

## Cover Page

**Order ID :** P4892

**Project ID :** Amtrak Sawtooth Bridges 2024

**Client :** Portal Partners Tri-Venture

**Lab Sample Number**

P4892-01  
P4892-02  
P4892-03  
P4892-04

**Client Sample Number**

WB-310-TOP  
WB-310-BOT  
WB-310-BOT  
WB-310-SW

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: 11/29/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## **CASE NARRATIVE**

### **Portal Partners Tri-Venture**

**Project Name: Amtrak Sawtooth Bridges 2024**

**Project # N/A**

**Chemtech Project # P4892**

**Test Name: VOC-TCLVOA-10**

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

3 Solid samples were received on 11/15/2024.

1 Water sample was received on 11/15/2024.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

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

The analysis performed on instrument MSVOA\_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868. The analysis performed on instrument MSVOA\_Y were done using GC column Rxi-624Sil MS, which is 30 meters, 0.25 mm id, 1.4 um df, Restek Cat. #13868. The Trap was supplied by Supelco, VOCARB 3000, ATOMAX XYZ Concentrator. The analysis of VOC-TCLVOA-10 was based on method 8260D.

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

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD for {VN1120WBSD02} with File ID: VN084982.D met criteria except for 1,2,3-Trichlorobenzene[23%], 1,2,4-Trichlorobenzene[21%] these compounds did not meet the NJDKQP criteria and in-house criteria due to difference in results of BS-BSD. The Blank Spike met requirements for all samples .

The Blank Spike Duplicate for {VN1120WBSD02} with File ID: VN084982.D met requirements for all samples except for 1,2,3-Trichlorobenzene[66%] and 1,2,4-Trichlorobenzene[65%] these compounds did not meet the NJDKQP criteria and in-house



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criteria but associated Blank Spike and CCAL passing for these analyte therefore no corrective action taken.

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

The %RSD is greater than 20% in the Initial Calibration method (82N103024W.M) for Methyl Acetate, Acetone, Chloroethane, Chloromethane these compounds are passing on Linear Regression while, 1,4-Dichlorobenzene this compound is passing on Quadratic Regression.

The %RSD is greater than 20% in the Initial Calibration method (82Y111924S.M) for Chloromethane is passing on Linear Regression.

The Continuous Calibration File ID VN084960.D met the requirements except for 2-Hexanone and 4-Methyl-2-Pentanone failing high but no positive hit in associated sample therefore no corrective action taken.

The Tuning criteria met requirements.

**E. Additional Comments:**

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

Trip Blank was not provided with this set of samples.

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

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 <20% 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 > 20% for the Initial Calibration curve for SW-846 analysis.

**F. Manual Integration Comments:**

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

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

Signature\_\_\_\_\_



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## DATA REPORTING QUALIFIERS- ORGANIC

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

|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Value | If the result is a value greater than or equal to the detection limit, report the value                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| U     | Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. “10 U”. This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.                                                                                                                                                                                                                                 |
| ND    | Indicates the analyte was analyzed for, but not detected                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| J     | Indicates an estimated value. This flag is used:<br>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)<br>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: P4892

Completed

For thorough review, the report must have the following:

#### GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

#### COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

#### CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

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

✓

#### ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: PATEL VAISHALI

Date: 11/29/2024

## LAB CHRONICLE

|                 |                             |                   |                                        |
|-----------------|-----------------------------|-------------------|----------------------------------------|
| <b>OrderID:</b> | P4892                       | <b>OrderDate:</b> | 11/18/2024 8:10:00 AM                  |
| <b>Client:</b>  | Portal Partners Tri-Venture | <b>Project:</b>   | Amtrak Sawtooth Bridges 2024           |
| <b>Contact:</b> | Joseph Krupansky            | <b>Location:</b>  | M11,VOA Ref. #2 Soil,VOA Ref. #3 Water |

| LabID           | ClientID          | Matrix       | Test          | Method   | Sample Date     | Prep Date | Anal Date | Received        |
|-----------------|-------------------|--------------|---------------|----------|-----------------|-----------|-----------|-----------------|
| <b>P4892-01</b> | <b>WB-310-TOP</b> | <b>SOIL</b>  | VOC-TCLVOA-10 | 8260D    | <b>11/15/24</b> |           | 11/21/24  | <b>11/15/24</b> |
| <b>P4892-02</b> | <b>WB-310-BOT</b> | <b>SOIL</b>  | VOC-TCLVOA-10 | 8260D    | <b>11/15/24</b> |           | 11/22/24  | <b>11/15/24</b> |
| <b>P4892-03</b> | <b>WB-310-BOT</b> | <b>TCLP</b>  | TCLP VOA      | 8260D    | <b>11/15/24</b> |           | 11/21/24  | <b>11/15/24</b> |
| <b>P4892-04</b> | <b>WB-310-SW</b>  | <b>Water</b> | VOC-TCLVOA-10 | 8260-Low | <b>11/15/24</b> |           | 11/20/24  | <b>11/15/24</b> |

**Hit Summary Sheet**  
**SW-846**

**SDG No.:** P4892  
**Client:** Portal Partners Tri-Venture

| Sample ID         | Client ID         | Matrix | Parameter                      | Concentration | C           | MDL  | RDL  | Units |
|-------------------|-------------------|--------|--------------------------------|---------------|-------------|------|------|-------|
| <b>Client ID:</b> | <b>WB-310-TOP</b> |        |                                |               |             |      |      |       |
| P4892-01          | WB-310-TOP        | SOIL   | Acetone                        | 110           |             | 7.10 | 28.3 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Carbon Disulfide               | 7.20          |             | 1.40 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | 2-Butanone                     | 40.3          |             | 6.40 | 28.3 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Methylcyclohexane              | 14.3          |             | 0.98 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Benzene                        | 22.6          |             | 0.81 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Toluene                        | 1.90          | J           | 0.76 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Chlorobenzene                  | 1.70          | J           | 0.84 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Ethyl Benzene                  | 1.20          | J           | 0.70 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | m/p-Xylenes                    | 11.5          |             | 1.50 | 11.3 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | o-Xylene                       | 17.2          |             | 0.79 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Isopropylbenzene               | 1.50          | J           | 0.76 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | 1,3-Dichlorobenzene            | 5.90          |             | 0.84 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | 1,4-Dichlorobenzene            | 6.10          |             | 0.91 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | 1,2-Dichlorobenzene            | 2.10          | J           | 0.67 | 5.70 | ug/Kg |
|                   |                   |        | <b>Total Voc :</b>             |               | <b>244</b>  |      |      |       |
| P4892-01          | WB-310-TOP        | SOIL   | unknown12.127                  | * 46.4        | J           | 0    | 0    | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | unknown12.164                  | * 59.6        | J           | 0    | 0    | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | unknown12.499                  | * 53.2        | J           | 0    | 0    | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | unknown12.658                  | * 77.6        | J           | 0    | 0    | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Pentane, 2,2,4-trimethyl-      | * 30.0        | J           | 0    | 0    | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Benzene, (1-methyl-1-propenyl) | * 28.0        | J           | 0    | 0    | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Cyclohexane, 1,2,4-trimethyl-  | * 52.7        | J           | 0    | 0    | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Naphthalene, decahydro-2-metl  | * 53.1        | J           | 0    | 0    | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Nonane, 3-methyl-              | * 44.6        | J           | 0    | 0    | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | Decane, 3-methyl-              | * 35.0        | J           | 0    | 0    | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | n-propylbenzene                | * 1.50        | J           | 0.72 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | 1,3,5-Trimethylbenzene         | * 6.50        | J           | 0.72 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | 1,2,4-Trimethylbenzene         | * 10.7        | J           | 1.60 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | sec-Butylbenzene               | * 1.40        | J           | 0.76 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | p-Isopropyltoluene             | * 2.80        | J           | 0.66 | 5.70 | ug/Kg |
| P4892-01          | WB-310-TOP        | SOIL   | n-Butylbenzene                 | * 1.60        | J           | 0.71 | 5.70 | ug/Kg |
|                   |                   |        | <b>Total Tics :</b>            |               | <b>505</b>  |      |      |       |
|                   |                   |        | <b>Total Concentration:</b>    |               | <b>748</b>  |      |      |       |
| <b>Client ID:</b> | <b>WB-310-SW</b>  |        |                                |               |             |      |      |       |
| P4892-04          | WB-310-SW         | Water  | m/p-Xylenes                    | 0.39          | J           | 0.31 | 2.00 | ug/L  |
|                   |                   |        | <b>Total Voc :</b>             |               | <b>0.39</b> |      |      |       |

**Hit Summary Sheet**  
**SW-846**

**SDG No.:** P4892

**Client:** Portal Partners Tri-Venture

| Sample ID            | Client ID | Matrix | Parameter              | Concentration | C | MDL  | RDL  | Units |
|----------------------|-----------|--------|------------------------|---------------|---|------|------|-------|
| P4892-04             | WB-310-SW | Water  | Acetic acid            | * 7.60        | J | 0    | 0    | ug/L  |
| P4892-04             | WB-310-SW | Water  | 1,2,4-Trimethylbenzene | * 0.52        | J | 0.18 | 1.00 | ug/L  |
| Total Tics :         |           |        |                        | 8.12          |   |      |      |       |
| Total Concentration: |           |        |                        | 8.51          |   |      |      |       |



# QC SUMMARY

## Surrogate Summary

SDG No.: **P4892**

Client: **Portal Partners Tri-Venture**

Analytical Method: **SW8260D**

| Lab Sample ID | Client ID    | Parameter             | Spike | Result | RecoveryQual | Limits  |           |
|---------------|--------------|-----------------------|-------|--------|--------------|---------|-----------|
|               |              |                       |       |        |              | Low     | High      |
| P4892-01      | WB-310-TOP   | 1,2-Dichloroethane-d4 | 50    | 61.0   | 122          | 70 (50) | 130 (163) |
|               |              | Dibromofluoromethane  | 50    | 50.7   | 101          | 70 (54) | 130 (147) |
|               |              | Toluene-d8            | 50    | 49.0   | 98           | 70 (58) | 130 (134) |
|               |              | 4-Bromofluorobenzene  | 50    | 58.9   | 118          | 70 (29) | 130 (146) |
| P4892-02      | WB-310-BOT   | 1,2-Dichloroethane-d4 | 50    | 46.7   | 93           | 70 (50) | 130 (163) |
|               |              | Dibromofluoromethane  | 50    | 47.8   | 96           | 70 (54) | 130 (147) |
|               |              | Toluene-d8            | 50    | 47.3   | 95           | 70 (58) | 130 (134) |
|               |              | 4-Bromofluorobenzene  | 50    | 45.9   | 92           | 70 (29) | 130 (146) |
| VY1121SBL01   | VY1121SBL01  | 1,2-Dichloroethane-d4 | 50    | 51.9   | 104          | 70 (50) | 130 (163) |
|               |              | Dibromofluoromethane  | 50    | 48.5   | 97           | 70 (54) | 130 (147) |
|               |              | Toluene-d8            | 50    | 48.2   | 96           | 70 (58) | 130 (134) |
|               |              | 4-Bromofluorobenzene  | 50    | 47.3   | 95           | 70 (29) | 130 (146) |
| VY1121SBS01   | VY1121SBS01  | 1,2-Dichloroethane-d4 | 50    | 46.0   | 92           | 70 (50) | 130 (163) |
|               |              | Dibromofluoromethane  | 50    | 43.7   | 87           | 70 (54) | 130 (147) |
|               |              | Toluene-d8            | 50    | 43.4   | 87           | 70 (58) | 130 (134) |
|               |              | 4-Bromofluorobenzene  | 50    | 45.0   | 90           | 70 (29) | 130 (146) |
| VY1121SBSD01  | VY1121SBSD01 | 1,2-Dichloroethane-d4 | 50    | 56.3   | 113          | 70 (50) | 130 (163) |
|               |              | Dibromofluoromethane  | 50    | 53.0   | 106          | 70 (54) | 130 (147) |
|               |              | Toluene-d8            | 50    | 52.8   | 106          | 70 (58) | 130 (134) |
|               |              | 4-Bromofluorobenzene  | 50    | 55.2   | 110          | 70 (29) | 130 (146) |
| VY1122SBL01   | VY1122SBL01  | 1,2-Dichloroethane-d4 | 50    | 47.6   | 95           | 70 (50) | 130 (163) |
|               |              | Dibromofluoromethane  | 50    | 48.4   | 97           | 70 (54) | 130 (147) |
|               |              | Toluene-d8            | 50    | 47.6   | 95           | 70 (58) | 130 (134) |
|               |              | 4-Bromofluorobenzene  | 50    | 45.3   | 91           | 70 (29) | 130 (146) |
| VY1122SBS02   | VY1122SBS02  | 1,2-Dichloroethane-d4 | 50    | 53.1   | 106          | 70 (50) | 130 (163) |
|               |              | Dibromofluoromethane  | 50    | 53.2   | 106          | 70 (54) | 130 (147) |
|               |              | Toluene-d8            | 50    | 52.9   | 106          | 70 (58) | 130 (134) |
|               |              | 4-Bromofluorobenzene  | 50    | 54.6   | 109          | 70 (29) | 130 (146) |

### Surrogate Summary

SDG No.: **P4892**

Client: **Portal Partners Tri-Venture**

Analytical Method: **SW8260-Low**

| Lab Sample ID | Client ID    | Parameter             | Spike | Result | RecoveryQual | Limits  |           |
|---------------|--------------|-----------------------|-------|--------|--------------|---------|-----------|
|               |              |                       |       |        |              | Low     | High      |
| P4892-04      | WB-310-SW    | 1,2-Dichloroethane-d4 | 50    | 53.0   | 106          | 70 (74) | 130 (125) |
|               |              | Dibromofluoromethane  | 50    | 47.5   | 95           | 70 (75) | 130 (124) |
|               |              | Toluene-d8            | 50    | 45.9   | 92           | 70 (86) | 130 (113) |
|               |              | 4-Bromofluorobenzene  | 50    | 41.7   | 83           | 70 (77) | 130 (121) |
| VN1120WBL01   | VN1120WBL01  | 1,2-Dichloroethane-d4 | 50    | 51.1   | 102          | 70 (74) | 130 (125) |
|               |              | Dibromofluoromethane  | 50    | 49.5   | 99           | 70 (75) | 130 (124) |
|               |              | Toluene-d8            | 50    | 46.1   | 92           | 70 (86) | 130 (113) |
|               |              | 4-Bromofluorobenzene  | 50    | 46.4   | 93           | 70 (77) | 130 (121) |
| VN1120WBS02   | VN1120WBS02  | 1,2-Dichloroethane-d4 | 50    | 46.9   | 94           | 70 (74) | 130 (125) |
|               |              | Dibromofluoromethane  | 50    | 48.3   | 97           | 70 (75) | 130 (124) |
|               |              | Toluene-d8            | 50    | 44.9   | 90           | 70 (86) | 130 (113) |
|               |              | 4-Bromofluorobenzene  | 50    | 48.2   | 96           | 70 (77) | 130 (121) |
| VN1120WBSD0   | VN1120WBSD02 | 1,2-Dichloroethane-d4 | 50    | 51.7   | 103          | 70 (74) | 130 (125) |
|               |              | Dibromofluoromethane  | 50    | 50.6   | 101          | 70 (75) | 130 (124) |
|               |              | Toluene-d8            | 50    | 47.2   | 94           | 70 (86) | 130 (113) |
|               |              | 4-Bromofluorobenzene  | 50    | 50.5   | 101          | 70 (77) | 130 (121) |





Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4892

Client: Portal Partners Tri-Venture

Analytical Method: SW8260-Low

Datafile : VN084964.D

| Lab Sample ID | Parameter                      | Spike | Result | Unit | Rec | RPD | Qual | Low     | Limits High | RPD |
|---------------|--------------------------------|-------|--------|------|-----|-----|------|---------|-------------|-----|
| VN1120WBS02   | Dichlorodifluoromethane        | 20    | 20.6   | ug/L | 103 |     |      | 40 (69) | 160 (116)   |     |
|               | Chloromethane                  | 20    | 17.8   | ug/L | 89  |     |      | 40 (65) | 160 (116)   |     |
|               | Vinyl chloride                 | 20    | 19.3   | ug/L | 97  |     |      | 70 (65) | 130 (117)   |     |
|               | Bromomethane                   | 20    | 20.1   | ug/L | 101 |     |      | 40 (58) | 160 (125)   |     |
|               | Chloroethane                   | 20    | 19.2   | ug/L | 96  |     |      | 40 (56) | 160 (128)   |     |
|               | Trichlorofluoromethane         | 20    | 19.8   | ug/L | 99  |     |      | 40 (73) | 160 (115)   |     |
|               | 1,1,2-Trichlorotrifluoroethane | 20    | 19.6   | ug/L | 98  |     |      | 70 (80) | 130 (112)   |     |
|               | 1,1-Dichloroethene             | 20    | 19.0   | ug/L | 95  |     |      | 70 (74) | 130 (110)   |     |
|               | Acetone                        | 100   | 110    | ug/L | 110 |     |      | 40 (60) | 160 (125)   |     |
|               | Carbon disulfide               | 20    | 17.8   | ug/L | 89  |     |      | 40 (64) | 160 (112)   |     |
|               | Methyl tert-butyl Ether        | 20    | 21.8   | ug/L | 109 |     |      | 70 (78) | 130 (114)   |     |
|               | Methyl Acetate                 | 20    | 19.7   | ug/L | 99  |     |      | 70 (67) | 130 (125)   |     |
|               | Methylene Chloride             | 20    | 20.2   | ug/L | 101 |     |      | 70 (72) | 130 (114)   |     |
|               | trans-1,2-Dichloroethene       | 20    | 19.2   | ug/L | 96  |     |      | 70 (75) | 130 (108)   |     |
|               | 1,1-Dichloroethane             | 20    | 19.8   | ug/L | 99  |     |      | 70 (78) | 130 (112)   |     |
|               | Cyclohexane                    | 20    | 18.8   | ug/L | 94  |     |      | 70 (75) | 130 (110)   |     |
|               | 2-Butanone                     | 100   | 120    | ug/L | 120 |     |      | 40 (65) | 160 (122)   |     |
|               | Carbon Tetrachloride           | 20    | 20.8   | ug/L | 104 |     |      | 70 (77) | 130 (113)   |     |
|               | cis-1,2-Dichloroethene         | 20    | 20.1   | ug/L | 101 |     |      | 70 (77) | 130 (110)   |     |
|               | Bromochloromethane             | 20    | 21.8   | ug/L | 109 |     |      | 70 (70) | 130 (124)   |     |
|               | Chloroform                     | 20    | 20.6   | ug/L | 103 |     |      | 70 (79) | 130 (113)   |     |
|               | 1,1,1-Trichloroethane          | 20    | 20.0   | ug/L | 100 |     |      | 70 (80) | 130 (108)   |     |
|               | Methylcyclohexane              | 20    | 20.6   | ug/L | 103 |     |      | 70 (72) | 130 (115)   |     |
|               | Benzene                        | 20    | 19.8   | ug/L | 99  |     |      | 70 (82) | 130 (109)   |     |
|               | 1,2-Dichloroethane             | 20    | 21.4   | ug/L | 107 |     |      | 70 (80) | 130 (115)   |     |
|               | Trichloroethene                | 20    | 19.6   | ug/L | 98  |     |      | 70 (77) | 130 (113)   |     |
|               | 1,2-Dichloropropane            | 20    | 20.7   | ug/L | 104 |     |      | 70 (83) | 130 (111)   |     |
|               | Bromodichloromethane           | 20    | 20.2   | ug/L | 101 |     |      | 70 (83) | 130 (110)   |     |
|               | 4-Methyl-2-Pentanone           | 100   | 130    | ug/L | 130 |     |      | 40 (74) | 160 (118)   |     |
|               | Toluene                        | 20    | 20.7   | ug/L | 104 |     |      | 70 (82) | 130 (110)   |     |
|               | t-1,3-Dichloropropene          | 20    | 19.4   | ug/L | 97  |     |      | 70 (79) | 130 (110)   |     |
|               | cis-1,3-Dichloropropene        | 20    | 20.2   | ug/L | 101 |     |      | 70 (82) | 130 (110)   |     |
|               | 1,1,2-Trichloroethane          | 20    | 21.9   | ug/L | 110 |     |      | 70 (83) | 130 (112)   |     |
|               | 2-Hexanone                     | 100   | 130    | ug/L | 130 |     |      | 40 (73) | 160 (117)   |     |
|               | Dibromochloromethane           | 20    | 21.5   | ug/L | 108 |     |      | 70 (82) | 130 (110)   |     |
|               | 1,2-Dibromoethane              | 20    | 21.3   | ug/L | 106 |     |      | 70 (81) | 130 (110)   |     |
|               | Tetrachloroethene              | 20    | 19.7   | ug/L | 99  |     |      | 70 (67) | 130 (123)   |     |
|               | Chlorobenzene                  | 20    | 19.3   | ug/L | 97  |     |      | 70 (82) | 130 (109)   |     |
|               | Ethyl Benzene                  | 20    | 19.6   | ug/L | 98  |     |      | 70 (83) | 130 (109)   |     |
|               | m/p-Xylenes                    | 40    | 39.3   | ug/L | 98  |     |      | 70 (82) | 130 (110)   |     |
|               | o-Xylene                       | 20    | 20.7   | ug/L | 104 |     |      | 70 (83) | 130 (109)   |     |
|               | Styrene                        | 20    | 20.2   | ug/L | 101 |     |      | 70 (80) | 130 (111)   |     |
|               | Bromoform                      | 20    | 20.0   | ug/L | 100 |     |      | 70 (79) | 130 (109)   |     |
|               | Isopropylbenzene               | 20    | 19.3   | ug/L | 97  |     |      | 70 (83) | 130 (112)   |     |
|               | 1,1,2,2-Tetrachloroethane      | 20    | 20.4   | ug/L | 102 |     |      | 70 (76) | 130 (118)   |     |
|               | 1,3-Dichlorobenzene            | 20    | 17.5   | ug/L | 88  |     |      | 70 (82) | 130 (108)   |     |
|               | 1,4-Dichlorobenzene            | 20    | 18.0   | ug/L | 90  |     |      | 70 (82) | 130 (107)   |     |
|               | 1,2-Dichlorobenzene            | 20    | 18.0   | ug/L | 90  |     |      | 70 (82) | 130 (109)   |     |

() = LABORATORY INHOUSE LIMIT

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** P4892

**Client:** Portal Partners Tri-Venture

**Analytical Method:** SW8260-Low

**Datafile :** VN084964.D

| Lab Sample ID | Parameter                   | Spike | Result | Unit | Rec | RPD | Qual | Low     | Limits<br>High | RPD |
|---------------|-----------------------------|-------|--------|------|-----|-----|------|---------|----------------|-----|
| VN1120WBS02   | 1,2-Dibromo-3-Chloropropane | 20    | 20.6   | ug/L | 103 |     |      | 40 (68) | 160 (112)      |     |
|               | 1,2,4-Trichlorobenzene      | 20    | 16.0   | ug/L | 80  |     |      | 70 (75) | 130 (113)      |     |
|               | 1,2,3-Trichlorobenzene      | 20    | 16.5   | ug/L | 83  |     |      | 70 (76) | 130 (114)      |     |

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** P4892

**Client:** Portal Partners Tri-Venture

**Analytical Method:** SW8260-Low

**Datafile :** VN084982.D

| Lab Sample ID | Parameter                      | Spike | Result | Unit | Rec | RPD | Qual | Low     | Limits<br>High | RPD     |
|---------------|--------------------------------|-------|--------|------|-----|-----|------|---------|----------------|---------|
| VN1120WBSD02  | Dichlorodifluoromethane        | 20    | 19.7   | ug/L | 99  | 4   |      | 40 (69) | 160 (116)      | 20 (20) |
|               | Chloromethane                  | 20    | 16.6   | ug/L | 83  | 7   |      | 40 (65) | 160 (116)      | 20 (20) |
|               | Vinyl chloride                 | 20    | 18.9   | ug/L | 95  | 2   |      | 70 (65) | 130 (117)      | 20 (20) |
|               | Bromomethane                   | 20    | 19.2   | ug/L | 96  | 5   |      | 40 (58) | 160 (125)      | 20 (20) |
|               | Chloroethane                   | 20    | 18.5   | ug/L | 93  | 3   |      | 40 (56) | 160 (128)      | 20 (20) |
|               | Trichlorofluoromethane         | 20    | 19.5   | ug/L | 98  | 1   |      | 40 (73) | 160 (115)      | 20 (20) |
|               | 1,1,2-Trichlorotrifluoroethane | 20    | 18.6   | ug/L | 93  | 5   |      | 70 (80) | 130 (112)      | 20 (20) |
|               | 1,1-Dichloroethene             | 20    | 17.9   | ug/L | 90  | 5   |      | 70 (74) | 130 (110)      | 20 (20) |
|               | Acetone                        | 100   | 110    | ug/L | 110 | 0   |      | 40 (60) | 160 (125)      | 20 (20) |
|               | Carbon disulfide               | 20    | 16.6   | ug/L | 83  | 7   |      | 40 (64) | 160 (112)      | 20 (20) |
|               | Methyl tert-butyl Ether        | 20    | 19.1   | ug/L | 96  | 13  |      | 70 (78) | 130 (114)      | 20 (20) |
|               | Methyl Acetate                 | 20    | 18.7   | ug/L | 94  | 5   |      | 70 (67) | 130 (125)      | 20 (20) |
|               | Methylene Chloride             | 20    | 19.0   | ug/L | 95  | 6   |      | 70 (72) | 130 (114)      | 20 (20) |
|               | trans-1,2-Dichloroethene       | 20    | 18.4   | ug/L | 92  | 4   |      | 70 (75) | 130 (108)      | 20 (20) |
|               | 1,1-Dichloroethane             | 20    | 19.0   | ug/L | 95  | 4   |      | 70 (78) | 130 (112)      | 20 (20) |
|               | Cyclohexane                    | 20    | 17.9   | ug/L | 90  | 4   |      | 70 (75) | 130 (110)      | 20 (20) |
|               | 2-Butanone                     | 100   | 110    | ug/L | 110 | 9   |      | 40 (65) | 160 (122)      | 20 (20) |
|               | Carbon Tetrachloride           | 20    | 19.5   | ug/L | 98  | 6   |      | 70 (77) | 130 (113)      | 20 (20) |
|               | cis-1,2-Dichloroethene         | 20    | 18.2   | ug/L | 91  | 10  |      | 70 (77) | 130 (110)      | 20 (20) |
|               | Bromochloromethane             | 20    | 20.2   | ug/L | 101 | 8   |      | 70 (70) | 130 (124)      | 20 (20) |
|               | Chloroform                     | 20    | 19.4   | ug/L | 97  | 6   |      | 70 (79) | 130 (113)      | 20 (20) |
|               | 1,1,1-Trichloroethane          | 20    | 19.5   | ug/L | 98  | 2   |      | 70 (80) | 130 (108)      | 20 (20) |
|               | Methylcyclohexane              | 20    | 17.7   | ug/L | 89  | 15  |      | 70 (72) | 130 (115)      | 20 (20) |
|               | Benzene                        | 20    | 17.9   | ug/L | 90  | 10  |      | 70 (82) | 130 (109)      | 20 (20) |
|               | 1,2-Dichloroethane             | 20    | 19.0   | ug/L | 95  | 12  |      | 70 (80) | 130 (115)      | 20 (20) |
|               | Trichloroethene                | 20    | 17.3   | ug/L | 86  | 13  |      | 70 (77) | 130 (113)      | 20 (20) |
|               | 1,2-Dichloropropane            | 20    | 18.5   | ug/L | 93  | 11  |      | 70 (83) | 130 (111)      | 20 (20) |
|               | Bromodichloromethane           | 20    | 18.3   | ug/L | 92  | 9   |      | 70 (83) | 130 (110)      | 20 (20) |
|               | 4-Methyl-2-Pentanone           | 100   | 110    | ug/L | 110 | 17  |      | 40 (74) | 160 (118)      | 20 (20) |
|               | Toluene                        | 20    | 18.5   | ug/L | 93  | 11  |      | 70 (82) | 130 (110)      | 20 (20) |
|               | t-1,3-Dichloropropene          | 20    | 16.9   | ug/L | 85  | 13  |      | 70 (79) | 130 (110)      | 20 (20) |
|               | cis-1,3-Dichloropropene        | 20    | 17.7   | ug/L | 89  | 13  |      | 70 (82) | 130 (110)      | 20 (20) |
|               | 1,1,2-Trichloroethane          | 20    | 19.2   | ug/L | 96  | 14  |      | 70 (83) | 130 (112)      | 20 (20) |
|               | 2-Hexanone                     | 100   | 110    | ug/L | 110 | 17  |      | 40 (73) | 160 (117)      | 20 (20) |
|               | Dibromochloromethane           | 20    | 19.0   | ug/L | 95  | 13  |      | 70 (82) | 130 (110)      | 20 (20) |
|               | 1,2-Dibromoethane              | 20    | 18.0   | ug/L | 90  | 16  |      | 70 (81) | 130 (110)      | 20 (20) |
|               | Tetrachloroethene              | 20    | 18.0   | ug/L | 90  | 10  |      | 70 (67) | 130 (123)      | 20 (20) |
|               | Chlorobenzene                  | 20    | 17.8   | ug/L | 89  | 9   |      | 70 (82) | 130 (109)      | 20 (20) |
|               | Ethyl Benzene                  | 20    | 18.1   | ug/L | 91  | 7   |      | 70 (83) | 130 (109)      | 20 (20) |
|               | m/p-Xylenes                    | 40    | 36.6   | ug/L | 92  | 6   |      | 70 (82) | 130 (110)      | 20 (20) |
|               | o-Xylene                       | 20    | 19.1   | ug/L | 96  | 8   |      | 70 (83) | 130 (109)      | 20 (20) |
|               | Styrene                        | 20    | 17.9   | ug/L | 90  | 12  |      | 70 (80) | 130 (111)      | 20 (20) |
|               | Bromoform                      | 20    | 19.0   | ug/L | 95  | 5   |      | 70 (79) | 130 (109)      | 20 (20) |
|               | Isopropylbenzene               | 20    | 17.2   | ug/L | 86  | 12  |      | 70 (83) | 130 (112)      | 20 (20) |
|               | 1,1,2,2-Tetrachloroethane      | 20    | 17.8   | ug/L | 89  | 14  |      | 70 (76) | 130 (118)      | 20 (20) |
|               | 1,3-Dichlorobenzene            | 20    | 15.0   | ug/L | 75  | 16  |      | 70 (82) | 130 (108)      | 20 (20) |
|               | 1,4-Dichlorobenzene            | 20    | 16.1   | ug/L | 81  | 11  |      | 70 (82) | 130 (107)      | 20 (20) |
|               | 1,2-Dichlorobenzene            | 20    | 15.8   | ug/L | 79  | 13  |      | 70 (82) | 130 (109)      | 20 (20) |

() = LABORATORY INHOUSE LIMIT

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** P4892

**Client:** Portal Partners Tri-Venture

**Analytical Method:** SW8260-Low

**Datafile :** VN084982.D

| Lab Sample ID | Parameter                   | Spike | Result | Unit | Rec | RPD | Qual | Low     | Limits<br>High | RPD     |
|---------------|-----------------------------|-------|--------|------|-----|-----|------|---------|----------------|---------|
| VN1120WBSD02  | 1,2-Dibromo-3-Chloropropane | 20    | 17.6   | ug/L | 88  | 16  |      | 40 (68) | 160 (112)      | 20 (20) |
|               | 1,2,4-Trichlorobenzene      | 20    | 13.0   | ug/L | 65  | 21  | * *  | 70 (75) | 130 (113)      | 20 (20) |
|               | 1,2,3-Trichlorobenzene      | 20    | 13.2   | ug/L | 66  | 23  | * *  | 70 (76) | 130 (114)      | 20 (20) |

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** P4892

**Client:** Portal Partners Tri-Venture

**Analytical Method:** SW8260D

**Datafile :** VY020375.D

| Lab Sample ID | Parameter                      | Spike | Result | Unit  | Rec | RPD | Qual | Low     | Limits<br>High | RPD |
|---------------|--------------------------------|-------|--------|-------|-----|-----|------|---------|----------------|-----|
| VY1121SBS01   | Dichlorodifluoromethane        | 20    | 22.3   | ug/Kg | 112 |     |      | 40 (64) | 160 (136)      |     |
|               | Chloromethane                  | 20    | 14.3   | ug/Kg | 72  |     |      | 40 (70) | 160 (130)      |     |
|               | Vinyl chloride                 | 20    | 15.8   | ug/Kg | 79  |     |      | 70 (72) | 130 (129)      |     |
|               | Bromomethane                   | 20    | 17.3   | ug/Kg | 86  |     |      | 40 (58) | 160 (141)      |     |
|               | Chloroethane                   | 20    | 17.0   | ug/Kg | 85  |     |      | 40 (69) | 160 (130)      |     |
|               | Trichlorofluoromethane         | 20    | 19.8   | ug/Kg | 99  |     |      | 40 (69) | 160 (134)      |     |
|               | 1,1,2-Trichlorotrifluoroethane | 20    | 18.3   | ug/Kg | 92  |     |      | 70 (81) | 130 (123)      |     |
|               | 1,1-Dichloroethene             | 20    | 18.3   | ug/Kg | 92  |     |      | 70 (79) | 130 (121)      |     |
|               | Acetone                        | 100   | 93.9   | ug/Kg | 94  |     |      | 40 (60) | 160 (131)      |     |
|               | Carbon disulfide               | 20    | 17.3   | ug/Kg | 86  |     |      | 40 (45) | 160 (154)      |     |
|               | Methyl tert-butyl Ether        | 20    | 19.3   | ug/Kg | 97  |     |      | 70 (77) | 130 (129)      |     |
|               | Methyl Acetate                 | 20    | 18.1   | ug/Kg | 91  |     |      | 70 (69) | 130 (149)      |     |
|               | Methylene Chloride             | 20    | 19.0   | ug/Kg | 95  |     |      | 70 (56) | 130 (174)      |     |
|               | trans-1,2-Dichloroethene       | 20    | 17.9   | ug/Kg | 90  |     |      | 70 (80) | 130 (123)      |     |
|               | 1,1-Dichloroethane             | 20    | 18.5   | ug/Kg | 93  |     |      | 70 (82) | 130 (123)      |     |
|               | Cyclohexane                    | 20    | 18.7   | ug/Kg | 94  |     |      | 70 (76) | 130 (122)      |     |
|               | 2-Butanone                     | 100   | 99.8   | ug/Kg | 100 |     |      | 40 (69) | 160 (131)      |     |
|               | Carbon Tetrachloride           | 20    | 21.1   | ug/Kg | 106 |     |      | 70 (76) | 130 (129)      |     |
|               | cis-1,2-Dichloroethene         | 20    | 18.9   | ug/Kg | 95  |     |      | 70 (82) | 130 (123)      |     |
|               | Bromochloromethane             | 20    | 18.1   | ug/Kg | 91  |     |      | 70 (80) | 130 (127)      |     |
|               | Chloroform                     | 20    | 19.0   | ug/Kg | 95  |     |      | 70 (82) | 130 (125)      |     |
|               | 1,1,1-Trichloroethane          | 20    | 20.2   | ug/Kg | 101 |     |      | 70 (80) | 130 (126)      |     |
|               | Methylcyclohexane              | 20    | 18.8   | ug/Kg | 94  |     |      | 70 (77) | 130 (123)      |     |
|               | Benzene                        | 20    | 19.6   | ug/Kg | 98  |     |      | 70 (84) | 130 (121)      |     |
|               | 1,2-Dichloroethane             | 20    | 20.7   | ug/Kg | 104 |     |      | 70 (81) | 130 (126)      |     |
|               | Trichloroethene                | 20    | 19.3   | ug/Kg | 97  |     |      | 70 (83) | 130 (122)      |     |
|               | 1,2-Dichloropropane            | 20    | 19.1   | ug/Kg | 96  |     |      | 70 (83) | 130 (122)      |     |
|               | Bromodichloromethane           | 20    | 19.9   | ug/Kg | 100 |     |      | 70 (82) | 130 (123)      |     |
|               | 4-Methyl-2-Pentanone           | 100   | 99.7   | ug/Kg | 100 |     |      | 40 (70) | 160 (135)      |     |
|               | Toluene                        | 20    | 19.3   | ug/Kg | 97  |     |      | 70 (83) | 130 (122)      |     |
|               | t-1,3-Dichloropropene          | 20    | 19.2   | ug/Kg | 96  |     |      | 70 (78) | 130 (124)      |     |
|               | cis-1,3-Dichloropropene        | 20    | 19.9   | ug/Kg | 100 |     |      | 70 (81) | 130 (122)      |     |
|               | 1,1,2-Trichloroethane          | 20    | 19.0   | ug/Kg | 95  |     |      | 70 (82) | 130 (125)      |     |
|               | 2-Hexanone                     | 100   | 100    | ug/Kg | 100 |     |      | 40 (66) | 160 (138)      |     |
|               | Dibromochloromethane           | 20    | 19.8   | ug/Kg | 99  |     |      | 70 (79) | 130 (125)      |     |
|               | 1,2-Dibromoethane              | 20    | 18.7   | ug/Kg | 94  |     |      | 70 (80) | 130 (125)      |     |
|               | Tetrachloroethene              | 20    | 18.6   | ug/Kg | 93  |     |      | 70 (83) | 130 (125)      |     |
|               | Chlorobenzene                  | 20    | 18.6   | ug/Kg | 93  |     |      | 70 (84) | 130 (122)      |     |
|               | Ethyl Benzene                  | 20    | 19.0   | ug/Kg | 95  |     |      | 70 (82) | 130 (124)      |     |
|               | m/p-Xylenes                    | 40    | 39.2   | ug/Kg | 98  |     |      | 70 (83) | 130 (124)      |     |
|               | o-Xylene                       | 20    | 19.5   | ug/Kg | 98  |     |      | 70 (83) | 130 (123)      |     |
|               | Styrene                        | 20    | 19.8   | ug/Kg | 99  |     |      | 70 (82) | 130 (124)      |     |
|               | Bromoform                      | 20    | 20.7   | ug/Kg | 104 |     |      | 70 (75) | 130 (127)      |     |
|               | Isopropylbenzene               | 20    | 18.4   | ug/Kg | 92  |     |      | 70 (82) | 130 (124)      |     |
|               | 1,1,2,2-Tetrachloroethane      | 20    | 18.2   | ug/Kg | 91  |     |      | 70 (77) | 130 (127)      |     |
|               | 1,3-Dichlorobenzene            | 20    | 17.8   | ug/Kg | 89  |     |      | 70 (83) | 130 (122)      |     |
|               | 1,4-Dichlorobenzene            | 20    | 18.4   | ug/Kg | 92  |     |      | 70 (84) | 130 (121)      |     |
|               | 1,2-Dichlorobenzene            | 20    | 18.6   | ug/Kg | 93  |     |      | 70 (83) | 130 (124)      |     |

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**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** P4892  
**Client:** Portal Partners Tri-Venture  
**Analytical Method:** SW8260D **Datafile :** VY020375.D

| Lab Sample ID | Parameter                   | Spike | Result | Unit  | Rec | RPD | Qual | Low     | Limits<br>High | RPD |
|---------------|-----------------------------|-------|--------|-------|-----|-----|------|---------|----------------|-----|
| VY1121SBS01   | 1,2-Dibromo-3-Chloropropane | 20    | 18.1   | ug/Kg | 91  |     |      | 40 (66) | 160 (134)      |     |
|               | 1,2,4-Trichlorobenzene      | 20    | 17.9   | ug/Kg | 90  |     |      | 70 (78) | 130 (127)      |     |
|               | 1,2,3-Trichlorobenzene      | 20    | 17.6   | ug/Kg | 88  |     |      | 70 (70) | 130 (137)      |     |

