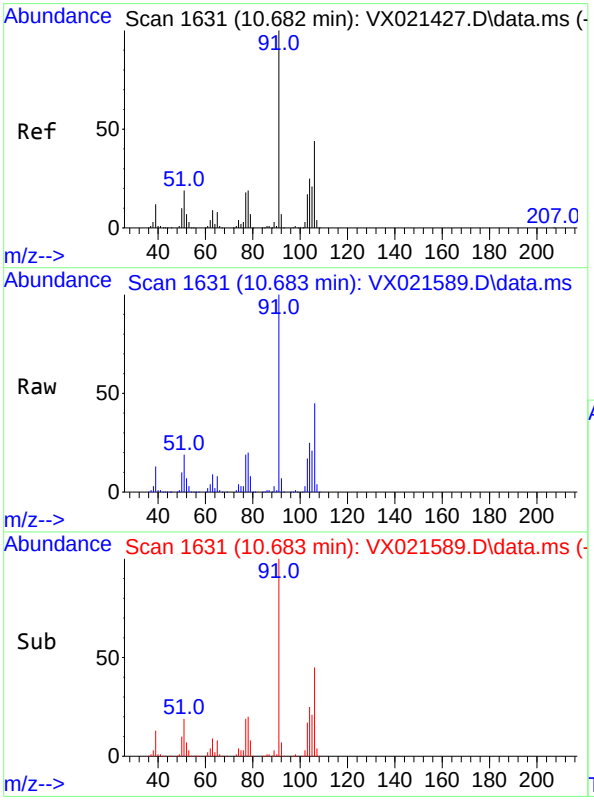



#68
m/p-Xylenes
Concen: 100.56 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:106 Resp: 164754

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 215.7 | 162.8 | 244.2 |

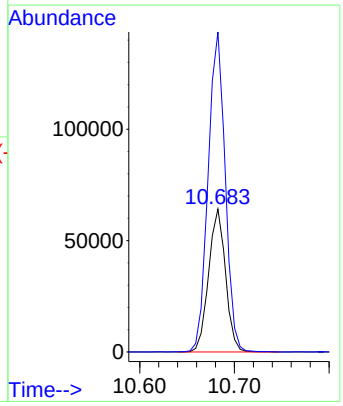



#69
o-Xylene
Concen: 50.18 ug/l
RT: 10.683 min Scan# 1631
Delta R.T. 0.001 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

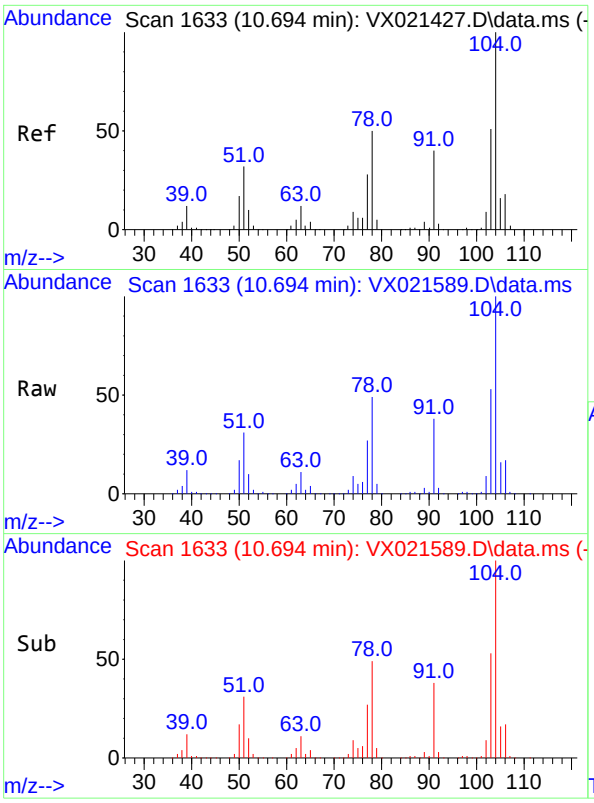
Tgt Ion:106 Resp: 79627

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 226.2 | 108.1 | 324.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

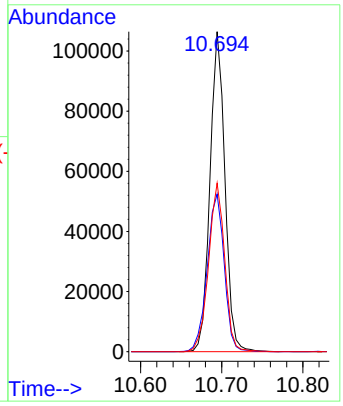
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

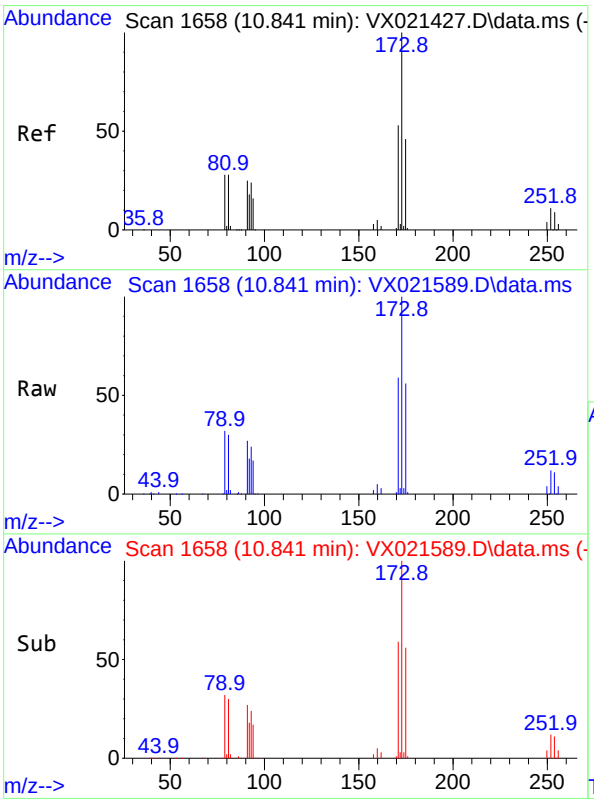



#70
Styrene
Concen: 49.73 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:104 Resp: 135716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 56.3 | 40.0 | 60.0 |
| 103 | 57.0 | 43.4 | 65.0 |

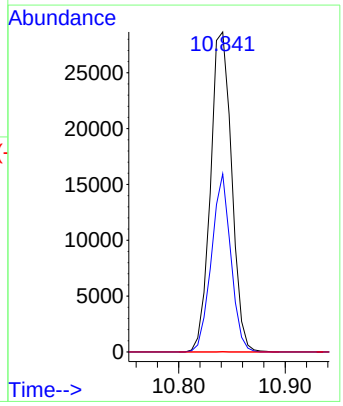



#71
Bromoform
Concen: 50.31 ug/l
RT: 10.841 min Scan# 1658
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

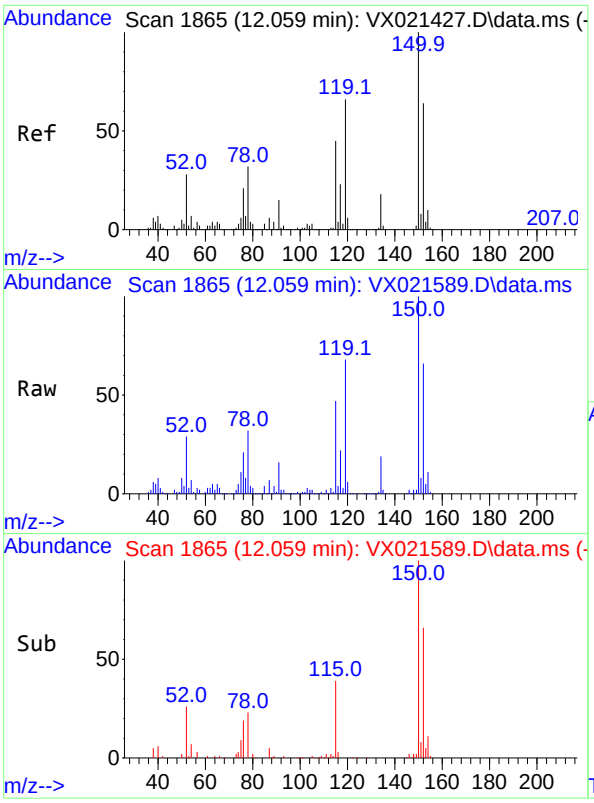
Tgt Ion:173 Resp: 39524

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 50.8 | 23.9 | 71.8 |
| 254 | 0.0 | 0.1 | 0.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

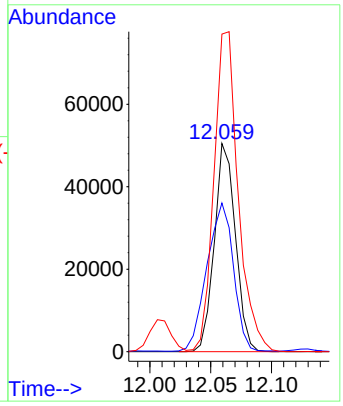
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

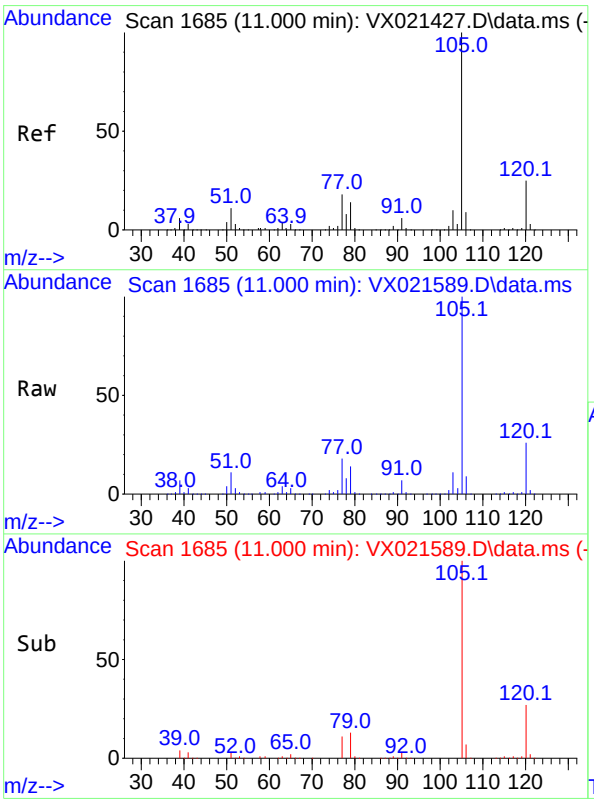



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:152 Resp: 60876

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 89.3 | 41.1 | 123.3 |
| 150 | 177.1 | 0.0 | 349.0 |

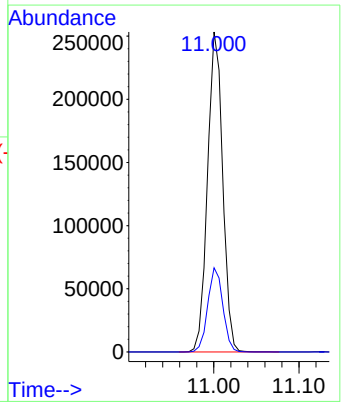



#73
Isopropylbenzene
Concen: 73.03 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

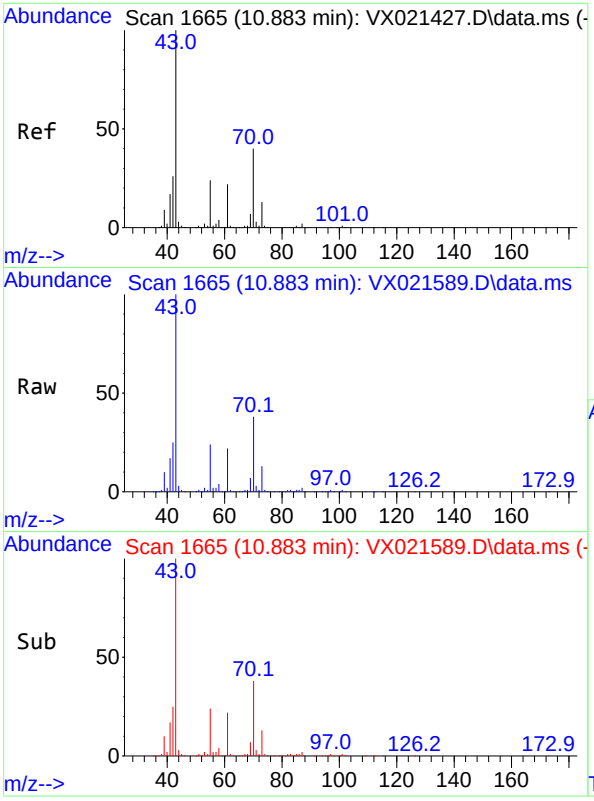
Tgt Ion:105 Resp: 312344

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.2 | 13.2 | 39.6 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

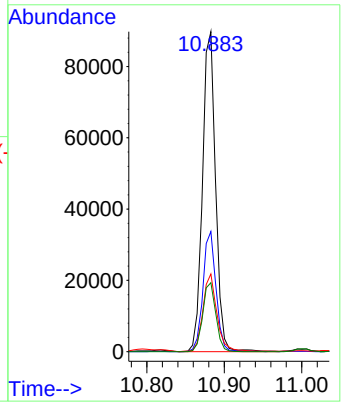
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

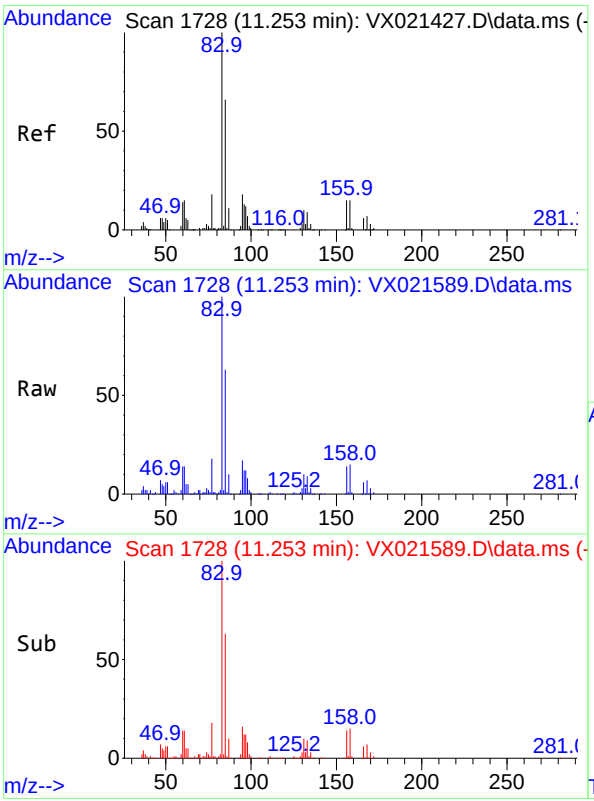



#74
N-amyl acetate
Concen: 51.06 ug/l
RT: 10.883 min Scan# 1665
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 43 Resp: 105675

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 37.4 | 39.0 | 58.6# |
| 55 | 26.3 | 21.5 | 32.3 |
| 61 | 21.5 | 22.1 | 33.1# |

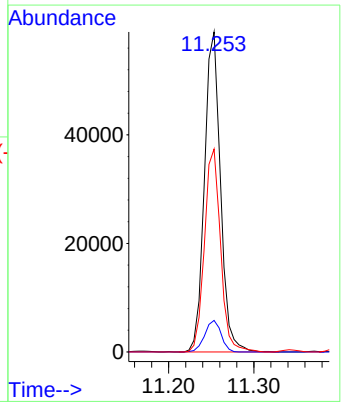



#75
1,1,2,2-Tetrachloroethane
Concen: 51.03 ug/l
RT: 11.253 min Scan# 1728
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

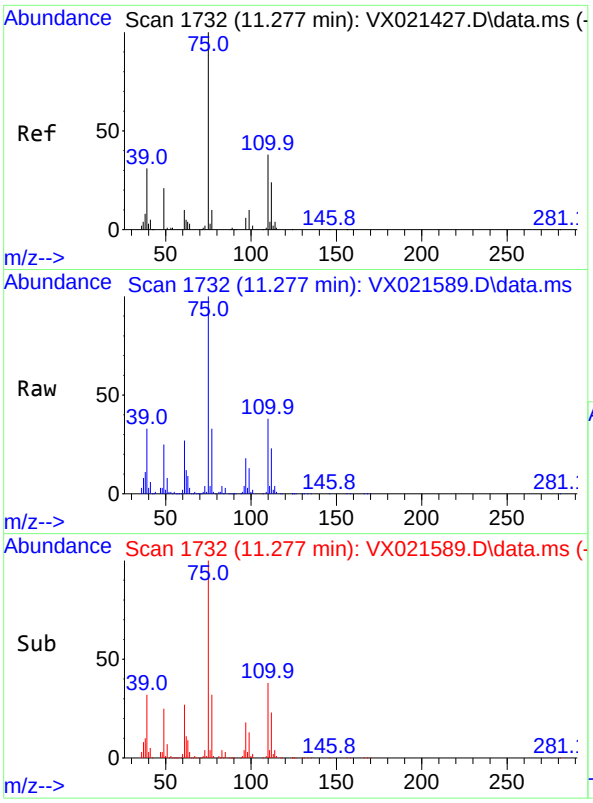
Tgt Ion: 83 Resp: 77128

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.0 | 5.1 | 15.2 |
| 85 | 63.7 | 31.8 | 95.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

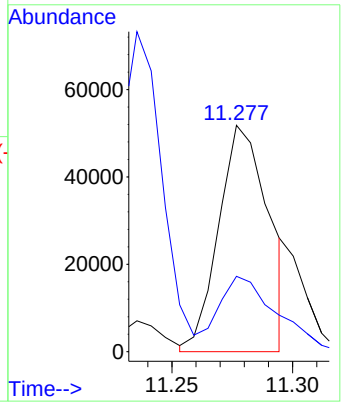
**Manual Integrations APPROVED**
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3/31/2021 9:58:51 AM

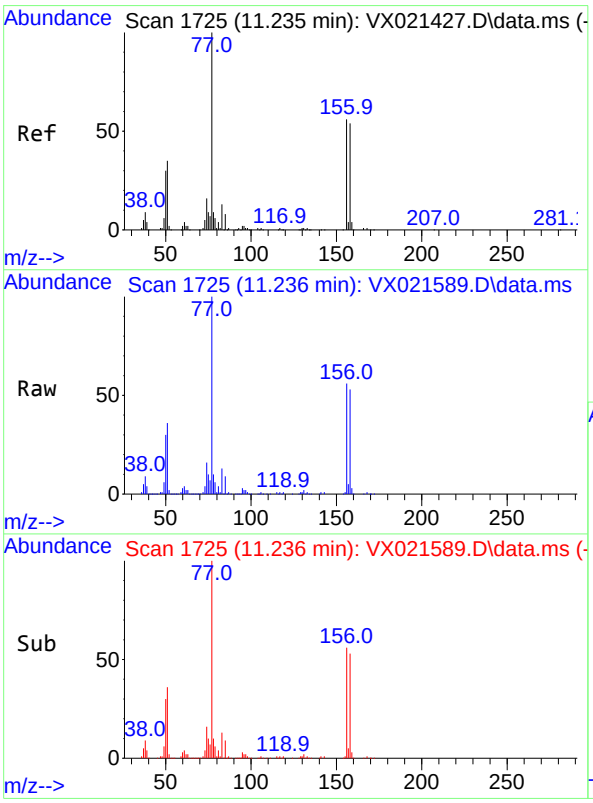



#76
1,2,3-Trichloropropane
Concen: 52.56 ug/l m
RT: 11.277 min Scan# 1732
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 75 Resp: 74481

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 38.9 | 19.1 | 57.5 |

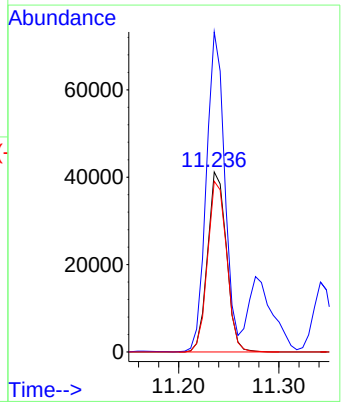



#77
Bromobenzene
Concen: 50.85 ug/l
RT: 11.236 min Scan# 1725
Delta R.T. 0.001 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

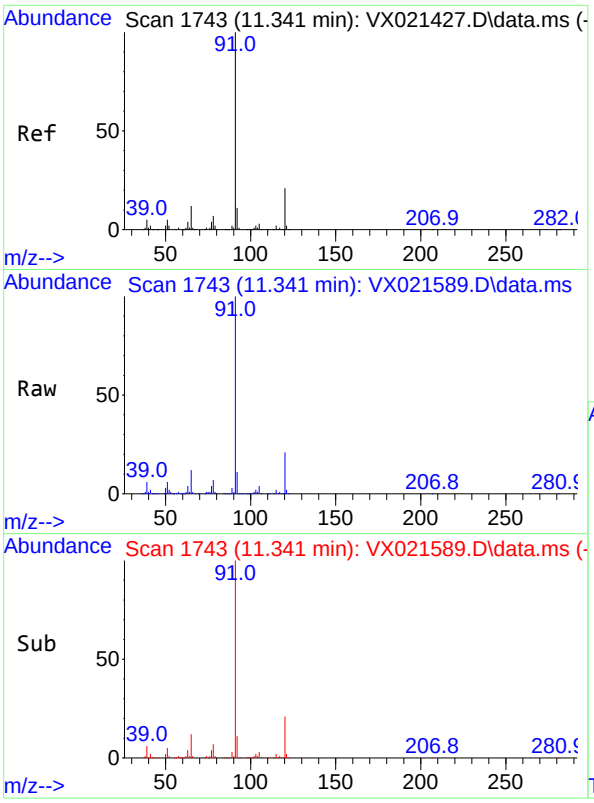
Tgt Ion:156 Resp: 53921

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 173.0 | 82.8 | 248.6 |
| 158 | 96.0 | 49.1 | 147.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

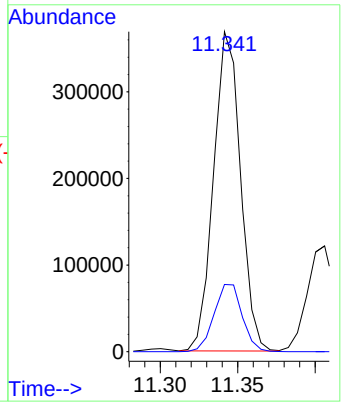
**Manual Integrations APPROVED**
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3/31/2021 9:58:51 AM

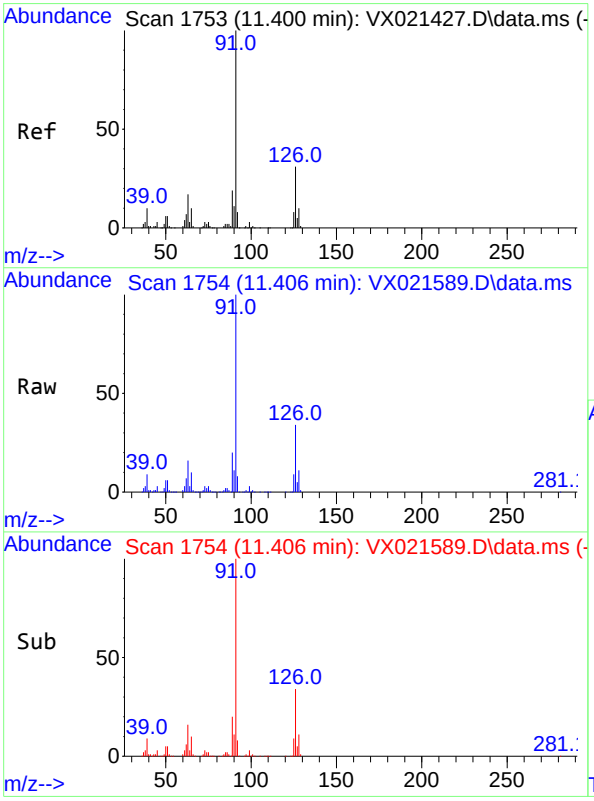



#78
n-propylbenzene
Concen: 88.09 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 91 Resp: 444975

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.0 | 11.5 | 34.5 |

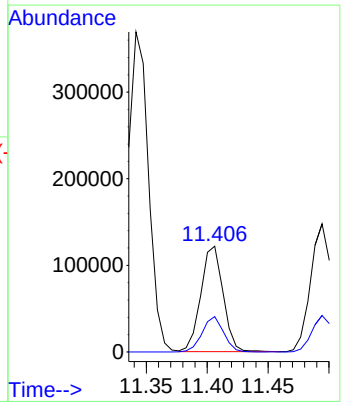



#79
2-Chlorotoluene
Concen: 50.47 ug/l
RT: 11.406 min Scan# 1754
Delta R.T. 0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

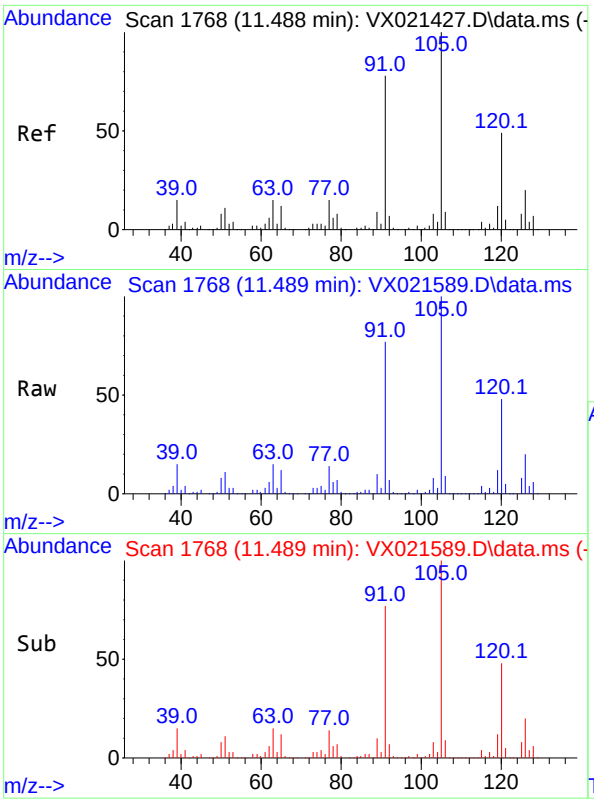
Tgt Ion: 91 Resp: 154661

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.3 | 16.6 | 49.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

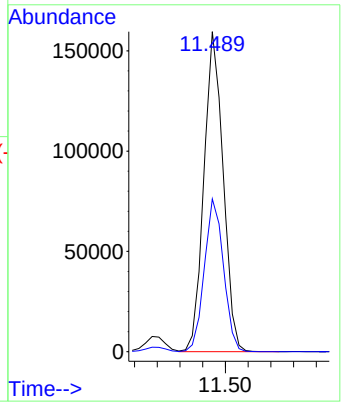
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

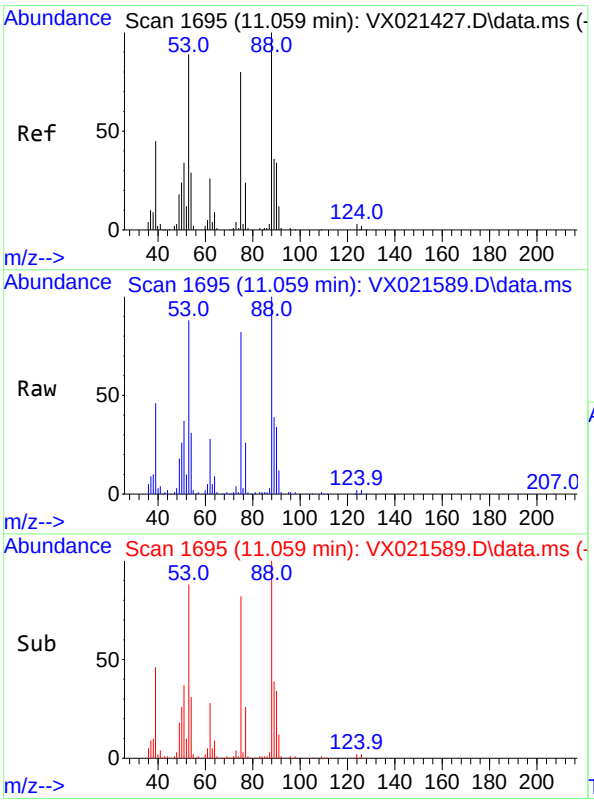



#80
1,3,5-Trimethylbenzene
Concen: 51.24 ug/l
RT: 11.489 min Scan# 1768
Delta R.T. 0.001 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:105 Resp: 187231

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 47.6 | 23.8 | 71.5 |

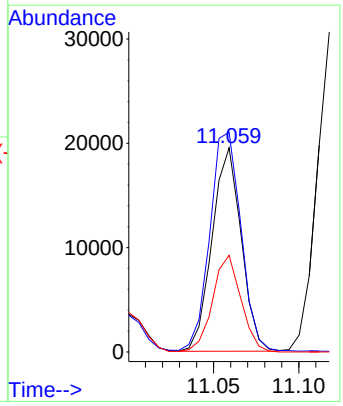



#81
trans-1,4-Dichloro-2-butene
Concen: 49.97 ug/l
RT: 11.059 min Scan# 1695
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

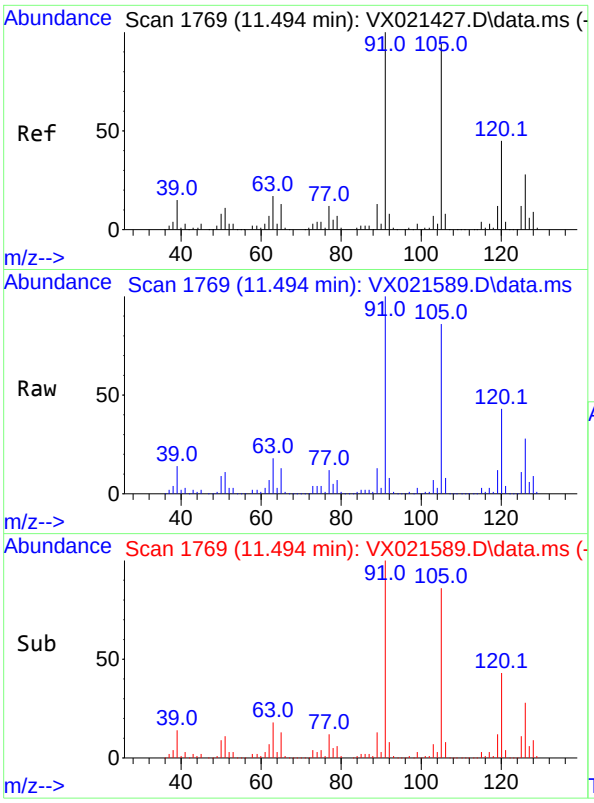
Tgt Ion: 75 Resp: 23249

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 116.3 | 74.5 | 111.7# |
| 89 | 46.4 | 37.9 | 56.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

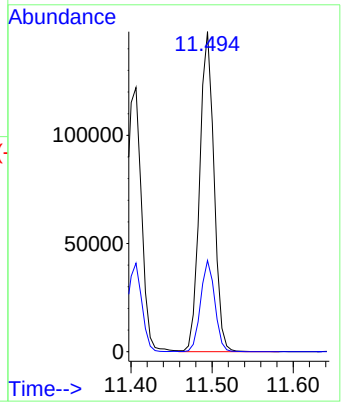
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3/31/2021 9:58:51 AM

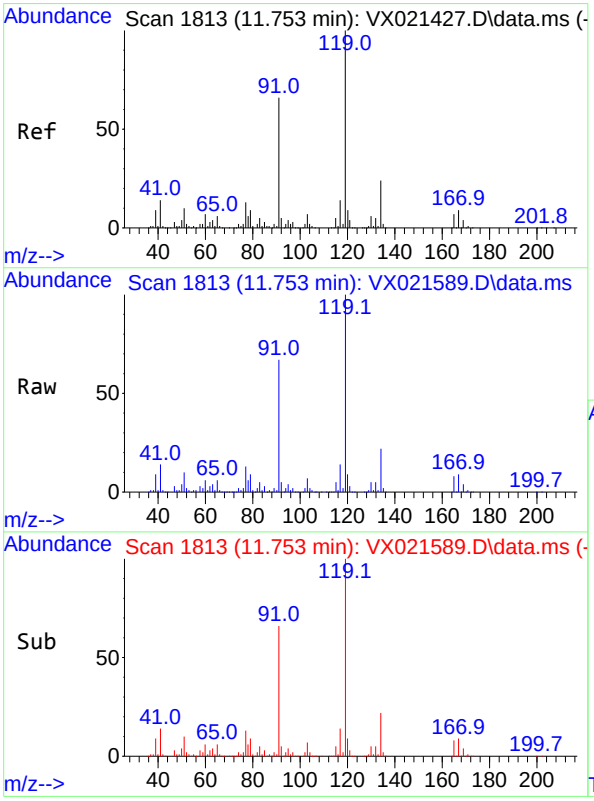



#82
4-Chlorotoluene
Concen: 49.78 ug/l
RT: 11.494 min Scan# 1769
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 91 Resp: 181113

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 28.1 | 14.9 | 44.5 |

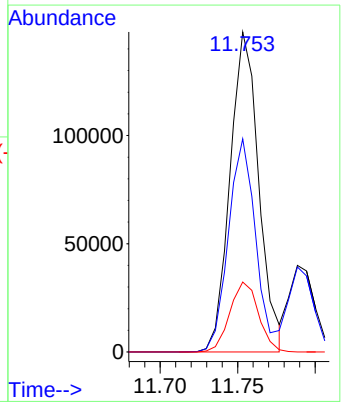



#83
tert-Butylbenzene
Concen: 53.58 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

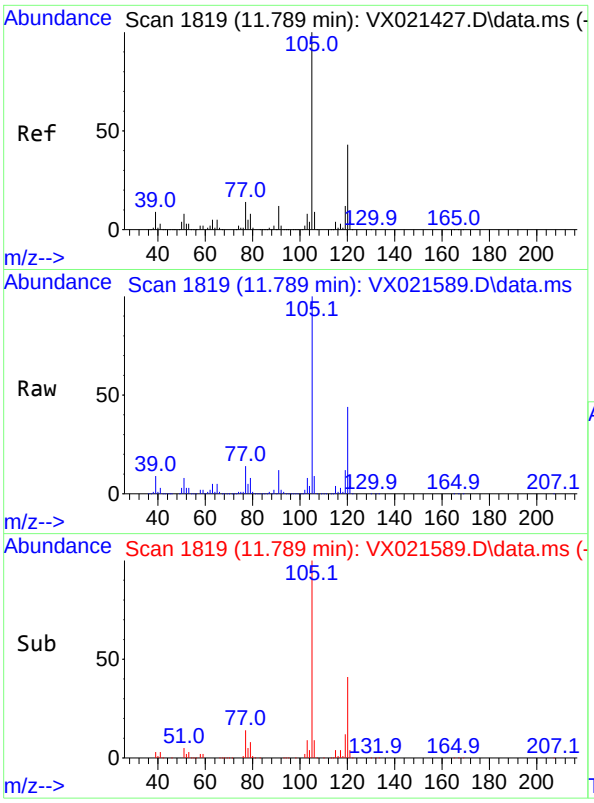
Tgt Ion:119 Resp: 190630

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 62.0 | 27.9 | 83.7 |
| 134 | 21.8 | 11.3 | 33.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

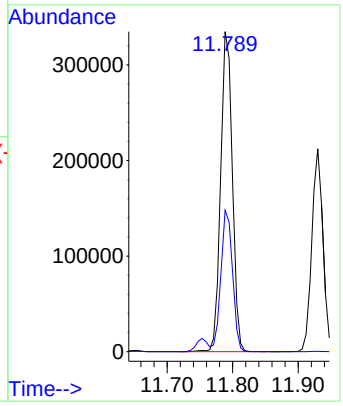
**Manual Integrations APPROVED**
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3/31/2021 9:58:51 AM

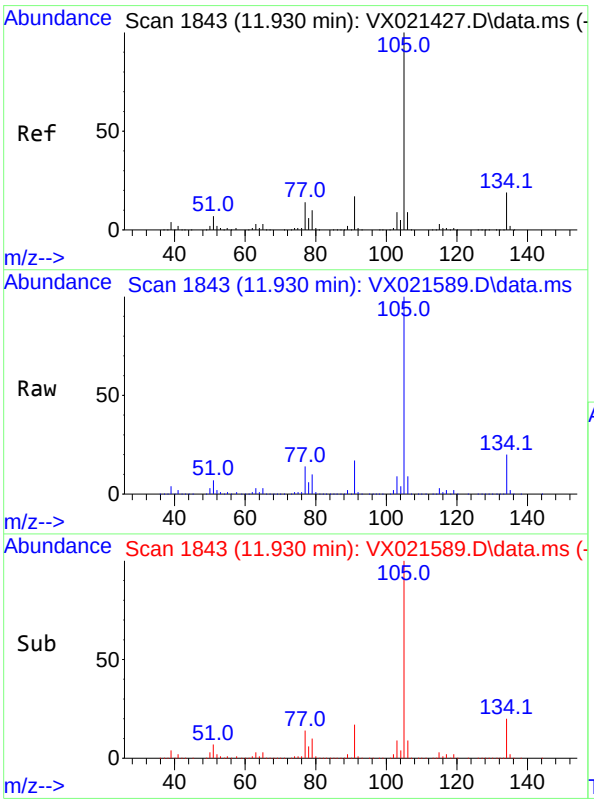



#84
1,2,4-Trimethylbenzene
Concen: 111.80 ug/l
RT: 11.789 min Scan# 1819
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:105 Resp: 411854

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 44.0 | 22.4 | 67.3 |

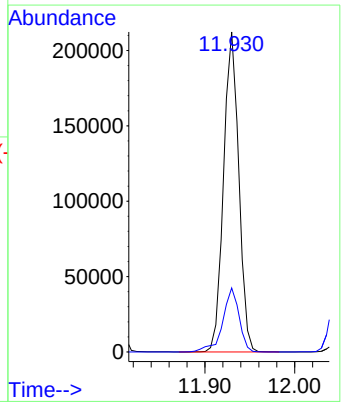



#85
sec-Butylbenzene
Concen: 60.85 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

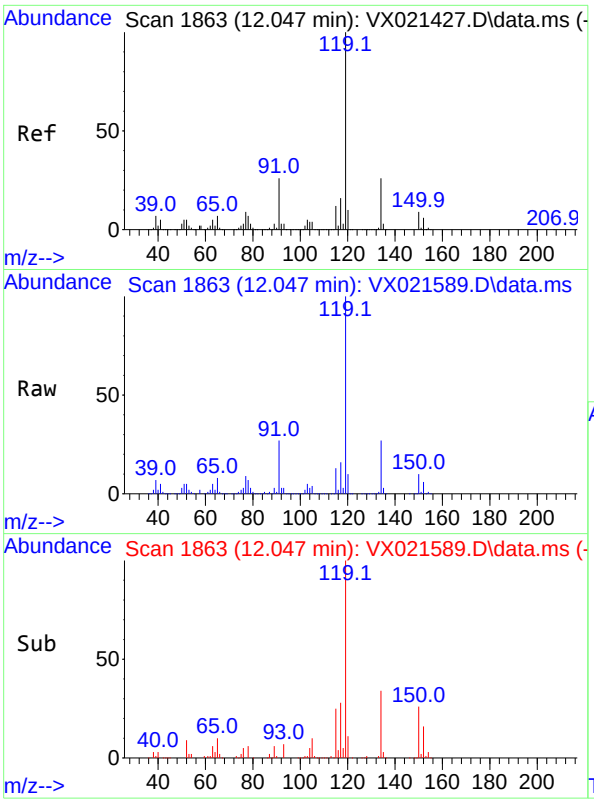
Tgt Ion:105 Resp: 249721

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 21.6 | 10.0 | 29.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

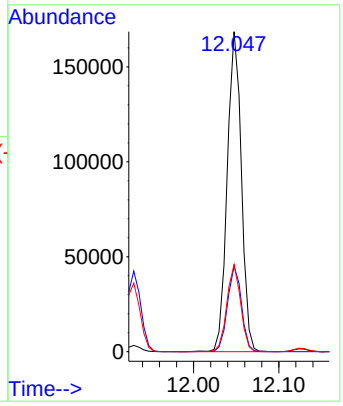
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

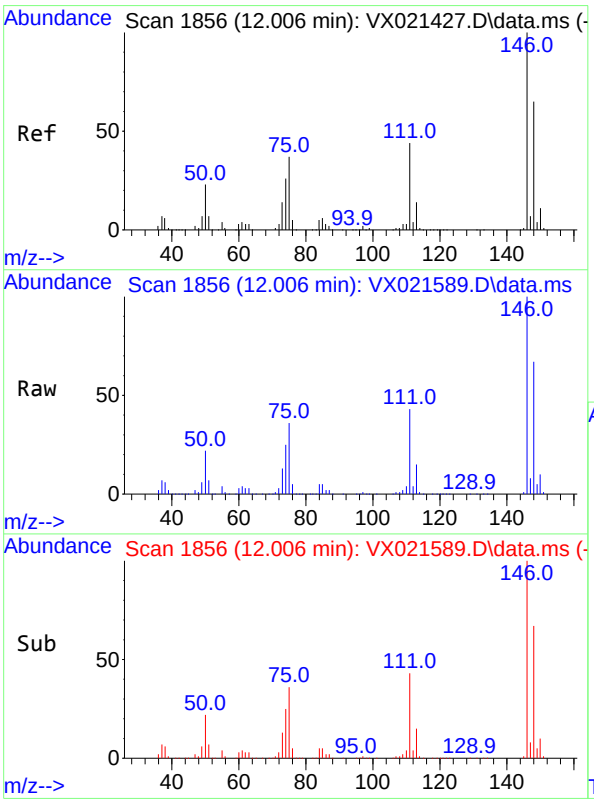



#86
p-Isopropyltoluene
Concen: 51.93 ug/l
RT: 12.047 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:119 Resp: 193995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 26.3 | 12.9 | 38.7 |
| 91 | 26.5 | 11.7 | 35.0 |

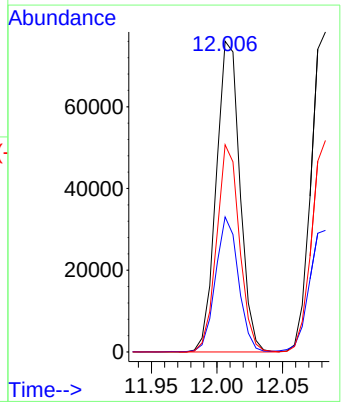



#87
1,3-Dichlorobenzene
Concen: 49.90 ug/l
RT: 12.006 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

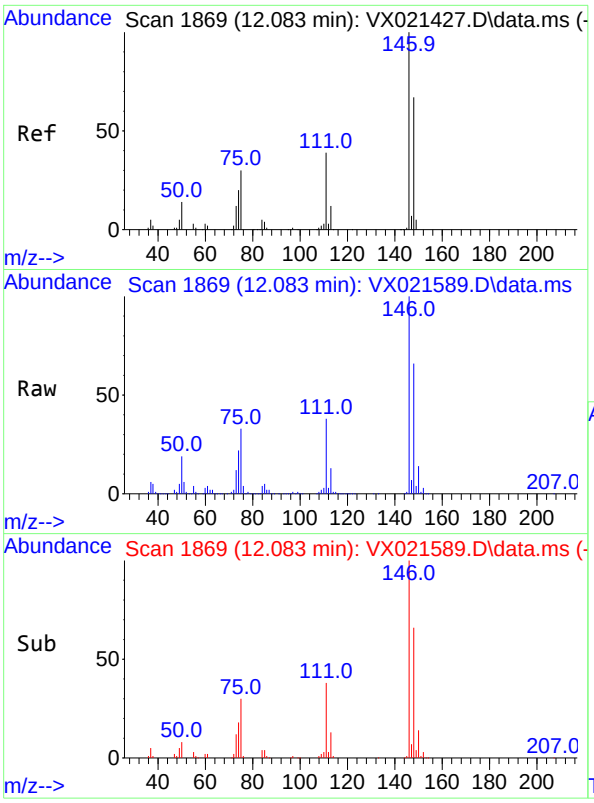
Tgt Ion:146 Resp: 95276

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 42.3 | 20.2 | 60.5 |
| 148 | 64.4 | 31.9 | 95.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

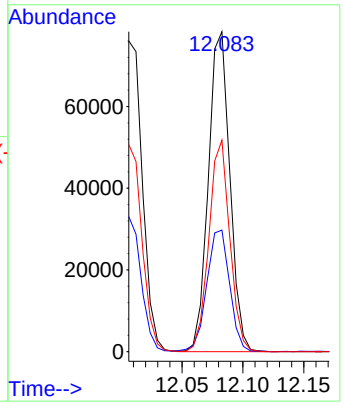
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

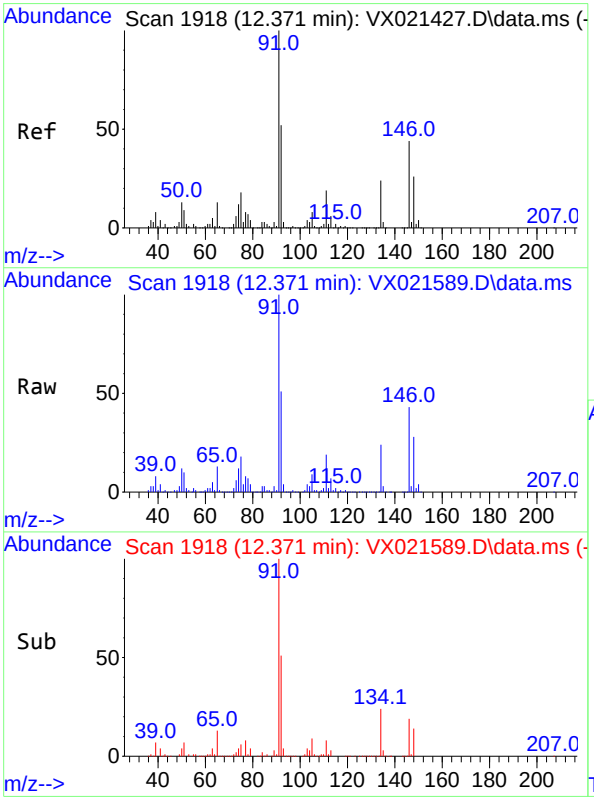



#88
1,4-Dichlorobenzene
Concen: 48.67 ug/l
RT: 12.083 min Scan# 1869
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:146 Resp: 96129

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 40.5 | 19.6 | 58.8 |
| 148 | 64.3 | 31.6 | 95.0 |

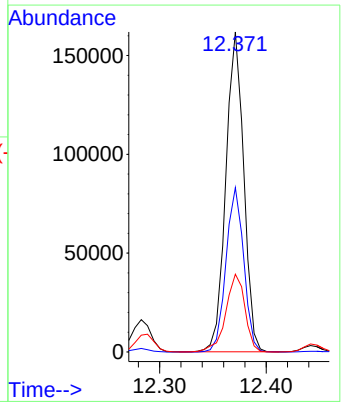



#89
n-Butylbenzene
Concen: 55.29 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

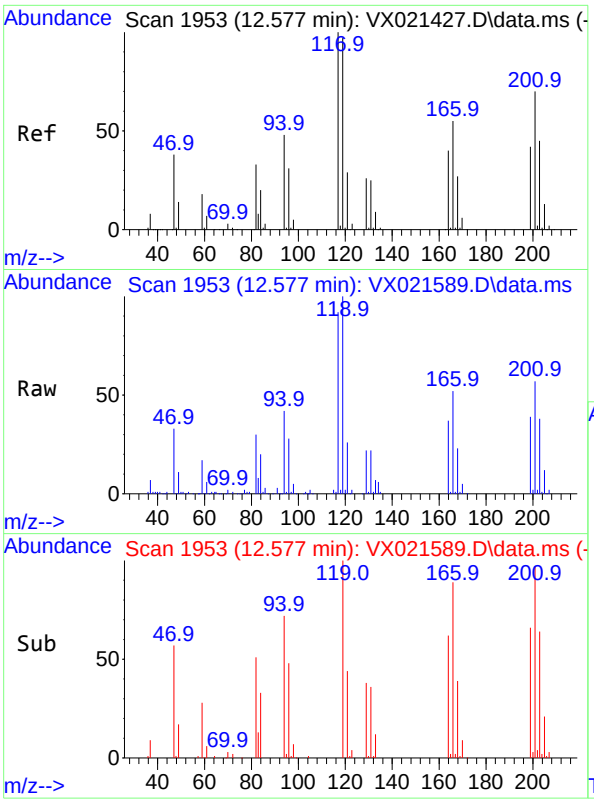
Tgt Ion: 91 Resp: 189224

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 50.8 | 27.4 | 82.0 |
| 134 | 26.0 | 13.2 | 39.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

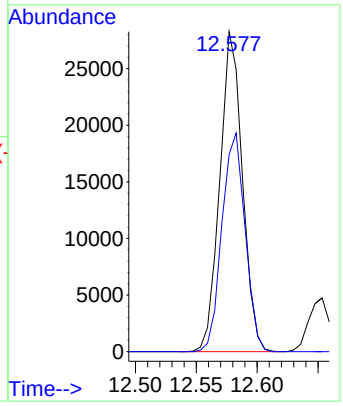
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

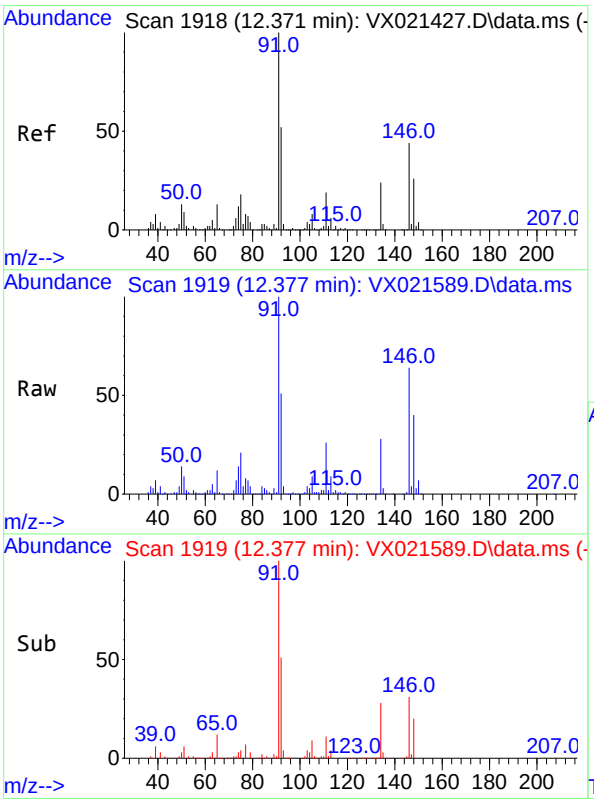



#90
Hexachloroethane
Concen: 54.11 ug/l
RT: 12.577 min Scan# 1953
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:117 Resp: 36484

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 70.2 | 40.4 | 121.2 |

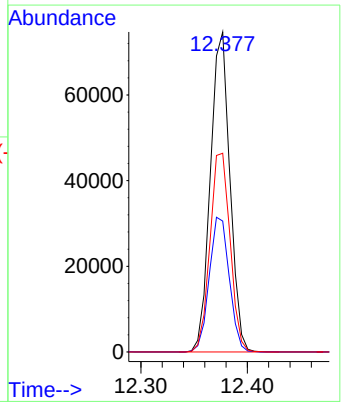



#91
1,2-Dichlorobenzene
Concen: 51.08 ug/l
RT: 12.377 min Scan# 1919
Delta R.T. 0.006 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

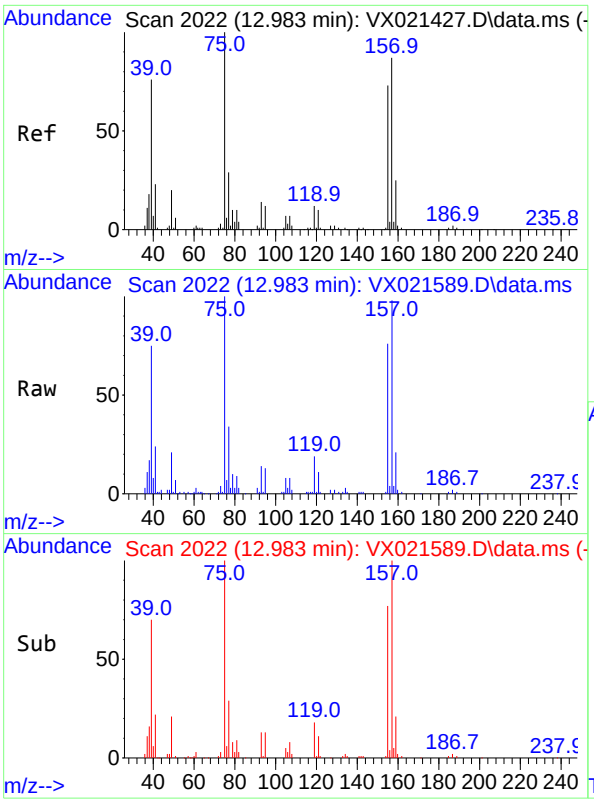
Tgt Ion:146 Resp: 94819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 43.3 | 20.8 | 62.2 |
| 148 | 64.1 | 31.9 | 95.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

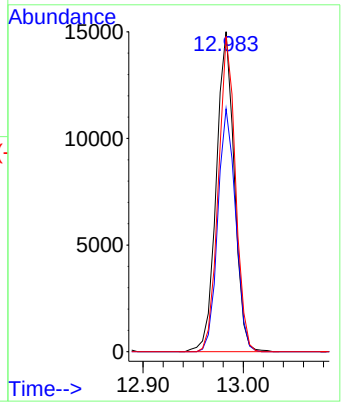
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

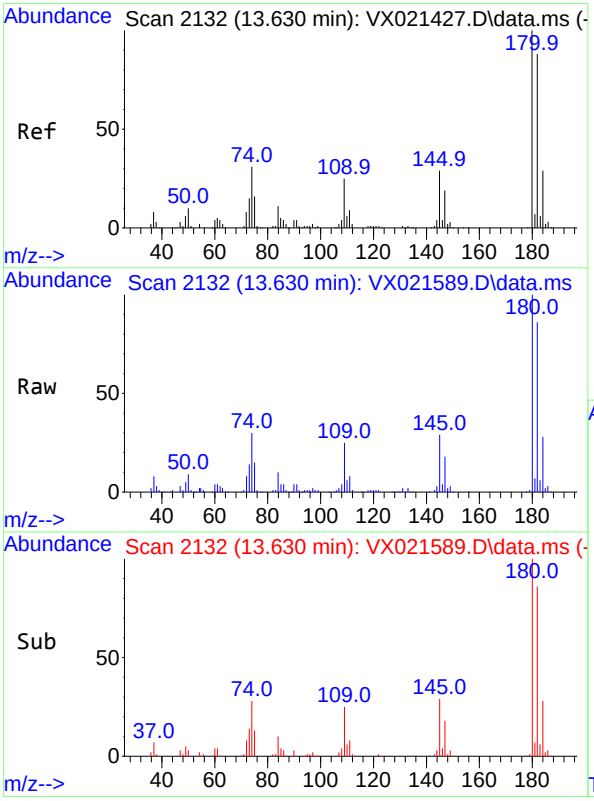



#92
1,2-Dibromo-3-Chloropropane
Concen: 48.94 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion: 75 Resp: 18624

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 75.0 | 45.3 | 135.9 |
| 157 | 93.5 | 57.7 | 173.1 |

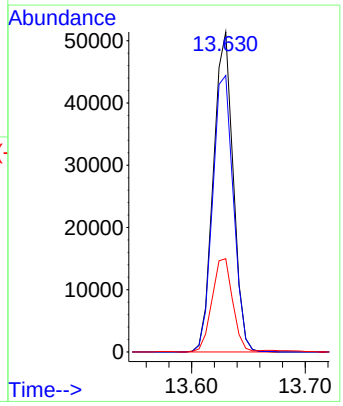



#93
1,2,4-Trichlorobenzene
Concen: 51.17 ug/l
RT: 13.630 min Scan# 2132
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

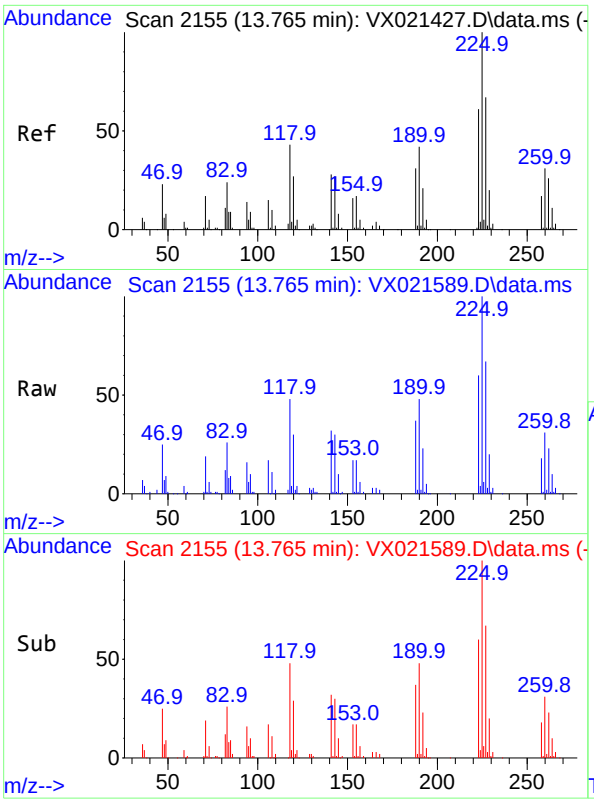
Tgt Ion:180 Resp: 62266

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 90.6 | 47.7 | 143.1 |
| 145 | 30.6 | 15.0 | 45.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

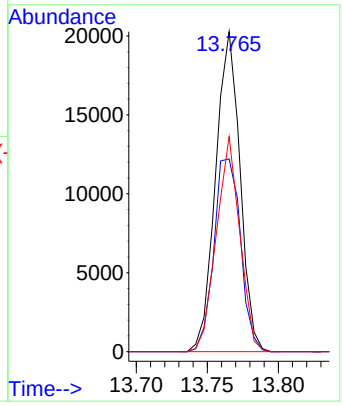
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM

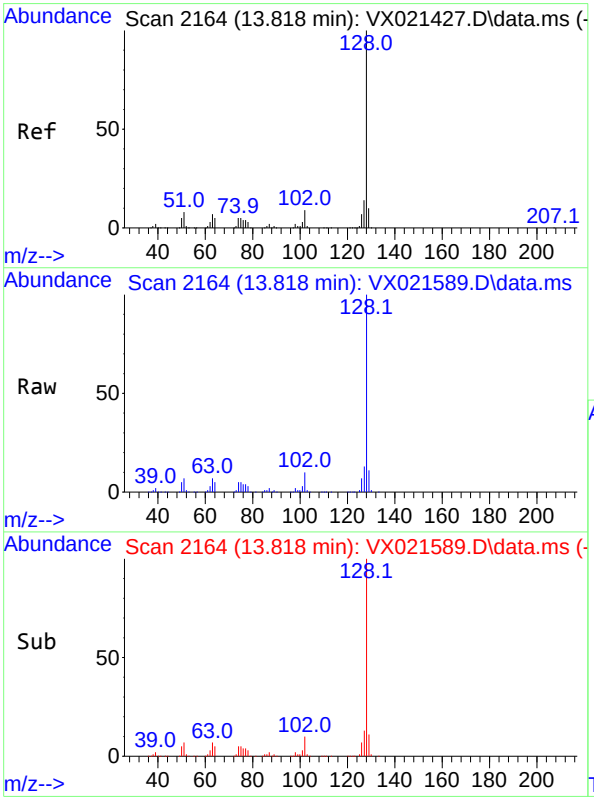



#94
Hexachlorobutadiene
Concen: 44.05 ug/l
RT: 13.765 min Scan# 2155
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:225 Resp: 24193

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 65.9 | 31.1 | 93.2 |
| 227 | 64.5 | 31.6 | 95.0 |

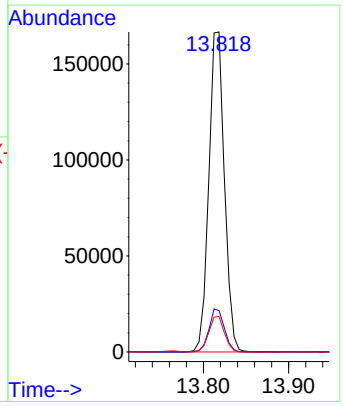



#95
Naphthalene
Concen: 53.38 ug/l
RT: 13.818 min Scan# 2164
Delta R.T. 0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

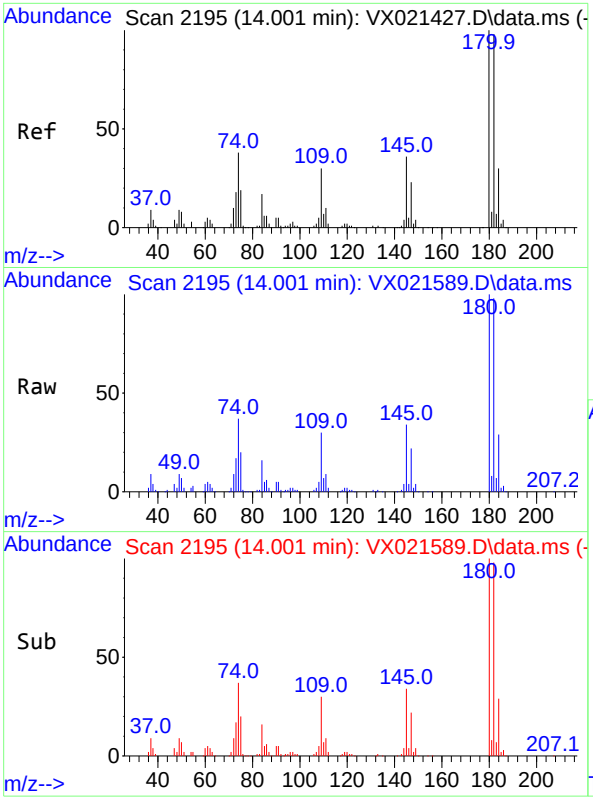
Tgt Ion:128 Resp: 211826

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.3 | 10.3 | 15.5 |
| 129 | 11.2 | 8.8 | 13.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MS

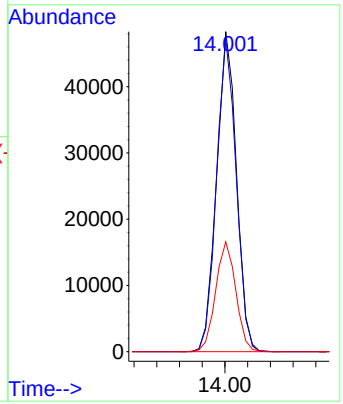
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:51 AM




#96
1,2,3-Trichlorobenzene
Concen: 48.22 ug/l
RT: 14.001 min Scan# 2195
Delta R.T. -0.000 min
Lab File: VX021589.D
Acq: 29 Mar 2021 19:57

Tgt Ion:180 Resp: 58650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 97.2 | 47.6 | 142.9 |
| 145 | 34.9 | 16.1 | 48.3 |



Raw Data: **VX021590.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-1MSD | SDG No.: | M1785 |
| Lab Sample ID: | M1785-12MSD | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021590.D | 10 | | 03/29/21 20:21 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 470 | | 2.30 | 10.0 | ug/L |
| 74-87-3 | Chloromethane | 470 | | 2.00 | 10.0 | ug/L |
| 75-01-4 | Vinyl Chloride | 500 | | 1.90 | 10.0 | ug/L |
| 74-83-9 | Bromomethane | 560 | | 8.70 | 50.0 | ug/L |
| 75-00-3 | Chloroethane | 490 | | 3.50 | 10.0 | ug/L |
| 75-69-4 | Trichlorofluoromethane | 500 | | 2.50 | 10.0 | ug/L |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane | 490 | | 2.10 | 10.0 | ug/L |
| 75-35-4 | 1,1-Dichloroethene | 470 | | 2.60 | 10.0 | ug/L |
| 67-64-1 | Acetone | 2500 | | 16.1 | 50.0 | ug/L |
| 75-15-0 | Carbon Disulfide | 420 | | 2.50 | 10.0 | ug/L |
| 1634-04-4 | Methyl tert-butyl Ether | 500 | | 2.20 | 10.0 | ug/L |
| 79-20-9 | Methyl Acetate | 550 | | 4.70 | 10.0 | ug/L |
| 75-09-2 | Methylene Chloride | 480 | | 1.80 | 10.0 | ug/L |
| 156-60-5 | trans-1,2-Dichloroethene | 470 | | 1.90 | 10.0 | ug/L |
| 75-34-3 | 1,1-Dichloroethane | 500 | | 2.10 | 10.0 | ug/L |
| 110-82-7 | Cyclohexane | 480 | | 13.0 | 50.0 | ug/L |
| 78-93-3 | 2-Butanone | 2600 | | 9.00 | 50.0 | ug/L |
| 56-23-5 | Carbon Tetrachloride | 490 | | 2.70 | 10.0 | ug/L |
| 156-59-2 | cis-1,2-Dichloroethene | 490 | | 2.20 | 10.0 | ug/L |
| 74-97-5 | Bromochloromethane | 510 | | 2.60 | 10.0 | ug/L |
| 67-66-3 | Chloroform | 510 | | 2.70 | 10.0 | ug/L |
| 71-55-6 | 1,1,1-Trichloroethane | 500 | | 2.00 | 10.0 | ug/L |
| 108-87-2 | Methylcyclohexane | 450 | | 1.40 | 10.0 | ug/L |
| 71-43-2 | Benzene | 480 | | 1.80 | 10.0 | ug/L |
| 107-06-2 | 1,2-Dichloroethane | 490 | | 2.50 | 10.0 | ug/L |
| 79-01-6 | Trichloroethene | 480 | | 1.70 | 10.0 | ug/L |
| 78-87-5 | 1,2-Dichloropropane | 490 | | 1.70 | 10.0 | ug/L |
| 75-27-4 | Bromodichloromethane | 490 | | 2.00 | 10.0 | ug/L |
| 108-10-1 | 4-Methyl-2-Pentanone | 2600 | | 8.70 | 50.0 | ug/L |
| 108-88-3 | Toluene | 500 | | 2.20 | 10.0 | ug/L |
| 10061-02-6 | t-1,3-Dichloropropene | 490 | | 1.80 | 10.0 | ug/L |
| 10061-01-5 | cis-1,3-Dichloropropene | 480 | | 1.70 | 10.0 | ug/L |

Raw Data: **VX021590.D**

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

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-1MSD | SDG No.: | M1785 |
| Lab Sample ID: | M1785-12MSD | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021590.D | 10 | | 03/29/21 20:21 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 500 | | 2.40 | 10.0 | ug/L |
| 591-78-6 | 2-Hexanone | 2600 | | 9.20 | 50.0 | ug/L |
| 124-48-1 | Dibromochloromethane | 510 | | 1.80 | 10.0 | ug/L |
| 106-93-4 | 1,2-Dibromoethane | 500 | | 1.60 | 10.0 | ug/L |
| 127-18-4 | Tetrachloroethene | 490 | | 1.70 | 10.0 | ug/L |
| 108-90-7 | Chlorobenzene | 490 | | 1.70 | 10.0 | ug/L |
| 100-41-4 | Ethyl Benzene | 500 | | 1.80 | 10.0 | ug/L |
| 1330-20-7 | Total Xylenes | 1510 | | 5.10 | 30.0 | ug/L |
| 100-42-5 | Styrene | 500 | | 1.60 | 10.0 | ug/L |
| 75-25-2 | Bromoform | 520 | | 1.90 | 10.0 | ug/L |
| 98-82-8 | Isopropylbenzene | 730 | | 2.30 | 10.0 | ug/L |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 500 | | 2.90 | 10.0 | ug/L |
| 103-65-1 | n-propylbenzene | 870 | | 2.40 | 10.0 | ug/L |
| 108-67-8 | 1,3,5-Trimethylbenzene | 510 | | 2.50 | 10.0 | ug/L |
| 98-06-6 | tert-Butylbenzene | 530 | | 2.60 | 10.0 | ug/L |
| 95-63-6 | 1,2,4-Trimethylbenzene | 1100 | | 2.00 | 10.0 | ug/L |
| 135-98-8 | sec-Butylbenzene | 600 | | 2.30 | 10.0 | ug/L |
| 541-73-1 | 1,3-Dichlorobenzene | 500 | | 1.90 | 10.0 | ug/L |
| 106-46-7 | 1,4-Dichlorobenzene | 480 | | 2.00 | 10.0 | ug/L |
| 104-51-8 | n-Butylbenzene | 550 | | 1.90 | 10.0 | ug/L |
| 95-50-1 | 1,2-Dichlorobenzene | 500 | | 1.90 | 10.0 | ug/L |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 480 | | 4.70 | 10.0 | ug/L |
| 120-82-1 | 1,2,4-Trichlorobenzene | 480 | | 3.00 | 10.0 | ug/L |
| 87-61-6 | 1,2,3-Trichlorobenzene | 480 | | 3.50 | 10.0 | ug/L |
| 123-91-1 | 1,4-Dioxane | 10300 | | 69.8 | 1000 | ug/L |
| **SURROGATES** | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 52.8 | | 78 - 117 | 105% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 50.9 | | 75 - 124 | 102% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 51.5 | | 92 - 112 | 103% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 52.3 | | 83 - 123 | 105% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | |
| 363-72-4 | Pentafluorobenzene | 78200 | 5.629 | | | |
| 540-36-3 | 1,4-Difluorobenzene | 134000 | 6.829 | | | |