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: **P4892**

Client: **Portal Partners Tri-Venture**

Analytical Method: **SW8260D**

Datafile : VY020376.D

| Lab Sample ID | Parameter                      | Spike | Result | Unit  | Rec | RPD | Qual | Low     | Limits<br>High | RPD     |
|---------------|--------------------------------|-------|--------|-------|-----|-----|------|---------|----------------|---------|
| VY1121SBSD01  | Dichlorodifluoromethane        | 20    | 23.8   | ug/Kg | 119 | 6   |      | 40 (64) | 160 (136)      | 30 (20) |
|               | Chloromethane                  | 20    | 14.9   | ug/Kg | 75  | 4   |      | 40 (70) | 160 (130)      | 30 (20) |
|               | Vinyl chloride                 | 20    | 16.8   | ug/Kg | 84  | 6   |      | 70 (72) | 130 (129)      | 30 (20) |
|               | Bromomethane                   | 20    | 19.1   | ug/Kg | 96  | 11  |      | 40 (58) | 160 (141)      | 30 (20) |
|               | Chloroethane                   | 20    | 17.8   | ug/Kg | 89  | 5   |      | 40 (69) | 160 (130)      | 30 (20) |
|               | Trichlorofluoromethane         | 20    | 21.1   | ug/Kg | 106 | 7   |      | 40 (69) | 160 (134)      | 30 (20) |
|               | 1,1,2-Trichlorotrifluoroethane | 20    | 19.4   | ug/Kg | 97  | 5   |      | 70 (81) | 130 (123)      | 30 (20) |
|               | 1,1-Dichloroethene             | 20    | 19.8   | ug/Kg | 99  | 7   |      | 70 (79) | 130 (121)      | 30 (20) |
|               | Acetone                        | 100   | 95.5   | ug/Kg | 96  | 2   |      | 40 (60) | 160 (131)      | 30 (20) |
|               | Carbon disulfide               | 20    | 18.9   | ug/Kg | 95  | 10  |      | 40 (45) | 160 (154)      | 30 (20) |
|               | Methyl tert-butyl Ether        | 20    | 21.0   | ug/Kg | 105 | 8   |      | 70 (77) | 130 (129)      | 30 (20) |
|               | Methyl Acetate                 | 20    | 19.0   | ug/Kg | 95  | 4   |      | 70 (69) | 130 (149)      | 30 (20) |
|               | Methylene Chloride             | 20    | 20.4   | ug/Kg | 102 | 7   |      | 70 (56) | 130 (174)      | 30 (20) |
|               | trans-1,2-Dichloroethene       | 20    | 19.5   | ug/Kg | 98  | 9   |      | 70 (80) | 130 (123)      | 30 (20) |
|               | 1,1-Dichloroethane             | 20    | 19.8   | ug/Kg | 99  | 6   |      | 70 (82) | 130 (123)      | 30 (20) |
|               | Cyclohexane                    | 20    | 19.4   | ug/Kg | 97  | 3   |      | 70 (76) | 130 (122)      | 30 (20) |
|               | 2-Butanone                     | 100   | 110    | ug/Kg | 110 | 10  |      | 40 (69) | 160 (131)      | 30 (20) |
|               | Carbon Tetrachloride           | 20    | 23.2   | ug/Kg | 116 | 9   |      | 70 (76) | 130 (129)      | 30 (20) |
|               | cis-1,2-Dichloroethene         | 20    | 20.7   | ug/Kg | 104 | 9   |      | 70 (82) | 130 (123)      | 30 (20) |
|               | Bromochloromethane             | 20    | 17.9   | ug/Kg | 90  | 1   |      | 70 (80) | 130 (127)      | 30 (20) |
|               | Chloroform                     | 20    | 20.8   | ug/Kg | 104 | 9   |      | 70 (82) | 130 (125)      | 30 (20) |
|               | 1,1,1-Trichloroethane          | 20    | 21.8   | ug/Kg | 109 | 8   |      | 70 (80) | 130 (126)      | 30 (20) |
|               | Methylcyclohexane              | 20    | 20.4   | ug/Kg | 102 | 8   |      | 70 (77) | 130 (123)      | 30 (20) |
|               | Benzene                        | 20    | 21.9   | ug/Kg | 110 | 12  |      | 70 (84) | 130 (121)      | 30 (20) |
|               | 1,2-Dichloroethane             | 20    | 23.1   | ug/Kg | 116 | 11  |      | 70 (81) | 130 (126)      | 30 (20) |
|               | Trichloroethene                | 20    | 21.1   | ug/Kg | 106 | 9   |      | 70 (83) | 130 (122)      | 30 (20) |
|               | 1,2-Dichloropropane            | 20    | 21.1   | ug/Kg | 106 | 10  |      | 70 (83) | 130 (122)      | 30 (20) |
|               | Bromodichloromethane           | 20    | 21.6   | ug/Kg | 108 | 8   |      | 70 (82) | 130 (123)      | 30 (20) |
|               | 4-Methyl-2-Pentanone           | 100   | 110    | ug/Kg | 110 | 10  |      | 40 (70) | 160 (135)      | 30 (20) |
|               | Toluene                        | 20    | 21.8   | ug/Kg | 109 | 12  |      | 70 (83) | 130 (122)      | 30 (20) |
|               | t-1,3-Dichloropropene          | 20    | 21.1   | ug/Kg | 106 | 10  |      | 70 (78) | 130 (124)      | 30 (20) |
|               | cis-1,3-Dichloropropene        | 20    | 22.0   | ug/Kg | 110 | 10  |      | 70 (81) | 130 (122)      | 30 (20) |
|               | 1,1,2-Trichloroethane          | 20    | 20.7   | ug/Kg | 104 | 9   |      | 70 (82) | 130 (125)      | 30 (20) |
|               | 2-Hexanone                     | 100   | 110    | ug/Kg | 110 | 10  |      | 40 (66) | 160 (138)      | 30 (20) |
|               | Dibromochloromethane           | 20    | 22.4   | ug/Kg | 112 | 12  |      | 70 (79) | 130 (125)      | 30 (20) |
|               | 1,2-Dibromoethane              | 20    | 20.9   | ug/Kg | 104 | 10  |      | 70 (80) | 130 (125)      | 30 (20) |
|               | Tetrachloroethene              | 20    | 20.9   | ug/Kg | 104 | 11  |      | 70 (83) | 130 (125)      | 30 (20) |
|               | Chlorobenzene                  | 20    | 20.9   | ug/Kg | 104 | 11  |      | 70 (84) | 130 (122)      | 30 (20) |
|               | Ethyl Benzene                  | 20    | 21.1   | ug/Kg | 106 | 11  |      | 70 (82) | 130 (124)      | 30 (20) |
|               | m/p-Xylenes                    | 40    | 42.8   | ug/Kg | 107 | 9   |      | 70 (83) | 130 (124)      | 30 (20) |
|               | o-Xylene                       | 20    | 21.5   | ug/Kg | 108 | 10  |      | 70 (83) | 130 (123)      | 30 (20) |
|               | Styrene                        | 20    | 22.1   | ug/Kg | 111 | 11  |      | 70 (82) | 130 (124)      | 30 (20) |
|               | Bromoform                      | 20    | 22.2   | ug/Kg | 111 | 7   |      | 70 (75) | 130 (127)      | 30 (20) |
|               | Isopropylbenzene               | 20    | 20.4   | ug/Kg | 102 | 10  |      | 70 (82) | 130 (124)      | 30 (20) |
|               | 1,1,2,2-Tetrachloroethane      | 20    | 19.7   | ug/Kg | 99  | 8   |      | 70 (77) | 130 (127)      | 30 (20) |
|               | 1,3-Dichlorobenzene            | 20    | 19.9   | ug/Kg | 100 | 12  |      | 70 (83) | 130 (122)      | 30 (20) |
|               | 1,4-Dichlorobenzene            | 20    | 20.5   | ug/Kg | 103 | 11  |      | 70 (84) | 130 (121)      | 30 (20) |
|               | 1,2-Dichlorobenzene            | 20    | 20.8   | ug/Kg | 104 | 11  |      | 70 (83) | 130 (124)      | 30 (20) |

() = LABORATORY INHOUSE LIMIT



**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** P4892

**Client:** Portal Partners Tri-Venture

**Analytical Method:** SW8260D

**Datafile :** VY020376.D

| Lab Sample ID | Parameter                   | Spike | Result | Unit  | Rec | RPD | Qual | Low     | Limits<br>High | RPD     |
|---------------|-----------------------------|-------|--------|-------|-----|-----|------|---------|----------------|---------|
| VY1121SBSD01  | 1,2-Dibromo-3-Chloropropane | 20    | 20.2   | ug/Kg | 101 | 10  |      | 40 (66) | 160 (134)      | 30 (20) |
|               | 1,2,4-Trichlorobenzene      | 20    | 20.0   | ug/Kg | 100 | 11  |      | 70 (78) | 130 (127)      | 30 (20) |
|               | 1,2,3-Trichlorobenzene      | 20    | 19.4   | ug/Kg | 97  | 10  |      | 70 (70) | 130 (137)      | 30 (20) |

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: **P4892**

Client: **Portal Partners Tri-Venture**

Analytical Method: **SW8260D**

Datafile : VY020404.D

| Lab Sample ID | Parameter                      | Spike | Result | Unit  | Rec | RPD | Qual | Low     | Limits<br>High | RPD |
|---------------|--------------------------------|-------|--------|-------|-----|-----|------|---------|----------------|-----|
| VY1122SBS02   | Dichlorodifluoromethane        | 20    | 25.3   | ug/Kg | 127 |     |      | 40 (64) | 160 (136)      |     |
|               | Chloromethane                  | 20    | 15.7   | ug/Kg | 79  |     |      | 40 (70) | 160 (130)      |     |
|               | Vinyl chloride                 | 20    | 17.6   | ug/Kg | 88  |     |      | 70 (72) | 130 (129)      |     |
|               | Bromomethane                   | 20    | 20.3   | ug/Kg | 102 |     |      | 40 (58) | 160 (141)      |     |
|               | Chloroethane                   | 20    | 18.1   | ug/Kg | 91  |     |      | 40 (69) | 160 (130)      |     |
|               | Trichlorofluoromethane         | 20    | 22.8   | ug/Kg | 114 |     |      | 40 (69) | 160 (134)      |     |
|               | 1,1,2-Trichlorotrifluoroethane | 20    | 21.5   | ug/Kg | 108 |     |      | 70 (81) | 130 (123)      |     |
|               | 1,1-Dichloroethene             | 20    | 20.8   | ug/Kg | 104 |     |      | 70 (79) | 130 (121)      |     |
|               | Acetone                        | 100   | 95.0   | ug/Kg | 95  |     |      | 40 (60) | 160 (131)      |     |
|               | Carbon disulfide               | 20    | 19.5   | ug/Kg | 98  |     |      | 40 (45) | 160 (154)      |     |
|               | Methyl tert-butyl Ether        | 20    | 20.5   | ug/Kg | 103 |     |      | 70 (77) | 130 (129)      |     |
|               | Methyl Acetate                 | 20    | 17.9   | ug/Kg | 90  |     |      | 70 (69) | 130 (149)      |     |
|               | Methylene Chloride             | 20    | 20.5   | ug/Kg | 103 |     |      | 70 (56) | 130 (174)      |     |
|               | trans-1,2-Dichloroethene       | 20    | 20.4   | ug/Kg | 102 |     |      | 70 (80) | 130 (123)      |     |
|               | 1,1-Dichloroethane             | 20    | 20.0   | ug/Kg | 100 |     |      | 70 (82) | 130 (123)      |     |
|               | Cyclohexane                    | 20    | 20.6   | ug/Kg | 103 |     |      | 70 (76) | 130 (122)      |     |
|               | 2-Butanone                     | 100   | 100    | ug/Kg | 100 |     |      | 40 (69) | 160 (131)      |     |
|               | Carbon Tetrachloride           | 20    | 24.8   | ug/Kg | 124 |     |      | 70 (76) | 130 (129)      |     |
|               | cis-1,2-Dichloroethene         | 20    | 21.5   | ug/Kg | 108 |     |      | 70 (82) | 130 (123)      |     |
|               | Bromochloromethane             | 20    | 18.3   | ug/Kg | 92  |     |      | 70 (80) | 130 (127)      |     |
|               | Chloroform                     | 20    | 21.1   | ug/Kg | 106 |     |      | 70 (82) | 130 (125)      |     |
|               | 1,1,1-Trichloroethane          | 20    | 22.9   | ug/Kg | 115 |     |      | 70 (80) | 130 (126)      |     |
|               | Methylcyclohexane              | 20    | 22.6   | ug/Kg | 113 |     |      | 70 (77) | 130 (123)      |     |
|               | Benzene                        | 20    | 22.5   | ug/Kg | 113 |     |      | 70 (84) | 130 (121)      |     |
|               | 1,2-Dichloroethane             | 20    | 22.7   | ug/Kg | 114 |     |      | 70 (81) | 130 (126)      |     |
|               | Trichloroethene                | 20    | 22.8   | ug/Kg | 114 |     |      | 70 (83) | 130 (122)      |     |
|               | 1,2-Dichloropropane            | 20    | 21.9   | ug/Kg | 110 |     |      | 70 (83) | 130 (122)      |     |
|               | Bromodichloromethane           | 20    | 22.1   | ug/Kg | 111 |     |      | 70 (82) | 130 (123)      |     |
|               | 4-Methyl-2-Pentanone           | 100   | 100    | ug/Kg | 100 |     |      | 40 (70) | 160 (135)      |     |
|               | Toluene                        | 20    | 22.5   | ug/Kg | 113 |     |      | 70 (83) | 130 (122)      |     |
|               | t-1,3-Dichloropropene          | 20    | 21.2   | ug/Kg | 106 |     |      | 70 (78) | 130 (124)      |     |
|               | cis-1,3-Dichloropropene        | 20    | 22.2   | ug/Kg | 111 |     |      | 70 (81) | 130 (122)      |     |
|               | 1,1,2-Trichloroethane          | 20    | 21.7   | ug/Kg | 109 |     |      | 70 (82) | 130 (125)      |     |
|               | 2-Hexanone                     | 100   | 100    | ug/Kg | 100 |     |      | 40 (66) | 160 (138)      |     |
|               | Dibromochloromethane           | 20    | 22.6   | ug/Kg | 113 |     |      | 70 (79) | 130 (125)      |     |
|               | 1,2-Dibromoethane              | 20    | 21.2   | ug/Kg | 106 |     |      | 70 (80) | 130 (125)      |     |
|               | Tetrachloroethene              | 20    | 22.8   | ug/Kg | 114 |     |      | 70 (83) | 130 (125)      |     |
|               | Chlorobenzene                  | 20    | 22.3   | ug/Kg | 112 |     |      | 70 (84) | 130 (122)      |     |
|               | Ethyl Benzene                  | 20    | 22.6   | ug/Kg | 113 |     |      | 70 (82) | 130 (124)      |     |
|               | m/p-Xylenes                    | 40    | 45.5   | ug/Kg | 114 |     |      | 70 (83) | 130 (124)      |     |
|               | o-Xylene                       | 20    | 22.6   | ug/Kg | 113 |     |      | 70 (83) | 130 (123)      |     |
|               | Styrene                        | 20    | 23.0   | ug/Kg | 115 |     |      | 70 (82) | 130 (124)      |     |
|               | Bromoform                      | 20    | 23.6   | ug/Kg | 118 |     |      | 70 (75) | 130 (127)      |     |
|               | Isopropylbenzene               | 20    | 22.9   | ug/Kg | 115 |     |      | 70 (82) | 130 (124)      |     |
|               | 1,1,2,2-Tetrachloroethane      | 20    | 21.1   | ug/Kg | 106 |     |      | 70 (77) | 130 (127)      |     |
|               | 1,3-Dichlorobenzene            | 20    | 21.6   | ug/Kg | 108 |     |      | 70 (83) | 130 (122)      |     |
|               | 1,4-Dichlorobenzene            | 20    | 22.6   | ug/Kg | 113 |     |      | 70 (84) | 130 (121)      |     |
|               | 1,2-Dichlorobenzene            | 20    | 22.3   | ug/Kg | 112 |     |      | 70 (83) | 130 (124)      |     |

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4892

Client: Portal Partners Tri-Venture

Analytical Method: SW8260D

Datafile : VY020404.D

| Lab Sample ID | Parameter                   | Spike | Result | Unit  | Rec | RPD | Qual | Low     | Limits<br>High | RPD |
|---------------|-----------------------------|-------|--------|-------|-----|-----|------|---------|----------------|-----|
| VY1122SBS02   | 1,2-Dibromo-3-Chloropropane | 20    | 19.8   | ug/Kg | 99  |     |      | 40 (66) | 160 (134)      |     |
|               | 1,2,4-Trichlorobenzene      | 20    | 21.3   | ug/Kg | 106 |     |      | 70 (78) | 130 (127)      |     |
|               | 1,2,3-Trichlorobenzene      | 20    | 20.6   | ug/Kg | 103 |     |      | 70 (70) | 130 (137)      |     |

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN1120WBL01

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: P4892

SAS No.: P4892 SDG NO.: P4892

Lab File ID: VN084962.D

Lab Sample ID: VN1120WBL01

Date Analyzed: 11/20/2024

Time Analyzed: 12:21

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

Heated Purge: (Y/N) N

Instrument ID: MSVOA\_N

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED |
|-------------------|------------------|----------------|------------------|
| VN1120WBS02       | VN1120WBS02      | VN084964.D     | 11/20/2024       |
| VN1120WBSD02      | VN1120WBSD02     | VN084982.D     | 11/20/2024       |
| WB-310-SW         | P4892-04         | VN084984.D     | 11/20/2024       |

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

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY1121SBL01

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: P4892

SAS No.: P4892 SDG NO.: P4892

Lab File ID: VY020374.D

Lab Sample ID: VY1121SBL01

Date Analyzed: 11/21/2024

Time Analyzed: 09:59

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

Heated Purge: (Y/N) Y

Instrument ID: MSVOA\_Y

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED |
|-------------------|------------------|----------------|------------------|
| VY1121SBS01       | VY1121SBS01      | VY020375.D     | 11/21/2024       |
| VY1121SBSD01      | VY1121SBSD01     | VY020376.D     | 11/21/2024       |
| WB-310-TOP        | P4892-01         | VY020395.D     | 11/21/2024       |

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

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY1122SBL01

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: P4892

SAS No.: P4892 SDG NO.: P4892

Lab File ID: VY020402.D

Lab Sample ID: VY1122SBL01

Date Analyzed: 11/22/2024

Time Analyzed: 10:15

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

Heated Purge: (Y/N) Y

Instrument ID: MSVOA\_Y

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED |
|-------------------|------------------|----------------|------------------|
| VY1122SBS02       | VY1122SBS02      | VY020404.D     | 11/22/2024       |
| WB-310-BOT        | P4892-02         | VY020406.D     | 11/22/2024       |

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



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06  
Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
Lab File ID: VN084569.D BFB Injection Date: 10/30/2024  
Instrument ID: MSVOA\_N BFB Injection Time: 10:42  
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 19.5                 |
| 75  | 30.0 - 60.0% of mass 95            | 50.7                 |
| 95  | Base Peak, 100% relative abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 7.2                  |
| 173 | Less than 2.0% of mass 174         | 1.2 ( 1.6 ) 1        |
| 174 | 50.0 - 100.0% of mass 95           | 73.5                 |
| 175 | 5.0 - 9.0% of mass 174             | 5.7 ( 7.7 ) 1        |
| 176 | 95.0 - 101.0% of mass 174          | 70.1 ( 95.4 ) 1      |
| 177 | 5.0 - 9.0% of mass 176             | 4.8 ( 6.9 ) 2        |

1-Value is % mass 174

2-Value is % mass 176

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-------------------|------------------|----------------|------------------|------------------|
| VSTDICC100        | VSTDICC100       | VN084570.D     | 10/30/2024       | 11:46            |
| VSTDICCC050       | VSTDICCC050      | VN084571.D     | 10/30/2024       | 12:09            |
| VSTDICC020        | VSTDICC020       | VN084572.D     | 10/30/2024       | 12:33            |
| VSTDICC010        | VSTDICC010       | VN084573.D     | 10/30/2024       | 12:57            |
| VSTDICC005        | VSTDICC005       | VN084574.D     | 10/30/2024       | 13:21            |
| VSTDICC001        | VSTDICC001       | VN084575.D     | 10/30/2024       | 13:45            |



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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06  
Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
Lab File ID: VN084959.D BFB Injection Date: 11/20/2024  
Instrument ID: MSVOA\_N BFB Injection Time: 09:51  
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N N

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 18.3                 |
| 75  | 30.0 - 60.0% of mass 95            | 52.8                 |
| 95  | Base Peak, 100% relative abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 6.9                  |
| 173 | Less than 2.0% of mass 174         | 0.7 ( 0.9 ) 1        |
| 174 | 50.0 - 100.0% of mass 95           | 72.4                 |
| 175 | 5.0 - 9.0% of mass 174             | 5.8 ( 8 ) 1          |
| 176 | 95.0 - 101.0% of mass 174          | 68.8 ( 95 ) 1        |
| 177 | 5.0 - 9.0% of mass 176             | 4.7 ( 6.9 ) 2        |

1-Value is % mass 174

2-Value is % mass 176

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-------------------|------------------|----------------|------------------|------------------|
| VSTDCCC050        | VSTDCCC050       | VN084960.D     | 11/20/2024       | 11:18            |
| VN1120WBL01       | VN1120WBL01      | VN084962.D     | 11/20/2024       | 12:21            |
| VN1120WBS02       | VN1120WBS02      | VN084964.D     | 11/20/2024       | 13:20            |
| VN1120WBSD02      | VN1120WBSD02     | VN084982.D     | 11/20/2024       | 20:34            |
| WB-310-SW         | P4892-04         | VN084984.D     | 11/20/2024       | 21:22            |





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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06  
Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
Lab File ID: VY020337.D BFB Injection Date: 11/19/2024  
Instrument ID: MSVOA\_Y BFB Injection Time: 14:40  
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 21.7                 |
| 75  | 30.0 - 60.0% of mass 95            | 55.3                 |
| 95  | Base Peak, 100% relative abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 6.7                  |
| 173 | Less than 2.0% of mass 174         | 0.8 ( 0.9 ) 1        |
| 174 | 50.0 - 100.0% of mass 95           | 81.6                 |
| 175 | 5.0 - 9.0% of mass 174             | 6.4 ( 7.8 ) 1        |
| 176 | 95.0 - 101.0% of mass 174          | 79 ( 96.8 ) 1        |
| 177 | 5.0 - 9.0% of mass 176             | 5.4 ( 6.8 ) 2        |

1-Value is % mass 174

2-Value is % mass 176

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-------------------|------------------|----------------|------------------|------------------|
| VSTDIC005         | VSTDIC005        | VY020338.D     | 11/19/2024       | 15:49            |
| VSTDIC010         | VSTDIC010        | VY020339.D     | 11/19/2024       | 16:12            |
| VSTDIC020         | VSTDIC020        | VY020340.D     | 11/19/2024       | 16:35            |
| VSTDIC050         | VSTDIC050        | VY020341.D     | 11/19/2024       | 16:57            |
| VSTDIC100         | VSTDIC100        | VY020342.D     | 11/19/2024       | 17:20            |
| VSTDIC150         | VSTDIC150        | VY020343.D     | 11/19/2024       | 17:42            |



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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06  
Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
Lab File ID: VY020372.D BFB Injection Date: 11/21/2024  
Instrument ID: MSVOA\_Y BFB Injection Time: 08:32  
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 21.5                 |
| 75  | 30.0 - 60.0% of mass 95            | 55.9                 |
| 95  | Base Peak, 100% relative abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 6.7                  |
| 173 | Less than 2.0% of mass 174         | 0.0 ( 0.0 ) 1        |
| 174 | 50.0 - 100.0% of mass 95           | 73.7                 |
| 175 | 5.0 - 9.0% of mass 174             | 5.8 ( 7.9 ) 1        |
| 176 | 95.0 - 101.0% of mass 174          | 70.4 ( 95.6 ) 1      |
| 177 | 5.0 - 9.0% of mass 176             | 4.7 ( 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<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-------------------|------------------|----------------|------------------|------------------|
| VSTDCCC050        | VSTDCCC050       | VY020373.D     | 11/21/2024       | 09:25            |
| VY1121SBL01       | VY1121SBL01      | VY020374.D     | 11/21/2024       | 09:59            |
| VY1121SBS01       | VY1121SBS01      | VY020375.D     | 11/21/2024       | 10:39            |
| VY1121SBSD01      | VY1121SBSD01     | VY020376.D     | 11/21/2024       | 11:02            |
| WB-310-TOP        | P4892-01         | VY020395.D     | 11/21/2024       | 18:27            |



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: PORT06  
Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
Lab File ID: VY020400.D BFB Injection Date: 11/22/2024  
Instrument ID: MSVOA\_Y BFB Injection Time: 08:56  
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

| m/e | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0% of mass 95            | 20                   |
| 75  | 30.0 - 60.0% of mass 95            | 55.2                 |
| 95  | Base Peak, 100% relative abundance | 100                  |
| 96  | 5.0 - 9.0% of mass 95              | 7                    |
| 173 | Less than 2.0% of mass 174         | 0.5 ( 0.7 ) 1        |
| 174 | 50.0 - 100.0% of mass 95           | 73.8                 |
| 175 | 5.0 - 9.0% of mass 174             | 5.7 ( 7.7 ) 1        |
| 176 | 95.0 - 101.0% of mass 174          | 72.5 ( 98.3 ) 1      |
| 177 | 5.0 - 9.0% of mass 176             | 5 ( 6.9 ) 2          |

1-Value is % mass 174

2-Value is % mass 176

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

| EPA<br>SAMPLE NO. | LAB<br>SAMPLE ID | LAB<br>FILE ID | DATE<br>ANALYZED | TIME<br>ANALYZED |
|-------------------|------------------|----------------|------------------|------------------|
| VSTDCCC050        | VSTDCCC050       | VY020401.D     | 11/22/2024       | 09:40            |
| VY1122SBL01       | VY1122SBL01      | VY020402.D     | 11/22/2024       | 10:15            |
| VY1122SBS02       | VY1122SBS02      | VY020404.D     | 11/22/2024       | 11:04            |
| WB-310-BOT        | P4892-02         | VY020406.D     | 11/22/2024       | 12:01            |

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06  
 Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
 Lab File ID: VN084960.D Date Analyzed: 11/20/2024  
 Instrument ID: MSVOA\_N Time Analyzed: 11:18  
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

|                | IS1<br>AREA # | RT #  | IS2<br>AREA # | RT # | IS3<br>AREA # | RT #   |
|----------------|---------------|-------|---------------|------|---------------|--------|
| 12 HOUR STD    | 164992        | 8.22  | 271316        | 9.10 | 240365        | 11.87  |
| UPPER LIMIT    | 329984        | 8.724 | 542632        | 9.6  | 480730        | 12.365 |
| LOWER LIMIT    | 82496         | 7.724 | 135658        | 8.6  | 120183        | 11.365 |
| EPA SAMPLE NO. |               |       |               |      |               |        |
| WB-310-SW      | 166877        | 8.22  | 307613        | 9.10 | 262227        | 11.87  |
| VN1120WBL01    | 178908        | 8.22  | 319489        | 9.10 | 277659        | 11.87  |
| VN1120WBS02    | 150630        | 8.22  | 253557        | 9.10 | 229692        | 11.87  |
| VN1120WBSD02   | 152907        | 8.22  | 266547        | 9.10 | 231842        | 11.87  |

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06  
 Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
 Lab File ID: VN084960.D Date Analyzed: 11/20/2024  
 Instrument ID: MSVOA\_N Time Analyzed: 11:18  
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

|                | IS4<br>AREA # | RT #   |  |  |  |  |
|----------------|---------------|--------|--|--|--|--|
| 12 HOUR STD    | 122785        | 13.788 |  |  |  |  |
| UPPER LIMIT    | 245570        | 14.288 |  |  |  |  |
| LOWER LIMIT    | 61392.5       | 13.288 |  |  |  |  |
| EPA SAMPLE NO. |               |        |  |  |  |  |
| WB-310-SW      | 114908        | 13.79  |  |  |  |  |
| VN1120WBL01    | 123641        | 13.79  |  |  |  |  |
| VN1120WBS02    | 114872        | 13.79  |  |  |  |  |
| VN1120WBSD02   | 119679        | 13.79  |  |  |  |  |

IS4 = 1,4-Dichlorobenzene-d4

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06  
 Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
 Lab File ID: VY020373.D Date Analyzed: 11/21/2024  
 Instrument ID: MSVOA\_Y Time Analyzed: 09:25  
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

|                | IS1<br>AREA # | RT #  | IS2<br>AREA # | RT #  | IS3<br>AREA # | RT #  |
|----------------|---------------|-------|---------------|-------|---------------|-------|
| 12 HOUR STD    | 191018        | 7.71  | 313957        | 8.62  | 263957        | 11.42 |
| UPPER LIMIT    | 382036        | 8.213 | 627914        | 9.122 | 527914        | 11.92 |
| LOWER LIMIT    | 95509         | 7.213 | 156979        | 8.122 | 131979        | 10.92 |
| EPA SAMPLE NO. |               |       |               |       |               |       |
| WB-310-TOP     | 144486        | 7.71  | 282070        | 8.62  | 273380        | 11.41 |
| VY1121SBL01    | 139506        | 7.71  | 270751        | 8.62  | 245370        | 11.42 |
| VY1121SBS01    | 180247        | 7.71  | 303523        | 8.62  | 255135        | 11.42 |
| VY1121SBSD01   | 168644        | 7.71  | 280583        | 8.62  | 238249        | 11.42 |

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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06  
 Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
 Lab File ID: VY020373.D Date Analyzed: 11/21/2024  
 Instrument ID: MSVOA\_Y Time Analyzed: 09:25  
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

|                | IS4<br>AREA # | RT #   |  |  |  |  |
|----------------|---------------|--------|--|--|--|--|
| 12 HOUR STD    | 121826        | 13.352 |  |  |  |  |
| UPPER LIMIT    | 243652        | 13.852 |  |  |  |  |
| LOWER LIMIT    | 60913         | 12.852 |  |  |  |  |
| EPA SAMPLE NO. |               |        |  |  |  |  |
| WB-310-TOP     | 113213        | 13.35  |  |  |  |  |
| VY1121SBL01    | 89046         | 13.35  |  |  |  |  |
| VY1121SBS01    | 121310        | 13.35  |  |  |  |  |
| VY1121SBSD01   | 112550        | 13.35  |  |  |  |  |

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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06  
 Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
 Lab File ID: VY020401.D Date Analyzed: 11/22/2024  
 Instrument ID: MSVOA\_Y Time Analyzed: 09:40  
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

|                | IS1<br>AREA # | RT #  | IS2<br>AREA # | RT #  | IS3<br>AREA # | RT #   |
|----------------|---------------|-------|---------------|-------|---------------|--------|
| 12 HOUR STD    | 199094        | 7.72  | 315114        | 8.63  | 255079        | 11.43  |
| UPPER LIMIT    | 398188        | 8.219 | 630228        | 9.128 | 510158        | 11.926 |
| LOWER LIMIT    | 99547         | 7.219 | 157557        | 8.128 | 127540        | 10.926 |
| EPA SAMPLE NO. |               |       |               |       |               |        |
| WB-310-BOT     | 149521        | 7.71  | 283533        | 8.62  | 251330        | 11.42  |
| VY1122SBL01    | 161234        | 7.72  | 306842        | 8.62  | 269008        | 11.43  |
| VY1122SBS02    | 182116        | 7.72  | 298132        | 8.62  | 246608        | 11.42  |

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.



VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: PORT06  
 Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG NO.: P4892  
 Lab File ID: VY020401.D Date Analyzed: 11/22/2024  
 Instrument ID: MSVOA\_Y Time Analyzed: 09:40  
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

|                | IS4<br>AREA # | RT #   |  |  |  |  |
|----------------|---------------|--------|--|--|--|--|
| 12 HOUR STD    | 114938        | 13.359 |  |  |  |  |
| UPPER LIMIT    | 229876        | 13.859 |  |  |  |  |
| LOWER LIMIT    | 57469         | 12.859 |  |  |  |  |
| EPA SAMPLE NO. |               |        |  |  |  |  |
| WB-310-BOT     | 91188         | 13.35  |  |  |  |  |
| VY1122SBL01    | 94757         | 13.36  |  |  |  |  |
| VY1122SBS02    | 113255        | 13.35  |  |  |  |  |

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.



# SAMPLE DATA

## Report of Analysis

|                    |                                   |                 |                      |
|--------------------|-----------------------------------|-----------------|----------------------|
| Client:            | Portal Partners Tri-Venture       | Date Collected: | 11/15/24             |
| Project:           | Amtrak Sawtooth Bridges 2024      | Date Received:  | 11/15/24             |
| Client Sample ID:  | WB-310-TOP                        | SDG No.:        | P4892                |
| Lab Sample ID:     | P4892-01                          | Matrix:         | SOIL                 |
| Analytical Method: | SW8260                            | % Solid:        | 59.8                 |
| Sample Wt/Vol:     | 7.39      Units:    g             | Final Vol:      | 5000              uL |
| Soil Aliquot Vol:  | uL                                | Test:           | VOC-TCLVOA-10        |
| GC Column:         | RXI-624              ID :    0.25 | Level :         | LOW                  |
| Prep Method :      |                                   |                 |                      |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020395.D        | 1         |           | 11/21/24 18:27 | VY112124      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units(Dry Weight) |
|----------------|--------------------------------|-------|-----------|------|------------|-------------------|
| <b>TARGETS</b> |                                |       |           |      |            |                   |
| 75-71-8        | Dichlorodifluoromethane        | 1.90  | U         | 1.90 | 5.70       | ug/Kg             |
| 74-87-3        | Chloromethane                  | 1.30  | U         | 1.30 | 5.70       | ug/Kg             |
| 75-01-4        | Vinyl Chloride                 | 0.87  | U         | 0.87 | 5.70       | ug/Kg             |
| 74-83-9        | Bromomethane                   | 1.20  | U         | 1.20 | 5.70       | ug/Kg             |
| 75-00-3        | Chloroethane                   | 1.10  | U         | 1.10 | 5.70       | ug/Kg             |
| 75-69-4        | Trichlorofluoromethane         | 1.00  | U         | 1.00 | 5.70       | ug/Kg             |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 1.20  | U         | 1.20 | 5.70       | ug/Kg             |
| 75-35-4        | 1,1-Dichloroethene             | 0.88  | U         | 0.88 | 5.70       | ug/Kg             |
| 67-64-1        | Acetone                        | 110   |           | 7.10 | 28.3       | ug/Kg             |
| 75-15-0        | Carbon Disulfide               | 7.20  |           | 1.40 | 5.70       | ug/Kg             |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.76  | U         | 0.76 | 5.70       | ug/Kg             |
| 79-20-9        | Methyl Acetate                 | 2.00  | U         | 2.00 | 5.70       | ug/Kg             |
| 75-09-2        | Methylene Chloride             | 3.90  | U         | 3.90 | 11.3       | ug/Kg             |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.95  | U         | 0.95 | 5.70       | ug/Kg             |
| 75-34-3        | 1,1-Dichloroethane             | 0.71  | U         | 0.71 | 5.70       | ug/Kg             |
| 110-82-7       | Cyclohexane                    | 0.78  | U         | 0.78 | 5.70       | ug/Kg             |
| 78-93-3        | 2-Butanone                     | 40.3  |           | 6.40 | 28.3       | ug/Kg             |
| 56-23-5        | Carbon Tetrachloride           | 0.98  | U         | 0.98 | 5.70       | ug/Kg             |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.69  | U         | 0.69 | 5.70       | ug/Kg             |
| 74-97-5        | Bromochloromethane             | 2.70  | U         | 2.70 | 5.70       | ug/Kg             |
| 67-66-3        | Chloroform                     | 0.76  | U         | 0.76 | 5.70       | ug/Kg             |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.88  | U         | 0.88 | 5.70       | ug/Kg             |
| 108-87-2       | Methylcyclohexane              | 14.3  |           | 0.98 | 5.70       | ug/Kg             |
| 71-43-2        | Benzene                        | 22.6  |           | 0.81 | 5.70       | ug/Kg             |
| 107-06-2       | 1,2-Dichloroethane             | 0.69  | U         | 0.69 | 5.70       | ug/Kg             |
| 79-01-6        | Trichloroethene                | 0.85  | U         | 0.85 | 5.70       | ug/Kg             |
| 78-87-5        | 1,2-Dichloropropane            | 0.75  | U         | 0.75 | 5.70       | ug/Kg             |
| 75-27-4        | Bromodichloromethane           | 0.63  | U         | 0.63 | 5.70       | ug/Kg             |
| 108-10-1       | 4-Methyl-2-Pentanone           | 4.90  | U         | 4.90 | 28.3       | ug/Kg             |
| 108-88-3       | Toluene                        | 1.90  | J         | 0.76 | 5.70       | ug/Kg             |

## Report of Analysis

|                    |                              |        |      |                 |               |
|--------------------|------------------------------|--------|------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  |        |      | Date Collected: | 11/15/24      |
| Project:           | Amtrak Sawtooth Bridges 2024 |        |      | Date Received:  | 11/15/24      |
| Client Sample ID:  | WB-310-TOP                   |        |      | SDG No.:        | P4892         |
| Lab Sample ID:     | P4892-01                     |        |      | Matrix:         | SOIL          |
| Analytical Method: | SW8260                       |        |      | % Solid:        | 59.8          |
| Sample Wt/Vol:     | 7.39                         | Units: | g    | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  |                              |        | uL   | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624                      | ID :   | 0.25 | Level :         | LOW           |
| Prep Method :      |                              |        |      |                 |               |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VY020395.D        | 1         |           | 11/21/24 18:27 | VY112124      |

| CAS Number  | Parameter                   | Conc. | Qualifier | MDL  | LOQ / CRQL | Units(Dry Weight) |
|-------------|-----------------------------|-------|-----------|------|------------|-------------------|
| 10061-02-6  | t-1,3-Dichloropropene       | 0.68  | U         | 0.68 | 5.70       | ug/Kg             |
| 10061-01-5  | cis-1,3-Dichloropropene     | 0.64  | U         | 0.64 | 5.70       | ug/Kg             |
| 79-00-5     | 1,1,2-Trichloroethane       | 0.95  | U         | 0.95 | 5.70       | ug/Kg             |
| 591-78-6    | 2-Hexanone                  | 5.40  | U         | 5.40 | 28.3       | ug/Kg             |
| 124-48-1    | Dibromochloromethane        | 0.74  | U         | 0.74 | 5.70       | ug/Kg             |
| 106-93-4    | 1,2-Dibromoethane           | 0.89  | U         | 0.89 | 5.70       | ug/Kg             |
| 127-18-4    | Tetrachloroethene           | 1.00  | U         | 1.00 | 5.70       | ug/Kg             |
| 108-90-7    | Chlorobenzene               | 1.70  | J         | 0.84 | 5.70       | ug/Kg             |
| 100-41-4    | Ethyl Benzene               | 1.20  | J         | 0.70 | 5.70       | ug/Kg             |
| 179601-23-1 | m/p-Xylenes                 | 11.5  |           | 1.50 | 11.3       | ug/Kg             |
| 95-47-6     | o-Xylene                    | 17.2  |           | 0.79 | 5.70       | ug/Kg             |
| 100-42-5    | Styrene                     | 0.68  | U         | 0.68 | 5.70       | ug/Kg             |
| 75-25-2     | Bromoform                   | 0.92  | U         | 0.92 | 5.70       | ug/Kg             |
| 98-82-8     | Isopropylbenzene            | 1.50  | J         | 0.76 | 5.70       | ug/Kg             |
| 79-34-5     | 1,1,2,2-Tetrachloroethane   | 1.20  | U         | 1.20 | 5.70       | ug/Kg             |
| 541-73-1    | 1,3-Dichlorobenzene         | 5.90  |           | 0.84 | 5.70       | ug/Kg             |
| 106-46-7    | 1,4-Dichlorobenzene         | 6.10  |           | 0.91 | 5.70       | ug/Kg             |
| 95-50-1     | 1,2-Dichlorobenzene         | 2.10  | J         | 0.67 | 5.70       | ug/Kg             |
| 96-12-8     | 1,2-Dibromo-3-Chloropropane | 1.80  | U         | 1.80 | 5.70       | ug/Kg             |
| 120-82-1    | 1,2,4-Trichlorobenzene      | 0.89  | U         | 0.89 | 5.70       | ug/Kg             |
| 87-61-6     | 1,2,3-Trichlorobenzene      | 0.88  | U         | 0.88 | 5.70       | ug/Kg             |