Raw Data: **VX021590.D**

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Chazen Companies | Date Collected: | 03/23/21 |
| Project: | Ebenzer Plaza-1 - 20918.10 | Date Received: | 03/23/21 |
| Client Sample ID: | MW-1MSD | SDG No.: | M1785 |
| Lab Sample ID: | M1785-12MSD | Matrix: | Water |
| Analytical Method: | SW8260 | % Moisture: | 100 |
| Sample Wt/Vol: | 5 Units: mL | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group2 |
| GC Column: | DB-624UI ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VX021590.D | 10 | | 03/29/21 20:21 | VX032921 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|
| 3114-55-4 | Chlorobenzene-d5 | 126000 | 10.094 | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 62500 | 12.059 | | | |

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

Quantitation Report (QT Reviewed)

Sample Results: **VX021590.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021590.D
Acq On : 29 Mar 2021 20:21
Operator : JC/MD
Sample : M1785-12MSD 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 28 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

Quant Time: Mar 30 03:32:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| Internal Standards | | | | | | | |
| 1) Pentafluorobenzene | 5.629 | 168 | 78212 | 50.00 | ug/l | | 0.00 |
| 34) 1,4-Difluorobenzene | 6.829 | 114 | 133786 | 50.00 | ug/l | | 0.00 |
| 63) Chlorobenzene-d5 | 10.094 | 117 | 126299 | 50.00 | ug/l | | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.059 | 152 | 62506 | 50.00 | ug/l | | 0.00 |
| System Monitoring Compounds | | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.029 | 65 | 68651 | 52.75 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = 105.50% | | | | |
| 35) Dibromofluoromethane | 5.464 | 113 | 48404 | 50.93 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = 101.86% | | | | |
| 50) Toluene-d8 | 8.694 | 98 | 174489 | 51.53 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = 103.06% | | | | |
| 62) 4-Bromofluorobenzene | 11.118 | 95 | 68823 | 52.27 | ug/l | | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = 104.54% | | | | |
| Target Compounds | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.181 | 85 | 40698 | 47.34 | ug/l | | 98 |
| 3) Chloromethane | 1.311 | 50 | 46662 | 47.22 | ug/l | | 98 |
| 4) Vinyl Chloride | 1.393 | 62 | 44001 | 50.04 | ug/l | | 100 |
| 5) Bromomethane | 1.622 | 94 | 19647 | 55.52 | ug/l | | 95 |
| 6) Chloroethane | 1.699 | 64 | 27541 | 49.39 | ug/l | | 100 |
| 7) Trichlorofluoromethane | 1.905 | 101 | 71053 | 49.68 | ug/l | | 95 |
| 8) Diethyl Ether | 2.170 | 74 | 24805 | 49.98 | ug/l | | 78 |
| 9) 1,1,2-Trichlorotrifluo... | 2.358 | 101 | 39243 | 48.75 | ug/l | | 97 |
| 10) Methyl Iodide | 2.487 | 142 | 34810 | 54.66 | ug/l | # | 89 |
| 11) Tert butyl alcohol | 3.023 | 59 | 54297 | 252.38 | ug/l | | 97 |
| 12) 1,1-Dichloroethene | 2.352 | 96 | 37296 | 47.32 | ug/l | | 88 |
| 13) Acrolein | 2.275 | 56 | 17861 | 166.06 | ug/l | | 96 |
| 14) Allyl chloride | 2.705 | 41 | 76725 | 47.96 | ug/l | # | 89 |
| 15) Acrylonitrile | 3.117 | 53 | 131304 | 256.81 | ug/l | | 97 |
| 16) Acetone | 2.422 | 43 | 122943 | 249.86 | ug/l | # | 86 |
| 17) Carbon Disulfide | 2.546 | 76 | 94022 | 42.48 | ug/l | | 98 |
| 18) Methyl Acetate | 2.746 | 43 | 78622 | 55.31 | ug/l | | 90 |
| 19) Methyl tert-butyl Ether | 3.170 | 73 | 148316 | 50.39 | ug/l | | 99 |
| 20) Methylene Chloride | 2.828 | 84 | 45839 | 47.74 | ug/l | # | 86 |
| 21) trans-1,2-Dichloroethene | 3.134 | 96 | 40805 | 47.13 | ug/l | | 91 |
| 22) Diisopropyl ether | 3.823 | 45 | 157793 | 50.76 | ug/l | # | 94 |
| 23) Vinyl Acetate | 3.781 | 43 | 658893 | 250.61 | ug/l | # | 92 |
| 24) 1,1-Dichloroethane | 3.664 | 63 | 83017 | 49.54 | ug/l | | 96 |
| 25) 2-Butanone | 4.635 | 43 | 191740 | 257.07 | ug/l | | 91 |
| 26) 2,2-Dichloropropane | 4.546 | 77 | 63370 | 43.65 | ug/l | | 96 |
| 27) cis-1,2-Dichloroethene | 4.558 | 96 | 49479 | 49.22 | ug/l | | 93 |
| 28) Bromochloromethane | 4.976 | 49 | 42858 | 51.09 | ug/l | | 87 |
| 29) Tetrahydrofuran | 5.088 | 42 | 122106 | 252.49 | ug/l | | 86 |
| 30) Chloroform | 5.176 | 83 | 90051 | 50.92 | ug/l | | 99 |
| 31) Cyclohexane | 5.546 | 56 | 68816 | 48.09 | ug/l | | 94 |
| 32) 1,1,1-Trichloroethane | 5.458 | 97 | 79108 | 50.48 | ug/l | | 97 |
| 36) 1,1-Dichloropropene | 5.764 | 75 | 61703 | 47.07 | ug/l | | 96 |
| 37) Ethyl Acetate | 4.793 | 43 | 71006 | 46.85 | ug/l | # | 93 |
| 38) Carbon Tetrachloride | 5.746 | 117 | 69406 | 49.27 | ug/l | | 98 |
| 39) Methylcyclohexane | 7.435 | 83 | 65842 | 45.31 | ug/l | | 91 |
| 40) Benzene | 6.111 | 78 | 179094 | 48.11 | ug/l | | 99 |

Sample Results: **VX021590.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021590.D
Acq On : 29 Mar 2021 20:21
Operator : JC/MD
Sample : M1785-12MSD 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 28 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

Quant Time: Mar 30 03:32:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 41) Methacrylonitrile | 5.005 | 41 | 41849 | 47.60 | ug/l | | 89 |
| 42) 1,2-Dichloroethane | 6.158 | 62 | 78533 | 48.66 | ug/l | | 94 |
| 43) Isopropyl Acetate | 6.411 | 43 | 121138 | 49.22 | ug/l | # | 90 |
| 44) Trichloroethene | 7.188 | 130 | 46818 | 47.66 | ug/l | | 95 |
| 45) 1,2-Dichloropropane | 7.488 | 63 | 49076 | 48.67 | ug/l | | 96 |
| 46) Dibromomethane | 7.635 | 93 | 35479 | 48.27 | ug/l | | 92 |
| 47) Bromodichloromethane | 7.876 | 83 | 73771 | 49.32 | ug/l | | 100 |
| 48) Methyl methacrylate | 7.747 | 41 | 64379 | 49.04 | ug/l | # | 83 |
| 49) 1,4-Dioxane | 7.711 | 88 | 24092 | 1025.01 | ug/l | # | 89 |
| 51) 4-Methyl-2-Pentanone | 8.617 | 43 | 390991 | 258.28 | ug/l | | 88 |
| 52) Toluene | 8.765 | 92 | 114366 | 49.74 | ug/l | | 99 |
| 53) t-1,3-Dichloropropene | 9.023 | 75 | 74599 | 49.39 | ug/l | | 98 |
| 54) cis-1,3-Dichloropropene | 8.412 | 75 | 77542 | 48.25 | ug/l | # | 84 |
| 55) 1,1,2-Trichloroethane | 9.194 | 97 | 48656 | 50.14 | ug/l | | 98 |
| 56) Ethyl methacrylate | 9.159 | 69 | 75245 | 46.08 | ug/l | # | 76 |
| 57) 1,3-Dichloropropane | 9.353 | 76 | 81875 | 49.30 | ug/l | | 100 |
| 59) 2-Hexanone | 9.470 | 43 | 301146 | 264.93 | ug/l | | 84 |
| 60) Dibromochloromethane | 9.565 | 129 | 55375 | 50.95 | ug/l | | 98 |
| 61) 1,2-Dibromoethane | 9.653 | 107 | 52101 | 49.98 | ug/l | | 99 |
| 64) Tetrachloroethene | 9.318 | 164 | 41551 | 49.11 | ug/l | | 93 |
| 65) Chlorobenzene | 10.124 | 112 | 124401 | 49.03 | ug/l | | 99 |
| 66) 1,1,1,2-Tetrachloroethane | 10.206 | 131 | 49790 | 51.21 | ug/l | | 98 |
| 67) Ethyl Benzene | 10.235 | 91 | 231805 | 50.12 | ug/l | | 99 |
| 68) m/p-Xylenes | 10.341 | 106 | 166292 | 100.93 | ug/l | | 91 |
| 69) o-Xylene | 10.682 | 106 | 80942 | 50.72 | ug/l | | 96 |
| 70) Styrene | 10.694 | 104 | 137003 | 49.92 | ug/l | | 95 |
| 71) Bromoform | 10.841 | 173 | 40963 | 51.85 | ug/l | # | 97 |
| 73) Isopropylbenzene | 11.000 | 105 | 319065 | 72.65 | ug/l | | 100 |
| 74) N-amyl acetate | 10.882 | 43 | 106130 | 49.94 | ug/l | # | 89 |
| 75) 1,1,2,2-Tetrachloroethane | 11.253 | 83 | 78037 | 50.29 | ug/l | | 99 |
| 76) 1,2,3-Trichloropropane | 11.277 | 75 | 76105m | 52.30 | ug/l | | |
| 77) Bromobenzene | 11.241 | 156 | 53955 | 49.56 | ug/l | | 96 |
| 78) n-propylbenzene | 11.341 | 91 | 450578 | 86.87 | ug/l | | 99 |
| 79) 2-Chlorotoluene | 11.406 | 91 | 157280 | 49.99 | ug/l | | 99 |
| 80) 1,3,5-Trimethylbenzene | 11.488 | 105 | 192203 | 51.22 | ug/l | | 97 |
| 81) trans-1,4-Dichloro-2-b... | 11.059 | 75 | 23305 | 48.78 | ug/l | # | 83 |
| 82) 4-Chlorotoluene | 11.494 | 91 | 183217 | 49.05 | ug/l | | 97 |
| 83) tert-Butylbenzene | 11.753 | 119 | 192441 | 52.68 | ug/l | | 94 |
| 84) 1,2,4-Trimethylbenzene | 11.788 | 105 | 426289 | 112.71 | ug/l | | 98 |
| 85) sec-Butylbenzene | 11.930 | 105 | 253761 | 60.22 | ug/l | | 97 |
| 86) p-Isopropyltoluene | 12.047 | 119 | 194101 | 50.60 | ug/l | | 96 |
| 87) 1,3-Dichlorobenzene | 12.006 | 146 | 98348 | 50.17 | ug/l | | 98 |
| 88) 1,4-Dichlorobenzene | 12.083 | 146 | 97747 | 48.20 | ug/l | | 99 |
| 89) n-Butylbenzene | 12.371 | 91 | 192711 | 54.84 | ug/l | | 97 |
| 90) Hexachloroethane | 12.577 | 117 | 36417 | 52.61 | ug/l | | 92 |
| 91) 1,2-Dichlorobenzene | 12.377 | 146 | 95609 | 50.16 | ug/l | | 98 |
| 92) 1,2-Dibromo-3-Chloropr... | 12.983 | 75 | 18553 | 47.54 | ug/l | | 83 |
| 93) 1,2,4-Trichlorobenzene | 13.630 | 180 | 60583 | 48.49 | ug/l | | 98 |
| 94) Hexachlorobutadiene | 13.765 | 225 | 25982 | 46.08 | ug/l | | 97 |
| 95) Naphthalene | 13.812 | 128 | 221159 | 54.28 | ug/l | | 99 |
| 96) 1,2,3-Trichlorobenzene | 14.000 | 180 | 59642 | 47.76 | ug/l | | 96 |

Sample Results: **VX021590.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021590.D
Acq On : 29 Mar 2021 20:21
Operator : JC/MD
Sample : M1785-12MSD 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 28 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

Quant Time: Mar 30 03:32:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

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

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

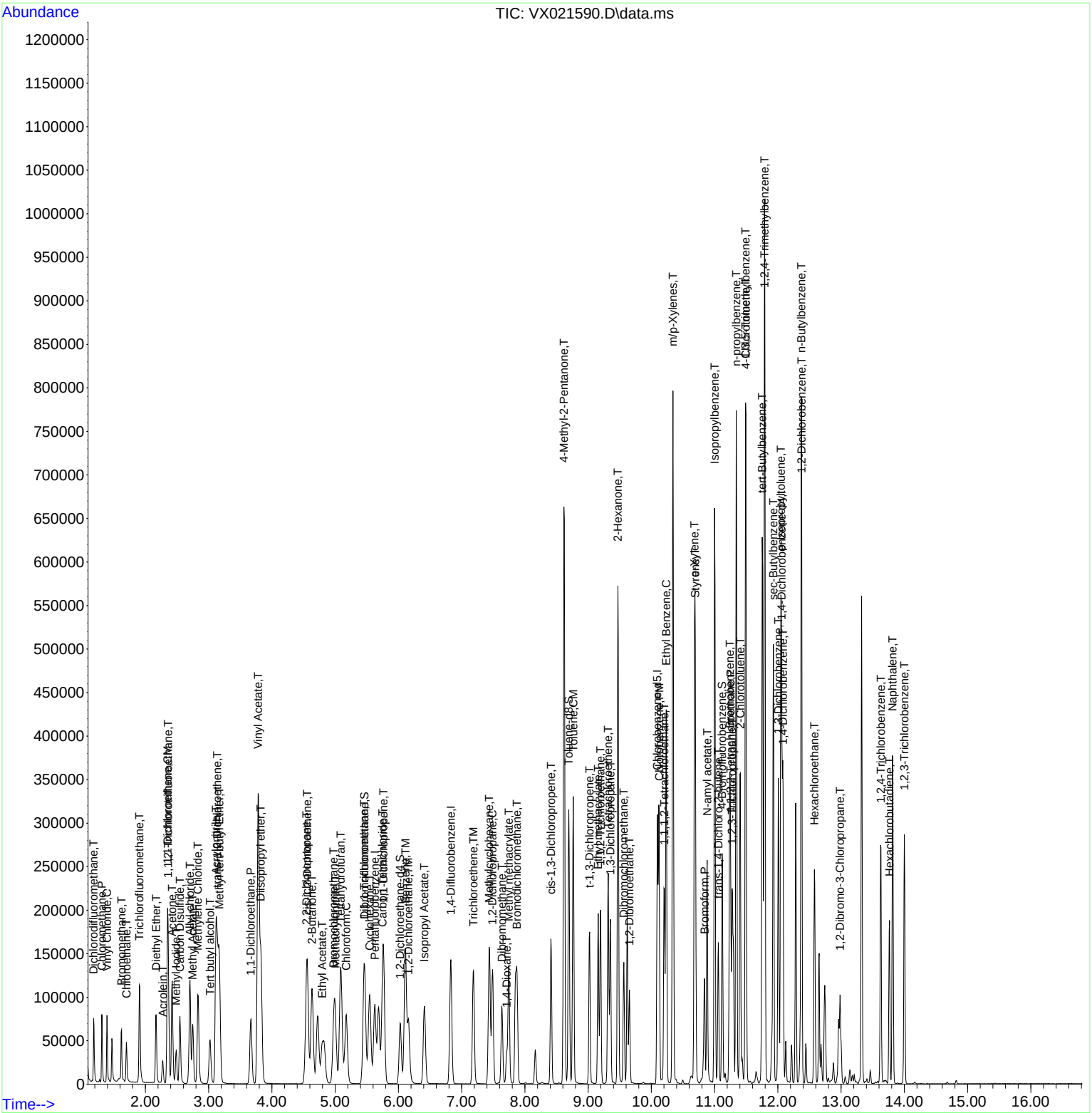
Sample Results: **VX021590.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX032921\
Data File : VX021590.D
Acq On : 29 Mar 2021 20:21
Operator : JC/MD
Sample : M1785-12MSD 10X
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Mar 30 03:32:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X032421W.M
Quant Title : SW846 8260
QLast Update : Wed Mar 24 12:25:26 2021
Response via : Initial Calibration

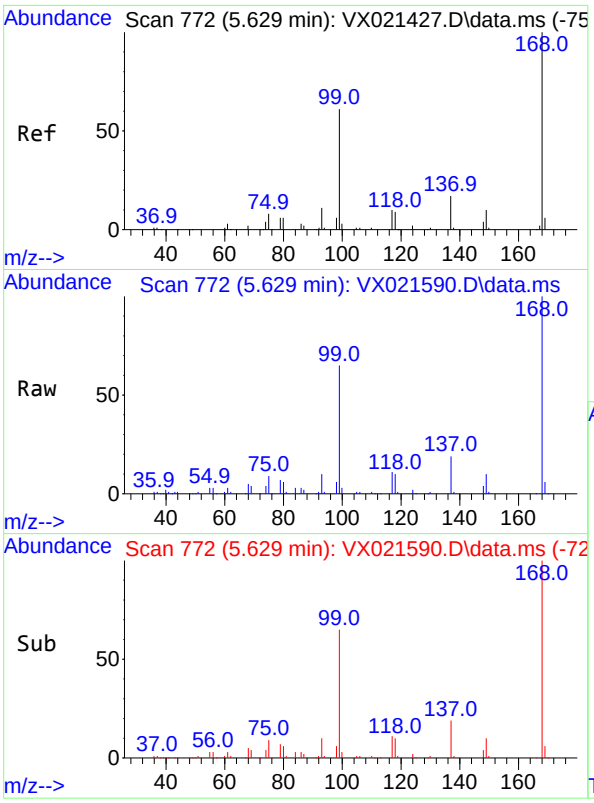
**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

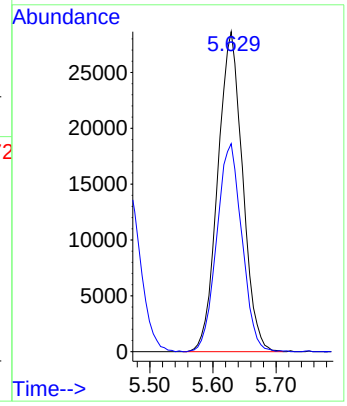
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

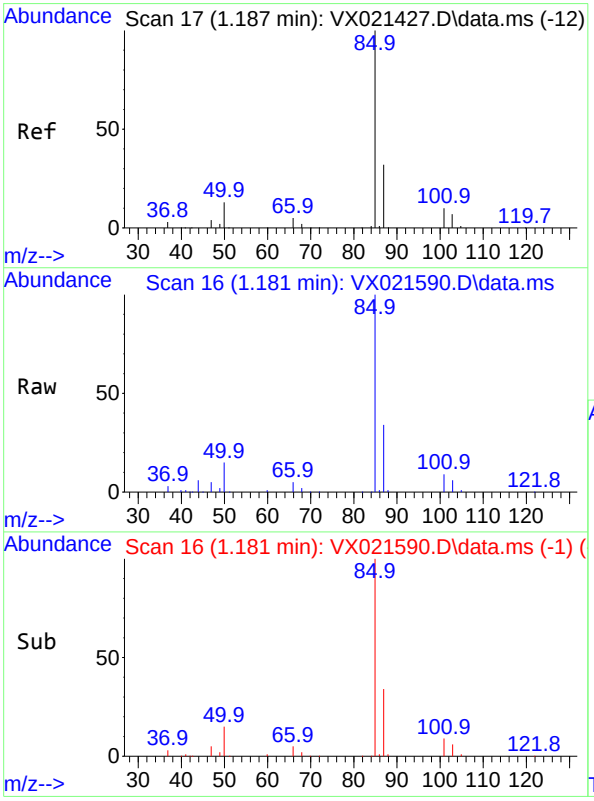



#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.629 min Scan# 772
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:168 Resp: 78212

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 65.0 | 45.8 | 68.6 |

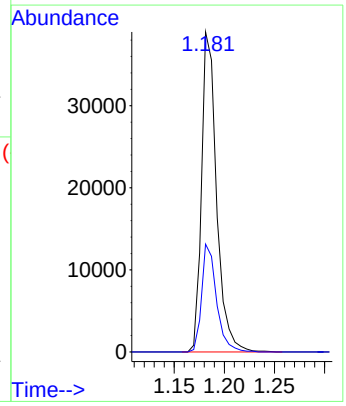



#2
Dichlorodifluoromethane
Concen: 47.34 ug/l
RT: 1.181 min Scan# 16
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

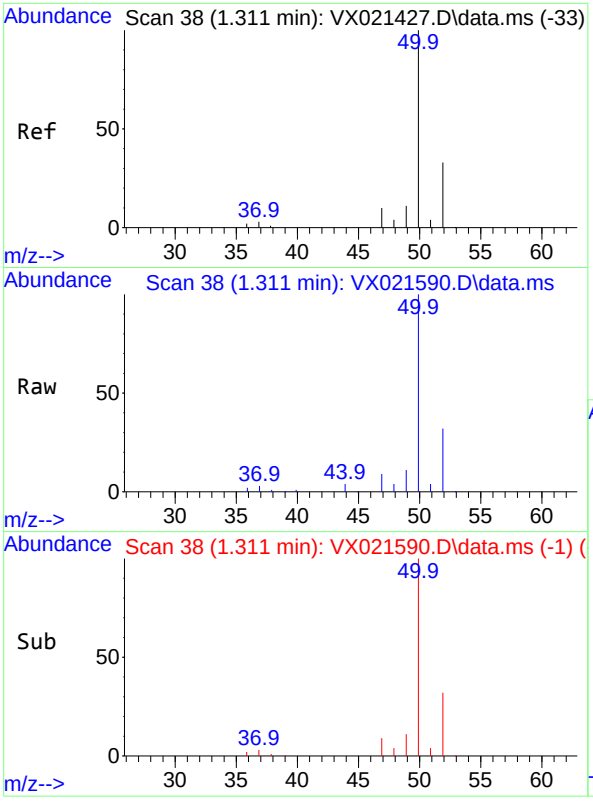
Tgt Ion: 85 Resp: 40698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 33.7 | 16.4 | 49.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

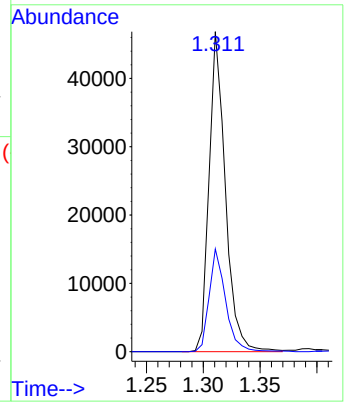
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

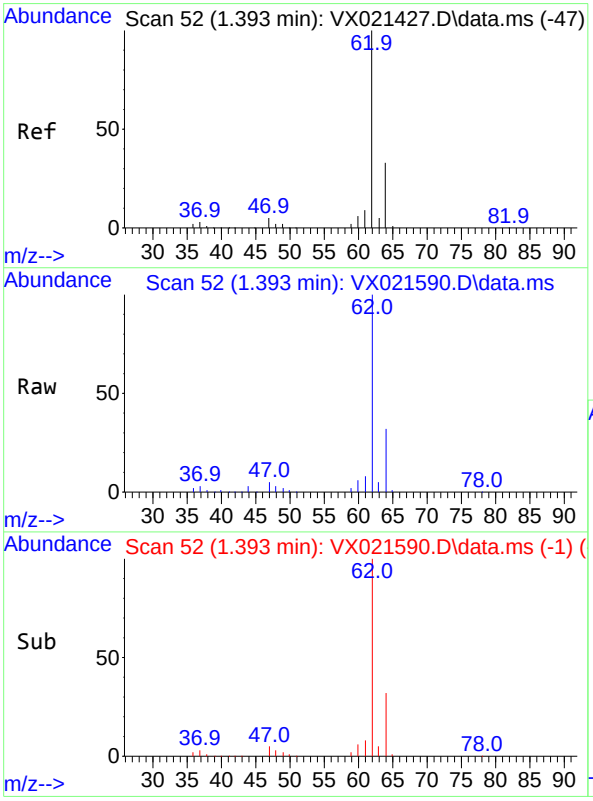



#3
Chloromethane
Concen: 47.22 ug/l
RT: 1.311 min Scan# 38
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 50 Resp: 46662

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 32.1 | 26.4 | 39.6 |

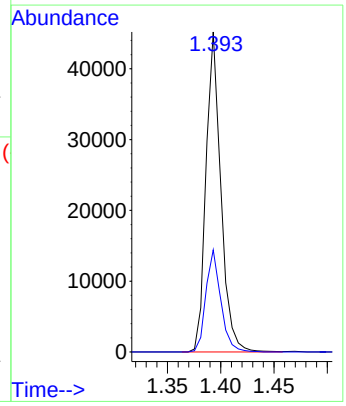



#4
Vinyl Chloride
Concen: 50.04 ug/l
RT: 1.393 min Scan# 52
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

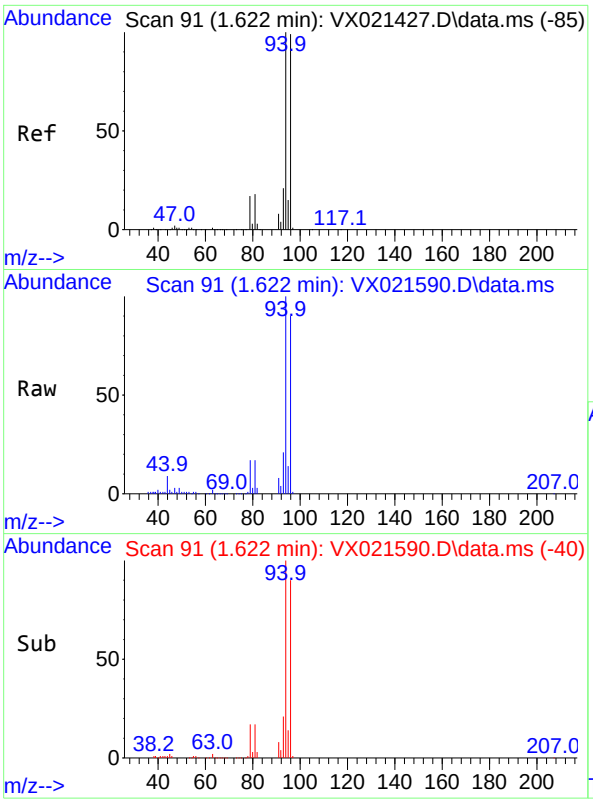
Tgt Ion: 62 Resp: 44001

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 31.9 | 25.7 | 38.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

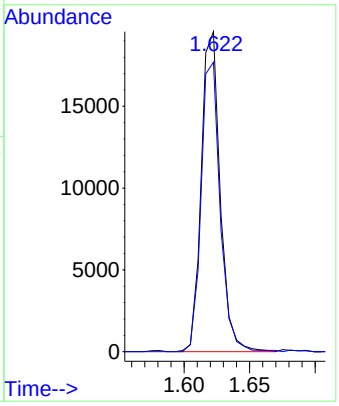
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

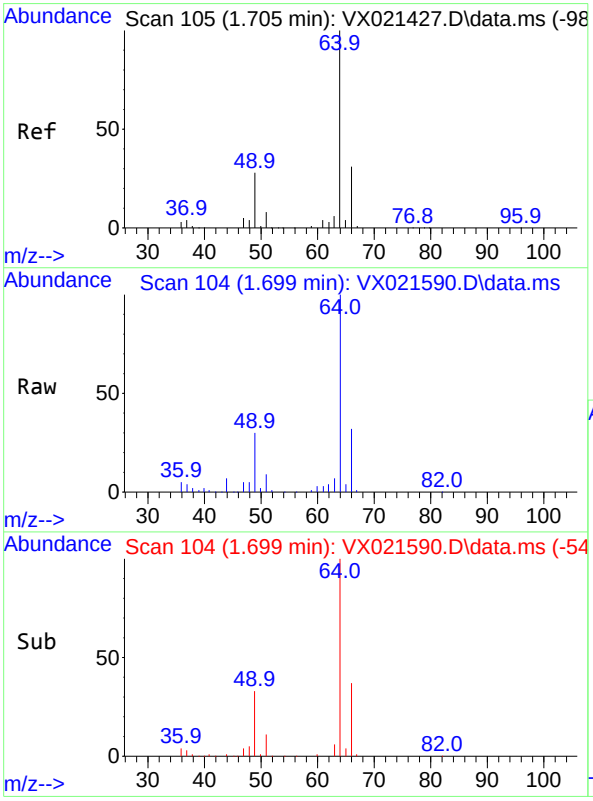



#5
Bromomethane
Concen: 55.52 ug/l
RT: 1.622 min Scan# 91
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 94 Resp: 19647

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 90.5 | 76.4 | 114.6 |

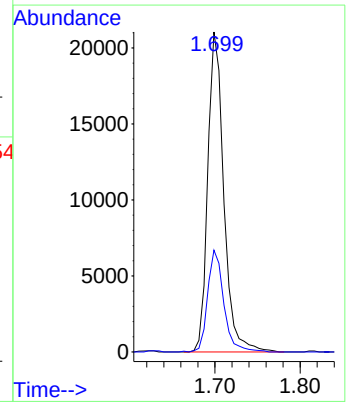



#6
Chloroethane
Concen: 49.39 ug/l
RT: 1.699 min Scan# 104
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

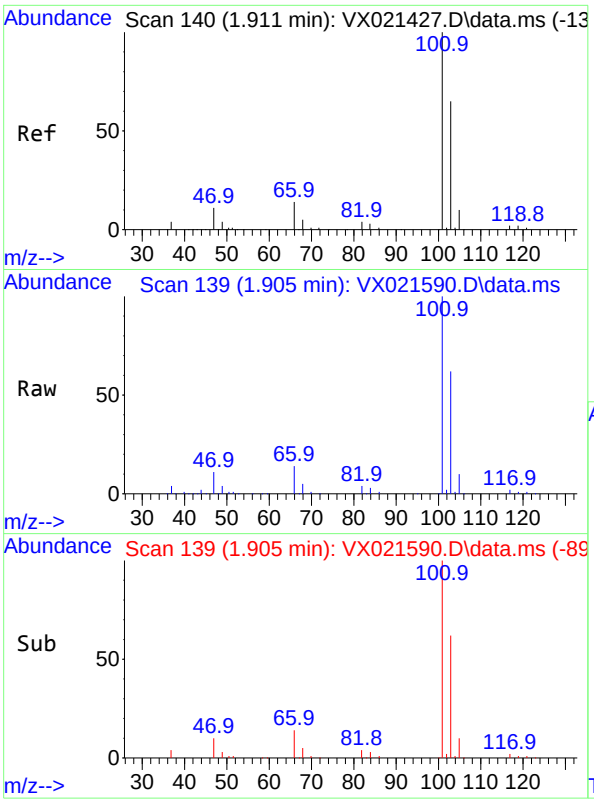
Tgt Ion: 64 Resp: 27541

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 31.8 | 25.4 | 38.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

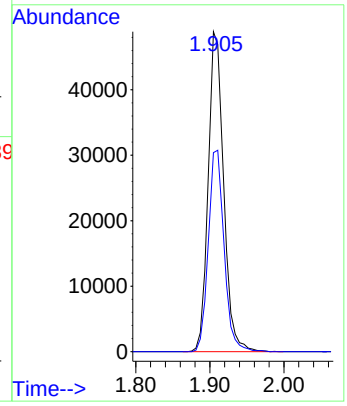
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

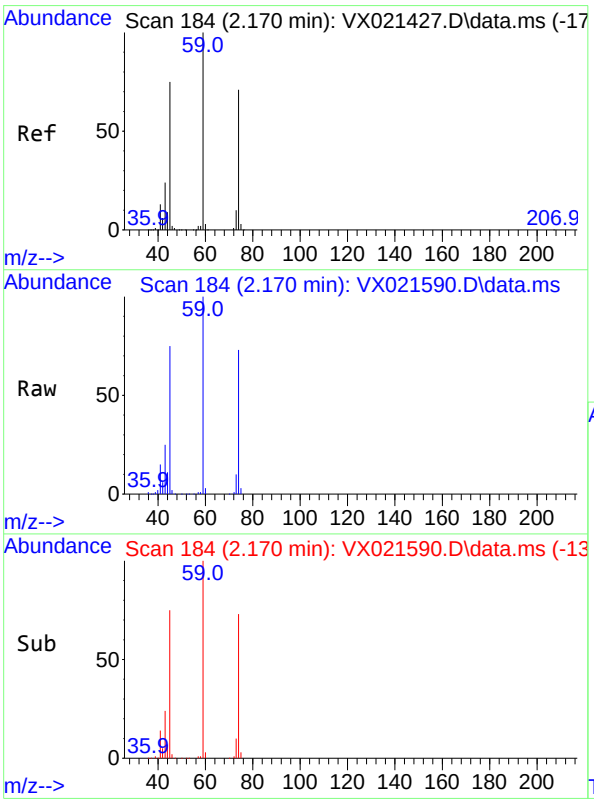



#7
Trichlorofluoromethane
Concen: 49.68 ug/l
RT: 1.905 min Scan# 139
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:101 Resp: 71053

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 62.2 | 53.2 | 79.8 |

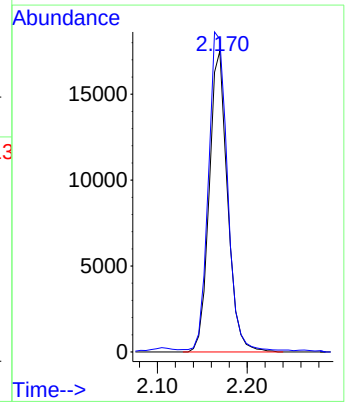



#8
Diethyl Ether
Concen: 49.98 ug/l
RT: 2.170 min Scan# 184
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

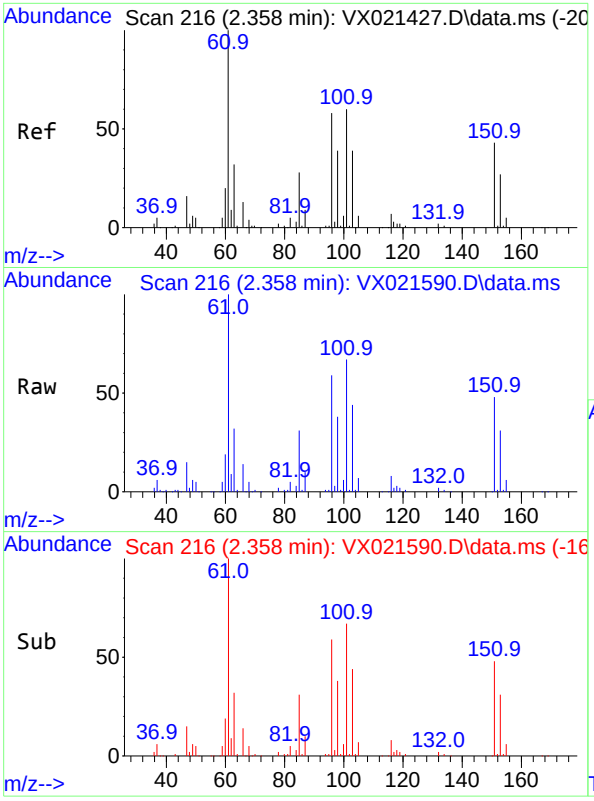
Tgt Ion: 74 Resp: 24805

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 74 | 100 | | |
| 45 | 109.9 | 44.5 | 133.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

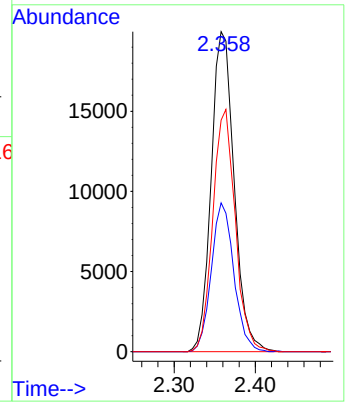
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

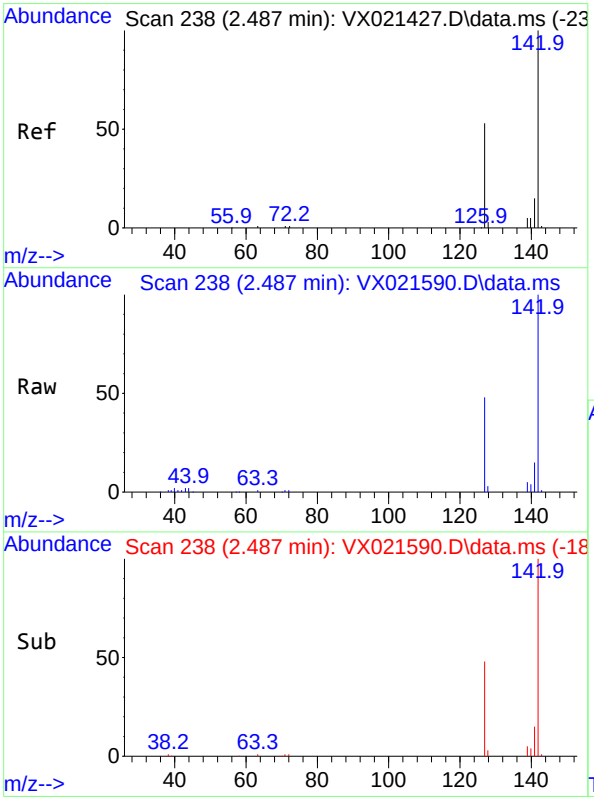



#9
1,1,2-Trichlorotrifluoroethane
Concen: 48.75 ug/l
RT: 2.358 min Scan# 216
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:101 Resp: 39243

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 85 | 45.6 | 34.9 | 52.3 |
| 151 | 74.3 | 61.4 | 92.2 |

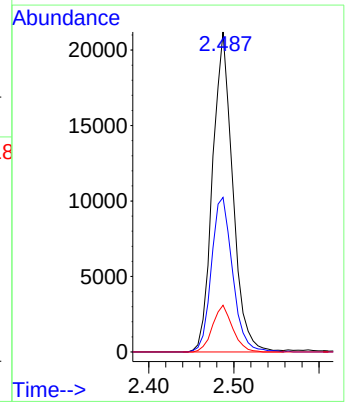



#10
Methyl Iodide
Concen: 54.66 ug/l
RT: 2.487 min Scan# 238
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

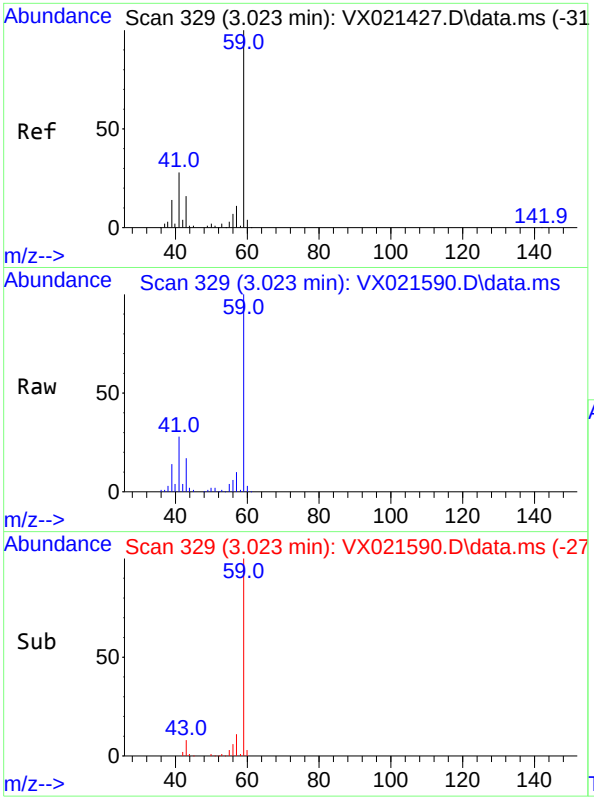
Tgt Ion:142 Resp: 34810

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 50.7 | 33.3 | 49.9# |
| 141 | 14.5 | 11.4 | 17.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

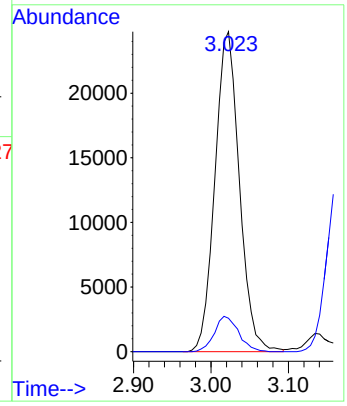
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

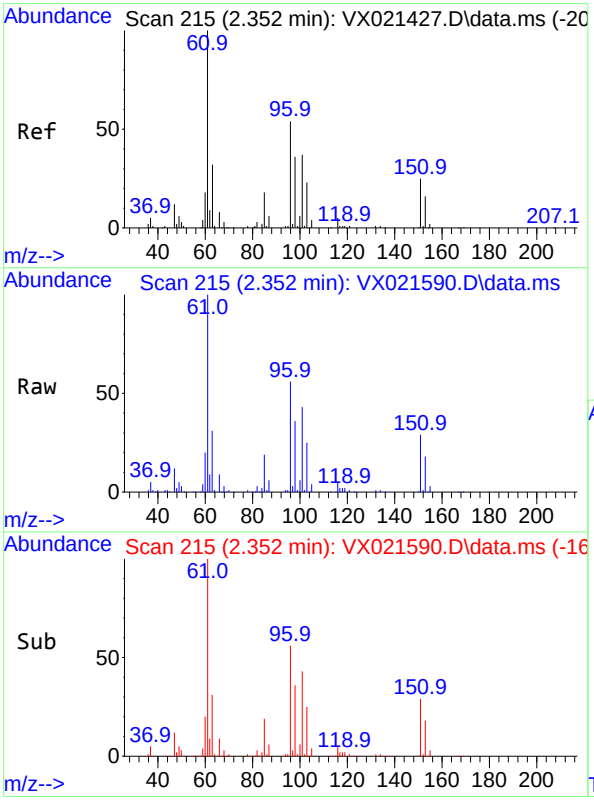



#11
Tert butyl alcohol
Concen: 252.38 ug/l
RT: 3.023 min Scan# 329
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 59 Resp: 54297

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 11.0 | 7.8 | 11.8 |

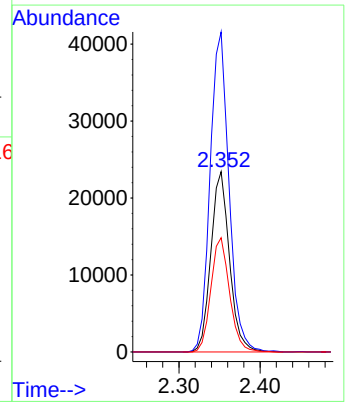



#12
1,1-Dichloroethene
Concen: 47.32 ug/l
RT: 2.352 min Scan# 215
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

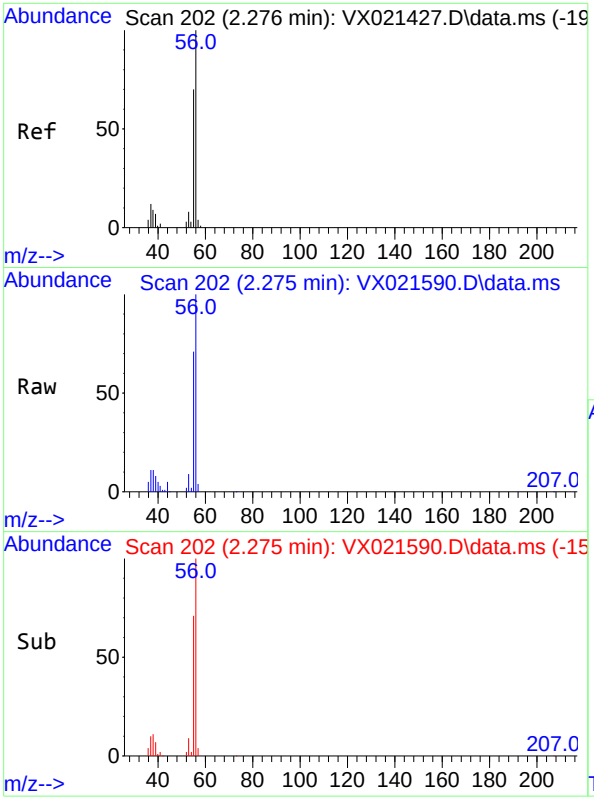
Tgt Ion: 96 Resp: 37296

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 177.5 | 124.6 | 187.0 |
| 98 | 63.4 | 50.6 | 76.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

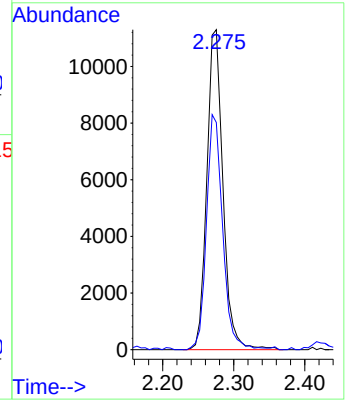
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

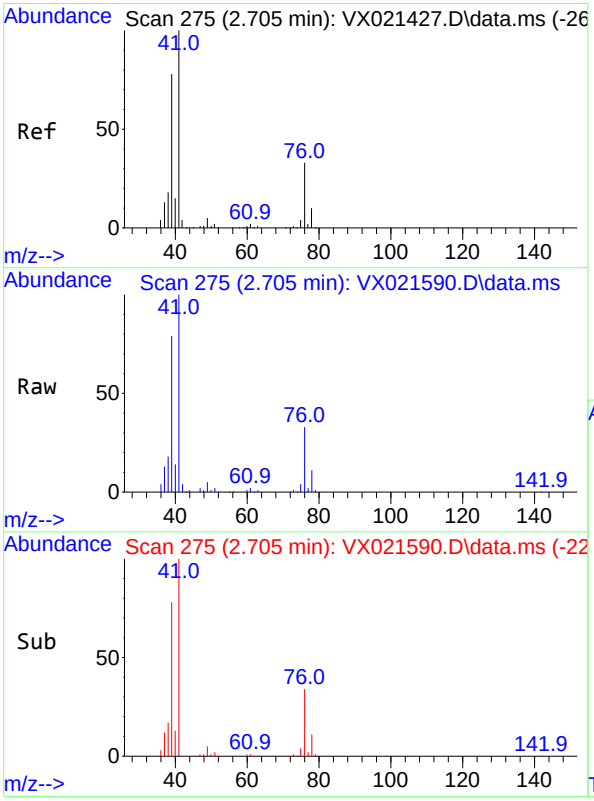



#13
Acrolein
Concen: 166.06 ug/l
RT: 2.275 min Scan# 202
Delta R.T. -0.001 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 56 Resp: 17861

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 73.8 | 56.4 | 84.6 |

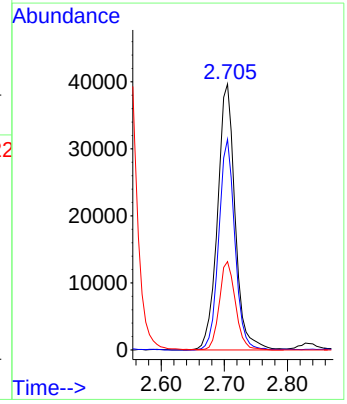



#14
Allyl chloride
Concen: 47.96 ug/l
RT: 2.705 min Scan# 275
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

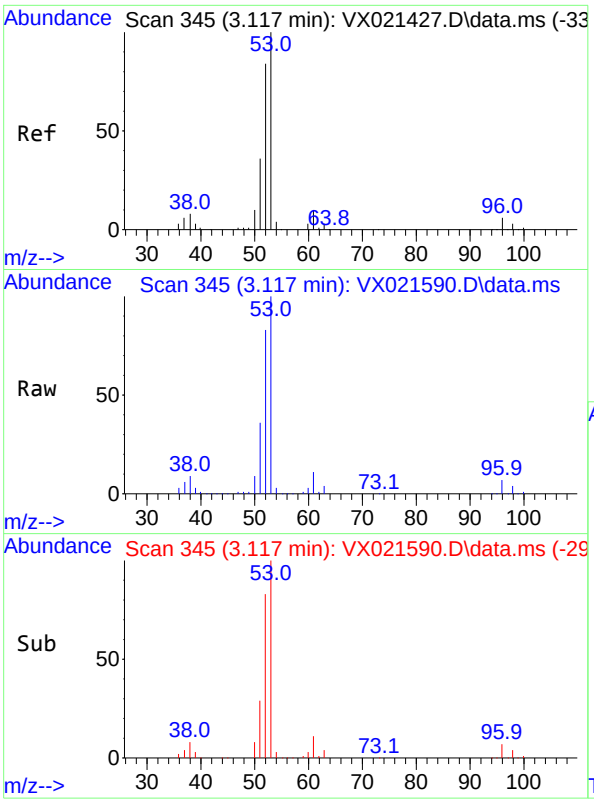
Tgt Ion: 41 Resp: 76725

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 72.4 | 51.6 | 77.4 |
| 76 | 30.4 | 30.5 | 45.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

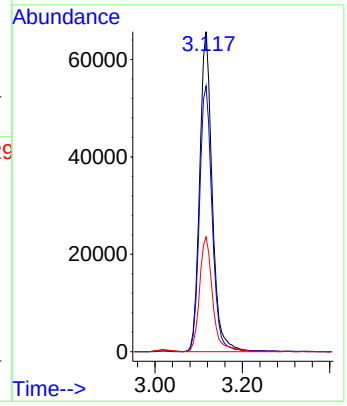
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

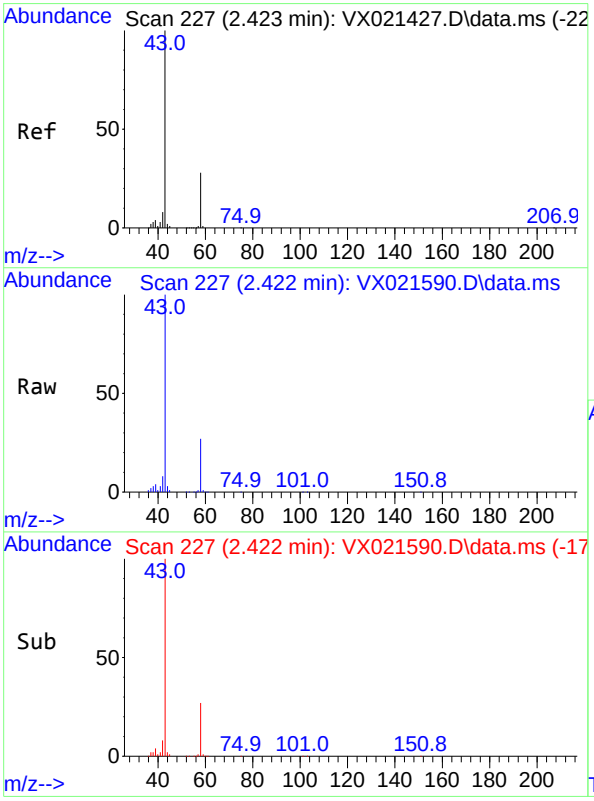



#15
Acrylonitrile
Concen: 256.81 ug/l
RT: 3.117 min Scan# 345
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 53 Resp: 131304

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 84.0 | 65.3 | 97.9 |
| 51 | 37.4 | 28.2 | 42.2 |

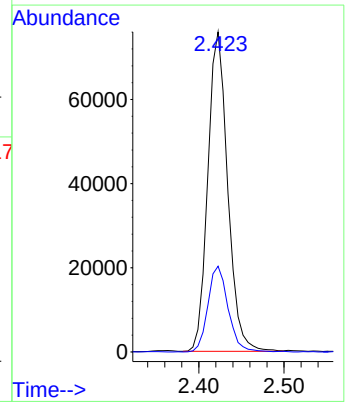



#16
Acetone
Concen: 249.86 ug/l
RT: 2.422 min Scan# 227
Delta R.T. -0.001 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

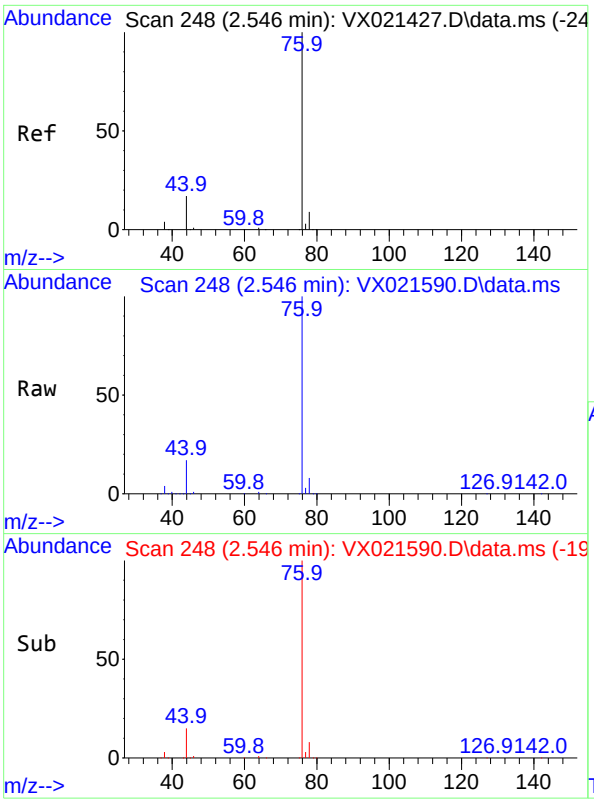
Tgt Ion: 43 Resp: 122943

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 26.9 | 27.8 | 41.8# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

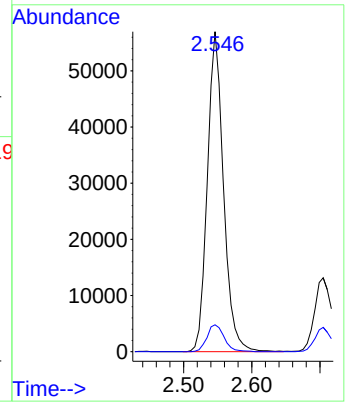
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

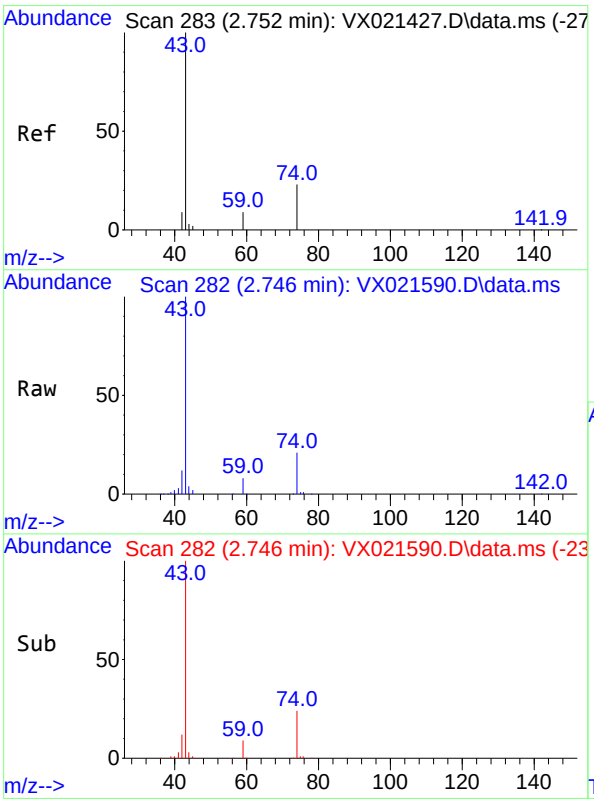



#17
Carbon Disulfide
Concen: 42.48 ug/l
RT: 2.546 min Scan# 248
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 76 Resp: 94022

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 8.4 | 7.2 | 10.8 |

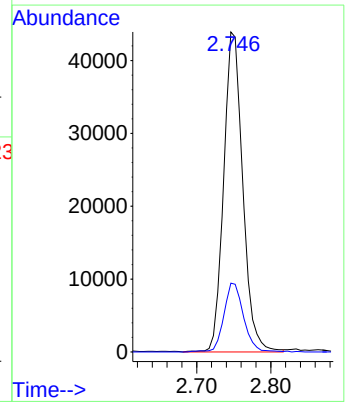



#18
Methyl Acetate
Concen: 55.31 ug/l
RT: 2.746 min Scan# 282
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

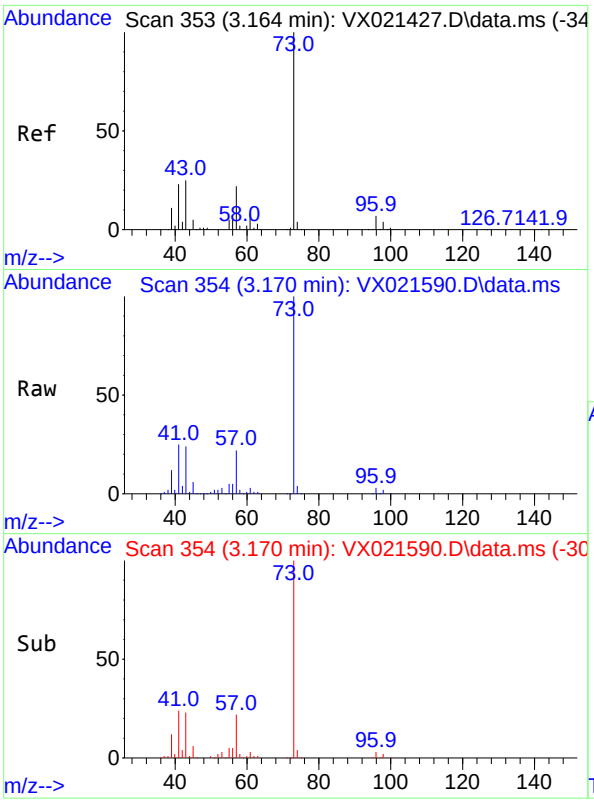
Tgt Ion: 43 Resp: 78622

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 22.3 | 21.9 | 32.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

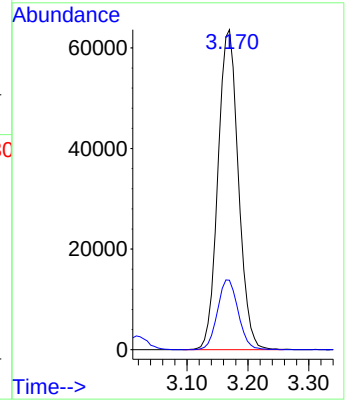
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

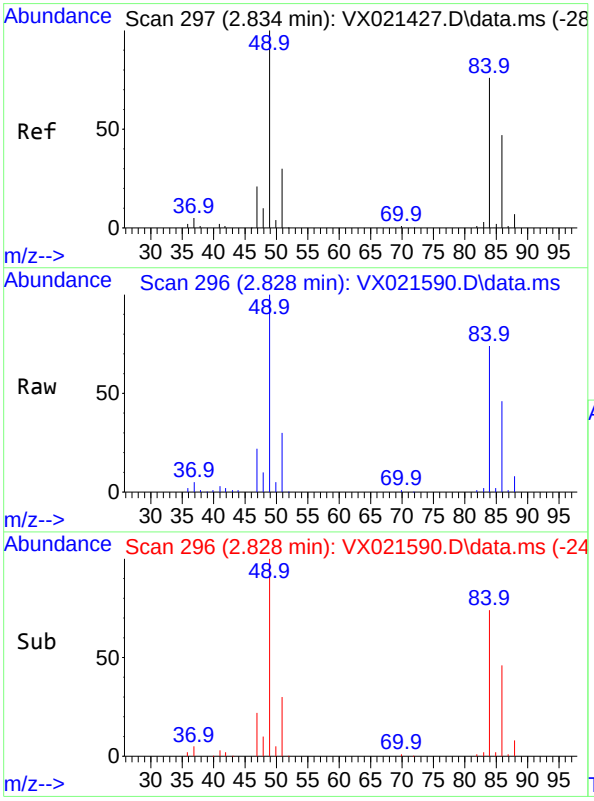



#19
Methyl tert-butyl Ether
Concen: 50.39 ug/l
RT: 3.170 min Scan# 354
Delta R.T. 0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 73 Resp: 148316

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 21.7 | 17.1 | 25.7 |

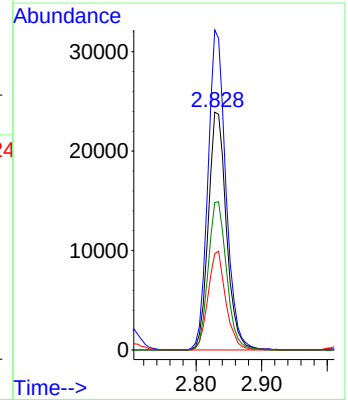



#20
Methylene Chloride
Concen: 47.74 ug/l
RT: 2.828 min Scan# 296
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

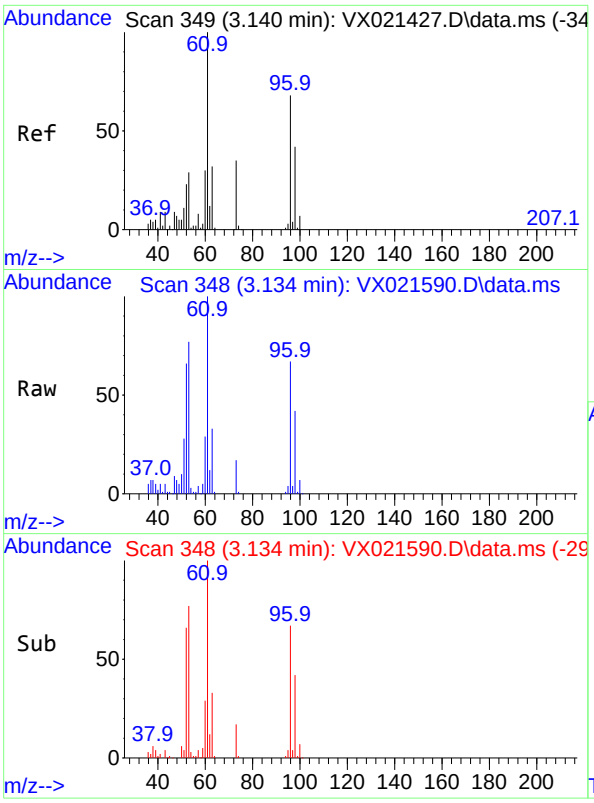
Tgt Ion: 84 Resp: 45839

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 134.6 | 88.6 | 132.8# |
| 51 | 40.5 | 27.0 | 40.6 |
| 86 | 62.1 | 50.3 | 75.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

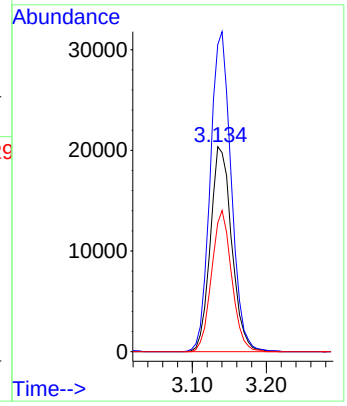
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

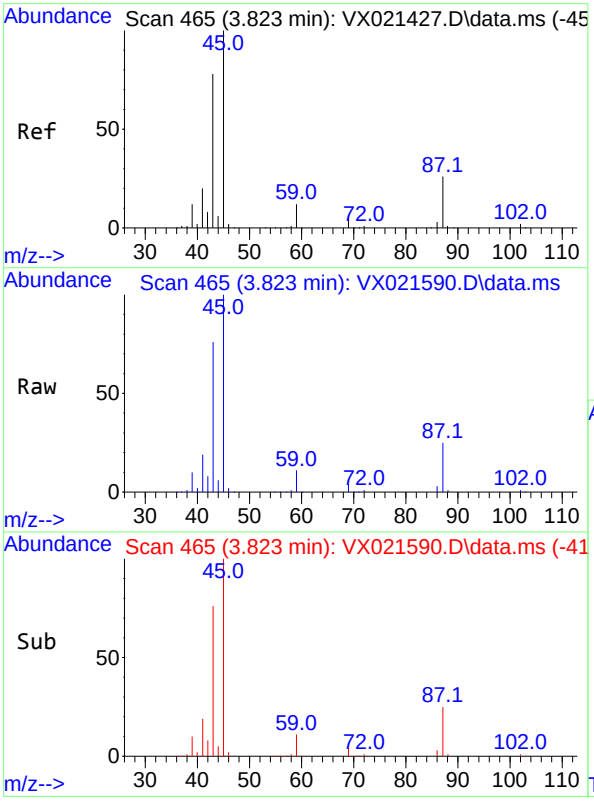



#21
trans-1,2-Dichloroethene
Concen: 47.13 ug/l
RT: 3.134 min Scan# 348
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 96 Resp: 40805

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 149.8 | 107.7 | 161.5 |
| 98 | 62.8 | 50.4 | 75.6 |

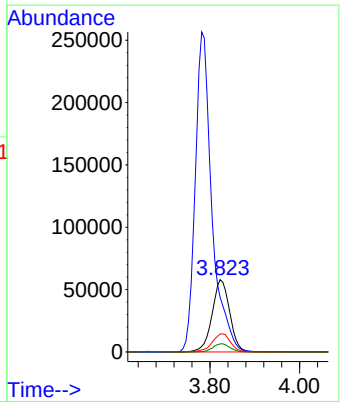



#22
Diisopropyl ether
Concen: 50.76 ug/l
RT: 3.823 min Scan# 465
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

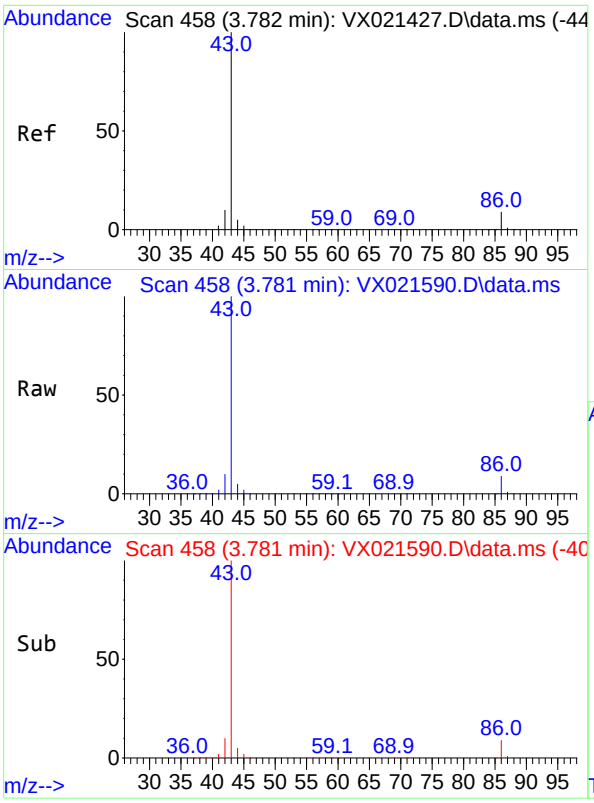
Tgt Ion: 45 Resp: 157793

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 75.2 | 58.0 | 87.0 |
| 87 | 24.9 | 25.4 | 38.0# |
| 59 | 11.0 | 10.2 | 15.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

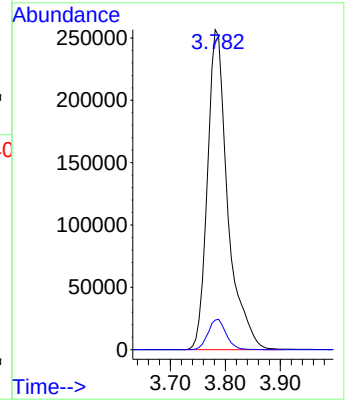
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

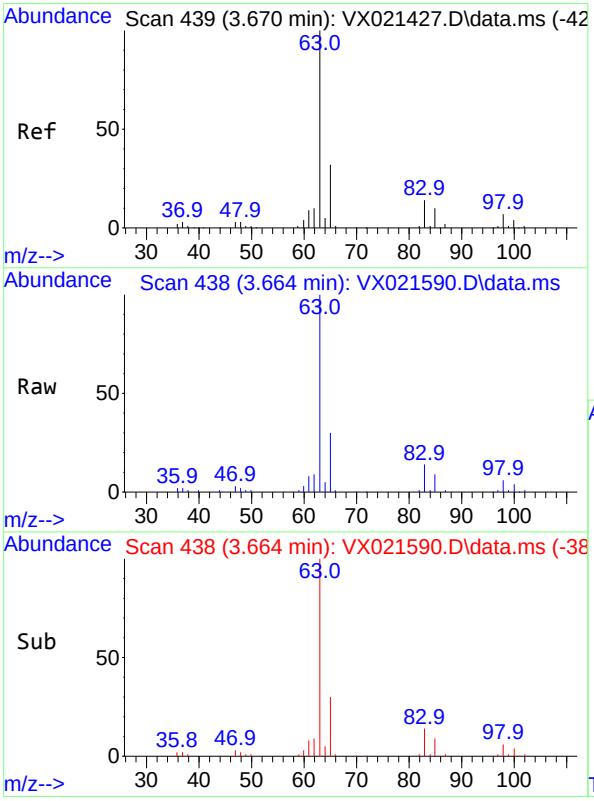



#23
Vinyl Acetate
Concen: 250.61 ug/l
RT: 3.781 min Scan# 458
Delta R.T. -0.001 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 43 Resp: 658893

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 9.3 | 9.9 | 14.9# |

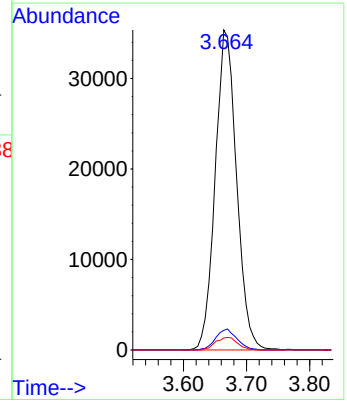



#24
1,1-Dichloroethane
Concen: 49.54 ug/l
RT: 3.664 min Scan# 438
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

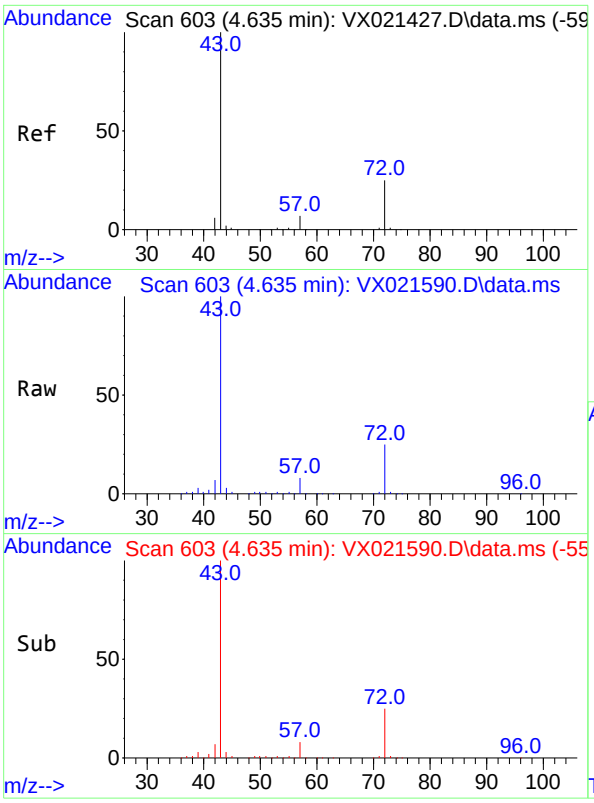
Tgt Ion: 63 Resp: 83017

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 98 | 6.2 | 3.8 | 11.2 |
| 100 | 3.8 | 2.5 | 7.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

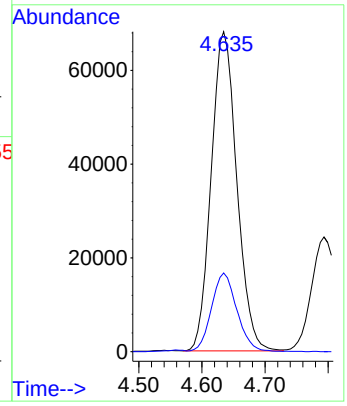
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

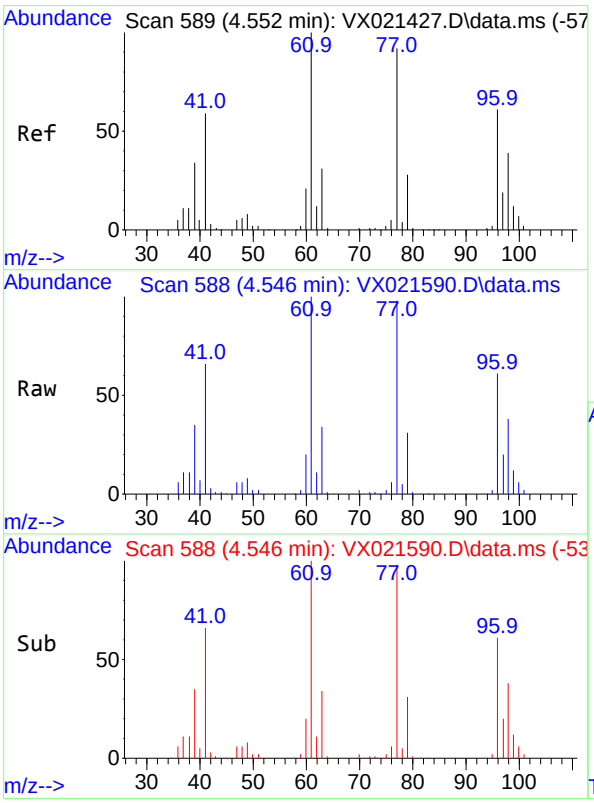



#25
2-Butanone
Concen: 257.07 ug/l
RT: 4.635 min Scan# 603
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 43 Resp: 191740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 24.5 | 23.7 | 35.5 |

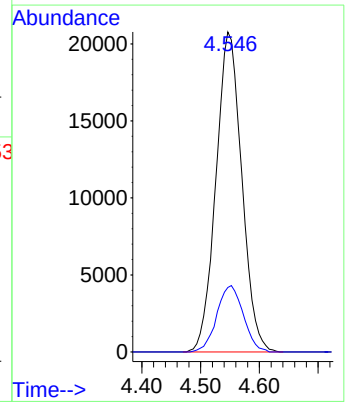



#26
2,2-Dichloropropane
Concen: 43.65 ug/l
RT: 4.546 min Scan# 588
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

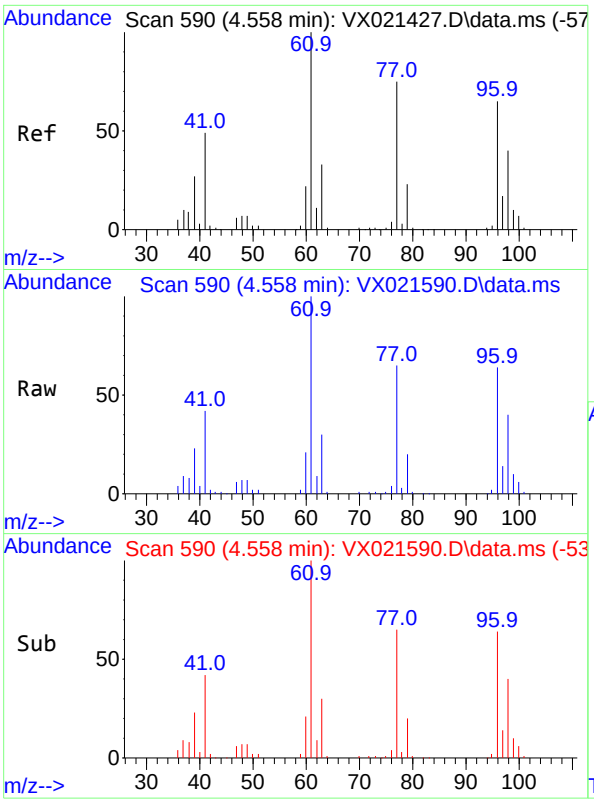
Tgt Ion: 77 Resp: 63370

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 77 | 100 | | |
| 97 | 21.3 | 11.7 | 35.1 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

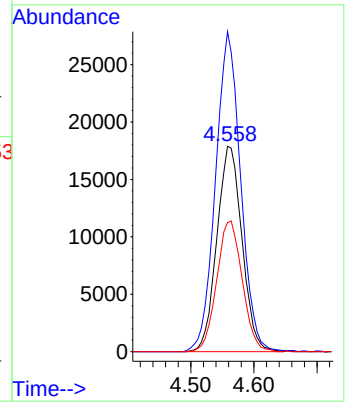
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

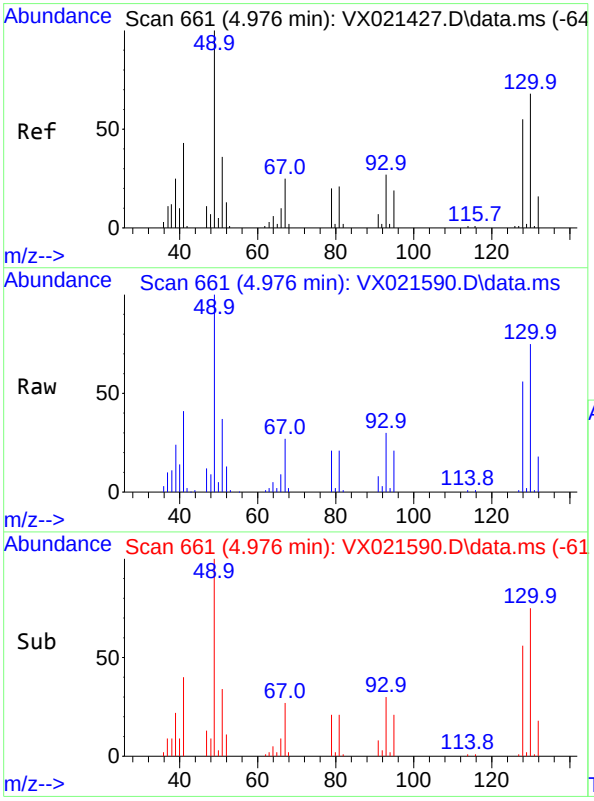



#27
cis-1,2-Dichloroethene
Concen: 49.22 ug/l
RT: 4.558 min Scan# 590
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 96 Resp: 49479

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 155.5 | 0.0 | 285.6 |
| 98 | 64.5 | 0.0 | 129.6 |

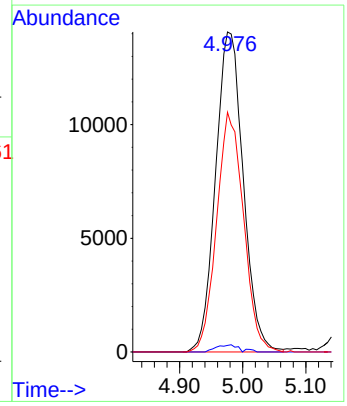



#28
Bromochloromethane
Concen: 51.09 ug/l
RT: 4.976 min Scan# 661
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

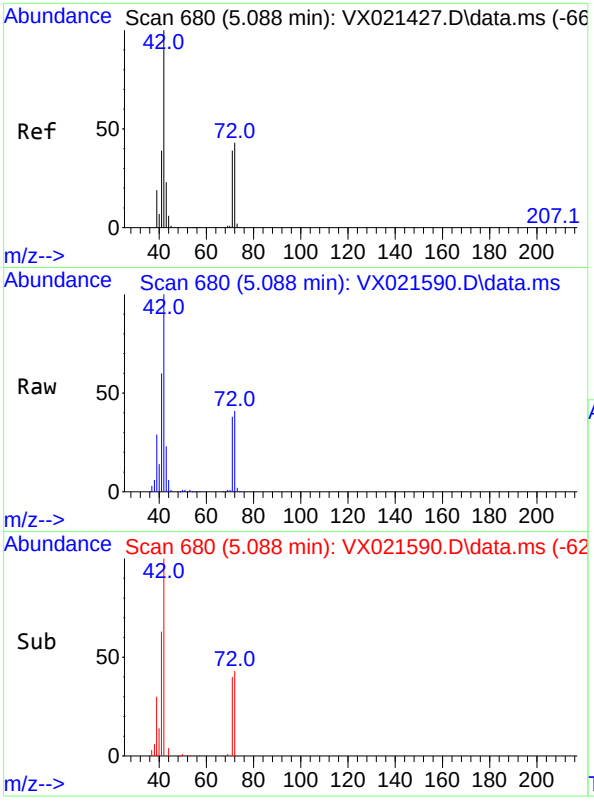
Tgt Ion: 49 Resp: 42858

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 129 | 1.6 | 0.0 | 4.0 |
| 130 | 72.8 | 68.2 | 102.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

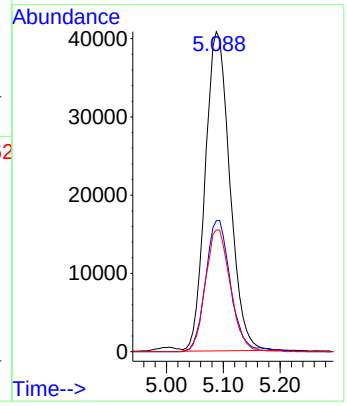
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

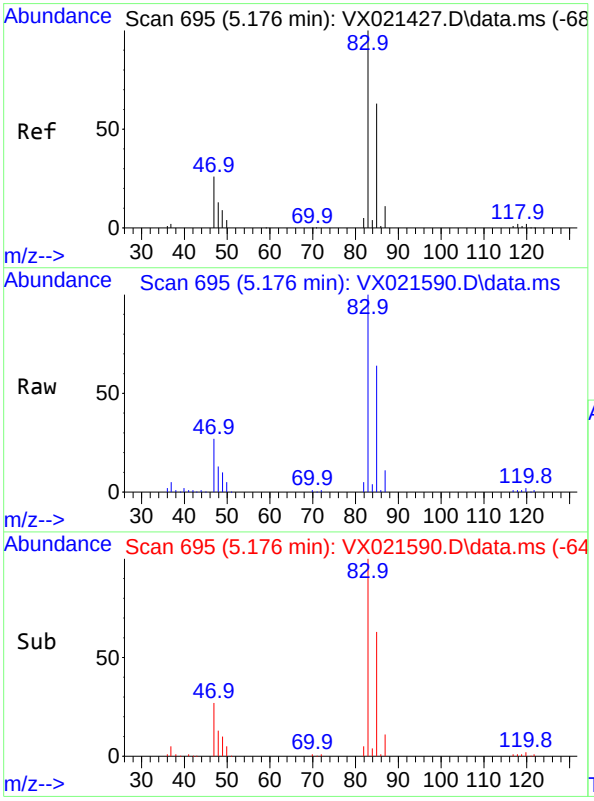



#29
Tetrahydrofuran
Concen: 252.49 ug/l
RT: 5.088 min Scan# 680
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 42 Resp: 122106

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 42.0 | 41.7 | 62.5 |
| 71 | 39.1 | 38.4 | 57.6 |

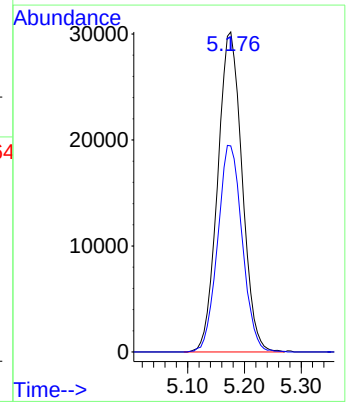



#30
Chloroform
Concen: 50.92 ug/l
RT: 5.176 min Scan# 695
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

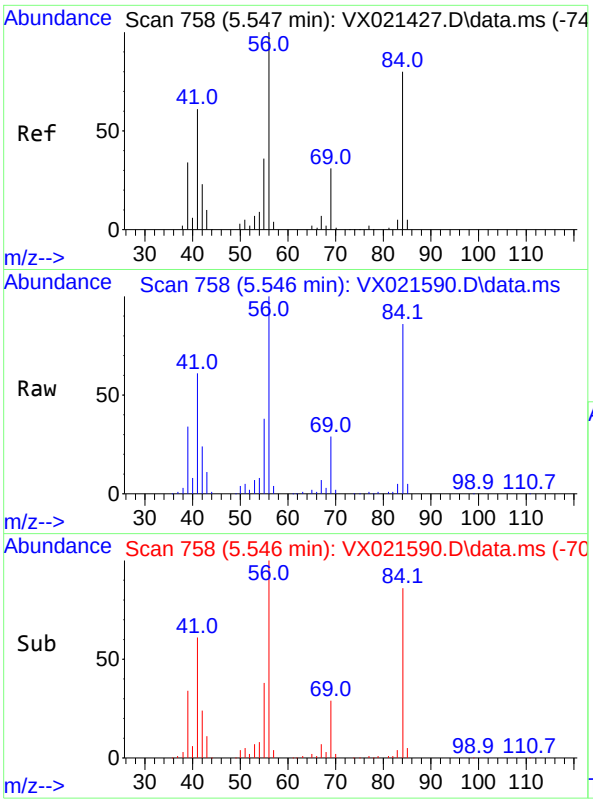
Tgt Ion: 83 Resp: 90051

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.4 | 52.0 | 78.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

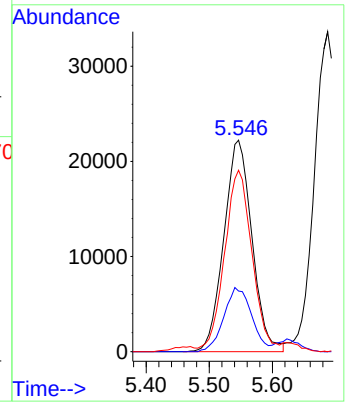
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

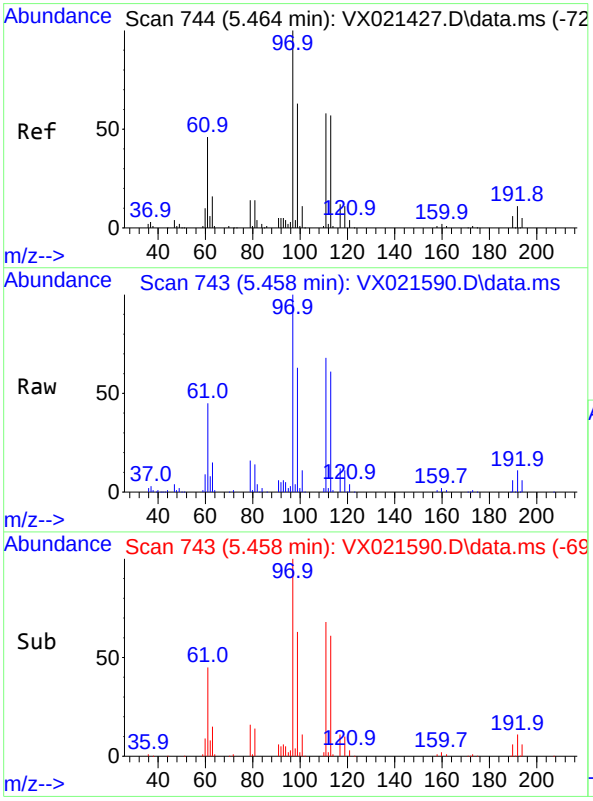



#31
Cyclohexane
Concen: 48.09 ug/l
RT: 5.546 min Scan# 758
Delta R.T. -0.001 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 56 Resp: 68816

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 28.7 | 25.3 | 37.9 |
| 84 | 83.5 | 71.4 | 107.0 |

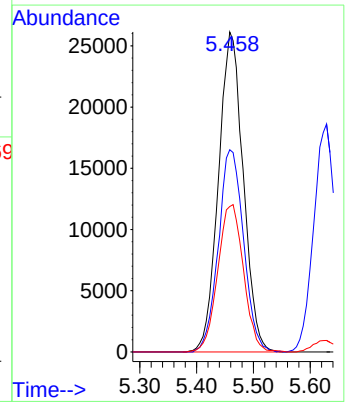



#32
1,1,1-Trichloroethane
Concen: 50.48 ug/l
RT: 5.458 min Scan# 743
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

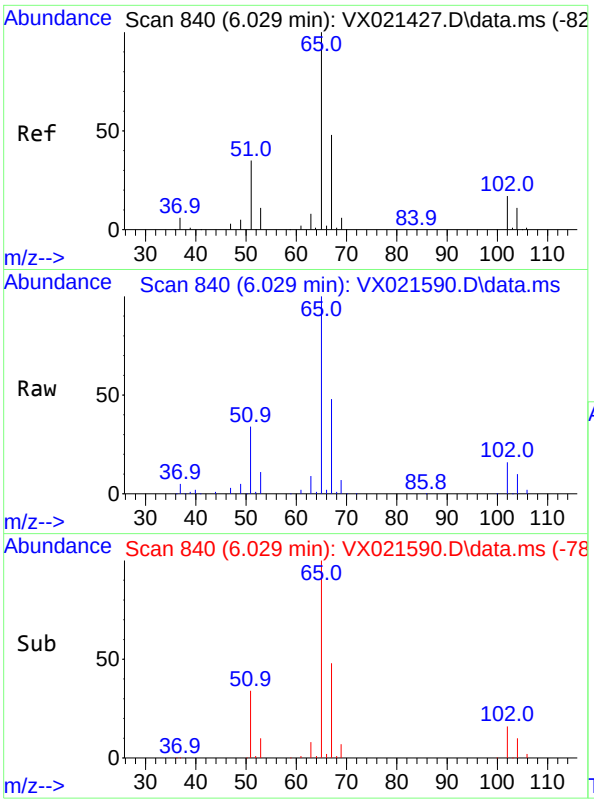
Tgt Ion: 97 Resp: 79108

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 99 | 64.3 | 51.5 | 77.3 |
| 61 | 47.9 | 34.2 | 51.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

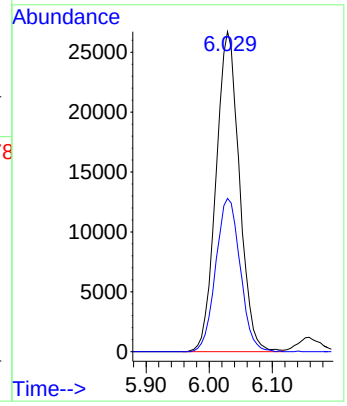
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

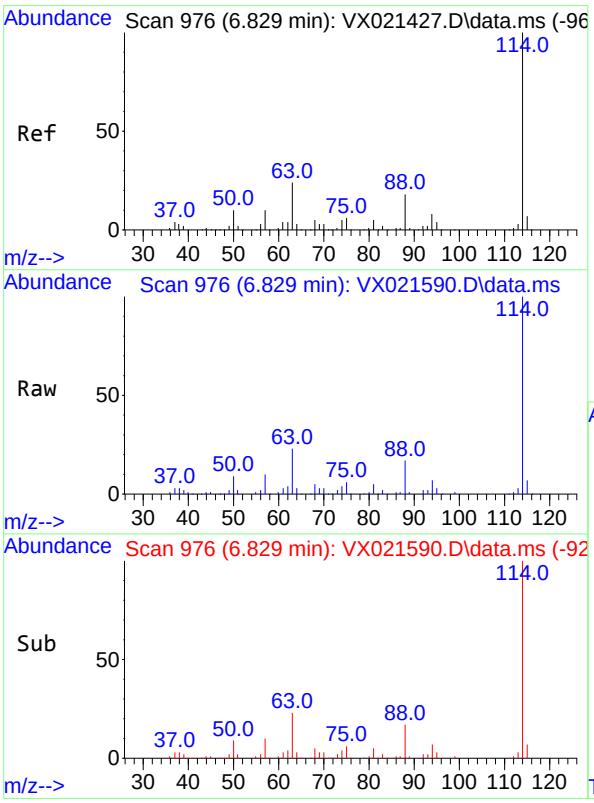



#33
1,2-Dichloroethane-d4
Concen: 52.75 ug/l
RT: 6.029 min Scan# 840
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 65 Resp: 68651

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.1 | 0.0 | 105.4 |

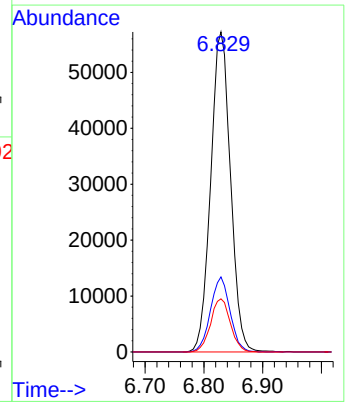



#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 6.829 min Scan# 976
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

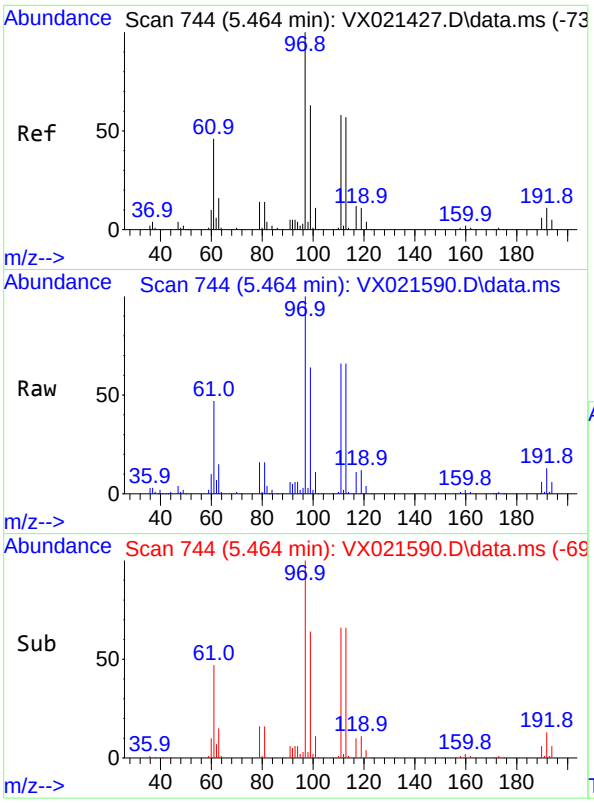
Tgt Ion:114 Resp: 133786

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 23.5 | 0.0 | 40.8 |
| 88 | 16.6 | 0.0 | 32.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

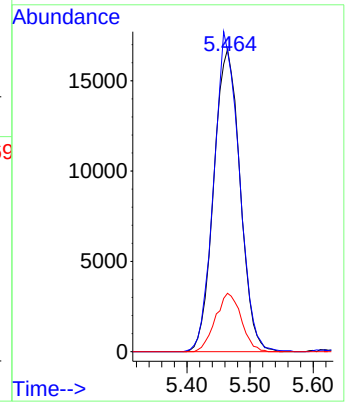
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

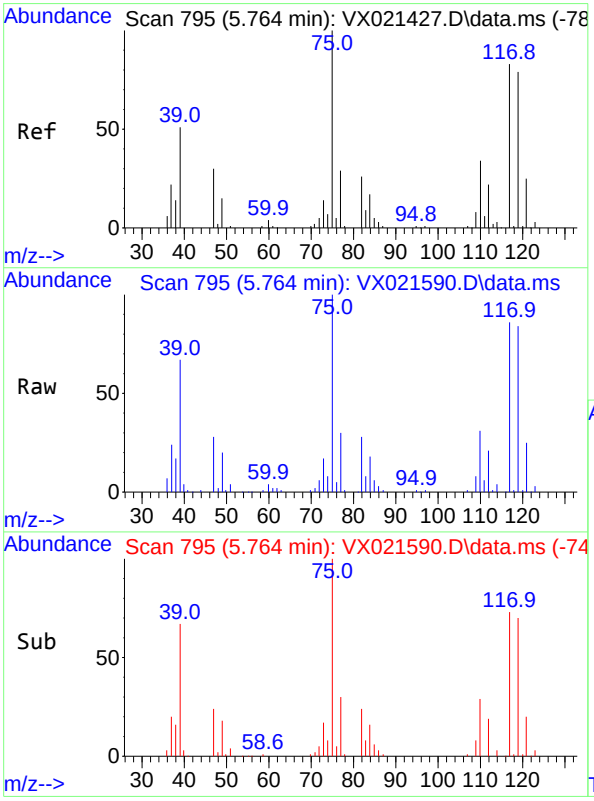



#35
Dibromofluoromethane
Concen: 50.93 ug/l
RT: 5.464 min Scan# 744
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:113 Resp: 48404

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 102.2 | 81.9 | 122.9 |
| 192 | 18.9 | 16.7 | 25.1 |

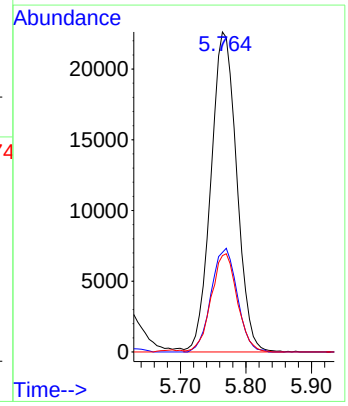



#36
1,1-Dichloropropene
Concen: 47.07 ug/l
RT: 5.764 min Scan# 795
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

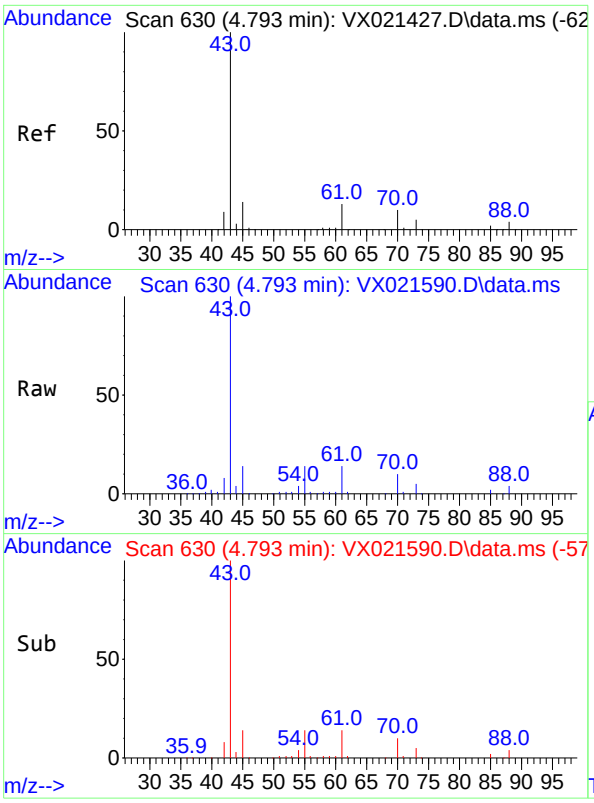
Tgt Ion: 75 Resp: 61703

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 32.7 | 18.1 | 54.4 |
| 77 | 31.0 | 25.3 | 37.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

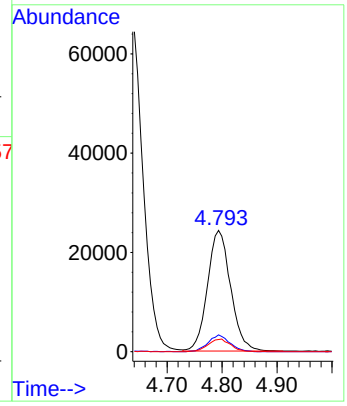
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

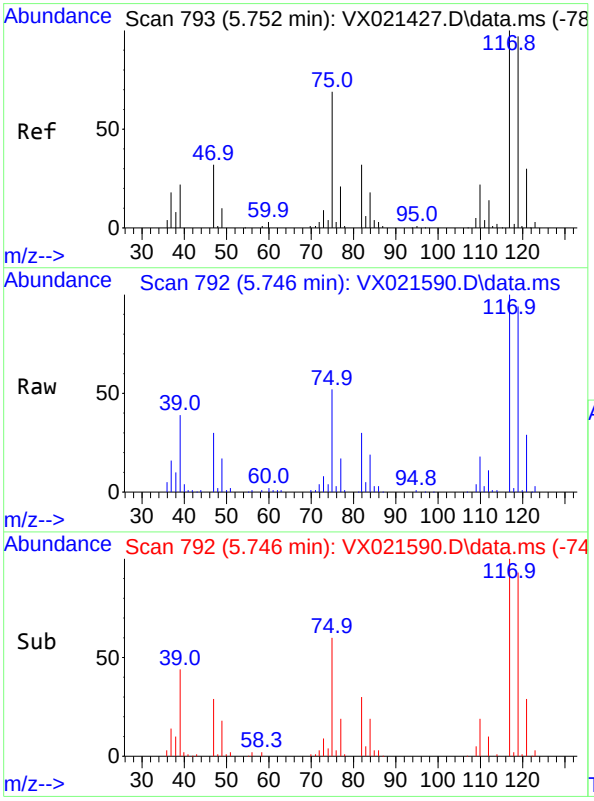



#37
Ethyl Acetate
Concen: 46.85 ug/l
RT: 4.793 min Scan# 630
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 43 Resp: 71006

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 13.0 | 12.8 | 19.2 |
| 70 | 10.2 | 10.5 | 15.7# |

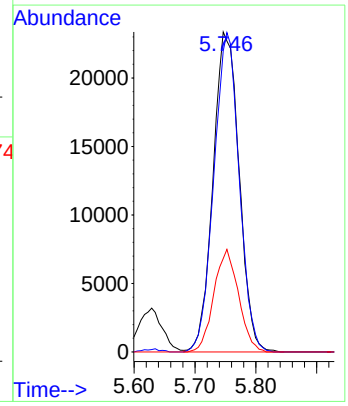



#38
Carbon Tetrachloride
Concen: 49.27 ug/l
RT: 5.746 min Scan# 792
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

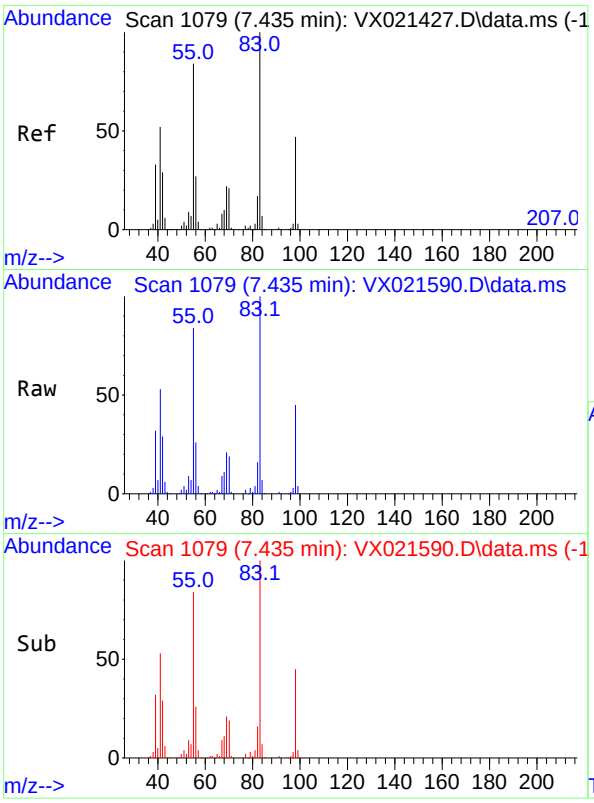
Tgt Ion:117 Resp: 69406

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 94.1 | 76.2 | 114.2 |
| 121 | 29.2 | 24.8 | 37.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

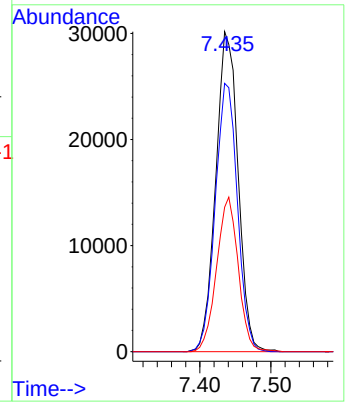
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

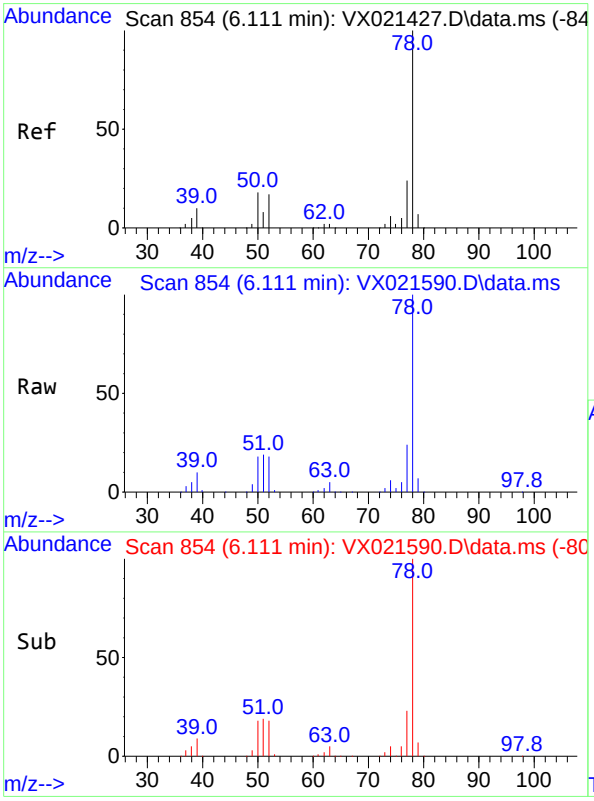



#39
Methylcyclohexane
Concen: 45.31 ug/l
RT: 7.435 min Scan# 1079
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 83 Resp: 65842

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 55 | 83.8 | 58.9 | 88.3 |
| 98 | 45.2 | 38.1 | 57.1 |

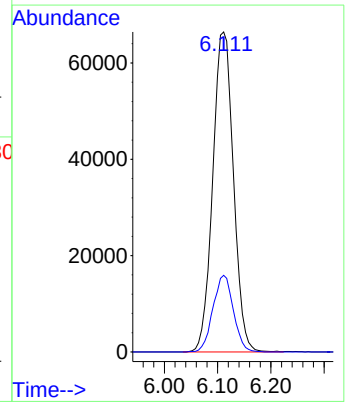



#40
Benzene
Concen: 48.11 ug/l
RT: 6.111 min Scan# 854
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

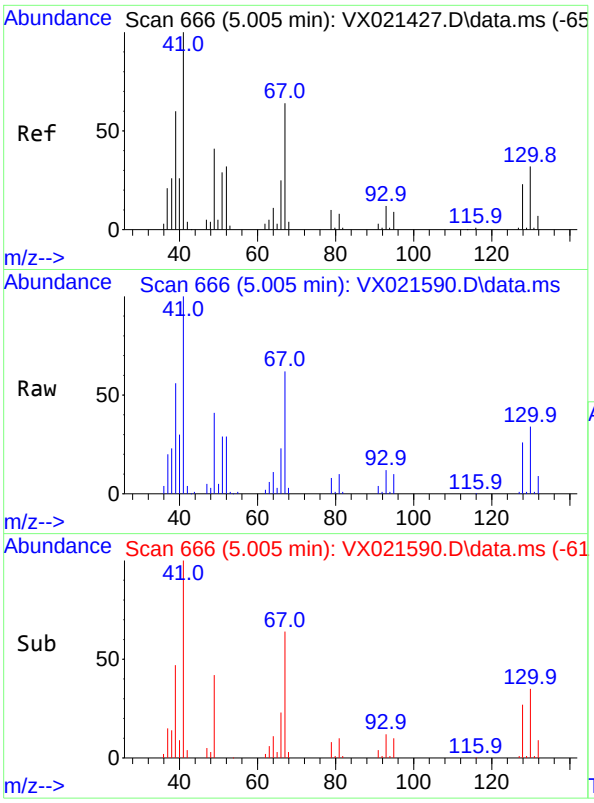
Tgt Ion: 78 Resp: 179094

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.0 | 18.9 | 28.3 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

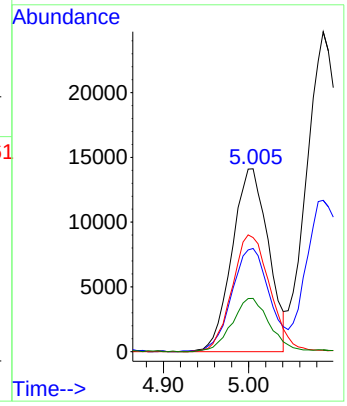
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

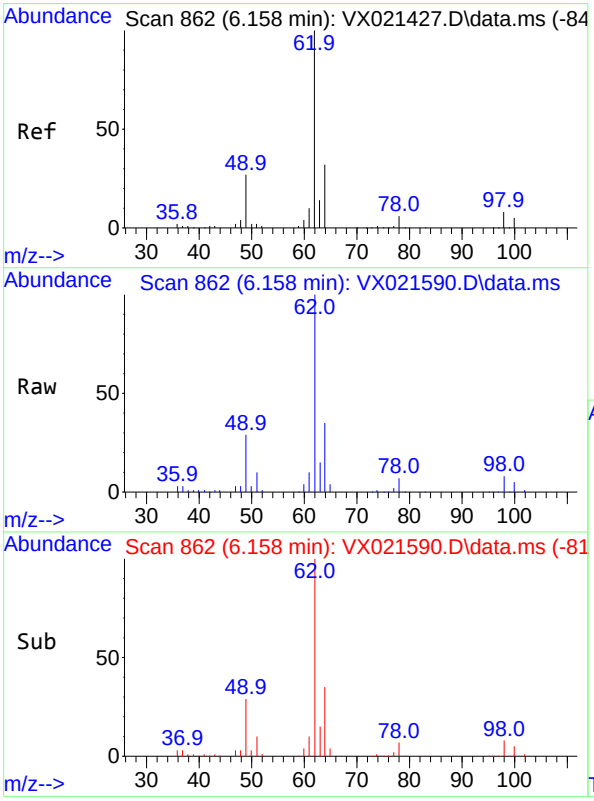



#41
Methacrylonitrile
Concen: 47.60 ug/l
RT: 5.005 min Scan# 666
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 41 Resp: 41849

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 59.4 | 42.5 | 63.7 |
| 67 | 67.0 | 65.0 | 97.6 |
| 52 | 30.2 | 25.3 | 37.9 |

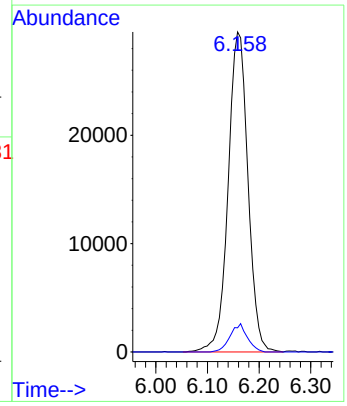



#42
1,2-Dichloroethane
Concen: 48.66 ug/l
RT: 6.158 min Scan# 862
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

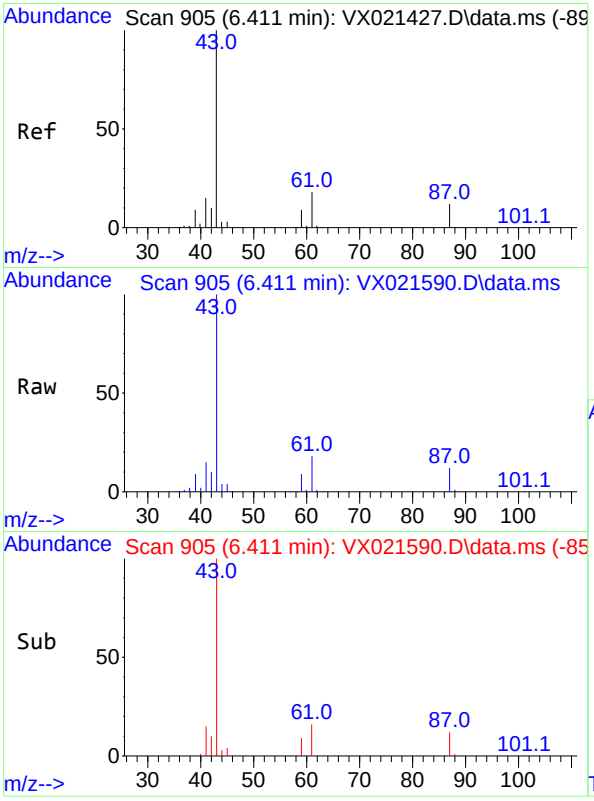
Tgt Ion: 62 Resp: 78533

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 7.7 | 0.0 | 20.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

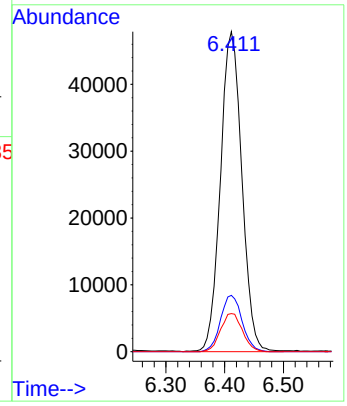
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

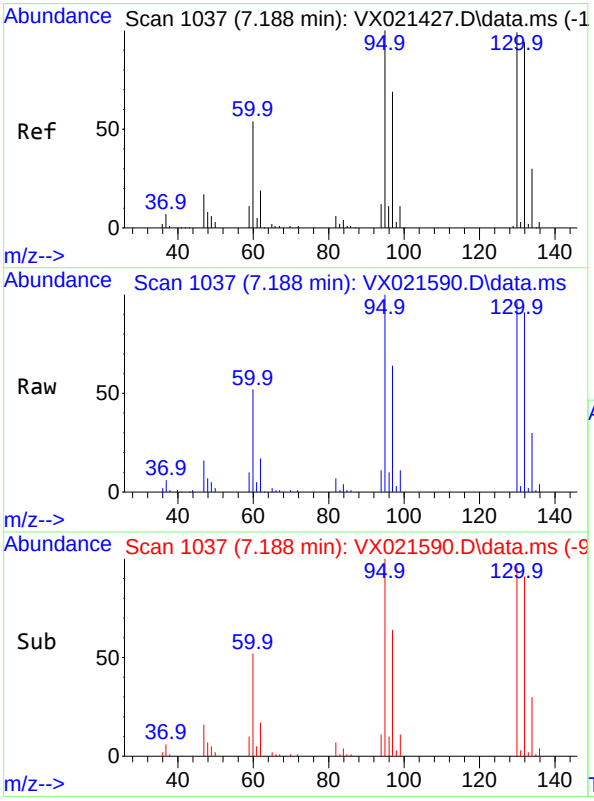



#43
Isopropyl Acetate
Concen: 49.22 ug/l
RT: 6.411 min Scan# 905
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 43 Resp: 121138

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 17.7 | 18.2 | 27.4# |
| 87 | 12.2 | 12.5 | 18.7# |

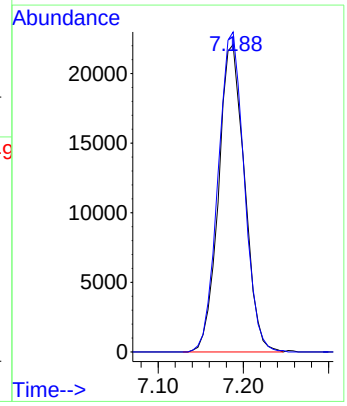



#44
Trichloroethene
Concen: 47.66 ug/l
RT: 7.188 min Scan# 1037
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

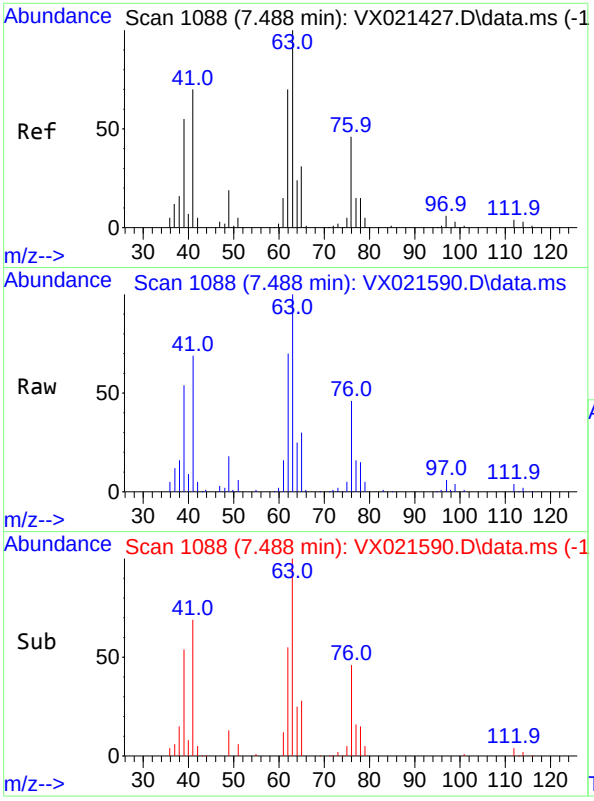
Tgt Ion:130 Resp: 46818

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 130 | 100 | | |
| 95 | 104.1 | 0.0 | 198.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

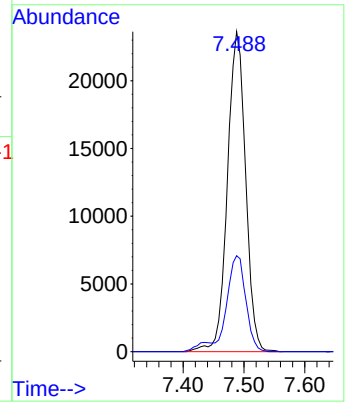
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

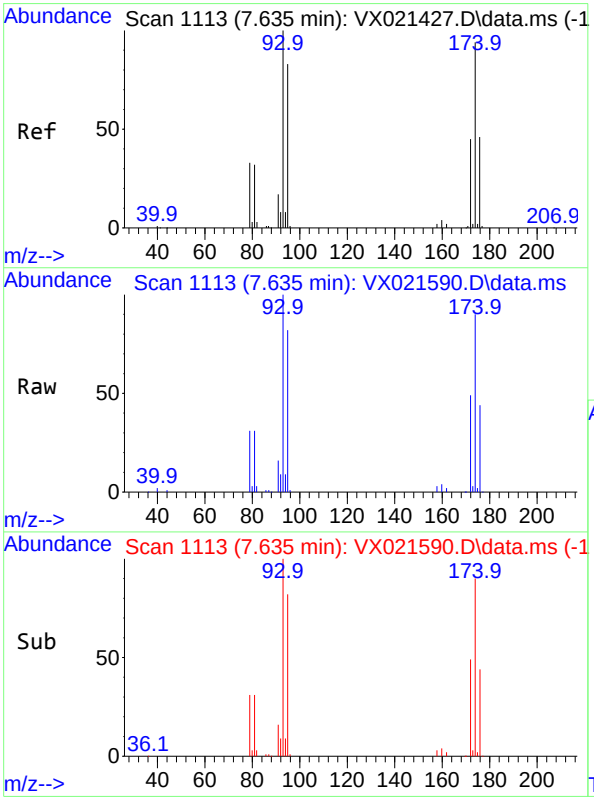



#45
1,2-Dichloropropane
Concen: 48.67 ug/l
RT: 7.488 min Scan# 1088
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 63 Resp: 49076

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 65 | 30.0 | 25.7 | 38.5 |

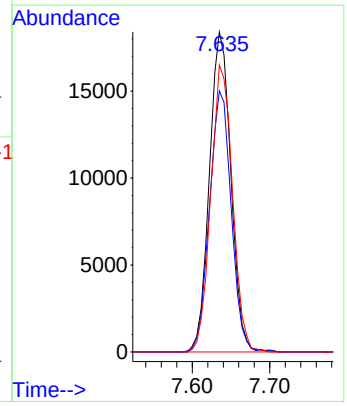



#46
Dibromomethane
Concen: 48.27 ug/l
RT: 7.635 min Scan# 1113
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

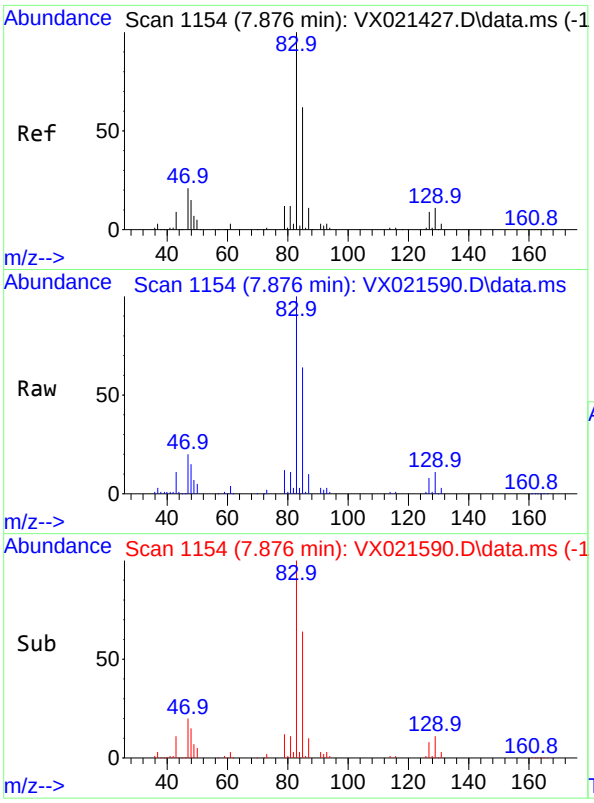
Tgt Ion: 93 Resp: 35479

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 93 | 100 | | |
| 95 | 82.5 | 66.8 | 100.2 |
| 174 | 90.5 | 83.1 | 124.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

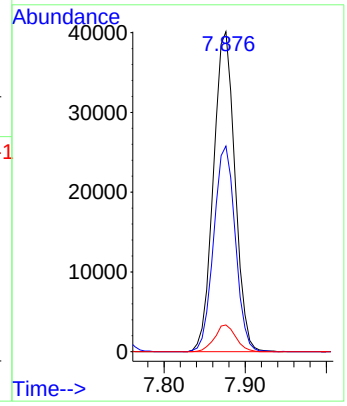
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

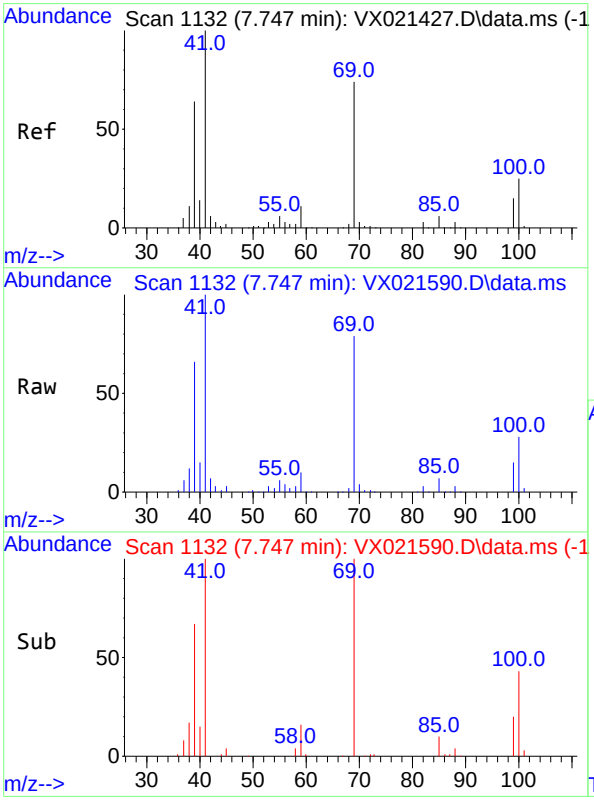



#47
Bromodichloromethane
Concen: 49.32 ug/l
RT: 7.876 min Scan# 1154
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 83 Resp: 73771

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.2 | 51.4 | 77.0 |
| 127 | 8.4 | 6.8 | 10.2 |

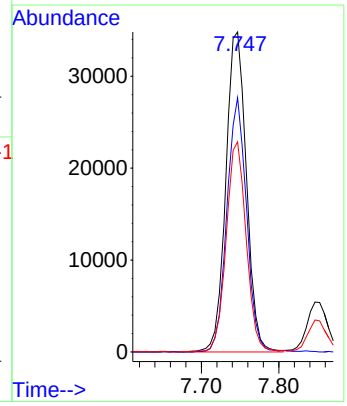



#48
Methyl methacrylate
Concen: 49.04 ug/l
RT: 7.747 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

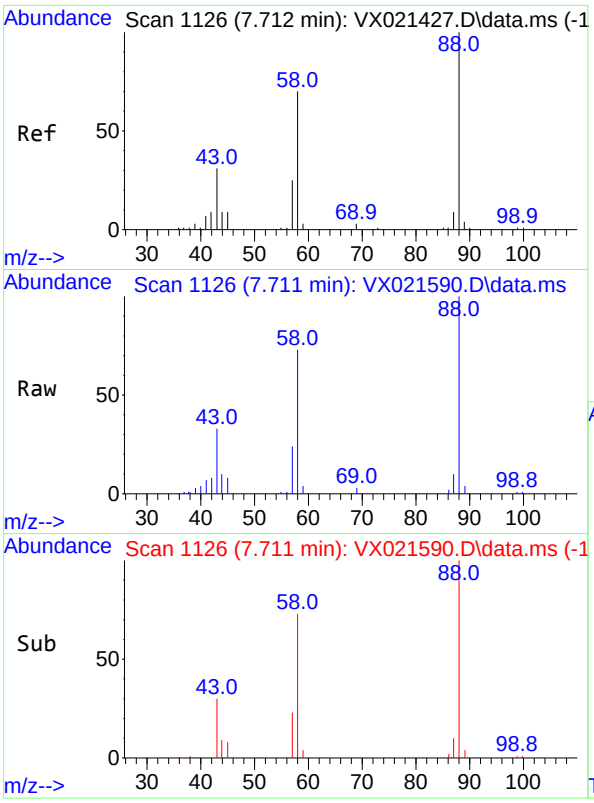
Tgt Ion: 41 Resp: 64379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 75.9 | 76.0 | 114.0# |
| 39 | 64.1 | 44.6 | 67.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

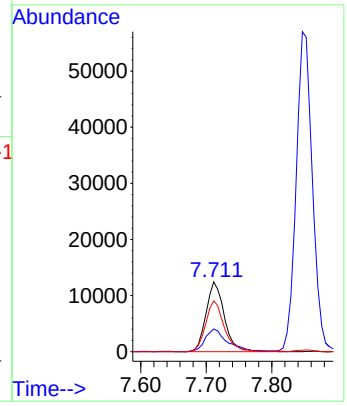
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

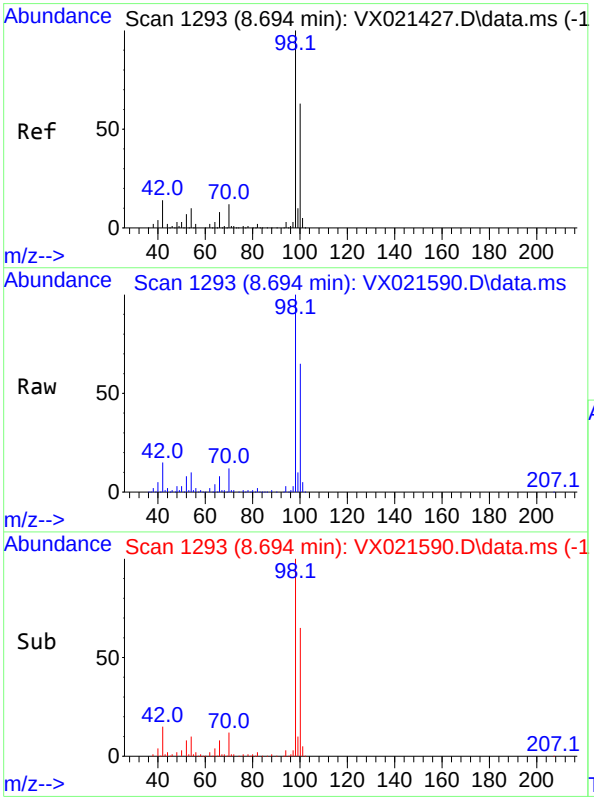



#49
1,4-Dioxane
Concen: 1025.01 ug/l
RT: 7.711 min Scan# 1126
Delta R.T. -0.001 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 88 Resp: 24092

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 39.5 | 23.2 | 34.8# |
| 58 | 74.6 | 55.0 | 82.4 |

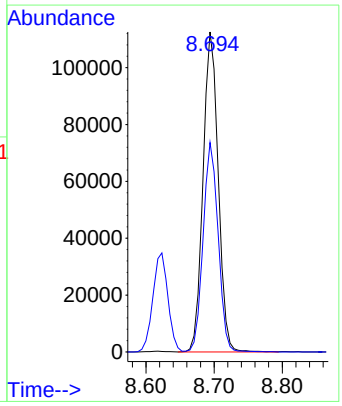



#50
Toluene-d8
Concen: 51.53 ug/l
RT: 8.694 min Scan# 1293
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

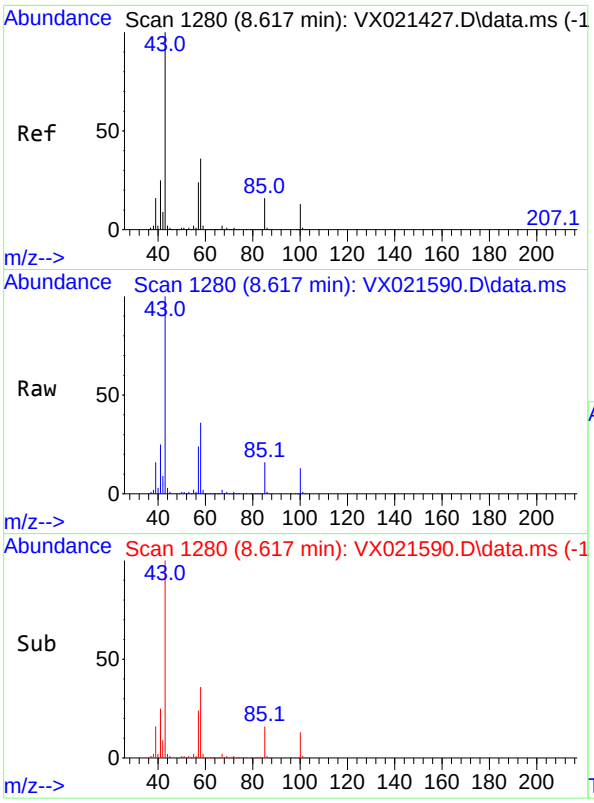
Tgt Ion: 98 Resp: 174489

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.8 | 51.9 | 77.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

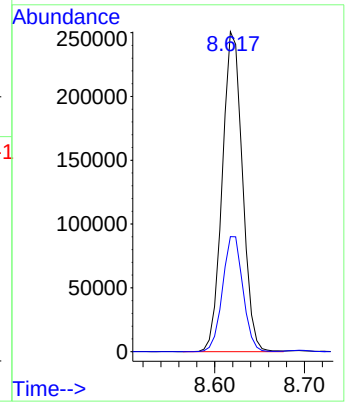
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

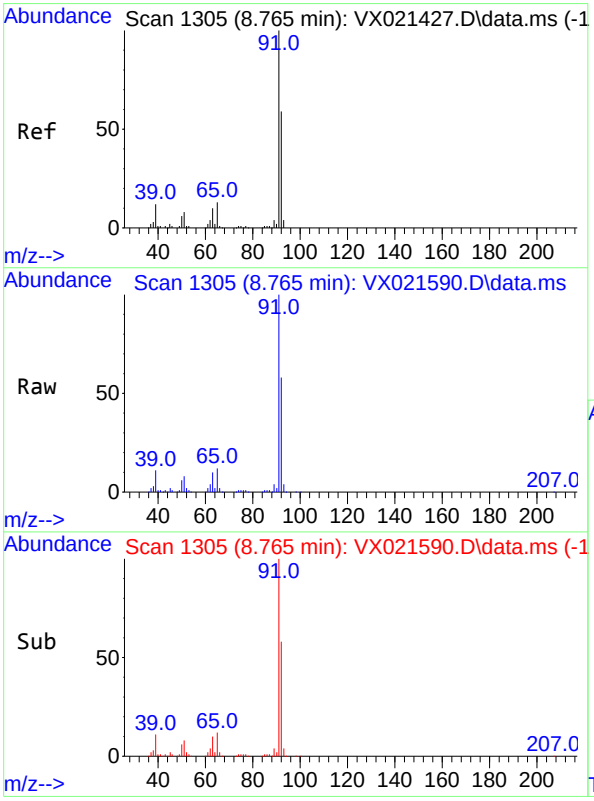



#51
4-Methyl-2-Pentanone
Concen: 258.28 ug/l
RT: 8.617 min Scan# 1280
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 43 Resp: 390991

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 36.5 | 35.4 | 53.0 |

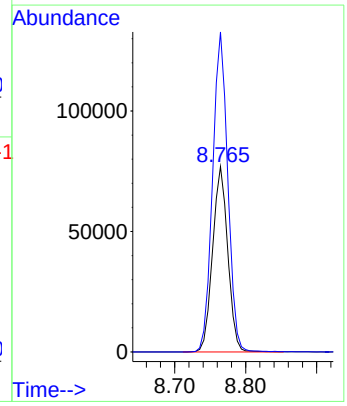



#52
Toluene
Concen: 49.74 ug/l
RT: 8.765 min Scan# 1305
Delta R.T. -0.001 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

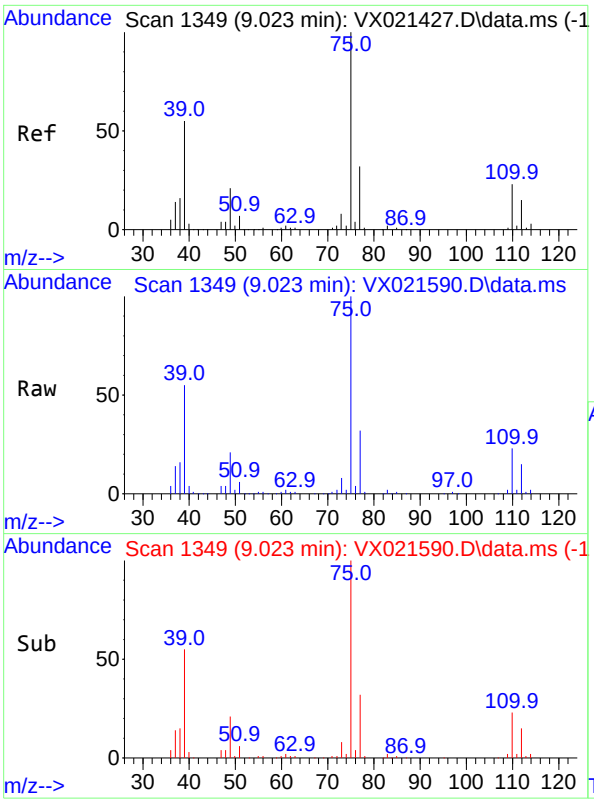
Tgt Ion: 92 Resp: 114366

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 92 | 100 | | |
| 91 | 172.6 | 137.1 | 205.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