## SURROGATES

|            |                       |      |                     |      |         |
|------------|-----------------------|------|---------------------|------|---------|
| 17060-07-0 | 1,2-Dichloroethane-d4 | 61.0 | 70 (50) - 130 (163) | 122% | SPK: 50 |
| 1868-53-7  | Dibromofluoromethane  | 50.7 | 70 (54) - 130 (147) | 101% | SPK: 50 |
| 2037-26-5  | Toluene-d8            | 48.9 | 70 (58) - 130 (134) | 98%  | SPK: 50 |
| 460-00-4   | 4-Bromofluorobenzene  | 58.9 | 70 (29) - 130 (146) | 118% | SPK: 50 |

## INTERNAL STANDARDS

|           |                        |        |        |
|-----------|------------------------|--------|--------|
| 363-72-4  | Pentafluorobenzene     | 144000 | 7.713  |
| 540-36-3  | 1,4-Difluorobenzene    | 282000 | 8.616  |
| 3114-55-4 | Chlorobenzene-d5       | 273000 | 11.414 |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 113000 | 13.347 |

### TENTATIVE IDENTIFIED COMPOUNDS

## Report of Analysis

|                    |                                   |                 |                      |
|--------------------|-----------------------------------|-----------------|----------------------|
| Client:            | Portal Partners Tri-Venture       | Date Collected: | 11/15/24             |
| Project:           | Amtrak Sawtooth Bridges 2024      | Date Received:  | 11/15/24             |
| Client Sample ID:  | WB-310-TOP                        | SDG No.:        | P4892                |
| Lab Sample ID:     | P4892-01                          | Matrix:         | SOIL                 |
| Analytical Method: | SW8260                            | % Solid:        | 59.8                 |
| Sample Wt/Vol:     | 7.39      Units:    g             | Final Vol:      | 5000              uL |
| Soil Aliquot Vol:  | uL                                | Test:           | VOC-TCLVOA-10        |
| GC Column:         | RXI-624              ID :    0.25 | Level :         | LOW                  |
| Prep Method :      |                                   |                 |                      |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020395.D        | 1         |           | 11/21/24 18:27 | VY112124      |

| CAS Number  | Parameter                          | Conc. | Qualifier | MDL | LOQ / CRQL | Units(Dry Weight) |
|-------------|------------------------------------|-------|-----------|-----|------------|-------------------|
| 000540-84-1 | Pentane, 2,2,4-trimethyl-          | 30.0  | J         |     | 8.25       | ug/Kg             |
| 005911-04-6 | Nonane, 3-methyl-                  | 44.6  | J         |     | 12.0       | ug/Kg             |
|             | unknown12.127                      | 46.4  | J         |     | 12.1       | ug/Kg             |
|             | unknown12.164                      | 59.6  | J         |     | 12.2       | ug/Kg             |
|             | unknown12.499                      | 53.2  | J         |     | 12.5       | ug/Kg             |
| 103-65-1    | n-propylbenzene                    | 1.50  | J         |     | 12.6       | ug/Kg             |
|             | unknown12.658                      | 77.6  | J         |     | 12.7       | ug/Kg             |
| 108-67-8    | 1,3,5-Trimethylbenzene             | 6.50  | J         |     | 12.7       | ug/Kg             |
| 002234-75-5 | Cyclohexane, 1,2,4-trimethyl-      | 52.7  | J         |     | 12.9       | ug/Kg             |
| 95-63-6     | 1,2,4-Trimethylbenzene             | 10.7  | J         |     | 13.0       | ug/Kg             |
| 013151-34-3 | Decane, 3-methyl-                  | 35.0  | J         |     | 13.1       | ug/Kg             |
| 135-98-8    | sec-Butylbenzene                   | 1.40  | J         |     | 13.2       | ug/Kg             |
| 99-87-6     | p-Isopropyltoluene                 | 2.80  | J         |     | 13.3       | ug/Kg             |
| 104-51-8    | n-Butylbenzene                     | 1.60  | J         |     | 13.6       | ug/Kg             |
| 002958-76-1 | Naphthalene, decahydro-2-methyl-   | 53.1  | J         |     | 14.2       | ug/Kg             |
| 000767-99-7 | Benzene, (1-methyl-1-propenyl)-, ( | 28.0  | J         |     | 14.6       | ug/Kg             |

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

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\_Y\Data\VY112124\  
 Data File : VY020395.D  
 Acq On : 21 Nov 2024 18:27  
 Operator : SY/MD  
 Sample : P4892-01  
 Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 WB-310-TOP

Quant Time: Nov 22 02:44:12 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

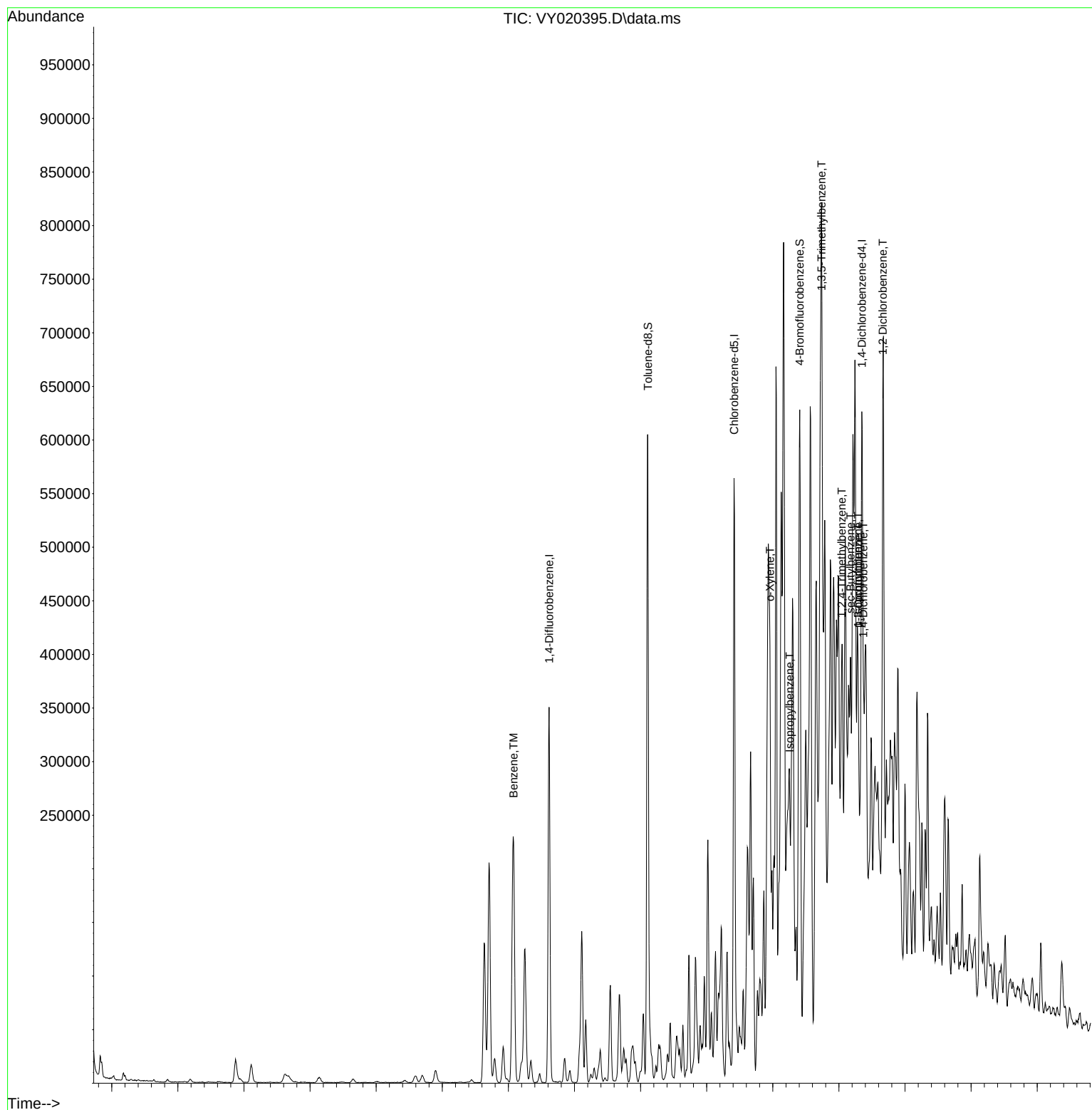
| Compound                    | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|-----------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                       |                |      |                     |         |        |          |
| Internal Standards          |                |      |                     |         |        |          |
| 1) Pentafluorobenzene       | 7.713          | 168  | 144486              | 50.000  | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene     | 8.616          | 114  | 282070              | 50.000  | ug/l   | 0.00     |
| 63) Chlorobenzene-d5        | 11.414         | 117  | 273380              | 50.000  | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.347         | 152  | 113213              | 50.000  | ug/l   | 0.00     |
|                             |                |      |                     |         |        |          |
| System Monitoring Compounds |                |      |                     |         |        |          |
| 33) 1,2-Dichloroethane-d4   | 8.061          | 65   | 101220              | 60.977  | ug/l   | 0.00     |
| Spiked Amount 50.000        | Range 50 - 163 |      | Recovery = 121.960% |         |        |          |
| 35) Dibromofluoromethane    | 7.634          | 113  | 91753               | 50.728  | ug/l   | 0.00     |
| Spiked Amount 50.000        | Range 54 - 147 |      | Recovery = 101.460% |         |        |          |
| 50) Toluene-d8              | 10.109         | 98   | 348748              | 48.948  | ug/l   | 0.00     |
| Spiked Amount 50.000        | Range 58 - 134 |      | Recovery = 97.900%  |         |        |          |
| 62) 4-Bromofluorobenzene    | 12.408         | 95   | 134960              | 58.924  | ug/l   | 0.00     |
| Spiked Amount 50.000        | Range 29 - 146 |      | Recovery = 117.840% |         |        |          |
|                             |                |      |                     |         |        |          |
| Target Compounds            |                |      |                     |         |        |          |
|                             |                |      |                     |         | Qvalue |          |
| 16) Acetone                 | 3.873          | 43   | 40045               | 100.630 | ug/l   | 99       |
| 17) Carbon Disulfide        | 4.110          | 76   | 33718               | 6.350   | ug/l   | 99       |
| 25) 2-Butanone              | 6.903          | 43   | 18255               | 35.633  | ug/l   | 95       |
| 39) Methylcyclohexane       | 9.103          | 83   | 43848               | 12.682  | ug/l   | 89       |
| 40) Benzene                 | 8.079          | 78   | 161482              | 19.946  | ug/l   | 99       |
| 52) Toluene                 | 10.170         | 92   | 8356                | 1.689   | ug/l   | 99       |
| 65) Chlorobenzene           | 11.438         | 112  | 9046                | 1.484   | ug/l   | 95       |
| 67) Ethyl Benzene           | 11.518         | 91   | 12363               | 1.099   | ug/l   | 98       |
| 68) m/p-Xylenes             | 11.627         | 106  | 41068               | 10.139  | ug/l   | 94       |
| 69) o-Xylene                | 11.957         | 106  | 58317               | 15.179  | ug/l   | 97       |
| 73) Isopropylbenzene        | 12.255         | 105  | 12934               | 1.349   | ug/l   | 99       |
| 78) n-propylbenzene         | 12.597         | 91   | 14898               | 1.294   | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene  | 12.737         | 105  | 44208               | 5.704   | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene  | 13.042         | 105  | 72471               | 9.431   | ug/l   | 99       |
| 85) sec-Butylbenzene        | 13.176         | 105  | 13719               | 1.272   | ug/l # | 58       |
| 86) p-Isopropyltoluene      | 13.292         | 119  | 20601               | 2.471   | ug/l   | 93       |
| 87) 1,3-Dichlorobenzene     | 13.292         | 146  | 21351               | 5.255   | ug/l # | 35       |
| 88) 1,4-Dichlorobenzene     | 13.371         | 146  | 20934               | 5.393   | ug/l # | 32       |
| 89) n-Butylbenzene          | 13.621         | 91   | 11336               | 1.420   | ug/l # | 80       |
| 91) 1,2-Dichlorobenzene     | 13.664         | 146  | 6405                | 1.892   | ug/l # | 19       |
| -----                       |                |      |                     |         |        |          |

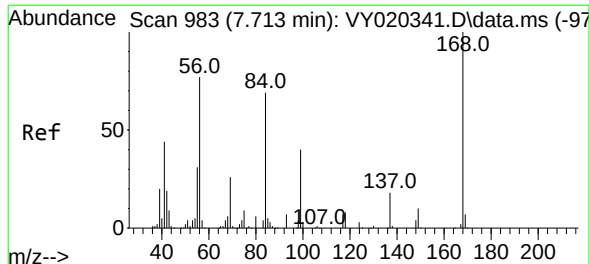
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

Quant Time: Nov 22 02:44:12 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

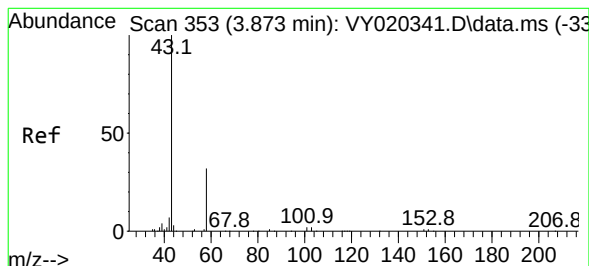
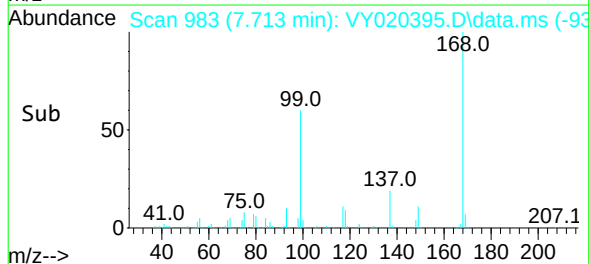
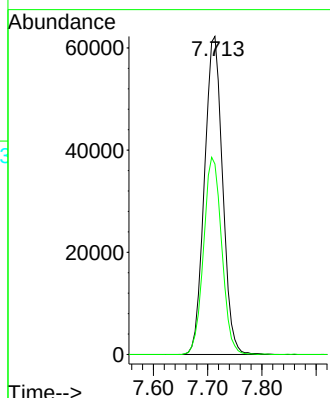
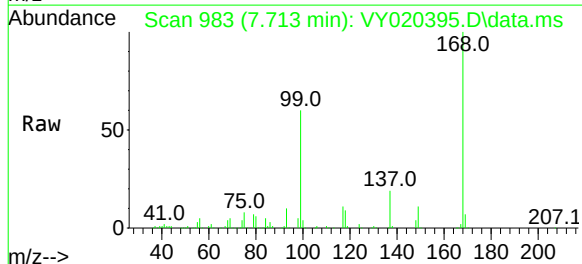




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.713 min Scan# 98  
Delta R.T. 0.000 min  
Lab File: VY020395.D  
Acq: 21 Nov 2024 18:27

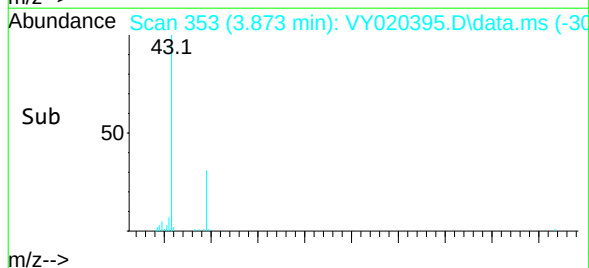
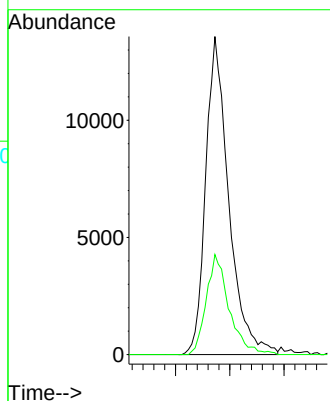
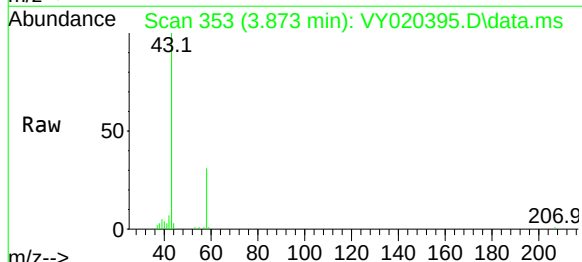
Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

Tgt Ion: 168 Resp: 144486  
Ion Ratio Lower Upper  
168 100  
99 59.9 46.6 69.8

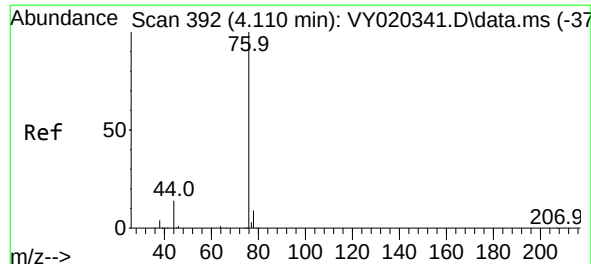


#16  
Acetone  
Concen: 100.630 ug/l  
RT: 3.873 min Scan# 353  
Delta R.T. -0.000 min  
Lab File: VY020395.D  
Acq: 21 Nov 2024 18:27

Tgt Ion: 43 Resp: 40045  
Ion Ratio Lower Upper  
43 100  
58 31.5 25.7 38.5







#17

Carbon Disulfide

Concen: 6.350 ug/l

RT: 4.110 min Scan# 39

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

Instrument :

MSVOA\_Y

ClientSampleId :

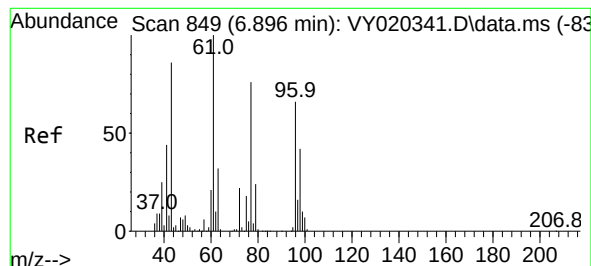
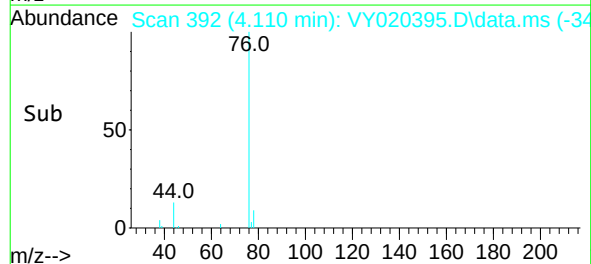
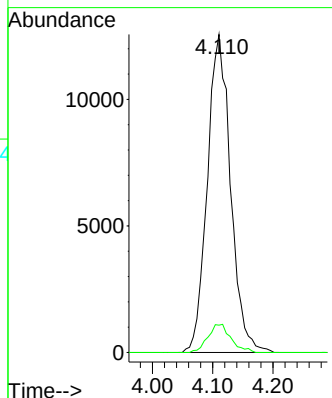
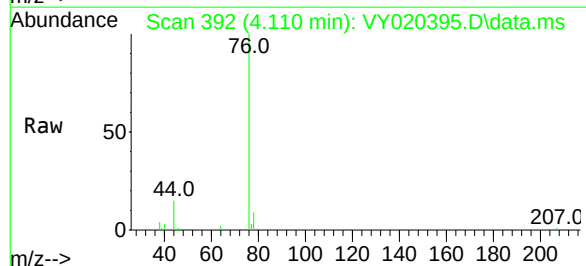
WB-310-TOP

Tgt Ion: 76 Resp: 33718

Ion Ratio Lower Upper

76 100

78 8.6 7.3 10.9



#25

2-Butanone

Concen: 35.633 ug/l

RT: 6.903 min Scan# 850

Delta R.T. 0.006 min

Lab File: VY020395.D

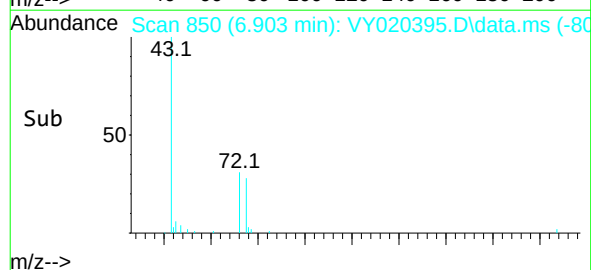
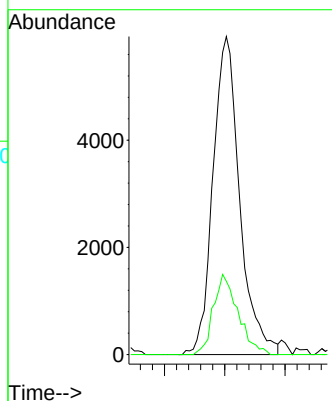
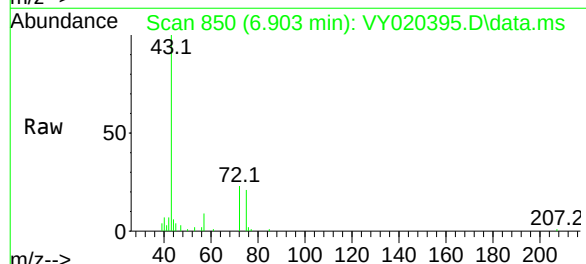
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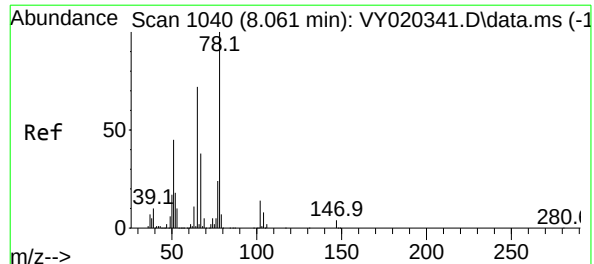
Tgt Ion: 43 Resp: 18255

Ion Ratio Lower Upper

43 100

72 23.0 20.4 30.6

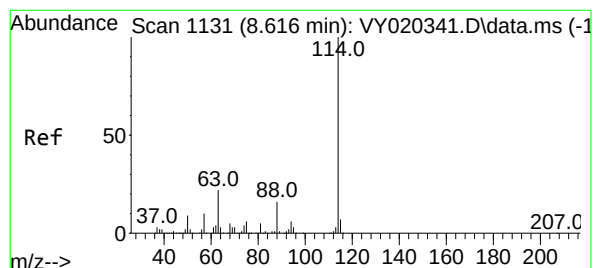
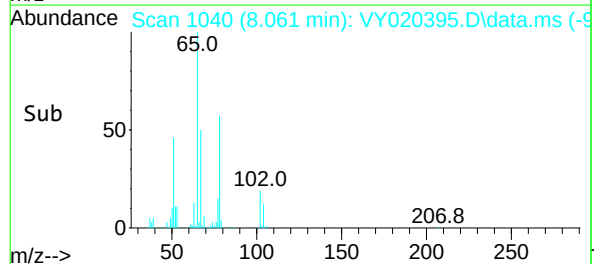
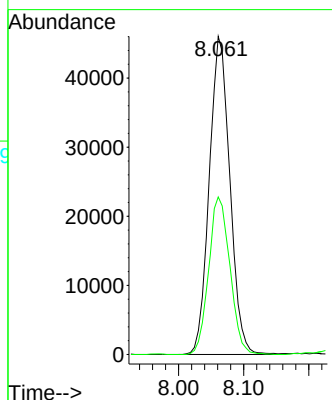
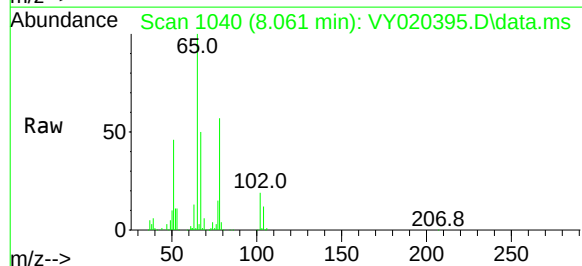




#33  
1,2-Dichloroethane-d4  
Concen: 60.977 ug/l  
RT: 8.061 min Scan# 1040  
Delta R.T. -0.000 min  
Lab File: VY020395.D  
Acq: 21 Nov 2024 18:27

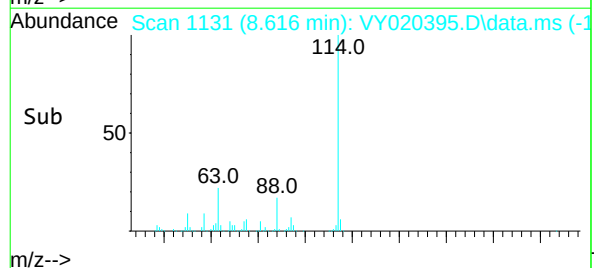
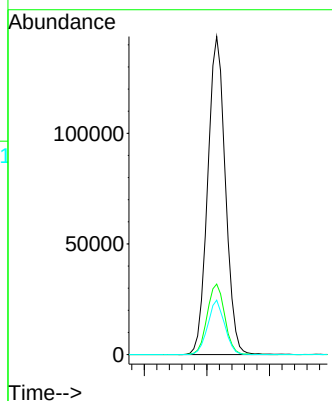
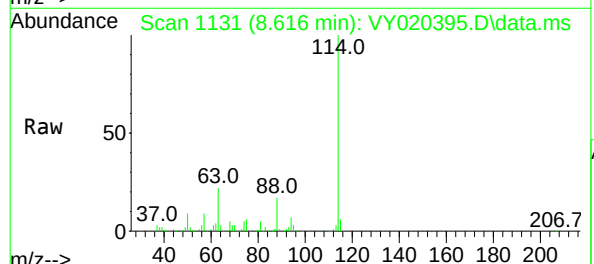
Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

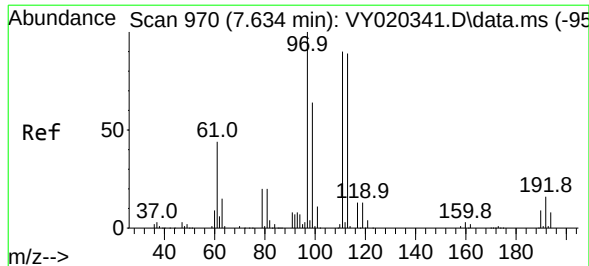
Tgt Ion: 65 Resp: 101220  
Ion Ratio Lower Upper  
65 100  
67 51.0 0.0 105.8



#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.616 min Scan# 1131  
Delta R.T. -0.000 min  
Lab File: VY020395.D  
Acq: 21 Nov 2024 18:27

Tgt Ion: 114 Resp: 282070  
Ion Ratio Lower Upper  
114 100  
63 22.2 0.0 44.8  
88 17.1 0.0 32.0





#35

Dibromofluoromethane

Concen: 50.728 ug/l

RT: 7.634 min Scan# 97

Delta R.T. -0.000 min

Lab File: VY020395.D

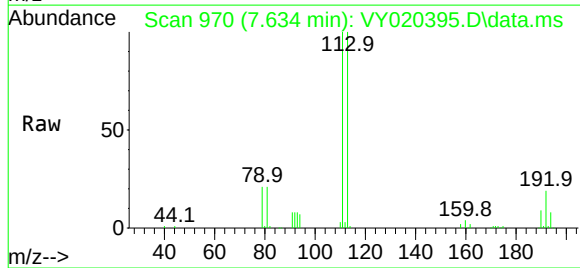
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Instrument :

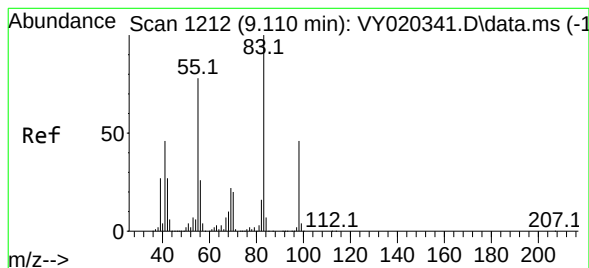
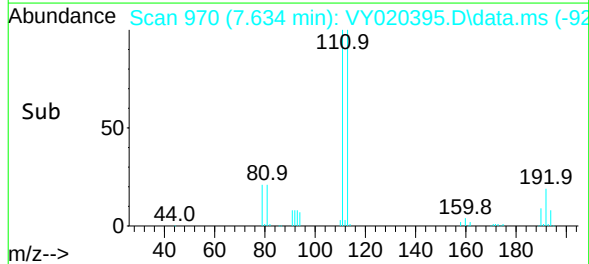
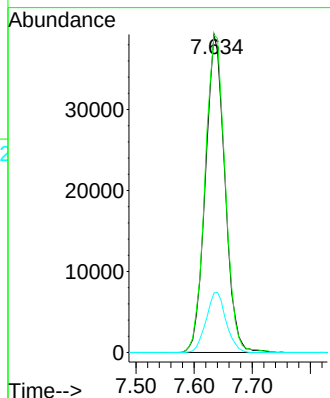
MSVOA\_Y

ClientSampleId :

WB-310-TOP



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 113   | Resp: | 91753 |
| Ion      | Ratio | Lower | Upper |
| 113      | 100   |       |       |
| 111      | 103.0 | 81.4  | 122.0 |
| 192      | 19.2  | 15.1  | 22.7  |



#39

Methylcyclohexane

Concen: 12.682 ug/l

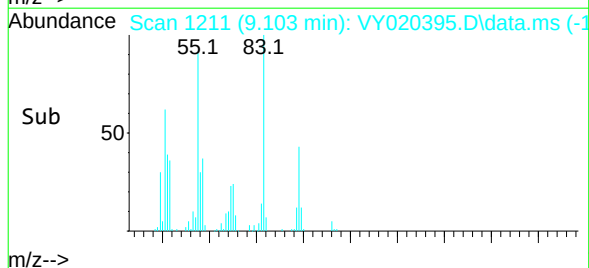
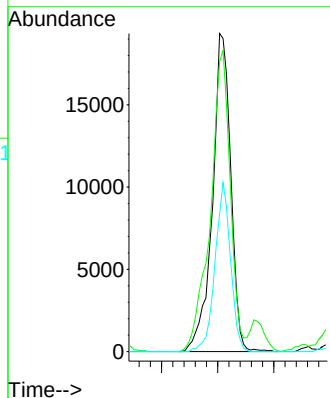
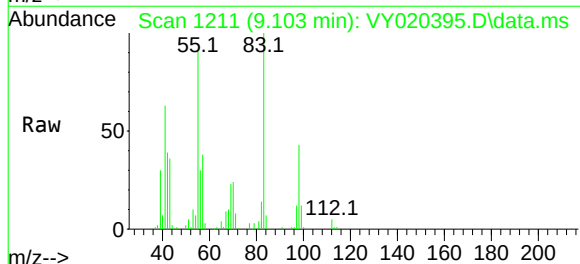
RT: 9.103 min Scan# 1211

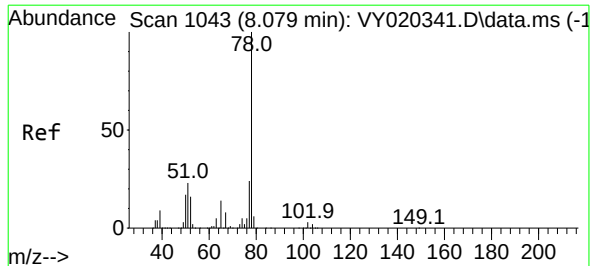
Delta R.T. -0.006 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 43848 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 55       | 91.1  | 62.6  | 93.8  |
| 98       | 43.3  | 37.0  | 55.4  |





#40

Benzene

Concen: 19.946 ug/l

RT: 8.079 min Scan# 1043

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

Instrument :

MSVOA\_Y

ClientSampleId :

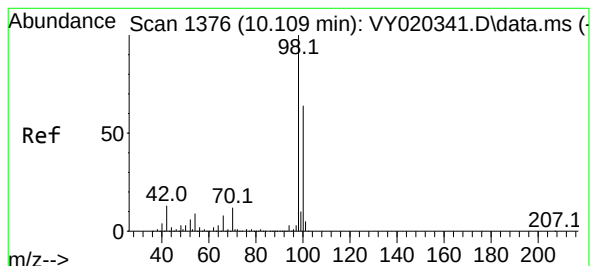
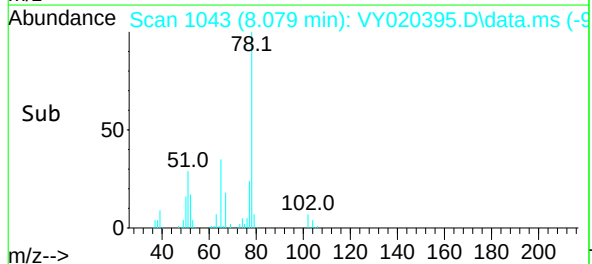
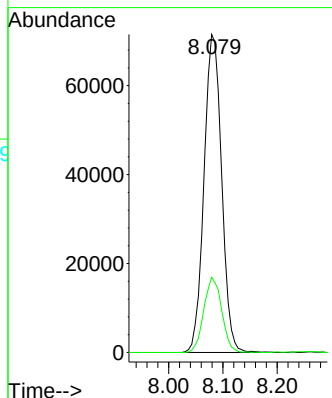
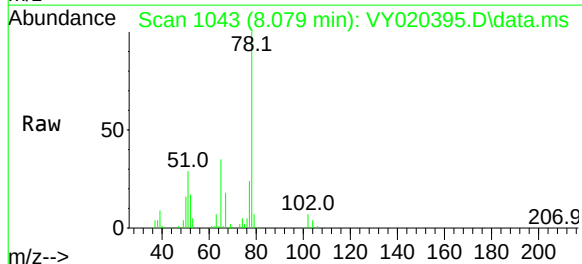
WB-310-TOP

Tgt Ion: 78 Resp: 161482

Ion Ratio Lower Upper

78 100

77 23.7 19.4 29.0



#50

Toluene-d8

Concen: 48.948 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. -0.000 min

Lab File: VY020395.D

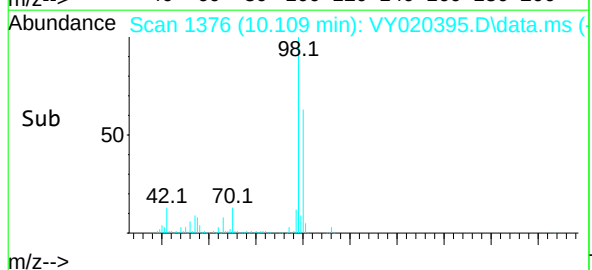
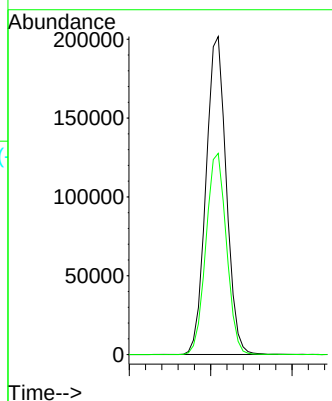
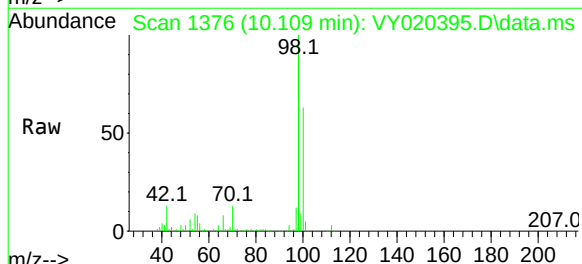
Acq: 21 Nov 2024 18:27

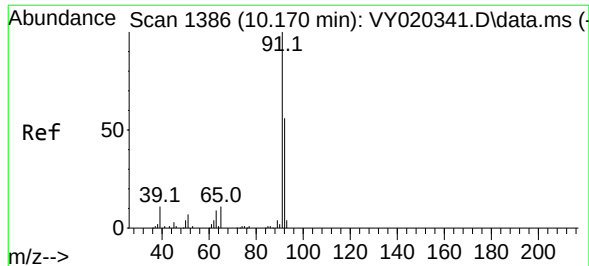
Tgt Ion: 98 Resp: 348748

Ion Ratio Lower Upper

98 100

100 64.1 51.3 76.9





#52

Toluene

Concen: 1.689 ug/l

RT: 10.170 min Scan# 1386

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

Instrument :

MSVOA\_Y

ClientSampleId :

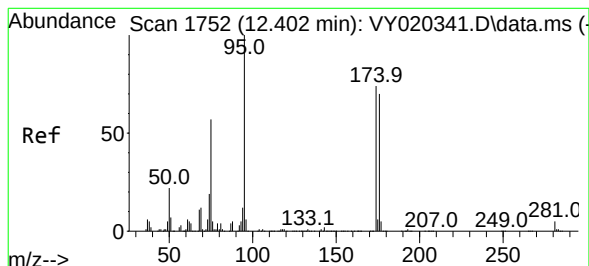
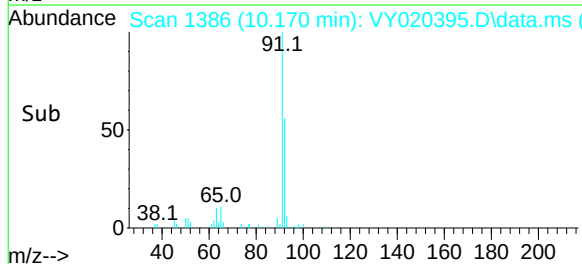
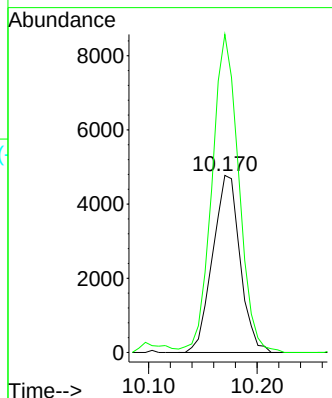
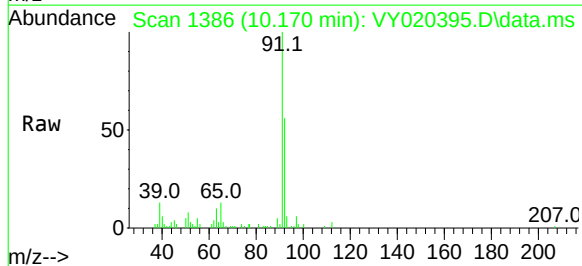
WB-310-TOP

Tgt Ion: 92 Resp: 8356

Ion Ratio Lower Upper

92 100

91 176.1 139.7 209.5



#62

4-Bromofluorobenzene

Concen: 58.924 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.006 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

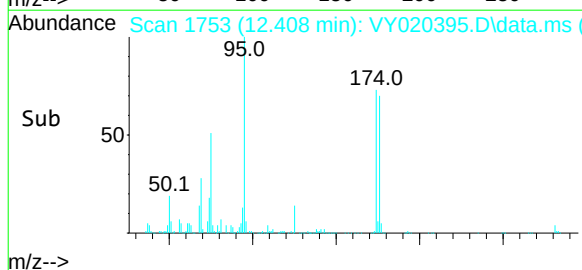
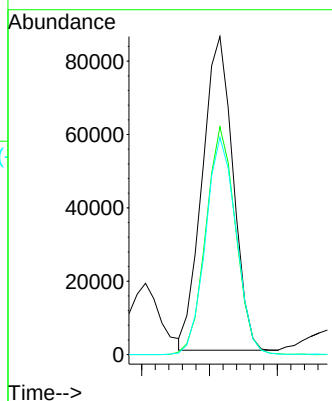
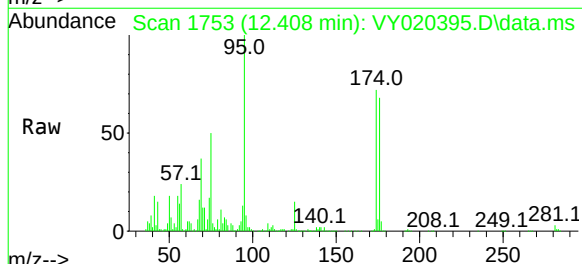
Tgt Ion: 95 Resp: 134960