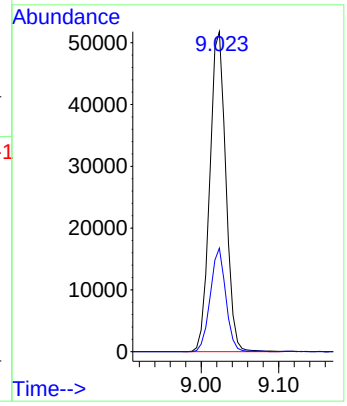
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

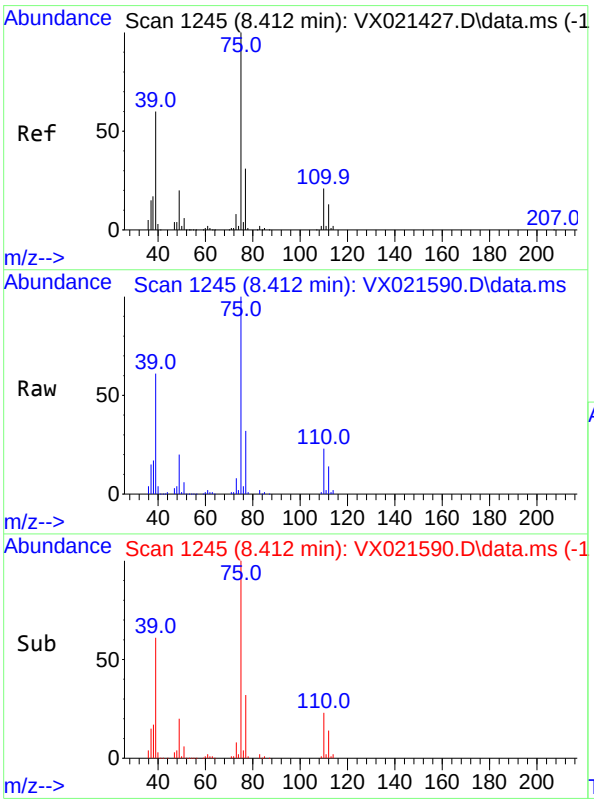



#53
t-1,3-Dichloropropene
Concen: 49.39 ug/l
RT: 9.023 min Scan# 1349
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 75 Resp: 74599

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 32.3 | 24.9 | 37.3 |

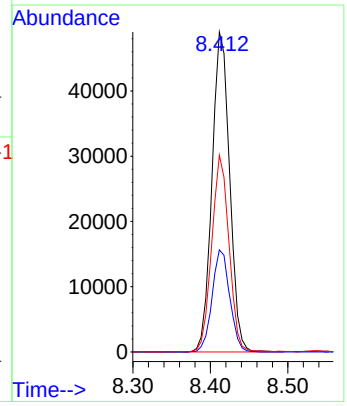



#54
cis-1,3-Dichloropropene
Concen: 48.25 ug/l
RT: 8.412 min Scan# 1245
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

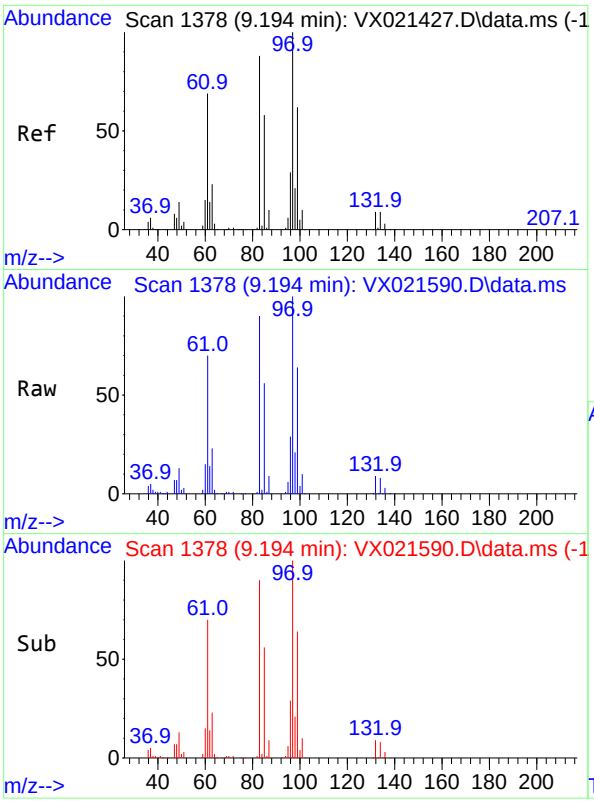
Tgt Ion: 75 Resp: 77542

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 31.9 | 25.7 | 38.5 |
| 39 | 61.4 | 35.1 | 52.7# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

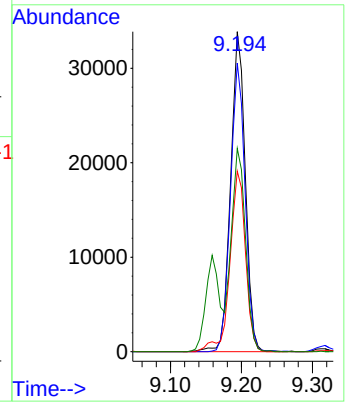
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

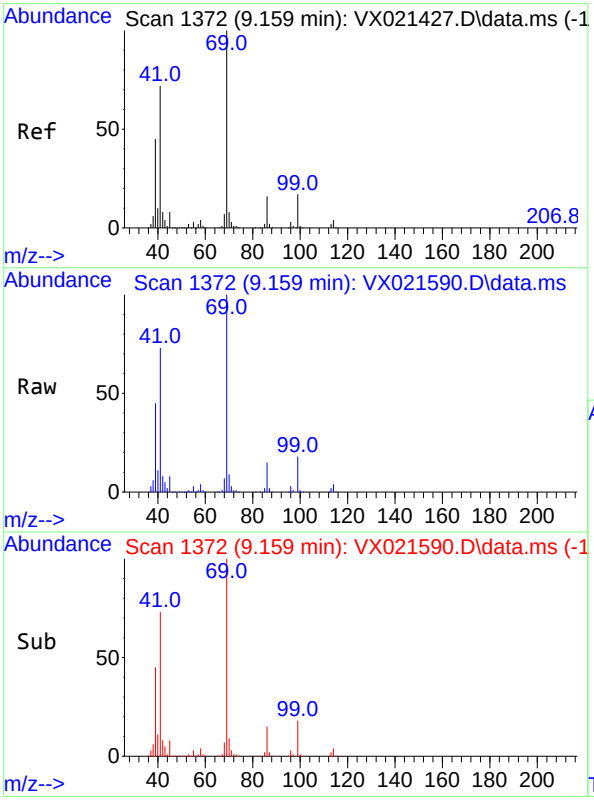



#55
1,1,2-Trichloroethane
Concen: 50.14 ug/l
RT: 9.194 min Scan# 1378
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 97 Resp: 48656

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 97 | 100 | | |
| 83 | 90.2 | 69.3 | 103.9 |
| 85 | 56.4 | 44.3 | 66.5 |
| 99 | 63.5 | 50.3 | 75.5 |

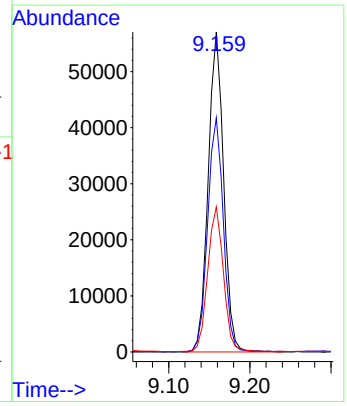



#56
Ethyl methacrylate
Concen: 46.08 ug/l
RT: 9.159 min Scan# 1372
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

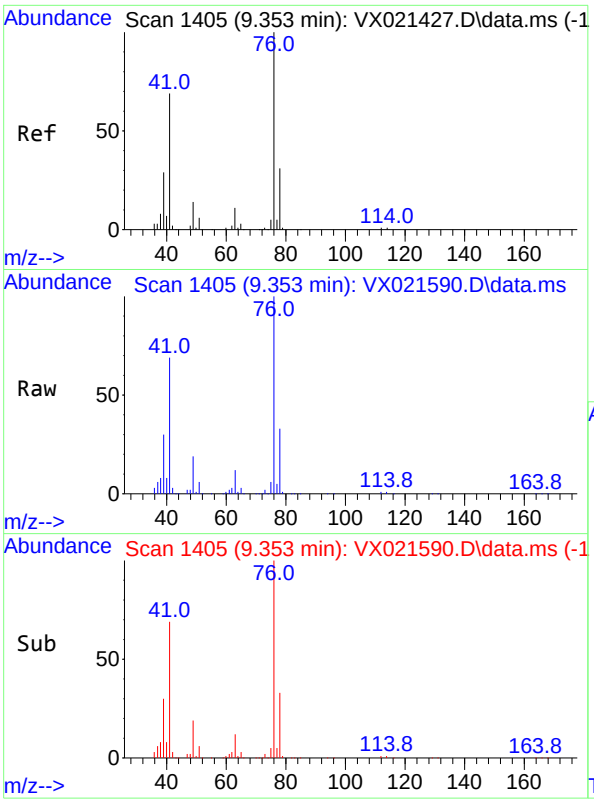
Tgt Ion: 69 Resp: 75245

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 69 | 100 | | |
| 41 | 75.0 | 46.8 | 70.2# |
| 39 | 46.2 | 24.7 | 37.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

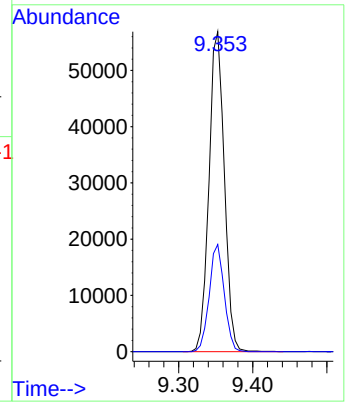
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

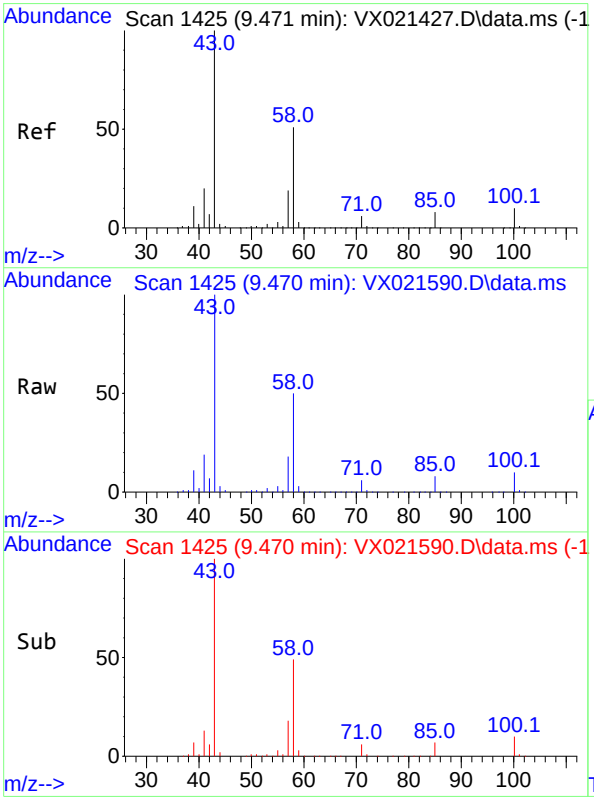



#57
1,3-Dichloropropane
Concen: 49.30 ug/l
RT: 9.353 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 76 Resp: 81875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 78 | 32.8 | 26.2 | 39.2 |

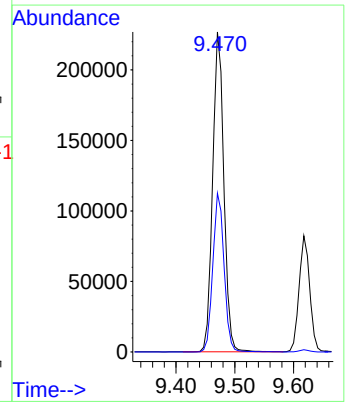



#59
2-Hexanone
Concen: 264.93 ug/l
RT: 9.470 min Scan# 1425
Delta R.T. -0.001 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

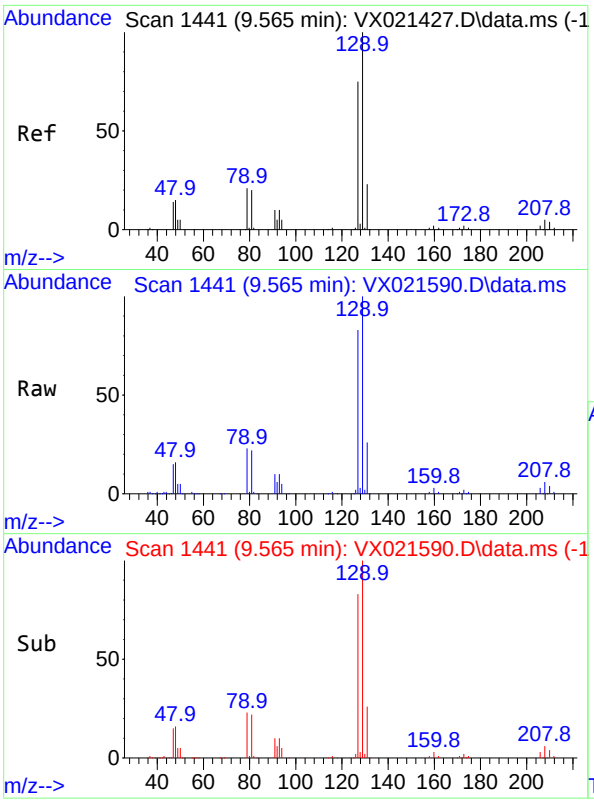
Tgt Ion: 43 Resp: 301146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 50.0 | 30.9 | 92.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

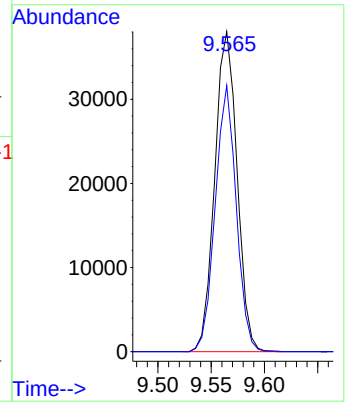
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

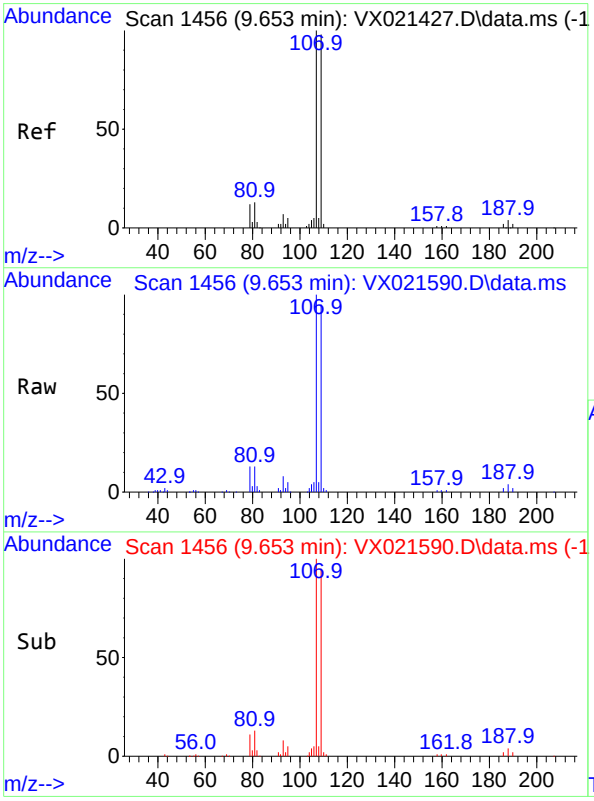



#60
Dibromochloromethane
Concen: 50.95 ug/l
RT: 9.565 min Scan# 1441
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:129 Resp: 55375

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 129 | 100 | | |
| 127 | 78.5 | 38.4 | 115.2 |

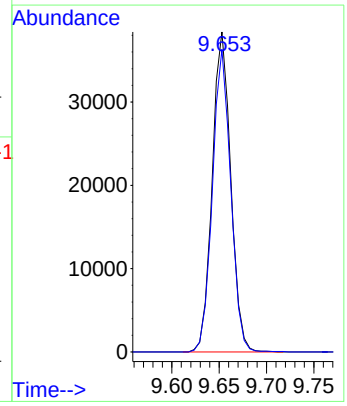



#61
1,2-Dibromoethane
Concen: 49.98 ug/l
RT: 9.653 min Scan# 1456
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

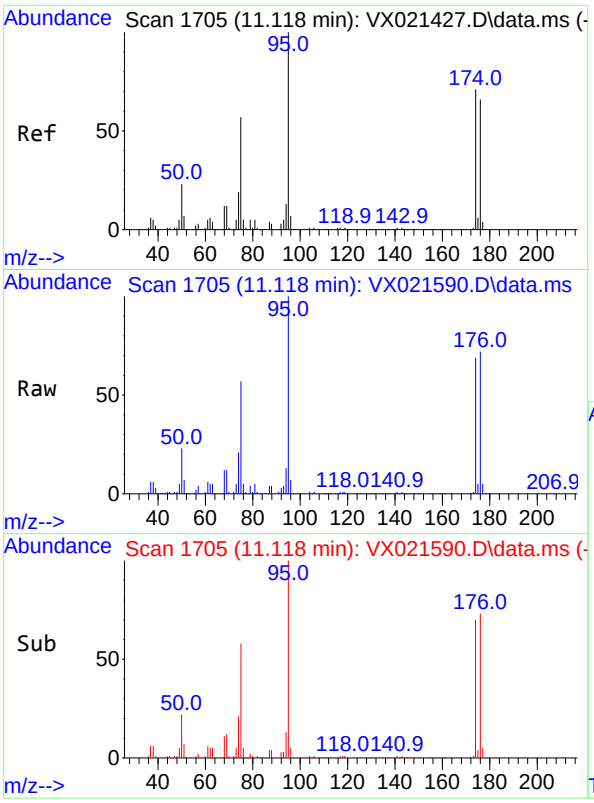
Tgt Ion:107 Resp: 52101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 107 | 100 | | |
| 109 | 93.5 | 75.8 | 113.6 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

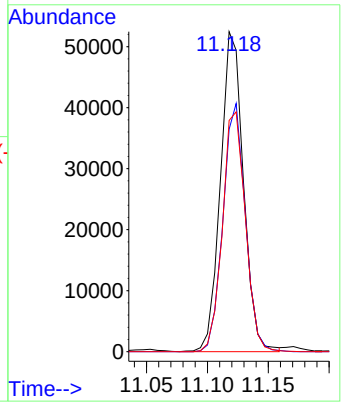
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

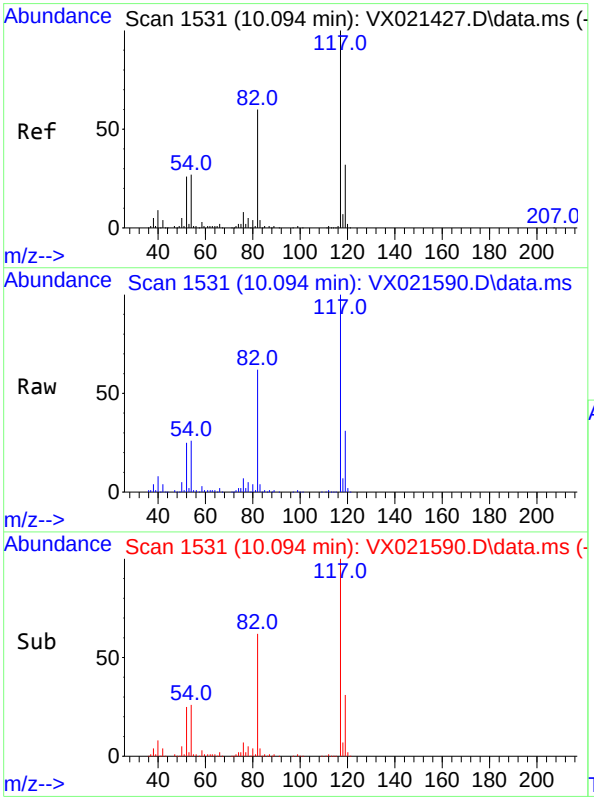



#62
4-Bromofluorobenzene
Concen: 52.27 ug/l
RT: 11.118 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 95 Resp: 68823

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 75.3 | 0.0 | 154.6 |
| 176 | 74.9 | 0.0 | 155.8 |

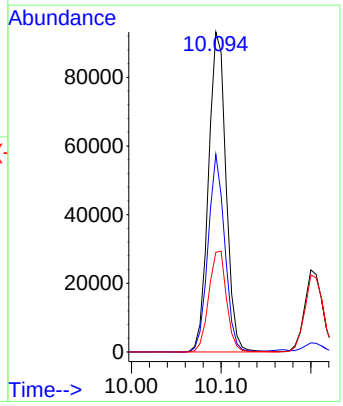



#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 10.094 min Scan# 1531
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

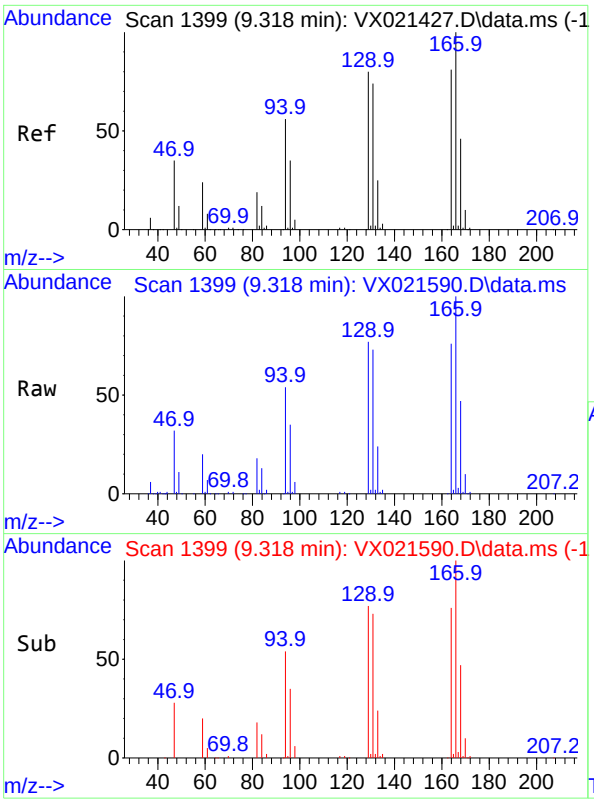
Tgt Ion:117 Resp: 126299

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 61.7 | 47.4 | 71.2 |
| 119 | 31.2 | 26.6 | 39.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

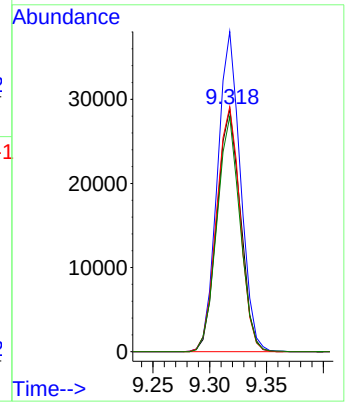
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

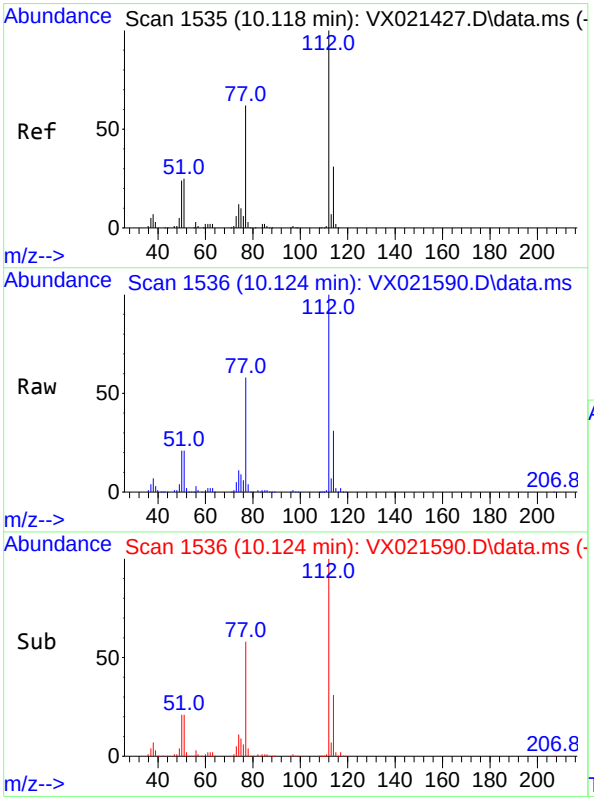



#64
Tetrachloroethene
Concen: 49.11 ug/l
RT: 9.318 min Scan# 1399
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:164 Resp: 41551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 131.7 | 103.4 | 155.2 |
| 129 | 100.8 | 70.8 | 106.2 |
| 131 | 96.8 | 72.5 | 108.7 |

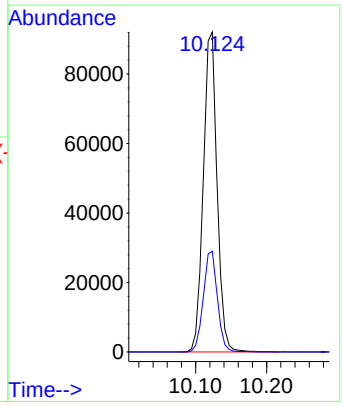



#65
Chlorobenzene
Concen: 49.03 ug/l
RT: 10.124 min Scan# 1536
Delta R.T. 0.005 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

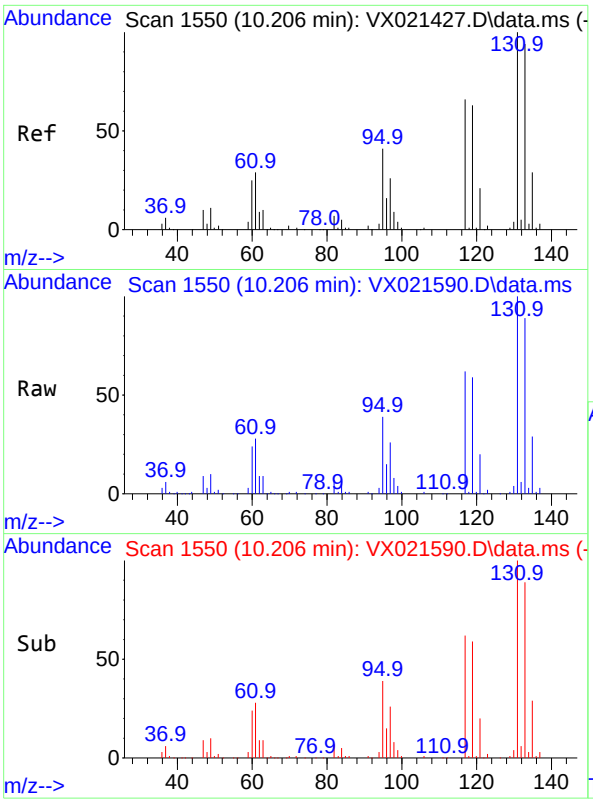
Tgt Ion:112 Resp: 124401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 112 | 100 | | |
| 114 | 31.5 | 25.8 | 38.6 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

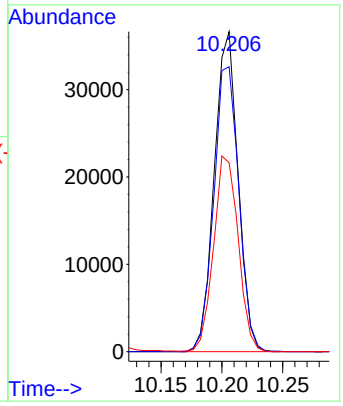
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

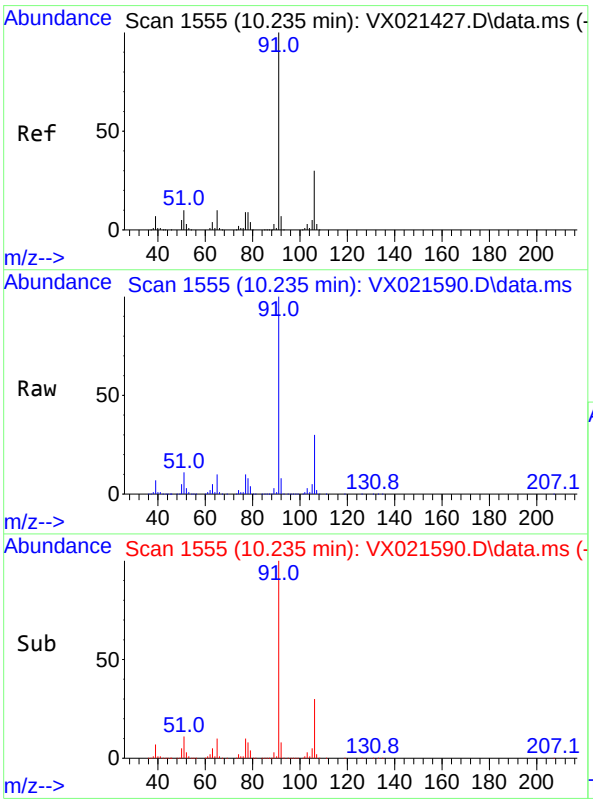



#66
1,1,1,2-Tetrachloroethane
Concen: 51.21 ug/l
RT: 10.206 min Scan# 1550
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:131 Resp: 49790

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 131 | 100 | | |
| 133 | 93.6 | 47.7 | 143.1 |
| 119 | 63.4 | 32.1 | 96.5 |

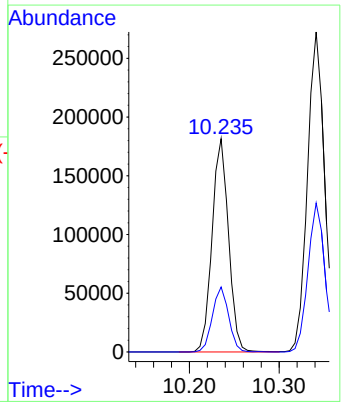



#67
Ethyl Benzene
Concen: 50.12 ug/l
RT: 10.235 min Scan# 1555
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

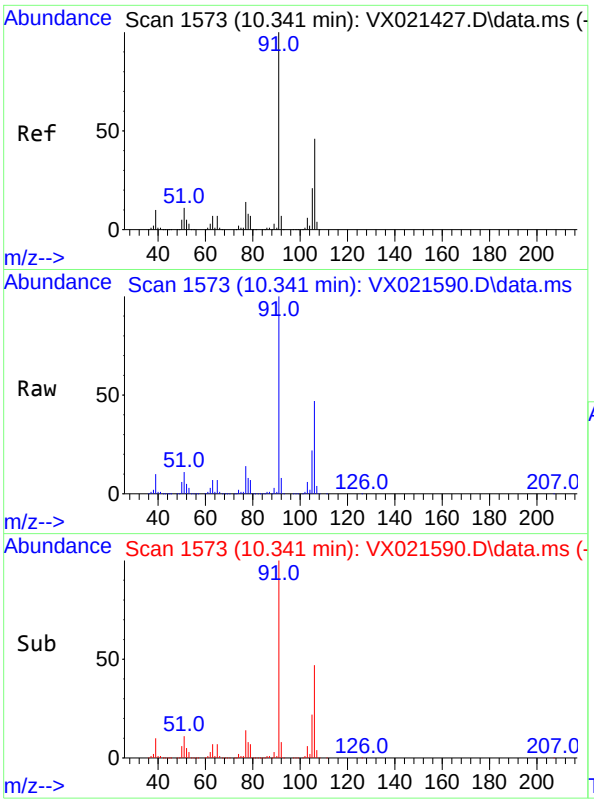
Tgt Ion: 91 Resp: 231805

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 30.5 | 24.6 | 37.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

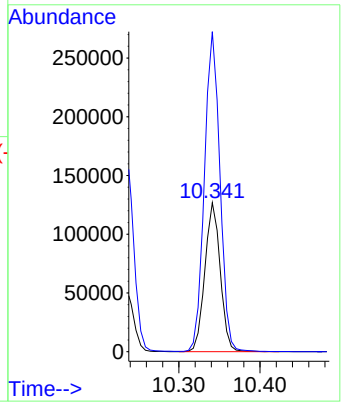
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

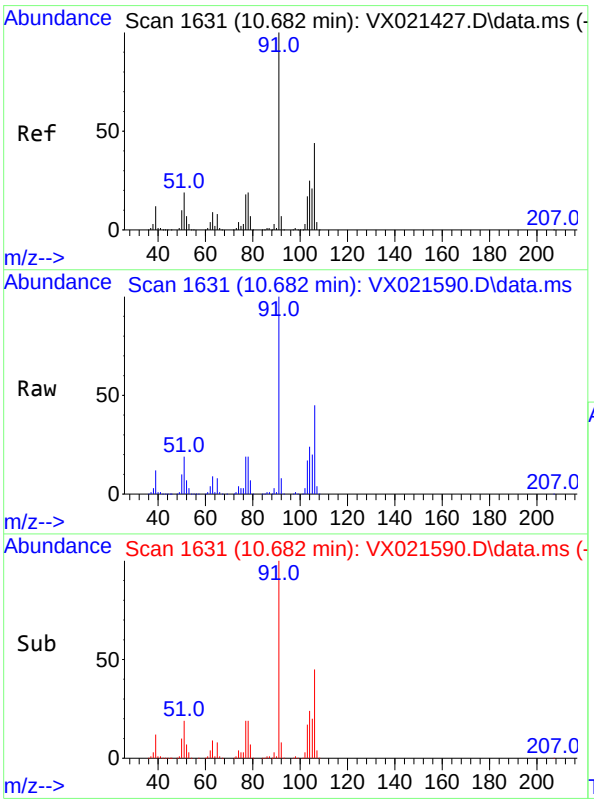



#68
m/p-Xylenes
Concen: 100.93 ug/l
RT: 10.341 min Scan# 1573
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:106 Resp: 166292

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 217.7 | 162.8 | 244.2 |

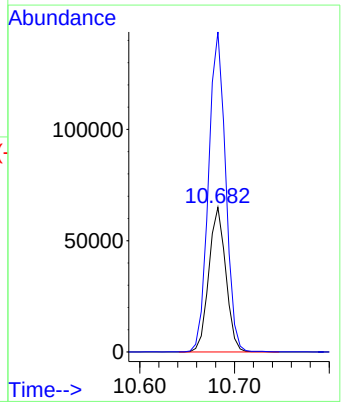



#69
o-Xylene
Concen: 50.72 ug/l
RT: 10.682 min Scan# 1631
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

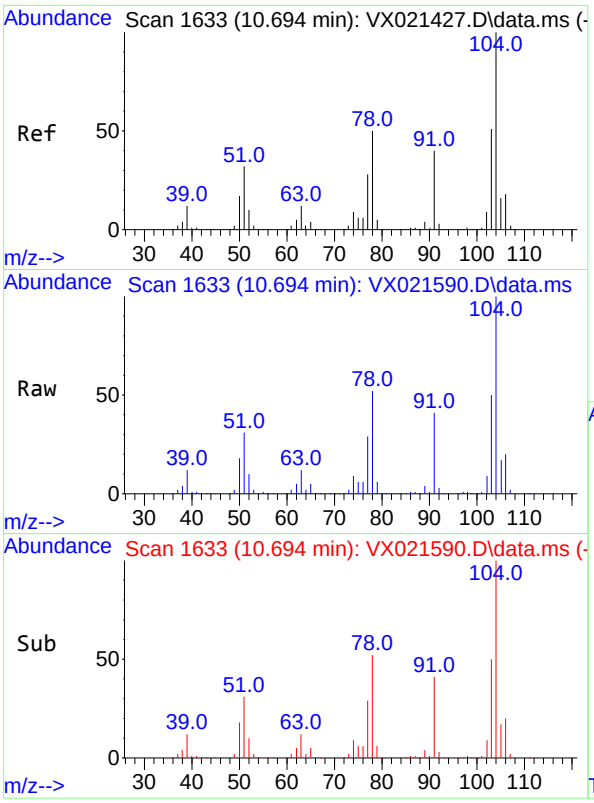
Tgt Ion:106 Resp: 80942

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 106 | 100 | | |
| 91 | 223.0 | 108.1 | 324.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

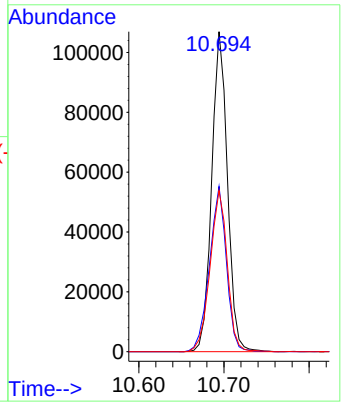
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

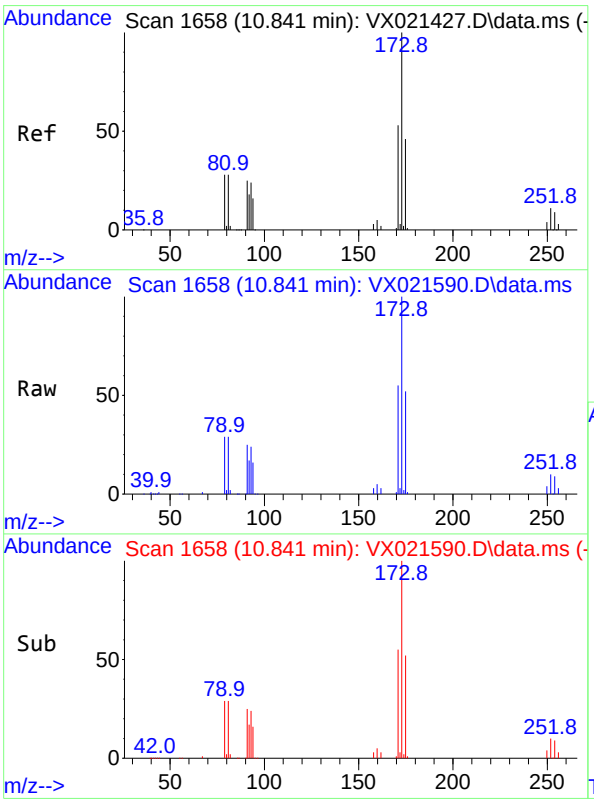



#70
Styrene
Concen: 49.92 ug/l
RT: 10.694 min Scan# 1633
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:104 Resp: 137003

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 104 | 100 | | |
| 78 | 55.9 | 40.0 | 60.0 |
| 103 | 55.1 | 43.4 | 65.0 |

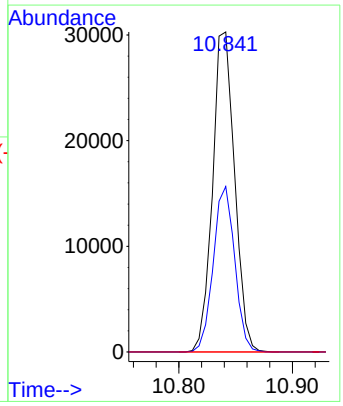



#71
Bromoform
Concen: 51.85 ug/l
RT: 10.841 min Scan# 1658
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

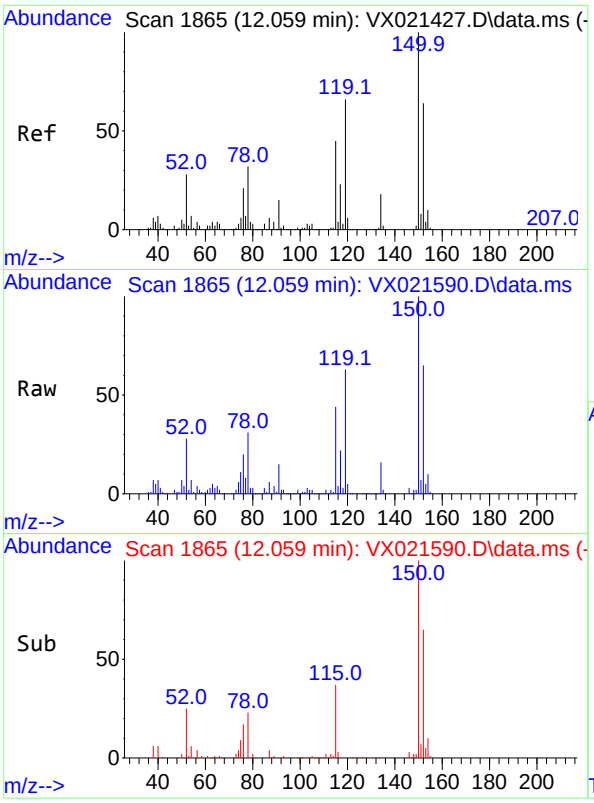
Tgt Ion:173 Resp: 40963

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 50.2 | 23.9 | 71.8 |
| 254 | 0.0 | 0.1 | 0.1# |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

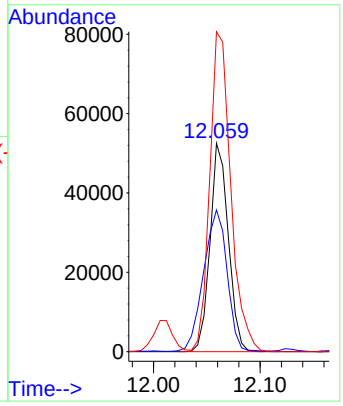
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

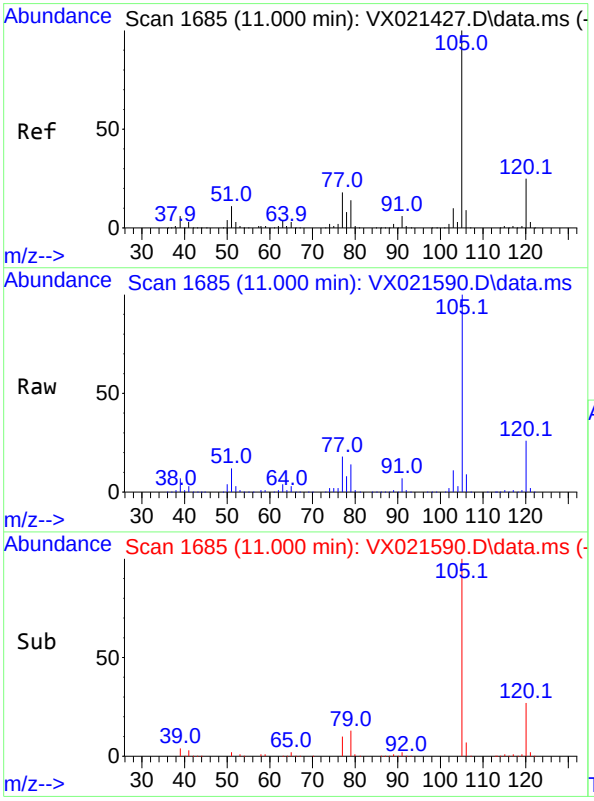



#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.059 min Scan# 1865
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:152 Resp: 62506

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 86.9 | 41.1 | 123.3 |
| 150 | 176.8 | 0.0 | 349.0 |

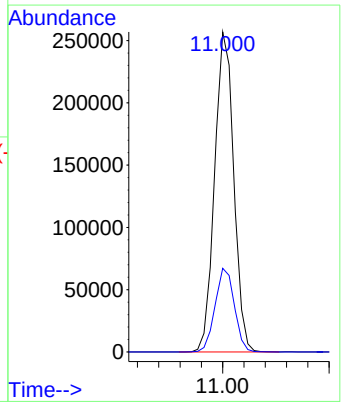



#73
Isopropylbenzene
Concen: 72.65 ug/l
RT: 11.000 min Scan# 1685
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

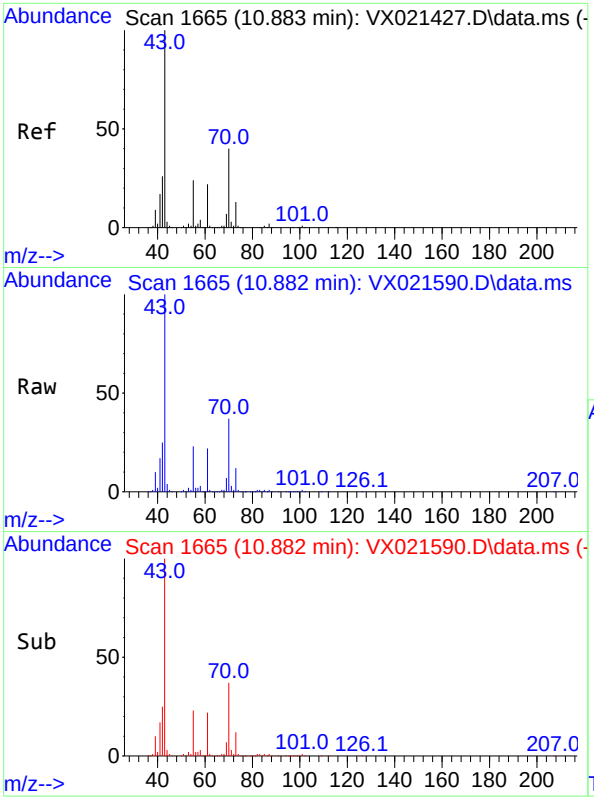
Tgt Ion:105 Resp: 319065

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 26.4 | 13.2 | 39.6 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

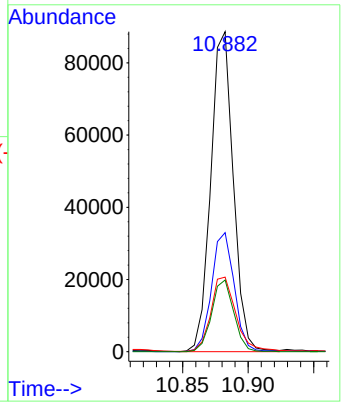
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

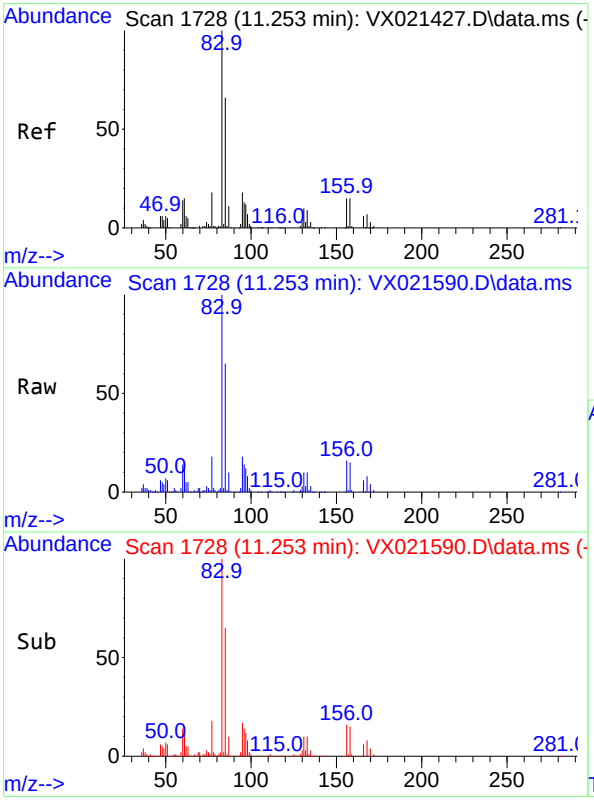



#74
N-amyl acetate
Concen: 49.94 ug/l
RT: 10.882 min Scan# 1665
Delta R.T. -0.001 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 43 Resp: 106130

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 37.7 | 39.0 | 58.6# |
| 55 | 26.0 | 21.5 | 32.3 |
| 61 | 22.0 | 22.1 | 33.1# |

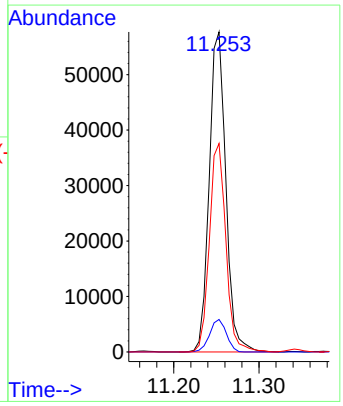



#75
1,1,2,2-Tetrachloroethane
Concen: 50.29 ug/l
RT: 11.253 min Scan# 1728
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

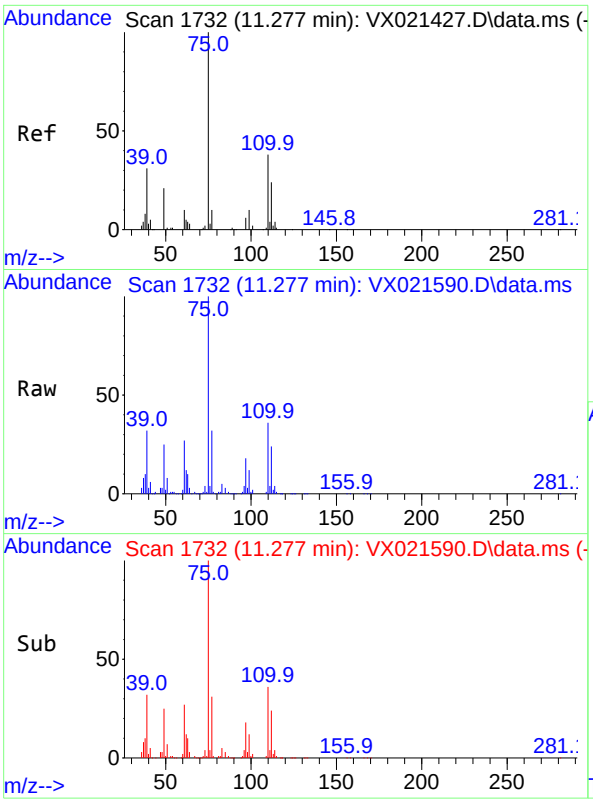
Tgt Ion: 83 Resp: 78037

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 10.3 | 5.1 | 15.2 |
| 85 | 64.8 | 31.8 | 95.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

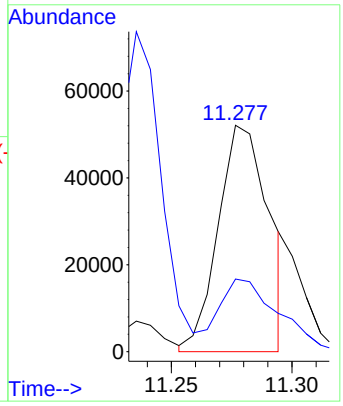
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

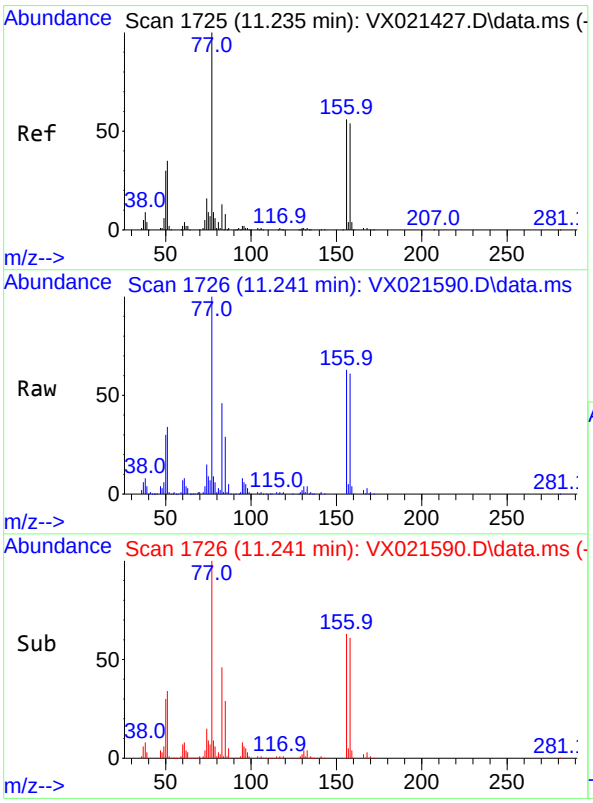



#76
1,2,3-Trichloropropane
Concen: 52.30 ug/l m
RT: 11.277 min Scan# 1732
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 75 Resp: 76105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 38.1 | 19.1 | 57.5 |

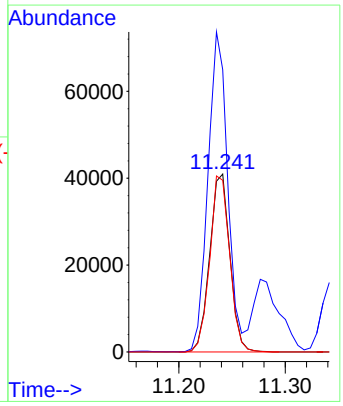



#77
Bromobenzene
Concen: 49.56 ug/l
RT: 11.241 min Scan# 1726
Delta R.T. 0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

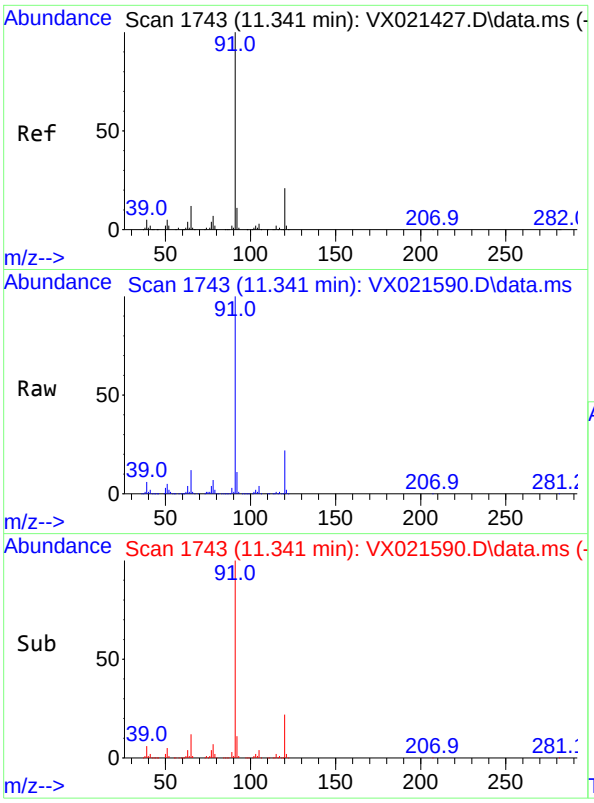
Tgt Ion:156 Resp: 53955

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 156 | 100 | | |
| 77 | 174.3 | 82.8 | 248.6 |
| 158 | 97.7 | 49.1 | 147.4 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

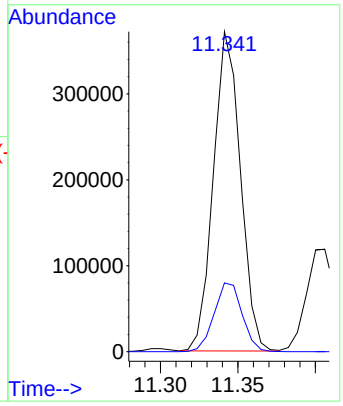
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

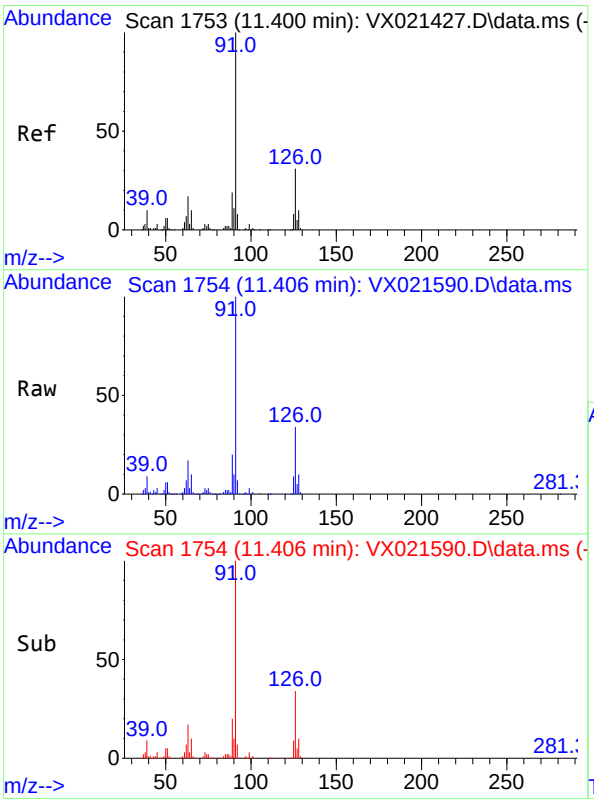



#78
n-propylbenzene
Concen: 86.87 ug/l
RT: 11.341 min Scan# 1743
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 91 Resp: 450578

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 120 | 22.3 | 11.5 | 34.5 |

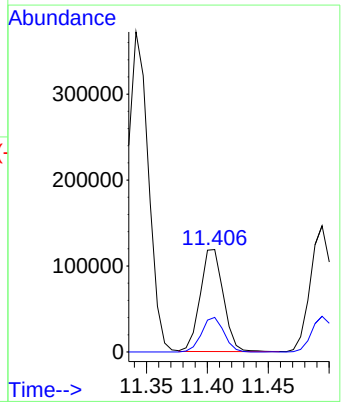



#79
2-Chlorotoluene
Concen: 49.99 ug/l
RT: 11.406 min Scan# 1754
Delta R.T. 0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

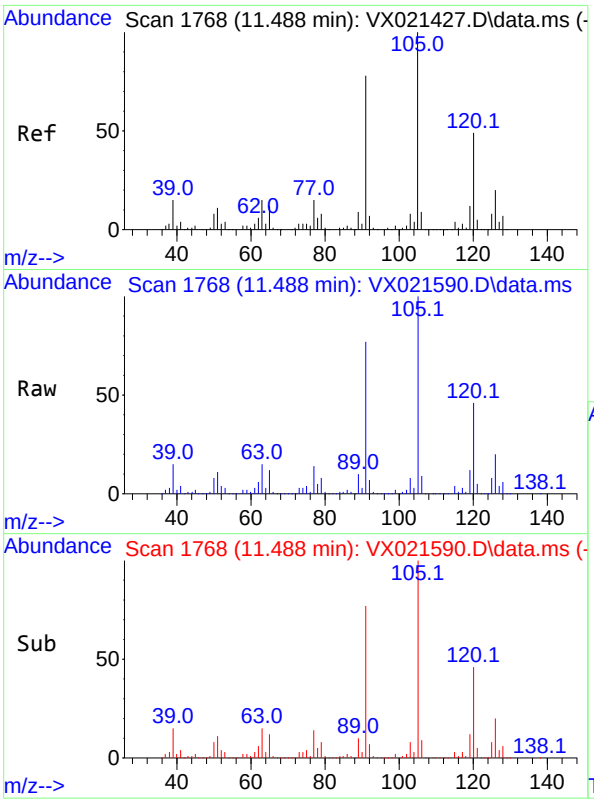
Tgt Ion: 91 Resp: 157280

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 32.8 | 16.6 | 49.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

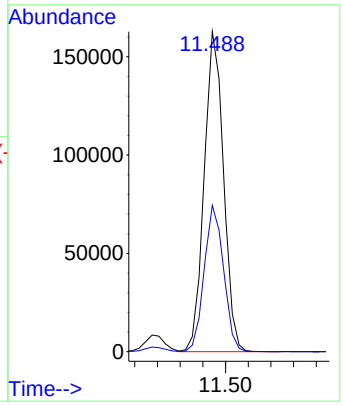
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

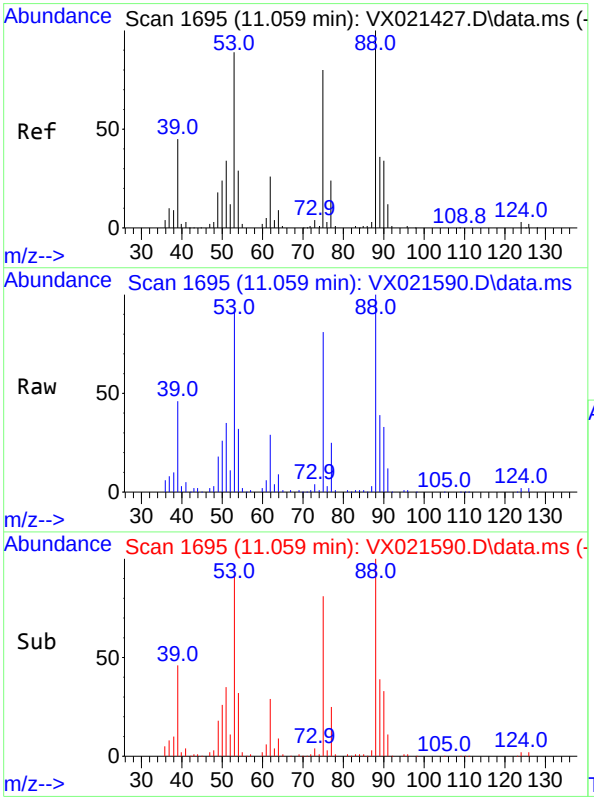



#80
1,3,5-Trimethylbenzene
Concen: 51.22 ug/l
RT: 11.488 min Scan# 1768
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:105 Resp: 192203

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 45.9 | 23.8 | 71.5 |

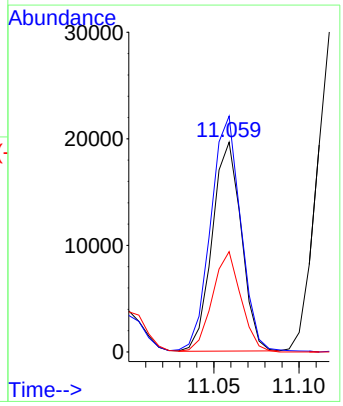



#81
trans-1,4-Dichloro-2-butene
Concen: 48.78 ug/l
RT: 11.059 min Scan# 1695
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

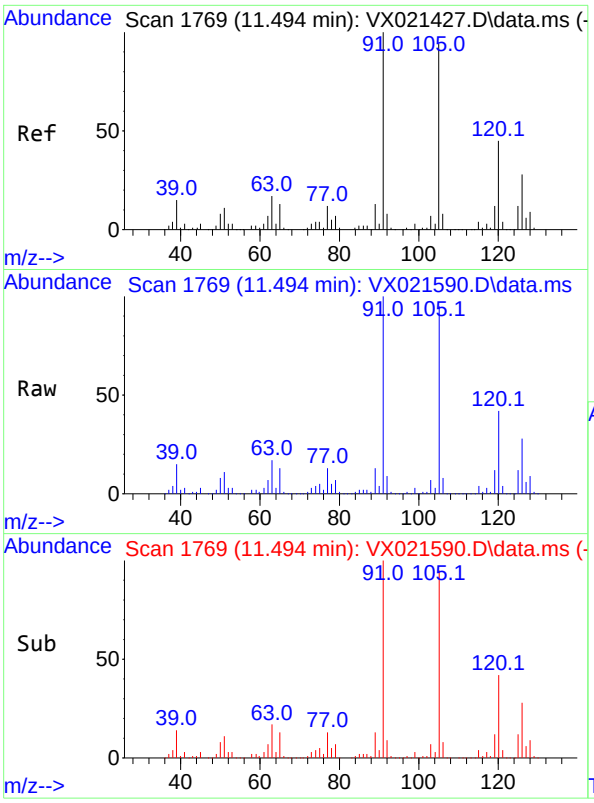
Tgt Ion: 75 Resp: 23305

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 117.7 | 74.5 | 111.7# |
| 89 | 47.2 | 37.9 | 56.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

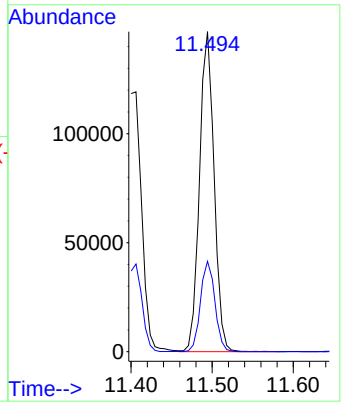
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

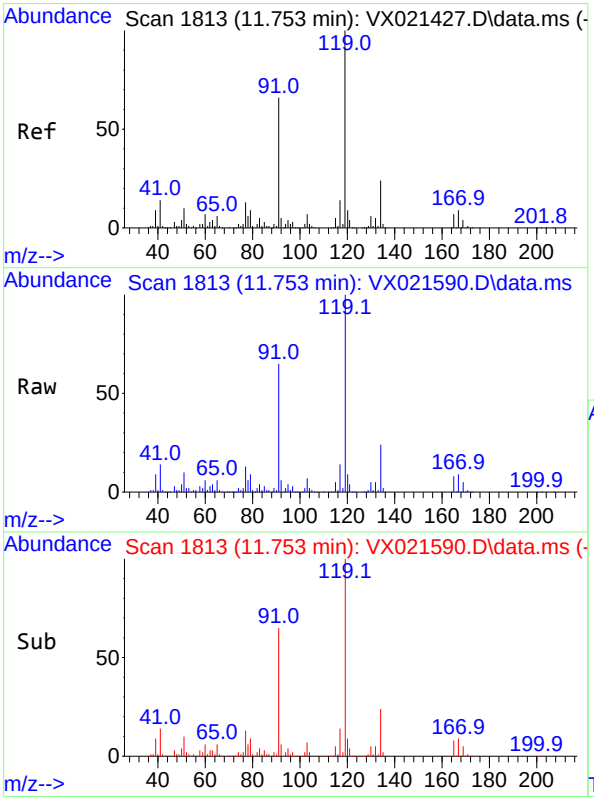



#82
4-Chlorotoluene
Concen: 49.05 ug/l
RT: 11.494 min Scan# 1769
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 91 Resp: 183217

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 126 | 27.9 | 14.9 | 44.5 |

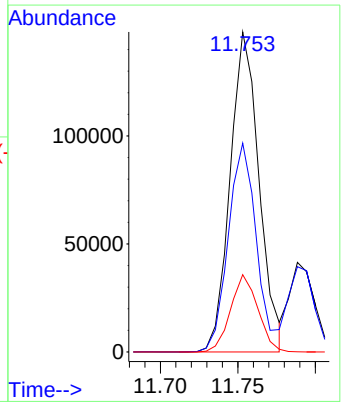



#83
tert-Butylbenzene
Concen: 52.68 ug/l
RT: 11.753 min Scan# 1813
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

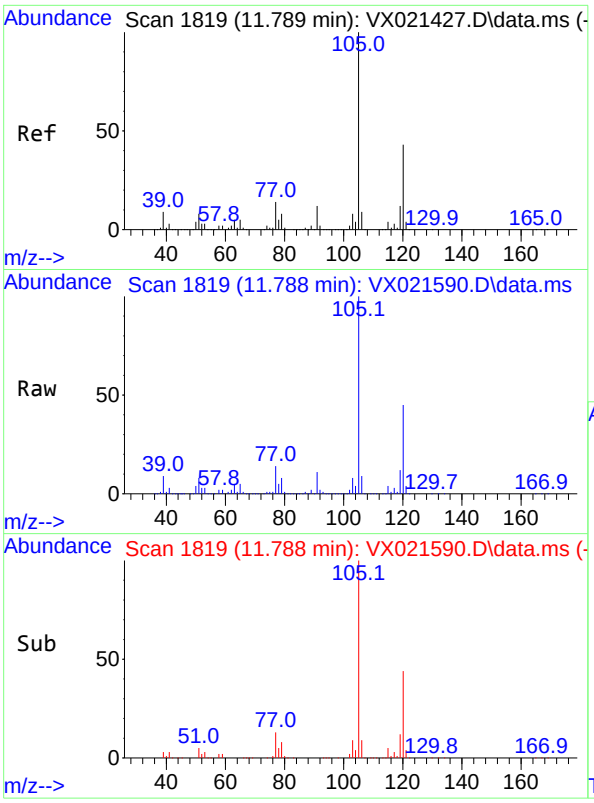
Tgt Ion:119 Resp: 192441

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 62.0 | 27.9 | 83.7 |
| 134 | 22.8 | 11.3 | 33.9 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

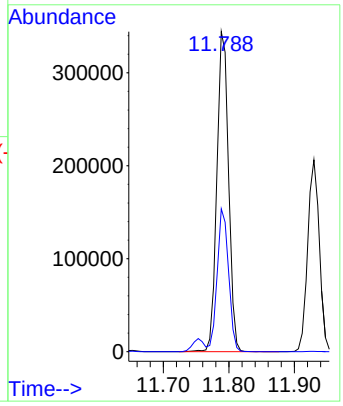
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