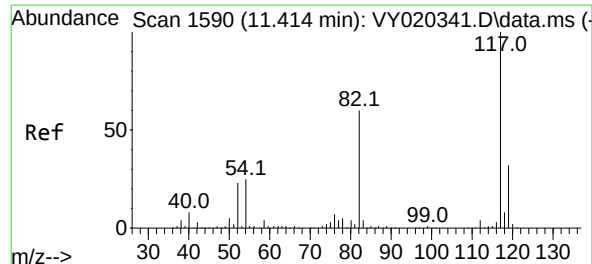
Ion Ratio Lower Upper

95 100

174 70.2 0.0 156.8

176 68.6 0.0 152.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 1590

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

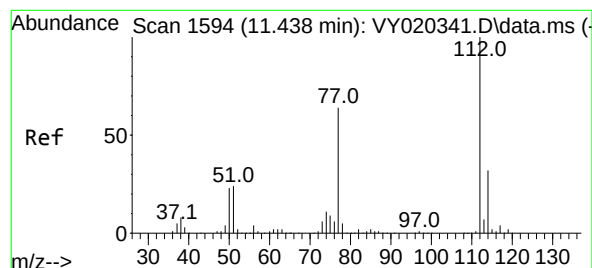
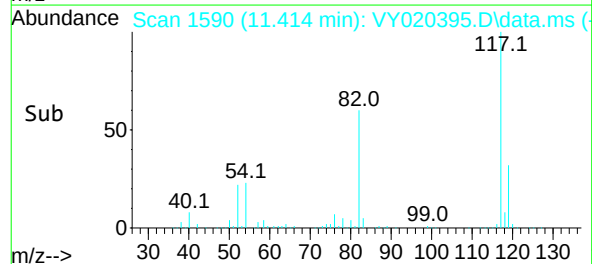
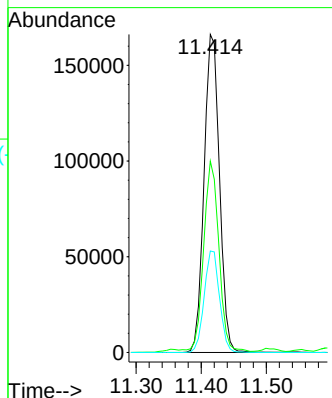
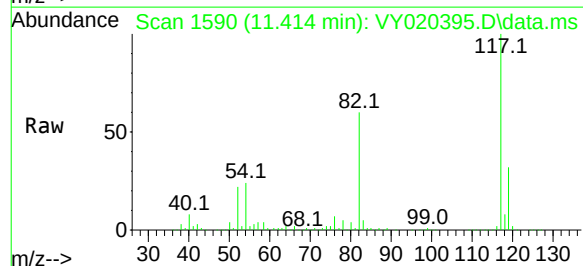
Instrument :

MSVOA\_Y

ClientSampleId :

WB-310-TOP

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 117   | Resp: | 273380 |
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 82        | 59.4  | 48.2  | 72.4   |
| 119       | 31.9  | 25.8  | 38.8   |



#65

Chlorobenzene

Concen: 1.484 ug/l

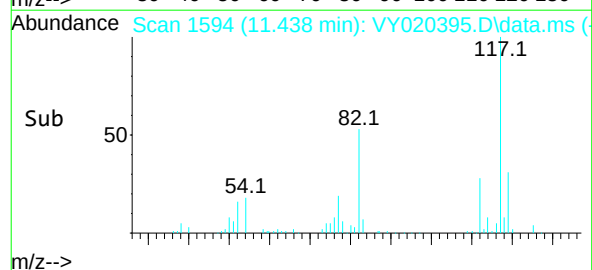
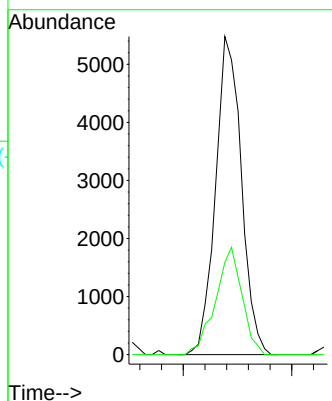
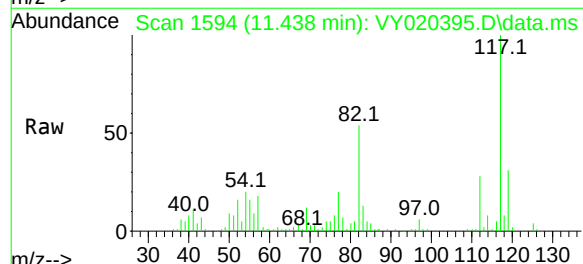
RT: 11.438 min Scan# 1594

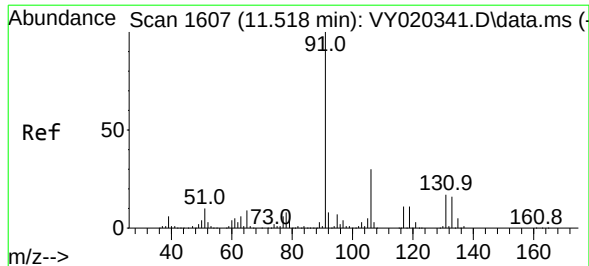
Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 112   | Resp: | 9046 |
| Ion Ratio | Lower | Upper |      |
| 112       | 100   |       |      |
| 114       | 29.0  | 25.7  | 38.5 |





#67

Ethyl Benzene

Concen: 1.099 ug/l

RT: 11.518 min Scan# 1607

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

Instrument :

MSVOA\_Y

ClientSampleId :

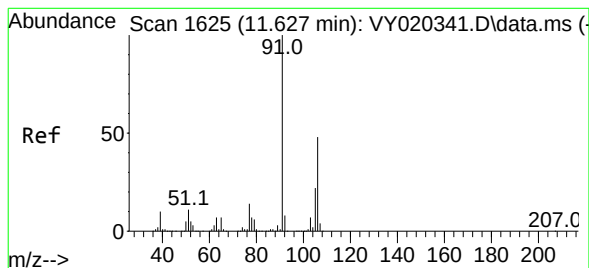
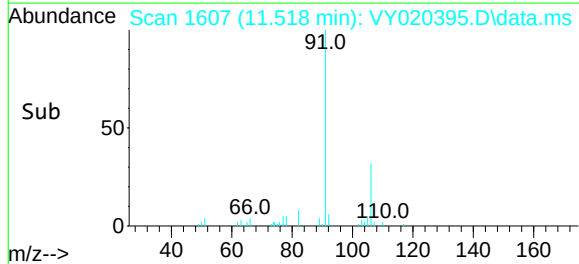
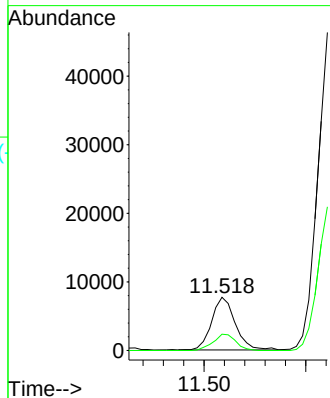
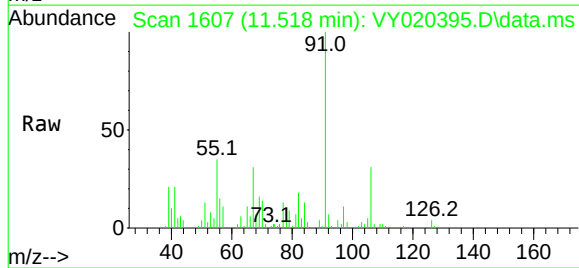
WB-310-TOP

Tgt Ion: 91 Resp: 12363

Ion Ratio Lower Upper

91 100

106 30.9 23.9 35.9



#68

m/p-Xylenes

Concen: 10.139 ug/l

RT: 11.627 min Scan# 1625

Delta R.T. -0.000 min

Lab File: VY020395.D

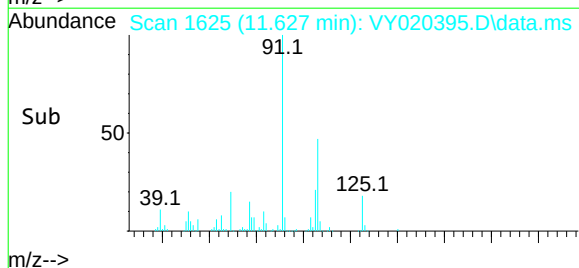
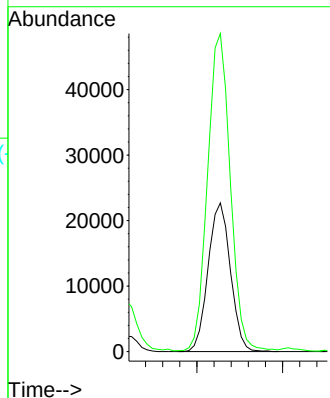
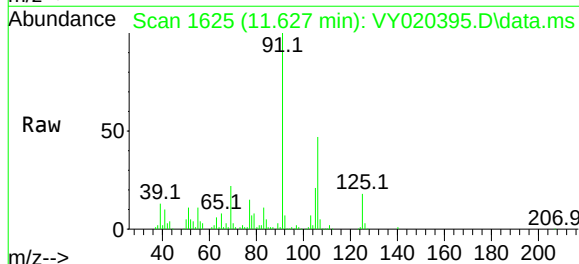
Acq: 21 Nov 2024 18:27

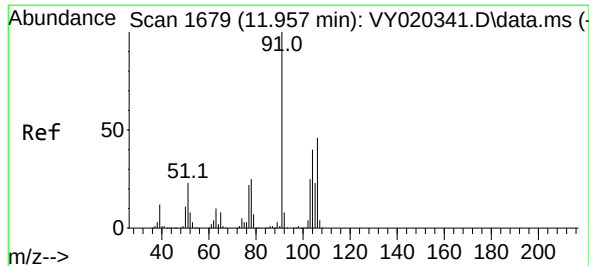
Tgt Ion: 106 Resp: 41068

Ion Ratio Lower Upper

106 100

91 216.3 166.0 249.0





#69

o-Xylene

Concen: 15.179 ug/l

RT: 11.957 min Scan# 1679

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

Instrument :

MSVOA\_Y

ClientSampleId :

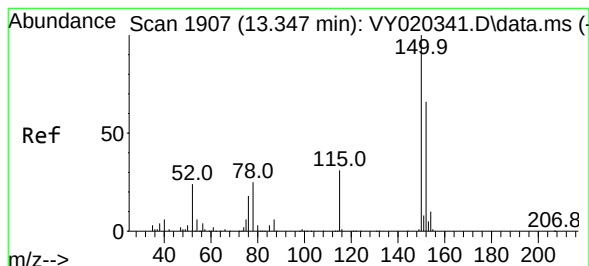
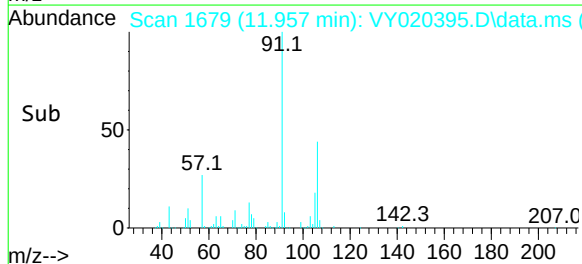
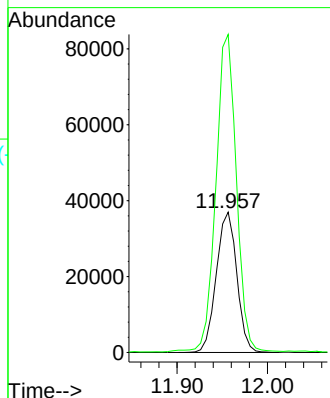
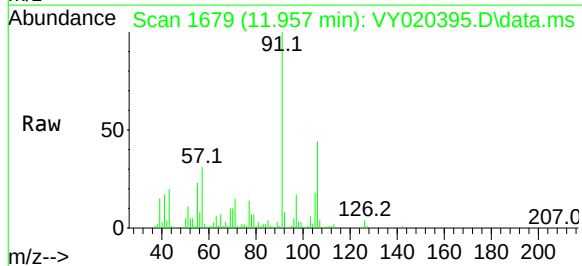
WB-310-TOP

Tgt Ion:106 Resp: 58317

Ion Ratio Lower Upper

106 100

91 225.4 110.0 330.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.347 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

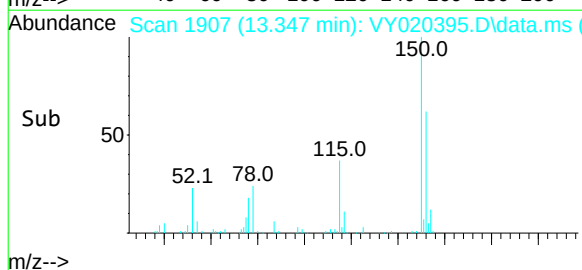
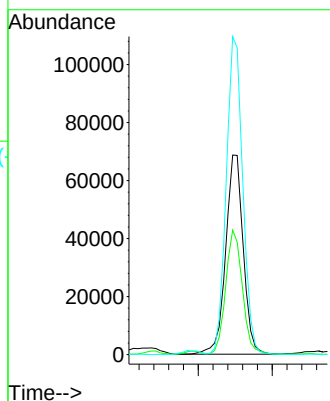
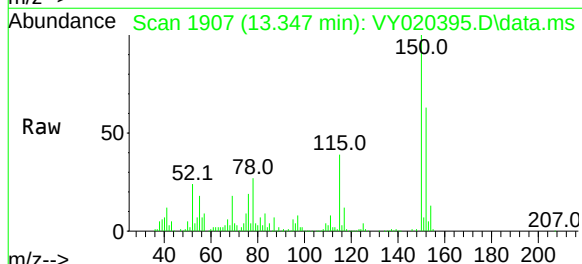
Tgt Ion:152 Resp: 113213

Ion Ratio Lower Upper

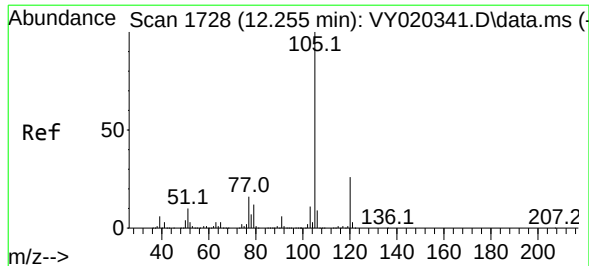
152 100

115 59.2 30.0 90.0

150 149.9 0.0 348.2







#73

Isopropylbenzene

Concen: 1.349 ug/l

RT: 12.255 min Scan# 1728

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

Instrument :

MSVOA\_Y

ClientSampleId :

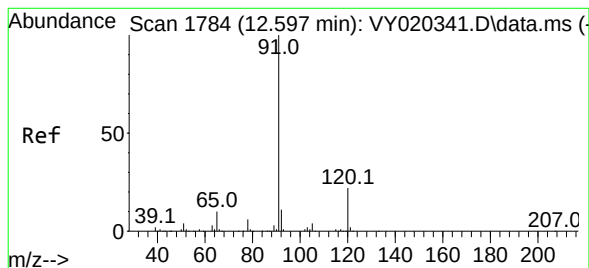
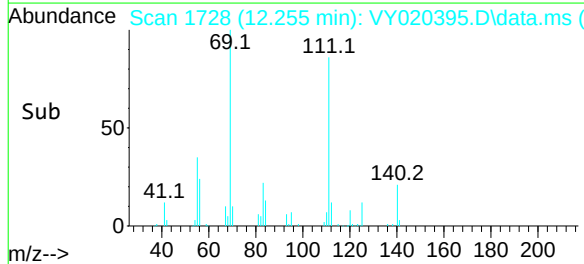
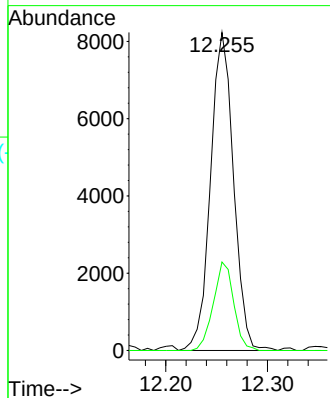
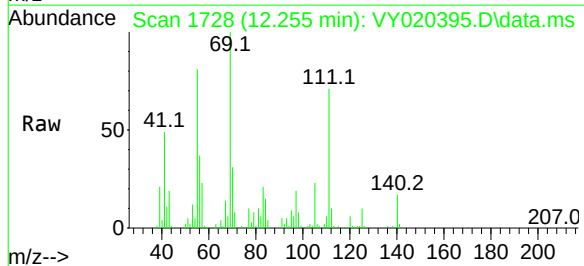
WB-310-TOP

Tgt Ion:105 Resp: 12934

Ion Ratio Lower Upper

105 100

120 24.7 12.7 38.1



#78

n-propylbenzene

Concen: 1.294 ug/l

RT: 12.597 min Scan# 1784

Delta R.T. -0.000 min

Lab File: VY020395.D

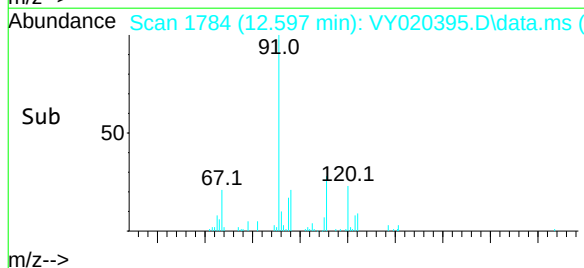
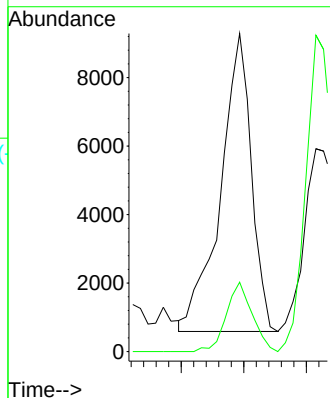
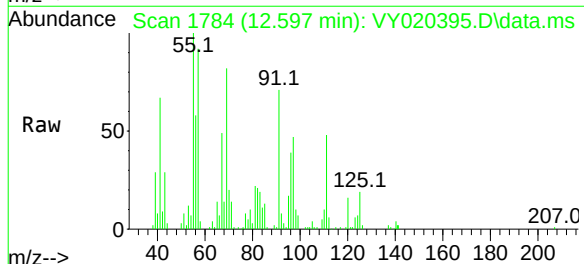
Acq: 21 Nov 2024 18:27

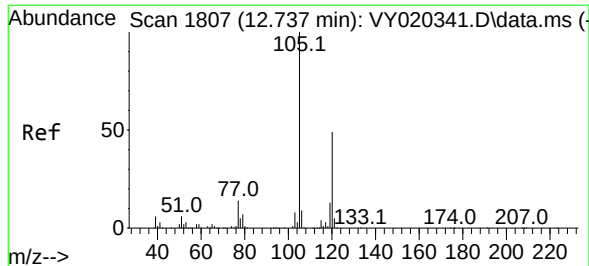
Tgt Ion: 91 Resp: 14898

Ion Ratio Lower Upper

91 100

120 19.6 10.9 32.6





#80

1,3,5-Trimethylbenzene

Concen: 5.704 ug/l

RT: 12.737 min Scan# 1807

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

Instrument :

MSVOA\_Y

ClientSampleId :

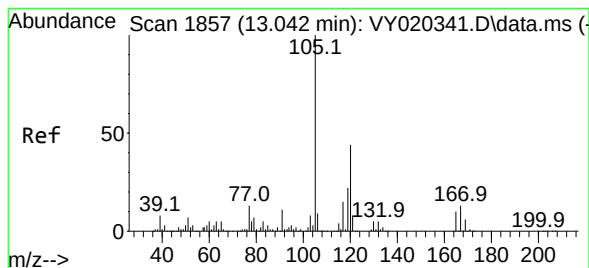
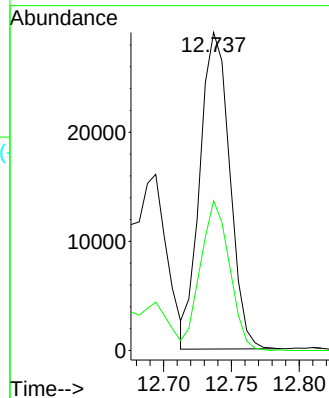
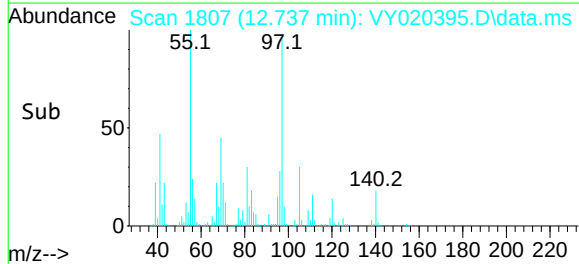
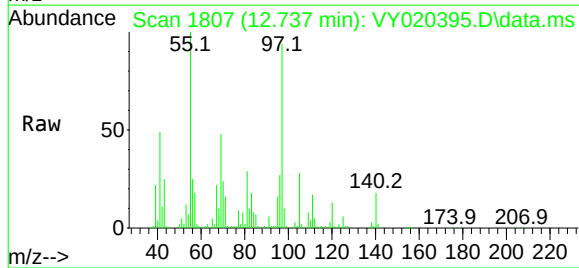
WB-310-TOP

Tgt Ion:105 Resp: 44208

Ion Ratio Lower Upper

105 100

120 46.3 24.3 72.8



#84

1,2,4-Trimethylbenzene

Concen: 9.431 ug/l

RT: 13.042 min Scan# 1857

Delta R.T. -0.000 min

Lab File: VY020395.D

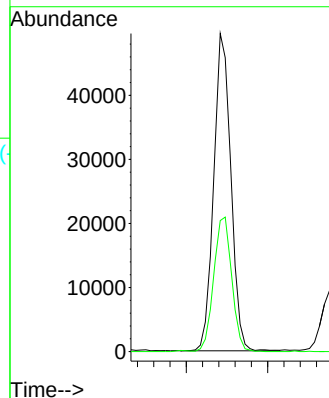
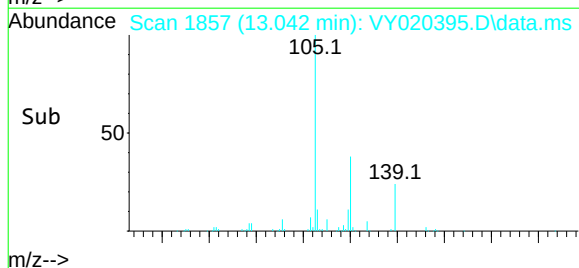
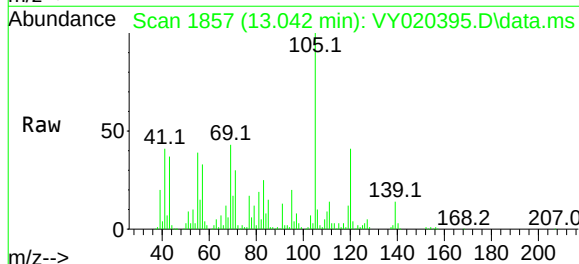
Acq: 21 Nov 2024 18:27

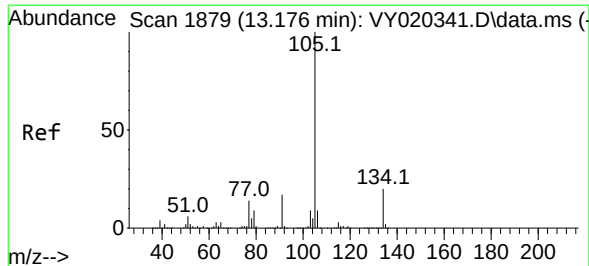
Tgt Ion:105 Resp: 72471

Ion Ratio Lower Upper

105 100

120 44.6 22.0 66.0





#85

sec-Butylbenzene

Concen: 1.272 ug/l

RT: 13.176 min Scan# 1879

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

Instrument :

MSVOA\_Y

ClientSampleId :

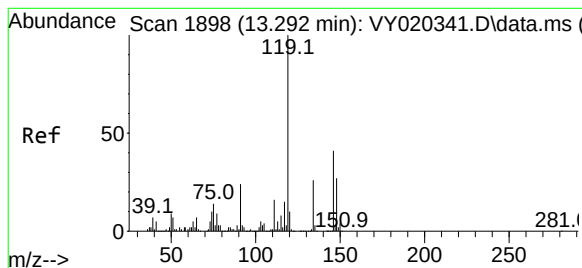
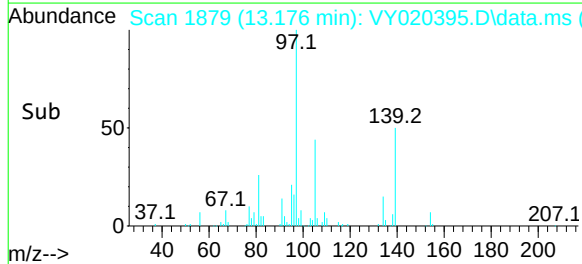
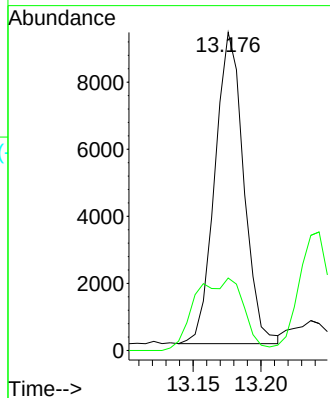
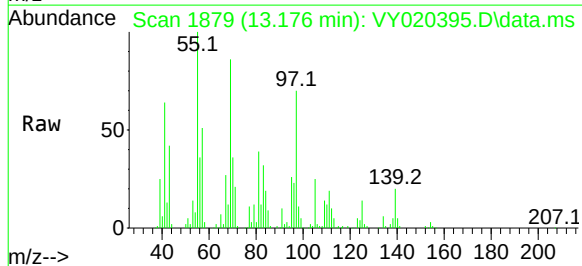
WB-310-TOP

Tgt Ion:105 Resp: 13719

Ion Ratio Lower Upper

105 100

134 39.1 9.8 29.5#



#86

p-Isopropyltoluene

Concen: 2.471 ug/l

RT: 13.292 min Scan# 1898

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

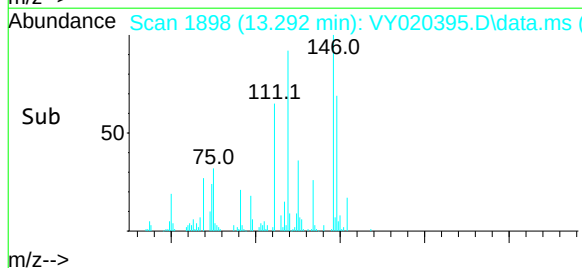
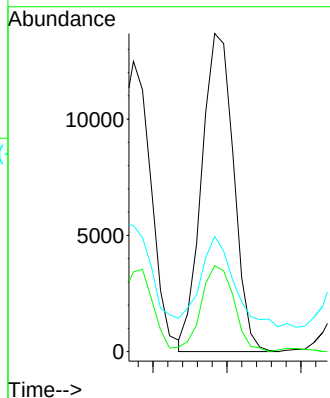
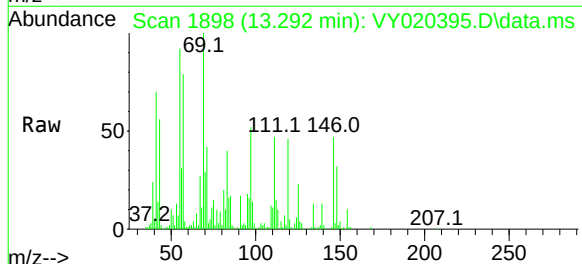
Tgt Ion:119 Resp: 20601

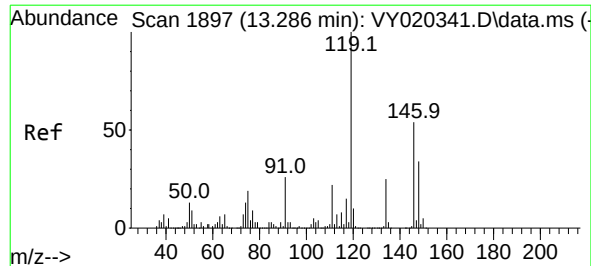
Ion Ratio Lower Upper

119 100

134 27.4 12.8 38.4

91 30.0 12.3 36.8





#87

1,3-Dichlorobenzene

Concen: 5.255 ug/l

RT: 13.292 min Scan# 1898

Delta R.T. 0.006 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

Instrument :

MSVOA\_Y

ClientSampleId :

WB-310-TOP

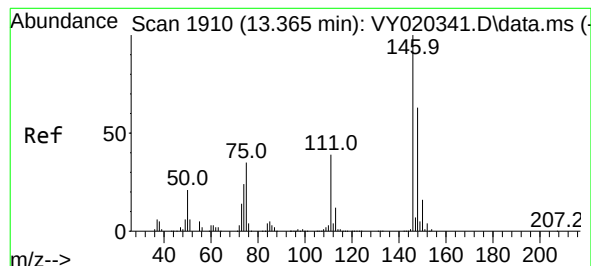
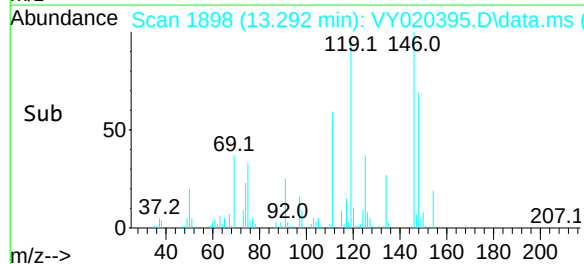
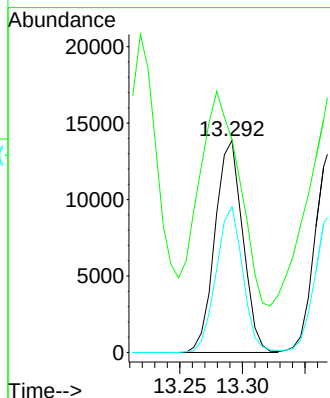
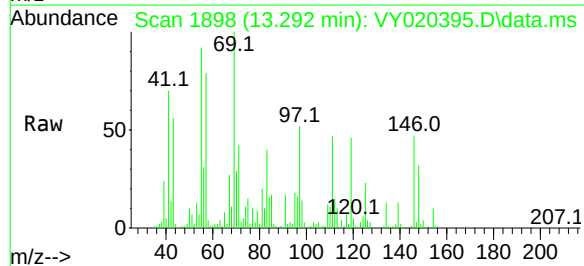
Tgt Ion:146 Resp: 21351

Ion Ratio Lower Upper

146 100

111 143.4 20.5 61.6#

148 66.3 32.1 96.5



#88

1,4-Dichlorobenzene

Concen: 5.393 ug/l

RT: 13.371 min Scan# 1911

Delta R.T. 0.006 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

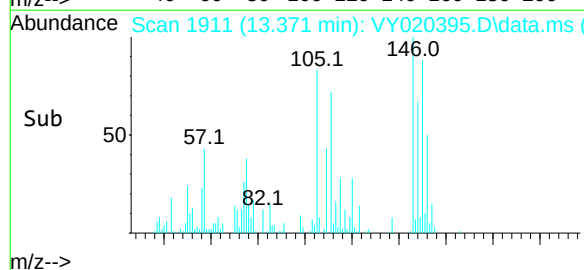
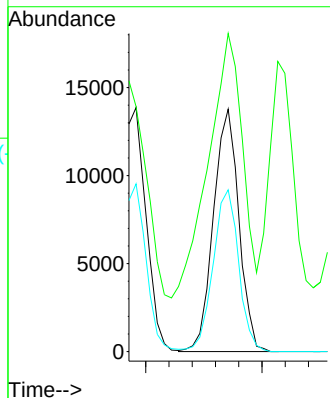
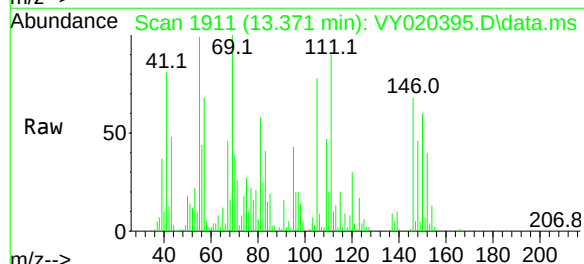
Tgt Ion:146 Resp: 20934

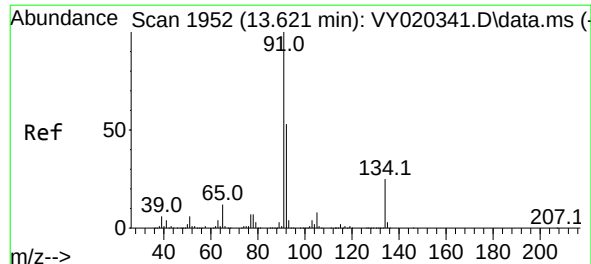
Ion Ratio Lower Upper

146 100

111 144.8 19.9 59.6#

148 67.2 32.0 96.2





#89

n-Butylbenzene

Concen: 1.420 ug/l

RT: 13.621 min Scan# 19

Delta R.T. -0.000 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

Instrument :

MSVOA\_Y

ClientSampleId :

WB-310-TOP

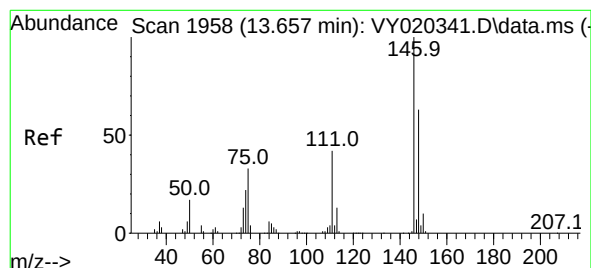
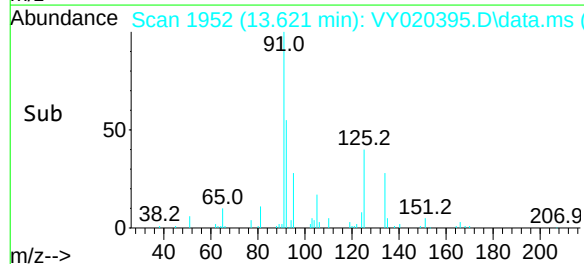
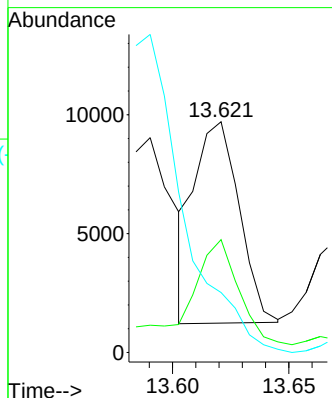
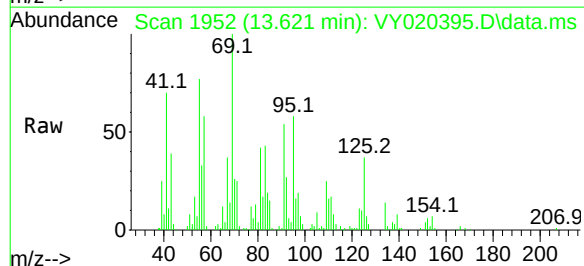
Tgt Ion: 91 Resp: 11336

Ion Ratio Lower Upper

91 100

92 57.7 26.5 79.5

134 0.0 12.2 36.4#



#91

1,2-Dichlorobenzene

Concen: 1.892 ug/l

RT: 13.664 min Scan# 1959

Delta R.T. 0.006 min

Lab File: VY020395.D

Acq: 21 Nov 2024 18:27

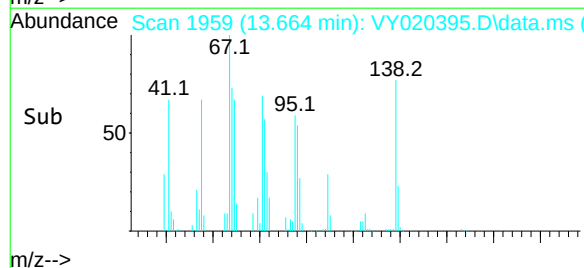
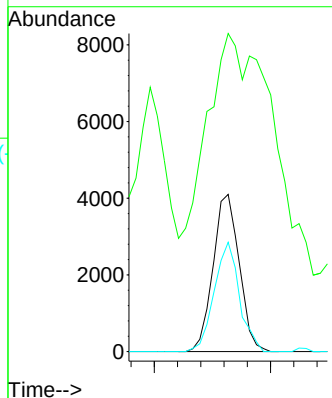
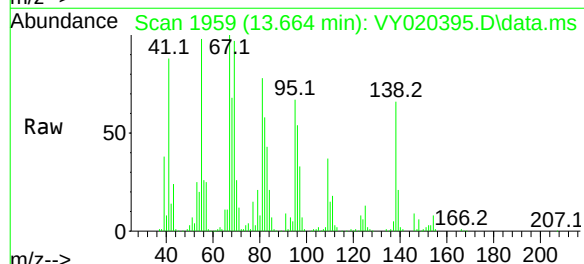
Tgt Ion:146 Resp: 6405

Ion Ratio Lower Upper

146 100

111 166.8 20.8 62.5#

148 66.9 31.8 95.4



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020395.D  
 Acq On : 21 Nov 2024 18:27  
 Operator : SY/MD  
 Sample : P4892-01  
 Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 WB-310-TOP

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M

Title : SW846 8260

Signal : TIC: VY020395.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 1.824       | 13            | 17          | 20           | rBV2     | 16990          | 26567         | 1.84%           | 0.087%        |
| 2         | 3.873       | 341           | 353         | 372          | rBV      | 21734          | 70645         | 4.89%           | 0.231%        |
| 3         | 4.110       | 382           | 392         | 407          | rVB      | 16533          | 45186         | 3.13%           | 0.148%        |
| 4         | 4.629       | 460           | 477         | 484          | rBV5     | 7807           | 35435         | 2.45%           | 0.116%        |
| 5         | 6.896       | 838           | 849         | 864          | rBV3     | 11391          | 37222         | 2.57%           | 0.122%        |
| 6         | 7.634       | 960           | 970         | 976          | rBV      | 130313         | 318528        | 22.03%          | 1.042%        |
| 7         | 7.707       | 976           | 982         | 990          | rVV      | 204095         | 485643        | 33.59%          | 1.589%        |
| 8         | 7.793       | 990           | 996         | 1005         | rVB3     | 22312          | 56284         | 3.89%           | 0.184%        |
| 9         | 7.921       | 1008          | 1017        | 1025         | rBV2     | 33352          | 80370         | 5.56%           | 0.263%        |
| 10        | 8.073       | 1032          | 1042        | 1053         | rBV3     | 228984         | 625093        | 43.23%          | 2.045%        |
| 11        | 8.250       | 1053          | 1071        | 1080         | rVV      | 124115         | 363464        | 25.14%          | 1.189%        |
| 12        | 8.341       | 1080          | 1086        | 1097         | rVB2     | 20495          | 46820         | 3.24%           | 0.153%        |
| 13        | 8.616       | 1120          | 1131        | 1141         | rBV      | 350250         | 686234        | 47.46%          | 2.245%        |
| 14        | 8.853       | 1162          | 1170        | 1176         | rBV      | 22298          | 48857         | 3.38%           | 0.160%        |
| 15        | 9.109       | 1196          | 1212        | 1218         | rBV4     | 141037         | 350849        | 24.26%          | 1.148%        |
| 16        | 9.170       | 1218          | 1222        | 1229         | rVB2     | 58117          | 105241        | 7.28%           | 0.344%        |
| 17        | 9.298       | 1238          | 1243        | 1249         | rVV3     | 12663          | 28298         | 1.96%           | 0.093%        |
| 18        | 9.390       | 1249          | 1258        | 1265         | rVB4     | 29262          | 74248         | 5.13%           | 0.243%        |
| 19        | 9.542       | 1275          | 1283        | 1292         | rVB2     | 89352          | 180843        | 12.51%          | 0.592%        |
| 20        | 9.676       | 1295          | 1305        | 1311         | rBV3     | 80622          | 184820        | 12.78%          | 0.605%        |
| 21        | 9.744       | 1311          | 1316        | 1320         | rVV3     | 21391          | 39307         | 2.72%           | 0.129%        |
| 22        | 9.780       | 1320          | 1322        | 1328         | rVB4     | 21277          | 31235         | 2.16%           | 0.102%        |
| 23        | 9.884       | 1328          | 1339        | 1343         | rBV4     | 33816          | 108484        | 7.50%           | 0.355%        |
| 24        | 10.042      | 1359          | 1365        | 1369         | rVB      | 58694          | 99900         | 6.91%           | 0.327%        |
| 25        | 10.109      | 1369          | 1376        | 1391         | rVB      | 600276         | 1164110       | 80.51%          | 3.809%        |
| 26        | 10.274      | 1398          | 1403        | 1405         | rBV2     | 25392          | 39565         | 2.74%           | 0.129%        |
| 27        | 10.408      | 1415          | 1425        | 1427         | rBV5     | 23605          | 46386         | 3.21%           | 0.152%        |
| 28        | 10.451      | 1427          | 1432        | 1441         | rVB      | 51206          | 94103         | 6.51%           | 0.308%        |
| 29        | 10.548      | 1441          | 1448        | 1453         | rBV4     | 39127          | 108176        | 7.48%           | 0.354%        |
| 30        | 10.591      | 1453          | 1455        | 1459         | rVV3     | 20885          | 26081         | 1.80%           | 0.085%        |
| 31        | 10.640      | 1459          | 1463        | 1468         | rVB      | 48262          | 71838         | 4.97%           | 0.235%        |
| 32        | 10.731      | 1468          | 1478        | 1484         | rBV      | 113426         | 199780        | 13.82%          | 0.654%        |
| 33        | 10.829      | 1484          | 1494        | 1502         | rBV      | 108127         | 250373        | 17.32%          | 0.819%        |
| 34        | 10.902      | 1502          | 1506        | 1509         | rBV2     | 35226          | 55920         | 3.87%           | 0.183%        |
| 35        | 10.963      | 1512          | 1516        | 1520         | rVV      | 76942          | 117452        | 8.12%           | 0.384%        |
| 36        | 11.018      | 1520          | 1525        | 1530         | rVV      | 202463         | 348603        | 24.11%          | 1.141%        |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020395.D  
 Acq On : 21 Nov 2024 18:27  
 Operator : SY/MD  
 Sample : P4892-01  
 Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 WB-310-TOP

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Title : SW846 8260

|    |        |      |      |      |      |        |         |         |        |
|----|--------|------|------|------|------|--------|---------|---------|--------|
| 37 | 11.073 | 1530 | 1534 | 1538 | rVB2 | 40990  | 57336   | 3.97%   | 0.188% |
| 38 | 11.134 | 1538 | 1544 | 1548 | rBV3 | 98218  | 174812  | 12.09%  | 0.572% |
| 39 | 11.176 | 1548 | 1551 | 1553 | rVV2 | 54658  | 85555   | 5.92%   | 0.280% |
| 40 | 11.219 | 1554 | 1558 | 1567 | rVB2 | 138521 | 297324  | 20.56%  | 0.973% |
| 41 | 11.310 | 1567 | 1573 | 1577 | rBV  | 115244 | 208236  | 14.40%  | 0.681% |
| 42 | 11.414 | 1583 | 1590 | 1600 | rBV  | 547596 | 985610  | 68.16%  | 3.225% |
| 43 | 11.493 | 1600 | 1603 | 1609 | rBV4 | 24224  | 49575   | 3.43%   | 0.162% |
| 44 | 11.554 | 1609 | 1613 | 1616 | rVB  | 55220  | 74907   | 5.18%   | 0.245% |
| 45 | 11.615 | 1616 | 1623 | 1627 | rBV3 | 188592 | 440075  | 30.44%  | 1.440% |
| 46 | 11.664 | 1627 | 1631 | 1635 | rVV2 | 226782 | 356590  | 24.66%  | 1.167% |
| 47 | 11.707 | 1635 | 1638 | 1643 | rVB2 | 180150 | 270893  | 18.73%  | 0.886% |
| 48 | 11.768 | 1643 | 1648 | 1651 | rBV  | 74909  | 141331  | 9.77%   | 0.462% |
| 49 | 11.804 | 1651 | 1654 | 1659 | rVB2 | 34405  | 63645   | 4.40%   | 0.208% |
| 50 | 11.865 | 1659 | 1664 | 1667 | rBV2 | 117024 | 164448  | 11.37%  | 0.538% |
| 51 | 11.932 | 1667 | 1675 | 1682 | rBV4 | 433398 | 1400840 | 96.88%  | 4.583% |
| 52 | 12.018 | 1686 | 1689 | 1690 | rBV  | 68803  | 75323   | 5.21%   | 0.246% |
| 53 | 12.048 | 1690 | 1694 | 1698 | rVB  | 549066 | 776415  | 53.70%  | 2.540% |
| 54 | 12.127 | 1698 | 1707 | 1709 | rBV4 | 432115 | 808372  | 55.91%  | 2.645% |
| 55 | 12.164 | 1709 | 1713 | 1718 | rVB3 | 586293 | 1038546 | 71.82%  | 3.398% |
| 56 | 12.249 | 1718 | 1727 | 1730 | rBV6 | 95356  | 226860  | 15.69%  | 0.742% |
| 57 | 12.298 | 1730 | 1735 | 1741 | rVB4 | 329127 | 707909  | 48.96%  | 2.316% |
| 58 | 12.353 | 1741 | 1744 | 1746 | rVB  | 49912  | 55041   | 3.81%   | 0.180% |
| 59 | 12.408 | 1746 | 1753 | 1759 | rVB4 | 566122 | 1203237 | 83.21%  | 3.937% |
| 60 | 12.499 | 1759 | 1768 | 1771 | rBV5 | 267302 | 685654  | 47.42%  | 2.243% |
| 61 | 12.566 | 1772 | 1779 | 1786 | rVB4 | 574284 | 1445949 | 100.00% | 4.731% |
| 62 | 12.658 | 1786 | 1794 | 1798 | rBV5 | 411483 | 1001087 | 69.23%  | 3.275% |
| 63 | 12.737 | 1799 | 1807 | 1812 | rBV6 | 554080 | 1391309 | 96.22%  | 4.552% |
| 64 | 12.786 | 1813 | 1815 | 1821 | rVB3 | 338089 | 448509  | 31.02%  | 1.467% |
| 65 | 12.871 | 1821 | 1829 | 1833 | rBV6 | 301207 | 679622  | 47.00%  | 2.224% |
| 66 | 12.920 | 1833 | 1837 | 1841 | rBV3 | 193201 | 347062  | 24.00%  | 1.136% |
| 67 | 12.962 | 1841 | 1844 | 1846 | rBV2 | 119817 | 146771  | 10.15%  | 0.480% |
| 68 | 13.048 | 1854 | 1858 | 1862 | rVB4 | 157687 | 246189  | 17.03%  | 0.805% |
| 69 | 13.097 | 1862 | 1866 | 1871 | rBV2 | 257448 | 452011  | 31.26%  | 1.479% |
| 70 | 13.145 | 1872 | 1874 | 1876 | rBV2 | 63990  | 68650   | 4.75%   | 0.225% |
| 71 | 13.212 | 1881 | 1885 | 1887 | rVV3 | 306016 | 454171  | 31.41%  | 1.486% |
| 72 | 13.243 | 1888 | 1890 | 1894 | rVV2 | 363660 | 442711  | 30.62%  | 1.448% |
| 73 | 13.279 | 1894 | 1896 | 1901 | rVB5 | 176095 | 266591  | 18.44%  | 0.872% |
| 74 | 13.347 | 1902 | 1907 | 1913 | rBV  | 374992 | 729798  | 50.47%  | 2.388% |
| 75 | 13.487 | 1926 | 1930 | 1934 | rVB4 | 123670 | 183405  | 12.68%  | 0.600% |
| 76 | 13.548 | 1935 | 1940 | 1944 | rBV4 | 84976  | 200340  | 13.86%  | 0.655% |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020395.D  
 Acq On : 21 Nov 2024 18:27  
 Operator : SY/MD  
 Sample : P4892-01  
 Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 WB-310-TOP

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\_Y\methods\82Y111924S.M  
 Title : SW846 8260

|     |        |      |      |      |      |        |        |        |        |
|-----|--------|------|------|------|------|--------|--------|--------|--------|
| 77  | 13.670 | 1954 | 1960 | 1965 | rBV2 | 500231 | 862894 | 59.68% | 2.823% |
| 78  | 13.718 | 1965 | 1968 | 1971 | rBV2 | 72949  | 96028  | 6.64%  | 0.314% |
| 79  | 13.840 | 1985 | 1988 | 1993 | rBV4 | 105532 | 228458 | 15.80% | 0.747% |
| 80  | 13.889 | 1993 | 1996 | 2002 | rVB3 | 191290 | 305899 | 21.16% | 1.001% |
| 81  | 13.999 | 2010 | 2014 | 2019 | rVB3 | 158476 | 238462 | 16.49% | 0.780% |
| 82  | 14.066 | 2019 | 2025 | 2031 | rVB6 | 104517 | 240557 | 16.64% | 0.787% |
| 83  | 14.127 | 2031 | 2035 | 2039 | rBV5 | 58453  | 102967 | 7.12%  | 0.337% |
| 84  | 14.182 | 2039 | 2044 | 2053 | rBV6 | 243344 | 685484 | 47.41% | 2.243% |
| 85  | 14.255 | 2053 | 2056 | 2060 | rVB  | 120066 | 163261 | 11.29% | 0.534% |
| 86  | 14.304 | 2060 | 2064 | 2067 | rBV3 | 113756 | 178859 | 12.37% | 0.585% |
| 87  | 14.340 | 2067 | 2070 | 2075 | rVB2 | 212659 | 299960 | 20.74% | 0.981% |
| 88  | 14.487 | 2090 | 2094 | 2099 | rBV3 | 49364  | 78476  | 5.43%  | 0.257% |
| 89  | 14.535 | 2099 | 2102 | 2106 | rVB2 | 67927  | 81736  | 5.65%  | 0.267% |
| 90  | 14.602 | 2106 | 2113 | 2118 | rBV3 | 156253 | 361560 | 25.01% | 1.183% |
| 91  | 14.651 | 2118 | 2121 | 2128 | rVB3 | 144647 | 244078 | 16.88% | 0.799% |
| 92  | 14.712 | 2128 | 2131 | 2132 | rBV2 | 25509  | 28435  | 1.97%  | 0.093% |
| 93  | 14.865 | 2152 | 2156 | 2160 | rVB3 | 77118  | 98403  | 6.81%  | 0.322% |
| 94  | 15.133 | 2195 | 2200 | 2207 | rBV2 | 121335 | 254664 | 17.61% | 0.833% |
| 95  | 15.255 | 2217 | 2220 | 2225 | rBV6 | 27755  | 48207  | 3.33%  | 0.158% |
| 96  | 15.346 | 2232 | 2235 | 2243 | rVB9 | 36178  | 70323  | 4.86%  | 0.230% |
| 97  | 15.432 | 2244 | 2249 | 2251 | rBV4 | 26241  | 54587  | 3.78%  | 0.179% |
| 98  | 15.517 | 2259 | 2263 | 2268 | rVB3 | 66414  | 112566 | 7.78%  | 0.368% |
| 99  | 16.053 | 2347 | 2351 | 2359 | rVB  | 65257  | 108059 | 7.47%  | 0.354% |
| 100 | 16.370 | 2398 | 2403 | 2411 | rBV4 | 49633  | 116042 | 8.03%  | 0.380% |

Sum of corrected areas: 30564634

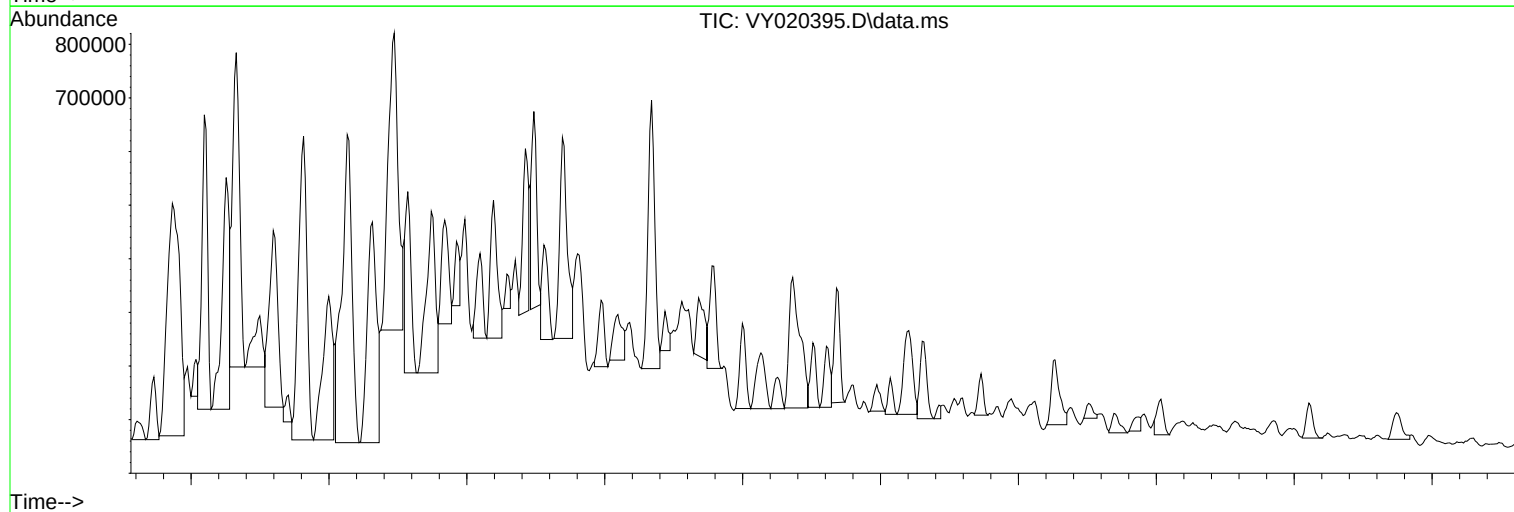
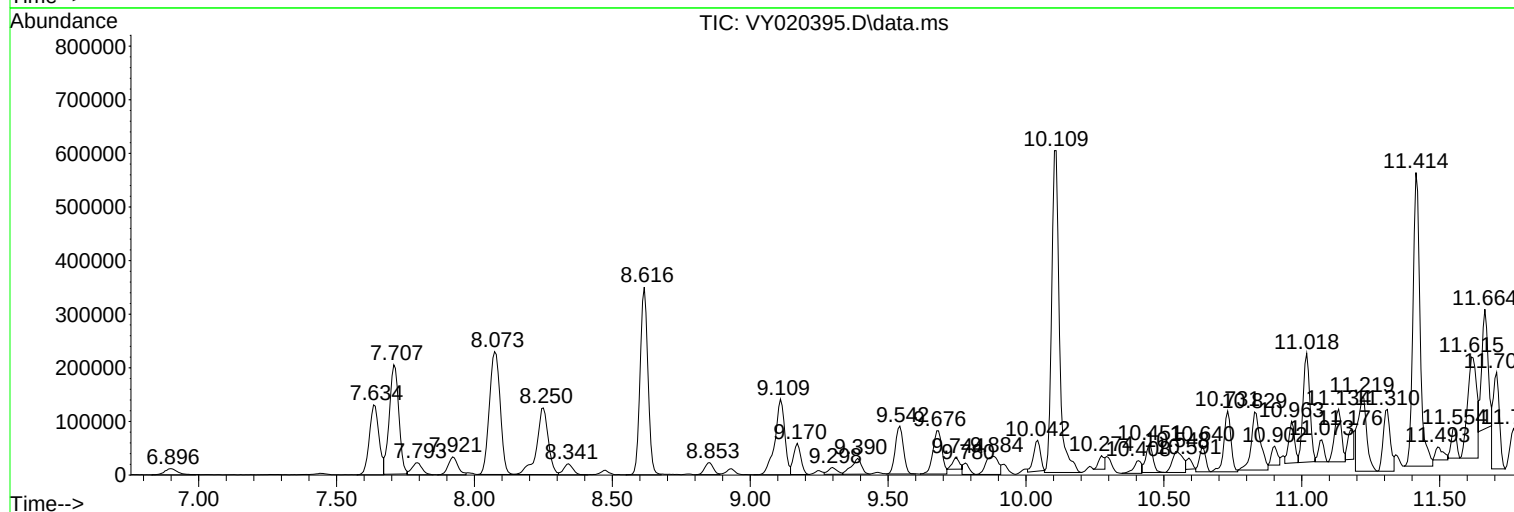
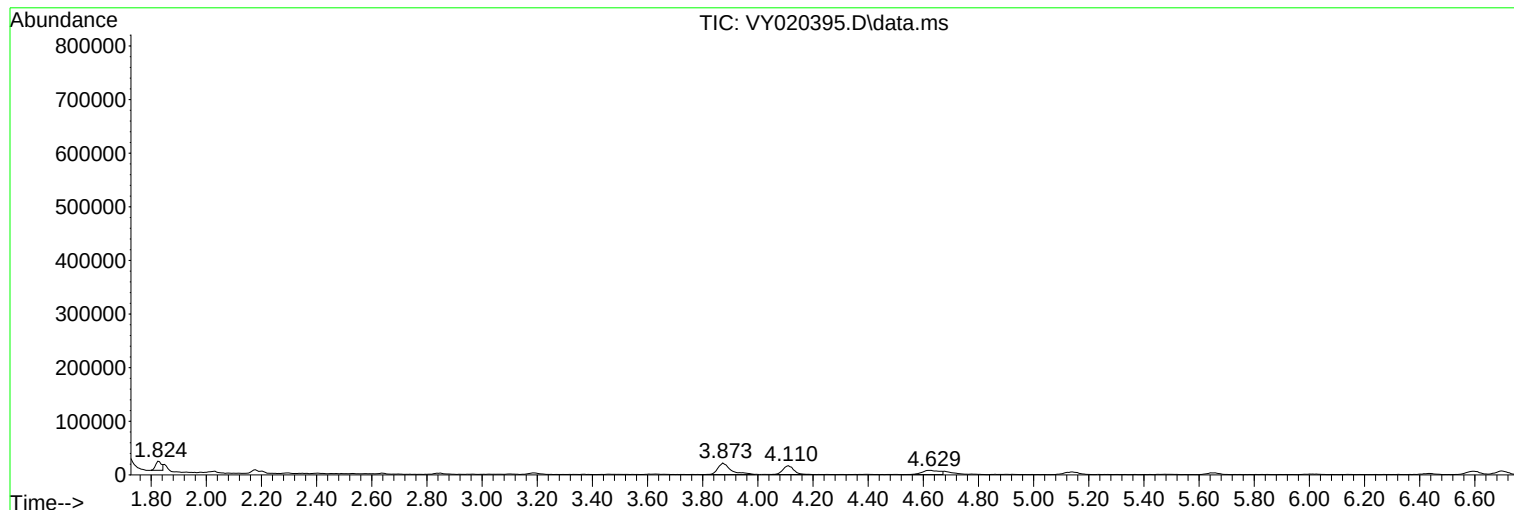


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

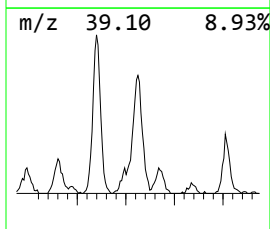
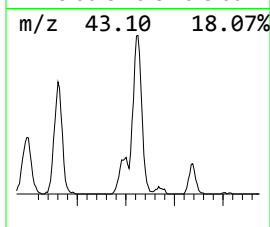
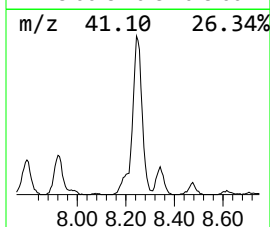
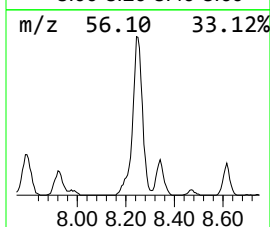
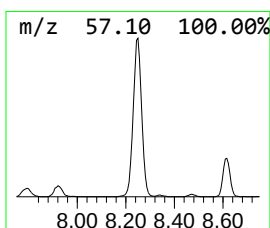
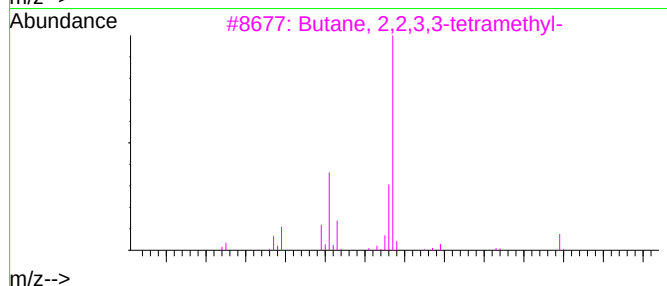
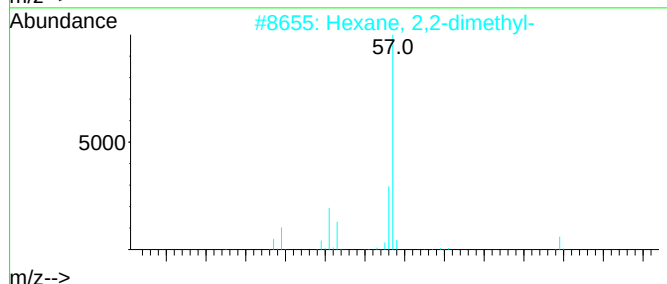
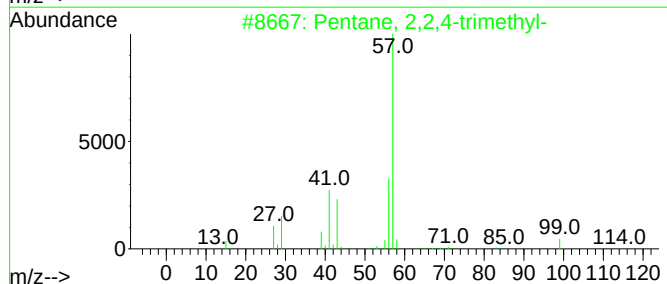
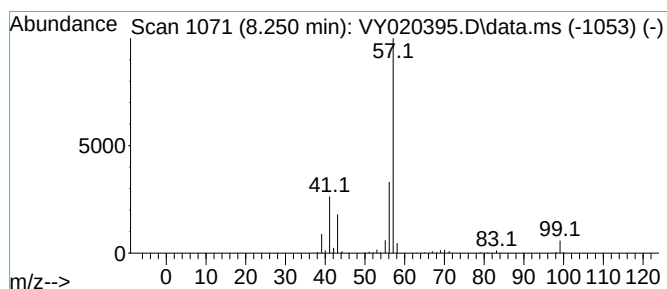
TIC Library : C:\Database\NIST20.L

TIC Integration Parameters: LSCINT.P

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Peak Number 1 Pentane, 2,2,4-trimethyl- Concentration Rank 9

| R.T.      | EstConc                         | Area   | Relative to ISTD    | R.T.        |      |
|-----------|---------------------------------|--------|---------------------|-------------|------|
| 8.250     | 26.48 ug/l                      | 363464 | 1,4-Difluorobenzene | 8.616       |      |
| Hit# of 5 | Tentative ID                    | MW     | MolForm             | CAS#        | Qual |
| 1         | Pentane, 2,2,4-trimethyl-       | 114    | C8H18               | 000540-84-1 | 72   |
| 2         | Hexane, 2,2-dimethyl-           | 114    | C8H18               | 000590-73-8 | 72   |
| 3         | Butane, 2,2,3,3-tetramethyl-    | 114    | C8H18               | 000594-82-1 | 72   |
| 4         | Heptane, 2,2,4,6,6-pentamethyl- | 170    | C12H26              | 013475-82-6 | 64   |
| 5         | Pentane, 2,2,4,4-tetramethyl-   | 128    | C9H20               | 001070-87-7 | 59   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

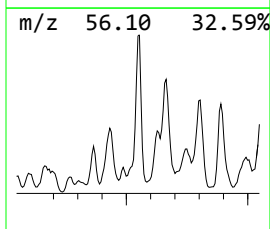
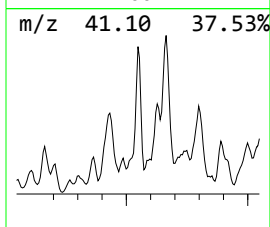
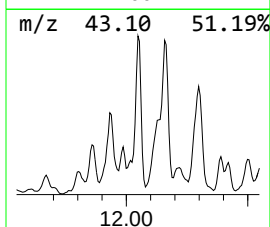
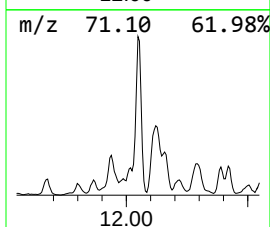
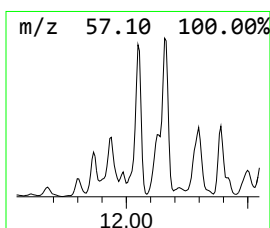
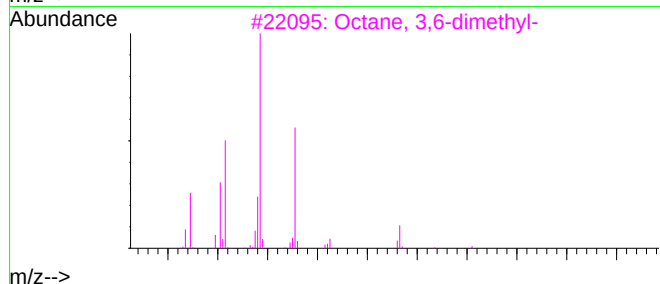
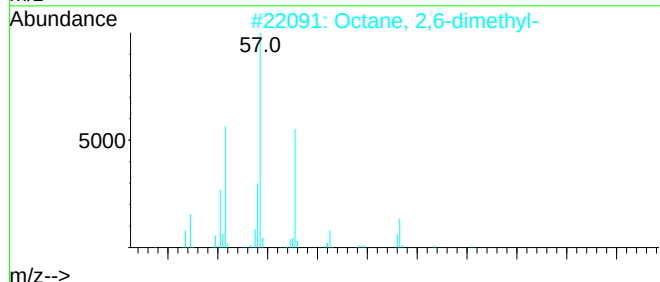
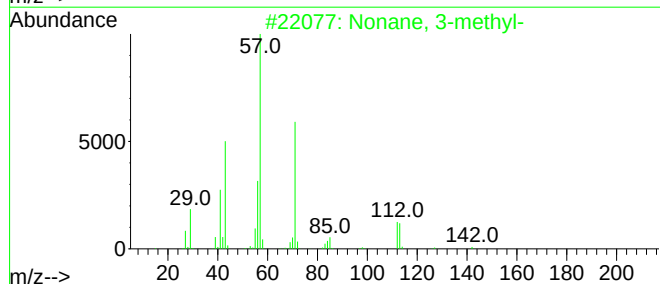
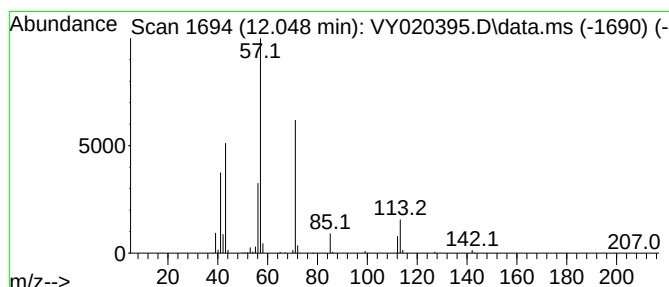
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 2 Nonane, 3-methyl- Concentration Rank 7

| R.T.      | EstConc                             | Area   | Relative to ISTD | R.T.         |      |
|-----------|-------------------------------------|--------|------------------|--------------|------|
| 12.048    | 39.39 ug/l                          | 776415 | Chlorobenzene-d5 | 11.414       |      |
| Hit# of 5 | Tentative ID                        | MW     | MolForm          | CAS#         | Qual |
| 1         | Nonane, 3-methyl-                   | 142    | C10H22           | 005911-04-6  | 91   |
| 2         | Octane, 2,6-dimethyl-               | 142    | C10H22           | 002051-30-1  | 91   |
| 3         | Octane, 3,6-dimethyl-               | 142    | C10H22           | 015869-94-0  | 91   |
| 4         | Sulfurous acid, 2-ethylhexyl hex... | 418    | C24H50O3S        | 1000309-19-9 | 72   |
| 5         | Butane, 2,2-dimethyl-               | 86     | C6H14            | 000075-83-2  | 59   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

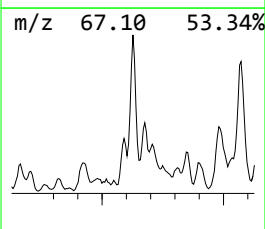
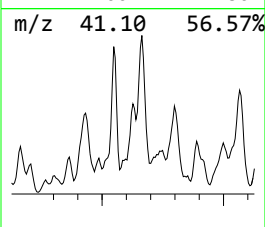
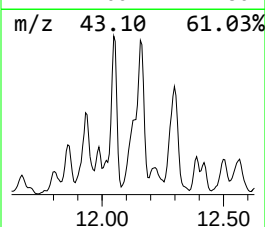
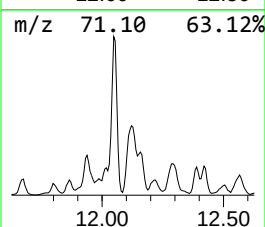
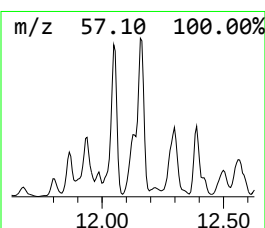
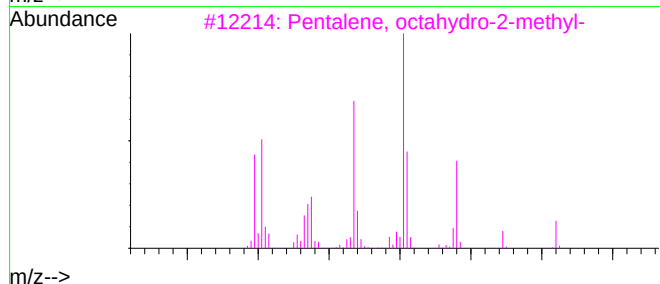
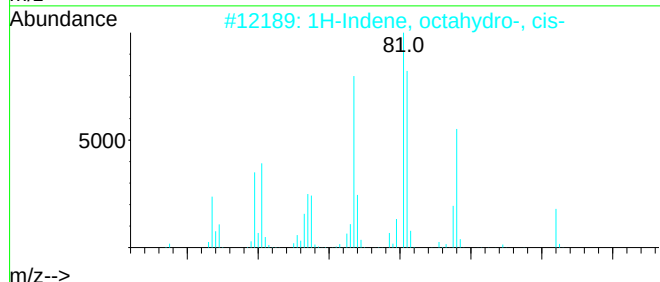
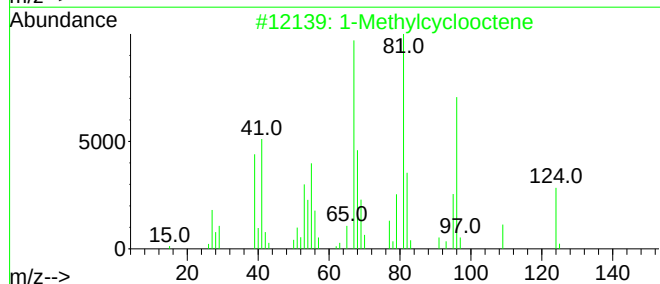
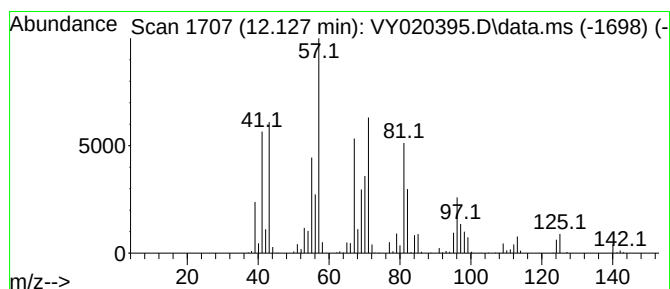
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Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 3 unknown12.127 Concentration Rank 6

| R.T.   | EstConc    | Area   | Relative to ISTD | R.T.   |
|--------|------------|--------|------------------|--------|
| 12.127 | 41.01 ug/l | 808372 | Chlorobenzene-d5 | 11.414 |

| Hit# of 5 | Tentative ID                   | MW  | MolForm | CAS#        | Qual |
|-----------|--------------------------------|-----|---------|-------------|------|
| 1         | 1-Methylcyclooctene            | 124 | C9H16   | 000933-11-9 | 42   |
| 2         | 1H-Indene, octahydro-, cis-    | 124 | C9H16   | 004551-51-3 | 38   |
| 3         | Pentalene, octahydro-2-methyl- | 124 | C9H16   | 003868-64-2 | 35   |
| 4         | Octane, 2,6-dimethyl-          | 142 | C10H22  | 002051-30-1 | 30   |
| 5         | Nonane, 3-methyl-              | 142 | C10H22  | 005911-04-6 | 30   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

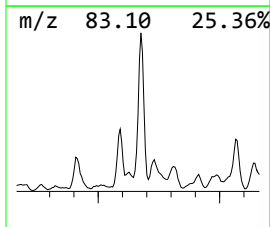
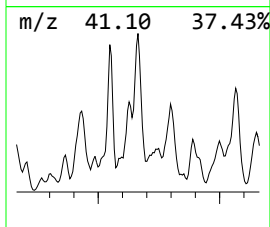
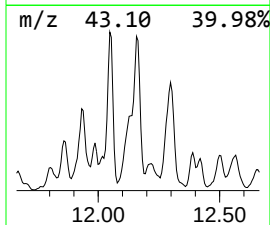
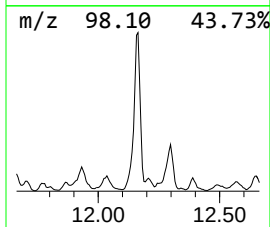
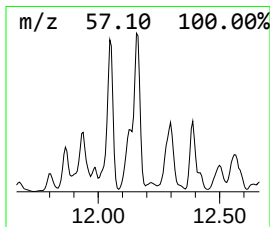
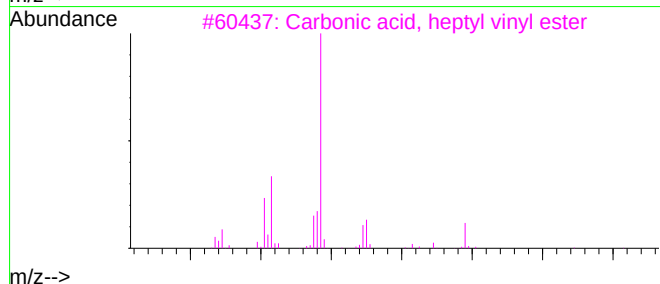
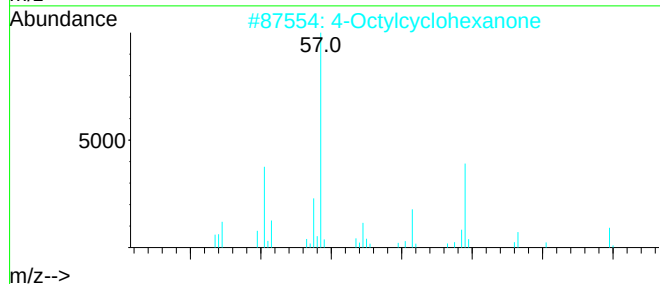
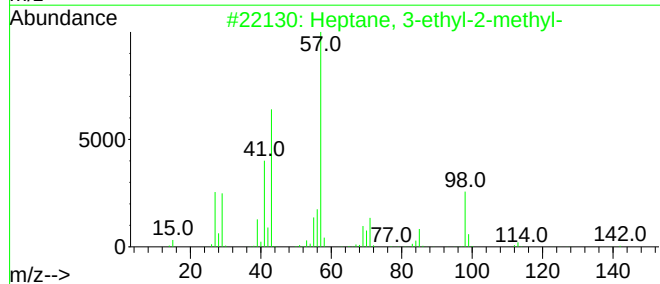
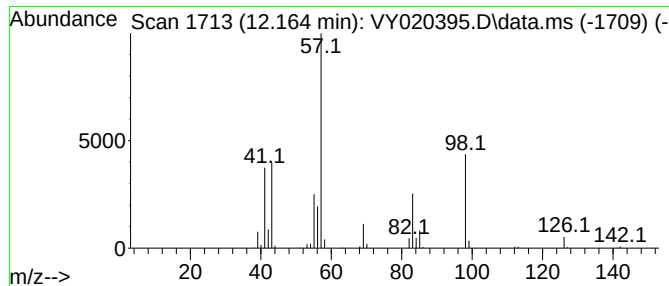
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TIC Integration Parameters: LSCINT.P

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Peak Number 4 unknown12.164 Concentration Rank 2

| R.T.   | EstConc    | Area    | Relative to ISTD | R.T.   |
|--------|------------|---------|------------------|--------|
| 12.164 | 52.69 ug/l | 1038550 | Chlorobenzene-d5 | 11.414 |

| Hit# of 5 | Tentative ID                        | MW  | MolForm     | CAS#         | Qual |
|-----------|-------------------------------------|-----|-------------|--------------|------|
| 1         | Heptane, 3-ethyl-2-methyl-          | 142 | C10H22      | 014676-29-0  | 47   |
| 2         | 4-Octylcyclohexanone                | 210 | C14H26O     | 1000428-94-1 | 45   |
| 3         | Carbonic acid, heptyl vinyl ester   | 186 | C10H18O3    | 1010383-25-4 | 40   |
| 4         | 2,2-Dimethyl-3-pentanol, chlorod... | 228 | C9H15ClF2O2 | 1000376-26-4 | 38   |
| 5         | Carbonic acid, heptyl prop-1-en-... | 200 | C11H20O3    | 1000382-54-1 | 27   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L

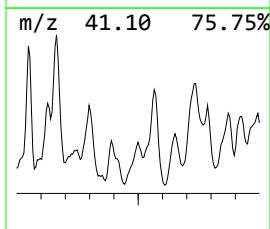
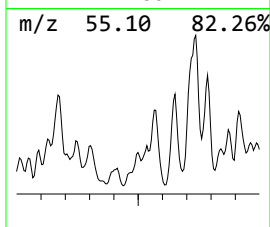
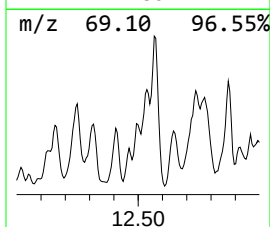
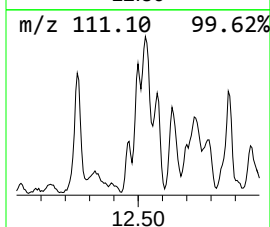
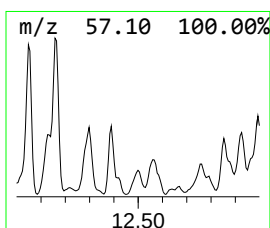
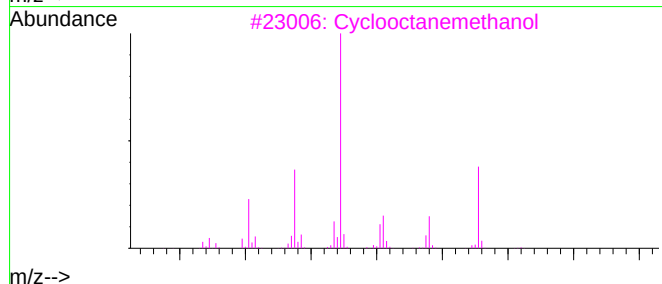
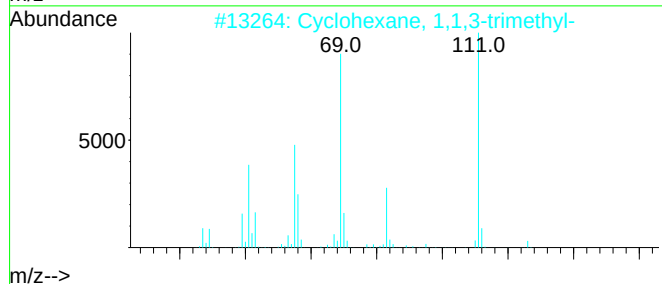
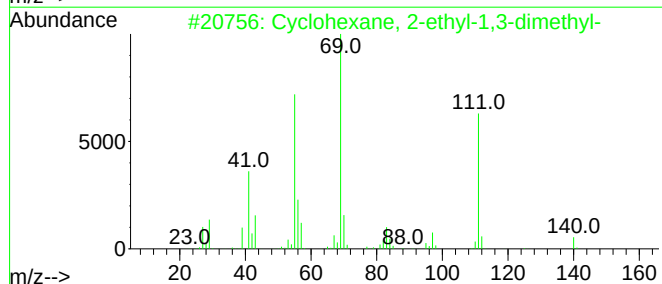
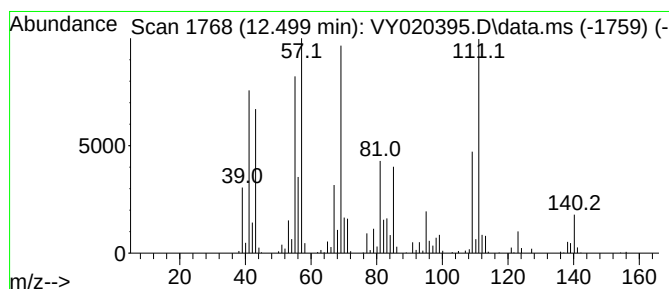
TIC Integration Parameters: LSCINT.P