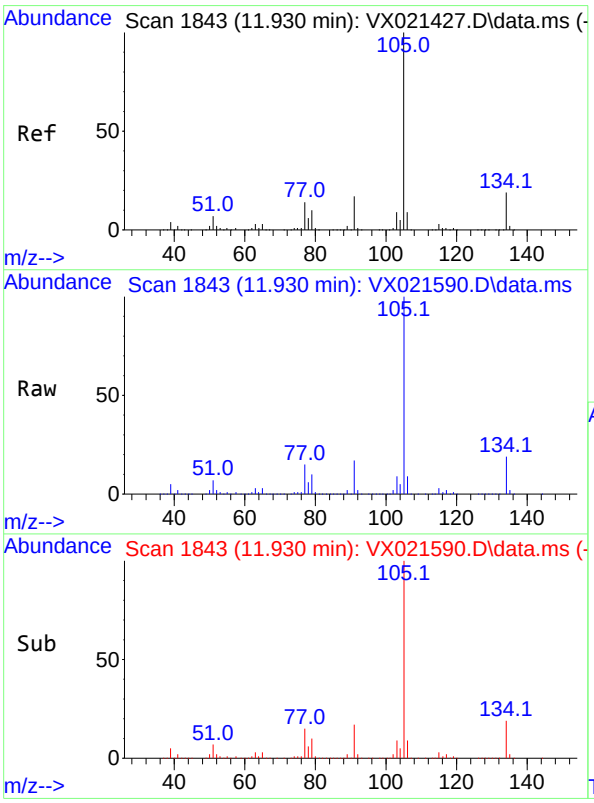



#84
1,2,4-Trimethylbenzene
Concen: 112.71 ug/l
RT: 11.788 min Scan# 1819
Delta R.T. -0.001 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:105 Resp: 426289

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 43.6 | 22.4 | 67.3 |

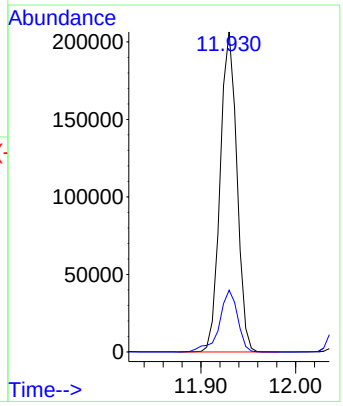



#85
sec-Butylbenzene
Concen: 60.22 ug/l
RT: 11.930 min Scan# 1843
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

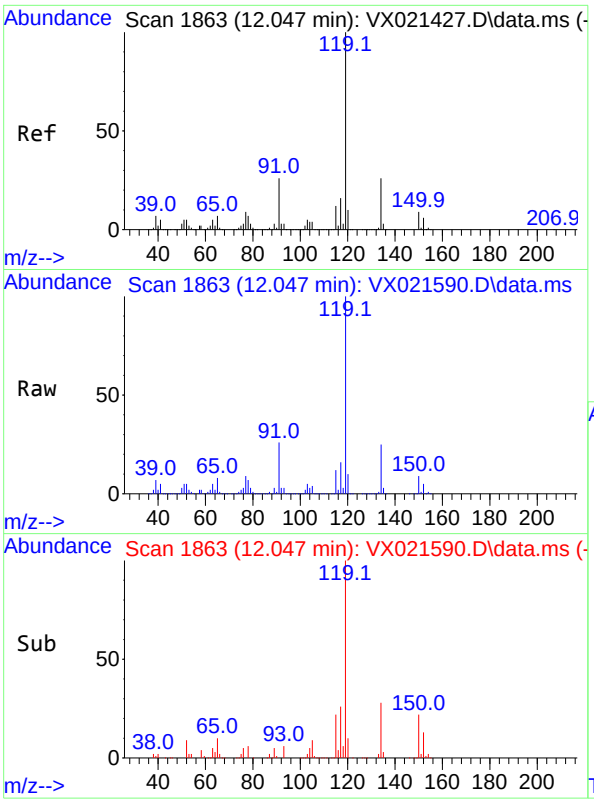
Tgt Ion:105 Resp: 253761

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 134 | 21.2 | 10.0 | 29.8 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

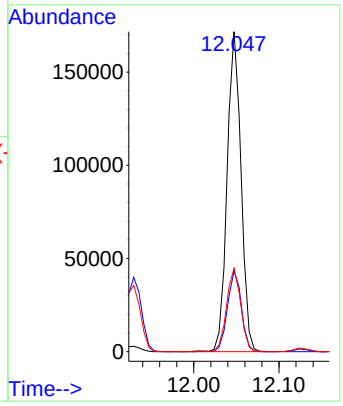
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

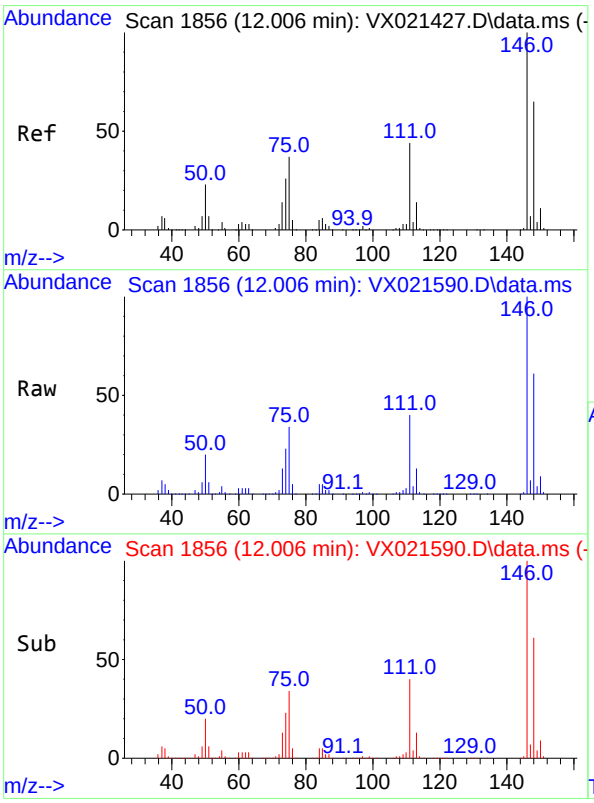



#86
p-Isopropyltoluene
Concen: 50.60 ug/l
RT: 12.047 min Scan# 1863
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:119 Resp: 194101

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 134 | 25.3 | 12.9 | 38.7 |
| 91 | 26.5 | 11.7 | 35.0 |

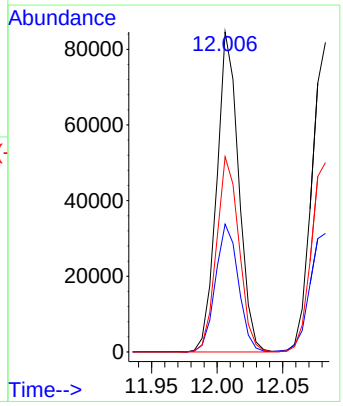



#87
1,3-Dichlorobenzene
Concen: 50.17 ug/l
RT: 12.006 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

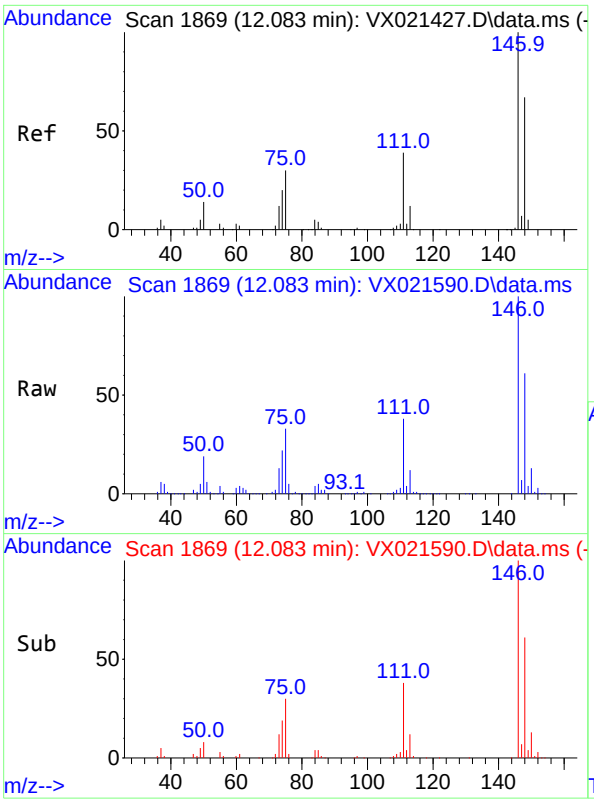
Tgt Ion:146 Resp: 98348

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.5 | 20.2 | 60.5 |
| 148 | 62.5 | 31.9 | 95.7 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

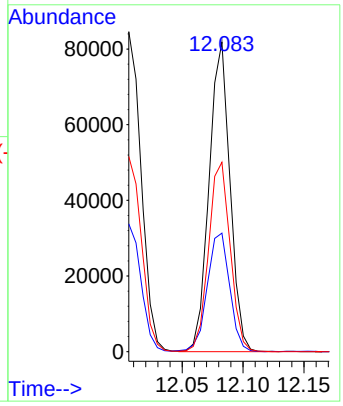
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

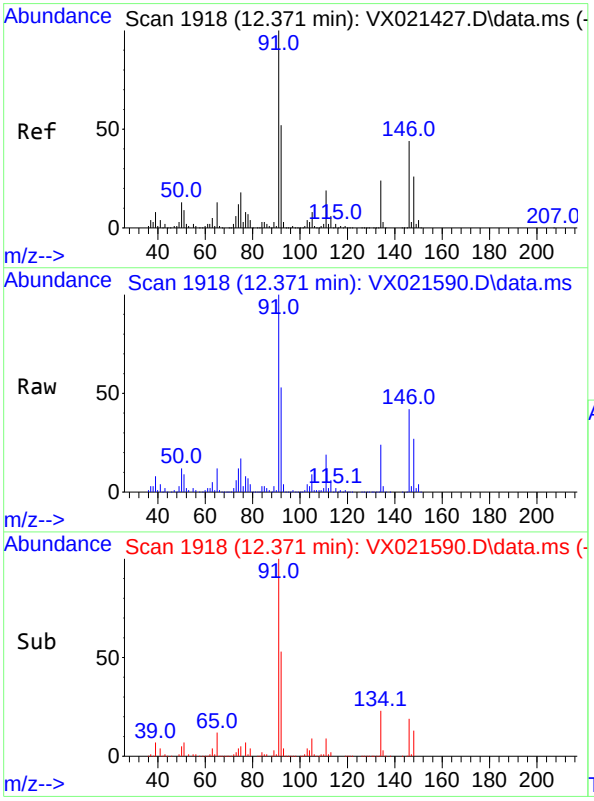



#88
1,4-Dichlorobenzene
Concen: 48.20 ug/l
RT: 12.083 min Scan# 1869
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:146 Resp: 97747

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 41.1 | 19.6 | 58.8 |
| 148 | 63.3 | 31.6 | 95.0 |

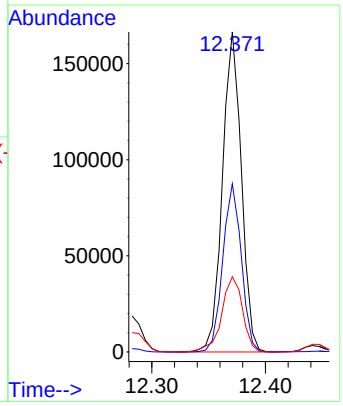



#89
n-Butylbenzene
Concen: 54.84 ug/l
RT: 12.371 min Scan# 1918
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

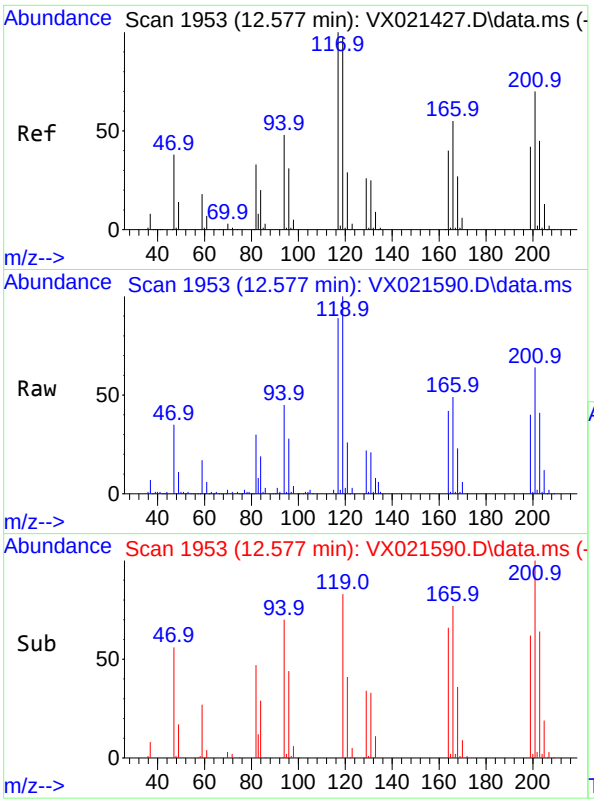
Tgt Ion: 91 Resp: 192711

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 51.5 | 27.4 | 82.0 |
| 134 | 25.9 | 13.2 | 39.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

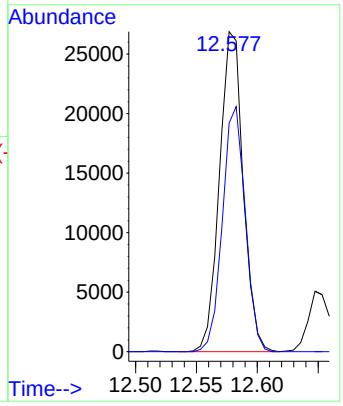
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

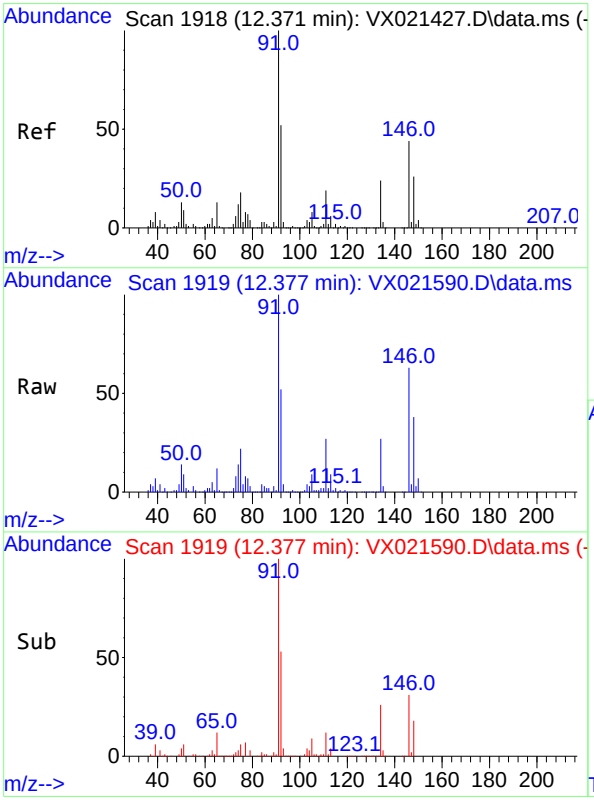



#90
Hexachloroethane
Concen: 52.61 ug/l
RT: 12.577 min Scan# 1953
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:117 Resp: 36417

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 201 | 73.8 | 40.4 | 121.2 |

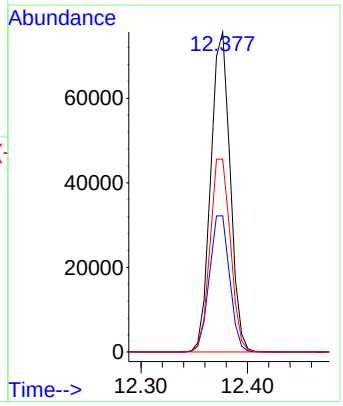



#91
1,2-Dichlorobenzene
Concen: 50.16 ug/l
RT: 12.377 min Scan# 1919
Delta R.T. 0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

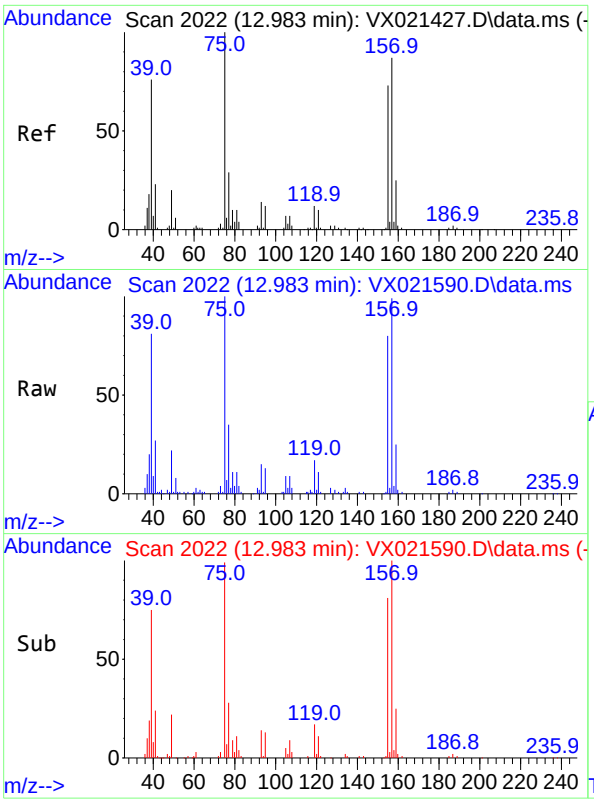
Tgt Ion:146 Resp: 95609

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 146 | 100 | | |
| 111 | 44.4 | 20.8 | 62.2 |
| 148 | 63.4 | 31.9 | 95.5 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

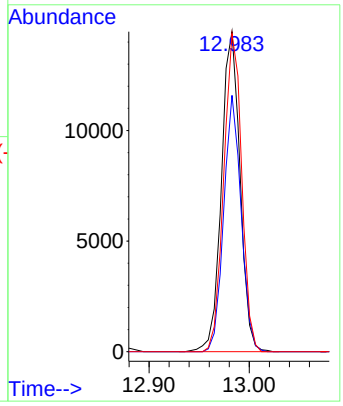
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

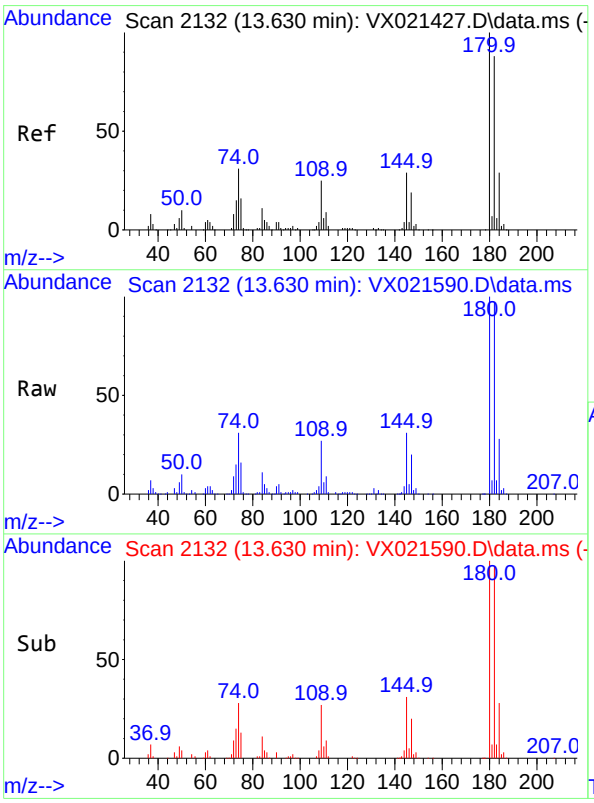



#92
1,2-Dibromo-3-Chloropropane
Concen: 47.54 ug/l
RT: 12.983 min Scan# 2022
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion: 75 Resp: 18553

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 74.9 | 45.3 | 135.9 |
| 157 | 96.1 | 57.7 | 173.1 |

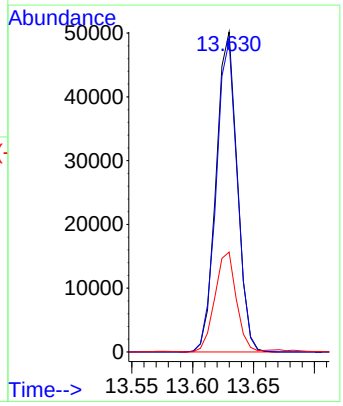



#93
1,2,4-Trichlorobenzene
Concen: 48.49 ug/l
RT: 13.630 min Scan# 2132
Delta R.T. -0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

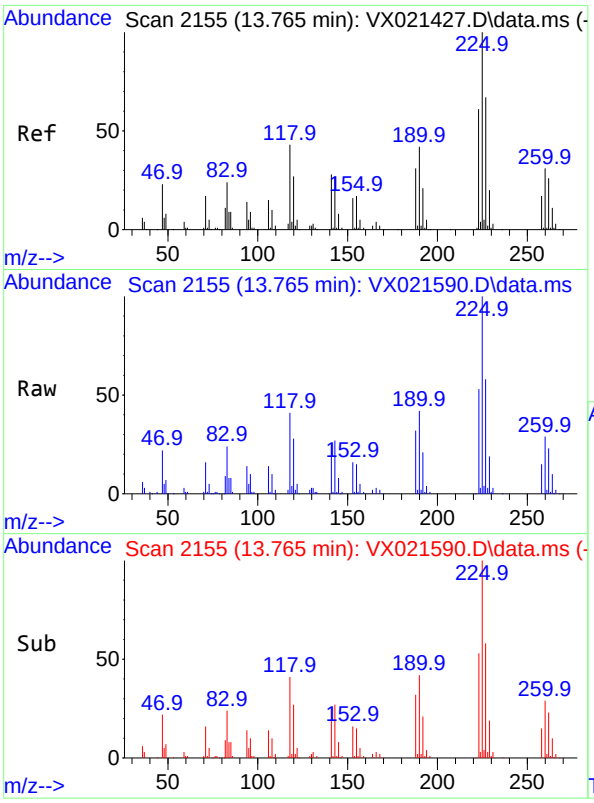
Tgt Ion:180 Resp: 60583

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 96.9 | 47.7 | 143.1 |
| 145 | 31.9 | 15.0 | 45.0 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

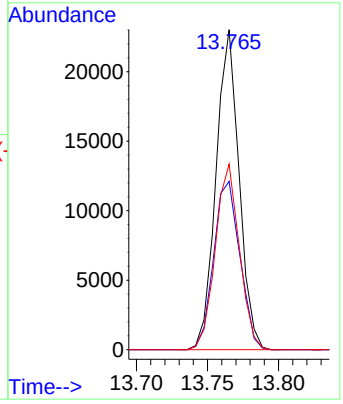
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM

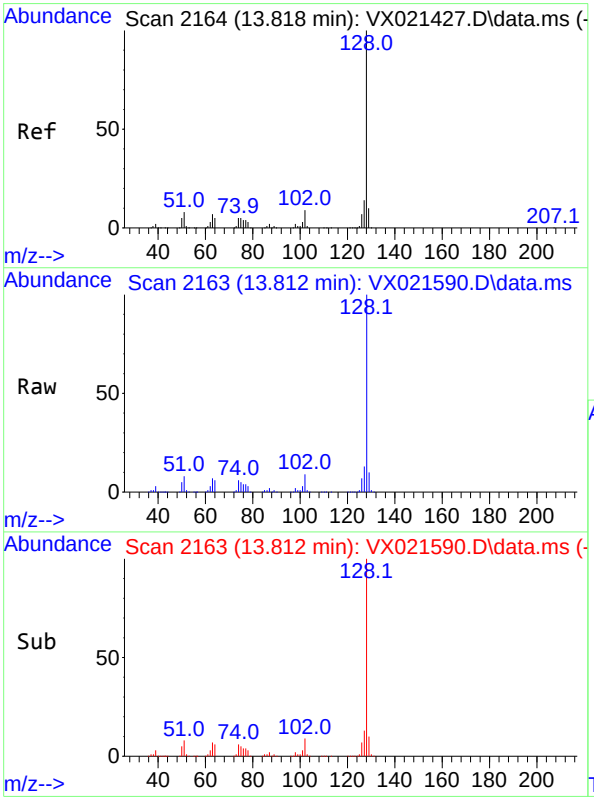



#94
Hexachlorobutadiene
Concen: 46.08 ug/l
RT: 13.765 min Scan# 2155
Delta R.T. 0.000 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:225 Resp: 25982

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 225 | 100 | | |
| 223 | 59.7 | 31.1 | 93.2 |
| 227 | 60.5 | 31.6 | 95.0 |

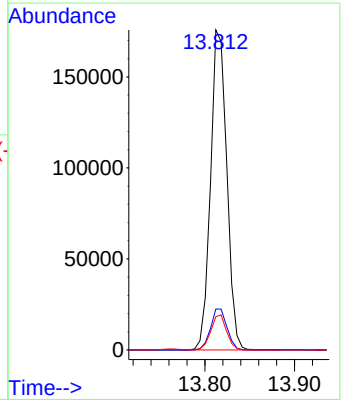



#95
Naphthalene
Concen: 54.28 ug/l
RT: 13.812 min Scan# 2163
Delta R.T. -0.006 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

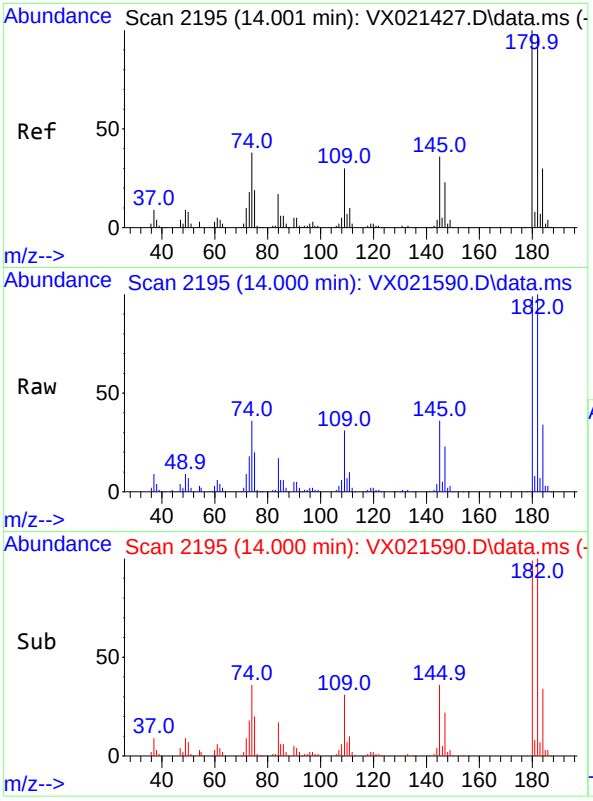
Tgt Ion:128 Resp: 221159

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 13.0 | 10.3 | 15.5 |
| 129 | 10.7 | 8.8 | 13.2 |



**Instrument :**
MSVOA_X
**ClientSampleId :**
MW-1MSD

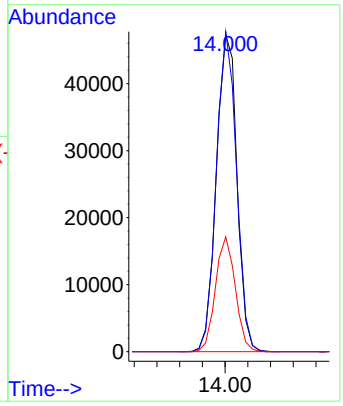
**Manual Integrations APPROVED**
MMDadoda
3/31/2021 9:58:58 AM




#96
1,2,3-Trichlorobenzene
Concen: 47.76 ug/l
RT: 14.000 min Scan# 2195
Delta R.T. -0.001 min
Lab File: VX021590.D
Acq: 29 Mar 2021 20:21

Tgt Ion:180 Resp: 59642

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 180 | 100 | | |
| 182 | 98.8 | 47.6 | 142.9 |
| 145 | 34.8 | 16.1 | 48.3 |



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# Manual Integration Report

| Sequence: | VX032421 | Instrument | MSVOA_x |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDICC001 | VX021424.D | 1,2,3-Trichloropropane | john | 3/25/2021 9:12:39 AM | MMDadoda | 3/25/2021 9:49:16 AM | Peak Integrated by Software incorrectly |
| VSTDICC001 | VX021424.D | 1,4-Dichlorobenzene | john | 3/25/2021 9:12:39 AM | MMDadoda | 3/25/2021 9:49:16 AM | Peak Integrated by Software incorrectly |
| VSTDICC005 | VX021425.D | 1,2,3-Trichloropropane | john | 3/25/2021 9:12:43 AM | MMDadoda | 3/25/2021 9:49:21 AM | Peak Integrated by Software incorrectly |
| VSTDICC020 | VX021426.D | 1,2,3-Trichloropropane | john | 3/25/2021 9:12:47 AM | MMDadoda | 3/25/2021 9:49:26 AM | Peak Integrated by Software incorrectly |
| VSTDICCC050 | VX021427.D | 1,2,3-Trichloropropane | john | 3/25/2021 9:12:51 AM | MMDadoda | 3/25/2021 9:49:31 AM | Peak Integrated by Software incorrectly |
| VSTDICC100 | VX021428.D | 1,2,3-Trichloropropane | john | 3/25/2021 9:12:55 AM | MMDadoda | 3/25/2021 9:49:35 AM | Peak Integrated by Software incorrectly |
| VSTDICC150 | VX021429.D | 1,2,3-Trichloropropane | john | 3/25/2021 9:12:59 AM | MMDadoda | 3/25/2021 9:49:41 AM | Peak Integrated by Software incorrectly |
| VSTDICV050 | VX021431.D | 1,2,3-Trichloropropane | john | 3/25/2021 9:13:03 AM | MMDadoda | 3/25/2021 9:49:46 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VX021447.D | 1,2,3-Trichloropropane | john | 3/25/2021 9:13:36 AM | MMDadoda | 3/25/2021 9:50:25 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VX021449.D | 1,2,3-Trichloropropane | john | 3/25/2021 9:13:45 AM | MMDadoda | 3/25/2021 9:50:30 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VX021472.D | 1,2,3-Trichloropropane | john | 3/25/2021 9:14:12 AM | MMDadoda | 3/25/2021 9:50:43 AM | Peak Integrated by Software incorrectly |

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# Manual Integration Report

| Sequence: | vx032921 | Instrument | MSVOA_x |
|---|---|---|---|

| Sample ID | File ID | Parameter | Review By | Review On | Supervised By | Supervised On | Reason |
|---|---|---|---|---|---|---|---|
| VSTDCCC050 | VX021564.D | 1,2,3-Trichloropropane | john | 3/30/2021 8:48:07 AM | MMDadoda | 3/31/2021 9:41:24 AM | Peak Integrated by Software incorrectly |
| VX0329WBS01 | VX021566.D | 1,2,3-Trichloropropane | john | 3/30/2021 8:48:11 AM | MMDadoda | 3/31/2021 9:41:34 AM | Peak Integrated by Software incorrectly |
| M1785-10 | VX021571.D | 1,3,5-Trimethylbenzene | john | 3/30/2021 8:48:26 AM | MMDadoda | 3/31/2021 12:06:39 PM | Peak Integrated by Software incorrectly |
| M1785-14DL | VX021573.D | p-Isopropyltoluene | SAM | 3/31/2021 6:23:45 PM | MMDadoda | 3/31/2021 6:28:25 PM | Peak Integrated by Software incorrectly |
| M1785-15 | VX021574.D | p-Isopropyltoluene | john | 3/30/2021 8:48:39 AM | MMDadoda | 3/31/2021 12:06:54 PM | Peak Integrated by Software incorrectly |
| M1785-11MS | VX021589.D | 1,2,3-Trichloropropane | john | 3/30/2021 8:49:00 AM | MMDadoda | 3/31/2021 9:58:51 AM | Peak Integrated by Software incorrectly |
| M1785-12MSD | VX021590.D | 1,2,3-Trichloropropane | john | 3/30/2021 8:49:05 AM | MMDadoda | 3/31/2021 9:58:58 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VX021591.D | 1,2,3-Trichloropropane | john | 3/30/2021 8:49:09 AM | MMDadoda | 3/31/2021 9:59:04 AM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VX021593.D | 1,2,3-Trichloropropane | john | 3/30/2021 8:49:12 AM | MMDadoda | 3/30/2021 7:33:11 PM | Peak Integrated by Software incorrectly |
| VSTDCCC050 | VX021615.D | 1,2,3-Trichloropropane | john | 3/30/2021 8:49:43 AM | MMDadoda | 3/30/2021 7:34:15 PM | Peak Integrated by Software incorrectly |

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**Instrument ID: MSVOA_X**

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032421

| | | | | | |
|---|---|---|---|---|---|
| Review By | john | Review On | 3/25/2021 9:36:30 AM | | |
| Supervise By | MMDadoda | Supervise On | 3/25/2021 9:50:53 AM | | |
| SubDirectory | VX032421 | HP Acquire Method | | HP Processing Method | |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101665,VP101707 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101666,VP101667,VP1011709,VP101710,.2PPB-VP101713,.5PPB-VP101714,.75PPB-VP101715,2.5PPB-VP101716 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VX021422.D | 24 Mar 2021 08:21 | JC/MD | Ok |
| 2 | VSTDCCC050 | VX021423.D | 24 Mar 2021 09:27 | JC/MD | Not Ok |
| 3 | VSTDICC001 | VX021424.D | 24 Mar 2021 10:04 | JC/MD | Ok,M |
| 4 | VSTDICC005 | VX021425.D | 24 Mar 2021 10:26 | JC/MD | Ok,M |
| 5 | VSTDICC020 | VX021426.D | 24 Mar 2021 10:49 | JC/MD | Ok,M |
| 6 | VSTDICCC050 | VX021427.D | 24 Mar 2021 11:13 | JC/MD | Ok,M |
| 7 | VSTDICC100 | VX021428.D | 24 Mar 2021 11:36 | JC/MD | Ok,M |
| 8 | VSTDICC150 | VX021429.D | 24 Mar 2021 11:58 | JC/MD | Ok,M |
| 9 | IBLK | VX021430.D | 24 Mar 2021 12:20 | JC/MD | Ok |
| 10 | VSTDICV050 | VX021431.D | 24 Mar 2021 12:43 | JC/MD | Ok,M |
| 11 | VX0324WBL01 | VX021432.D | 24 Mar 2021 13:51 | JC/MD | Ok |
| 12 | VX0324WBS01 | VX021433.D | 24 Mar 2021 14:21 | JC/MD | Ok,M |
| 13 | VX0324WBSD01 | VX021434.D | 24 Mar 2021 14:47 | JC/MD | Ok,M |
| 14 | M1752-13 | VX021435.D | 24 Mar 2021 15:08 | JC/MD | Ok |
| 15 | M1752-01 | VX021436.D | 24 Mar 2021 15:29 | JC/MD | Ok |
| 16 | M1752-07 | VX021437.D | 24 Mar 2021 15:50 | JC/MD | Ok |
| 17 | M1735-10 | VX021438.D | 24 Mar 2021 16:10 | JC/MD | Ok |
| 18 | M1735-17 | VX021439.D | 24 Mar 2021 16:34 | JC/MD | Ok |
| 19 | M1458-07 .2PPB | VX021440.D | 24 Mar 2021 16:55 | JC/MD | Ok,M |
| 20 | M1458-07 .5PPB | VX021441.D | 24 Mar 2021 17:15 | JC/MD | Ok,M |
| 21 | M1458-07 .75PPB | VX021442.D | 24 Mar 2021 17:36 | JC/MD | Ok,M |
| 22 | M1458-07 2.5PPB | VX021443.D | 24 Mar 2021 17:59 | JC/MD | Ok,M |
| 23 | M1774-02 | VX021444.D | 24 Mar 2021 18:23 | JC/MD | Ok |
| 24 | M1774-04 | VX021445.D | 24 Mar 2021 18:46 | JC/MD | Ok |
| 25 | M1774-03 | VX021446.D | 24 Mar 2021 19:10 | JC/MD | Ok |

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**Instrument ID: MSVOA_X**

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032421

| | | | | | |
|---|---|---|---|---|---|
| Review By | john | Review On | 3/25/2021 9:36:30 AM | | |
| Supervise By | MMDadoda | Supervise On | 3/25/2021 9:50:53 AM | | |
| SubDirectory | VX032421 | HP Acquire Method | | HP Processing Method | |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101665,VP101707 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101666,VP101667,VP1011709,VP101710,.2PPB-VP101713,.5PPB-VP101714,.75PPB-VP101715,2.5PPB-VP101716 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| | | | | | |
|---|---|---|---|---|---|
| 26 | VSTDCCC050 | VX021447.D | 24 Mar 2021 19:33 | JC/MD | Ok,M |
| 27 | BFB | VX021448.D | 24 Mar 2021 20:43 | JC/MD | Ok |
| 28 | VSTDCCC050 | VX021449.D | 24 Mar 2021 21:07 | JC/MD | Ok,M |
| 29 | VX0324WBL02 | VX021450.D | 24 Mar 2021 21:54 | JC/MD | Ok |
| 30 | VX0324WBS02 | VX021451.D | 24 Mar 2021 22:17 | JC/MD | Ok,M |
| 31 | VX0324WBSD02 | VX021452.D | 24 Mar 2021 22:40 | JC/MD | Ok,M |
| 32 | M1770-09 | VX021453.D | 24 Mar 2021 23:04 | JC/MD | Ok |
| 33 | M1787-01 | VX021454.D | 24 Mar 2021 23:27 | JC/MD | Ok |
| 34 | M1770-18 | VX021455.D | 24 Mar 2021 23:51 | JC/MD | ReRun |
| 35 | M1770-10 | VX021456.D | 25 Mar 2021 00:14 | JC/MD | Ok |
| 36 | M1770-11 | VX021457.D | 25 Mar 2021 00:38 | JC/MD | Ok |
| 37 | M1770-12 | VX021458.D | 25 Mar 2021 01:01 | JC/MD | Ok |
| 38 | M1770-13 | VX021459.D | 25 Mar 2021 01:25 | JC/MD | Ok |
| 39 | M1770-14 | VX021460.D | 25 Mar 2021 01:48 | JC/MD | Ok |
| 40 | M1770-15 | VX021461.D | 25 Mar 2021 02:12 | JC/MD | Ok |
| 41 | M1770-16 | VX021462.D | 25 Mar 2021 02:35 | JC/MD | Ok |
| 42 | M1770-17 | VX021463.D | 25 Mar 2021 02:59 | JC/MD | Ok |
| 43 | M1787-02 | VX021464.D | 25 Mar 2021 03:22 | JC/MD | Dilution |
| 44 | M1787-06 | VX021465.D | 25 Mar 2021 03:46 | JC/MD | Dilution |
| 45 | M1787-07 | VX021466.D | 25 Mar 2021 04:09 | JC/MD | Dilution |
| 46 | M1787-08 | VX021467.D | 25 Mar 2021 04:32 | JC/MD | Dilution |
| 47 | M1787-09 | VX021468.D | 25 Mar 2021 04:56 | JC/MD | Dilution |
| 48 | M1787-10 | VX021469.D | 25 Mar 2021 05:19 | JC/MD | Dilution |
| 49 | M1787-13 | VX021470.D | 25 Mar 2021 05:43 | JC/MD | ReRun |
| 50 | M1787-14 | VX021471.D | 25 Mar 2021 06:06 | JC/MD | Dilution |
| 51 | VSTDCCC050 | VX021472.D | 25 Mar 2021 06:29 | JC/MD | Ok,M |

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**Instrument ID: MSVOA_X**

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032921

| | | | | | |
|---|---|---|---|---|---|
| Review By | john | Review On | 3/30/2021 9:19:41 AM | | |
| Supervise By | MMDadoda | Supervise On | 3/31/2021 12:09:08 PM | | |
| SubDirectory | VX032921 | HP Acquire Method | MSVOA_X | HP Processing Method | 82X032421W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101846, VP101847 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101842 ,VP101843,VP101844,VP101845 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| Sr# | SampleId | Data File Name | Date-Time | Operator | Status |
|---|---|---|---|---|---|
| 1 | BFB | VX021563.D | 29 Mar 2021 09:02 | JC/MD | Ok |
| 2 | VSTDCCC050 | VX021564.D | 29 Mar 2021 09:35 | JC/MD | Ok,M |
| 3 | VX0329WBL01 | VX021565.D | 29 Mar 2021 10:36 | JC/MD | Ok |
| 4 | VX0329WBS01 | VX021566.D | 29 Mar 2021 10:59 | JC/MD | Ok,M |
| 5 | VX0329WBSD01 | VX021567.D | 29 Mar 2021 11:22 | JC/MD | Ok,M |
| 6 | M1787-11 | VX021568.D | 29 Mar 2021 11:46 | JC/MD | Dilution |
| 7 | M1787-12 | VX021569.D | 29 Mar 2021 12:09 | JC/MD | Dilution |
| 8 | M1787-17 | VX021570.D | 29 Mar 2021 12:32 | JC/MD | Dilution |
| 9 | M1785-10 | VX021571.D | 29 Mar 2021 12:55 | JC/MD | Ok,M |
| 10 | M1785-13 | VX021572.D | 29 Mar 2021 13:18 | JC/MD | Not Ok |
| 11 | M1785-14DL | VX021573.D | 29 Mar 2021 13:42 | JC/MD | Ok,M |
| 12 | M1785-15 | VX021574.D | 29 Mar 2021 14:05 | JC/MD | Ok,M |
| 13 | M1785-16 | VX021575.D | 29 Mar 2021 14:29 | JC/MD | Not Ok |
| 14 | M1785-18 | VX021576.D | 29 Mar 2021 14:52 | JC/MD | Ok |
| 15 | M1787-17DL | VX021577.D | 29 Mar 2021 15:16 | JC/MD | Ok |
| 16 | M1785-17 | VX021578.D | 29 Mar 2021 15:39 | JC/MD | Ok |
| 17 | M1785-13 | VX021579.D | 29 Mar 2021 16:02 | JC/MD | Ok |
| 18 | M1785-14 | VX021580.D | 29 Mar 2021 16:26 | JC/MD | Dilution |
| 19 | M1785-16 | VX021581.D | 29 Mar 2021 16:49 | JC/MD | Ok |
| 20 | M1860-03 | VX021582.D | 29 Mar 2021 17:13 | JC/MD | Ok |
| 21 | M1860-01 | VX021583.D | 29 Mar 2021 17:36 | JC/MD | Ok |
| 22 | M1860-02 | VX021584.D | 29 Mar 2021 18:00 | JC/MD | Ok |
| 23 | M1862-04 | VX021585.D | 29 Mar 2021 18:23 | JC/MD | Ok |
| 24 | M1862-01 | VX021586.D | 29 Mar 2021 18:47 | JC/MD | Ok |
| 25 | M1862-02 | VX021587.D | 29 Mar 2021 19:10 | JC/MD | Ok |

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**Instrument ID: MSVOA_X**

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032921

| | | | | | |
|---|---|---|---|---|---|
| Review By | john | Review On | 3/30/2021 9:19:41 AM | | |
| Supervise By | MMDadoda | Supervise On | 3/31/2021 12:09:08 PM | | |
| SubDirectory | VX032921 | HP Acquire Method | MSVOA_X | HP Processing Method | 82X032421W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101846, VP101847 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101842 ,VP101843,VP101844,VP101845 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| | | | | | |
|---|---|---|---|---|---|
| 26 | M1862-03 | VX021588.D | 29 Mar 2021 19:34 | JC/MD | Ok |
| 27 | M1785-11MS | VX021589.D | 29 Mar 2021 19:57 | JC/MD | Ok,M |
| 28 | M1785-12MSD | VX021590.D | 29 Mar 2021 20:21 | JC/MD | Ok,M |
| 29 | VSTDCCC050 | VX021591.D | 29 Mar 2021 20:44 | JC/MD | Ok,M |
| 30 | BFB | VX021592.D | 29 Mar 2021 21:08 | JC/MD | Ok |
| 31 | VSTDCCC050 | VX021593.D | 29 Mar 2021 21:56 | JC/MD | Ok,M |
| 32 | VX0329WBL02 | VX021594.D | 29 Mar 2021 22:43 | JC/MD | Ok |
| 33 | VX0329WBS02 | VX021595.D | 29 Mar 2021 23:06 | JC/MD | Ok,M |
| 34 | M1843-18 | VX021596.D | 29 Mar 2021 23:30 | JC/MD | ReRun |
| 35 | M1843-19 | VX021597.D | 29 Mar 2021 23:53 | JC/MD | ReRun |
| 36 | M1843-01 | VX021598.D | 30 Mar 2021 00:17 | JC/MD | Ok |
| 37 | M1843-02 | VX021599.D | 30 Mar 2021 00:40 | JC/MD | Dilution |
| 38 | M1843-03 | VX021600.D | 30 Mar 2021 01:03 | JC/MD | Dilution |
| 39 | M1843-04 | VX021601.D | 30 Mar 2021 01:27 | JC/MD | Ok |
| 40 | M1843-07 | VX021602.D | 30 Mar 2021 01:50 | JC/MD | Dilution |
| 41 | M1843-08 | VX021603.D | 30 Mar 2021 02:14 | JC/MD | ReRun |
| 42 | M1843-09 | VX021604.D | 30 Mar 2021 02:37 | JC/MD | Dilution |
| 43 | M1843-10 | VX021605.D | 30 Mar 2021 03:01 | JC/MD | ReRun |
| 44 | M1843-11 | VX021606.D | 30 Mar 2021 03:24 | JC/MD | Ok |
| 45 | M1843-12 | VX021607.D | 30 Mar 2021 03:47 | JC/MD | Dilution |
| 46 | M1843-13 | VX021608.D | 30 Mar 2021 04:11 | JC/MD | Dilution |
| 47 | M1843-14 | VX021609.D | 30 Mar 2021 04:34 | JC/MD | Dilution |
| 48 | M1843-15 | VX021610.D | 30 Mar 2021 04:58 | JC/MD | Ok |
| 49 | M1843-16 | VX021611.D | 30 Mar 2021 05:21 | JC/MD | Ok |
| 50 | M1843-17 | VX021612.D | 30 Mar 2021 05:45 | JC/MD | Dilution |
| 51 | M1843-05MS | VX021613.D | 30 Mar 2021 06:08 | JC/MD | Ok,M |

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**Instrument ID: MSVOA_X**

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032921

| | | | | | |
|---|---|---|---|---|---|
| Review By | john | Review On | 3/30/2021 9:19:41 AM | | |
| Supervise By | MMDadoda | Supervise On | 3/31/2021 12:09:08 PM | | |
| SubDirectory | VX032921 | HP Acquire Method | MSVOA_X | HP Processing Method | 82X032421W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101846, VP101847 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101842 ,VP101843,VP101844,VP101845 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| | | | | | |
|---|---|---|---|---|---|
| 52 | M1843-06MSD | VX021614.D | 30 Mar 2021 06:31 | JC/MD | Ok,M |
| 53 | VSTDCCC050 | VX021615.D | 30 Mar 2021 06:54 | JC/MD | Ok,M |

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**Instrument ID:** MSVOA_X

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032421

| | | | |
|---|---|---|---|
| Review By | john | Review On | 3/25/2021 9:36:30 AM |
| Supervise By | MMDadoda | Supervise On | 3/25/2021 9:50:53 AM |
| SubDirectory | VX032421 | HP Acquire Method | HP Processing Method |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101665,VP101707 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101666,VP101667,VP1011709,VP101710,.2PPB-VP101713,.5PPB-VP101714,.75PPB-VP101715,2.5PPB-VP101716 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VX021422.D | 24 Mar 2021 08:21 | | JC/MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VX021423.D | 24 Mar 2021 09:27 | need ical | JC/MD | Not Ok |
| 3 | VSTDICC001 | VSTDICC001 | VX021424.D | 24 Mar 2021 10:04 | good for DOD | JC/MD | Ok,M |
| 4 | VSTDICC005 | VSTDICC005 | VX021425.D | 24 Mar 2021 10:26 | | JC/MD | Ok,M |
| 5 | VSTDICC020 | VSTDICC020 | VX021426.D | 24 Mar 2021 10:49 | | JC/MD | Ok,M |
| 6 | VSTDICCC050 | VSTDICCC050 | VX021427.D | 24 Mar 2021 11:13 | | JC/MD | Ok,M |
| 7 | VSTDICC100 | VSTDICC100 | VX021428.D | 24 Mar 2021 11:36 | | JC/MD | Ok,M |
| 8 | VSTDICC150 | VSTDICC150 | VX021429.D | 24 Mar 2021 11:58 | | JC/MD | Ok,M |
| 9 | IBLK | IBLK | VX021430.D | 24 Mar 2021 12:20 | | JC/MD | Ok |
| 10 | VSTDICV050 | ICVVX032421 | VX021431.D | 24 Mar 2021 12:43 | pH#Lot#V11255 | JC/MD | Ok,M |
| 11 | VX0324WBL01 | VX0324WBL01 | VX021432.D | 24 Mar 2021 13:51 | | JC/MD | Ok |
| 12 | VX0324WBS01 | VX0324WBS01 | VX021433.D | 24 Mar 2021 14:21 | | JC/MD | Ok,M |
| 13 | VX0324WBSD01 | VX0324WBSD01 | VX021434.D | 24 Mar 2021 14:47 | | JC/MD | Ok,M |
| 14 | M1752-13 | 30816 | VX021435.D | 24 Mar 2021 15:08 | vial A pH<2 | JC/MD | Ok |
| 15 | M1752-01 | COMP1-41711-41714:1 | VX021436.D | 24 Mar 2021 15:29 | vial A pH<2 | JC/MD | Ok |
| 16 | M1752-07 | COMP2-41720:23-4171 | VX021437.D | 24 Mar 2021 15:50 | vial A pH<2 | JC/MD | Ok |
| 17 | M1735-10 | RE132D6-20210315 | VX021438.D | 24 Mar 2021 16:10 | vial B pH<2 | JC/MD | Ok |
| 18 | M1735-17 | DUP01-20210316 | VX021439.D | 24 Mar 2021 16:34 | vial A pH<2 | JC/MD | Ok |
| 19 | M1458-07 .2PPB | LOD-MDL-WATER-01-( | VX021440.D | 24 Mar 2021 16:55 | | JC/MD | Ok,M |
| 20 | M1458-07 .5PPB | LOD-MDL-WATER-01-( | VX021441.D | 24 Mar 2021 17:15 | | JC/MD | Ok,M |

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**Instrument ID:** MSVOA_X

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032421

| | | | |
|---|---|---|---|
| Review By | john | Review On | 3/25/2021 9:36:30 AM |
| Supervise By | MMDadoda | Supervise On | 3/25/2021 9:50:53 AM |
| SubDirectory | VX032421 | HP Acquire Method | HP Processing Method |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101665,VP101707 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101666,VP101667,VP1011709,VP101710,.2PPB-VP101713,.5PPB-VP101714,.75PPB-VP101715,2.5PPB-VP101716 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 21 | M1458-07 .75PPB | LOD-MDL-WATER-01-( | VX021442.D | 24 Mar 2021 17:36 | | JC/MD | Ok,M |
| 22 | M1458-07 2.5PPB | LOD-MDL-WATER-01-( | VX021443.D | 24 Mar 2021 17:59 | | JC/MD | Ok,M |
| 23 | M1774-02 | 30806 | VX021444.D | 24 Mar 2021 18:23 | vial A pH<2 | JC/MD | Ok |
| 24 | M1774-04 | 30808 | VX021445.D | 24 Mar 2021 18:46 | vial A pH<2 | JC/MD | Ok |
| 25 | M1774-03 | 30807 | VX021446.D | 24 Mar 2021 19:10 | vial A pH<2 | JC/MD | Ok |
| 26 | VSTDCCC050 | VSTDCCC050EC | VX021447.D | 24 Mar 2021 19:33 | | JC/MD | Ok,M |
| 27 | BFB | BFB | VX021448.D | 24 Mar 2021 20:43 | | JC/MD | Ok |
| 28 | VSTDCCC050 | VSTDCCC050 | VX021449.D | 24 Mar 2021 21:07 | | JC/MD | Ok,M |
| 29 | VX0324WBL02 | VX0324WBL02 | VX021450.D | 24 Mar 2021 21:54 | | JC/MD | Ok |
| 30 | VX0324WBS02 | VX0324WBS02 | VX021451.D | 24 Mar 2021 22:17 | | JC/MD | Ok,M |
| 31 | VX0324WBSD02 | VX0324WBSD02 | VX021452.D | 24 Mar 2021 22:40 | | JC/MD | Ok,M |
| 32 | M1770-09 | TB-03232021 | VX021453.D | 24 Mar 2021 23:04 | vial A pH<2 TB | JC/MD | Ok |
| 33 | M1787-01 | TB-02-20210318 | VX021454.D | 24 Mar 2021 23:27 | vial A pH<2 TB | JC/MD | Ok |
| 34 | M1770-18 | FB-03232021 | VX021455.D | 24 Mar 2021 23:51 | vial A pH<2 FB, Hit of Comp. #16 | JC/MD | ReRun |
| 35 | M1770-10 | MW-106D | VX021456.D | 25 Mar 2021 00:14 | vial A pH<2 | JC/MD | Ok |
| 36 | M1770-11 | MW-104D | VX021457.D | 25 Mar 2021 00:38 | vial A pH<2 | JC/MD | Ok |
| 37 | M1770-12 | MW-104I | VX021458.D | 25 Mar 2021 01:01 | vial A pH<2 | JC/MD | Ok |
| 38 | M1770-13 | MW-103D | VX021459.D | 25 Mar 2021 01:25 | vial A pH<2 | JC/MD | Ok |
| 39 | M1770-14 | MW-103I | VX021460.D | 25 Mar 2021 01:48 | vial A pH<2 | JC/MD | Ok |
| 40 | M1770-15 | MW-101S | VX021461.D | 25 Mar 2021 02:12 | vial A pH<2 | JC/MD | Ok |
| 41 | M1770-16 | MW-101I | VX021462.D | 25 Mar 2021 02:35 | vial A pH<2 | JC/MD | Ok |

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**Instrument ID:** MSVOA_X

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032421

| | | | |
|---|---|---|---|
| Review By | john | Review On | 3/25/2021 9:36:30 AM |
| Supervise By | MMDadoda | Supervise On | 3/25/2021 9:50:53 AM |
| SubDirectory | VX032421 | HP Acquire Method | HP Processing Method |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101665,VP101707 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101666,VP101667,VP1011709,VP101710,.2PPB-VP101713,.5PPB-VP101714,.75PPB-VP101715,2.5PPB-VP101716 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 42 | M1770-17 | MW-101D | VX021463.D | 25 Mar 2021 02:59 | vial A pH<2 | JC/MD | Ok |
| 43 | M1787-02 | TT180D2-20210318 | VX021464.D | 25 Mar 2021 03:22 | vial A pH<2 Need 5X | JC/MD | Dilution |
| 44 | M1787-06 | RE-103D2-20210318 | VX021465.D | 25 Mar 2021 03:46 | vial A pH<2 Need 20X | JC/MD | Dilution |
| 45 | M1787-07 | RE-103D1-20210318 | VX021466.D | 25 Mar 2021 04:09 | vial A pH<2 Need 10X | JC/MD | Dilution |
| 46 | M1787-08 | RE-125D1-20210319 | VX021467.D | 25 Mar 2021 04:32 | vial A pH<2 Need 4X | JC/MD | Dilution |
| 47 | M1787-09 | RE-125D2-20210319 | VX021468.D | 25 Mar 2021 04:56 | vial A pH<2 Need 5X | JC/MD | Dilution |
| 48 | M1787-10 | RE-125D3-20210319 | VX021469.D | 25 Mar 2021 05:19 | vial A pH<2 Need 4X | JC/MD | Dilution |
| 49 | M1787-13 | RE-122D3-20210319 | VX021470.D | 25 Mar 2021 05:43 | vial A pH<2 E Flag of Previous sample | JC/MD | ReRun |
| 50 | M1787-14 | RE-126D2-20210319 | VX021471.D | 25 Mar 2021 06:06 | vial A pH<2 Need 10X | JC/MD | Dilution |
| 51 | VSTDCCC050 | VSTDCCC050EC | VX021472.D | 25 Mar 2021 06:29 | | JC/MD | Ok,M |

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**Instrument ID:** MSVOA_X

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032921

| | | | | | |
|---|---|---|---|---|---|
| Review By | john | Review On | 3/30/2021 9:19:41 AM | | |
| Supervise By | MMDadoda | Supervise On | 3/31/2021 12:09:08 PM | | |
| SubDirectory | VX032921 | HP Acquire Method | MSVOA_X | HP Processing Method | 82X032421W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101846, VP101847 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101842 ,VP101843,VP101844,VP101845 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| Sr# | SampleId | ClientID | Data File Name | Date-Time | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | BFB | BFB | VX021563.D | 29 Mar 2021 09:02 | | JC/MD | Ok |
| 2 | VSTDCCC050 | VSTDCCC050 | VX021564.D | 29 Mar 2021 09:35 | pH#Lot#V11255 | JC/MD | Ok,M |
| 3 | VX0329WBL01 | VX0329WBL01 | VX021565.D | 29 Mar 2021 10:36 | | JC/MD | Ok |
| 4 | VX0329WBS01 | VX0329WBS01 | VX021566.D | 29 Mar 2021 10:59 | | JC/MD | Ok,M |
| 5 | VX0329WBSD01 | VX0329WBSD01 | VX021567.D | 29 Mar 2021 11:22 | | JC/MD | Ok,M |
| 6 | M1787-11 | RE-122D2-20210319 | VX021568.D | 29 Mar 2021 11:46 | vial B pH<2 need 100X | JC/MD | Dilution |
| 7 | M1787-12 | RE-122D1-20210319 | VX021569.D | 29 Mar 2021 12:09 | vial B pH<2 Need 10X | JC/MD | Dilution |
| 8 | M1787-17 | DUP03-20210319 | VX021570.D | 29 Mar 2021 12:32 | vial A pH<2 Need 4X | JC/MD | Dilution |
| 9 | M1785-10 | MW-1 | VX021571.D | 29 Mar 2021 12:55 | vial A pH<2 | JC/MD | Ok,M |
| 10 | M1785-13 | MW-2 | VX021572.D | 29 Mar 2021 13:18 | Run @ 10X | JC/MD | Not Ok |
| 11 | M1785-14DL | MW-3RDL | VX021573.D | 29 Mar 2021 13:42 | | JC/MD | Ok,M |
| 12 | M1785-15 | MW-4 | VX021574.D | 29 Mar 2021 14:05 | vial A pH<2 | JC/MD | Ok,M |
| 13 | M1785-16 | MW-5R | VX021575.D | 29 Mar 2021 14:29 | Run @ 10X | JC/MD | Not Ok |
| 14 | M1785-18 | TRIP-BLANK | VX021576.D | 29 Mar 2021 14:52 | vial A pH<2 TB | JC/MD | Ok |
| 15 | M1787-17DL | DUP03-20210319DL | VX021577.D | 29 Mar 2021 15:16 | vial B pH<2 | JC/MD | Ok |
| 16 | M1785-17 | FD-032321 | VX021578.D | 29 Mar 2021 15:39 | vial A pH<2 | JC/MD | Ok |
| 17 | M1785-13 | MW-2 | VX021579.D | 29 Mar 2021 16:02 | vial A pH<2 | JC/MD | Ok |
| 18 | M1785-14 | MW-3R | VX021580.D | 29 Mar 2021 16:26 | Need Further 4X | JC/MD | Dilution |
| 19 | M1785-16 | MW-5R | VX021581.D | 29 Mar 2021 16:49 | vial A pH<2 | JC/MD | Ok |
| 20 | M1860-03 | EB-01-032621 | VX021582.D | 29 Mar 2021 17:13 | vial A pH<2 EB | JC/MD | Ok |

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**Instrument ID:** MSVOA_X

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032921

| | | | | | |
|---|---|---|---|---|---|
| Review By | john | Review On | 3/30/2021 9:19:41 AM | | |
| Supervise By | MMDadoda | Supervise On | 3/31/2021 12:09:08 PM | | |
| SubDirectory | VX032921 | HP Acquire Method | MSVOA_X | HP Processing Method | 82X032421W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101846, VP101847 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101842 ,VP101843,VP101844,VP101845 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 21 | M1860-01 | GWBR3-115-137-03262 | VX021583.D | 29 Mar 2021 17:36 | vial A pH<2 | JC/MD | Ok |
| 22 | M1860-02 | TB-01-032621 | VX021584.D | 29 Mar 2021 18:00 | vial A pH<2 TB | JC/MD | Ok |
| 23 | M1862-04 | MW-2 | VX021585.D | 29 Mar 2021 18:23 | vial A pH<2 | JC/MD | Ok |
| 24 | M1862-01 | MW-1 | VX021586.D | 29 Mar 2021 18:47 | vial A pH<2 | JC/MD | Ok |
| 25 | M1862-02 | MW-3 | VX021587.D | 29 Mar 2021 19:10 | vial A pH<2 | JC/MD | Ok |
| 26 | M1862-03 | MW-4 | VX021588.D | 29 Mar 2021 19:34 | vial A pH<2 | JC/MD | Ok |
| 27 | M1785-11MS | MW-1MS | VX021589.D | 29 Mar 2021 19:57 | vial A pH<2 | JC/MD | Ok,M |
| 28 | M1785-12MSD | MW-1MSD | VX021590.D | 29 Mar 2021 20:21 | vial A pH<2 | JC/MD | Ok,M |
| 29 | VSTDCCC050 | VSTDCCC050EC | VX021591.D | 29 Mar 2021 20:44 | | JC/MD | Ok,M |
| 30 | BFB | BFB | VX021592.D | 29 Mar 2021 21:08 | | JC/MD | Ok |
| 31 | VSTDCCC050 | VSTDCCC050 | VX021593.D | 29 Mar 2021 21:56 | | JC/MD | Ok,M |
| 32 | VX0329WBL02 | VX0329WBL02 | VX021594.D | 29 Mar 2021 22:43 | | JC/MD | Ok |
| 33 | VX0329WBS02 | VX0329WBS02 | VX021595.D | 29 Mar 2021 23:06 | | JC/MD | Ok,M |
| 34 | M1843-18 | EB02-20210325 | VX021596.D | 29 Mar 2021 23:30 | vial A pH<2 EB, confirm hit | JC/MD | ReRun |
| 35 | M1843-19 | FB01-20210325 | VX021597.D | 29 Mar 2021 23:53 | vial A pH<2 FB, confirm hit | JC/MD | ReRun |
| 36 | M1843-01 | MW178I-20210324 | VX021598.D | 30 Mar 2021 00:17 | vial A pH<2 | JC/MD | Ok |
| 37 | M1843-02 | MW179D1-20210324 | VX021599.D | 30 Mar 2021 00:40 | vial A pH<2 Need 4X | JC/MD | Dilution |
| 38 | M1843-03 | MW179D2-20210324 | VX021600.D | 30 Mar 2021 01:03 | vial A pH<2 Need 5X | JC/MD | Dilution |
| 39 | M1843-04 | MW179D-20210324 | VX021601.D | 30 Mar 2021 01:27 | vial A pH<2 | JC/MD | Ok |
| 40 | M1843-07 | RE137-20210324 | VX021602.D | 30 Mar 2021 01:50 | vial A pH<2 Need 20X | JC/MD | Dilution |
| 41 | M1843-08 | DUP06-20210324 | VX021603.D | 30 Mar 2021 02:14 | vial A pH<2 E Flag of Previous sample | JC/MD | ReRun |

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**Instrument ID:** MSVOA_X

## Daily Analysis Runlog For Sequence/QCBatch ID # VX032921

| | | | | | |
|---|---|---|---|---|---|
| Review By | john | Review On | 3/30/2021 9:19:41 AM | | |
| Supervise By | MMDadoda | Supervise On | 3/31/2021 12:09:08 PM | | |
| SubDirectory | VX032921 | HP Acquire Method | MSVOA_X | HP Processing Method | 82X032421W.M |

| STD. NAME | STD REF.# |
|---|---|
| Tune/Reschk | VP101846, VP101847 |
| Initial Calibration Stds | VP101685,VP101686,VP101687,VP101688,VP101689,VP101690 |
| CCC | VP101842 ,VP101843,VP101844,VP101845 |
| Internal Standard/PEM | VP100049 |
| ICV/I.BLK | VP101691 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 42 | M1843-09 | DUP07-20210324 | VX021604.D | 30 Mar 2021 02:37 | vial A pH<2 Need 4X | JC/MD | Dilution |
| 43 | M1843-10 | RE117D2-20210325 | VX021605.D | 30 Mar 2021 03:01 | vial A pH<2 E Flag of Previous sample | JC/MD | ReRun |
| 44 | M1843-11 | RE117D1-20210325 | VX021606.D | 30 Mar 2021 03:24 | vial A pH<2 | JC/MD | Ok |
| 45 | M1843-12 | RE115D1-20210325 | VX021607.D | 30 Mar 2021 03:47 | vial A pH<2 Need 5X | JC/MD | Dilution |
| 46 | M1843-13 | RE115D2-20210325 | VX021608.D | 30 Mar 2021 04:11 | vial A pH<2 Need 10X | JC/MD | Dilution |
| 47 | M1843-14 | RE114D1-20210325 | VX021609.D | 30 Mar 2021 04:34 | vial A pH<2 Need 5X | JC/MD | Dilution |
| 48 | M1843-15 | RE114D2-20210325 | VX021610.D | 30 Mar 2021 04:58 | vial A pH<2 | JC/MD | Ok |
| 49 | M1843-16 | GM38-RW3-MW01-202 | VX021611.D | 30 Mar 2021 05:21 | vial A pH<2 | JC/MD | Ok |
| 50 | M1843-17 | DUP08-20210325 | VX021612.D | 30 Mar 2021 05:45 | vial A pH<2 Need 5X | JC/MD | Dilution |
| 51 | M1843-05MS | MW179D-20210324MS | VX021613.D | 30 Mar 2021 06:08 | vial A pH<2 | JC/MD | Ok,M |
| 52 | M1843-06MSD | MW179D-20210324MS | VX021614.D | 30 Mar 2021 06:31 | vial A pH<2 | JC/MD | Ok,M |
| 53 | VSTDCCC050 | VSTDCCC050EC | VX021615.D | 30 Mar 2021 06:54 | | JC/MD | Ok,M |

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# Prep Standard - Chemical Standard Summary

**Order ID :** M1785

**Test :** VOCMS Group2

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** vx032921,

**Standard ID :**

VP100006,VP100007,VP100049,VP100098,VP100438,VP100440,VP100582,VP100584,VP100695,VP101192,VP101195,VP101197,VP101685,VP101686,VP101687,VP101688,VP101689,VP101690,VP101691,VP101724,VP101842,VP101843,VP101844,VP101845,VP101846,VP99051,VP99335,VP99969,VP99970,

**Chemical ID :**

V10264,V10592,V10597,V10685,V10700,V10703,V10707,V10710,V10779,V10780,V10781,V10782,V10933,V10963,V11039,V11167,V11168,V11169,V11170,V11172,V11173,V11178,V11192,V11193,V11194,V11195,V11196,V11197,V11198,V11199,V11207,V11214,V11242,V11243,V11248,V11256,V11257,V11258,V11259,V11321,V11322,V11333,V11334,V11463,V11464,V11467,V11540,V11541,V11542,V11546,V11592,V11593,V11604,V11607,V11610,V11612,V11636,V11637,V11740,V11761,V11762,V11763,V11764,V11765,V11766,V8726,V9527,V9528,VP101847,W2606,

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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 | VP100006 | 01/22/2021 | 07/21/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 01/25/2021 |

**FROM** 0.25000ml of V10710 + 24.75000ml of V11593 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 719 | 8260 Working STD (BCM)-First source, 400PPM | VP100007 | 01/22/2021 | 07/21/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 01/25/2021 |

**FROM** 1.20000ml of V10700 + 1.20000ml of V10707 + 1.20000ml of V10710 + 1.40000ml of V10703 + 20.00000ml of V11593 = 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 | VP100049 | 01/25/2021 | 07/25/2021 | Semsettin Yesilyurt | None | None | Amit Patel 01/28/2021 |

**FROM** 0.25000ml of V10264 + 24.75000ml of V11592 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1817 | 8260 Working Std(2-CVE)-SS, 800ppm | VP100098 | 01/25/2021 | 07/25/2021 | Semsettin Yesilyurt | None | None | Amit Patel 01/28/2021 |