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Peak Number 5 unknown12.499 Concentration Rank 3

| R.T.   | EstConc    | Area   | Relative to ISTD       | R.T.   |
|--------|------------|--------|------------------------|--------|
| 12.499 | 46.98 ug/l | 685654 | 1,4-Dichlorobenzene-d4 | 13.347 |

| Hit# of 5 | Tentative ID                       | MW  | MolForm | CAS#        | Qual |
|-----------|------------------------------------|-----|---------|-------------|------|
| 1         | Cyclohexane, 2-ethyl-1,3-dimethyl- | 140 | C10H20  | 007045-67-2 | 49   |
| 2         | Cyclohexane, 1,1,3-trimethyl-      | 126 | C9H18   | 003073-66-3 | 46   |
| 3         | Cyclooctanemethanol                | 142 | C9H18O  | 003637-63-6 | 43   |
| 4         | 2-(Butyliden-2-one)tetrahydrofuran | 140 | C8H12O2 | 343270-50-8 | 43   |
| 5         | Cyclooctane, (1-methylpropyl)-     | 168 | C12H24  | 016538-89-9 | 43   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

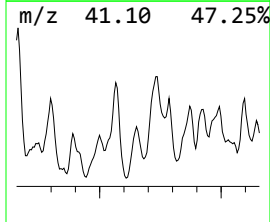
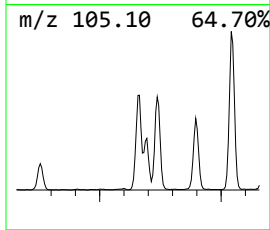
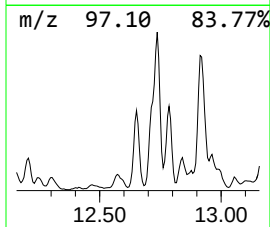
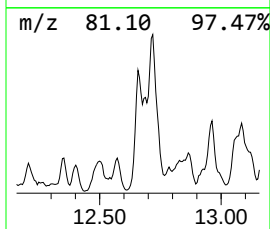
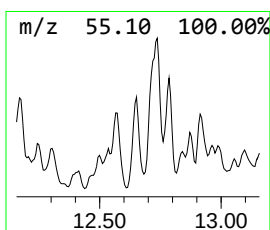
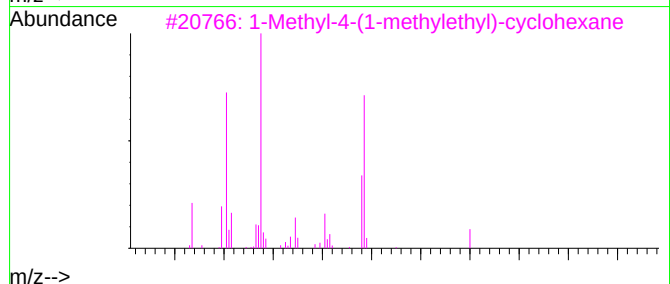
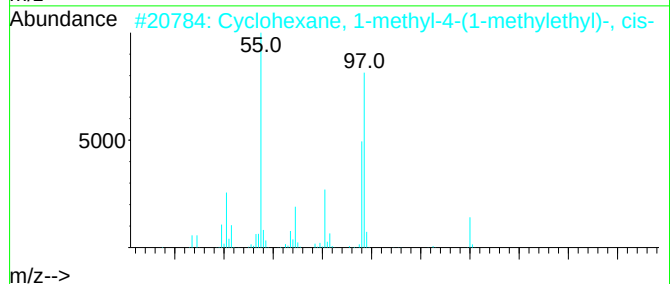
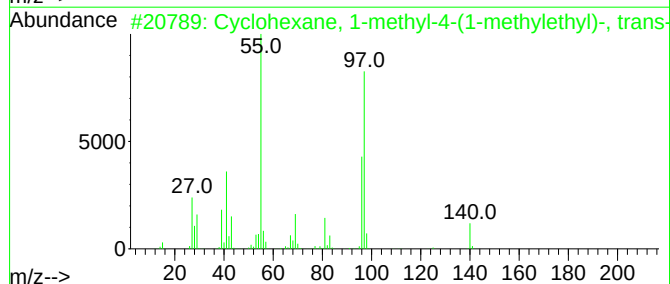
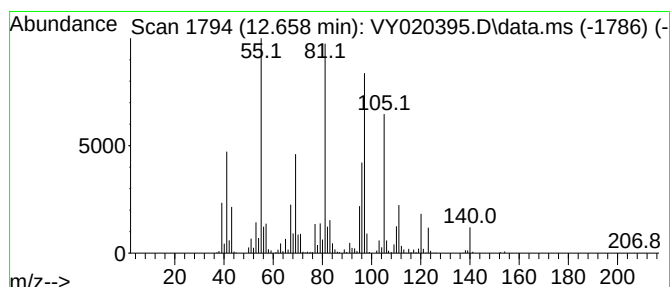
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Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 6 unknown12.658 Concentration Rank 1

| R.T.   | EstConc    | Area    | Relative to ISTD       | R.T.   |
|--------|------------|---------|------------------------|--------|
| 12.658 | 68.59 ug/l | 1001090 | 1,4-Dichlorobenzene-d4 | 13.347 |

| Hit# | of | 5 | Tentative ID                        | MW  | MolForm  | CAS#         | Qual |
|------|----|---|-------------------------------------|-----|----------|--------------|------|
| 1    |    |   | Cyclohexane, 1-methyl-4-(1-methy... | 140 | C10H20   | 001678-82-6  | 43   |
| 2    |    |   | Cyclohexane, 1-methyl-4-(1-methy... | 140 | C10H20   | 006069-98-3  | 43   |
| 3    |    |   | 1-Methyl-4-(1-methylethyl)-cyclo... | 140 | C10H20   | 000099-82-1  | 43   |
| 4    |    |   | 6-Methyl-bicyclo[4.2.0]octan-7-one  | 138 | C9H14O   | 1010193-87-2 | 43   |
| 5    |    |   | Oxalic acid, cyclohexylmethyl pr... | 228 | C12H20O4 | 1010309-68-1 | 38   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L

TIC Integration Parameters: LSCINT.P

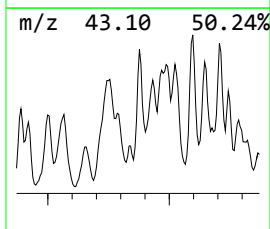
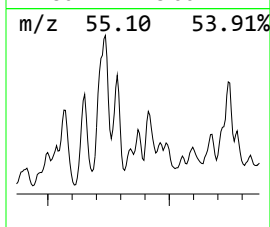
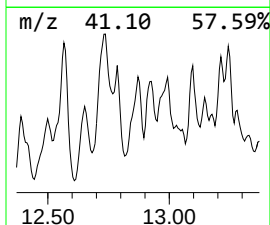
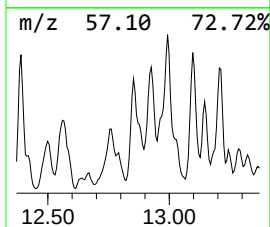
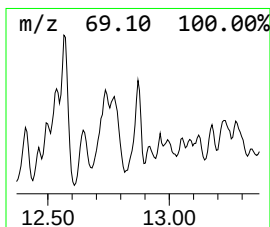
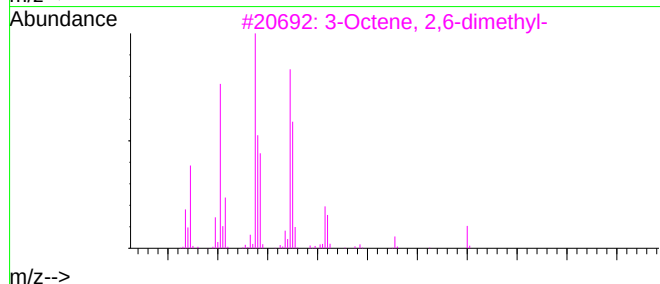
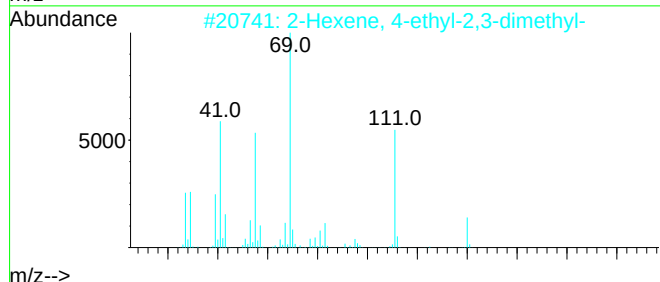
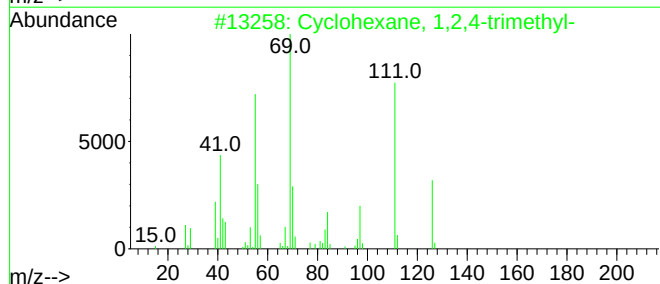
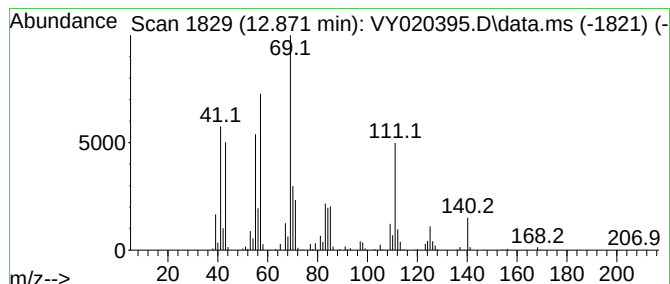
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Peak Number 7 Cyclohexane, 1,2,4-trimethyl- Concentration Rank 5

| R.T.   | EstConc    | Area   | Relative to ISTD       | R.T.   |
|--------|------------|--------|------------------------|--------|
| 12.871 | 46.56 ug/l | 679622 | 1,4-Dichlorobenzene-d4 | 13.347 |

| Hit# of 5 | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|-----------|-------------------------------------|-----|---------|--------------|------|
| 1         | Cyclohexane, 1,2,4-trimethyl-       | 126 | C9H18   | 002234-75-5  | 60   |
| 2         | 2-Hexene, 4-ethyl-2,3-dimethyl-     | 140 | C10H20  | 1000149-19-7 | 49   |
| 3         | 3-Octene, 2,6-dimethyl-             | 140 | C10H20  | 006874-28-8  | 47   |
| 4         | Cyclooctane, ethyl-                 | 140 | C10H20  | 013152-02-8  | 43   |
| 5         | Cyclohexane, 1,2,4-trimethyl-, (... | 126 | C9H18   | 007667-60-9  | 43   |





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

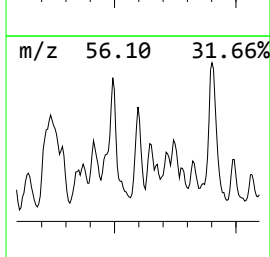
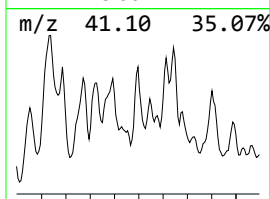
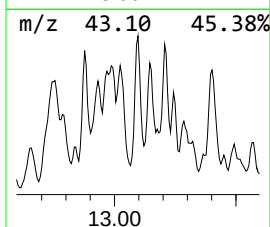
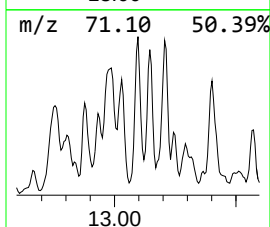
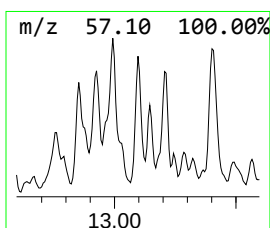
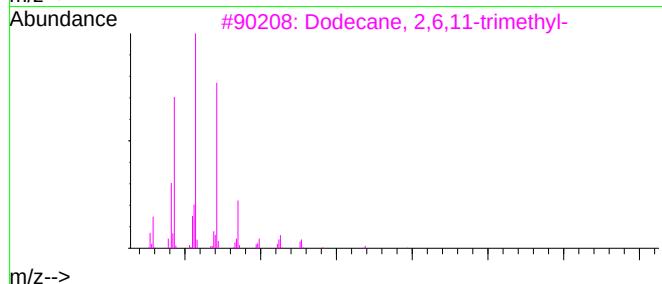
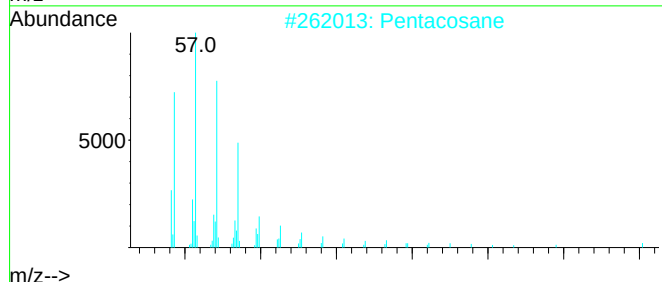
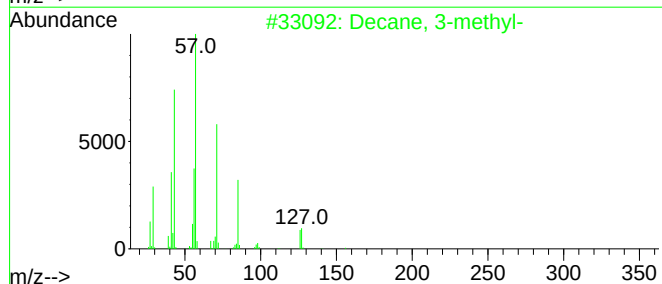
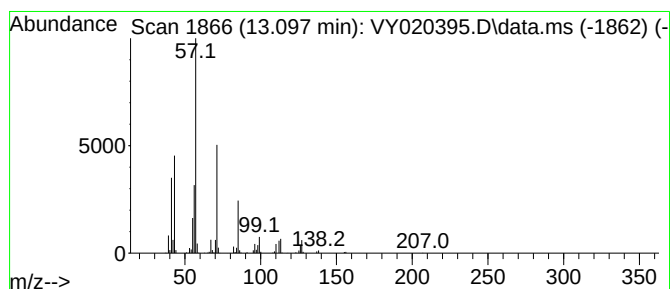
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

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Peak Number 8 Decane, 3-methyl- Concentration Rank 8

| R.T.   | EstConc    | Area   | Relative to ISTD       | R.T.   |
|--------|------------|--------|------------------------|--------|
| 13.097 | 30.97 ug/l | 452011 | 1,4-Dichlorobenzene-d4 | 13.347 |

| Hit# of 5 | Tentative ID                | MW  | MolForm | CAS#        | Qual |
|-----------|-----------------------------|-----|---------|-------------|------|
| 1         | Decane, 3-methyl-           | 156 | C11H24  | 013151-34-3 | 70   |
| 2         | Pentacosane                 | 352 | C25H52  | 000629-99-2 | 59   |
| 3         | Dodecane, 2,6,11-trimethyl- | 212 | C15H32  | 031295-56-4 | 59   |
| 4         | Nonane, 3,7-dimethyl-       | 156 | C11H24  | 017302-32-8 | 59   |
| 5         | Undecane, 2,6-dimethyl-     | 184 | C13H28  | 017301-23-4 | 53   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L

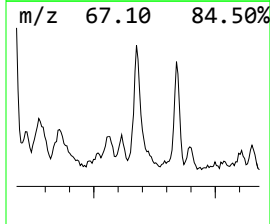
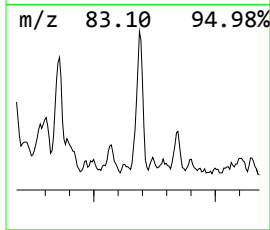
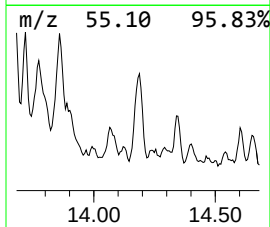
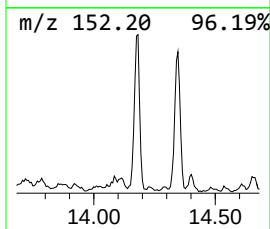
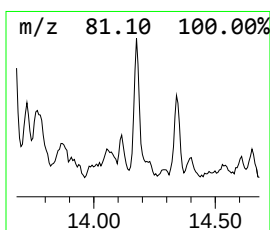
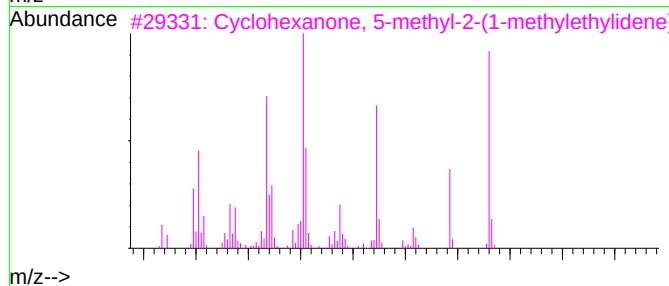
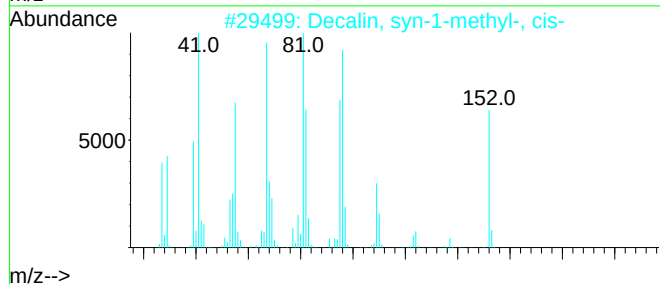
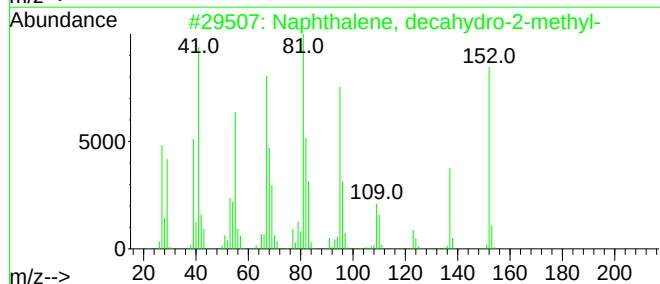
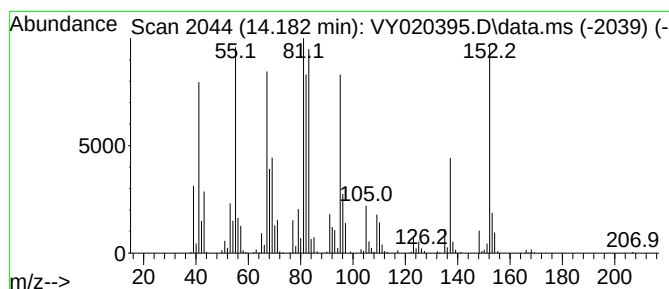
TIC Integration Parameters: LSCINT.P

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Peak Number 9 Naphthalene, decahydro-2-me... Concentration Rank 4

| R.T.   | EstConc    | Area   | Relative to ISTD       | R.T.   |
|--------|------------|--------|------------------------|--------|
| 14.182 | 46.96 ug/l | 685484 | 1,4-Dichlorobenzene-d4 | 13.347 |

| Hit# of 5 | Tentative ID                        | MW  | MolForm | CAS#         | Qual |
|-----------|-------------------------------------|-----|---------|--------------|------|
| 1         | Naphthalene, decahydro-2-methyl-    | 152 | C11H20  | 002958-76-1  | 89   |
| 2         | Decalin, syn-1-methyl-, cis-        | 152 | C11H20  | 1000158-89-1 | 68   |
| 3         | Cyclohexanone, 5-methyl-2-(1-met... | 152 | C10H16O | 015932-80-6  | 60   |
| 4         | cis-Decalin, 2-syn-methyl-          | 152 | C11H20  | 1000155-85-6 | 58   |
| 5         | Cycloundecene (Z)                   | 152 | C11H20  | 013151-61-6  | 52   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L

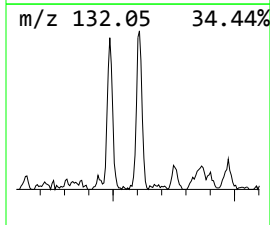
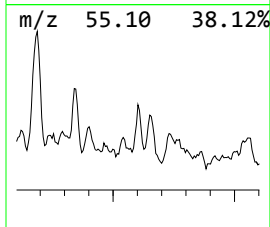
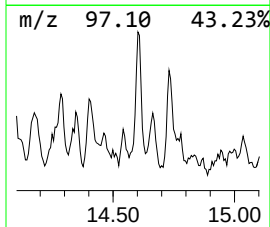
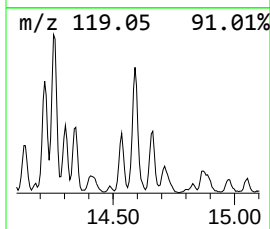
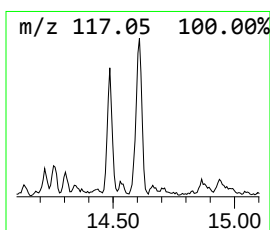
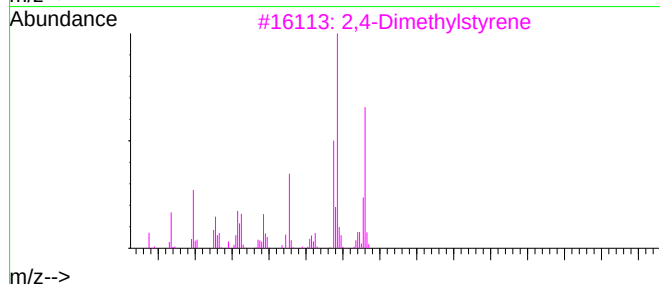
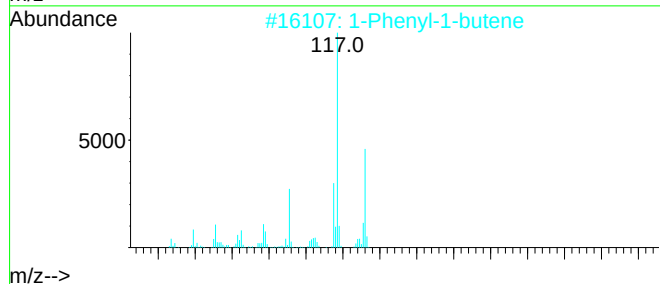
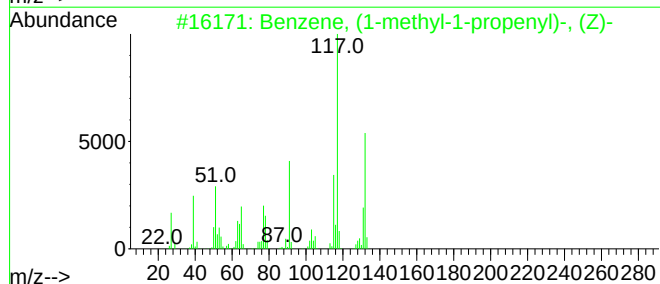
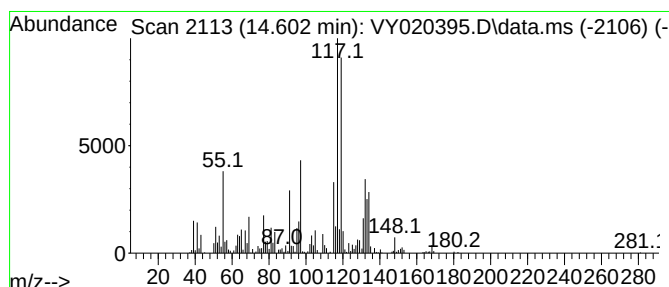
TIC Integration Parameters: LSCINT.P

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

| R.T.   | EstConc    | Area   | Relative to ISTD       | R.T.   |
|--------|------------|--------|------------------------|--------|
| 14.602 | 24.77 ug/l | 361560 | 1,4-Dichlorobenzene-d4 | 13.347 |

| Hit# of 5 | Tentative ID                        | MW  | MolForm | CAS#        | Qual |
|-----------|-------------------------------------|-----|---------|-------------|------|
| 1         | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12  | 000767-99-7 | 84   |
| 2         | 1-Phenyl-1-butene                   | 132 | C10H12  | 000824-90-8 | 83   |
| 3         | 2,4-Dimethylstyrene                 | 132 | C10H12  | 002234-20-0 | 64   |
| 4         | Benzene, 2-butenyl-                 | 132 | C10H12  | 001560-06-1 | 52   |
| 5         | Benzene, (1-methyl-1-propenyl)-,... | 132 | C10H12  | 000768-00-3 | 46   |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020395.D  
Acq On : 21 Nov 2024 18:27  
Operator : SY/MD  
Sample : P4892-01  
Misc : 7.39g/5.0mL/MSVOA\_Y/SOIL/A  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-TOP

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name   | RT     | EstConc | Units | Response | --Internal Standard-- |        |        |      |
|--------------------|--------|---------|-------|----------|-----------------------|--------|--------|------|
|                    |        |         |       |          | #                     | RT     | Resp   | Conc |
| Pentane, 2,2,4-... | 8.250  | 26.5    | ug/l  | 363464   | 2                     | 8.616  | 686234 | 50.0 |
| Nonane, 3-methyl-  | 12.048 | 39.4    | ug/l  | 776415   | 3                     | 11.414 | 985610 | 50.0 |
| unknown12.127      | 12.127 | 41.0    | ug/l  | 808372   | 3                     | 11.414 | 985610 | 50.0 |
| unknown12.164      | 12.164 | 52.7    | ug/l  | 1038550  | 3                     | 11.414 | 985610 | 50.0 |
| unknown12.499      | 12.499 | 47.0    | ug/l  | 685654   | 4                     | 13.347 | 729798 | 50.0 |
| unknown12.658      | 12.658 | 68.6    | ug/l  | 1001090  | 4                     | 13.347 | 729798 | 50.0 |
| Cyclohexane, 1,... | 12.871 | 46.6    | ug/l  | 679622   | 4                     | 13.347 | 729798 | 50.0 |
| Decane, 3-methyl-  | 13.097 | 31.0    | ug/l  | 452011   | 4                     | 13.347 | 729798 | 50.0 |
| Naphthalene, de... | 14.182 | 47.0    | ug/l  | 685484   | 4                     | 13.347 | 729798 | 50.0 |
| Benzene, (1-met... | 14.602 | 24.8    | ug/l  | 361560   | 4                     | 13.347 | 729798 | 50.0 |

## Report of Analysis

|                    |                                   |                 |                      |
|--------------------|-----------------------------------|-----------------|----------------------|
| Client:            | Portal Partners Tri-Venture       | Date Collected: | 11/15/24             |
| Project:           | Amtrak Sawtooth Bridges 2024      | Date Received:  | 11/15/24             |
| Client Sample ID:  | WB-310-BOT                        | SDG No.:        | P4892                |
| Lab Sample ID:     | P4892-02                          | Matrix:         | SOIL                 |
| Analytical Method: | SW8260                            | % Solid:        | 86.1                 |
| Sample Wt/Vol:     | 8.56      Units:    g             | Final Vol:      | 5000              uL |
| Soil Aliquot Vol:  | uL                                | Test:           | VOC-TCLVOA-10        |
| GC Column:         | RXI-624              ID :    0.25 | Level :         | LOW                  |
| Prep Method :      |                                   |                 |                      |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020406.D        | 1         |           | 11/22/24 12:01 | VY112224      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units(Dry Weight) |
|----------------|--------------------------------|-------|-----------|------|------------|-------------------|
| <b>TARGETS</b> |                                |       |           |      |            |                   |
| 75-71-8        | Dichlorodifluoromethane        | 1.10  | U         | 1.10 | 3.40       | ug/Kg             |
| 74-87-3        | Chloromethane                  | 0.79  | U         | 0.79 | 3.40       | ug/Kg             |
| 75-01-4        | Vinyl Chloride                 | 0.52  | U         | 0.52 | 3.40       | ug/Kg             |
| 74-83-9        | Bromomethane                   | 0.70  | U         | 0.70 | 3.40       | ug/Kg             |
| 75-00-3        | Chloroethane                   | 0.69  | U         | 0.69 | 3.40       | ug/Kg             |
| 75-69-4        | Trichlorofluoromethane         | 0.62  | U         | 0.62 | 3.40       | ug/Kg             |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.73  | U         | 0.73 | 3.40       | ug/Kg             |
| 75-35-4        | 1,1-Dichloroethene             | 0.53  | U         | 0.53 | 3.40       | ug/Kg             |
| 67-64-1        | Acetone                        | 4.20  | U         | 4.20 | 17.0       | ug/Kg             |
| 75-15-0        | Carbon Disulfide               | 0.87  | U         | 0.87 | 3.40       | ug/Kg             |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.45  | U         | 0.45 | 3.40       | ug/Kg             |
| 79-20-9        | Methyl Acetate                 | 1.20  | U         | 1.20 | 3.40       | ug/Kg             |
| 75-09-2        | Methylene Chloride             | 2.30  | U         | 2.30 | 6.80       | ug/Kg             |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.57  | U         | 0.57 | 3.40       | ug/Kg             |
| 75-34-3        | 1,1-Dichloroethane             | 0.43  | U         | 0.43 | 3.40       | ug/Kg             |
| 110-82-7       | Cyclohexane                    | 0.47  | U         | 0.47 | 3.40       | ug/Kg             |
| 78-93-3        | 2-Butanone                     | 3.90  | U         | 3.90 | 17.0       | ug/Kg             |
| 56-23-5        | Carbon Tetrachloride           | 0.59  | U         | 0.59 | 3.40       | ug/Kg             |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.41  | U         | 0.41 | 3.40       | ug/Kg             |
| 74-97-5        | Bromochloromethane             | 1.60  | U         | 1.60 | 3.40       | ug/Kg             |
| 67-66-3        | Chloroform                     | 0.45  | U         | 0.45 | 3.40       | ug/Kg             |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.53  | U         | 0.53 | 3.40       | ug/Kg             |
| 108-87-2       | Methylcyclohexane              | 0.59  | U         | 0.59 | 3.40       | ug/Kg             |
| 71-43-2        | Benzene                        | 0.49  | U         | 0.49 | 3.40       | ug/Kg             |
| 107-06-2       | 1,2-Dichloroethane             | 0.41  | U         | 0.41 | 3.40       | ug/Kg             |
| 79-01-6        | Trichloroethene                | 0.51  | U         | 0.51 | 3.40       | ug/Kg             |
| 78-87-5        | 1,2-Dichloropropane            | 0.45  | U         | 0.45 | 3.40       | ug/Kg             |
| 75-27-4        | Bromodichloromethane           | 0.38  | U         | 0.38 | 3.40       | ug/Kg             |
| 108-10-1       | 4-Methyl-2-Pentanone           | 3.00  | U         | 3.00 | 17.0       | ug/Kg             |
| 108-88-3       | Toluene                        | 0.45  | U         | 0.45 | 3.40       | ug/Kg             |

## Report of Analysis

|                    |                              |        |      |                 |               |    |
|--------------------|------------------------------|--------|------|-----------------|---------------|----|
| Client:            | Portal Partners Tri-Venture  |        |      | Date Collected: | 11/15/24      |    |
| Project:           | Amtrak Sawtooth Bridges 2024 |        |      | Date Received:  | 11/15/24      |    |
| Client Sample ID:  | WB-310-BOT                   |        |      | SDG No.:        | P4892         |    |
| Lab Sample ID:     | P4892-02                     |        |      | Matrix:         | SOIL          |    |
| Analytical Method: | SW8260                       |        |      | % Solid:        | 86.1          |    |
| Sample Wt/Vol:     | 8.56                         | Units: | g    | Final Vol:      | 5000          | uL |
| Soil Aliquot Vol:  |                              |        | uL   | Test:           | VOC-TCLVOA-10 |    |
| GC Column:         | RXI-624                      | ID :   | 0.25 | Level :         | LOW           |    |
| Prep Method :      |                              |        |      |                 |               |    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020406.D        | 1         |           | 11/22/24 12:01 | VY112224      |

| CAS Number                | Parameter                   | Conc.  | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-----------------------------|--------|-----------|---------------------|------------|-------------------|
| 10061-02-6                | t-1,3-Dichloropropene       | 0.41   | U         | 0.41                | 3.40       | ug/Kg             |
| 10061-01-5                | cis-1,3-Dichloropropene     | 0.39   | U         | 0.39                | 3.40       | ug/Kg             |
| 79-00-5                   | 1,1,2-Trichloroethane       | 0.57   | U         | 0.57                | 3.40       | ug/Kg             |
| 591-78-6                  | 2-Hexanone                  | 3.20   | U         | 3.20                | 17.0       | ug/Kg             |
| 124-48-1                  | Dibromochloromethane        | 0.44   | U         | 0.44                | 3.40       | ug/Kg             |
| 106-93-4                  | 1,2-Dibromoethane           | 0.54   | U         | 0.54                | 3.40       | ug/Kg             |
| 127-18-4                  | Tetrachloroethene           | 0.60   | U         | 0.60                | 3.40       | ug/Kg             |
| 108-90-7                  | Chlorobenzene               | 0.50   | U         | 0.50                | 3.40       | ug/Kg             |
| 100-41-4                  | Ethyl Benzene               | 0.42   | U         | 0.42                | 3.40       | ug/Kg             |
| 179601-23-1               | m/p-Xylenes                 | 0.92   | U         | 0.92                | 6.80       | ug/Kg             |
| 95-47-6                   | o-Xylene                    | 0.47   | U         | 0.47                | 3.40       | ug/Kg             |
| 100-42-5                  | Styrene                     | 0.41   | U         | 0.41                | 3.40       | ug/Kg             |
| 75-25-2                   | Bromoform                   | 0.55   | U         | 0.55                | 3.40       | ug/Kg             |
| 98-82-8                   | Isopropylbenzene            | 0.45   | U         | 0.45                | 3.40       | ug/Kg             |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane   | 0.75   | U         | 0.75                | 3.40       | ug/Kg             |
| 541-73-1                  | 1,3-Dichlorobenzene         | 0.50   | U         | 0.50                | 3.40       | ug/Kg             |
| 106-46-7                  | 1,4-Dichlorobenzene         | 0.54   | U         | 0.54                | 3.40       | ug/Kg             |
| 95-50-1                   | 1,2-Dichlorobenzene         | 0.40   | U         | 0.40                | 3.40       | ug/Kg             |
| 96-12-8                   | 1,2-Dibromo-3-Chloropropane | 1.10   | U         | 1.10                | 3.40       | ug/Kg             |
| 120-82-1                  | 1,2,4-Trichlorobenzene      | 0.54   | U         | 0.54                | 3.40       | ug/Kg             |
| 87-61-6                   | 1,2,3-Trichlorobenzene      | 0.53   | U         | 0.53                | 3.40       | ug/Kg             |
| <b>SURROGATES</b>         |                             |        |           |                     |            |                   |
| 17060-07-0                | 1,2-Dichloroethane-d4       | 46.7   |           | 70 (50) - 130 (163) | 93%        | SPK: 50           |
| 1868-53-7                 | Dibromofluoromethane        | 47.8   |           | 70 (54) - 130 (147) | 96%        | SPK: 50           |
| 2037-26-5                 | Toluene-d8                  | 47.3   |           | 70 (58) - 130 (134) | 95%        | SPK: 50           |
| 460-00-4                  | 4-Bromofluorobenzene        | 45.9   |           | 70 (29) - 130 (146) | 92%        | SPK: 50           |
| <b>INTERNAL STANDARDS</b> |                             |        |           |                     |            |                   |
| 363-72-4                  | Pentafluorobenzene          | 150000 | 7.713     |                     |            |                   |
| 540-36-3                  | 1,4-Difluorobenzene         | 284000 | 8.622     |                     |            |                   |
| 3114-55-4                 | Chlorobenzene-d5            | 251000 | 11.42     |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4      | 91200  | 13.353    |                     |            |                   |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Portal Partners Tri-Venture               | Date Collected: | 11/15/24                     |
| Project:           | Amtrak Sawtooth Bridges 2024              | Date Received:  | 11/15/24                     |
| Client Sample ID:  | WB-310-BOT                                | SDG No.:        | P4892                        |
| Lab Sample ID:     | P4892-02                                  | Matrix:         | SOIL                         |
| Analytical Method: | SW8260                                    | % Solid:        | 86.1                         |
| Sample Wt/Vol:     | 8.56      Units:    g                     | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOC-TCLVOA-10                |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020406.D        | 1         |           | 11/22/24 12:01 | VY112224      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|------------|-------|
|------------|-----------|-------|-----------|-----|------------|-------|

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\_Y\Data\VY112224\  
 Data File : VY020406.D  
 Acq On : 22 Nov 2024 12:01  
 Operator : SY/MD  
 Sample : P4892-02  
 Misc : 8.56g/5.0mL/MSVOA\_Y/SOIL/B  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 WB-310-BOT

Quant Time: Nov 22 23:58:59 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.713  | 168  | 149521   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.622  | 114  | 283533   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.420 | 117  | 251330   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.353 | 152  | 91188    | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 33) 1,2-Dichloroethane-d4   | 8.067  | 65    | 80176    | 46.673   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 93.340% |
| 35) Dibromofluoromethane    | 7.640  | 113   | 86936    | 47.817   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 95.640% |
| 50) Toluene-d8              | 10.109 | 98    | 339071   | 47.344   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 94.680% |
| 62) 4-Bromofluorobenzene    | 12.408 | 95    | 105655   | 45.891   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 91.780% |

| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

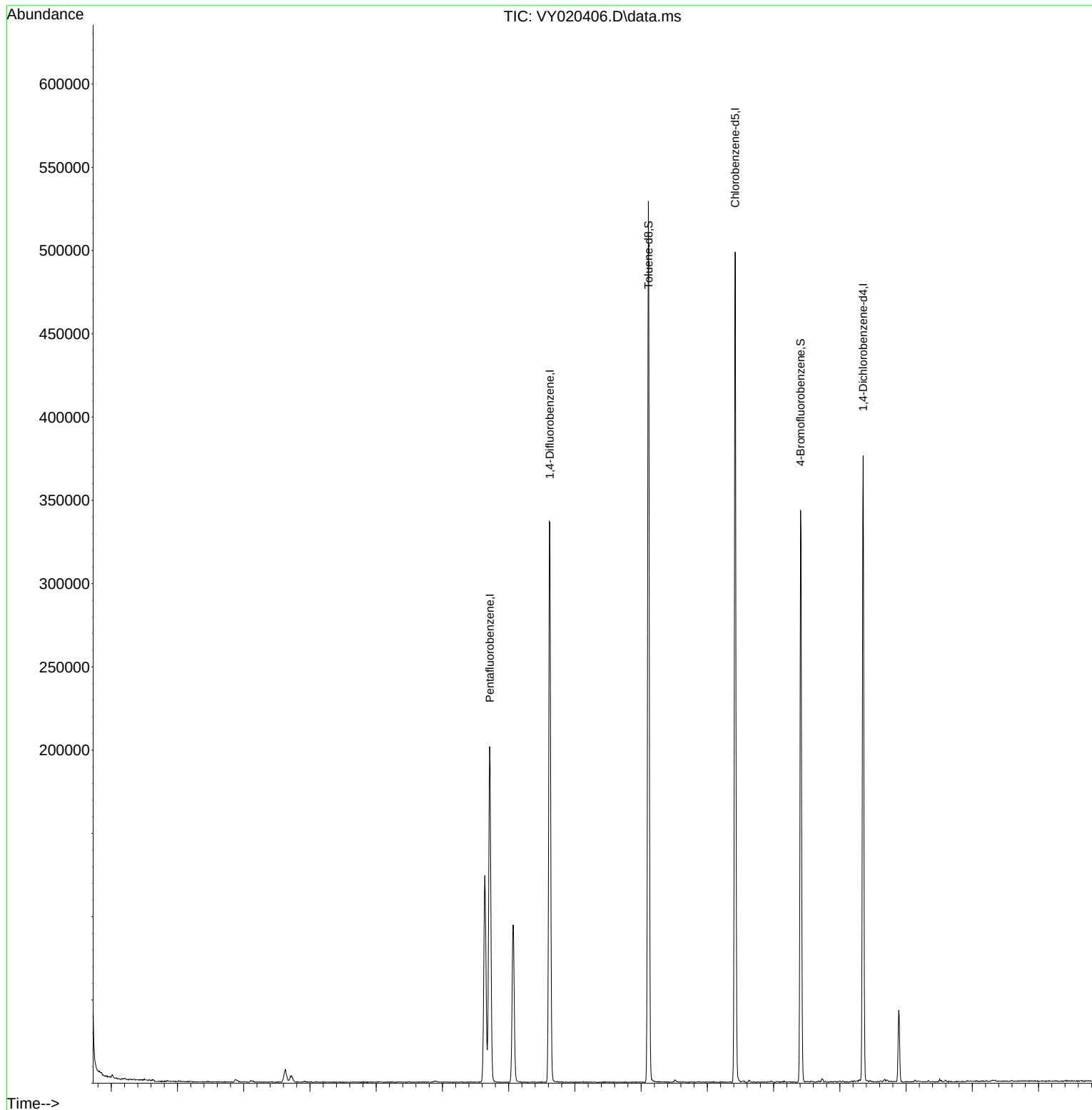
(#) = qualifier out of range (m) = manual integration (+) = signals summed

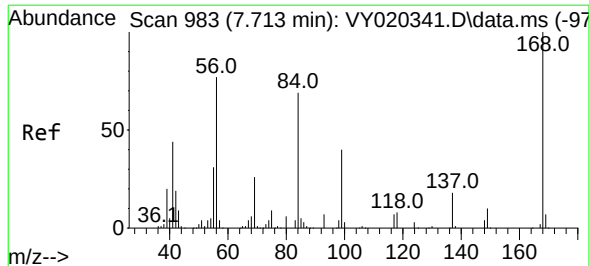


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020406.D  
Acq On : 22 Nov 2024 12:01  
Operator : SY/MD  
Sample : P4892-02  
Misc : 8.56g/5.0mL/MSVOA\_Y/SOIL/B  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-BOT

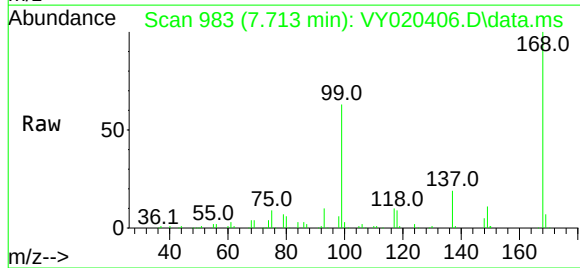
Quant Time: Nov 22 23:58:59 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration



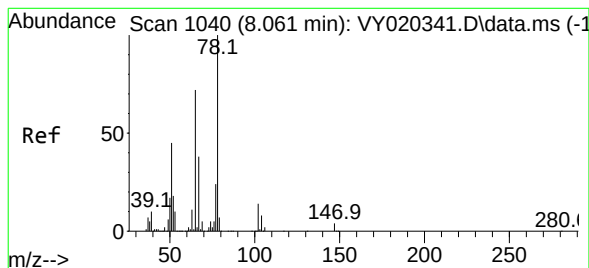
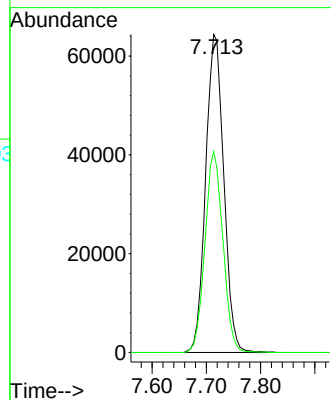
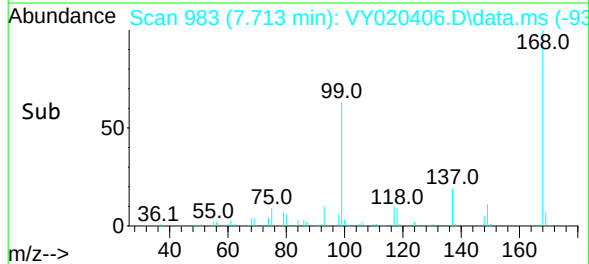


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.713 min Scan# 98  
Delta R.T. 0.000 min  
Lab File: VY020406.D  
Acq: 22 Nov 2024 12:01

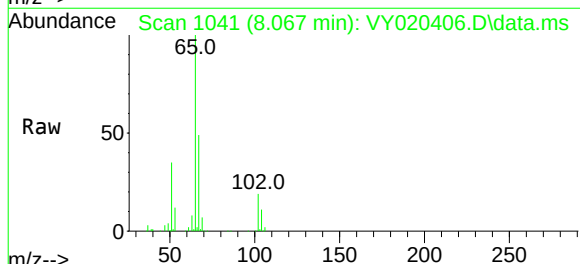
Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-BOT



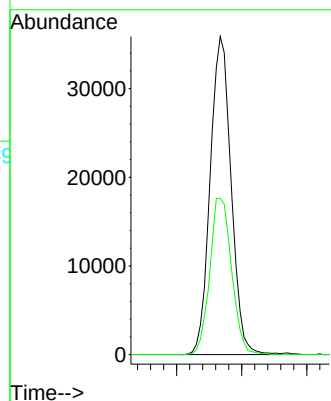
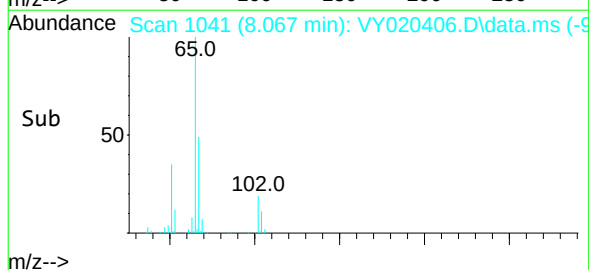
Tgt Ion: 168 Resp: 149521  
Ion Ratio Lower Upper  
168 100  
99 63.2 46.6 69.8

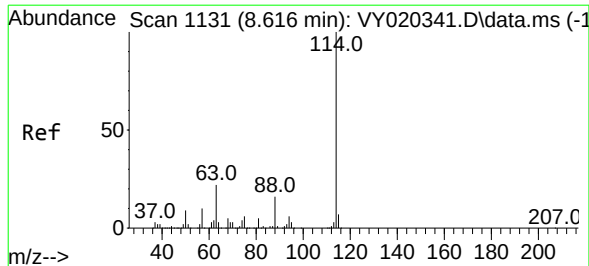


#33  
1,2-Dichloroethane-d4  
Concen: 46.673 ug/l  
RT: 8.067 min Scan# 1041  
Delta R.T. 0.006 min  
Lab File: VY020406.D  
Acq: 22 Nov 2024 12:01



Tgt Ion: 65 Resp: 80176  
Ion Ratio Lower Upper  
65 100  
67 51.3 0.0 105.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY020406.D

Acq: 22 Nov 2024 12:01

Instrument :

MSVOA\_Y

ClientSampleId :

WB-310-BOT

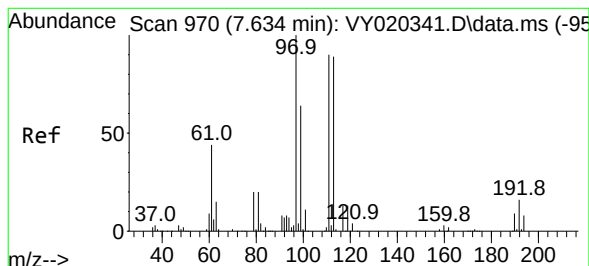
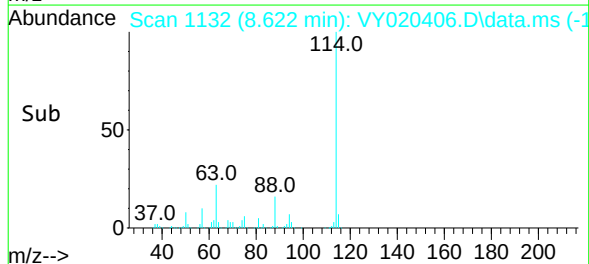
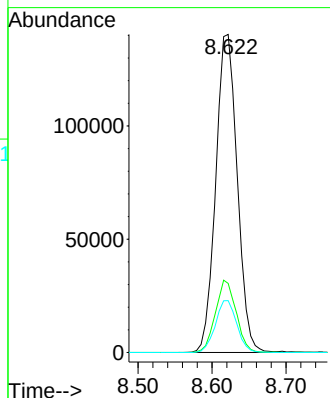
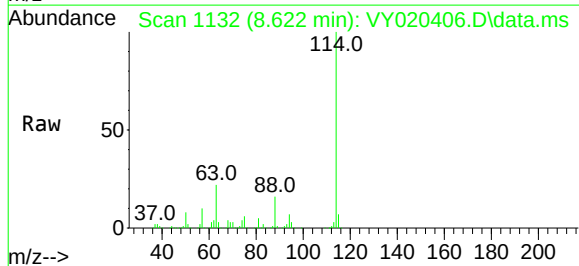
Tgt Ion:114 Resp: 283533

Ion Ratio Lower Upper

114 100

63 21.7 0.0 44.8

88 16.3 0.0 32.0



#35

Dibromofluoromethane

Concen: 47.817 ug/l

RT: 7.640 min Scan# 971

Delta R.T. 0.006 min

Lab File: VY020406.D

Acq: 22 Nov 2024 12:01

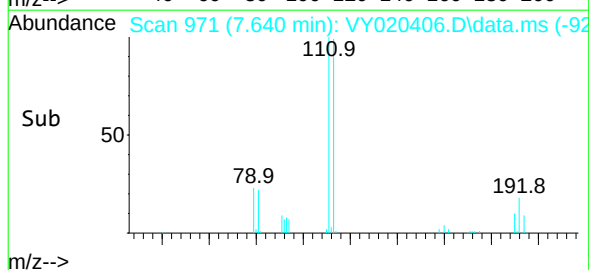
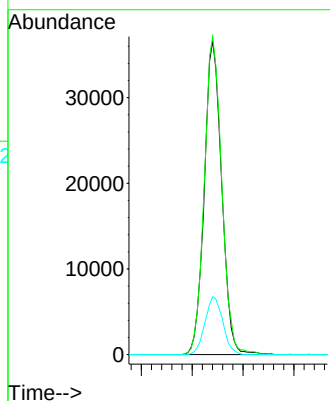
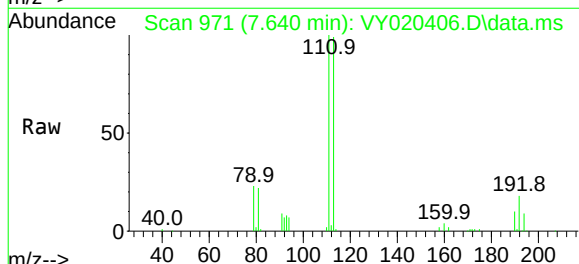
Tgt Ion:113 Resp: 86936

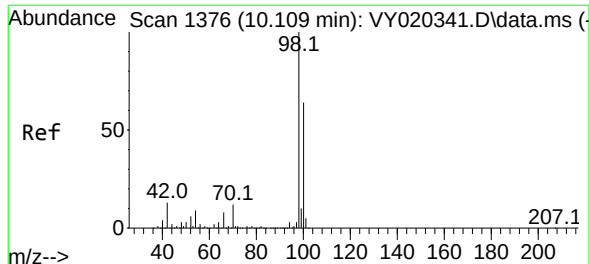
Ion Ratio Lower Upper

113 100

111 102.1 81.4 122.0

192 18.9 15.1 22.7





#50

Toluene-d8

Concen: 47.344 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. -0.000 min

Lab File: VY020406.D

Acq: 22 Nov 2024 12:01

Instrument :

MSVOA\_Y

ClientSampleId :

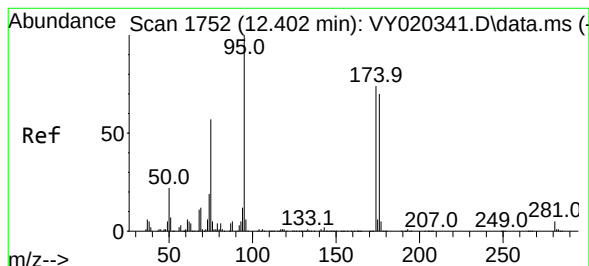
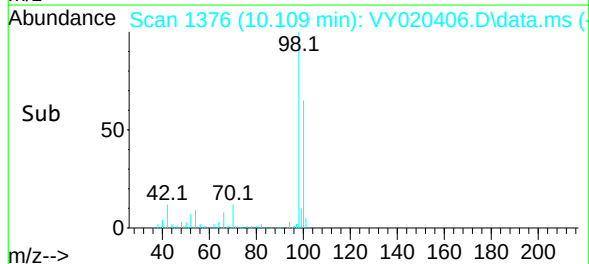
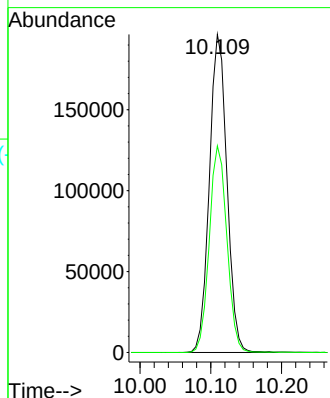
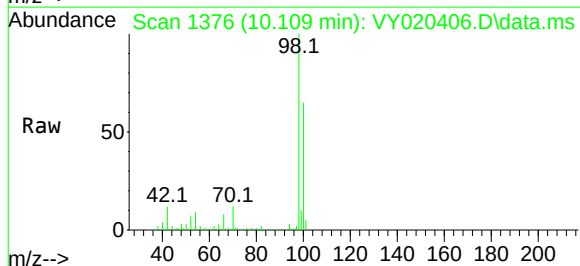
WB-310-BOT

Tgt Ion: 98 Resp: 339071

Ion Ratio Lower Upper

98 100

100 65.1 51.3 76.9



#62

4-Bromofluorobenzene

Concen: 45.891 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.006 min

Lab File: VY020406.D

Acq: 22 Nov 2024 12:01

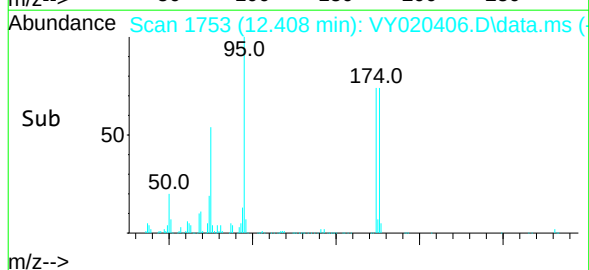
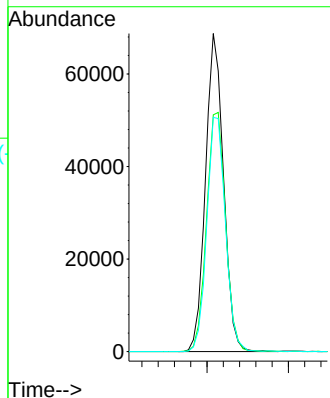
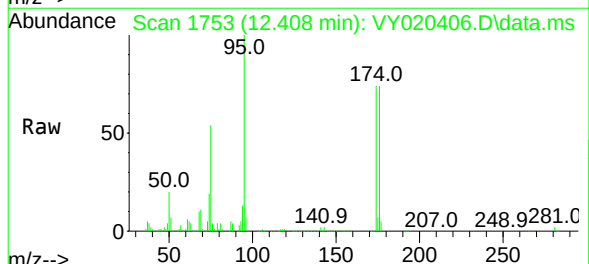
Tgt Ion: 95 Resp: 105655

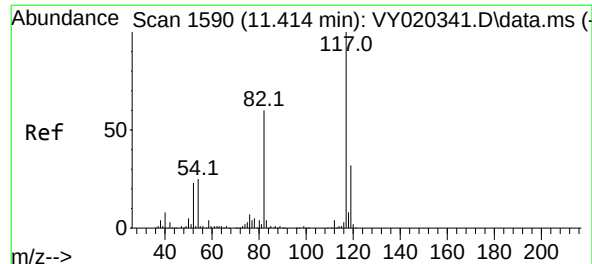
Ion Ratio Lower Upper

95 100

174 79.1 0.0 156.8

176 76.0 0.0 152.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 15

Delta R.T. 0.006 min

Lab File: VY020406.D

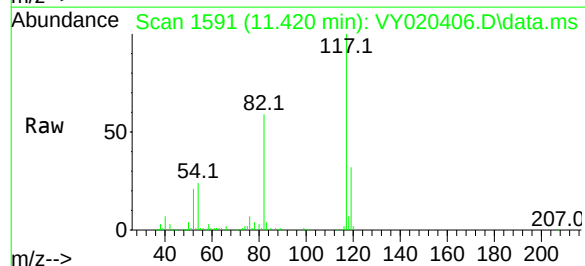
Acq: 22 Nov 2024 12:01

Instrument :

MSVOA\_Y

ClientSampleId :

WB-310-BOT



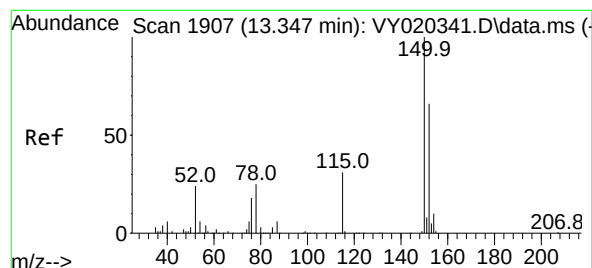
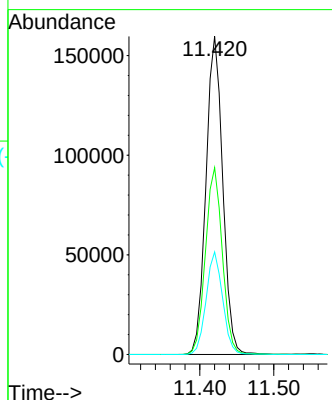
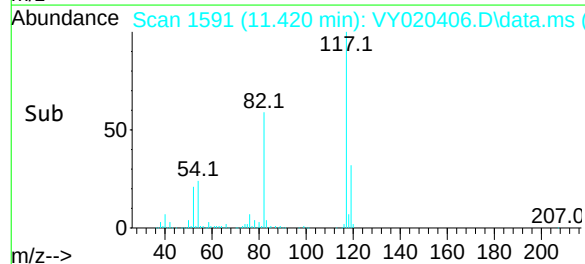
Tgt Ion:117 Resp: 251330

Ion Ratio Lower Upper

117 100

82 58.7 48.2 72.4

119 32.2 25.8 38.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY020406.D

Acq: 22 Nov 2024 12:01

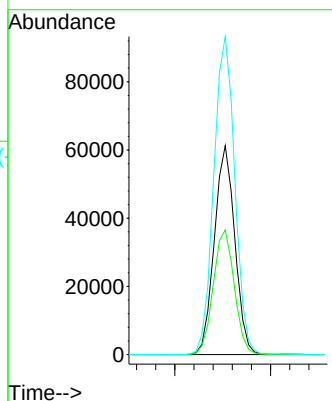
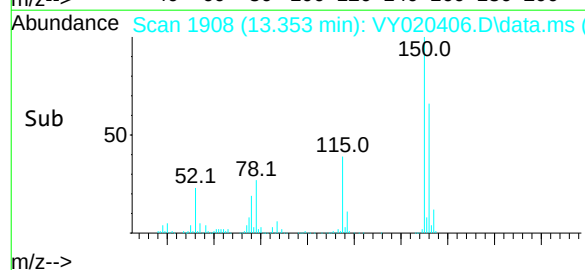
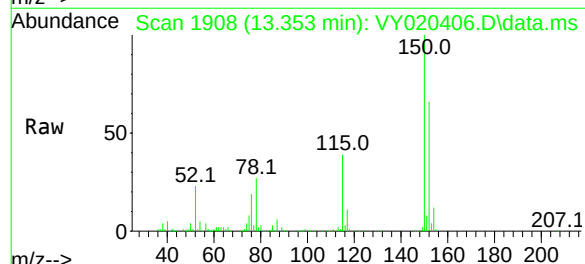
Tgt Ion:152 Resp: 91188

Ion Ratio Lower Upper

152 100

115 61.2 30.0 90.0

150 156.4 0.0 348.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
 Data File : VY020406.D  
 Acq On : 22 Nov 2024 12:01  
 Operator : SY/MD  
 Sample : P4892-02  
 Misc : 8.56g/5.0mL/MSVOA\_Y/SOIL/B  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 WB-310-BOT

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Title : SW846 8260

Signal : TIC: VY020406.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 4.629       | 467           | 477         | 486          | rBV2     | 7651           | 22393         | 2.44%           | 0.489%        |
| 2         | 7.640       | 961           | 971         | 977          | rBV      | 123997         | 291909        | 31.84%          | 6.371%        |
| 3         | 7.713       | 977           | 983         | 1003         | rVB      | 201665         | 463211        | 50.52%          | 10.110%       |
| 4         | 8.067       | 1030          | 1041        | 1054         | rBV      | 94636          | 216317        | 23.59%          | 4.722%        |
| 5         | 8.616       | 1123          | 1131        | 1145         | rBV      | 336587         | 681378        | 74.31%          | 14.872%       |
| 6         | 10.109      | 1368          | 1376        | 1390         | rBV      | 529168         | 916942        | 100.00%         | 20.014%       |
| 7         | 11.420      | 1583          | 1591        | 1604         | rBV      | 498619         | 795914        | 86.80%          | 17.372%       |
| 8         | 12.408      | 1747          | 1753        | 1763         | rVB      | 343400         | 552497        | 60.25%          | 12.059%       |
| 9         | 13.353      | 1901          | 1908        | 1916         | rVB      | 375443         | 570540        | 62.22%          | 12.453%       |
| 10        | 13.889      | 1990          | 1996        | 2005         | rVB2     | 43131          | 70399         | 7.68%           | 1.537%        |

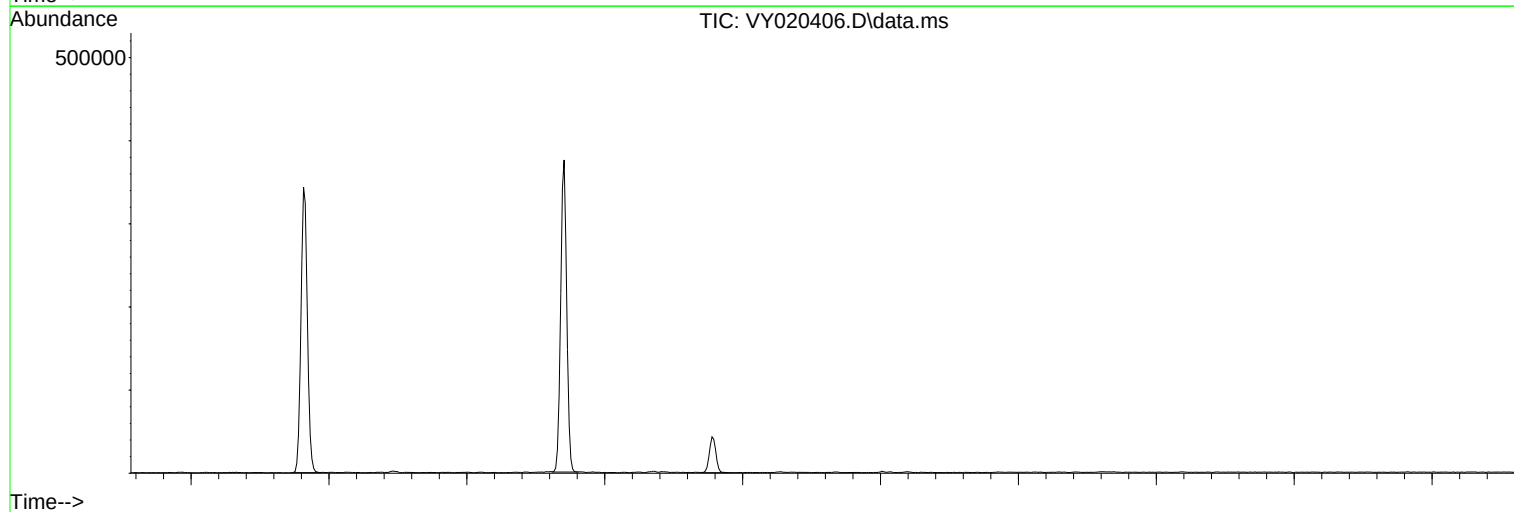
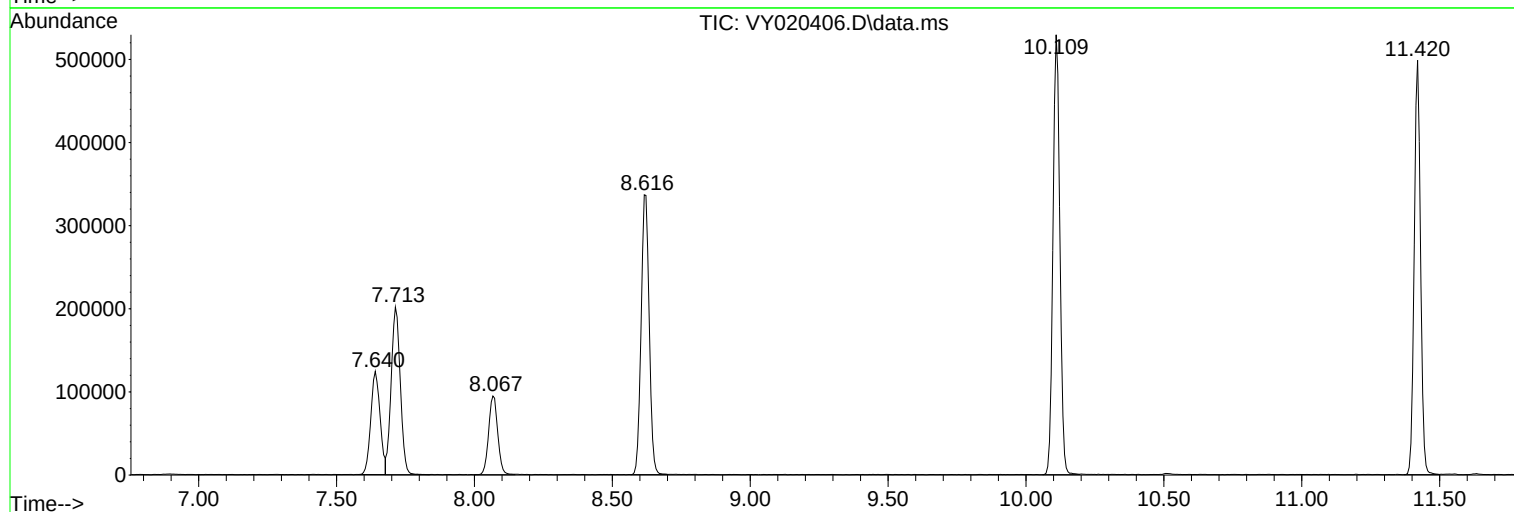
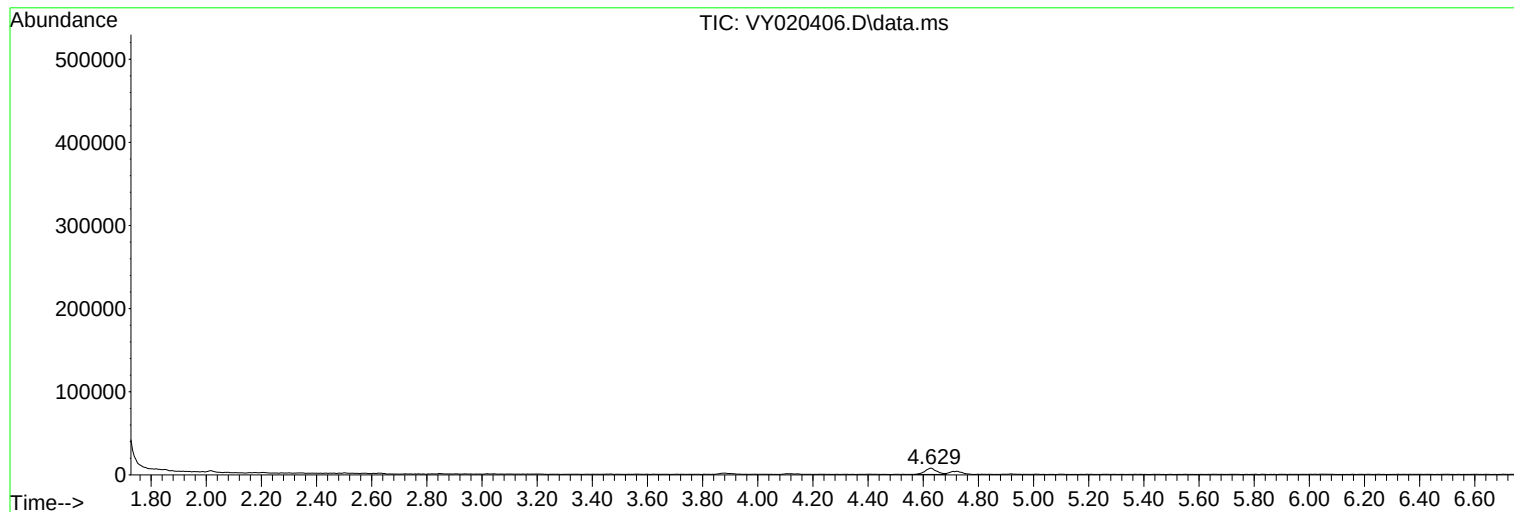
Sum of corrected areas: 4581500

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020406.D  
Acq On : 22 Nov 2024 12:01  
Operator : SY/MD  
Sample : P4892-02  
Misc : 8.56g/5.0mL/MSVOA\_Y/SOIL/B  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-BOT

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020406.D  
Acq On : 22 Nov 2024 12:01  
Operator : SY/MD  
Sample : P4892-02  
Misc : 8.56g/5.0mL/MSVOA\_Y/SOIL/B  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-BOT

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020406.D  
Acq On : 22 Nov 2024 12:01  
Operator : SY/MD  
Sample : P4892-02  
Misc : 8.56g/5.0mL/MSVOA\_Y/SOIL/B  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
WB-310-BOT

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | # | RT | Resp | Conc |
|------------------|----|---------|-------|----------|---|----|------|------|
|------------------|----|---------|-------|----------|---|----|------|------|

### Report of Analysis

|                    |                              |           |                 |               |    |
|--------------------|------------------------------|-----------|-----------------|---------------|----|
| Client:            | Portal Partners Tri-Venture  |           | Date Collected: | 11/15/24      |    |
| Project:           | Amtrak Sawtooth Bridges 2024 |           | Date Received:  | 11/15/24      |    |
| Client Sample ID:  | WB-310-SW                    |           | SDG No.:        | P4892         |    |
| Lab Sample ID:     | P4892-04                     |           | Matrix:         | Water         |    |
| Analytical Method: | SW8260                       |           | % Solid:        | 0             |    |
| Sample Wt/Vol:     | 5                            | Units: mL | Final Vol:      | 5000          | uL |
| Soil Aliquot Vol:  |                              | uL        | Test:           | VOC-TCLVOA-10 |    |
| GC Column:         | RXI-624                      | ID : 0.25 | Level :         | LOW           |    |
| Prep Method :      |                              |           |                 |               |    |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN084984.D        | 1         |           | 11/20/24 21:22 | VN112024      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |            |       |
| 75-71-8        | Dichlorodifluoromethane        | 0.21  | U         | 0.21 | 1.00       | ug/L  |
| 74-87-3        | Chloromethane                  | 0.35  | U         | 0.35 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 0.34  | U         | 0.34 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 1.40  | U         | 1.40 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 0.56  | U         | 0.56 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 0.34  | U         | 0.34 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.25  | U         | 0.25 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 0.26  | U         | 0.26 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 1.40  | U         | 1.40 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 0.32  | U         | 0.32 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.16  | U         | 0.16 | 1.00       | ug/L  |
| 79-20-9        | Methyl Acetate                 | 0.60  | U         | 0.60 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 0.32  | U         | 0.32 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.25  | U         | 0.25 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 0.23  | U         | 0.23 | 1.00       | ug/L  |
| 110-82-7       | Cyclohexane                    | 1.60  | U         | 1.60 | 5.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 1.30  | U         | 1.30 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 0.25  | U         | 0.25 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.25  | U         | 0.25 | 1.00       | ug/L  |
| 74-97-5        | Bromochloromethane             | 0.18  | U         | 0.18 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 0.26  | U         | 0.26 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.19  | U         | 0.19 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 0.19  | U         | 0.19 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 0.16  | U         | 0.16 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 0.24  | U         | 0.24 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 0.32  | U         | 0.32 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 0.19  | U         | 0.19 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 0.24  | U         | 0.24 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 0.75  | U         | 0.75 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 0.18  | U         | 0.18 | 1.00       | ug/L  |

## Report of Analysis

|                    |                              |                 |          |
|--------------------|------------------------------|-----------------|----------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: | 11/15/24 |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  | 11/15/24 |
| Client Sample ID:  | WB-310-SW                    | SDG No.:        | P4892    |
| Lab Sample ID:     | P4892-04                     | Matrix:         | Water    |
| Analytical Method: | SW8260                       | % Solid:        | 0        |
| Sample Wt/Vol:     | 5                            | Units:          | mL       |
| Soil Aliquot Vol:  |                              |                 | uL       |
| GC Column:         | RXI-624                      | ID :            | 0.25     |
| Prep Method :      |                              | Level :         | LOW      |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VN084984.D        | 1         |           | 11/20/24 21:22 | VN112024      |

| CAS Number                | Parameter                   | Conc.  | Qualifier | MDL                 | LOQ / CRQL | Units   |
|---------------------------|-----------------------------|--------|-----------|---------------------|------------|---------|
| 10061-02-6                | t-1,3-Dichloropropene       | 0.21   | U         | 0.21                | 1.00       | ug/L    |
| 10061-01-5                | cis-1,3-Dichloropropene     | 0.18   | U         | 0.18                | 1.00       | ug/L    |
| 79-00-5                   | 1,1,2-Trichloroethane       | 0.21   | U         | 0.21                | 1.00       | ug/L    |
| 591-78-6                  | 2-Hexanone                  | 1.10   | U         | 1.10                | 5.00       | ug/L    |
| 124-48-1                  | Dibromochloromethane        | 0.18   | U         | 0.18                | 1.00       | ug/L    |
| 106-93-4                  | 1,2-Dibromoethane           | 0.16   | U         | 0.16                | 1.00       | ug/L    |
| 127-18-4                  | Tetrachloroethene           | 0.25   | U         | 0.25                | 1.00       | ug/L    |
| 108-90-7                  | Chlorobenzene               | 0.13   | U         | 0.13                | 1.00       | ug/L    |
| 100-41-4                  | Ethyl Benzene               | 0.16   | U         | 0.16                | 1.00       | ug/L    |
| 179601-23-1               | m/p-Xylenes                 | 0.39   | J         | 0.31                | 2.00       | ug/L    |
| 95-47-6                   | o-Xylene                    | 0.14   | U         | 0.14                | 1.00       | ug/L    |
| 100-42-5                  | Styrene                     | 0.16   | U         | 0.16                | 1.00       | ug/L    |
| 75-25-2                   | Bromoform                   | 0.21   | U         | 0.21                | 1.00       | ug/L    |
| 98-82-8                   | Isopropylbenzene            | 0.13   | U         | 0.13                | 1.00       | ug/L    |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane   | 0.27   | U         | 0.27                | 1.00       | ug/L    |
| 541-73-1                  | 1,3-Dichlorobenzene         | 0.24   | U         | 0.24                | 1.00       | ug/L    |
| 106-46-7                  | 1,4-Dichlorobenzene         | 0.27   | U         | 0.27                | 1.00       | ug/L    |
| 95-50-1                   | 1,2-Dichlorobenzene         | 0.19   | U         | 0.19                | 1.00       | ug/L    |
| 96-12-8                   | 1,2-Dibromo-3-Chloropropane | 0.46   | U         | 0.46                | 1.00       | ug/L    |
| 120-82-1                  | 1,2,4-Trichlorobenzene      | 0.42   | UQ        | 0.42                | 1.00       | ug/L    |
| 87-61-6                   | 1,2,3-Trichlorobenzene      | 0.51   | UQ        | 0.51                | 1.00       | ug/L    |
| <b>SURROGATES</b>         |                             |        |           |                     |            |         |
| 17060-07-0                | 1,2-Dichloroethane-d4       | 53.0   |           | 70 (74) - 130 (125) | 106%       | SPK: 50 |
| 1868-53-7                 | Dibromofluoromethane        | 47.5   |           | 70 (75) - 130 (124) | 95%        | SPK: 50 |
| 2037-26-5                 | Toluene-d8                  | 45.9   |           | 70 (86) - 130 (113) | 92%        | SPK: 50 |
| 460-00-4                  | 4-Bromofluorobenzene        | 41.7   |           | 70 (77) - 130 (121) | 83%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b> |                             |        |           |                     |            |         |
| 363-72-4                  | Pentafluorobenzene          | 167000 | 8.218     |                     |            |         |
| 540-36-3                  | 1,4-Difluorobenzene         | 308000 | 9.1       |                     |            |         |
| 3114-55-4                 | Chlorobenzene-d5            | 262000 | 11.865    |                     |            |         |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4      | 115000 | 13.794    |                     |            |         |

### TENTATIVE IDENTIFIED COMPOUNDS

## Report of Analysis

|                    |                              |                 |          |
|--------------------|------------------------------|-----------------|----------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: | 11/15/24 |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  | 11/15/24 |
| Client Sample ID:  | WB-310-SW                    | SDG No.:        | P4892    |
| Lab Sample ID:     | P4892-04                     | Matrix:         | Water    |
| Analytical Method: | SW8260                       | % Solid:        | 0        |
| Sample Wt/Vol:     | 5                            | Units:          | mL       |
| Soil Aliquot Vol:  |                              |                 | uL       |
| GC Column:         | RXI-624                      | ID :            | 0.25     |
| Prep Method :      |                              | Level :         | LOW      |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VN084984.D        | 1         |           | 11/20/24 21:22 | VN112024      |

| CAS Number  | Parameter              | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------|------------------------|-------|-----------|-----|------------|-------|
| 000064-19-7 | Acetic acid            | 7.60  | J         |     | 8.72       | ug/L  |
| 95-63-6     | 1,2,4-Trimethylbenzene | 0.52  | J         |     | 13.5       | 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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084984.D  
 Acq On : 20 Nov 2024 21:22  
 Operator : JC\MD  
 Sample : P4892-04  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 WB-310-SW