**FROM** 0.80000ml of V9528 + 1.20000ml of V9527 + 23.00000ml of V11592 = 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 |
|---|---|---|---|---|---|---|---|---|
| 1810 | 8260 Working Std(2-CVE)-800ppm | VP100438 | 02/09/2021 | 08/09/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 02/09/2021 |

**FROM** 1.00000ml of V11256 + 1.00000ml of V11257 + 1.00000ml of V11258 + 1.00000ml of V11259 + 46.00000ml of V11607 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1812 | 8260 Working Std(2-CVE)-100ppm | VP100440 | 02/09/2021 | 08/09/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 02/09/2021 |

**FROM** 0.25000ml of V11259 + 24.75000ml of V11607 = 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 |
|---|---|---|---|---|---|---|---|---|
| 257 | 8260 Calibration Working STD Mix-First source, 160PPM | VP100582 | 02/15/2021 | 03/25/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 02/18/2021 |

**FROM** 0.40000ml of V11173 + 1.00000ml of V10779 + 1.00000ml of V10780 + 1.00000ml of V11167 + 1.00000ml of V11168 + 1.00000ml of V11192 + 1.00000ml of V11193 + 1.00000ml of V11194 + 1.00000ml of V11198 + 1.00000ml of V11242 + 1.00000ml of V11243 + 1.00000ml of V11321 + 1.00000ml of V11322 + 1.00000ml of V11541 + 1.00000ml of V11542 + 10.60000ml of V11463 = 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 | VP100584 | 02/15/2021 | 03/25/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 02/18/2021 |

**FROM** 17.50000ml of V11463 + 2.50000ml of VP100582 = 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 |
|---|---|---|---|---|---|---|---|---|
| 259 | 8260 Calibration Working STD Mix-Second source, 160PPM | VP100695 | 02/19/2021 | 04/06/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 02/22/2021 |

**FROM** 0.16000ml of V11178 + 0.40000ml of V11214 + 0.80000ml of V10592 + 0.80000ml of V10933 + 0.80000ml of V10963 + 0.80000ml of V11039 + 0.80000ml of V11248 + 1.20000ml of V11207 + 4.24000ml of V11610 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 263 | 8260 Working STD (Acrolein)-Second source, 800PPM | VP101192 | 03/09/2021 | 04/06/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 03/11/2021 |

**FROM** 0.60000ml of V11766 + 1.00000ml of V11765 + 8.40000ml of V11604 = 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 |
|---|---|---|---|---|---|---|---|---|
| 51 | 8260 Working STD (Acrolein) -first source, 800PPM | VP101195 | 03/09/2021 | 04/08/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 03/11/2021 |

**FROM** 0.40000ml of V11764 + 1.20000ml of V11761 + 1.20000ml of V11762 + 1.20000ml of V11763 + 21.00000ml of V11604 = Final Quantity: 25.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 180 | 8260 Working STD (Acrolein)-First source, 100PPM | VP101197 | 03/09/2021 | 04/08/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 03/11/2021 |

**FROM** 17.50000ml of V11604 + 2.50000ml of VP101195 = Final Quantity: 20.000 ml

# CHEMTECH

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## VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 334 | 1 PPB ICC, 8260-Water | VP101685 | 03/24/2021 | 03/25/2021 | John Carlone | None | None | Mahesh Dadoda 03/25/2021 |

**FROM** 39.98200ml of W2606 + 0.00200ml of VP100006 + 0.00200ml of VP100440 + 0.00200ml of VP100584 + 0.00200ml of VP101197 + 0.00200ml of VP99970 + 0.00800ml of VP100049 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 335 | 5 PPB ICC, 8260-Water | VP101686 | 03/24/2021 | 03/25/2021 | John Carlone | None | None | Mahesh Dadoda 03/25/2021 |

**FROM** 39.94200ml of W2606 + 0.00800ml of VP100049 + 0.01000ml of VP100006 + 0.01000ml of VP100440 + 0.01000ml of VP100584 + 0.01000ml of VP101197 + 0.01000ml of VP99970 = 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 |
|---|---|---|---|---|---|---|---|---|
| 337 | 20 PPB ICC, 8260-Water | VP101687 | 03/24/2021 | 03/25/2021 | John Carlone | None | None | Mahesh Dadoda 03/25/2021 |

**FROM** 39.97000ml of W2606 + 0.00200ml of VP100007 + 0.00200ml of VP99969 + 0.00500ml of VP100438 + 0.00500ml of VP100582 + 0.00500ml of VP101195 + 0.00800ml of VP100049 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 380 | 50 PPB ICC, 8260-Water | VP101688 | 03/24/2021 | 03/25/2021 | John Carlone | None | None | Mahesh Dadoda 03/25/2021 |

**FROM** 39.94450ml of W2606 + 0.00500ml of VP100007 + 0.00500ml of VP99969 + 0.00800ml of VP100049 + 0.01250ml of VP100438 + 0.01250ml of VP100582 + 0.01250ml of VP101195 = 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 |
|---|---|---|---|---|---|---|---|---|
| 381 | 100 PPB ICC, 8260-Water | VP101689 | 03/24/2021 | 03/25/2021 | John Carlone | None | None | Mahesh Dadoda 03/25/2021 |

**FROM** 39.89700ml of W2606 + 0.00800ml of VP100049 + 0.01000ml of VP100007 + 0.01000ml of VP99969 + 0.02500ml of VP100438 + 0.02500ml of VP100582 + 0.02500ml of VP101195 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 382 | 150 PPB ICC, 8260-Water | VP101690 | 03/24/2021 | 03/25/2021 | John Carlone | None | None | Mahesh Dadoda 03/25/2021 |

**FROM** 39.84950ml of W2606 + 0.00800ml of VP100049 + 0.01500ml of VP100007 + 0.01500ml of VP99969 + 0.03750ml of VP100438 + 0.03750ml of VP100582 + 0.03750ml of VP101195 = 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 |
|---|---|---|---|---|---|---|---|---|
| 385 | 50 PPB ICV, 8260-Water | VP101691 | 03/24/2021 | 03/25/2021 | John Carlone | None | None | Mahesh Dadoda 03/25/2021 |

**FROM** 39.92950ml of W2606 + 0.00500ml of VP99969 + 0.00800ml of VP100049 + 0.01250ml of VP100098 + 0.01250ml of VP100695 + 0.01250ml of VP101192 + 0.02000ml of VP99335 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 257 | 8260 Calibration Working STD Mix-First source, 160PPM | VP101724 | 03/25/2021 | 05/04/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 03/29/2021 |

**FROM** 0.40000ml of V11172 + 0.40000ml of V11199 + 0.80000ml of V10782 + 0.80000ml of V11334 + 0.80000ml of V11546 + 0.80000ml of V11637 + 1.00000ml of V11170 + 1.20000ml of V10781 + 1.20000ml of V11169 + 1.20000ml of V11195 + 1.20000ml of V11196 + 1.20000ml of V11197 + 1.20000ml of V11333 + 1.20000ml of V11540 + 1.20000ml of V11636 + 10.60000ml of V11740 = 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 |
|---|---|---|---|---|---|---|---|---|
| 620 | 50 PPB CCC, 8260-Water | VP101842 | 03/29/2021 | 03/30/2021 | Mahesh Dadoda | None | None | John Carlone 03/31/2021 |

**FROM** 39.94450ml of W2606 + 0.00500ml of VP100007 + 0.00500ml of VP99969 + 0.00800ml of VP100049 + 0.01250ml of VP100438 + 0.01250ml of VP101195 + 0.01250ml of VP101724 = 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 | VP101843 | 03/29/2021 | 03/30/2021 | Mahesh Dadoda | None | None | John Carlone 03/31/2021 |

**FROM** 39.94450ml of W2606 + 0.00500ml of VP100007 + 0.00500ml of VP99969 + 0.00800ml of VP100049 + 0.01250ml of VP100438 + 0.01250ml of VP101195 + 0.01250ml of VP101724 = 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 | VP101844 | 03/29/2021 | 03/30/2021 | Mahesh Dadoda | None | None | John Carlone 03/31/2021 |

**FROM** 39.94450ml of W2606 + 0.00500ml of VP100007 + 0.00500ml of VP99969 + 0.00800ml of VP100049 + 0.01250ml of VP100438 + 0.01250ml of VP101195 + 0.01250ml of VP101724 = 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 | VP101845 | 03/29/2021 | 03/30/2021 | Mahesh Dadoda | None | None | John Carlone 03/31/2021 |

**FROM** 39.94450ml of W2606 + 0.00500ml of VP100007 + 0.00500ml of VP99969 + 0.00800ml of VP100049 + 0.01250ml of VP100438 + 0.01250ml of VP101195 + 0.01250ml of VP101724 = 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 | VP101846 | 03/29/2021 | 03/30/2021 | Mahesh Dadoda | None | None | John Carlone 03/31/2021 |

**FROM** 39.98400ml of W2606 + 0.01600ml of VP99051 = Final Quantity: 40.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 218 | BFB, 25PPM | VP99051 | 12/15/2020 | 06/15/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 12/18/2020 |

**FROM** 0.25000ml of V10597 + 24.75000ml of V11467 = Final Quantity: 25.000 ml

# CHEMTECH

**284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900**

## VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 262 | 8260 Working STD (BCM)-Second source, 100PPM | VP99335 | 12/28/2020 | 06/28/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 12/29/2020 |

**FROM** 1.00000ml of V8726 + 9.00000ml of V11464 = Final Quantity: 10.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 617 | 8260 Surrogate, 400PPM | VP99969 | 01/20/2021 | 07/20/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 01/22/2021 |

**FROM** 0.80000ml of V10685 + 49.20000ml of V11612 = Final Quantity: 50.000 ml

# CHEMTECH

**284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900**

## VOC STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1738 | 8260 surrogate 20 ppm | VP99970 | 01/20/2021 | 07/20/2021 | Semsettin Yesilyurt | None | None | Mahesh Dadoda 01/22/2021 |

**FROM** 0.02000ml of V10685 + 24.99000ml of V11612 = Final Quantity: 25.000 ml

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# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 555581 / Custom Standard, 8260 Internal Std [CS 5179-1] | A0153385 | 07/25/2021 | 01/25/2021 / SAM | 10/01/2019 / sam | V10264 |

| 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 | A0155430 | 06/30/2021 | 02/08/2021 / SAM | 01/09/2020 / sam | V10592 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Restek | 30067 / BFB tuneing solution | A0147670 | 06/15/2021 | 12/15/2020 / SAM | 01/09/2020 / sam | V10597 |

| 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] | A0158153 | 07/20/2021 | 01/20/2021 / SAM | 02/28/2020 / sam | V10685 |

| 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 | A0155519 | 07/21/2021 | 01/21/2021 / SAM | 03/05/2020 / sam | V10700 |

| 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 | A0155519 | 07/21/2021 | 01/21/2021 / SAM | 03/05/2020 / sam | V10703 |

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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 | A0155519 | 07/21/2021 | 01/21/2021 / SAM | 03/05/2020 / sam | V10707 |

| 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 | A0155519 | 07/21/2021 | 01/21/2021 / SAM | 03/05/2020 / sam | V10710 |

| 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) | 050219 | 08/08/2021 | 02/08/2021 / SAM | 03/18/2020 / sam | V10779 |

| 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) | 050219 | 08/08/2021 | 02/08/2021 / SAM | 03/18/2020 / sam | V10780 |

| 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) | 050219 | 09/18/2021 | 03/18/2021 / SAM | 03/18/2020 / sam | V10781 |

| 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) | 050219 | 09/18/2021 | 03/18/2021 / SAM | 03/18/2020 / sam | V10782 |

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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 | A0158115 | 10/31/2026 | 12/06/2020 / SAM | 04/22/2020 / sam | V10933 |

| 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) | 050119 | 07/08/2021 | 01/08/2021 / SAM | 06/05/2020 / sam | V10963 |

| 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) | 010419 | 08/08/2021 | 02/08/2021 / SAM | 07/16/2020 / sam | V11039 |

| 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) | 010719 | 08/08/2021 | 02/08/2021 / SAM | 08/01/2020 / sam | V11167 |

| 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) | 010719 | 08/08/2021 | 02/08/2021 / SAM | 08/01/2020 / sam | V11168 |

| 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) | 010719 | 09/18/2021 | 03/18/2021 / SAM | 08/01/2020 / sam | V11169 |

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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) | 010719 | 09/18/2021 | 03/18/2021 / SAM | 08/01/2020 / sam | V11170 |

| 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 | A0160703 | 09/18/2021 | 03/18/2021 / SAM | 08/21/2020 / sam | V11172 |

| 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 | A0160703 | 07/08/2021 | 01/08/2021 / SAM | 08/21/2020 / sam | V11173 |

| 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 | A0158421 | 08/19/2021 | 02/19/2021 / SAM | 08/21/2020 / sam | V11178 |

| 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 | A0154174 | 08/08/2021 | 02/08/2021 / SAM | 08/21/2020 / sam | V11192 |

| 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 | A0154174 | 08/08/2021 | 02/08/2021 / SAM | 08/21/2020 / sam | V11193 |

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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 | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A0154174 | 08/08/2021 | 02/08/2021 / SAM | 08/21/2020 / sam | V11194 |

| 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 | A0154174 | 09/18/2021 | 03/18/2021 / SAM | 08/21/2020 / sam | V11195 |

| 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 | A0154174 | 09/18/2021 | 03/18/2021 / SAM | 08/21/2020 / sam | V11196 |

| 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 | A0154174 | 09/18/2021 | 03/18/2021 / SAM | 08/21/2020 / sam | V11197 |

| 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 | A0154174 | 08/08/2021 | 02/08/2021 / SAM | 08/21/2020 / sam | V11198 |

| 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 | A0154174 | 09/18/2021 | 03/18/2021 / SAM | 08/21/2020 / sam | V11199 |

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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 | 30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml | A0159420 | 07/08/2021 | 01/08/2021 / SAM | 08/21/2020 / sam | V11207 |

| 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 | A0159420 | 07/08/2021 | 01/08/2021 / SAM | 08/21/2020 / sam | V11214 |

| 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 | A0164211 | 08/08/2021 | 02/08/2021 / SAM | 09/14/2020 / sam | V11242 |

| 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 | A0164211 | 08/08/2021 | 02/08/2021 / SAM | 09/14/2020 / sam | V11243 |

| 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 | A0164091 | 08/08/2021 | 02/08/2021 / SAM | 09/14/2020 / sam | V11248 |

| 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) | 082620 | 08/09/2021 | 02/09/2021 / SAM | 09/18/2020 / sam | V11256 |

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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. | 95318 / 2-Chloroethyl Vinyl Ether (Min = 5) | 082620 | 08/09/2021 | 02/09/2021 / SAM | 09/18/2020 / sam | V11257 |

| 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) | 082620 | 08/09/2021 | 02/09/2021 / SAM | 09/18/2020 / sam | V11258 |

| 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) | 082620 | 08/09/2021 | 02/09/2021 / SAM | 09/18/2020 / sam | V11259 |

| 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 | A0160196 | 08/08/2021 | 02/08/2021 / SAM | 10/02/2020 / sam | V11321 |

| 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 | A0160196 | 08/08/2021 | 02/08/2021 / SAM | 10/02/2020 / sam | V11322 |

| 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 | A0160196 | 09/18/2021 | 03/18/2021 / SAM | 10/02/2020 / sam | V11333 |

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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 | A0160196 | 09/18/2021 | 03/18/2021 / SAM | 10/02/2020 / sam | V11334 |

| 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) | 0000230446 | 08/05/2021 | 02/05/2021 / pedro | 10/29/2020 / sam | V11463 |

| 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) | 0000230446 | 06/28/2021 | 12/28/2020 / SAM | 10/29/2020 / sam | V11464 |

| 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) | 0000258810 | 06/15/2021 | 12/15/2020 / SAM | 10/29/2020 / sam | V11467 |

| 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 | A0162411 | 09/18/2021 | 03/18/2021 / SAM | 12/24/2020 / SAM | V11540 |

| 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 | A0162411 | 08/08/2021 | 02/08/2021 / SAM | 12/24/2020 / SAM | V11541 |

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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 | 30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL | A0162411 | 08/08/2021 | 02/08/2021 / SAM | 12/24/2020 / SAM | V11542 |

| 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 | A0162411 | 09/18/2021 | 03/18/2021 / SAM | 12/24/2020 / SAM | V11546 |

| 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) | 0000258810 | 07/25/2021 | 01/25/2021 / SAM | 12/30/2020 / SAM | V11592 |

| 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) | 0000258810 | 07/21/2021 | 01/21/2021 / SAM | 12/30/2020 / SAM | V11593 |

| 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) | 0000258810 | 08/25/2021 | 02/25/2021 / SAM | 12/30/2020 / SAM | V11604 |

| 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) | 0000230446 | 08/09/2021 | 02/09/2021 / SAM | 12/30/2020 / SAM | V11607 |

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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) | 0000230446 | 08/19/2021 | 02/19/2021 / SAM | 12/30/2020 / SAM | V11610 |

| 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) | 0000230446 | 07/20/2021 | 01/20/2021 / SAM | 12/30/2020 / SAM | V11612 |

| 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 | A0168095 | 09/18/2021 | 03/18/2021 / SAM | 01/22/2021 / SAM | V11636 |

| 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 | A0168095 | 09/18/2021 | 03/18/2021 / SAM | 01/22/2021 / SAM | V11637 |

| 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) | 0000258810 | 09/22/2021 | 03/22/2021 / SAM | 03/03/2021 / SAM | V11740 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 030821 | 04/08/2021 | 03/09/2021 / SAM | 03/09/2021 / SAM | V11761 |

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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) | 030821 | 04/08/2021 | 03/09/2021 / SAM | 03/09/2021 / SAM | V11762 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 030821 | 04/08/2021 | 03/09/2021 / SAM | 03/09/2021 / SAM | V11763 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 030821 | 04/08/2021 | 03/09/2021 / SAM | 03/09/2021 / SAM | V11764 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 030621 | 04/06/2021 | 03/09/2021 / SAM | 03/09/2021 / SAM | V11765 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 91980 / Acrolin Std (Min = 5) | 030621 | 04/06/2021 | 03/09/2021 / SAM | 03/09/2021 / SAM | V11766 |

| 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 | 072918 | 06/28/2021 | 12/28/2020 / SAM | 07/27/2018 / sam | V8726 |

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

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 95318 / 2-Chloroethyl Vinyl Ether (Min = 5) | 031419 | 07/25/2021 | 01/25/2021 / SAM | 03/15/2019 / sam | V9527 |

| 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) | 031419 | 07/25/2021 | 01/25/2021 / SAM | 03/15/2019 / sam | V9528 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | DIW / DI Water | Daily Lab-Certified | 10/24/2024 | 10/24/2019 / apatel | 10/24/2019 / apatel | W2606 |

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 0000258810
Manufactured Date: 2020/04/01
Expiration Date: 2023/04/01
Revision No: 1

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($CH_3OH$) (by GC, corrected for water) | >= 99.9 % | 100.0 |
| Residue after Evaporation | <= 1.0000 ppm | 0.5000 |
| Titrable Acid (µeq/g) | <= 0.3 | 0.2 |
| Titrable Base (µeq/g) | <= 0.1 | <0.01 |
| Water (by KF, coulometric) | <= 0.08 % | < 0.01 |
| Volatile Organic Trace Analysis - Below EPA 8260B CRQL | Conforms / Fails | 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: US
Packaging Site: Phillipsburg Mfg Ctr & DC

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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

www.restek.com

# CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30042 **Lot No.:** A0158115

**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, 2026 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12)<br>**CAS #** 75-71-8 (Lot 00012554)<br>**Purity** 99% | 2,003.0 µg/mL | +/- 13.5699 µg/mL<br>+/- 112.5204 µg/mL<br>+/- 115.1432 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | Chloromethane (methyl chloride)<br>**CAS #** 74-87-3 (Lot SHBK6571)<br>**Purity** 99% | 2,002.2 µg/mL | +/- 13.7609 µg/mL<br>+/- 112.5010 µg/mL<br>+/- 115.1223 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Vinyl chloride<br>**CAS #** 75-01-4 (Lot 00015559)<br>**Purity** 99% | 2,000.7 µg/mL | +/- 14.3428 µg/mL<br>+/- 112.4884 µg/mL<br>+/- 115.1060 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | Bromomethane (methyl bromide)<br>**CAS #** 74-83-9 (Lot 101604)<br>**Purity** 99% | 2,000.2 µg/mL | +/- 13.8233 µg/mL<br>+/- 112.3951 µg/mL<br>+/- 115.0136 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Chloroethane (ethyl chloride)<br>**CAS #** 75-00-3 (Lot 107-401039114-1)<br>**Purity** 99% | 2,001.0 µg/mL | +/- 13.1358 µg/mL<br>+/- 112.3597 µg/mL<br>+/- 114.9812 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Trichlorofluoromethane (CFC-11)<br>**CAS #** 75-69-4 (Lot MKCJ8658)<br>**Purity** 99% | 2,001.8 µg/mL | +/- 13.8031 µg/mL<br>+/- 112.4818 µg/mL<br>+/- 115.1024 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

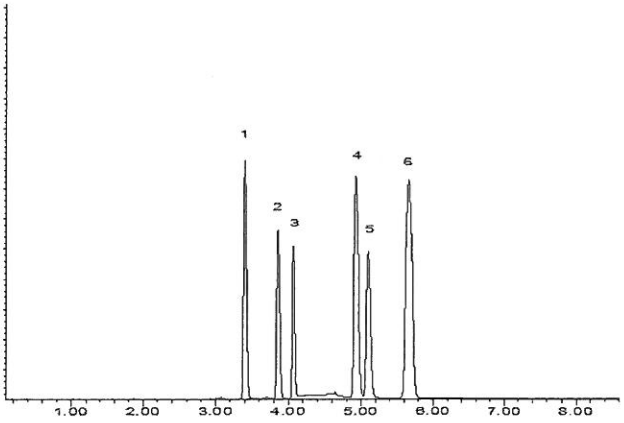
**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




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:** 24-Feb-2020 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

**Date Passed:** 27-Feb-2020

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) | < 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 010419
Description: Universal VOA Megamix
69 components
Expiration Date: 010422
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 2684186

Solvent(s): Methanol
Lot#: DT140Q6

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.001 Flask Uncertainty

| | | |
|---|---|---|
| Formulated By: | Eli Aliaga | 010419 DATE |
| Reviewed By: | Pedro L. Rentas | 010419 DATE |

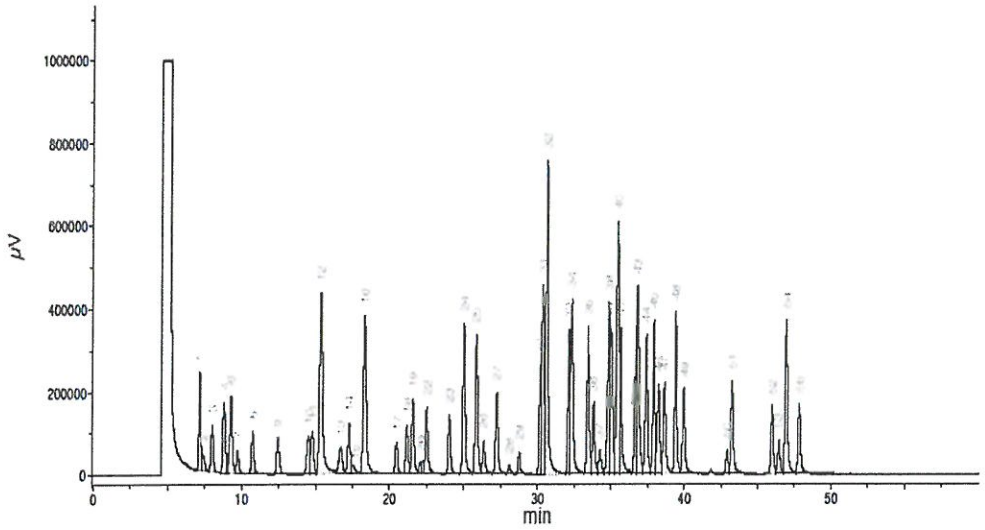
| Compound | (RM#) Part Number | Lot Number | Dil. Factor | Initial Vol. (mL) | Initial Conc.(ug/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Acetonitrile | (0324) | 060812 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20022 | 0.20040 | 2001.8 | 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 | 0.20204 | 0.20210 | 2000.6 | 8.1 | 107-05-1 | 1 ppm (3mg/m3/8H) | orl-rat 700mg/kg |
| 3. Carbon disulphide | (0060) | MKBZ6689V | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20204 | 0.20215 | 2001.1 | 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 | 0.21055 | 0.21060 | 2000.5 | 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 | 0.20728 | 0.20745 | 2001.7 | 8.4 | 110-57-6 | N/A | N/A |
| 6. Diethyl ether | (0153) | 209453 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20204 | 0.20210 | 2000.6 | 8.1 | 60-29-7 | N/A | N/A |
| 7. Ethyl methacrylate | (0381) | 06126PX | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20204 | 0.20220 | 2001.6 | 8.1 | 97-63-2 | N/A | orl-rat 14800mg/kg |
| 8. Iodomethane | (0489) | SHBF8718V | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20103 | 0.20140 | 2003.7 | 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 | 0.20103 | 0.20110 | 2000.7 | 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 | 0.20204 | 0.20215 | 2001.1 | 8.1 | 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 | 0.20022 | 0.20120 | 2009.8 | 8.1 | 96-33-3 | 10 ppm(35mg/m3/8H)(skin) | orl-rat 277mg/kg |
| 12. Methyl methacrylate | (0404) | 03021BX | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20204 | 0.20225 | 2002.1 | 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 | 0.20204 | 0.20220 | 2001.6 | 8.1 | 98-95-3 | 1 ppm (5mg/m3/8H)(skin) | orl-rat 780mg/kg |
| 14. 2-Nitropropane | (0461) | 14002JX | NA | NA | NA | 2000 | 95 | 0.2 | NA | 0.21055 | 0.21060 | 2000.5 | 8.5 | 79-46-9 | 10 ppm (35mg/m3/8H) | orl-rat 720mg/kg |
| 15. Pentachloroethane | (0450) | HGA01 | NA | NA | NA | 2000 | 98 | 0.2 | NA | 0.20410 | 0.20425 | 2001.4 | 8.2 | 76-01-7 | N/A | N/A |
| 16. 1,1,2-Trichlorotrifluoroethane | (0474) | 18930 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20204 | 0.20215 | 2001.1 | 8.1 | 76-13-1 | 1000 ppm (7600mg/m3/8H) | orl-rat 43g/kg |
| 17. Bromodichloromethane | 35171 | 051118 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.9 | 75-27-4 | N/A | orl-rat 916mg/kg |
| 18. Dibromochloromethane | 35171 | 051118 | 0.05 | 5.00 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 124-48-1 | N/A | orl-rat 848mg/kg |
| 19. cis-1,2-Dichloroethene | 35171 | 051118 | 0.05 | 5.00 | 40002.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 156-59-2 | N/A | N/A |
| 20. trans-1,2-Dichloroethene | 35171 | 051118 | 0.05 | 5.00 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 156-60-5 | N/A | orl-rat 1235mg/kg |
| 21. Methylene chloride | 35171 | 051118 | 0.05 | 5.00 | 40003.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 75-09-2 | 500 ppm | orl-rat 820mg/kg |
| 22. 1,1-Dichloroethene | 32251 | 122818 | 0.10 | 10.00 | 20005.5 | 2000 | NA | NA | 0.042 | NA | NA | 2000.3 | 18.7 | 75-35-4 | 1 ppm (4mg/m3/8H) | orl-rat 200mg/kg |
| 23. Bromoform | 95321 | 010419 | 0.10 | 10.00 | 20001.7 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 75-25-2 | 0.5 ppm (5mg/m3) (skin) | orl-rat 933mg/kg |
| 24. Carbon tetrachloride | 95321 | 010419 | 0.10 | 10.00 | 20001.3 | 2000 | NA | NA | 0.042 | NA | NA | 1999.9 | 18.7 | 56-23-5 | 2 ppm (12.6mg/m3/8H) | orl-rat 2350mg/kg |
| 25. Chloroform | 95321 | 010419 | 0.10 | 10.00 | 20001.8 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 67-66-3 | 50 ppm (240mg/m3) (CL) | orl-rat 908mg/kg |
| 26. Dibromomethane | 95321 | 010419 | 0.10 | 10.00 | 20001.7 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 74-95-3 | N/A | orl-rat 108mg/kg |
| 27. 1,1-Dichloroethane | 95321 | 010419 | 0.10 | 10.00 | 20000.8 | 2000 | NA | NA | 0.042 | NA | NA | 1999.9 | 18.7 | 75-34-3 | 100 ppm | orl-rat 725mg/kg |
| 28. 2,2-Dichloropropane | 95321 | 010419 | 0.10 | 10.00 | 20002.1 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 594-20-7 | N/A | N/A |
| 29. Tetrachloroethene | 95321 | 010419 | 0.10 | 10.00 | 20002.2 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 127-18-4 | 25 ppm (170mg/m3/8H)(final) | orl-rat 2629mg/kg |
| 30. 1,1,1-Trichloroethane | 95321 | 010419 | 0.10 | 10.00 | 20001.7 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 71-55-6 | 350 ppm (1900mg/m3/8H) | orl-rat 10300mg/kg |
| 31. 1,2-Dibromo-3-chloropropane | 35161 | 052418 | 0.05 | 5.00 | 40000.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 96-12-8 | 0.001 ppm | orl-rat 170mg/kg |
| 32. 1,2-Dibromoethane | 35161 | 052418 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 106-93-4 | 20 ppm (8H) | orl-rat 108mg/kg |
| 33. 1,2-Dichloroethane | 35161 | 052418 | 0.05 | 5.00 | 40001.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 107-06-2 | 50 ppm (8H) | orl-rat 670mg/kg |
| 34. 1,2-Dichloropropane | 35161 | 052418 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 78-87-5 | 75 ppm (350mg/m3/8H) | orl-rat 1947mg/kg |
| 35. 1,3-Dichloropropane | 35161 | 052418 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 142-28-9 | N/A | unr-mus 3600mg/kg |
| 36. 1,1-Dichloropropene | 35161 | 052418 | 0.05 | 5.00 | 39639.5 | 2000 | NA | NA | 0.017 | NA | NA | 1981.8 | 24.2 | 563-58-6 | N/A | N/A |
| 37. cis-1,3-Dichloropropene | 35161 | 052418 | 0.05 | 5.00 | 40001.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 10061-01-5 | N/A | N/A |
| 38. trans-1,3-Dichloropropene | 35161 | 052418 | 0.05 | 5.00 | 40000.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 16.0 | 10061-02-6 | N/A | N/A |
| 39. Hexachloro-1,3-butadiene | 35161 | 052418 | 0.05 | 5.00 | 40000.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 87-68-3 | 0.02 ppm (0.24mg/m3/8H) | orl-rat 82mg/kg |
| 40. 1,1,1,2-Tetrachloroethane | 35161 | 052418 | 0.05 | 5.00 | 40000.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 630-20-6 | N/A | orl-rat 670mg/kg |
| 41. 1,1,2,2-Tetrachloroethane | 35161 | 052418 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 79-34-5 | 5 ppm (35mg/m3/8H)(skin) | orl-rat 800mg/kg |
| 42. 1,1,2-Trichloroethane | 35161 | 052418 | 0.05 | 5.00 | 40000.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 79-00-5 | 10 ppm (45mg/m3/8H)(skin) | orl-rat 836mg/kg |
| 43. Trichloroethene | 35161 | 052418 | 0.05 | 5.00 | 40000.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 79-01-6 | 50 ppm (270mg/m3/8H) | orl-mus 2402mg/kg |
| 44. 1,2,3-Trichloropropane | 35161 | 052418 | 0.05 | 5.00 | 40000.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 96-18-4 | 10 ppm (60mg/m3/8H) | orl-rat 149.6mg/kg |
| 45. Benzene | 35162 | 060418 | 0.05 | 5.00 | 40000.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 71-43-2 | 1 ppm | orl-rat 4894mg/kg |
| 46. Bromobenzene | 35162 | 060418 | 0.05 | 5.00 | 40000.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 108-86-1 | N/A | orl-rat 2699mg/kg |
| 47. n-Butyl benzene | 35162 | 060418 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 104-51-8 | N/A | N/A |
| 48. Ethyl benzene | 35162 | 060418 | 0.05 | 5.00 | 40000.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 100-41-4 | 100 ppm (435mg/m3/8H) | orl-rat >2000mg/kg |
| 49. p-Isopropyl toluene | 35162 | 060418 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 99-87-6 | N/A | orl-rat 4750mg/kg |
| 50. Naphthalene | 35162 | 060418 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 91-20-3 | 10 ppm (50mg/m3/8H) | orl-rat 490mg/kg |
| 51. Styrene | 35162 | 060418 | 0.05 | 5.00 | 40000.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 100-42-5 | 100 ppm | orl-rat 5000mg/kg |
| 52. Toluene | 35162 | 060418 | 0.05 | 5.00 | 40000.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 108-88-3 | 200 ppm | orl-rat 5000mg/kg |
| 53. 1,2,3-Trichlorobenzene | 35162 | 060418 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 87-61-6 | N/A | ipr-mus 1390mg/kg |
| 54. 1,2,4-Trichlorobenzene | 35162 | 060418 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 120-82-1 | 5 ppm (CL) (40mg/m3) | orl-rat 756mg/kg |
| 55. 1,2,4-Trimethylbenzene | 35162 | 060418 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.9 | 95-63-6 | N/A | orl-rat 5g/kg |
| 56. 1,3,5-Trimethylbenzene | 35162 | 060418 | 0.05 | 5.00 | 40000.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 108-67-8 | N/A | N/A |
| 57. m-Xylene | 35162 | 060418 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 108-38-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |
| 58. tert-Butyl benzene | 35163 | 051118 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 98-06-6 | N/A | N/A |
| 59. sec-Butyl benzene | 35163 | 051118 | 0.05 | 5.00 | 40001.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 135-98-8 | N/A | orl-rat 2240mg/kg |
| 60. Chlorobenzene | 35163 | 051118 | 0.05 | 5.00 | 40001.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 108-90-7 | 75 ppm (350mg/m3/8H) | orl-rat 2290mg/kg |
| 61. 2-Chlorotoluene | 35163 | 051118 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 95-49-8 | 50 ppm (250mg/m3/8H) | orl-rat 3900mg/kg |
| 62. 4-Chlorotoluene | 35163 | 051118 | 0.05 | 5.00 | 40001.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 106-43-4 | N/A | orl-rat 2100mg/kg |
| 63. 1,2-Dichlorobenzene | 35163 | 051118 | 0.05 | 5.00 | 40002.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 95-50-1 | 50 ppm (300mg/m3) (CL) | orl-rat 500mg/kg |
| 64. 1,3-Dichlorobenzene | 35163 | 051118 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.9 | 541-73-1 | N/A | ipr-mus 1062mg/kg |
| 65. 1,4-Dichlorobenzene | 35163 | 051118 | 0.05 | 5.00 | 40001.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 106-46-7 | 75 ppm (450mg/m3/8H) | orl-rat 500mg/kg |
| 66. Isopropylbenzene | 35163 | 051118 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.9 | 98-82-8 | 50 ppm (245mg/m3/8H) | orl-rat 1400mg/kg |
| 67. n-Propylbenzene | 35163 | 051118 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 103-65-1 | N/A | orl-rat 6040mg/kg |
| 68. o-Xylene | 35163 | 051118 | 0.05 | 5.00 | 40001.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 95-47-6 | 100 ppm (435mg/m3/8H) | ipr-mus 1364mg/kg |
| 69. p-Xylene | 35163 | 051118 | 0.05 | 5.00 | 40001.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 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 26, "P95317 L010419 [2000µg/mL in MeOH]"**

Run Length: 60.00 min, 36000 points at 10 points/second.
Created: Wed, Jan 9, 2019 at 1:40:49 PM.
Sampled: Sequence "010819-GC13M1", Method "GC13-M1".
Analyzed using Method "GC13-M1".

**Comments**
GC13-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 # | Analyte | FID RT (min.) |
|---|---|---|
| 1 | Ether | 7.15 |
| 2 | 1,1,2-Trichloro-1,2,2 trifluoroethane | 7.37 |
| 3 | 1,1-Dichloroethene | 7.86 |
| 4 | Acetonitrile | 8.80 |
| 5 | Iodomethane | 9.01 |
| 6 | Allyl chloride | 9.27 |
| 7 | **Carbon disulfide/Methylene chloride** | 9.73 |
| 8 | trans-1,2-Dichloroethene | 10.73 |
| 9 | 1,1-Dichloroethane | 12.44 |
| 10 | 2,2-Dichloropropane | 14.49 |
| 11 | cis-1,2-Dichloroethene | 14.76 |
| 12 | **Methacrylonitrile/Methyl acrylate/Chloroform** | 15.33 |
| 13 | **Isobutanol/1,1,1-Trichloroethane** | 16.69 |
| 14 | 1,1-Dichloropropene | 17.26 |
| 15 | Carbon tetrachloride | 17.72 |
| 16 | **Benzene/1,2-Dichloroethane** | 18.29 |
| 17 | Trichloroethene | 20.45 |
| 18 | 1,2-Dichloropropane | 21.17 |
| 19 | Methyl methacrylate | 21.56 |
| 20 | Bromodichloromethane | 22.25 |
| 21 | Dibromomethane | 22.83 |
| 22 | 2-Nitropropane | 22.98 |
| 23 | cis-1,3-Dichloropropene | 24.09 |
| 24 | Toluene | 24.97 |
| 25 | **Ethyl methacrylate/trans-1,3-Dichloropropene** | 27.82 |
| 26 | 1,1,2-Trichloroethane | 28.33 |
| 27 | **Tetrachloroethene/1,3-Dichloropropane** | 27.70 |
| 28 | Dibromochloromethane | 30.06 |
| 29 | 1,2-Dibromoethane | 28.72 |
| 30 | Chlorobenzene | 30.14 |
| 31 | **Ethylbenzene/1,1,1,2-Tetrachloroethane** | 30.32 |
| 32 | **m-Xylene/p-Xylene** | 30.59 |
| 33 | o-Xylene | 32.12 |
| 34 | Styrene | 32.30 |
| 35 | **Isopropylbenzene/Bromoform** | 33.39 |
| 36 | cis-1,4-Dichloro-2-butene | 33.89 |
| 37 | 1,1,2,2-Tetrachloroethane | 34.21 |
| 38 | **1,2,3-Trichloropropane/n-Propylbenzene** | 34.82 |
| 39 | **trans-1,4-Dichloro-2-butene/Bromobenzene** | 34.99 |
| 40 | **1,3,5-Trimethylbenzene/2-Chlorotoluene** | 35.42 |
| 41 | 4-Chlorotoluene | 35.61 |
| 42 | tert-Butylbenzene | 36.54 |
| 43 | **1,2,4-Trimethylbenzene/Pentachloroethane** | 36.78 |
| 44 | sec-Butylbenzene | 37.38 |
| 45 | p-Isopropyltoluene | 37.91 |
| 46 | 1,3-Dichlorobenzene | 38.13 |
| 47 | 1,4-Dichlorobenzene | 38.64 |
| 48 | n-Butylbenzene | 39.38 |
| 49 | 1,2-Dichlorobenzene | 39.86 |
| 50 | 1,2-Dibromo-3-chloropropane | 42.99 |
| 51 | Nitrobenzene | 43.23 |
| 52 | 1,2,4-Trichlorobenzene | 45.95 |
| 53 | Hexachlorobutadiene | 46.41 |
| 54 | Naphthalene | 46.90 |
| 55 | 1,2,3-Trichlorobenzene | 47.79 |

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>May 1, 2019 |

## 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.<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.

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

www.restek.com

# CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30042 **Lot No.:** A0160196

**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 :** December 31, 2026 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12)<br>**CAS #** 75-71-8 (Lot 00012554)<br>**Purity** 99% | 2,000.8 µg/mL | +/- 13.6549 µg/mL<br>+/- 112.4100 µg/mL<br>+/- 115.0297 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | Chloromethane (methyl chloride)<br>**CAS #** 74-87-3 (Lot SHBK6571)<br>**Purity** 99% | 2,001.1 µg/mL | +/- 13.2219 µg/mL<br>+/- 112.3743 µg/mL<br>+/- 114.9956 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Vinyl chloride<br>**CAS #** 75-01-4 (Lot 00015559)<br>**Purity** 99% | 2,002.0 µg/mL | +/- 13.9531 µg/mL<br>+/- 112.5119 µg/mL<br>+/- 115.1324 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | Bromomethane (methyl bromide)<br>**CAS #** 74-83-9 (Lot 101604)<br>**Purity** 99% | 2,000.1 µg/mL | +/- 13.8657 µg/mL<br>+/- 112.3970 µg/mL<br>+/- 115.0153 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Chloroethane (ethyl chloride)<br>**CAS #** 75-00-3 (Lot 107-401039114-1)<br>**Purity** 99% | 1,999.5 µg/mL | +/- 13.2647 µg/mL<br>+/- 112.2929 µg/mL<br>+/- 114.9120 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Trichlorofluoromethane (CFC-11)<br>**CAS #** 75-69-4 (Lot MKCJ8658)<br>**Purity** 99% | 2,001.4 µg/mL | +/- 13.9770 µg/mL<br>+/- 112.4806 µg/mL<br>+/- 115.1001 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

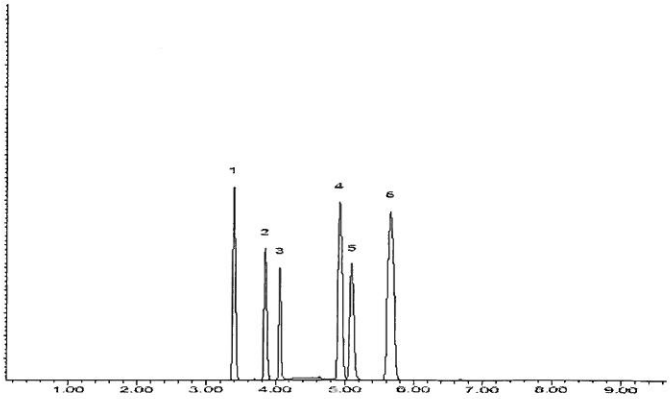
**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




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 Suckal - Mix Technician

**Date Mixed:** 22-Apr-2020 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

**Date Passed:** 27-Apr-2020

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) | < 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 0000230446
Manufactured Date: 2019/04/11
Expiration Date: 2022/04/10
Revision No: 1

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($CH_3OH$) (by GC, corrected for water) | >= 99.9 % | 100.0 |
| Residue after Evaporation | <= 1.0000 ppm | 0.3000 |
| Titrable Acid (µeq/g) | <= 0.3 | 0.2 |
| Titrable Base (µeq/g) | <= 0.1 | <0.01 |
| Water (by KF, coulometric) | <= 0.08 % | < 0.01 |
| Photoionization Detection (PID) Below CRQL | Passes Test | PT |
| Electroconductivity Detection (ELCD) Below CRQL | Passes Test | PT |

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: US
Packaging Site: Phillipsburg Mfg Ctr & DC

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

Material No.: 9077-02
Batch No.: 0000258810
Manufactured Date: 2020/04/01
Expiration Date: 2023/04/01
Revision No: 1

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($CH_3OH$) (by GC, corrected for water) | >= 99.9 % | 100.0 |
| Residue after Evaporation | <= 1.0000 ppm | 0.5000 |
| Titrable Acid (µeq/g) | <= 0.3 | 0.2 |
| Titrable Base (µeq/g) | <= 0.1 | <0.01 |
| Water (by KF, coulometric) | <= 0.08 % | < 0.01 |
| Volatile Organic Trace Analysis - Below EPA 8260B CRQL | Conforms / Fails | 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: US
Packaging Site: Phillipsburg Mfg Ctr & DC

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 030621
Description: Acrolein

Expiration Date: 040621
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 23060

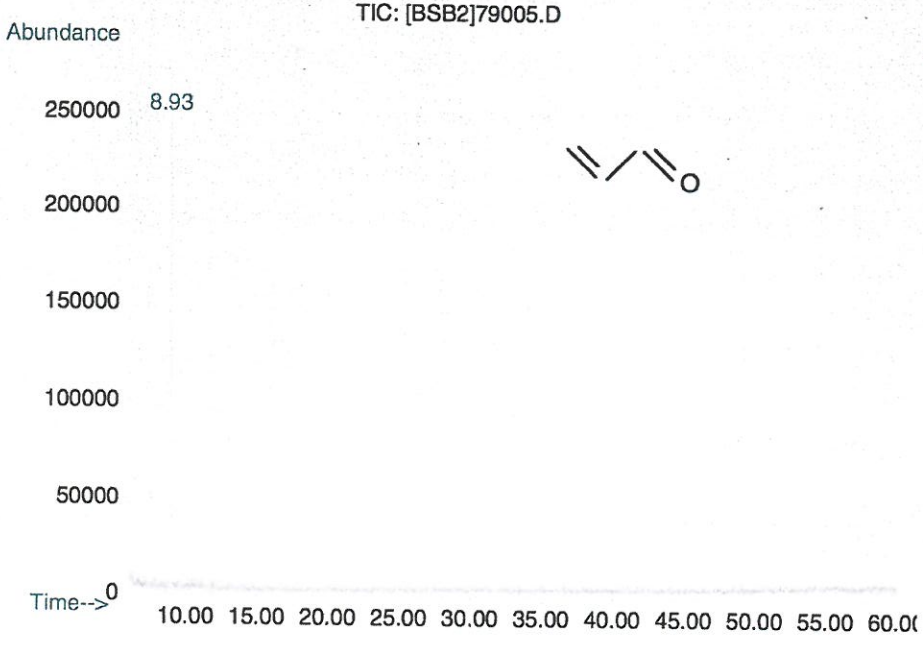
**Solvent(s):** **Lot#**
Water 120720Q

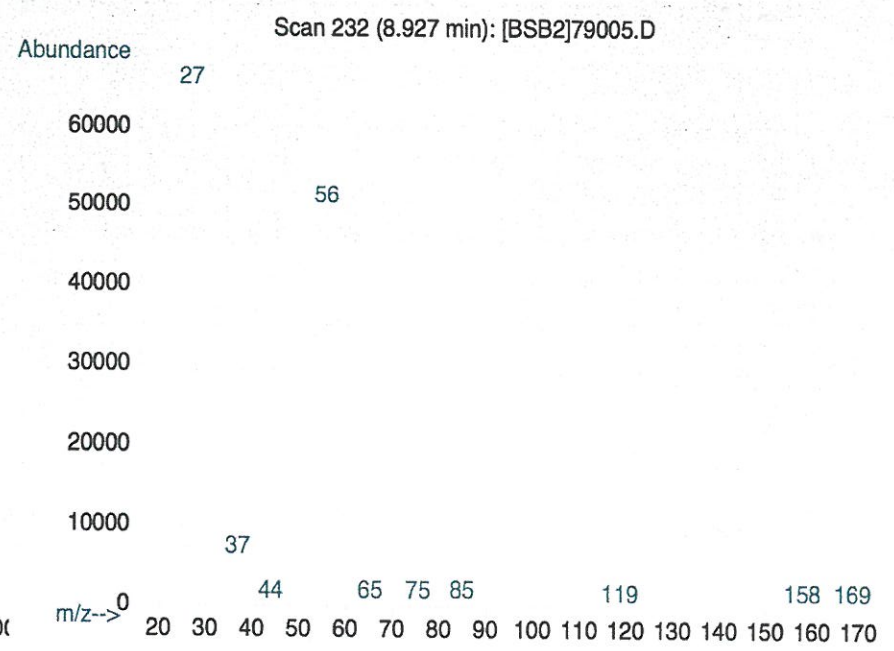
| | | |
|---|---|---|
| Formulated By: | Justin Dippold | 030621 DATE |
| Reviewed By: | Pedro L. Rentas | 030621 DATE |

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 10.0 0.007 Flask Uncertainty

| 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 | 04715LL | 5000 | 97 | 0.2 | 0.05157 | 0.05175 | 5017.8 | 23.8 | 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).

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## CERTIFIED WEIGHT REPORT

**Part Number:** 91980
Lot Number: 030821
Description: Acrolein

Expiration Date: 040821
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 23060

Weight(s) shown below were combined and diluted to (mL): 20.0

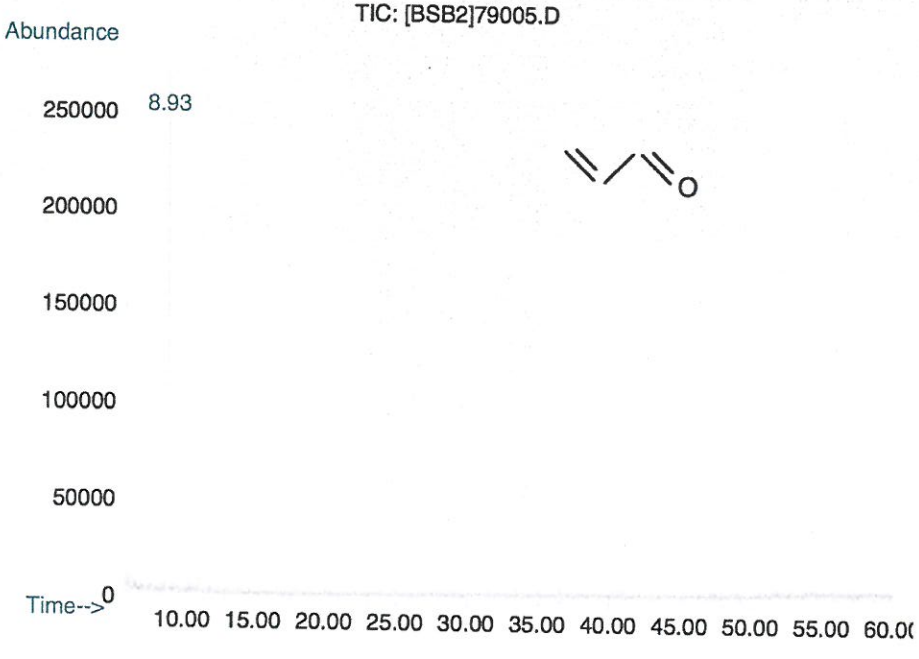
| Solvent(s): | Lot# |
|---|---|
| Water | 120720Q |

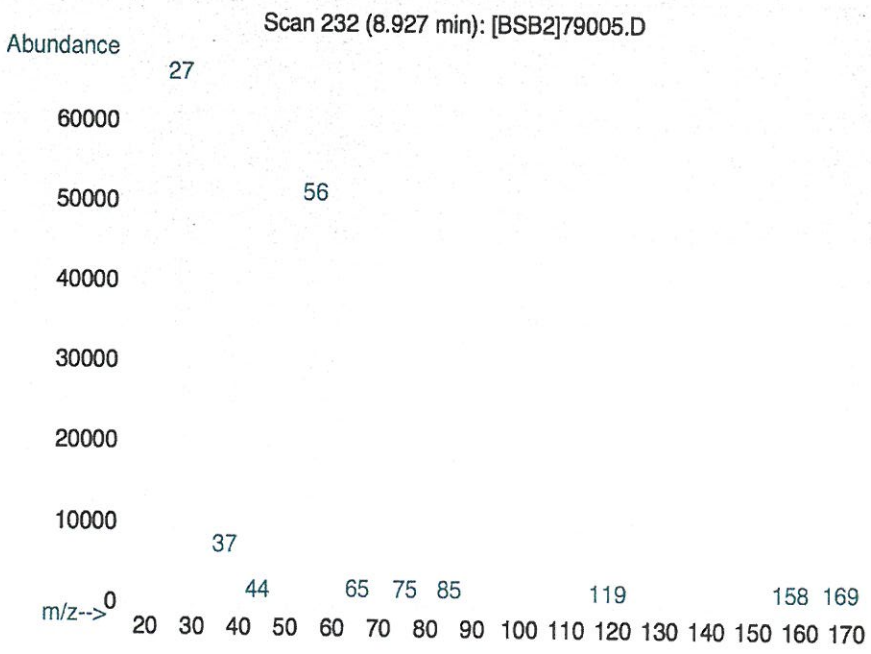
5E-05 Balance Uncertainty
0.002 Flask Uncertainty

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 030821 DATE |
| Reviewed By: | Pedro L. Rentas | 030821 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 | 07813BN | 5000 | 97 | 0.2 | 0.10302 | 0.10350 | 5023.4 | 21.3 | 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.
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**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. Hamden CT, 06514 | Emergency Telephone International | **1-352-323-3500** |
| | | Date Prepared/Revised | January 25, 2021 |

## Section II - Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

| | | | |
|---|---|---|---|
| | | **H315** | **Causes skin and eye irritation.** |
| **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) |
|---|---|---|
| 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) | NA | Melting Point | 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: 082620
Description: 2-Chloroethyl vinyl ether

Expiration Date: 082623
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 23060

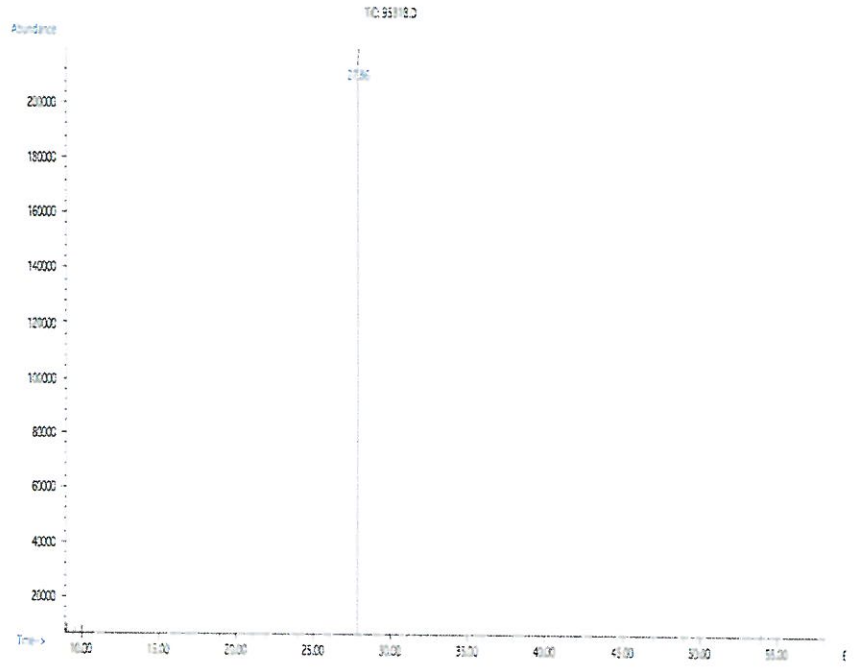
**Solvent(s):** **Lot#**
Methanol DX932-US

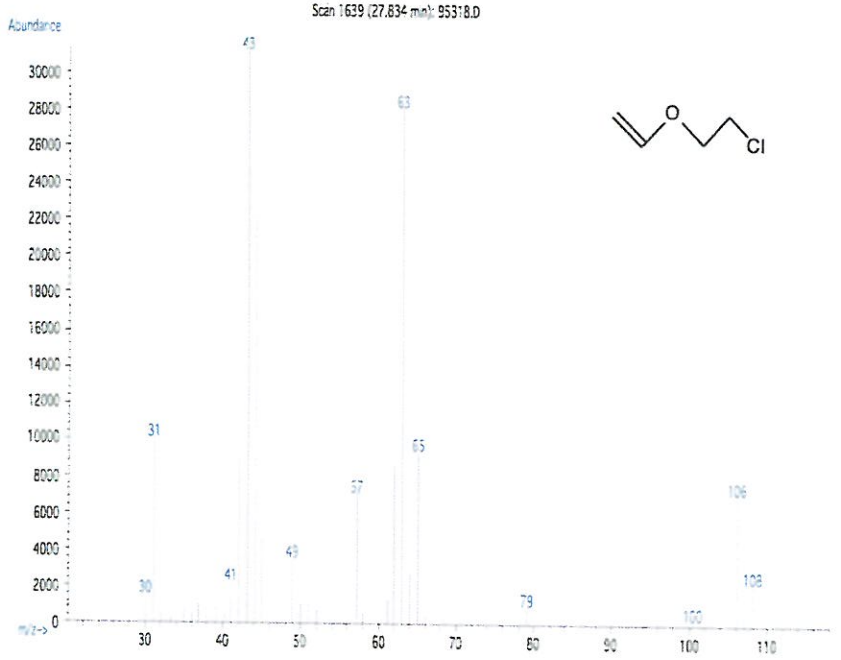
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 30.0 0.002 Flask Uncertainty

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 082620 DATE |
| Reviewed By: | Pedro L. Rentas | 082620 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 | 0.30284 | 0.30289 | 10001.7 | 40.6 | 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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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>May 1, 2015 |

## 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.<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

# Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30489 **Lot No.:** A0162411

**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 :** January 31, 2022 **Storage:** 0°C or colder

**Handling:** This product is photosensitive.

## CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | Methyl acetate<br>**CAS #** 79-20-9<br>**Purity** 99% | (Lot SHBK5436) | 2,013.0 µg/mL | +/- 11.7308 µg/mL<br>+/- 121.4558 µg/mL<br>+/- 121.7442 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |
| 2 | Vinyl acetate<br>**CAS #** 108-05-4<br>**Purity** 99% | (Lot RD200601) | 2,007.5 µg/mL | +/- 11.6987 µg/mL<br>+/- 121.1240 µg/mL<br>+/- 121.4115 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Ethyl acetate<br>**CAS #** 141-78-6<br>**Purity** 99% | (Lot SHBL3655) | 2,007.3 µg/mL | +/- 11.6973 µg/mL<br>+/- 121.1089 µg/mL<br>+/- 121.3964 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |
| 4 | Isopropyl acetate<br>**CAS #** 108-21-4<br>**Purity** 99% | (Lot BCBT9845) | 2,007.0 µg/mL | +/- 11.6958 µg/mL<br>+/- 121.0938 µg/mL<br>+/- 121.3813 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Propyl acetate<br>**CAS #** 109-60-4<br>**Purity** 99% | (Lot FGL01) | 2,004.0 µg/mL | +/- 11.6784 µg/mL<br>+/- 120.9128 µg/mL<br>+/- 121.1999 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Butyl acetate<br>**CAS #** 123-86-4<br>**Purity** 99% | (Lot SHBK5137) | 2,007.5 µg/mL | +/- 11.6987 µg/mL<br>+/- 121.1240 µg/mL<br>+/- 121.4115 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Amyl acetate<br>**CAS #** 628-63-7<br>**Purity** 99% | (Lot 41325/1) | 2,013.8 µg/mL | +/- 11.7352 µg/mL<br>+/- 121.5011 µg/mL<br>+/- 121.7895 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |

**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.

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

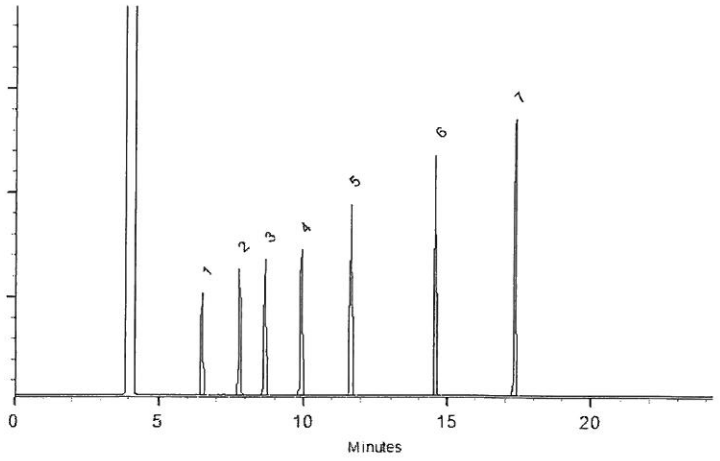
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Tom Suckar - Mix Technician

**Date Mixed:** 09-Jul-2020 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

**Date Passed:** 13-Jul-2020

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

**General Certified Reference Material Notes**

**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

**Purity Notes:**

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

**Certified Uncertainty Value Notes:**

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value ( includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

*k* is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

| Label Conditions | Standard Conditions | Non-Standard Conditions |
|---|---|---|
| 25°C Nominal (Room Temperature) | < 60°C | ≥ 60°C up to 7 days |
| 10°C or colder (Refrigerate) | < 40°C | ≥ 40°C up to 7 days |
| 0°C or colder (Freezer)<br>-20°C or colder (Deep Freezer) | < 25°C | ≥ 25°C up to 7 days |

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

**Manufacturing Notes:**

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

**Handling Notes:**

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

RESTEK

# Safety Data Sheet

**Revision Date: 12/04/20**
www.restek.com

2 Letter ISO country code/language code: US/EN

## 1. IDENTIFICATION

| | |
|---|---|
| **Catalog Number / Product Name:** | **30489 / 8260B Acetates Mix** |
| **Company:** | Restek Corporation |
| **Address:** | 110 Benner Circle<br>Bellefonte, Pa. 16823 |
| **Phone#:** | 814-353-1300 |
| **Fax#:** | 814-353-1309 |
| **Emergency#:** | 800-424-9300 (CHEMTREC)<br>703-527-3887 (Outside the US) |
| **Email:** | www.restek.com |
| **Revision Number:** | 15 |
| **Intended use:** | For Laboratory use only |

## 2. HAZARD(S)IDENTIFICATION

**Emergency Overview:**

**GHS Hazard Symbols:**



| | |
|---|---|
| **GHS Classification:** | Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1<br>Flammable Liquid Category 2<br>Carcinogenicity Category 2<br>Acute Toxicity - Inhalation Dust / Mist Category 3<br>Acute Toxicity - Dermal Category 3<br>Acute Toxicity - Oral Category 3 |
| **GHS Signal Word:** | Danger |
| **GHS Hazard:** | Highly flammable liquid and vapour.<br>Toxic if swallowed, in contact with skin or if inhaled.<br>Suspected of causing cancer.<br>Causes damage to organs. |
| **GHS Precautions:** | |
| **Safety Precautions:** | Obtain special instructions before use.<br>Do not handle until all safety precautions have been read and understood.<br>Keep away from heat/sparks/open flames/hot surfaces. – No smoking.<br>Ground/bond container and receiving equipment.<br>Use explosion-proof electrical/ventilation and lighting equipment.<br>Use only non-sparking tools.<br>Take precautionary measures against static discharge.<br>Do not breathe dust/fume/gas/mist/vapours/spray.<br>Wash hands and skin thoroughly after handling.<br>Do not eat, drink or smoke when using this product.<br>Use only outdoors or in a well-ventilated area.<br>Wear protective gloves/protective clothing/eye protection/face protection. |
| **First Aid Measures:** | IF SWALLOWED: Immediately call a POISON CENTER/doctor/....<br>IF ON SKIN: Wash with plenty of soap and water.<br>IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>Specific treatment see section 4.<br>Rinse mouth. |

Take off immediately all contaminated clothing and wash it before reuse.
In case of fire: Use extinguishing media in section 5 for extinction.

**Storage:** Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.

**Disposal:** Dispose of contents/container according to section 13 of the SDS.

**Single Exposure Target Organs:** Specific target organ toxicity - Single exposure - STOT SE 1: H370 Causes damage to organs. (C >= 10 %; No information to prove exclusion of certain routes of exposure); Specific target organ toxicity - Single exposure - STOT SE 2: H371 May cause damage to organs. (3 % <= C <10 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given)

**Repeated Exposure Target Organs:** No data available

## 3. COMPOSITION / INFORMATION ON INGREDIENT

| Chemical Name | CAS # | EINEC # | % Composition |
|---|---|---|---|
| P&T Methanol | 67-56-1 | 200-659-6 | 98.6 |
| Propyl acetate | 109-60-4 | 203-686-1 | 0.2 |
| Isopropyl acetate | 108-21-4 | 203-561-1 | 0.2 |
| Vinyl acetate | 108-05-4 | 203-545-4 | 0.2 |
| Butyl acetate | 123-86-4 | 204-658-1 | 0.2 |
| Methyl acetate | 79-20-9 | 201-185-2 | 0.2 |
| Ethyl acetate | 141-78-6 | 205-500-4 | 0.2 |
| Amyl acetate | 628-63-7 | 211-047-3 | 0.2 |

## 4. FIRST-AID MEASURES

**Inhalation:** Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately

**Eyes:** Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention. Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.

**Skin Contact:** Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

**Ingestion:** Minimal risk of harm if swallowed. Do not induce vomiting. Seek medical attention immediately. Provide medical care provider with this SDS.

## 5. FIRE- FIGHTING MEASURES

**Extinguishing Media:** Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire. Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire.

**Fire and/or Explosion Hazards:** Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a source of ignition and flash back

**Fire Fighting Methods and Protection:** Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.

**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment:** Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

**Methods for Clean-up:** Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## 7. HANDLING AND STORAGE

**Handling Technical Measures and Precautions:** Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment Wash thoroughly after handling Avoid contact with material. Remove contaminated clothing and wash before reuse "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous.

**Storage Technical Measures and Conditions:** Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition Keep away from heat, sparks, and flame

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**United States:**

| Chemical Name | CAS No. | IDLH | ACGIH STEL | ACGIH TLV-TWA | OSHA Exposure Limit |
|---|---|---|---|---|---|
| P&T Methanol | 67-56-1 | 6000 ppm IDLH | 250 ppm STEL | 200 ppm TWA | 200 ppm TWA; 260 mg/m3 TWA |
| Vinyl acetate | 108-05-4 | Not established | 15 ppm STEL; 53 mg/m3 STEL | 10 ppm TWA; 35 mg/m3 TWA | No data available |

**Personal Protection:**

**Engineering Measures:** Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

**Respiratory Protection:** No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur as explained Section 3. A respirator is not normally required.If an exposure limit is exceeded or if an operator is experiencing symptoms of inhalation overexposure as explained in Section 3, provide respiratory protection.

**Eye Protection:** Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

**Skin Protection:** Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene and wear a barrier cream and/or impervious surgical style gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance, color:** | No data available |
| **Odor:** | Mild |
| **Physical State:** | Liquid |
| **pH:** | Not applicable |
| **Vapor Pressure:** | No data available |
| **Vapor Density:** | 1.1 (air = 1) |
| **Boiling Point (°C):** | 72.8 °C (HSDB) 64.7 °C at 760 mmHg (HSDB) |

| | |
|---|---|
| **Melting Point (°C):** | -98 °C |
| **Flash Point (°F):** | 18 |
| **Flammability:** | Highly Flammable Extremely Flammable |
| **Upper Flammable/Explosive Limit, % in air:** | 36 |
| **Lower Flammable/Explosive Limit, % in air:** | 6 |
| **Autoignition Temperature (°C):** | 464 deg C |
| **Decomposition Temperature (°C):** | 0 |
| **Specific Gravity:** | 0.791 - 0.792 g/cm3 at 20 °C |
| **Evaporation Rate:** | No data available |
| **Odor Threshold:** | No data available |
| **Solubility:** | Moderate; 50-99% |
| **Partition Coefficient: n-octanol in water:** | No data available |
| **VOC % by weight:** | 99.8 |
| **Molecular Weight:** | 32.04 |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability:** | Stable under normal conditions. |
| **Conditions to Avoid:** | None known.Contamination |
| **Materials to Avoid / Chemical Incompatiability:** | Acids Oxidizing materials Peroxides Strong alkalies |
| **Hazardous Decomposition Products:** | Carbon dioxide Carbon monoxide |

## 11. TOXICOLOGICAL INFORMATION

| | |
|---|---|
| **Routes of Entry:** | Inhalation, Skin Contact, Eye Contact, Ingestion |
| **Target Organs Potentially Affected By Exposure:** | Eyes, Central nervous system stimulation, Skin, GI Tract, Respiratory Tract |
| **Chemical Interactions That Change Toxicity:** | None Known |

**Immediate (Acute) Health Effects by Route of Exposure:**

| | |
|---|---|
| **Inhalation Irritation:** | Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. |
| **Inhalation Toxicity:** | Harmful! Can cause systemic damage (see "Target Organs)Methanol can cause central nervous system depression and overexposure can cause damage to the optic nerve resulting in visual impairment or blindness. |
| **Skin Contact:** | Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. |
| **Eye Contact:** | Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue. |
| **Ingestion Irritation:** | Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.Highly toxic and may be fatal if swallowed. |
| **Ingestion Toxicity:** | Toxic if swallowed. May cause target organ failure and/or death.May be fatal if swallowed. |

**Long-Term (Chronic) Health Effects:**

| | |
|---|---|
| **Carcinogenicity:** | No data. |
| **Reproductive and Developmental Toxicity:** | No data available to indicate product or any components present at greater than 0.1% may cause birth defects. |
| **Inhalation:** | Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs) |
| **Skin Contact:** | Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. |
| **Skin Absorption:** | Upon prolonged or repeated exposure, no hazard in normal industrial use. |
| **Ingestion:** | Toxic if swallowed. May cause target organ failure and/or death. |

**Component Toxicological Data:**
**NIOSH:**

| Chemical Name | CAS No. | LD50/LC50 |
|---|---|---|
| Vinyl acetate<br>Acetic acid, vinyl ester | 108-05-4 | Inhalation LC50 Rat : 11400 mg/m3/4H; Inhalation LC50 Mouse : 1550 ppm/4H; Oral LD50 Rat : 2920 mg/kg; Oral LD50 Mouse : 1613 mg/kg; Dermal LD50 Rabbit : 2335 mg/kg |

| | | |
|---|---|---|
| Methanol | 67-56-1 | Inhalation LC50 Rat 22500 ppm 8 h |

**Component Carcinogenic Data:**

**OSHA:**

| Chemical Name | CAS No. | |
|---|---|---|
| Vinyl acetate | 108-05-4 | Present |

**ACGIH:**

| Chemical Name | CAS No. | |
|---|---|---|
| Vinyl acetate | 108-05-4 | A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans |

**NIOSH:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**NTP:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**IARC:**

| Chemical Name | CAS No. | Group No. |
|---|---|---|
| Monograph 63; 1995 | 108-05-4 | Group 2B |

## 12. ECOLOGICAL INFORMATION

| | |
|---|---|
| **Overview:** | Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. |
| **Mobility:** | No data |
| **Persistence:** | No data |
| **Bioaccumulation:** | No data |
| **Degradability:** | Biodegrades slowly. |
| **Ecological Toxicity Data:** | No data available |

## 13. DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **Waste Description of Spent Product:** | Spent or discarded material is a hazardous waste.Mixing spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous waste determination on mixtures. |
| **Disposal Methods:** | Dispose of by incineration following Federal, State, Local, or Provincial regulations. |
| **Waste Disposal of Packaging:** | Comply with all Local, State, Federal, and Provincial Environmental Regulations. |

## 14. TRANSPORTATION INFORMATION

**United States:**

| | |
|---|---|
| **DOT Proper Shipping Name:** | Flammable liquids, n.o.s. (Methanol, Ethyl acetate) |
| **UN Number:** | UN1993 |
| **Hazard Class:** | 3 |
| | 3 |
| **Packing Group:** | II |

**International:**

| | |
|---|---|
| **IATA Proper Shipping Name:** | Flammable liquids, n.o.s. (Methanol, Ethyl acetate) |
| **UN Number:** | UN1993 |
| **Hazard Class:** | 3 |
| **Packing Group:** | II |

**Marine Pollutant:** No

| Chemical Name | CAS# | Marine Pollutant | Severe Marine Pollutant |
|---|---|---|---|
| No data available | | | |

## 15. REGULATORY INFORMATION

**United States:**

| Chemical Name | CAS# | CERCLA | SARA 313 | SARA EHS 313 | TSCA |
|---|---|---|---|---|---|
| P&T Methanol | 67-56-1 | X | X | - | X |
| Vinyl acetate | 108-05-4 | X | X | X | X |

**The following chemicals are listed on CA Prop 65:**

| Chemical Name | CAS # | Regulation |
|---|---|---|
| Methanol | 67-56-1 | Prop 65 Devolop Tox |

**State Right To Know Listing:**

| Chemical Name | CAS# | New Jersey | Massachusetts | Pennsylvania | California |
|---|---|---|---|---|---|
| P&T Methanol | 67-56-1 | X | X | X | X |
| Propyl acetate | 109-60-4 | X | X | X | X |
| Isopropyl acetate | 108-21-4 | X | X | X | X |
| Vinyl acetate | 108-05-4 | X | X | X | X |
| Butyl acetate | 123-86-4 | X | X | X | X |
| Methyl acetate | 79-20-9 | X | X | X | X |
| Ethyl acetate | 141-78-6 | X | X | X | X |
| Amyl acetate | 628-63-7 | X | X | X | X |

## 16. OTHER INFORMATION

**Prior Version Date:** 05/14/19

**Other Information:** Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph.

**References:** No data available

**Disclaimer:** Restek Corporation provides the descriptions, data and information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding products described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given and accepted at your risk.

RESTEK®
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Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

# CERTIFIED REFERENCE MATERIAL

## Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

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. :** 555408-FL **Lot No.:** A0164091

**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 :** March 31, 2022 **Storage:** 0°C or colder

**Handling:** This product is photosensitive. **Ship:** Ambient

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | Vinyl acetate | 8,080.0 µg/mL | +/- 47.4180 | µg/mL | Gravimetric |
| | **CAS #** 108-05-4 (Lot 192709KJ) | | +/- 487.5448 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 488.7021 | µg/mL | Stressed |

**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.

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

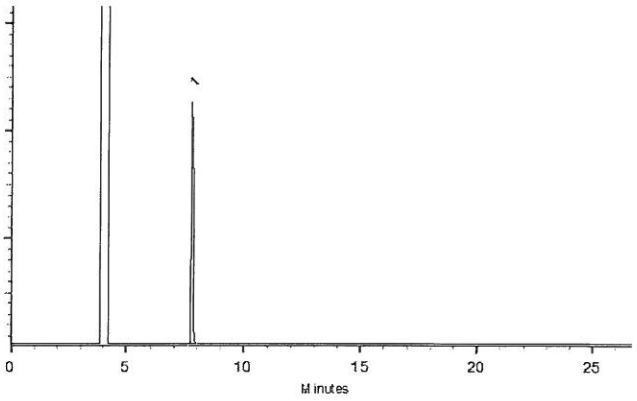
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Brandon Reish - Mix Technician

**Date Mixed:** 01-Sep-2020 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

**Date Passed:** 10-Sep-2020

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

**General Certified Reference Material Notes**

**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

**Purity Notes:**

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

**Certified Uncertainty Value Notes:**

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value ( includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

$k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

| Label Conditions | Standard Conditions | Non-Standard Conditions |
|---|---|---|
| 25°C Nominal (Room Temperature) | < 60°C | ≥ 60°C up to 7 days |
| 10°C or colder (Refrigerate) | < 40°C | ≥ 40°C up to 7 days |
| 0°C or colder (Freezer)<br>-20°C or colder (Deep Freezer) | < 25°C | ≥ 25°C up to 7 days |

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

**Manufacturing Notes:**

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

**Handling Notes:**

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

RESTEK®
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www.restek.com

# CERTIFIED REFERENCE MATERIAL

## Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555408-SL **Lot No.:** A0164211

**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 :** March 31, 2022 **Storage:** 0°C or colder

**Handling:** This product is photosensitive. **Ship:** Ambient

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | Vinyl acetate | 8,010.0 µg/mL | +/- 47.0072 | µg/mL | Gravimetric |
| | **CAS #** 108-05-4 (Lot 192709KJ) | | +/- 483.3210 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 484.4683 | µg/mL | Stressed |

**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.

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

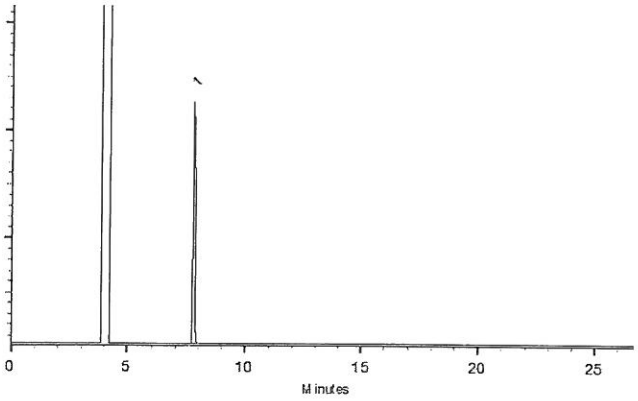
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Lane Kibe - Mix Technician

**Date Mixed:** 08-Sep-2020 **Balance:** B251644995

Justine Albertson - Operations Tech-ARM QC

**Date Passed:** 10-Sep-2020

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

**General Certified Reference Material Notes**

**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

**Purity Notes:**

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

**Certified Uncertainty Value Notes:**

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value ( includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

$k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

| Label Conditions | Standard Conditions | Non-Standard Conditions |
|---|---|---|
| 25°C Nominal (Room Temperature) | < 60°C | ≥ 60°C up to 7 days |
| 10°C or colder (Refrigerate) | < 40°C | ≥ 40°C up to 7 days |
| 0°C or colder (Freezer)<br>-20°C or colder (Deep Freezer) | < 25°C | ≥ 25°C up to 7 days |

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

**Manufacturing Notes:**

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

**Handling Notes:**

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

RESTEK®
110 Benner Circle
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# CERTIFIED REFERENCE MATERIAL

## Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555408-SL **Lot No.:** A0168095

**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 :** July 31, 2022 **Storage:** -20°C or colder

**Handling:** This product is photosensitive. **Ship:** On Ice

**CERTIFIED VALUES**

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | Vinyl acetate<br>**CAS #** 108-05-4 (Lot RD200601)<br>**Purity** 99% | 8,070.0 µg/mL | +/- 47.3593<br>+/- 486.9414<br>+/- 488.0973 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**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.

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

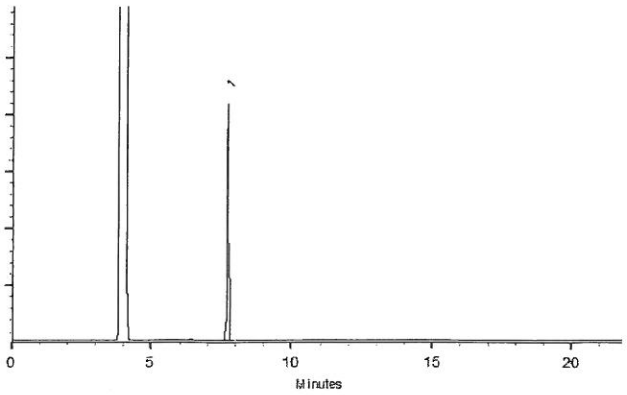
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Lane Kibe - Mix Technician

**Date Mixed:** 13-Jan-2021 **Balance:** 1128342314

Justine Albertson - Operations Tech-ARM QC

**Date Passed:** 15-Jan-2021

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

**General Certified Reference Material Notes**

**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

**Purity Notes:**

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

**Certified Uncertainty Value Notes:**

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value ( includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

*k* is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

| Label Conditions | Standard Conditions | Non-Standard Conditions |
|---|---|---|
| 25°C Nominal (Room Temperature) | < 60°C | ≥ 60°C up to 7 days |
| 10°C or colder (Refrigerate) | < 40°C | ≥ 40°C up to 7 days |
| 0°C or colder (Freezer)<br>-20°C or colder (Deep Freezer) | < 25°C | ≥ 25°C up to 7 days |

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

**Manufacturing Notes:**

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

**Handling Notes:**

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

**Absolute Standards, Inc.**
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www.absolutestandards.com

*Certified Reference Material CRM*

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

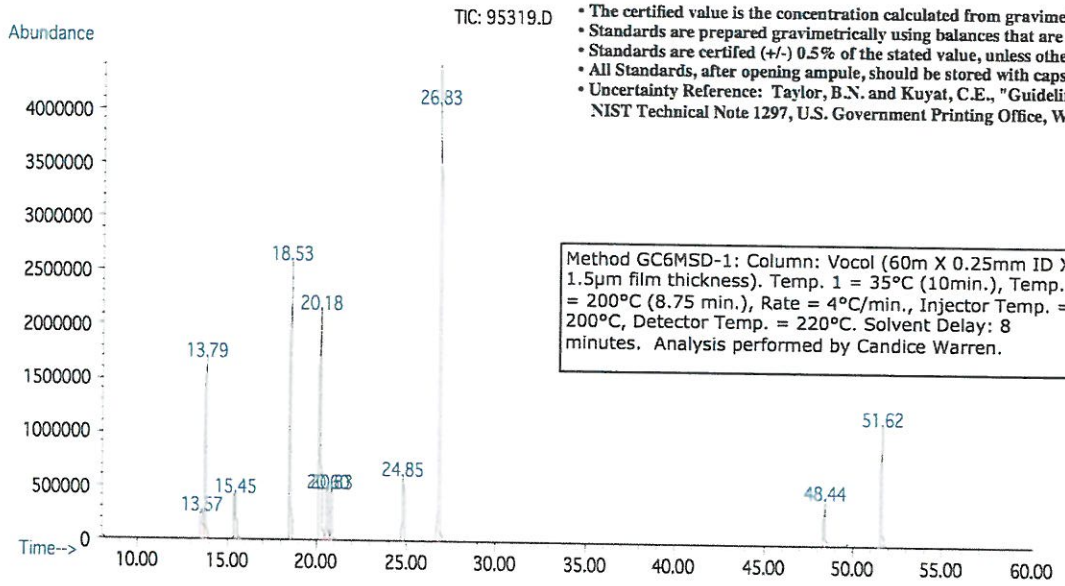
**Part Number:** 95319
Lot Number: 050119
Description: Revised Additions Mix
11 components
Expiration Date: 050122
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): Varied
NIST Test ID#: 6UTB

**Solvent(s):** **Lot#**
Methanol DU230-US

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.001 Flask Uncertainty

| | | |
|---|---|---|
| Formulated By: | Justin Dippold | 050119 DATE |
| Reviewed By: | Pedro L. Rentas | 050119 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 | 1.01021 | 1.01045 | 10002.4 | 40.4 | 107-13-1 | N/A | orl-rat 78 mg/kg |
| 2. 1-Chlorobutane | 1072 | 15538EZ | 2000 | 99.5 | 0.2 | 0.20103 | 0.20124 | 2002.1 | 8.1 | 109-69-3 | N/A | orl-rat 2670mg/kg |
| 3. Cyclohexane | 1023 | SHBD2795V | 2000 | 99.5 | 0.2 | 0.20103 | 0.20118 | 2001.5 | 8.1 | 110-82-7 | 300 ppm (1050mg/m3/8H) | orl-rat 12705mg/kg |
| 4. Di-isopropyl ether (DIPE) | 987 | 00412MX | 2000 | 99 | 0.2 | 0.20204 | 0.20222 | 2001.8 | 8.1 | 108-20-3 | 500 ppm (2100mg/m3/8H) | orl-rat 8470mg/kg |
| 5. 1,4-Dioxane | 373 | 03853KE | 40000 | 99 | 0.2 | 4.04085 | 4.04123 | 40003.8 | 161.6 | 123-91-1 | 25 ppm (90mg/m3/8H)(skin) | orl-mus 5700mg/kg |
| 6. Hexachloroethane | 199 | 12604HBV | 2000 | 99 | 0.2 | 0.20204 | 0.20223 | 2001.9 | 8.1 | 67-72-1 | 1 ppm (10mg/m3/8H)(skin) | orl-gpg 4970mg/kg |
| 7. Methylcyclohexane | 1627 | 08046KN | 2000 | 99 | 0.2 | 0.20204 | 0.20219 | 2001.5 | 8.1 | 108-87-2 | N/A | N/A |
| 8. Methyl tert-butyl ether (MTBE) | 209 | 02197JJ | 2000 | 99.8 | 0.2 | 0.20042 | 0.20059 | 2001.7 | 8.1 | 1634-04-4 | N/A | orl-rat 4g/kg |
| 9. Propionitrile | 349 | 1395468 | 20000 | 99 | 0.2 | 2.02042 | 2.02067 | 20002.4 | 80.8 | 107-12-0 | N/A | orl-rat 39mg/kg |
| 10. Tetrahydrofuran | 380 | 113886 | 10000 | 99.9 | 0.2 | 1.00111 | 1.00139 | 10002.8 | 40.1 | 109-99-9 | 20 ppm (590mg/m3/8H) | orl-rat 2500mg/kg |
| 11. 1,2,3,4-Tetramethylbenzene | 491 | AP01 | 2000 | 93 | 0.2 | 0.21508 | 0.21530 | 2002.1 | 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 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).

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 |

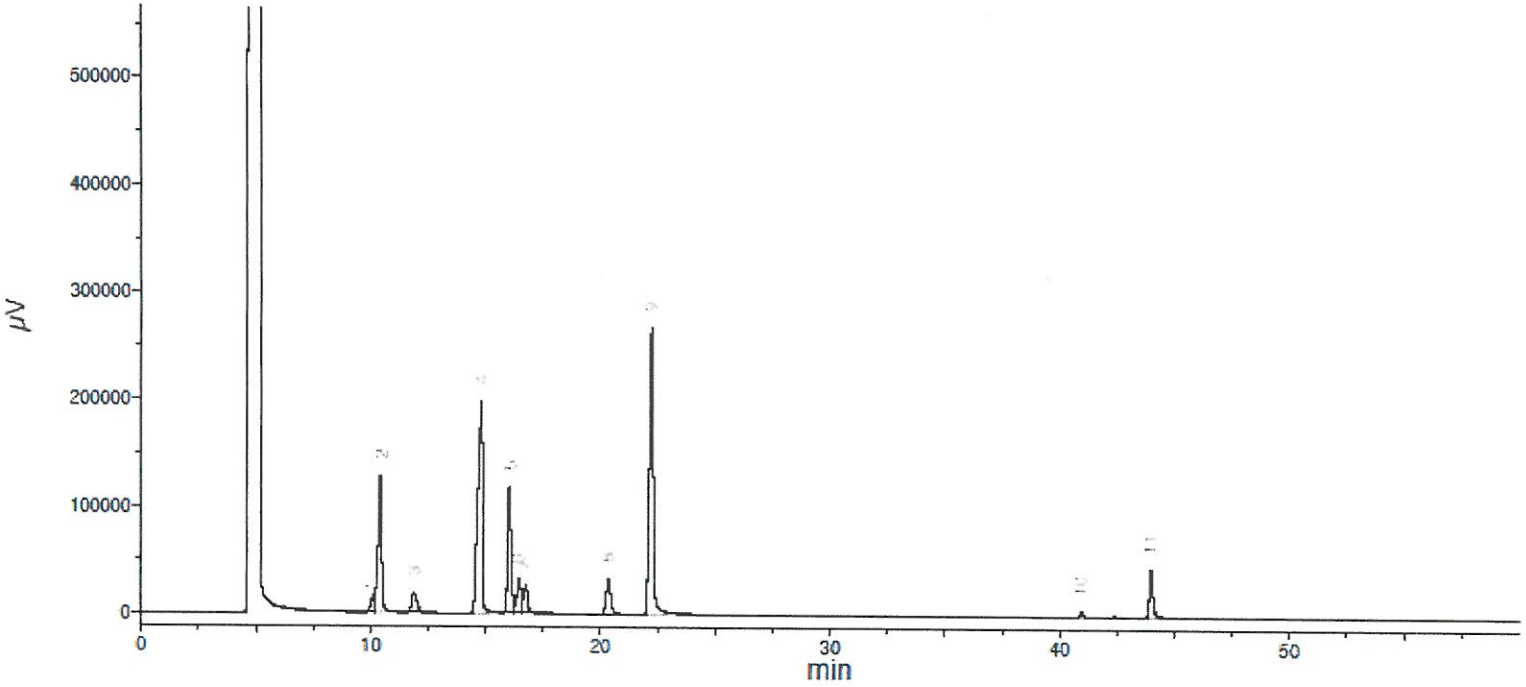
## Run 5, "P95319 L050119 [Varied in MeOH]"

Run Length: 60.00 min, 36000 points at 10 points/second.
Created: Fri, May 3, 2019 at 10:19:18 PM.
Sampled: Sequence "050319-GC13M1", Method "GC13-M1".
Analyzed using Method "GC13-M1".

| Name | FID RT (min.) |
|---|---|
| Methyl tert-butyl ether (MTBE) | 9.97 |
| Acrylonitrile | 10.40 |
| Di-isopropyl ether | 11.87 |
| Propionitrile | 14.80 |
| Tetrahydrofuran | 16.02 |
| Cyclohexane | 16.45 |
| 1-Chlorobutane | 16.73 |
| Methylcyclohexane | 20.34 |
| 1,4-Dioxane | 22.22 |
| Hexachloroethane | 40.96 |
| 1,2,3,4-Tetramethylbenzene | 43.97 |

### Comments

GC13-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=6



**Absolute Standards, Inc.**
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*Certified Reference Material CRM*

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

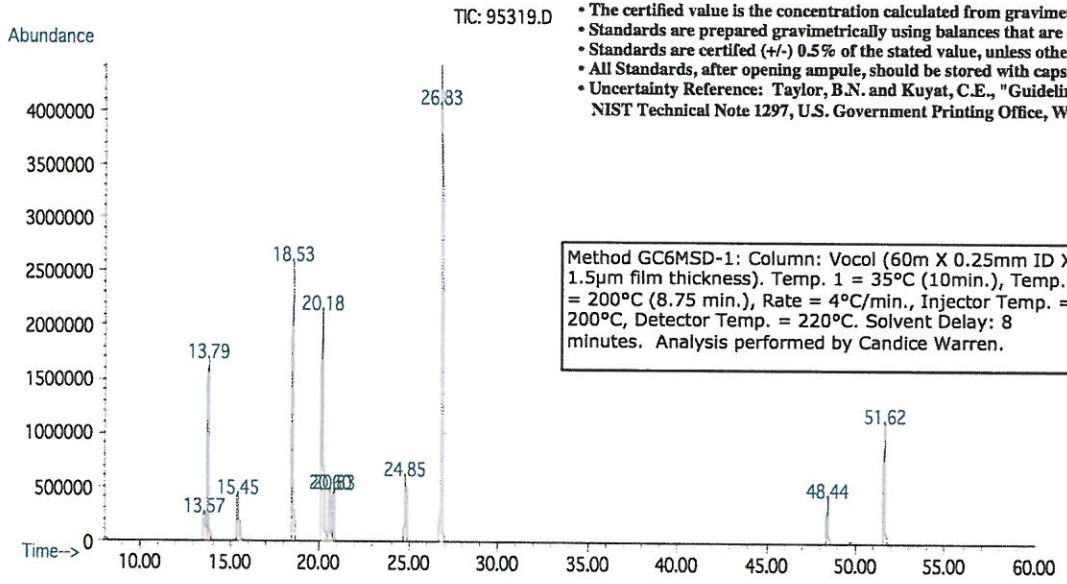
**Part Number:** 95319
Lot Number: 050219
Description: Revised Additions Mix
11 components
Expiration Date: 050222
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): Varied
NIST Test ID#: 6UTB

**Solvent(s):** Methanol **Lot#** DU230-US

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.001 Flask Uncertainty

| | | |
|---|---|---|
| Formulated By: | Prashant Chauhan | 050219 DATE |
| Reviewed By: | Pedro L. Rentas | 050219 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 | 1.01021 | 1.01061 | 10003.9 | 40.4 | 107-13-1 | N/A | orl-rat 78 mg/kg |
| 2. | 1-Chlorobutane | 1072 | 15538EZ | 2000 | 99.5 | 0.2 | 0.20103 | 0.20120 | 2001.7 | 8.1 | 109-69-3 | N/A | orl-rat 2670mg/kg |
| 3. | Cyclohexane | 1023 | SHBD2795V | 2000 | 99.5 | 0.2 | 0.20103 | 0.20120 | 2001.7 | 8.1 | 110-82-7 | 300 ppm (1050mg/m3/8H) | orl-rat 12705mg/kg |
| 4. | Di-isopropyl ether (DIPE) | 987 | 00412MX | 2000 | 99 | 0.2 | 0.20204 | 0.20224 | 2002.0 | 8.1 | 108-20-3 | 500 ppm (2100mg/m3/8H) | orl-rat 8470mg/kg |
| 5. | 1,4-Dioxane | 373 | 03853KE | 40000 | 99 | 0.2 | 4.04085 | 4.04110 | 40002.5 | 161.6 | 123-91-1 | 25 ppm (90mg/m3/8H)(skin) | orl-mus 5700mg/kg |
| 6. | Hexachloroethane | 199 | 12604HBV | 2000 | 99 | 0.2 | 0.20204 | 0.20220 | 2001.6 | 8.1 | 67-72-1 | 1 ppm (10mg/m3/8H)(skin) | orl-gpg 4970mg/kg |
| 7. | Methylcyclohexane | 1627 | 08046KN | 2000 | 99 | 0.2 | 0.20204 | 0.20224 | 2002.0 | 8.1 | 108-87-2 | N/A | N/A |
| 8. | Methyl tert-butyl ether (MTBE) | 209 | 02197JJ | 2000 | 99.8 | 0.2 | 0.20042 | 0.20062 | 2002.0 | 8.1 | 1634-04-4 | N/A | orl-rat 4g/kg |
| 9. | Propionitrile | 349 | 1395468 | 20000 | 99 | 0.2 | 2.02042 | 2.02082 | 20003.9 | 80.8 | 107-12-0 | N/A | orl-rat 39mg/kg |
| 10. | Tetrahydrofuran | 380 | 113886 | 10000 | 99.9 | 0.2 | 1.00111 | 1.00151 | 10004.0 | 40.1 | 109-99-9 | 20 ppm (590mg/m3/8H) | orl-rat 2500mg/kg |
| 11. | 1,2,3,4-Tetramethylbenzene | 491 | AP01 | 2000 | 93 | 0.2 | 0.21508 | 0.21540 | 2003.0 | 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.

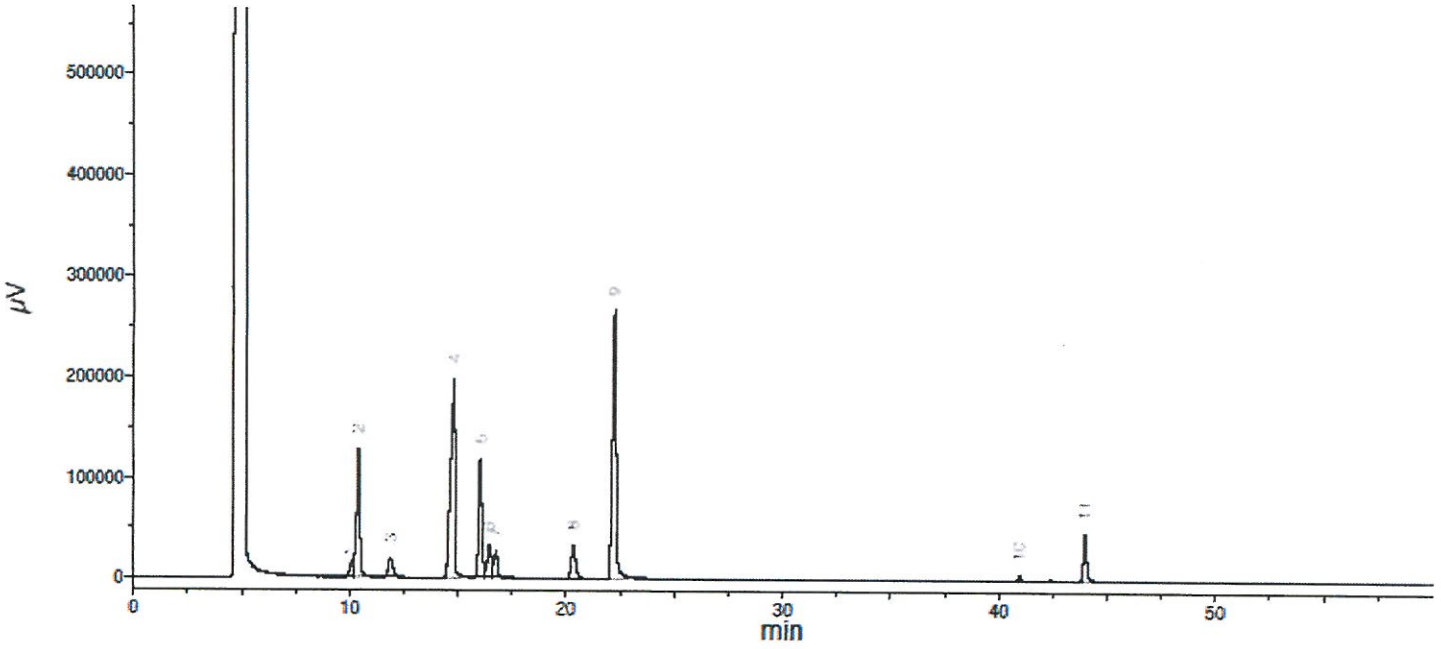
| Name | MSD RT (min.) |
|---|---|
| Methyl tert-butyl ether (MTBE) | 13.56 |
| Acrylonitrile | 13.79 |
| Di-isopropyl ether | 15.44 |
| Propionitrile | 18.53 |
| Tetrahydrofuran | 20.17 |
| Cyclohexane | 20.58 |
| 1-Chlorobutane | 20.83 |
| Methylcyclohexane | 24.84 |
| 1,4-Dioxane | 26.84 |
| Hexachloroethane | 48.44 |
| 1,2,3,4-Tetramethylbenzene | 51.62 |

## Run 4, "P95319 L050219 [Varied in MeOH]"

Run Length: 60.00 min, 36000 points at 10 points/second.
Created: Fri, May 3, 2019 at 9:08:02 PM.
Sampled: Sequence "050319-GC13M1", Method "GC13-M1".
Analyzed using Method "GC13-M1".

**Comments**
GC13-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=6

| Name | FID RT (min.) |
|---|---|
| Methyl tert-butyl ether (MTBE) | 9.97 |
| Acrylonitrile | 10.40 |
| Di-isopropyl ether | 11.87 |
| Propionitrile | 14.80 |
| Tetrahydrofuran | 16.02 |
| Cyclohexane | 16.45 |
| 1-Chlorobutane | 16.73 |
| Methylcyclohexane | 20.34 |
| 1,4-Dioxane | 22.22 |
| Hexachloroethane | 40.96 |
| 1,2,3,4-Tetramethylbenzene | 43.97 |



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# CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30067 **Lot No.:** A0147670

**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 :** April 30, 2024 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | 1-Bromo-4-fluorobenzene (BFB) | 2,511.0 µg/mL | +/- 14.7360 | µg/mL | Gravimetric |
| | **CAS #** 460-00-4 (Lot 20401KO) | | +/- 140.8035 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 144.0975 | 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)

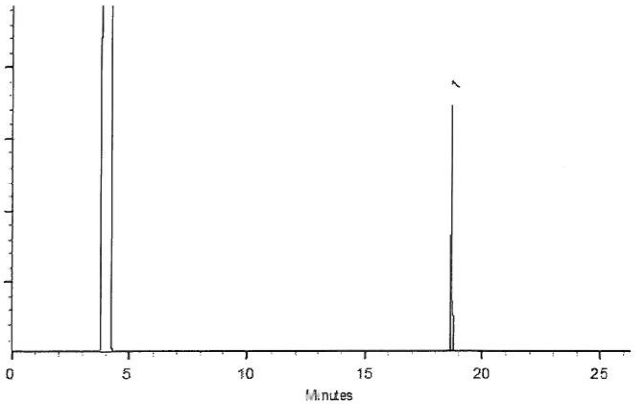
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Dustin J. Lidgett

Dustin Lidgett - Mix Technician

**Date Mixed:** 01-Apr-2019 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

**Date Passed:** 04-Apr-2019

**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) | < 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.
- 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: (800)356-1688
Fax: (814)353-1309

www.restek.com

# CERTIFIED REFERENCE MATERIAL

## Gravimetric Certificate

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555581 **Lot No.:** A0153385

**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 :** September 30, 2022 **Storage:** 10°C or colder

### CERTIFIED VALUES

| Component # | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | 1,4-Dichlorobenzene-d4<br>**CAS #** 3855-82-1<br>**Purity** 99% | (Lot PR-18488) | 25,060.0 µg/mL | +/- 231.9100<br>+/- 1,416.6261<br>+/- 1,449.2417 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 1,4-Difluorobenzene<br>**CAS #** 540-36-3<br>**Purity** 99% | (Lot MKBN8571V) | 25,092.0 µg/mL | +/- 232.2061<br>+/- 1,418.4350<br>+/- 1,451.0923 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Chlorobenzene-d5<br>**CAS #** 3114-55-4<br>**Purity** 99% | (Lot PR-29571/02028CZ1) | 25,056.0 µg/mL | +/- 231.8729<br>+/- 1,416.4000<br>+/- 1,449.0104 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | Pentafluorobenzene<br>**CAS #** 363-72-4<br>**Purity** 99% | (Lot MKCH1850) | 25,072.0 µg/mL | +/- 232.0210<br>+/- 1,417.3044<br>+/- 1,449.9357 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

Joseph Jaglowski - Mix Technician

**Date Mixed:** 27-Sep-2019 **Balance:** B707717271

**Manufactured under Restek's ISO 9001:2008 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) | < 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK

# Safety Data Sheet

**Revision Date: 12/15/16**
www.restek.com

## 1. IDENTIFICATION

| | |
|---|---|
| **Catalog Number / Product Name:** | **555581 / Custom 8260 Internal Standard Mix** |
| **Company:** | Restek Corporation |
| **Address:** | 110 Benner Circle<br>Bellefonte, Pa. 16823 |
| **Phone#:** | 814-353-1300 |
| **Fax#:** | 814-353-1309 |
| **Emergency#:** | 800-424-9300 (CHEMTREC)<br>703-527-3887 (Outside the US) |
| **Email:** | www.restek.com |
| **Revision Number:** | 7 |
| **Intended use:** | For Laboratory use only |

## 2. HAZARD(S)IDENTIFICATION

**Emergency Overview:**

**GHS Hazard Symbols:**





| | |
|---|---|
| **GHS Classification:** | Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1<br>Flammable Liquid Category 2<br>Acute Toxicity - Dermal Category 3<br>Acute Toxicity - Oral Category 3 |
| **GHS Signal Word:** | Danger |
| **GHS Hazard:** | Highly flammable liquid and vapour.<br>Toxic if swallowed or in contact with skin.<br>Causes damage to organs. |
| **GHS Precautions:** | |
| **Safety Precautions:** | Keep away from heat/sparks/open flames/hot surfaces. – No smoking.<br>Keep container tightly closed.<br>Ground/bond container and receiving equipment.<br>Use explosion-proof electrical/ventilation and lighting equipment.<br>Use only non-sparking tools.<br>Take precautionary measures against static discharge.<br>Do not breathe dust/fume/gas/mist/vapours/spray.<br>Wash hands and skin thoroughly after handling.<br>Do not eat, drink or smoke when using this product.<br>Wear protective gloves/protective clothing/eye protection/face protection. |
| **First Aid Measures:** | IF SWALLOWED: Immediately call a POISON CENTER/doctor/....<br>IF ON SKIN: Wash with plenty of soap and water.<br>IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>IF exposed: Call a POISON CENTER or doctor/physician.<br>Call a POISON CENTER or doctor/physician if you feel unwell.<br>Specific treatment see section 4.<br>Rinse mouth.<br>Take off immediately all contaminated clothing and wash it before reuse.<br>In case of fire: Use extinguishing media in section 5 for extinction. |
| **Storage:** | Store in a well-ventilated place. Keep cool.<br>Store locked up. |

**Disposal:** Dispose of contents/container according to section 13 of the SDS.

**Single Exposure Target Organs:** No data available.

**Repeated Exposure Target Organs:** No data available.

## 3. COMPOSITION / INFORMATION ON INGREDIENT

| Chemical Name | CAS # | EINEC # | % Composition |
|---|---|---|---|
| methanol | 67-56-1 | 200-659-6 | 90.000000 |
| 1,4-difluorobenzene | 540-36-3 | 208-742-9 | 2.500000 |
| pentafluorobenzene | 363-72-4 | 206-658-7 | 2.500000 |
| 1,4-dichlorobenzene-d4 | 3855-82-1 | | 2.500000 |
| chlorobenzene-d5 | 3114-55-4 | 221-482-0 | 2.500000 |

## 4. FIRST-AID MEASURES

**Inhalation:** Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately

**Eyes:** Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

**Skin Contact:** Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

**Ingestion:** Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this SDS.

## 5. FIRE- FIGHTING MEASURES

**Extinguishing Media:** Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire.

**Fire and/or Explosion Hazards:** Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back.

**Fire Fighting Methods and Protection:** Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use water spray/fog for cooling.

**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment:** Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

**Methods for Clean-up:** Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal

evaluation.

## 7. HANDLING AND STORAGE

| | |
|---|---|
| **Handling Technical Measures and Precautions:** | Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment |
| **Storage Technical Measures and Conditions:** | Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**United States:**

| Chemical Name | CAS No. | IDLH | ACGIH STEL | ACGIH TLV-TWA | OSHA Exposure Limit |
|---|---|---|---|---|---|
| methanol | 67-56-1 | 6000 ppm IDLH | 250 ppm STEL | 200 ppm TWA | 200 ppm TWA; 260 mg/m3 TWA |
| 1,4-difluorobenzene | 540-36-3 | ND | | No TLV | No data available. |
| pentafluorobenzene | 363-72-4 | ND | | No TLV | No data available. |
| 1,4-dichlorobenzene-d4 | 3855-82-1 | ND | | No TLV | No data available. |
| chlorobenzene-d5 | 3114-55-4 | ND | | No TLV | No data available. |

**Personal Protection:**

| | |
|---|---|
| **Engineering Measures:** | Local exhaust ventilation is recommended when generating excessive levels of vapors from handling or thermal processing. |
| **Respiratory Protection:** | Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.If an exposure limit is exceeded or if an operator is experiencing symptoms of inhalation overexposure as explained in Section 3, provide respiratory protection. |
| **Eye Protection:** | Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses. |
| **Skin Protection:** | Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance, color:** | No data available. |
| **Odor:** | Mild |
| **Physical State:** | No data available. |
| **pH:** | No data available. |
| **Vapor Pressure:** | No data available. |
| **Vapor Density:** | 1.1 (air = 1) |
| **Boiling Point:** | No data available. |
| **Melting Point:** | -98 °C |
| **Flash Point:** | 36 |
| **Flammability:** | Highly Flammable |
| **Upper Flammable/Explosive Limit, % in air:** | 36 |
| **Lower Flammable/Explosive Limit, % in air:** | 6 |
| **Autoignition Temperature:** | 464 deg C |
| **Decomposition Temperature:** | No data available. |
| **Specific Gravity:** | 0.791 - 0.792 g/cm3 at 20 °C |
| **Evaporation Rate:** | No data available. |
| **Odor Threshold:** | No data available. |
| **Solubility:** | Moderate; 50-99% |
| **Partition Coefficient: n-octanol in water:** | No data available. |
| **VOC % by weight:** | 90 |
| **Molecular Weight:** | 32.04 |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability:** | Stable under normal conditions. |
| **Conditions to Avoid:** | No data available. |
| **Materials to Avoid / Chemical Incompatiability:** | Strong oxidizing agents |

**Hazardous Decomposition Products:** Carbon dioxide Carbon monoxide

## 11. TOXICOLOGICAL INFORMATION

**Routes of Entry:** Inhalation, Skin Contact, Eye Contact, Ingestion
**Target Organs Potentially Affected By Exposure:** Eyes, Central nervous system stimulation, Skin, GI Tract, Respiratory Tract
**Chemical Interactions That Change Toxicity:** None Known

**Immediate (Acute) Health Effects by Route of Exposure:**

**Inhalation Irritation:** Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.

**Inhalation Toxicity:** Harmful! Can cause systemic damage (see "Target Organs)Methanol can cause central nervous system depression and overexposure can cause damage to the optic nerve resulting in visual impairment or blindness.

**Skin Contact:** Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

**Eye Contact:** Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.

**Ingestion Irritation:** Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.Highly toxic and may be fatal if swallowed.

**Ingestion Toxicity:** Toxic if swallowed. May cause target organ failure and/or death.May be fatal if swallowed.

**Long-Term (Chronic) Health Effects:**

**Carcinogenicity:** No data.

**Reproductive and Developmental Toxicity:** Contains a known human reproductive and/or developmental hazard.

**Inhalation:** Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs)

**Skin Contact:** Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

**Skin Absorption:** Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause severe irritation and systemic damage

**Ingestion:** Toxic if swallowed. May cause target organ failure and/or death.

**Component Toxicological Data:**
**NIOSH:**

| Chemical Name | CAS No. | LD50/LC50 |
|---|---|---|
| Methanol | 67-56-1 | Inhalation LC50 Rat 22500 ppm 8 h |
| Benzene, 1,2,3,4,5-pentafluoro- | 363-72-4 | Oral LD50 Rat 2 g/kg |

**Component Carcinogenic Data:**
**OSHA:**

| Chemical Name | CAS No. |
|---|---|
| No data available. | |

**ACGIH:**

| Chemical Name | CAS No. |
|---|---|
| No data available. | |

**NIOSH:**

| Chemical Name | CAS No. |
|---|---|
| No data available. | |

**NTP:**

| Chemical Name | CAS No. |
|---|---|
| No data available. | |

**IARC:**

| Chemical Name | CAS No. | Group No. |
|---|---|---|
| No data. | | Group 1 |

No data. Group 2A
No data. Group 2B

## 12. ECOLOGICAL INFORMATION

| | |
|---|---|
| **Overview:** | Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. |
| **Mobility:** | No data |
| **Persistence:** | No data |
| **Bioaccumulation:** | No data |
| **Degradability:** | Biodegrades slowly. |
| **Ecological Toxicity Data:** | No data available. |

## 13. DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **Waste Description of Spent Product:** | Spent or discarded material is a hazardous waste. |
| **Disposal Methods:** | Dispose of by incineration following Federal, State, Local, or Provincial regulations. |
| **Waste Disposal of Packaging:** | Comply with all Local, State, Federal, and Provincial Environmental Regulations. |

## 14. TRANSPORTATION INFORMATION

**United States:**

| | |
|---|---|
| **DOT Proper Shipping Name:** | Flammable liquids, n.o.s. (Methanol, Pentafluorobenzene) |
| **UN Number:** | UN1993 |
| **Hazard Class:** | 3 |
| **Packing Group:** | II |

**International:**

| | |
|---|---|
| **IATA Proper Shipping Name:** | Flammable liquids, n.o.s. (Methanol, Pentafluorobenzene) |
| **UN Number:** | UN1993 |
| **Hazard Class:** | 3 |
| **Packing Group:** | II |

**Marine Pollutant:** No

| Chemical Name | CAS# | Marine Pollutant | Severe Marine Pollutant |
|---|---|---|---|
| No data available. | | | |

## 15. REGULATORY INFORMATION

**United States:**

| Chemical Name | CAS# | CERCLA | SARA 313 | SARA EHS 313 | TSCA |
|---|---|---|---|---|---|
| methanol | 67-56-1 | X | X | - | X |
| 1,4-difluorobenzene | 540-36-3 | - | - | - | - |
| pentafluorobenzene | 363-72-4 | - | - | - | X |
| 1,4-dichlorobenzene-d4 | 3855-82-1 | - | - | - | - |
| chlorobenzene-d5 | 3114-55-4 | - | - | - | - |

**The following chemicals are listed on CA Prop 65:**

| Chemical Name | CAS # | Regulation |
|---|---|---|
| Methanol | 67-56-1 | Prop 65 Devolop Tox |

**State Right To Know Listing:**

| Chemical Name | CAS# | New Jersey | Massachusetts | Pennsylvania | California |
|---|---|---|---|---|---|
| methanol | 67-56-1 | X | X | X | X |
| 1,4-difluorobenzene | 540-36-3 | - | - | - | - |
| pentafluorobenzene | 363-72-4 | - | - | - | - |
| 1,4-dichlorobenzene-d4 | 3855-82-1 | - | - | - | - |
| chlorobenzene-d5 | 3114-55-4 | - | - | - | - |

## 16. OTHER INFORMATION

| | |
|---|---|
| **Prior Version Date:** | 03/03/16 |
| **Other Information:** | Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph. |
| **References:** | No data available. |
| **Disclaimer:** | Restek Corporation provides the descriptions, data and information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding prodcuts described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given and accepted at your risk. |

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# CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30489 **Lot No.:** A0155430

**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 :** June 30, 2021 **Storage:** 0°C or colder

**Handling:** This product is photosensitive.

## CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | Methyl acetate | | 2,012.7 µg/mL | +/- 11.8115 µg/mL | | Gravimetric |
| | **CAS #** 79-20-9 | (Lot SHBK5436) | | +/- 121.4437 µg/mL | | Unstressed |
| | **Purity** 99% | | | +/- 121.7320 µg/mL | | Stressed |
| 2 | Vinyl acetate | | 2,020.0 µg/mL | +/- 11.8545 µg/mL | | Gravimetric |
| | **CAS #** 108-05-4 | (Lot 192709KJ) | | +/- 121.8862 µg/mL | | Unstressed |
| | **Purity** 99% | | | +/- 122.1755 µg/mL | | Stressed |
| 3 | Ethyl acetate | | 2,018.7 µg/mL | +/- 11.8467 µg/mL | | Gravimetric |
| | **CAS #** 141-78-6 | (Lot SHBK2184) | | +/- 121.8058 µg/mL | | Unstressed |
| | **Purity** 99% | | | +/- 122.0949 µg/mL | | Stressed |
| 4 | Isopropyl acetate | | 2,012.7 µg/mL | +/- 11.8115 µg/mL | | Gravimetric |
| | **CAS #** 108-21-4 | (Lot BCBT9845) | | +/- 121.4437 µg/mL | | Unstressed |
| | **Purity** 99% | | | +/- 121.7320 µg/mL | | Stressed |
| 5 | Propyl acetate | | 2,018.7 µg/mL | +/- 11.8467 µg/mL | | Gravimetric |
| | **CAS #** 109-60-4 | (Lot MUZQD) | | +/- 121.8058 µg/mL | | Unstressed |
| | **Purity** 99% | | | +/- 122.0949 µg/mL | | Stressed |
| 6 | Butyl acetate | | 2,020.0 µg/mL | +/- 11.8545 µg/mL | | Gravimetric |
| | **CAS #** 123-86-4 | (Lot SHBK5137) | | +/- 121.8862 µg/mL | | Unstressed |
| | **Purity** 99% | | | +/- 122.1755 µg/mL | | Stressed |
| 7 | Amyl acetate | | 2,017.3 µg/mL | +/- 11.8388 µg/mL | | Gravimetric |
| | **CAS #** 628-63-7 | (Lot 41325/1) | | +/- 121.7253 µg/mL | | Unstressed |
| | **Purity** 99% | | | +/- 122.0142 µg/mL | | Stressed |

**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.

**Column:**
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

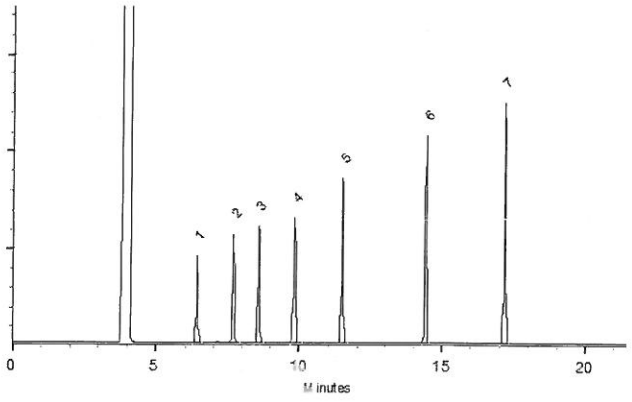
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Tom Suckar - Mix Technician

**Date Mixed:** 02-Dec-2019 **Balance:** B707717271

Justine Albertson - Operations Team-ARM QC

**Date Passed:** 04-Dec-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

RESTEK

# Safety Data Sheet

**Revision Date: 05/14/19**
www.restek.com

2 Letter ISO country code/language code: US/EN

## 1. IDENTIFICATION

| | |
|---|---|
| **Catalog Number / Product Name:** | **30489 / 8260B Acetates Mix** |
| **Company:** | Restek Corporation |
| **Address:** | 110 Benner Circle<br>Bellefonte, Pa. 16823 |
| **Phone#:** | 814-353-1300 |
| **Fax#:** | 814-353-1309 |
| **Emergency#:** | 800-424-9300 (CHEMTREC)<br>703-527-3887 (Outside the US) |
| **Email:** | www.restek.com |
| **Revision Number:** | 14 |
| **Intended use:** | For Laboratory use only |

## 2. HAZARD(S)IDENTIFICATION

**Emergency Overview:**

**GHS Hazard Symbols:**



| | |
|---|---|
| **GHS Classification:** | Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1<br>Flammable Liquid Category 2<br>Carcinogenicity Category 2<br>Acute Toxicity - Inhalation Dust / Mist Category 3<br>Acute Toxicity - Dermal Category 3<br>Acute Toxicity - Oral Category 3 |
| **GHS Signal Word:** | Danger |
| **GHS Hazard:** | Highly flammable liquid and vapour.<br>Toxic if swallowed, in contact with skin or if inhaled.<br>Suspected of causing cancer.<br>Causes damage to organs. |
| **GHS Precautions:** | |
| **Safety Precautions:** | Obtain special instructions before use.<br>Do not handle until all safety precautions have been read and understood.<br>Keep away from heat/sparks/open flames/hot surfaces. – No smoking.<br>Ground/bond container and receiving equipment.<br>Use explosion-proof electrical/ventilation and lighting equipment.<br>Use only non-sparking tools.<br>Take precautionary measures against static discharge.<br>Do not breathe dust/fume/gas/mist/vapours/spray.<br>Wash hands and skin thoroughly after handling.<br>Do not eat, drink or smoke when using this product.<br>Use only outdoors or in a well-ventilated area.<br>Wear protective gloves/protective clothing/eye protection/face protection. |
| **First Aid Measures:** | IF SWALLOWED: Immediately call a POISON CENTER/doctor/....<br>IF ON SKIN: Wash with plenty of soap and water.<br>IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>Specific treatment see section 4.<br>Rinse mouth. |

Take off immediately all contaminated clothing and wash it before reuse.
In case of fire: Use extinguishing media in section 5 for extinction.

**Storage:** Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.

**Disposal:** Dispose of contents/container according to section 13 of the SDS.

**Single Exposure Target Organs:** Specific target organ toxicity - Single exposure - STOT SE 1: H370 Causes damage to organs. (C >= 10 %; No information to prove exclusion of certain routes of exposure); Specific target organ toxicity - Single exposure - STOT SE 2: H371 May cause damage to organs. (3 % <= C <10 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given)

**Repeated Exposure Target Organs:** No data available

## 3. COMPOSITION / INFORMATION ON INGREDIENT

| Chemical Name | CAS # | EINEC # | % Composition |
|---|---|---|---|
| methanol | 67-56-1 | 200-659-6 | 98.6 |
| pentyl acetate (n-amyl acetate) | 628-63-7 | 211-047-3 | 0.2 |
| Isopropyl acetate | 108-21-4 | 203-561-1 | 0.2 |
| n-Butyl acetate | 123-86-4 | 204-658-1 | 0.2 |
| Vinyl acetate | 108-05-4 | 203-545-4 | 0.2 |
| n-Propyl acetate | 109-60-4 | 203-686-1 | 0.2 |
| Methyl acetate | 79-20-9 | 201-185-2 | 0.2 |
| Ethyl acetate | 141-78-6 | 205-500-4 | 0.2 |

## 4. FIRST-AID MEASURES

**Inhalation:** Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately

**Eyes:** Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention. Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.

**Skin Contact:** Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

**Ingestion:** Minimal risk of harm if swallowed. Do not induce vomiting. Seek medical attention immediately. Provide medical care provider with this SDS.

## 5. FIRE- FIGHTING MEASURES

**Extinguishing Media:** Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire. Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire.

**Fire and/or Explosion Hazards:** Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a source of ignition and flash back

**Fire Fighting Methods and Protection:** Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.

**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment:** Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

**Methods for Clean-up:** Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## 7. HANDLING AND STORAGE

**Handling Technical Measures and Precautions:** Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment Wash thoroughly after handling Avoid contact with material. Remove contaminated clothing and wash before reuse "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous.

**Storage Technical Measures and Conditions:** Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition Keep away from heat, sparks, and flame

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**United States:**

| Chemical Name | CAS No. | IDLH | ACGIH STEL | ACGIH TLV-TWA | OSHA Exposure Limit |
|---|---|---|---|---|---|
| methanol | 67-56-1 | 6000 ppm IDLH | 250 ppm STEL | 200 ppm TWA | 200 ppm TWA; 260 mg/m3 TWA |
| Vinyl acetate | 108-05-4 | Not established | 15 ppm STEL; 53 mg/m3 STEL | 10 ppm TWA; 35 mg/m3 TWA | No data available |

**Personal Protection:**

**Engineering Measures:** Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

**Respiratory Protection:** No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur as explained Section 3. A respirator is not normally required.If an exposure limit is exceeded or if an operator is experiencing symptoms of inhalation overexposure as explained in Section 3, provide respiratory protection.

**Eye Protection:** Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

**Skin Protection:** Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene and wear a barrier cream and/or impervious surgical style gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance, color:** | No data available |
| **Odor:** | Mild |
| **Physical State:** | Liquid |
| **pH:** | Not applicable |
| **Vapor Pressure:** | No data available |
| **Vapor Density:** | 1.1 (air = 1) |
| **Boiling Point (°C):** | 72.8 °C (HSDB) 64.7 °C at 760 mmHg (HSDB) |

| | |
|---|---|
| **Melting Point (°C):** | -98 °C |
| **Flash Point (°F):** | 18 |
| **Flammability:** | Highly Flammable Extremely Flammable |
| **Upper Flammable/Explosive Limit, % in air:** | 36 |
| **Lower Flammable/Explosive Limit, % in air:** | 6 |
| **Autoignition Temperature (°C):** | 464 deg C |
| **Decomposition Temperature (°C):** | 0 |
| **Specific Gravity:** | 0.791 - 0.792 g/cm3 at 20 °C |
| **Evaporation Rate:** | No data available |
| **Odor Threshold:** | No data available |
| **Solubility:** | Moderate; 50-99% |
| **Partition Coefficient: n-octanol in water:** | No data available |
| **VOC % by weight:** | 99.8 |
| **Molecular Weight:** | 32.04 |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability:** | Stable under normal conditions. |
| **Conditions to Avoid:** | None known.Contamination |
| **Materials to Avoid / Chemical Incompatiability:** | Acids Oxidizing materials Peroxides Strong alkalies |
| **Hazardous Decomposition Products:** | Carbon dioxide Carbon monoxide |

## 11. TOXICOLOGICAL INFORMATION

| | |
|---|---|
| **Routes of Entry:** | Inhalation, Skin Contact, Eye Contact, Ingestion |
| **Target Organs Potentially Affected By Exposure:** | Eyes, Central nervous system stimulation, Skin, GI Tract, Respiratory Tract |
| **Chemical Interactions That Change Toxicity:** | None Known |

**Immediate (Acute) Health Effects by Route of Exposure:**

| | |
|---|---|
| **Inhalation Irritation:** | Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. |
| **Inhalation Toxicity:** | Harmful! Can cause systemic damage (see "Target Organs)Methanol can cause central nervous system depression and overexposure can cause damage to the optic nerve resulting in visual impairment or blindness. |
| **Skin Contact:** | Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. |
| **Eye Contact:** | Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue. |
| **Ingestion Irritation:** | Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.Highly toxic and may be fatal if swallowed. |
| **Ingestion Toxicity:** | Toxic if swallowed. May cause target organ failure and/or death.May be fatal if swallowed. |

**Long-Term (Chronic) Health Effects:**

| | |
|---|---|
| **Carcinogenicity:** | No data. |
| **Reproductive and Developmental Toxicity:** | No data available to indicate product or any components present at greater than 0.1% may cause birth defects. |
| **Inhalation:** | Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs) |
| **Skin Contact:** | Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. |
| **Skin Absorption:** | Upon prolonged or repeated exposure, no hazard in normal industrial use. |
| **Ingestion:** | Toxic if swallowed. May cause target organ failure and/or death. |

**Component Toxicological Data:**
**NIOSH:**

| Chemical Name | CAS No. | LD50/LC50 |
|---|---|---|
| Vinyl acetate<br>Acetic acid, vinyl ester | 108-05-4 | Inhalation LC50 Rat : 11400 mg/m3/4H; Inhalation LC50 Mouse : 1550 ppm/4H; Oral LD50 Rat : 2920 mg/kg; Oral LD50 Mouse : 1613 mg/kg; Dermal LD50 Rabbit : 2335 mg/kg |

| | | |
|---|---|---|
| Methanol | 67-56-1 | Inhalation LC50 Rat 22500 ppm 8 h |

**Component Carcinogenic Data:**

**OSHA:**

| Chemical Name | CAS No. | |
|---|---|---|
| Vinyl acetate | 108-05-4 | Present |

**ACGIH:**

| Chemical Name | CAS No. | |
|---|---|---|
| Vinyl acetate | 108-05-4 | A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans |

**NIOSH:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**NTP:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**IARC:**

| Chemical Name | CAS No. | Group No. |
|---|---|---|
| Monograph 63; 1995 | 108-05-4 | Group 2B |

## 12. ECOLOGICAL INFORMATION

| | |
|---|---|
| **Overview:** | Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. |
| **Mobility:** | No data |
| **Persistence:** | No data |
| **Bioaccumulation:** | No data |
| **Degradability:** | Biodegrades slowly. |
| **Ecological Toxicity Data:** | No data available |

## 13. DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **Waste Description of Spent Product:** | Spent or discarded material is a hazardous waste.Mixing spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous waste determination on mixtures. |
| **Disposal Methods:** | Dispose of by incineration following Federal, State, Local, or Provincial regulations. |
| **Waste Disposal of Packaging:** | Comply with all Local, State, Federal, and Provincial Environmental Regulations. |

## 14. TRANSPORTATION INFORMATION

**United States:**

| | |
|---|---|
| **DOT Proper Shipping Name:** | Flammable liquids, n.o.s. (Methanol, Ethyl acetate) |
| **UN Number:** | UN1993 |
| **Hazard Class:** | 3 |
| **Packing Group:** | II |

**International:**

| | |
|---|---|
| **IATA Proper Shipping Name:** | Flammable liquids, n.o.s. (Methanol, Ethyl acetate) |
| **UN Number:** | UN1993 |
| **Hazard Class:** | 3 |
| **Packing Group:** | II |

**Marine Pollutant:** No

| Chemical Name | CAS# | Marine Pollutant | Severe Marine Pollutant |
|---|---|---|---|
| No data available | | | |

## 15. REGULATORY INFORMATION

**United States:**

| Chemical Name | CAS# | CERCLA | SARA 313 | SARA EHS 313 | TSCA |
|---|---|---|---|---|---|
| methanol | 67-56-1 | X | X | - | X |
| Vinyl acetate | 108-05-4 | X | X | X | X |

**The following chemicals are listed on CA Prop 65:**

| Chemical Name | CAS # | Regulation |
|---|---|---|
| Methanol | 67-56-1 | Prop 65 Devolop Tox |

**State Right To Know Listing:**

| Chemical Name | CAS# | New Jersey | Massachusetts | Pennsylvania | California |
|---|---|---|---|---|---|
| methanol | 67-56-1 | X | X | X | X |
| pentyl acetate (n-amyl acetate) | 628-63-7 | X | X | X | X |
| Isopropyl acetate | 108-21-4 | X | X | X | X |
| n-Butyl acetate | 123-86-4 | X | X | X | X |
| Vinyl acetate | 108-05-4 | X | X | X | X |
| n-Propyl acetate | 109-60-4 | X | X | X | X |
| Methyl acetate | 79-20-9 | X | X | X | X |
| Ethyl acetate | 141-78-6 | X | X | X | X |

## 16. OTHER INFORMATION

**Prior Version Date:** 01/17/18

**Other Information:** Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph.

**References:** No data available

**Disclaimer:** Restek Corporation provides the descriptions, data and information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding products described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given and accepted at your risk.

**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) | < 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.
- 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: (800)356-1688
Fax: (814)353-1309

www.restek.com

# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30225 **Lot No.:** A0155519

**Description :** Bromochloromethane Standard

Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** December 31, 2024 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | Bromochloromethane | 2,012.9 µg/mL | +/- 11.9561 | µg/mL | Gravimetric |
| | **CAS #** 74-97-5 (Lot 00008541) | | +/- 112.8889 | µg/mL | Unstressed |
| | **Purity** 98% | | +/- 115.5292 | 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)

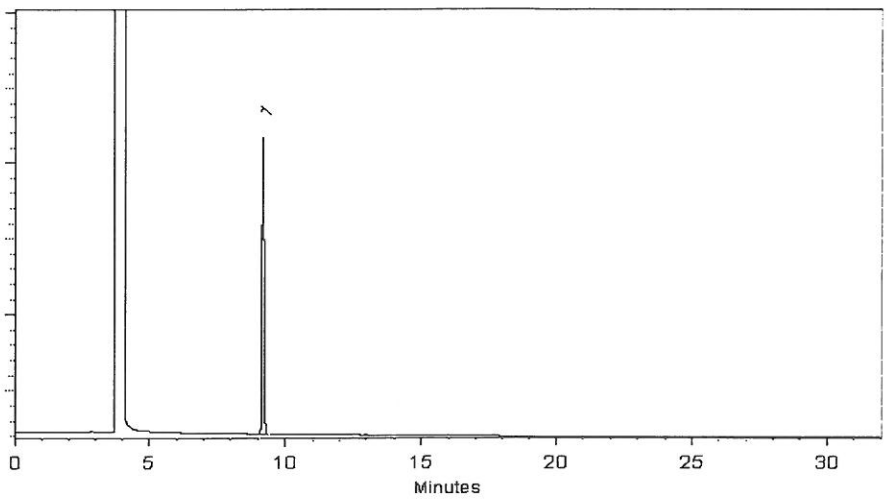
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Lane Kibe - Mix Technician

**Date Mixed:** 04-Dec-2019 **Balance:** 1128342314

Tyler Brown - Operations Tech-ARM QC

**Date Passed:** 05-Dec-2019

**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) | < 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK

# Safety Data Sheet

**Revision Date: 08/22/19**
www.restek.com

2 Letter ISO country code/language code: US/EN

## 1. IDENTIFICATION

| | |
|---|---|
| **Catalog Number / Product Name:** | **30225 / Bromochloromethane Standard** |
| **Company:** | Restek Corporation |
| **Address:** | 110 Benner Circle<br>Bellefonte, Pa. 16823 |
| **Phone#:** | 814-353-1300 |
| **Fax#:** | 814-353-1309 |
| **Emergency#:** | 800-424-9300 (CHEMTREC)<br>703-527-3887 (Outside the US) |
| **Email:** | www.restek.com |
| **Revision Number:** | 13 |
| **Intended use:** | For Laboratory use only |

## 2. HAZARD(S)IDENTIFICATION

**Emergency Overview:**

**GHS Hazard Symbols:**



| | |
|---|---|
| **GHS Classification:** | Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1<br>Hazardous for the ozone layer<br>Flammable Liquid Category 2<br>Acute Toxicity - Inhalation Dust / Mist Category 3<br>Acute Toxicity - Dermal Category 3<br>Acute Toxicity - Oral Category 3 |
| **GHS Signal Word:** | Danger |
| **GHS Hazard:** | Highly flammable liquid and vapour.<br>Toxic if swallowed, in contact with skin or if inhaled.<br>Causes damage to organs.<br>Harms public health and the environment by destroying ozone in the upper atmosphere. |
| **GHS Precautions:** | |
| **Safety Precautions:** | Keep away from heat/sparks/open flames/hot surfaces. – No smoking.<br>Ground/bond container and receiving equipment.<br>Use explosion-proof electrical/ventilation and lighting equipment.<br>Use only non-sparking tools.<br>Take precautionary measures against static discharge.<br>Do not breathe dust/fume/gas/mist/vapours/spray.<br>Wash hands and skin thoroughly after handling.<br>Do not eat, drink or smoke when using this product.<br>Use only outdoors or in a well-ventilated area.<br>Wear protective gloves/protective clothing/eye protection/face protection. |
| **First Aid Measures:** | IF SWALLOWED: Immediately call a POISON CENTER/doctor/....<br>IF ON SKIN: Wash with plenty of soap and water.<br>IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>Specific treatment see section 4.<br>Rinse mouth.<br>Take off immediately all contaminated clothing and wash it before reuse.<br>In case of fire: Use extinguishing media in section 5 for extinction. |

| | |
|---|---|
| **Storage:** | Store in a well-ventilated place. Keep container tightly closed.<br>Store in a well-ventilated place. Keep cool.<br>Store locked up. |
| **Disposal:** | Dispose of contents/container according to section 13 of the SDS.<br>Refer to manufacturer/supplier for information on recovery/recycling. |
| **Single Exposure Target Organs:** | Specific target organ toxicity - Single exposure - STOT SE 1: H370 Causes damage to organs. (C >= 10 %; No information to prove exclusion of certain routes of exposure); Specific target organ toxicity - Single exposure - STOT SE 2: H371 May cause damage to organs. (3 % <= C <10 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given) |
| **Repeated Exposure Target Organs:** | No data available |

## 3. COMPOSITION / INFORMATION ON INGREDIENT

| Chemical Name | CAS # | EINEC # | % Composition |
|---|---|---|---|
| methanol | 67-56-1 | 200-659-6 | 99.8 |
| bromochloromethane | 74-97-5 | 200-826-3 | 0.2 |

## 4. FIRST-AID MEASURES

| | |
|---|---|
| **Inhalation:** | Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately |
| **Eyes:** | Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention. |
| **Skin Contact:** | Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists. |
| **Ingestion:** | Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this SDS. |

## 5. FIRE- FIGHTING MEASURES

| | |
|---|---|
| **Extinguishing Media:** | Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire. |
| **Fire and/or Explosion Hazards:** | Vapors may be ignited by sparks, flames or other sources of ignition if material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back. |
| **Fire Fighting Methods and Protection:** | Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. |
| **Hazardous Combustion Products:** | Carbon dioxide, Carbon monoxide |

## 6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **Personal Precautions and Equipment:** | Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. |
| **Methods for Clean-up:** | Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. |

## 7. HANDLING AND STORAGE

| | |
|---|---|
| **Handling Technical Measures and Precautions:** | Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment |
| **Storage Technical Measures and Conditions:** | Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**United States:**

| Chemical Name | CAS No. | IDLH | ACGIH STEL | ACGIH TLV-TWA | OSHA Exposure Limit |
|---|---|---|---|---|---|
| methanol | 67-56-1 | 6000 ppm IDLH | 250 ppm STEL | 200 ppm TWA | 200 ppm TWA; 260 mg/m3 TWA |

**Personal Protection:**

| | |
|---|---|
| **Engineering Measures:** | Local exhaust ventilation is recommended when generating excessive levels of vapours from handling or thermal processing. |
| **Respiratory Protection:** | Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.If an exposure limit is exceeded or if an operator is experiencing symptoms of inhalation overexposure as explained in Section 3, provide respiratory protection. |
| **Eye Protection:** | Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses. |
| **Skin Protection:** | Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance, color:** | No data available |
| **Odor:** | Mild |
| **Physical State:** | Liquid |
| **pH:** | Not applicable |
| **Vapor Pressure:** | No data available |
| **Vapor Density:** | 1.1 (air = 1) |
| **Boiling Point (°C):** | 64.7 °C at 760 mmHg (HSDB) |
| **Melting Point (°C):** | -98 °C |
| **Flash Point (°F):** | 52 |
| **Flammability:** | Highly Flammable |
| **Upper Flammable/Explosive Limit, % in air:** | 36 |
| **Lower Flammable/Explosive Limit, % in air:** | 6 |
| **Autoignition Temperature (°C):** | 464 deg C |
| **Decomposition Temperature (°C):** | No data available |
| **Specific Gravity:** | 0.791 - 0.792 g/cm3 at 20 °C |
| **Evaporation Rate:** | No data available |
| **Odor Threshold:** | No data available |
| **Solubility:** | Moderate; 50-99% |
| **Partition Coefficient: n-octanol in water:** | No data available |
| **VOC % by weight:** | 99.8 |
| **Molecular Weight:** | 32.04 |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability:** | Stable under normal conditions. |
| **Conditions to Avoid:** | None known. |
| **Materials to Avoid / Chemical Incompatiability:** | Strong oxidizing agents |
| **Hazardous Decomposition Products:** | Carbon dioxide Carbon monoxide |

## 11. TOXICOLOGICAL INFORMATION

| | |
|---|---|
| **Routes of Entry:** | Inhalation, Skin Contact, Eye Contact, Ingestion |
| **Target Organs Potentially Affected By Exposure:** | Eyes, Central nervous system stimulation, Skin, GI Tract, Respiratory Tract |

**Chemical Interactions That Change Toxicity:** None Known

**Immediate (Acute) Health Effects by Route of Exposure:**

| | |
|---|---|
| **Inhalation Irritation:** | Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. |
| **Inhalation Toxicity:** | Harmful! Can cause systemic damage (see "Target Organs)Methanol can cause central nervous system depression and overexposure can cause damage to the optic nerve resulting in visual impairment or blindness. |
| **Skin Contact:** | Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. |
| **Eye Contact:** | Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue. |
| **Ingestion Irritation:** | Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.Highly toxic and may be fatal if swallowed. |
| **Ingestion Toxicity:** | Toxic if swallowed. May cause target organ failure and/or death.May be fatal if swallowed. |

**Long-Term (Chronic) Health Effects:**

| | |
|---|---|
| **Carcinogenicity:** | No data. |
| **Reproductive and Developmental Toxicity:** | No data available to indicate product or any components present at greater than 0.1% may cause birth defects. |
| **Inhalation:** | Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs) |
| **Skin Contact:** | Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. |
| **Ingestion:** | Toxic if swallowed. May cause target organ failure and/or death. |

**Component Toxicological Data:**

**NIOSH:**

| Chemical Name | CAS No. | LD50/LC50 |
|---|---|---|
| Methanol | 67-56-1 | Inhalation LC50 Rat 22500 ppm 8 h |

**Component Carcinogenic Data:**

**OSHA:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**ACGIH:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**NIOSH:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**NTP:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**IARC:**

| Chemical Name | CAS No. | Group No. |
|---|---|---|

## 12. ECOLOGICAL INFORMATION

| | |
|---|---|
| **Overview:** | Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. |
| **Mobility:** | No data |
| **Persistence:** | No data |
| **Bioaccumulation:** | No data |
| **Degradability:** | Biodegrades slowly. |
| **Ecological Toxicity Data:** | No data available |

## 13. DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **Waste Description of Spent Product:** | Spent or discarded material is a hazardous waste.Mixing spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous waste determination on mixtures. |
| **Disposal Methods:** | Dispose of by incineration following Federal, State, Local, or Provincial regulations. |
| **Waste Disposal of Packaging:** | Comply with all Local, State, Federal, and Provincial Environmental Regulations. |

## 14. TRANSPORTATION INFORMATION

| | |
|---|---|
| **United States:** | |
| **DOT Proper Shipping Name:** | Methanol |
| **UN Number:** | UN1230 |
| **Hazard Class:** | 3 |
| **Packing Group:** | II |
| **International:** | |
| **IATA Proper Shipping Name:** | Methanol |
| **UN Number:** | UN1230 |
| **Hazard Class:** | 3(6.1) |
| **Packing Group:** | II |

**Marine Pollutant:** No

| Chemical Name | CAS# | Marine Pollutant | Severe Marine Pollutant |
|---|---|---|---|
| No data available | | | |

## 15. REGULATORY INFORMATION

**United States:**

| Chemical Name | CAS# | CERCLA | SARA 313 | SARA EHS 313 | TSCA |
|---|---|---|---|---|---|
| methanol | 67-56-1 | X | X | - | X |

**The following chemicals are listed on CA Prop 65:**

| Chemical Name | CAS # | Regulation |
|---|---|---|
| Methanol | 67-56-1 | Prop 65 Devolop Tox |

**State Right To Know Listing:**

| Chemical Name | CAS# | New Jersey | Massachusetts | Pennsylvania | California |
|---|---|---|---|---|---|
| methanol | 67-56-1 | X | X | X | X |
| bromochloromethane | 74-97-5 | X | X | X | X |

## 16. OTHER INFORMATION

| | |
|---|---|
| **Prior Version Date:** | 11/08/18 |
| **Other Information:** | Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph. |
| **References:** | No data available |
| **Disclaimer:** | Restek Corporation provides the descriptions, data and information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding products described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given and accepted at your risk. |

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www.restek.com

# CERTIFIED REFERENCE MATERIAL

## Gravimetric Certificate

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #2222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555582 **Lot No.:** A0158153

**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 :** February 28, 2023 **Storage:** 10°C or colder

### CERTIFIED VALUES

| Component # | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | 1,2-Dichloroethane-d4<br>**CAS #** 17060-07-0<br>**Purity** 99% | (Lot PR-29377) | 25,224.0 µg/mL | +/- 233.4276 µg/mL<br>+/- 1,425.8969 µg/mL<br>+/- 1,458.7260 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 1-Bromo-4-fluorobenzene (BFB)<br>**CAS #** 460-00-4<br>**Purity** 99% | (Lot 20401KO) | 25,128.0 µg/mL | +/- 232.5392 µg/mL<br>+/- 1,420.4701 µg/mL<br>+/- 1,453.1742 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Dibromofluoromethane<br>**CAS #** 1868-53-7<br>**Purity** 99% | (Lot 0012016) | 25,200.0 µg/mL | +/- 233.2055 µg/mL<br>+/- 1,424.5402 µg/mL<br>+/- 1,457.3380 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |
| 4 | Toluene-d8<br>**CAS #** 2037-26-5<br>**Purity** 99% | (Lot I-21928) | 25,184.0 µg/mL | +/- 233.0575 µg/mL<br>+/- 1,423.6357 µg/mL<br>+/- 1,456.4127 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

Tom Suckal - Mix Technician

**Date Mixed:** 25-Feb-2020 **Balance:** B707717271

Manufactured under Restek's ISO 9001:2008
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) | < 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK

# Safety Data Sheet

**Revision Date: 07/20/18**
www.restek.com

2 Letter ISO country code/language code: US/EN

## 1. IDENTIFICATION

| | |
|---|---|
| **Catalog Number / Product Name:** | **555582 / Custom 8260A/B Surrogate Mix** |
| **Company:** | Restek Corporation |
| **Address:** | 110 Benner Circle<br>Bellefonte, Pa. 16823 |
| **Phone#:** | 814-353-1300 |
| **Fax#:** | 814-353-1309 |
| **Emergency#:** | 800-424-9300 (CHEMTREC)<br>703-527-3887 (Outside the US) |
| **Email:** | www.restek.com |
| **Revision Number:** | 6 |
| **Intended use:** | For Laboratory use only |

## 2. HAZARD(S)IDENTIFICATION

**Emergency Overview:**

**GHS Hazard Symbols:**



**GHS Classification:**
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1
Hazardous for the ozone layer
Flammable Liquid Category 2
Acute Toxicity - Dermal Category 3
Acute Toxicity - Oral Category 3

**GHS Signal Word:**
Danger

**GHS Hazard:**
Highly flammable liquid and vapour.
Toxic if swallowed or in contact with skin.
Causes damage to organs.
Harms public health and the environment by destroying ozone in the upper atmosphere.

**GHS Precautions:**

**Safety Precautions:**
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilation and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands and skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.

**First Aid Measures:**
IF SWALLOWED: Immediately call a POISON CENTER/doctor/....
IF ON SKIN: Wash with plenty of soap and water.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF exposed: Call a POISON CENTER or doctor/physician.
Call a POISON CENTER or doctor/physician if you feel unwell.
Specific treatment see section 4.
Rinse mouth.
Take off immediately all contaminated clothing and wash it before reuse.
In case of fire: Use extinguishing media in section 5 for extinction.

**Storage:** Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.

**Disposal:** Dispose of contents/container according to section 13 of the SDS.
Refer to manufacturer/supplier for information on recovery/recycling.

**Single Exposure Target Organs:** Specific target organ toxicity - Single exposure - STOT SE 1: H370 Causes damage to organs. (C >= 10 %; No information to prove exclusion of certain routes of exposure); Specific target organ toxicity - Single exposure - STOT SE 2: H371 May cause damage to organs. (3 % <= C <10 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given)

**Repeated Exposure Target Organs:** No data available

## 3. COMPOSITION / INFORMATION ON INGREDIENT

| Chemical Name | CAS # | EINEC # | % Composition |
|---|---|---|---|
| methanol | 67-56-1 | 200-659-6 | 90 |
| 1,2-dichloroethane-d4 | 17060-07-0 | | 2.5 |
| dibromofluoromethane | 1868-53-7 | | 2.5 |
| toluene-d8 | 2037-26-5 | 218-009-5 | 2.5 |
| 1-bromo-4-fluorobenzene | 460-00-4 | 207-300-2 | 2.5 |

## 4. FIRST-AID MEASURES

**Inhalation:** Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately

**Eyes:** Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

**Skin Contact:** Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

**Ingestion:** Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this SDS.

## 5. FIRE- FIGHTING MEASURES

**Extinguishing Media:** Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire. Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid.

**Fire and/or Explosion Hazards:** Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back.

**Fire Fighting Methods and Protection:** Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.

**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment:** Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the

area responding to the spill. Never exceed any occupational exposure limits.

**Methods for Clean-up:** Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## 7. HANDLING AND STORAGE

**Handling Technical Measures and Precautions:** Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment

**Storage Technical Measures and Conditions:** Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**United States:**

| Chemical Name | CAS No. | IDLH | ACGIH STEL | ACGIH TLV-TWA | OSHA Exposure Limit |
|---|---|---|---|---|---|
| methanol | 67-56-1 | 6000 ppm IDLH | 250 ppm STEL | 200 ppm TWA | 200 ppm TWA; 260 mg/m3 TWA |
| 1,2-dichloroethane-d4 | 17060-07-0 | Not established | None Known | Not established | No data available |
| dibromofluoromethane | 1868-53-7 | Not established | None Known | Not established | No data available |
| toluene-d8 | 2037-26-5 | Not established | None Known | Not established | No data available |
| 1-bromo-4-fluorobenzene | 460-00-4 | Not established | None Known | Not established | No data available |

**Personal Protection:**

**Engineering Measures:** Local exhaust ventilation is recommended when generating excessive levels of vapours from handling or thermal processing.

**Respiratory Protection:** Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.If an exposure limit is exceeded or if an operator is experiencing symptoms of inhalation overexposure as explained in Section 3, provide respiratory protection.

**Eye Protection:** Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

**Skin Protection:** Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance, color:** | No data available |
| **Odor:** | Mild |
| **Physical State:** | No data available |
| **pH:** | Not applicable |
| **Vapor Pressure:** | No data available |
| **Vapor Density:** | 1.1 (air = 1) |
| **Boiling Point (°C):** | 151.5 °C Boiling Point (at 1013.25 hPa) 64.7 °C at 760 mmHg (HSDB) |
| **Melting Point (°C):** | -98 °C |
| **Flash Point (°F):** | 50 |
| **Flammability:** | Highly Flammable |
| **Upper Flammable/Explosive Limit, % in air:** | 36 |
| **Lower Flammable/Explosive Limit, % in air:** | 6 |
| **Autoignition Temperature (°C):** | 464 deg C |
| **Decomposition Temperature (°C):** | No data available |
| **Specific Gravity:** | 0.791 - 0.792 g/cm3 at 20 °C |
| **Evaporation Rate:** | No data available |

| | |
|---|---|
| **Odor Threshold:** | No data available |
| **Solubility:** | Moderate; 50-99% |
| **Partition Coefficient: n-octanol in water:** | No data available |
| **VOC % by weight:** | 0 |
| **Molecular Weight:** | 32.04 |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability:** | Stable under normal conditions. |
| **Conditions to Avoid:** | None known. |
| **Materials to Avoid / Chemical Incompatiability:** | Strong oxidizing agents |
| **Hazardous Decomposition Products:** | Carbon dioxide Carbon monoxide |

## 11. TOXICOLOGICAL INFORMATION

| | |
|---|---|
| **Routes of Entry:** | Inhalation, Skin Contact, Eye Contact, Ingestion |
| **Target Organs Potentially Affected By Exposure:** | Eyes, Central nervous system stimulation, Skin, GI Tract, Respiratory Tract |
| **Chemical Interactions That Change Toxicity:** | None Known |

**Immediate (Acute) Health Effects by Route of Exposure:**

| | |
|---|---|
| **Inhalation Irritation:** | Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. |
| **Inhalation Toxicity:** | Harmful! Can cause systemic damage (see "Target Organs)Methanol can cause central nervous system depression and overexposure can cause damage to the optic nerve resulting in visual impairment or blindness. |
| **Skin Contact:** | Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. |
| **Eye Contact:** | Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue. |
| **Ingestion Irritation:** | Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.Highly toxic and may be fatal if swallowed. |
| **Ingestion Toxicity:** | Toxic if swallowed. May cause target organ failure and/or death.May be fatal if swallowed. |

**Long-Term (Chronic) Health Effects:**

| | |
|---|---|
| **Carcinogenicity:** | No data. |
| **Reproductive and Developmental Toxicity:** | No data available to indicate product or any components present at greater than 0.1% may cause birth defects. |
| **Inhalation:** | Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs) |
| **Skin Contact:** | Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage. |
| **Ingestion:** | Toxic if swallowed. May cause target organ failure and/or death. |

**Component Toxicological Data:**
**NIOSH:**

| Chemical Name | CAS No. | LD50/LC50 |
|---|---|---|
| Benzene, 1-bromo-4-fluoro- | 460-00-4 | Inhalation LC50 Rat 18 g/m3 4 h; Oral LD50 Rat 2700 mg/kg |
| Methanol | 67-56-1 | Inhalation LC50 Rat 22500 ppm 8 h |

**Component Carcinogenic Data:**
**OSHA:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**ACGIH:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**NIOSH:**

| Chemical Name | CAS No. |
|---|---|

No data available

**NTP:**

| Chemical Name | CAS No. |
|---|---|
| No data available | |

**IARC:**

| Chemical Name | CAS No. | Group No. |
|---|---|---|

## 12. ECOLOGICAL INFORMATION

| | |
|---|---|
| **Overview:** | Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. |
| **Mobility:** | No data |
| **Persistence:** | No data |
| **Bioaccumulation:** | No data |
| **Degradability:** | Biodegrades slowly. |
| **Ecological Toxicity Data:** | No data available |

## 13. DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **Waste Description of Spent Product:** | Spent or discarded material is a hazardous waste.Mixing spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous waste determination on mixtures. |
| **Disposal Methods:** | Dispose of by incineration following Federal, State, Local, or Provincial regulations. |
| **Waste Disposal of Packaging:** | Comply with all Local, State, Federal, and Provincial Environmental Regulations. |

## 14. TRANSPORTATION INFORMATION

**United States:**

| | |
|---|---|
| **DOT Proper Shipping Name:** | Flammable liquids, n.o.s. (Methanol) |
| **UN Number:** | UN1993 |
| **Hazard Class:** | 3 |
| **Packing Group:** | II |

**International:**

| | |
|---|---|
| **IATA Proper Shipping Name:** | Flammable liquids, n.o.s. (Methanol) |
| **UN Number:** | UN1993 |
| **Hazard Class:** | 3 |
| **Packing Group:** | II |

**Marine Pollutant:** No

| Chemical Name | CAS# | Marine Pollutant | Severe Marine Pollutant |
|---|---|---|---|
| No data available | | | |

## 15. REGULATORY INFORMATION

**United States:**

| Chemical Name | CAS# | CERCLA | SARA 313 | SARA EHS 313 | TSCA |
|---|---|---|---|---|---|
| methanol | 67-56-1 | X | X | - | X |
| 1,2-dichloroethane-d4 | 17060-07-0 | - | - | - | - |
| dibromofluoromethane | 1868-53-7 | - | - | - | - |
| toluene-d8 | 2037-26-5 | - | - | - | - |
| 1-bromo-4-fluorobenzene | 460-00-4 | - | - | - | X |

**The following chemicals are listed on CA Prop 65:**

| Chemical Name | CAS # | Regulation |
|---|---|---|
| Methanol | 67-56-1 | Prop 65 Devolop Tox |

**State Right To Know Listing:**

| Chemical Name | CAS# | New Jersey | Massachusetts | Pennsylvania | California |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| methanol | 67-56-1 | X | X | X | X |
| 1,2-dichloroethane-d4 | 17060-07-0 | - | - | - | - |
| dibromofluoromethane | 1868-53-7 | - | - | - | - |
| toluene-d8 | 2037-26-5 | - | - | - | - |
| 1-bromo-4-fluorobenzene | 460-00-4 | - | - | - | - |

## 16. OTHER INFORMATION

**Prior Version Date:** 03/03/16

**Other Information:** Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph.

**References:** No data available

**Disclaimer:** Restek Corporation provides the descriptions, data and information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding products described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given and accepted at your risk.

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***Analytical Reference Material ARM***

ISO 17034 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

**Part Number:** 95318
Lot Number: 031419
Description: 2-Chloroethyl vinyl ether

**Solvent(s):** Methanol **Lot#** DU230-US

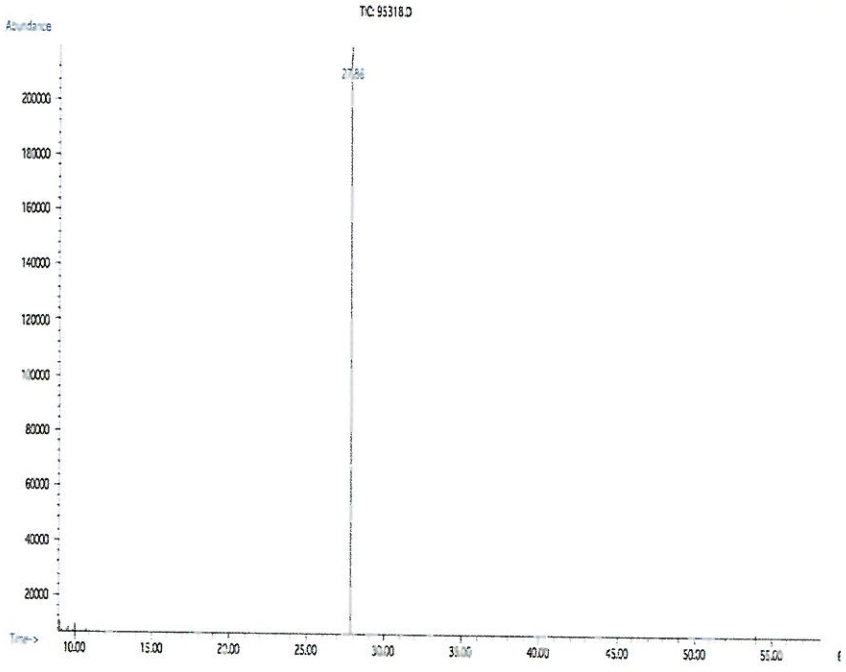
Expiration Date: 031422
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 2684186

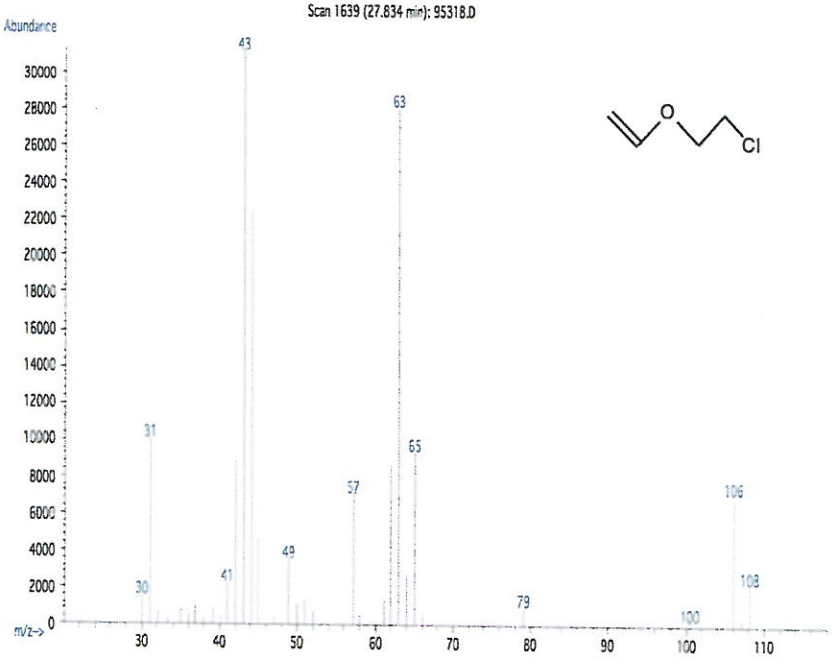
Weight(s) shown below were combined and diluted to (mL): 30.0 | 5E-05 Balance Uncertainty | 0.002 Flask Uncertainty

| | |
|---|---|
| Eli Aliaga | 031419 |
| Formulated By: Eli Aliaga | DATE |
| Pedro Rentas | 031419 |
| 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 | 0.30284 | 0.30292 | 10002.6 | 40.6 | 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 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).

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*Analytical Reference Material ARM*

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Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

**Part Number:** 70046
Lot Number: 072618
Description: Bromochloromethane

**Solvent(s):** Methanol **Lot#** DS526

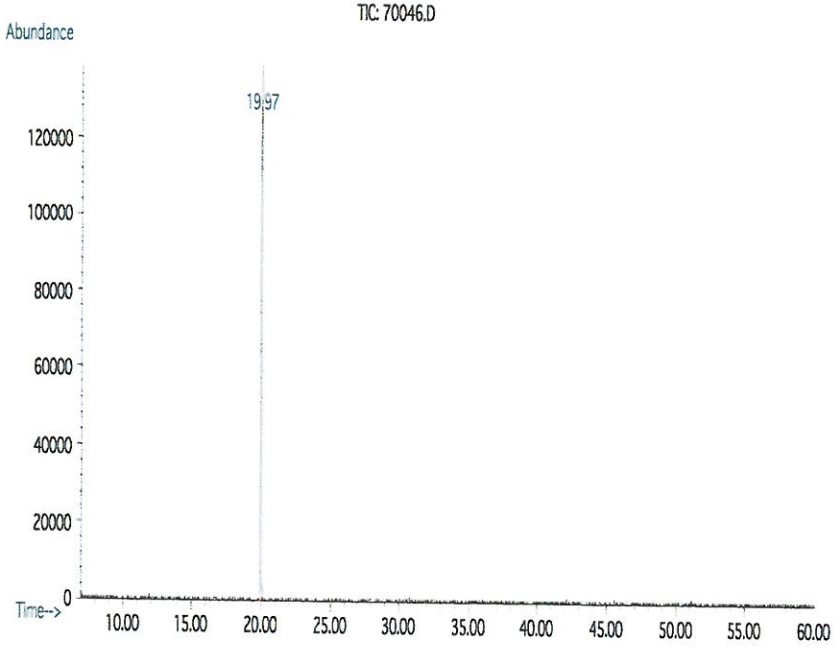
Expiration Date: 072623
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 822-275872-11

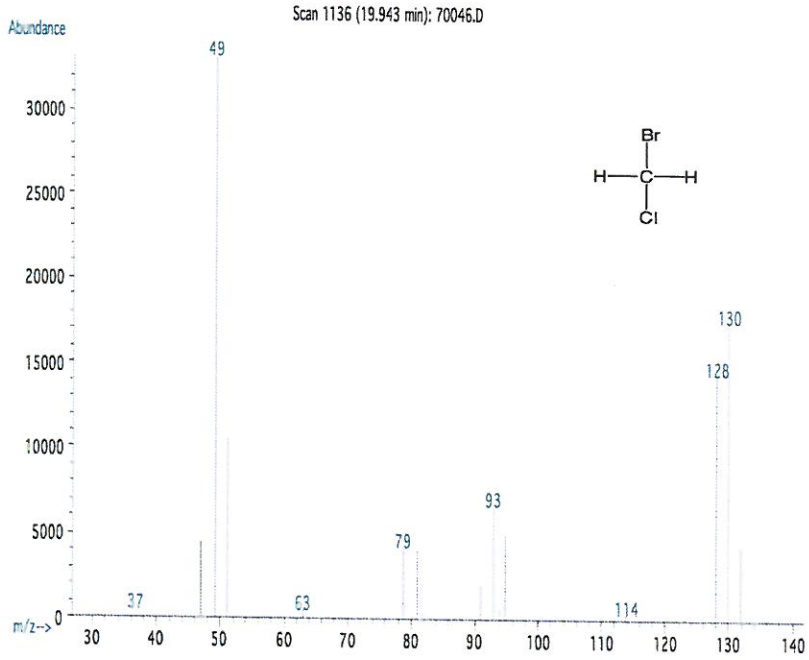
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.002 Flask Uncertainty

| | | |
|---|---|---|
| Eli Aliaga | | 072618 |
| Formulated By: | Eli Aliaga | DATE |
| Pedro Rentas | | 072618 |
| 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 | 0.02526 | 0.02540 | 1005.7 | 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).

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# CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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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. :** 30470 **Lot No.:** A0158421

**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 :** March 31, 2023 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | tert-Butanol (TBA) | 49,864.0 µg/mL | +/- 291.9647 µg/mL | Gravimetric |
| | **CAS #** 75-65-0 (Lot SHBL0592) | | +/- 1,068.1530 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 1,099.1740 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)

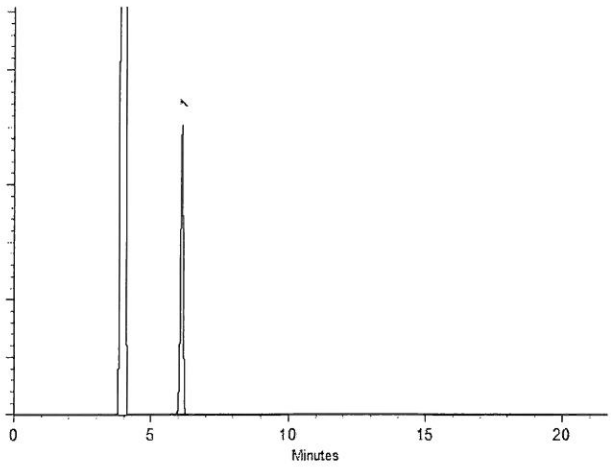
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Kylie Struble - Operations Technician I

**Date Mixed:** 03-Mar-2020 **Balance:** B251644995

Justine Albertson - Operations Tech-ARM QC

**Date Passed:** 04-Mar-2020

**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) | < 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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# CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30006 **Lot No.:** A0159420

**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 :** June 30, 2023 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Acetone | 5,006.4 µg/mL | +/- 29.1076 µg/mL | Gravimetric |
| | **CAS #** 67-64-1 (Lot MKCK2598) | | +/- 302.0583 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 302.7754 µg/mL | Stressed |
| 2 | 2-Butanone (MEK) | 5,001.8 µg/mL | +/- 29.0809 µg/mL | Gravimetric |
| | **CAS #** 78-93-3 (Lot SHBK9603) | | +/- 301.7808 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 302.4972 µg/mL | Stressed |
| 3 | 4-Methyl-2-pentanone (MIBK) | 5,001.5 µg/mL | +/- 29.0792 µg/mL | Gravimetric |
| | **CAS #** 108-10-1 (Lot SHBK5017) | | +/- 301.7627 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 302.4791 µg/mL | Stressed |
| 4 | 2-Hexanone | 5,001.6 µg/mL | +/- 29.0797 µg/mL | Gravimetric |
| | **CAS #** 591-78-6 (Lot MKCL1599) | | +/- 301.7687 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 302.4851 µg/mL | 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)

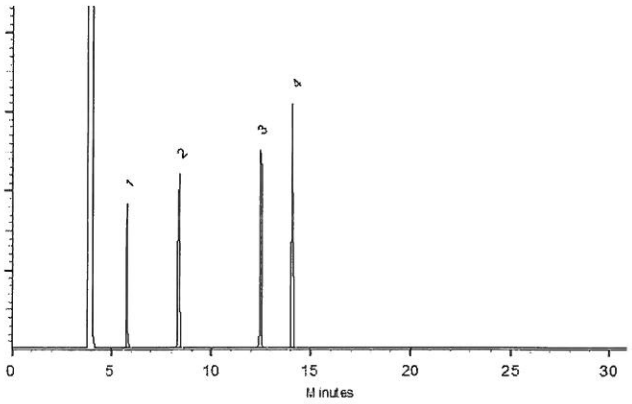
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Cathleen Soltis - Mix Technician

**Date Mixed:** 30-Mar-2020 **Balance:** B251644995

Fang Yen Lo QC Analyst

**Date Passed:** 01-Apr-2020

**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) | < 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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

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# CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30470 **Lot No.:** A0160703

**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 :** May 31, 2023 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | tert-Butanol (TBA) | 50,148.0 µg/mL | +/- 293.6276 µg/mL | Gravimetric |
| | **CAS #** 75-65-0 (Lot SHBL5806) | | +/- 1,074.2366 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 1,105.4344 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)

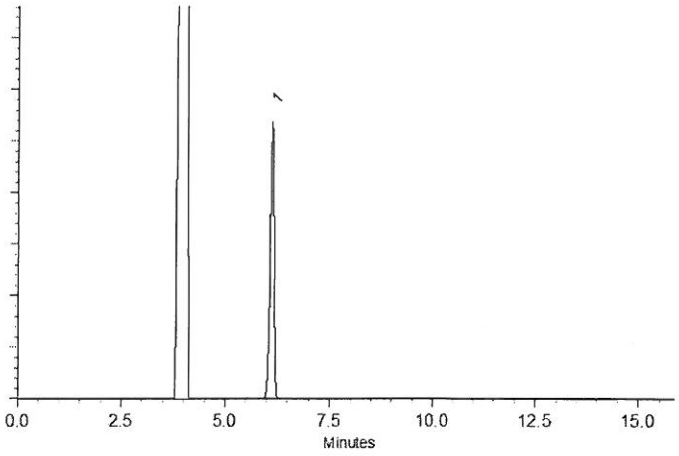
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Russ Bookhamer - Operations Technician I

**Date Mixed:** 11-May-2020 **Balance:** 1128360905

Justine Albertson - Operations Tech-ARM QC

**Date Passed:** 13-May-2020

**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) | < 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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# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

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. :** 30006 **Lot No.:** A0154174

**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 :** January 31, 2023 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Acetone<br>**CAS #** 67-64-1 (Lot SHBK6362)<br>**Purity** 99% | 5,005.9 µg/mL | +/- 29.1047 µg/mL<br>+/- 302.0281 µg/mL<br>+/- 302.7452 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 2-Butanone (MEK)<br>**CAS #** 78-93-3 (Lot SHBK2537)<br>**Purity** 99% | 5,002.6 µg/mL | +/- 29.0855 µg/mL<br>+/- 301.8290 µg/mL<br>+/- 302.5456 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | 4-Methyl-2-pentanone (MIBK)<br>**CAS #** 108-10-1 (Lot SHBK5017)<br>**Purity** 99% | 5,007.2 µg/mL | +/- 29.1123 µg/mL<br>+/- 302.1066 µg/mL<br>+/- 302.8238 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | 2-Hexanone<br>**CAS #** 591-78-6 (Lot MKCD9048)<br>**Purity** 99% | 5,009.0 µg/mL | +/- 29.1228 µg/mL<br>+/- 302.2152 µg/mL<br>+/- 302.9327 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)

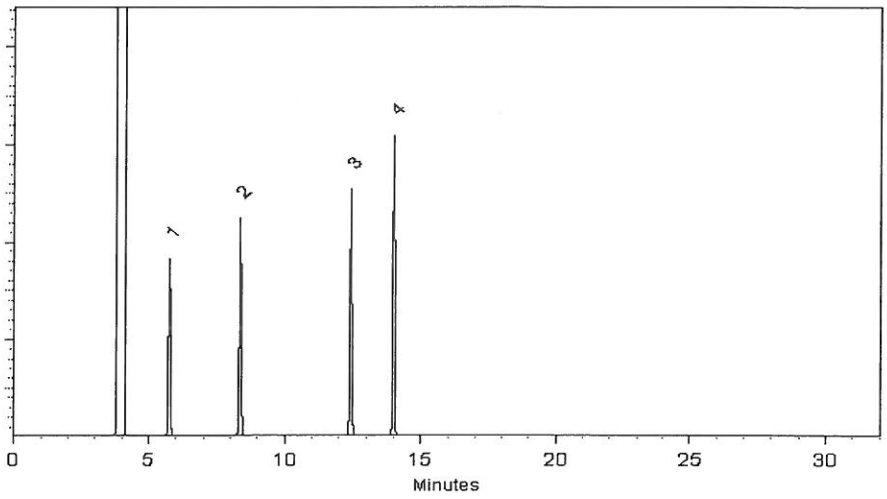
**Carrier Gas:**
hydrogen-constant pressure 11.0 psi.

**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.

Lane Kibe - Mix Technician

**Date Mixed:** 22-Oct-2019 **Balance:** B707717271

Fung-Yun Le - QC Analyst

**Date Passed:** 24-Oct-2019

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

**General Certified Reference Material Notes**

**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

**Purity Notes:**

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

**Certified Uncertainty Value Notes:**

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

$k$ is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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| 0°C or colder (Freezer) | < 25°C | ≥ 25°C up to 7 days |

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**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.

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***Certified Reference Material CRM***

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

15

CERTIFIED WEIGHT REPORT

Part Number: 95317
Lot Number: 010719
Description: Universal VOA Megamix
69 components
Expiration Date: 010722
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 2684186

V10786
V10800

Solvent(s): Methanol Lot# DT140Q6

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 100.0 0.001 Flask Uncertainty

| | | |
|---|---|---|
| | | 010719 |
| Formulated By: | Justin Dippold | DATE |
| | | 010719 |
| Reviewed By: | Pedro L. Rentas | DATE |

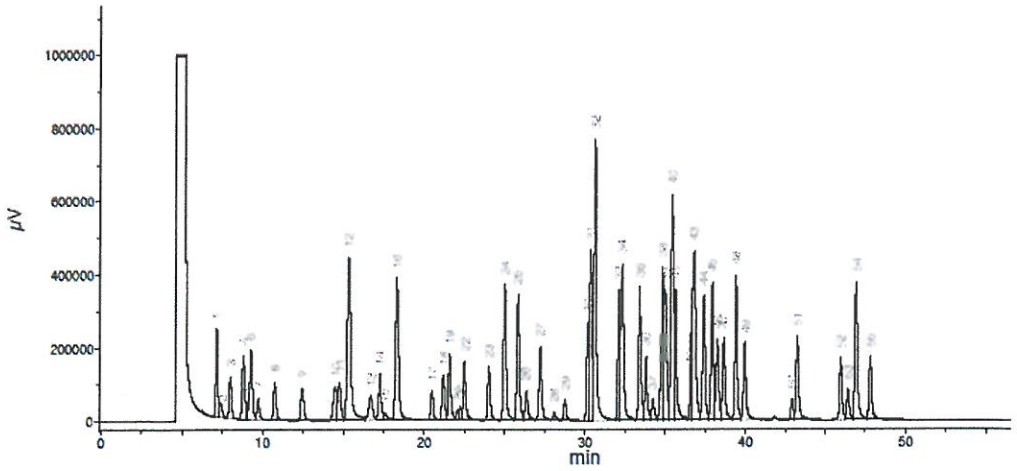
| | Compound | (RM#) Part Number | Lot Number | Dil. Factor | Initial Vol. (mL) | Initial Conc.(ug/mL) | Nominal Conc (µg/mL) | Purity (%) | Purity Uncertainty | Uncertainty Pipette (mL) | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty (+/-) (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Acetonitrile | (0324) | 060812 | NA | NA | NA | 2000 | 99.9 | 0.2 | NA | 0.20022 | 0.20050 | 2002.8 | 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 | 0.20204 | 0.20215 | 2001.1 | 8.1 | 107-05-1 | 1 ppm (3mg/m3/8H) | orl-rat 700mg/kg |
| 3. | Carbon disulphide | (0060) | MKBZ8669V | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20204 | 0.20215 | 2001.1 | 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 | 0.21055 | 0.21075 | 2001.9 | 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 | 0.20728 | 0.20750 | 2002.2 | 8.4 | 110-57-6 | N/A | N/A |
| 6. | Diethyl ether | (0153) | 209453 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20204 | 0.20230 | 2002.6 | 8.2 | 60-29-7 | N/A | N/A |
| 7. | Ethyl methacrylate | (0381) | 06126PX | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20204 | 0.20225 | 2002.1 | 8.1 | 97-63-2 | N/A | orl-rat 14800mg/kg |
| 8. | Iodomethane | (0489) | SHBF8718V | NA | NA | NA | 2000 | 99.5 | 0.2 | NA | 0.20103 | 0.20135 | 2003.2 | 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 | 0.20103 | 0.20120 | 2001.7 | 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 | 0.20204 | 0.20215 | 2001.1 | 8.1 | 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 | 0.20022 | 0.20100 | 2007.8 | 8.1 | 96-33-3 | 10 ppm(35mg/m3/8H)(skin) | orl-rat 277mg/kg |
| 12. | Methyl methacrylate | (0404) | 03021BX | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20204 | 0.20220 | 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 | 0.20204 | 0.20215 | 2001.1 | 8.1 | 98-95-3 | 1 ppm (5mg/m3/8H)(skin) | orl-rat 780mg/kg |
| 14. | 2-Nitropropane | (0461) | 14002JX | NA | NA | NA | 2000 | 95 | 0.2 | NA | 0.21055 | 0.21075 | 2001.9 | 8.5 | 79-46-9 | 10 ppm (35mg/m3/8H) | orl-rat 720mg/kg |
| 15. | Pentachloroethane | (0450) | HGA01 | NA | NA | NA | 2000 | 98 | 0.2 | NA | 0.20410 | 0.20430 | 2001.9 | 8.2 | 76-01-7 | N/A | N/A |
| 16. | 1,1,2-Trichlorotrifluoroethane | (0474) | 18930 | NA | NA | NA | 2000 | 99 | 0.2 | NA | 0.20204 | 0.20220 | 2001.6 | 8.1 | 76-13-1 | 1000 ppm (7600mg/m3/8H) | orl-rat 43g/kg |
| 17. | Bromodichloromethane | 35171 | 051118 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.9 | 75-27-4 | N/A | orl-rat 916mg/kg |
| 18. | Dibromochloromethane | 35171 | 051118 | 0.05 | 5.00 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 124-48-1 | N/A | orl-rat 848mg/kg |
| 19. | cis-1,2-Dichloroethene | 35171 | 051118 | 0.05 | 5.00 | 40002.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 156-59-2 | N/A | N/A |
| 20. | trans-1,2-Dichloroethene | 35171 | 051118 | 0.05 | 5.00 | 40000.8 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 156-60-5 | N/A | orl-rat 1235mg/kg |
| 21. | Methylene chloride | 35171 | 051118 | 0.05 | 5.00 | 40003.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 75-09-2 | 500 ppm | orl-rat 820mg/kg |
| 22. | 1,1-Dichloroethene | 32251 | 122818 | 0.10 | 10.00 | 20005.5 | 2000 | NA | NA | 0.042 | NA | NA | 2000.3 | 18.7 | 75-35-4 | 1 ppm (4mg/m3/8H) | orl-rat 200mg/kg |
| 23. | Bromoform | 95321 | 010419 | 0.10 | 10.00 | 20001.7 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 75-25-2 | 0.5 ppm (5mg/m3) (skin) | orl-rat 933mg/kg |
| 24. | Carbon tetrachloride | 95321 | 010419 | 0.10 | 10.00 | 20001.3 | 2000 | NA | NA | 0.042 | NA | NA | 1999.9 | 18.7 | 56-23-5 | 2 ppm (12.6mg/m3/8H) | orl-rat 2350mg/kg |
| 25. | Chloroform | 95321 | 010419 | 0.10 | 10.00 | 20001.8 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 67-66-3 | 50 ppm (240mg/m3) (CL) | orl-rat 908mg/kg |
| 26. | Dibromomethane | 95321 | 010419 | 0.10 | 10.00 | 20001.7 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 74-95-3 | N/A | orl-rat 108mg/kg |
| 27. | 1,1-Dichloroethane | 95321 | 010419 | 0.10 | 10.00 | 20000.8 | 2000 | NA | NA | 0.042 | NA | NA | 1999.9 | 18.7 | 75-34-3 | 100 ppm | orl-rat 725mg/kg |
| 28. | 1,2-Dichloropropane | 95321 | 010419 | 0.10 | 10.00 | 20002.1 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 594-20-7 | N/A | N/A |
| [illegible] | achloroethene | 95321 | 010419 | 0.10 | 10.00 | 20002.2 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 127-18-4 | 25 ppm (170mg/m3/8H)(final) | orl-rat 2629mg/kg |
| 30. | ,1-Trichloroethane | 95321 | 010419 | 0.10 | 10.00 | 20001.7 | 2000 | NA | NA | 0.042 | NA | NA | 2000.0 | 18.7 | 71-55-6 | 350 ppm (1900mg/m3/8H) | orl-rat 10300mg/kg |
| 31. | 1,2-Dibromo-3-chloropropane | 35161 | 052418 | 0.05 | 5.00 | 40000.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 96-12-8 | 0.001 ppm | orl-rat 170mg/kg |
| 32. | 1,2-Dibromoethane | 35161 | 052418 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 106-93-4 | 20 ppm (8H) | orl-rat 108mg/kg |
| 33. | 1,2-Dichloroethane | 35161 | 052418 | 0.05 | 5.00 | 40001.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 107-06-2 | 50 ppm (8H) | orl-rat 670mg/kg |
| 34. | 1,2-Dichloropropane | 35161 | 052418 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 78-87-5 | 75 ppm (350mg/m3/8H) | orl-rat 1947mg/kg |
| 35. | 1,3-Dichloropropane | 35161 | 052418 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 142-28-9 | N/A | unr-mus 3800mg/kg |
| 36. | 1,1-Dichloropropene | 35161 | 052418 | 0.05 | 5.00 | 39639.5 | 2000 | NA | NA | 0.017 | NA | NA | 1981.8 | 24.2 | 563-58-6 | N/A | N/A |
| 37. | cis-1,3-Dichloropropene | 35161 | 052418 | 0.05 | 5.00 | 40001.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 10061-01-5 | N/A | N/A |
| 38. | trans-1,3-Dichloropropene | 35161 | 052418 | 0.05 | 5.00 | 40000.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 16.0 | 10061-02-6 | N/A | N/A |
| 39. | Hexachloro-1,3-butadiene | 35161 | 052418 | 0.05 | 5.00 | 40000.9 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 87-68-3 | 0.02 ppm (0.24mg/m3/8H) | orl-rat 82mg/kg |
| 40. | 1,1,1,2-Tetrachloroethane | 35161 | 052418 | 0.05 | 5.00 | 40000.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 630-20-6 | N/A | orl-rat 670mg/kg |
| 41. | 1,1,2,2-Tetrachloroethane | 35161 | 052418 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 79-34-5 | 5 ppm (35mg/m3/9H)(skin) | orl-rat 800mg/kg |
| 42. | 1,1,2-Trichloroethane | 35161 | 052418 | 0.05 | 5.00 | 40000.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 79-00-5 | 10 ppm (45mg/m3/8H)(skin) | orl-rat 836mg/kg |
| 43. | Trichloroethene | 35161 | 052418 | 0.05 | 5.00 | 40000.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 79-01-6 | 50 ppm (270mg/m3/8H) | orl-mus 2402mg/kg |
| 44. | 1,2,3-Trichloropropane | 35161 | 052418 | 0.05 | 5.00 | 40000.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 96-18-4 | 10 ppm (60mg/m3/8H) | orl-rat 149.6mg/kg |
| 45. | Benzene | 35162 | 060418 | 0.05 | 5.00 | 40000.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 71-43-2 | 1 ppm | orl-rat 4894mg/kg |
| 46. | Bromobenzene | 35162 | 060418 | 0.05 | 5.00 | 40000.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 108-86-1 | N/A | orl-rat 2699mg/kg |
| 47. | n-Butyl benzene | 35162 | 060418 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 104-51-8 | N/A | N/A |
| 48. | Ethyl benzene | 35162 | 060418 | 0.05 | 5.00 | 40000.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 100-41-4 | 100 ppm (435mg/m3/8H) | orl-rat >2000mg/kg |
| 49. | p-Isopropyl toluene | 35162 | 060418 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 99-87-6 | N/A | orl-rat 4750mg/kg |
| 50. | Naphthalene | 35162 | 060418 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 91-20-3 | 10 ppm (50mg/m3/8H) | orl-rat 490mg/kg |
| 51. | Styrene | 35162 | 060418 | 0.05 | 5.00 | 40000.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 100-42-5 | 100 ppm | orl-rat 5000mg/kg |
| 52. | Toluene | 35162 | 060418 | 0.05 | 5.00 | 40000.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 108-88-3 | 200 ppm | orl-rat 5000mg/kg |
| 53. | 1,2,3-Trichlorobenzene | 35162 | 060418 | 0.05 | 5.00 | 40002.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 87-61-6 | N/A | ipr-mus 1390mg/kg |
| 54. | 1,2,4-Trichlorobenzene | 35162 | 060418 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 120-82-1 | 5 ppm (CL) (40mg/m3) | orl-rat 756mg/kg |
| 55. | 1,2,4-Trimethylbenzene | 35162 | 060418 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.9 | 95-63-6 | N/A | orl-rat 5g/kg |
| 56. | 1,3,5-Trimethylbenzene | 35162 | 060418 | 0.05 | 5.00 | 40000.2 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 108-67-8 | N/A | N/A |
| 57. | m-Xylene | 35162 | 060418 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 108-38-3 | 100 ppm (435mg/m3/8H) | orl-rat 5g/kg |
| 58. | tert-Butyl benzene | 35163 | 051118 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 98-06-6 | N/A | N/A |
| 59. | sec-Butyl benzene | 35163 | 051118 | 0.05 | 5.00 | 40001.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 135-98-8 | N/A | orl-rat 2240mg/kg |
| 60. | Chlorobenzene | 35163 | 051118 | 0.05 | 5.00 | 40001.6 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 108-90-7 | 75 ppm (350mg/m3/8H) | orl-rat 2290mg/kg |
| 61. | 2-Chlorotoluene | 35163 | 051118 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 95-49-8 | 50 ppm (250mg/m3/8H) | orl-rat 3900mg/kg |
| 62. | 4-Chlorotoluene | 35163 | 051118 | 0.05 | 5.00 | 40001.4 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 106-43-4 | N/A | orl-rat 2100mg/kg |
| 63. | 1,2-Dichlorobenzene | 35163 | 051118 | 0.05 | 5.00 | 40002.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.8 | 95-50-1 | 50 ppm (300mg/m3) (CL) | orl-rat 500mg/kg |
| 64. | 1,3-Dichlorobenzene | 35163 | 051118 | 0.05 | 5.00 | 40001.5 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.9 | 541-73-1 | N/A | ipr-mus 1062mg/kg |
| 65. | 1,4-Dichlorobenzene | 35163 | 051118 | 0.05 | 5.00 | 40001.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 106-46-7 | 75 ppm (450mg/m3/8H) | orl-rat 500mg/kg |
| 66. | Isopropylbenzene | 35163 | 051118 | 0.05 | 5.00 | 40001.7 | 2000 | NA | NA | 0.017 | NA | NA | 1999.9 | 15.9 | 98-82-8 | 50 ppm (245mg/m3/8H) | orl-rat 1400mg/kg |
| 67. | n-Propylbenzene | 35163 | 051118 | 0.05 | 5.00 | 40001.0 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.9 | 103-65-1 | N/A | orl-rat 6040mg/kg |
| 68. | o-Xylene | 35163 | 051118 | 0.05 | 5.00 | 40001.1 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 95-47-6 | 100 ppm (435mg/m3/8H) | ipr-mus 1364mg/kg |
| 69. | p-Xylene | 35163 | 051118 | 0.05 | 5.00 | 40001.3 | 2000 | NA | NA | 0.017 | NA | NA | 1999.8 | 15.8 | 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 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).

**Run 27, "P95317 L010719 [2000µg/mL in MeOH]"**

Run Length: 60.00 min, 36000 points at 10 points/second.
Created: Wed, Jan 9, 2019 at 2:51:42 PM.
Sampled: Sequence "010819-GC13M1", Method "GC13-M1".
Analyzed using Method "GC13-M1".

**Comments**
GC13-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 # | Analyte | FID RT (min.) |
|---|---|---|
| 1 | Ether | 7.15 |
| 2 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 7.37 |
| 3 | 1,1-Dichloroethene | 7.99 |
| 4 | Acetonitrile | 8.80 |
| 5 | Iodomethane | 9.01 |
| 6 | Allyl chloride | 9.27 |
| 7 | **Carbon disulfide/Methylene chloride** | 9.73 |
| 8 | trans-1,2-Dichloroethene | 10.73 |
| 9 | 1,1-Dichloroethane | 12.44 |
| 10 | 2,2-Dichloropropane | 14.49 |
| 11 | cis-1,2-Dichloroethene | 14.76 |
| 12 | **Methacrylonitrile/Methyl acrylate/Chloroform** | 15.33 |
| 13 | **Isobutanol/1,1,1-Trichloroethane** | 16.69 |
| 14 | 1,1-Dichloropropene | 17.26 |
| 15 | Carbon tetrachloride | 17.72 |
| 16 | **Benzene/1,2-Dichloroethane** | 18.29 |
| 17 | Trichloroethene | 20.45 |
| 18 | 1,2-Dichloropropane | 21.17 |
| 19 | Methyl methacrylate | 21.56 |
| 20 | Bromodichloromethane | 22.05 |
| 21 | Dibromomethane | 22.23 |
| 22 | 2-Nitropropane | 22.48 |
| 23 | cis-1,3-Dichloropropene | 24.00 |
| 24 | Toluene | 24.97 |
| 25 | **Ethyl methacrylate/trans-1,3-Dichloropropene** | 25.82 |
| 26 | 1,1,2-Trichloroethane | 26.33 |
| 27 | **Tetrachloroethene/1,3-Dichloropropane** | 27.20 |
| 28 | Dibromochloromethane | 28.06 |
| 29 | 1,2-Dibromoethane | 28.72 |
| 30 | Chlorobenzene | 30.14 |
| 31 | **Ethylbenzene/1,1,1,2-Tetrachloroethane** | 30.32 |
| 32 | **m-Xylene/p-Xylene** | 30.59 |
| 33 | o-Xylene | 32.12 |
| 34 | Styrene | 32.30 |
| 35 | **Isopropylbenzene/Bromoform** | 33.39 |
| 36 | cis-1,4-Dichloro-2-butene | 33.79 |
| 37 | 1,1,2,2-Tetrachloroethane | 34.21 |
| 38 | **1,2,3-Trichloropropane/n-Propylbenzene** | 34.82 |
| 39 | **trans-1,4-Dichloro-2-butene/Bromobenzene** | 34.99 |
| 40 | **1,3,5-Trimethylbenzene/2-Chlorotoluene** | 35.42 |
| 41 | 4-Chlorotoluene | 35.61 |
| 42 | tert-Butylbenzene | 36.54 |
| 43 | **1,2,4-Trimethylbenzene/Pentachloroethane** | 36.78 |
| 44 | sec-Butylbenzene | 37.38 |
| 45 | p-Isopropyltoluene | 37.91 |
| 46 | 1,3-Dichlorobenzene | 38.23 |
| 47 | 1,4-Dichlorobenzene | 38.64 |
| 48 | n-Butylbenzene | 38.38 |
| 49 | 1,2-Dichlorobenzene | 39.95 |
| 50 | 1,2-Dibromo-3-chloropropane | 42.89 |
| 51 | Nitrobenzene | 43.23 |
| 52 | 1,2,4-Trichlorobenzene | 45.95 |
| 53 | Hexachlorobutadiene | 46.41 |
| 54 | Naphthalene | 46.98 |
| 55 | 1,2,3-Trichlorobenzene | 47.79 |

CHEMTECH

# 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. M1785
COC Number 2028346

### CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Chazen Companies
ADDRESS: 547 River St.
CITY Troy STATE: NY ZIP: 12180
ATTENTION: Brausen Fields
PHONE: 518/266/7355 FAX:

### CLIENT PROJECT INFORMATION

PROJECT NAME: Ebenezer Plaza-1
PROJECT NO.: 20918.10 LOCATION: Brooklyn, NY
PROJECT MANAGER: Kevin McGrath
e-mail: Kmcgrath@chazencompanies.com
PHONE: 518-266-7370 FAX:

### CLIENT BILLING INFORMATION

BILL TO: Chazen PO#: 08246
ADDRESS:
CITY STATE: ZIP:
ATTENTION: Accts. Payable PHONE:

### DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: Standard DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

### DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced ☐ US EPA CLP
- ☐ NYS ASP A ☒ NYS ASP B
- ☐ Other _____
- ☒ EDD FORMAT NYSDEC v.4.

### ANALYSIS

1: 8260 VOCs
2
3
4
5
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 A,E | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | MW-1 | GW | | X | 3/23/21 | 1220 | 2 | | X | | | | | | | | |
| 2. | MW-1_MS/MSD | | | X | | 1220 | 2 | | X | | | | | | | | |
| 3. | MW-2 | | | X | | 1140 | 2 | | X | | | | | | | | |
| 4. | MW-3R | | | X | | 1100 | 2 | | X | | | | | | | | |
| 5. | MW-4 | | | X | | 1020 | 2 | | X | | | | | | | | |
| 6. | MW-5R | | | X | | 0935 | 2 | | X | | | | | | | | |
| 7. | FD-032321 | | | X | | 00:00 | 2 | | X | | | | | | | | |
| 8. | TripBlank | QA/QC | | | | 0915 | 2 | | X | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | |

COMMENTS
← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

### SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

| RELINQUISHED BY SAMPLER: | DATE/TIME: | RECEIVED BY: |
|---|---|---|
| 1. Brausen Fields | 3/23/21 1230 | 1. 3-23-21 |
| 2. | | 2. |
| 3. | 3-23-21 1800 | 3. SC |

Conditions of bottles or coolers at receipt: ☒ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP (BF) °C 4.2°C
Comments: Please reference Purchase Order #~~08341~~ on invoice. 08246

Page 1 of 1

CLIENT: ☐ Hand Delivered ☐ Other _____
CHEMTECH: ☒ Picked Up ☐ Field Sampling

Shipment Complete ☒ YES ☐ NO

**From:** Branson Fields <bfields@chazencompanies.com>
**Sent:** Wednesday, March 24, 2021 10:21 AM
**To:** S.Chaim@chemtech.net
**Subject:** Re: 20918.10_EP-1 Sample Pickup

Thanks for bringing this to my attention. I should have filled more vials. Please proceed.

Branson Fields
Environmental Scientist
Chazen Companies
547 River Street
Troy,NY 12180
(C)720.626.6362
(O)518.266.7355

---

**From:** Steven Chaimowitz <S.Chaim@chemtech.net>
**Sent:** Wednesday, March 24, 2021 10:01:48 AM
**To:** Branson Fields <bfields@chazencompanies.com>
**Subject:** RE: 20918.10_EP-1 Sample Pickup

Hi Branson,
Please be advised for the MS/MSD samples the lab only received 2 vials. We will proceed with analysis and label one vial as the MS and one as the MSD. That being said there will be no volume for reanalysis for the MS/MSD should this be needed. Please let me know if you have any questions.

Thank you,

Steven Chaimowitz
Project Manager

CHEMTECH

284 Sheffield St. | Mountainside, NJ 07092
Direct: (908) 728-3147
s.chaim@chemtech.net | www.chemtech.net

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-----Original Message-----
From: Steven Chaimowitz [mailto:S.Chaim@chemtech.net]
Sent: Monday, March 22, 2021 9:48 AM
To: 'Branson Fields' <bfields@chazencompanies.com>
Subject: RE: 20918.10_EP-1 Sample Pickup

Hi Branson,
Confirmed for 1pm tomorrow. Thanks!

Regards,

Steven Chaimowitz
Project Manager

CHEMTECH

284 Sheffield St. | Mountainside, NJ 07092
Direct: (908) 728-3147
s.chaim@chemtech.net | www.chemtech.net

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-----Original Message-----
From: Branson Fields [mailto:bfields@chazencompanies.com]
Sent: Monday, March 22, 2021 9:34 AM
To: Steven Chaimowitz <s.chaim@chemtech.net>
Subject: RE: 20918.10_EP-1 Sample Pickup

Hi Steven,

Groundwater sampling is scheduled to be completed at the EP-1 Site tomorrow, 3/23/21. May I please request a sample pickup from the Site around 1:00pm?

Thanks,

Branson Fields

-----Original Message-----
From: Branson Fields
Sent: Wednesday, March 17, 2021 1:11 PM
To: Steven Chaimowitz <S.Chaim@chemtech.net>
Subject: Re: 20918.10_EP-1 SMP_March 2021 Quarterly

Hi steven,
You are correct, ASP B please. Thanks

Cheers,
Branson Fields

> On Mar 17, 2021, at 11:31, Steven Chaimowitz <S.Chaim@chemtech.net> wrote:
>
> Hi Branson,
> Please see the attached. Just want to confirm the deliverable should
> be ASPB rather than ASPA based on past projects. Thanks!
>
> Regards,
>
> Steven Chaimowitz
> Project Manager
>
> CHEMTECH
>
> 284 Sheffield St. | Mountainside, NJ 07092
> Direct: (908) 728-3147
> s.chaim@chemtech.net |
> www.chemtech.net<https://protect-us.mimecast.com/s/GH1iCVOklyT10jOsGMC
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>
> From: Branson Fields [mailto:bfields@chazencompanies.com]
> Sent: Wednesday, March 17, 2021 7:22 AM
> To: s.chaim@chemtech.net
> Subject: RE: 20918.10_EP-1 SMP_March 2021 Quarterly
>
> Hi Steven,
>
> I ended up collecting soil samples (2 = trip blank) at the Ebenezer
> Plaza-1 Site yesterday, and shipped them overnight to your lab via FedEx.
> They should arrive this morning. Please reference Purchase Order #
> 08334 on invoice.
>
> Additionally, GW sampling will be occurring March 23rd. I will
> coordinate a pick up time as we near closer. Thanks.
>
> Branson Fields
> Chazen, A LaBella Company | Environmental Scientist
> 547 River Street
> Troy, New York 12180
> Office: 518.266.7355
> Cell: 720.626.6362
> www.chazencompanies.com<https://protect-us.mimecast.com/s/8SbHCYEn0BhP
> koGsVKwi4/>
>
> From: Steven Chaimowitz
> <S.Chaim@chemtech.net<mailto:S.Chaim@chemtech.net>>
> Sent: Monday, March 15, 2021 9:33 AM
> To: Branson Fields
> <bfields@chazencompanies.com<mailto:bfields@chazencompanies.com>>
> Cc: kurt@chemtech.net<mailto:kurt@chemtech.net>
> Subject: RE: 20918.10_EP-1 SMP_March 2021 Quarterly
>
> Hi Branson,
> We will have this added to our schedule for tomorrow around 9am.
> Please reach out whenever you may need a sample pickup. Thank you!
>
> Regards,
>
> Steven Chaimowitz
> Project Manager
>
> CHEMTECH
>
> 284 Sheffield St. | Mountainside, NJ 07092
> Direct: (908) 728-3147
> s.chaim@chemtech.net<mailto:s.chaim@chemtech.net> |
> www.chemtech.net<https://protect-us.mimecast.com/s/GH1iCVOklyT10jOsGMC

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> transmission, including attachments if any, from any computer.
>
> From: Branson Fields [mailto:bfields@chazencompanies.com]
> Sent: Monday, March 15, 2021 9:10 AM
> To: s.chaim@chemtech.net<mailto:s.chaim@chemtech.net>
> Cc: kurt@chemtech.net<mailto:kurt@chemtech.net>
> Subject: RE: 20918.10_EP-1 SMP_March 2021 Quarterly
>
> Morning Steven,
> I apologize for the last minute request, may I please request a
> bottleware delivery to the Ebenezer Plaza-1 project Site tomorrow morning, 3/16/2021?
> My surplus bottleware supply was used last week. I will be on-Site by
> 8:00 am on Tuesday.
> Bottleware is needed for seven (7) groundwater samples with 8260 VOC
> analyses. I am overseeing monitoring well installations in advance of
> sampling and may or may not collect samples tomorrow. Please hold off
> on scheduling a pick-up for now, and I will coordinate as field
> activities advance.
> I appreciate your help.
> Thanks.
>
> Branson Fields
> Chazen, A LaBella Company | Environmental Scientist
> 547 River Street
> Troy, New York 12180
> Office: 518.266.7355
> Cell: 720.626.6362
> www.chazencompanies.com<https://protect-us.mimecast.com/s/d8t0C1wnQzTK
> nwvT1fmwP/>
>
> From: Steven Chaimowitz
> <S.Chaim@chemtech.net<mailto:S.Chaim@chemtech.net>>

> Sent: Tuesday, March 2, 2021 11:15 AM
> To: Branson Fields
> <bfields@chazencompanies.com<mailto:bfields@chazencompanies.com>>
> Cc: kurt@chemtech.net<mailto:kurt@chemtech.net>
> Subject: RE: 20918.10_EP-1 SMP_March 2021 Quarterly
>
> Hi Branson,
> Thank you for the heads up. We will cancel the pickup for today.
> Please let us know whenever you would like to reschedule. Thanks!
>
> Regards,
>
> Steven Chaimowitz
> Project Manager
>
> CHEMTECH
>
> 284 Sheffield St. | Mountainside, NJ 07092
> Direct: (908) 728-3147
> s.chaim@chemtech.net<mailto:s.chaim@chemtech.net> |
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> Feedback<http://chemtech.net/clientsurvey.aspx>
>
>
> [IMG_1800]
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>
> From: Branson Fields [mailto:bfields@chazencompanies.com]
> Sent: Tuesday, March 2, 2021 11:14 AM
> To: s.chaim@chemtech.net<mailto:s.chaim@chemtech.net>
> Cc: kurt@chemtech.net<mailto:kurt@chemtech.net>
> Subject: Re: 20918.10_EP-1 SMP_March 2021 Quarterly
>
> Hi Steven,
> Apologies for any inconvenience, but I'd like to cancel the sample
> pickup in Brooklyn today. Upon arrival at the site this morning, 3 of

> 5 wells have been destroyed due to construction activity and we have
> decided to postpone the sampling event. Thank you.
> Cheers,
> Branson Fields
>
>
> On Mar 1, 2021, at 10:33, Steven Chaimowitz
> <S.Chaim@chemtech.net<mailto:S.Chaim@chemtech.net>> wrote:
>
> Hi Branson,
> Confirmed for pickup tomorrow at 3pm at Ebenezer Plaza-1 project Site,
> 94 New Lots Avenue in Brooklyn.
>
> Thanks!
>
> Steven Chaimowitz
> Project Manager
>
> CHEMTECH
>
> 284 Sheffield St. | Mountainside, NJ 07092
> Direct: (908) 728-3147
> s.chaim@chemtech.net<mailto:s.chaim@chemtech.net> |
> www.chemtech.net<https://protect-us.mimecast.com/s/GH1iCVOklyT10jOsGMC
> ji>
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>
> <image002.jpg>
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> notify us immediately by return e-mail, and permanently delete this
> transmission, including attachments if any, from any computer.
>
> From: Branson Fields [mailto:bfields@chazencompanies.com]
> Sent: Monday, March 1, 2021 10:12 AM
> To: kurt@chemtech.net<mailto:kurt@chemtech.net>
> Cc: s.chaim@chemtech.net<mailto:s.chaim@chemtech.net>
> Subject: RE: 20918.10_EP-1 SMP_March 2021 Quarterly
>

> Hi Kurt,
>
> I appreciate the update. Look forward to working with you.
>
> Regards,
>
> Branson Fields
> Chazen, A LaBella Company | Environmental Scientist
> 547 River Street
> Troy, New York 12180
> Office: 518.266.7355
> Cell: 720.626.6362
> www.chazencompanies.com<https://protect-us.mimecast.com/s/vUO5C2koOAIA
> KonIXFPHP/>
>
> From: Kurt Hummler <kurt@chemtech.net<mailto:kurt@chemtech.net>>
> Sent: Monday, March 1, 2021 10:05 AM
> To: Branson Fields
> <bfields@chazencompanies.com<mailto:bfields@chazencompanies.com>>
> Cc: s.chaim@chemtech.net<mailto:s.chaim@chemtech.net>
> Subject: RE: 20918.10_EP-1 SMP_March 2021 Quarterly
>
> Good morning Branson,
>
> Please note that Steven Kim no longer works for Chemtech. He's gone
> on to the pharmaceutical field.
> You may contact me going forward with any questions or requests.
>
> Project Manager Steven Chaimowitz will coordinate the pickup with you.
>
> Regards
>
> Kurt
>
> Kurt Hummler
> Chemtech
> 284 Sheffield St | Mountainside, NJ 07092 Direct Phone: (908) 728-3143
> Office Phone: (908) 789 8900 ext. 3143
> Fax: (908) 789 8922
> www.chemtech.net<https://protect-us.mimecast.com/s/S-ldC31pO0TV7YLIEtK
> hy/>
>
> From: Branson Fields
> <bfields@chazencompanies.com<mailto:bfields@chazencompanies.com>>
> Sent: Monday, March 01, 2021 9:27 AM
> To: steven@chemtech.net<mailto:steven@chemtech.net>
> Subject: 20918.10_EP-1 SMP_March 2021 Quarterly
>
> Hey Steve;
>
> I have an another groundwater sampling event this Tuesday, 3/2/2021,

> at our Ebenezer Plaza-1 project Site, 94 New Lots Avenue in Brooklyn.
> 5 groundwater samples, with TB, and Dup are scoped for VOC analysis by
> 8260C, Cat A, with standard TAT.
>
> I have bottleware but would like to request a sample pick-up via lab
> courier tomorrow afternoon around 3pm. Can this please be scheduled?
>
> Thank You.
>
> Branson Fields
> Environmental Scientist
> <image003.png>
> 547 River Street
> Troy, New York 12180
> Office: 518.266.7355
> Cell:720.626.6362
> www.chazencompanies.com<https://protect-us.mimecast.com/s/UN5PC4xq4DSG
> YALc3NCpc/>
>
>
> <m1701coc.pdf>

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

# Laboratory Certification

| Certified By | License No. |
|---|---|
| | |
| CAS EPA CLP Contract | EP-W-14-030 |
| | |
| Connecticut | PH-0649 |
| | |
| DOD ELAP (L-A-B) | L2219 |
| | |
| Maine | 2020021 |
| | |
| Maryland | 296 |
| | |
| New Hampshire | 255420 |
| | |
| New Jersey | 20012 |
| | |
| New York | 11376 |
| | |
| Pennsylvania | 68-00548 |
| | |
| Soil Permit | P330-18-00132 |
| | |
| Texas | T104704488-20-13 |

QA Control Code: A2070148

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# LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** M1785 CHAZ02
**Client Name :** Chazen Companies
**Client Contact :** Kevin McGrath
**Invoice Name :** Chazen Companies
**Invoice Contact :** Kevin McGrath

**Order Date :** 3/23/2021 12:41:00 PM
**Project Name :** Ebenzer Plaza-1 - 20918.10
**Receive DateTime :** 3/23/2021 12:00:00 AM
**Purchase Order :**

**Project Mgr :**
**Report Type :** NYS ASP B
**EDD Type :** NYSDEC EDD V-4
**Hard Copy Date :**
**Date Signoff :**

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|
| M1785-10 | MW-1 | Water | 03/23/2021 | 12:20 | | | | | |
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |
| M1785-11 | M1785-10MS | Water | 03/23/2021 | 12:20 | | | | | |
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |
| M1785-12 | M1785-10MSD | Water | 03/23/2021 | 12:20 | | | | | |
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |
| M1785-13 | MW-2 | Water | 03/23/2021 | 11:40 | | | | | |
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |
| M1785-14 | MW-3R | Water | 03/23/2021 | 11:00 | | | | | |
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |
| M1785-15 | MW-4 | Water | 03/23/2021 | 10:20 | | | | | |
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |
| M1785-16 | MW-5R | Water | 03/23/2021 | 09:35 | | | | | |
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |
| M1785-17 | FD-032321 | Water | 03/23/2021 | 00:00 | | | | | |
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |
| M1785-18 | TRIP-BLANK | Water | 03/23/2021 | 09:15 | | | | | |

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# LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** M1785 CHAZ02
**Client Name :** Chazen Companies
**Client Contact :** Kevin McGrath
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**Invoice Contact :** Kevin McGrath

**Order Date :** 3/23/2021 12:41:00 PM
**Project Name :** Ebenzer Plaza-1 - 20918.10
**Receive DateTime :** 3/23/2021 12:00:00 AM
**Purchase Order :**

**Project Mgr :**
**Report Type :** NYS ASP B
**EDD Type :** NYSDEC EDD V-4
**Hard Copy Date :**
**Date Signoff :**

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | VOCMS Group2 | | 8260-Low | | 10 Bus. Days |

**Relinguished By :** CR
**Date / Time :** 3-24-21 9:20

**Received By :** M
**Date / Time :** 3-24-21 9:30

**Storage Area :** VOA Refridgerator Room