Quant Time: Nov 21 00:51:26 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

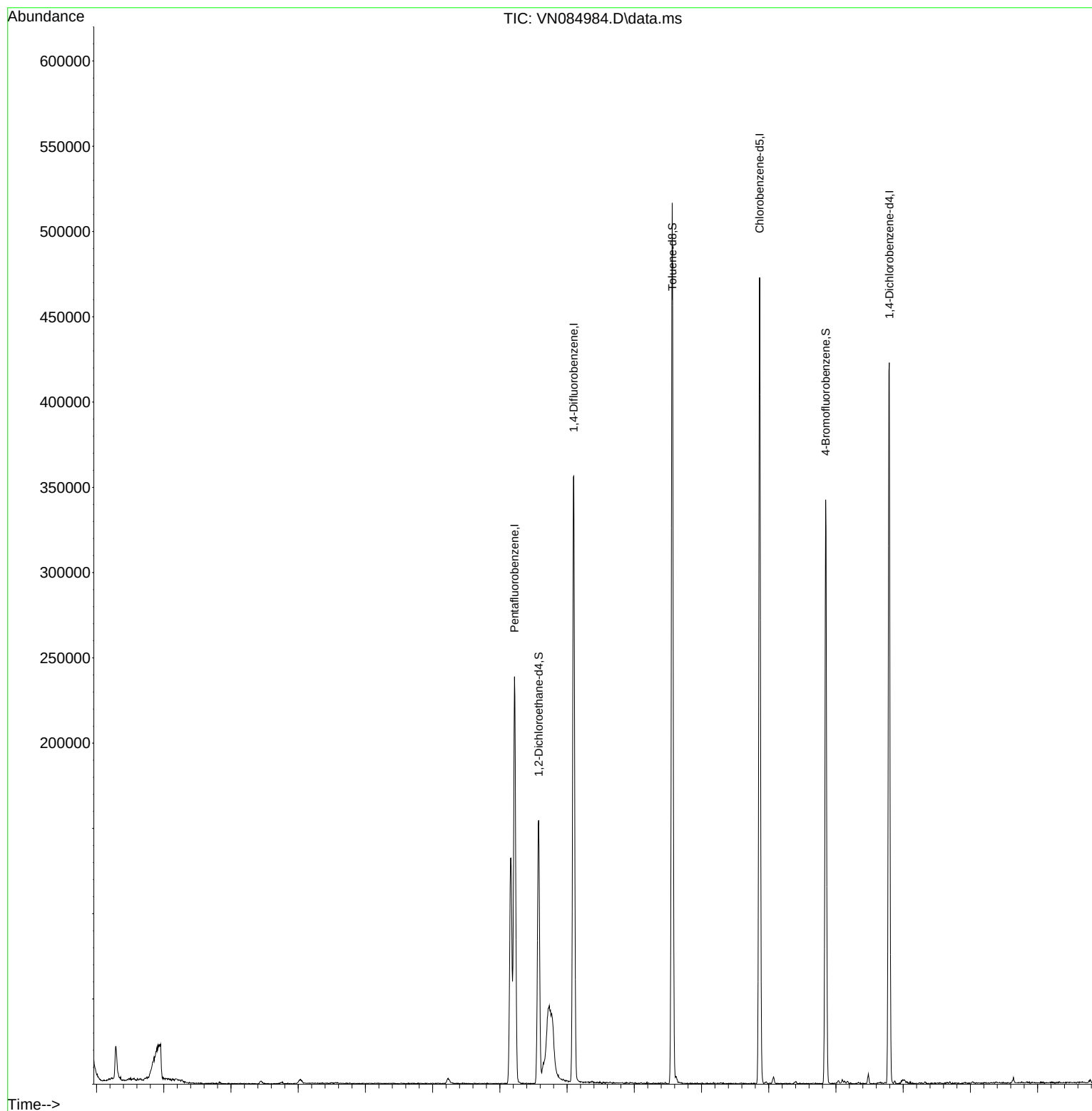
| Compound                    | R.T.   | QIon           | Response | Conc   | Units    | Dev(Min) |
|-----------------------------|--------|----------------|----------|--------|----------|----------|
| -----                       |        |                |          |        |          |          |
| Internal Standards          |        |                |          |        |          |          |
| 1) Pentafluorobenzene       | 8.218  | 168            | 166877   | 50.000 | ug/l     | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.100  | 114            | 307613   | 50.000 | ug/l     | 0.00     |
| 63) Chlorobenzene-d5        | 11.865 | 117            | 262227   | 50.000 | ug/l     | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.794 | 152            | 114908   | 50.000 | ug/l     | 0.00     |
|                             |        |                |          |        |          |          |
| System Monitoring Compounds |        |                |          |        |          |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65             | 127803   | 53.024 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | =      | 106.040% |          |
| 35) Dibromofluoromethane    | 8.165  | 113            | 98986    | 47.540 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | =      | 95.080%  |          |
| 50) Toluene-d8              | 10.565 | 98             | 352034   | 45.897 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | =      | 91.800%  |          |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 119438   | 41.666 | ug/l     | 0.00     |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | =      | 83.340%  |          |
|                             |        |                |          |        |          |          |
| Target Compounds            |        |                |          |        |          |          |
| 68) m/p-Xylenes             | 12.076 | 106            | 1461     | 0.394  | ug/l     | 92       |
| 84) 1,2,4-Trimethylbenzene  | 13.482 | 105            | 3571     | 0.518  | ug/l     | 98       |
| -----                       |        |                |          |        |          |          |

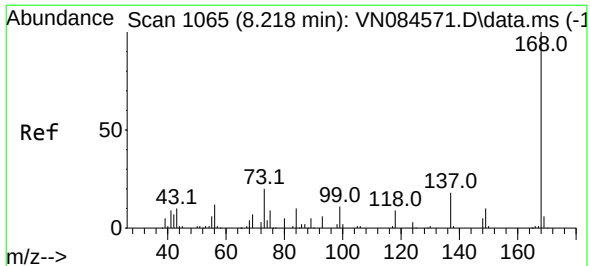
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084984.D  
Acq On : 20 Nov 2024 21:22  
Operator : JC\MD  
Sample : P4892-04  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
WB-310-SW

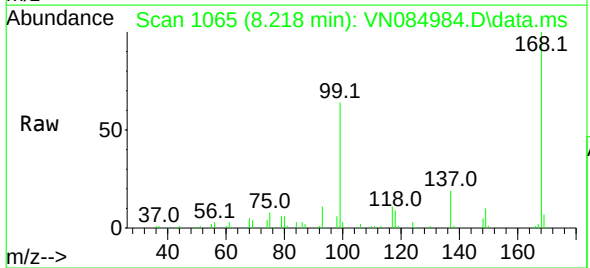
Quant Time: Nov 21 00:51:26 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration



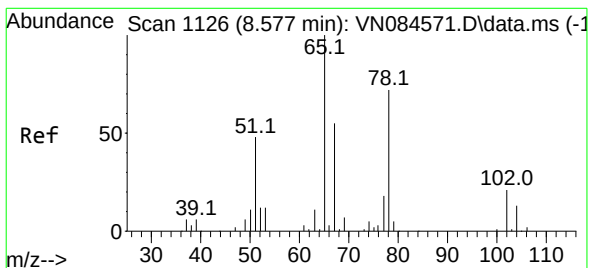
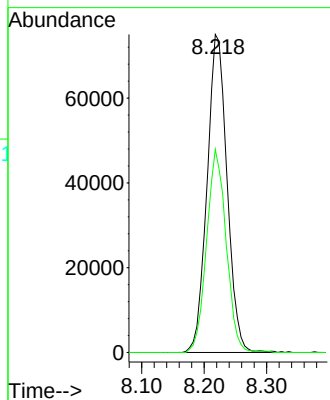
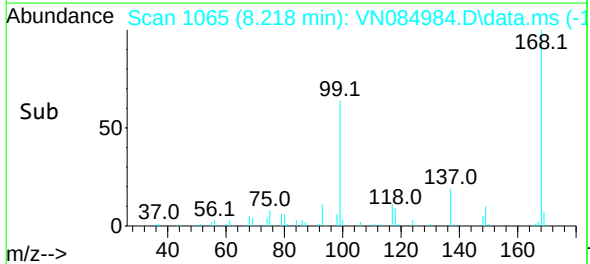


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.006 min  
Lab File: VN084984.D  
Acq: 20 Nov 2024 21:22

Instrument :  
MSVOA\_N  
ClientSampleId :  
WB-310-SW

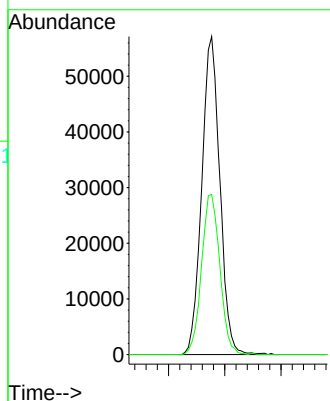
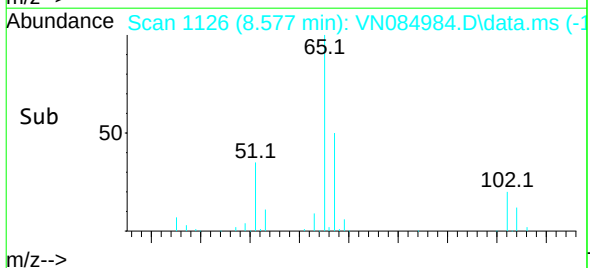
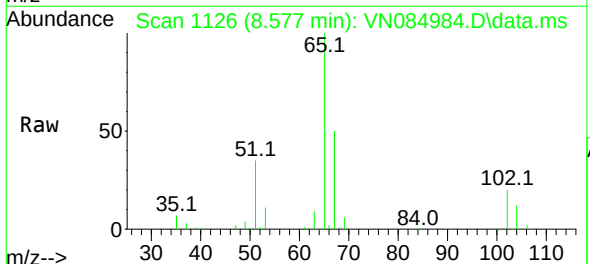


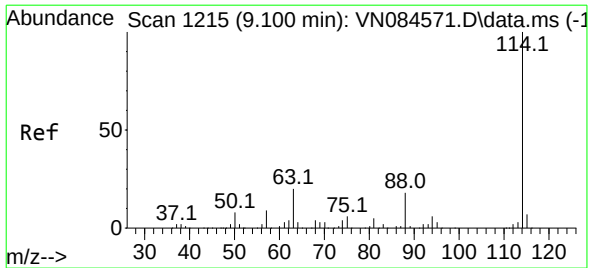
Tgt Ion:168 Resp: 166877  
Ion Ratio Lower Upper  
168 100  
99 63.8 54.2 81.2



#33  
1,2-Dichloroethane-d4  
Concen: 53.024 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. -0.000 min  
Lab File: VN084984.D  
Acq: 20 Nov 2024 21:22

Tgt Ion: 65 Resp: 127803  
Ion Ratio Lower Upper  
65 100  
67 50.9 0.0 102.0

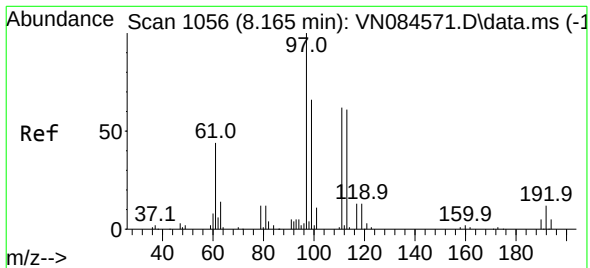
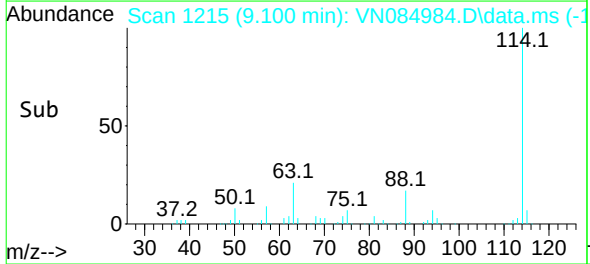
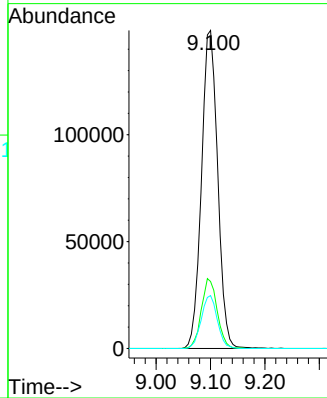
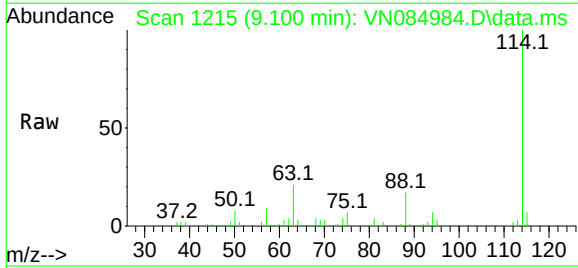




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 9.100 min Scan# 1215  
Delta R.T. 0.000 min  
Lab File: VN084984.D  
Acq: 20 Nov 2024 21:22

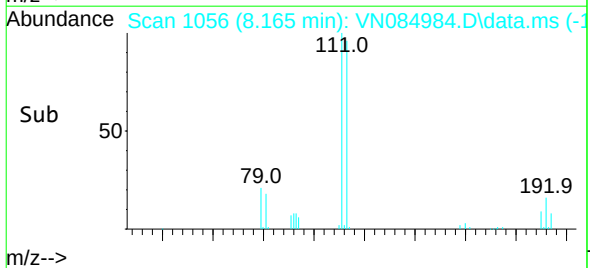
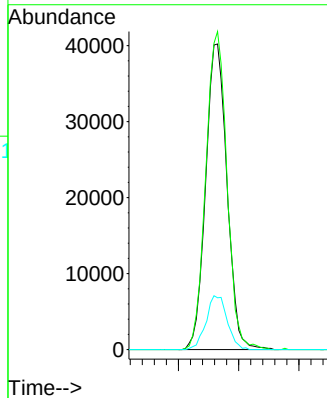
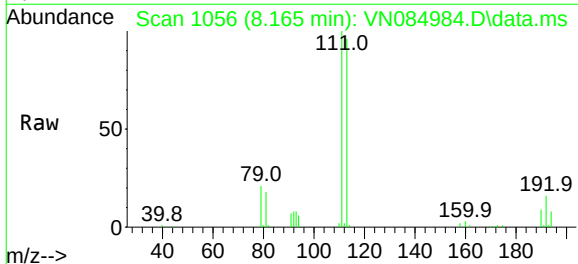
Instrument :  
MSVOA\_N  
ClientSampleId :  
WB-310-SW

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 114   | Resp: | 307613 |
| Ion      | Ratio | Lower | Upper  |
| 114      | 100   |       |        |
| 63       | 21.1  | 0.0   | 43.8   |
| 88       | 16.6  | 0.0   | 31.6   |

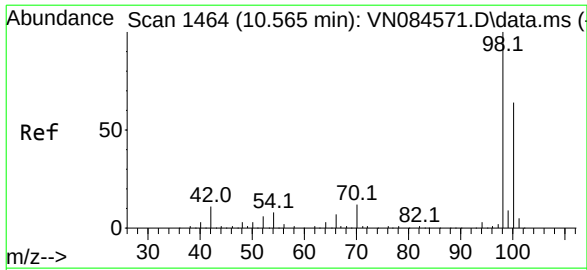


#35  
Dibromofluoromethane  
Concen: 47.540 ug/l  
RT: 8.165 min Scan# 1056  
Delta R.T. -0.000 min  
Lab File: VN084984.D  
Acq: 20 Nov 2024 21:22

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 113   | Resp: | 98986 |
| Ion      | Ratio | Lower | Upper |
| 113      | 100   |       |       |
| 111      | 103.2 | 83.3  | 124.9 |
| 192      | 17.4  | 13.5  | 20.3  |







#50

Toluene-d8

Concen: 45.897 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN084984.D

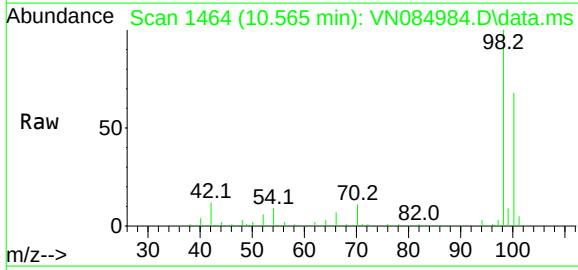
Acq: 20 Nov 2024 21:22

Instrument :

MSVOA\_N

ClientSampleId :

WB-310-SW

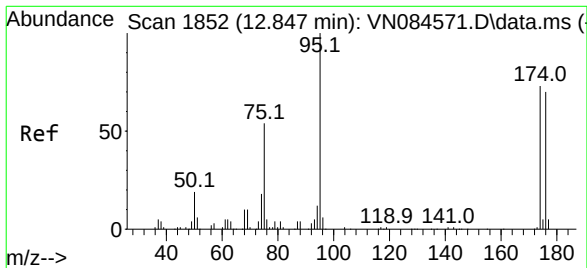
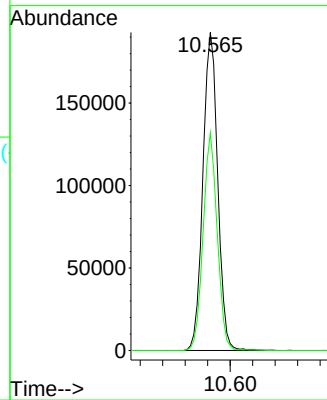
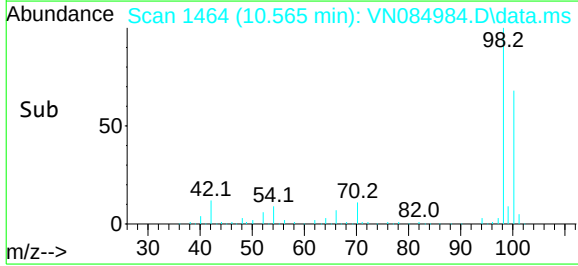


Tgt Ion: 98 Resp: 352034

Ion Ratio Lower Upper

98 100

100 65.4 52.7 79.1



#62

4-Bromofluorobenzene

Concen: 41.666 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. -0.000 min

Lab File: VN084984.D

Acq: 20 Nov 2024 21:22

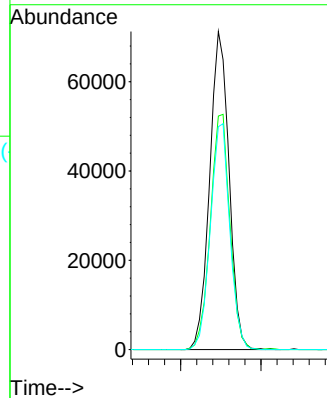
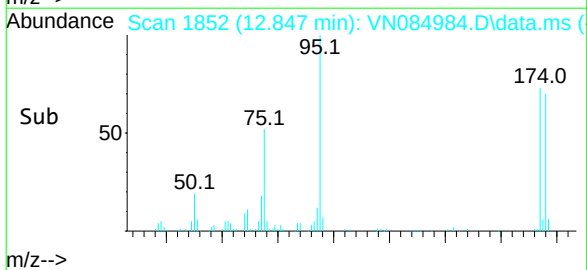
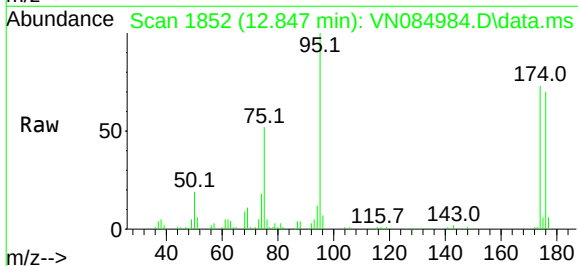
Tgt Ion: 95 Resp: 119438

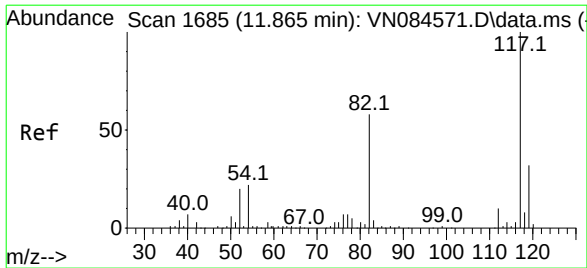
Ion Ratio Lower Upper

95 100

174 74.7 0.0 145.2

176 71.0 0.0 140.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 16

Delta R.T. -0.000 min

Lab File: VN084984.D

Acq: 20 Nov 2024 21:22

Instrument :

MSVOA\_N

ClientSampleId :

WB-310-SW

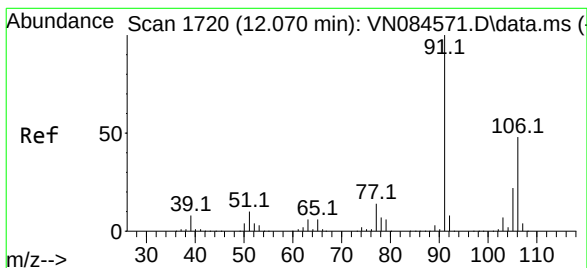
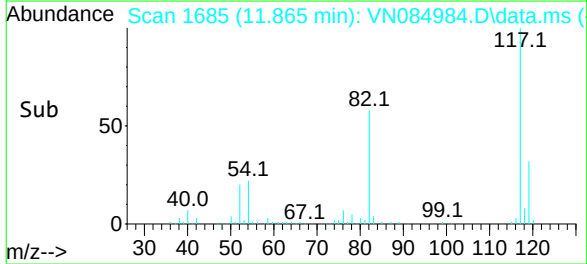
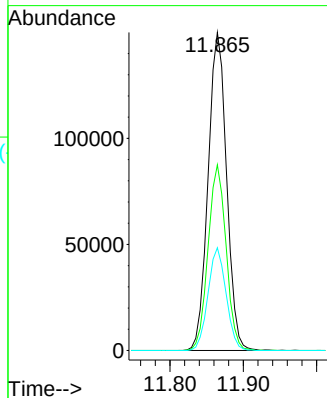
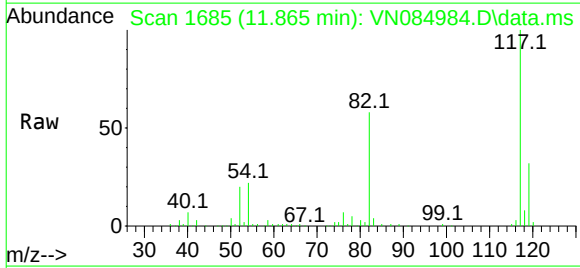
Tgt Ion:117 Resp: 262227

Ion Ratio Lower Upper

117 100

82 58.4 47.2 70.8

119 32.3 25.4 38.0



#68

m/p-Xylenes

Concen: 0.394 ug/l

RT: 12.076 min Scan# 1721

Delta R.T. 0.006 min

Lab File: VN084984.D

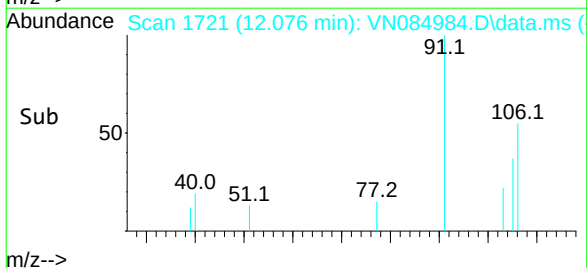
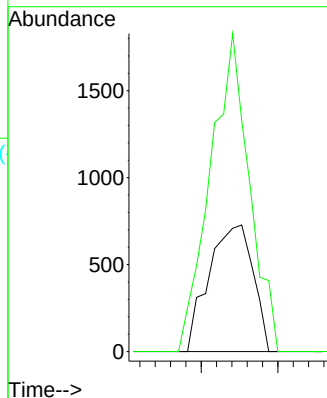
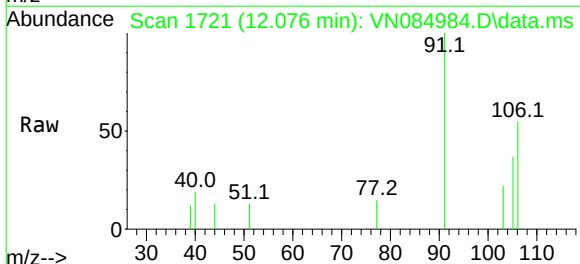
Acq: 20 Nov 2024 21:22

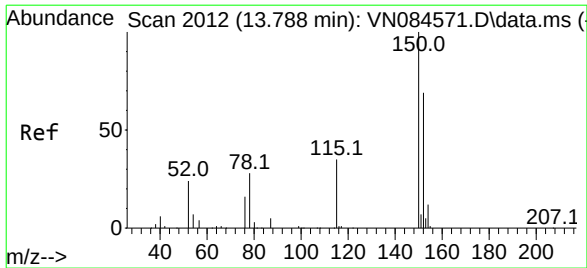
Tgt Ion:106 Resp: 1461

Ion Ratio Lower Upper

106 100

91 221.4 167.1 250.7





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.794 min Scan# 2012

Delta R.T. 0.006 min

Lab File: VN084984.D

Acq: 20 Nov 2024 21:22

Instrument :

MSVOA\_N

ClientSampleId :

WB-310-SW

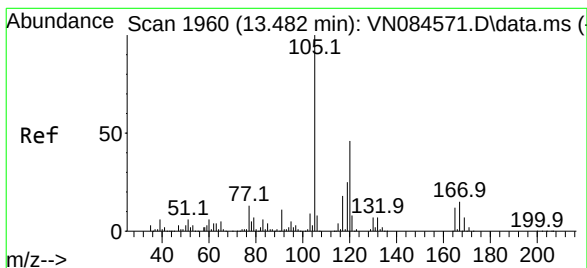
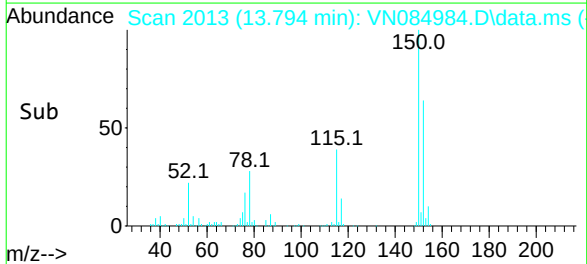
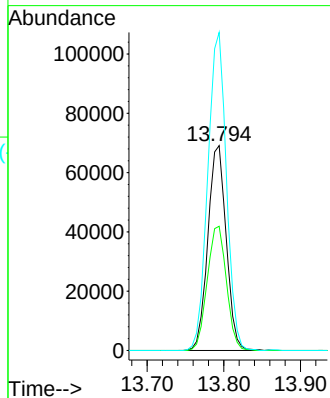
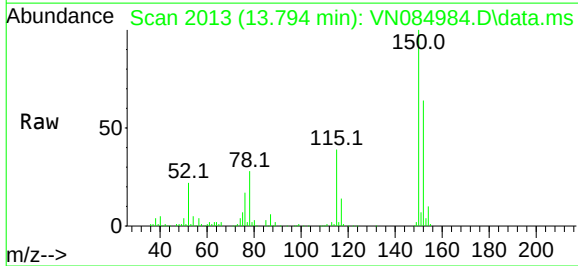
Tgt Ion:152 Resp: 114908

Ion Ratio Lower Upper

152 100

115 63.4 31.3 93.9

150 157.3 0.0 349.8



#84

1,2,4-Trimethylbenzene

Concen: 0.518 ug/l

RT: 13.482 min Scan# 1960

Delta R.T. 0.000 min

Lab File: VN084984.D

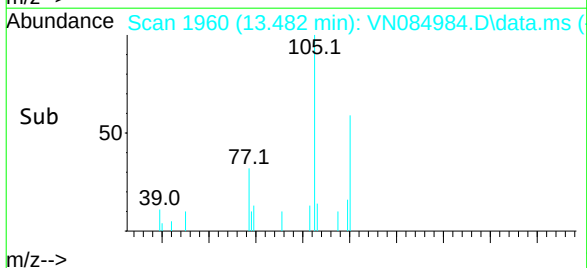
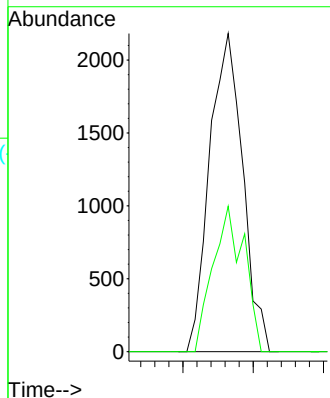
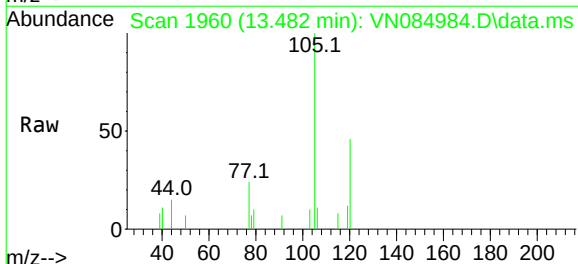
Acq: 20 Nov 2024 21:22

Tgt Ion:105 Resp: 3571

Ion Ratio Lower Upper

105 100

120 43.2 22.3 66.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084984.D  
 Acq On : 20 Nov 2024 21:22  
 Operator : JC\MD  
 Sample : P4892-04  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 WB-310-SW

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Title : SW846 8260

Signal : TIC: VN084984.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 2.289       | 51            | 57          | 66           | rBV5     | 18614          | 38315         | 4.09%           | 0.742%        |
| 2         | 2.853       | 140           | 153         | 154          | rBV6     | 11733          | 31114         | 3.32%           | 0.602%        |
| 3         | 2.918       | 156           | 164         | 165          | rVV7     | 6995           | 14841         | 1.58%           | 0.287%        |
| 4         | 8.165       | 1046          | 1056        | 1060         | rBV      | 132418         | 324286        | 34.58%          | 6.276%        |
| 5         | 8.218       | 1060          | 1065        | 1076         | rVB      | 237998         | 520534        | 55.51%          | 10.074%       |
| 6         | 8.577       | 1116          | 1126        | 1134         | rBV      | 154484         | 347130        | 37.02%          | 6.718%        |
| 7         | 8.724       | 1134          | 1151        | 1152         | rBV      | 38234          | 110216        | 11.75%          | 2.133%        |
| 8         | 9.100       | 1206          | 1215        | 1229         | rBV      | 355099         | 729969        | 77.85%          | 14.127%       |
| 9         | 10.565      | 1455          | 1464        | 1472         | rBV      | 516490         | 937653        | 100.00%         | 18.146%       |
| 10        | 11.865      | 1677          | 1685        | 1695         | rBV      | 472798         | 814212        | 86.84%          | 15.757%       |
| 11        | 12.847      | 1844          | 1852        | 1865         | rVB      | 342534         | 577224        | 61.56%          | 11.171%       |
| 12        | 13.794      | 2005          | 2013        | 2023         | rVB      | 422739         | 721664        | 76.96%          | 13.966%       |

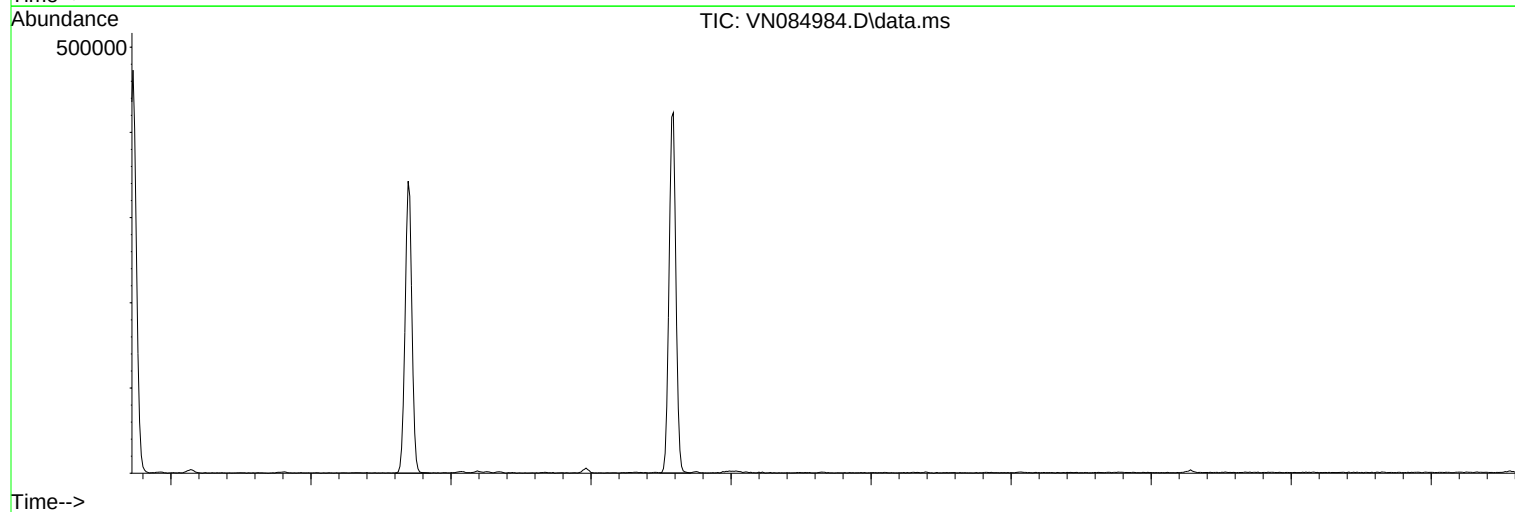
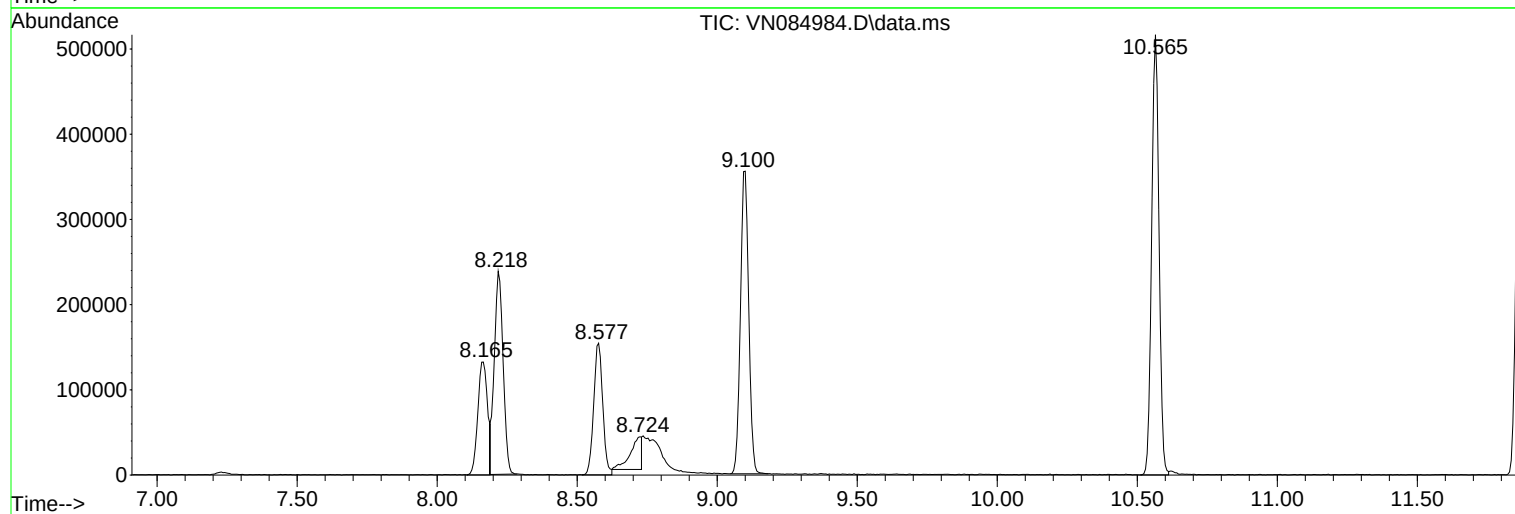
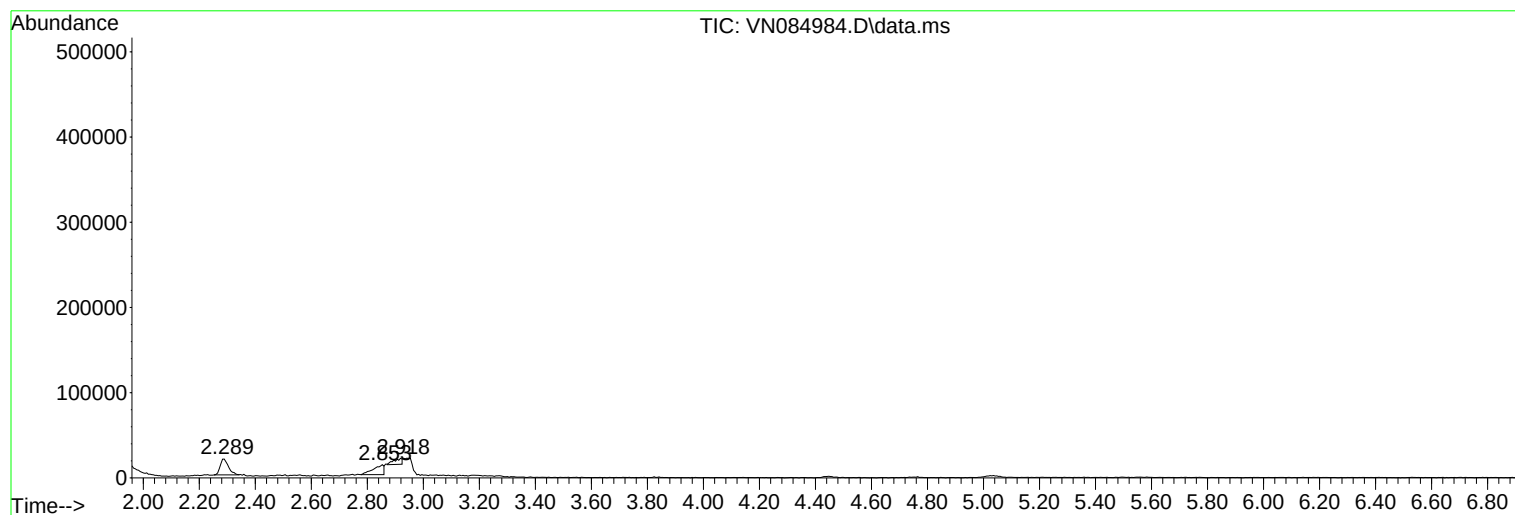
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Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084984.D  
Acq On : 20 Nov 2024 21:22  
Operator : JC\MD  
Sample : P4892-04  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
WB-310-SW

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084984.D  
Acq On : 20 Nov 2024 21:22  
Operator : JC\MD  
Sample : P4892-04  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
WB-310-SW

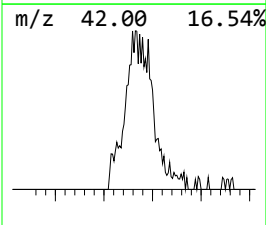
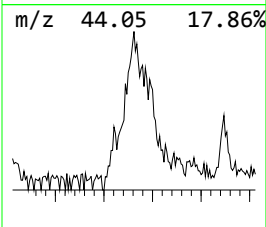
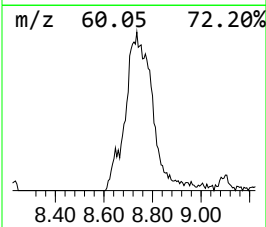
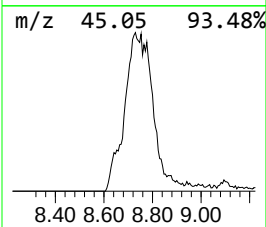
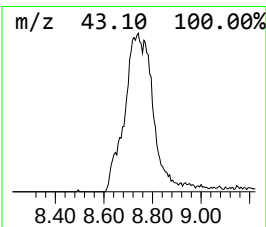
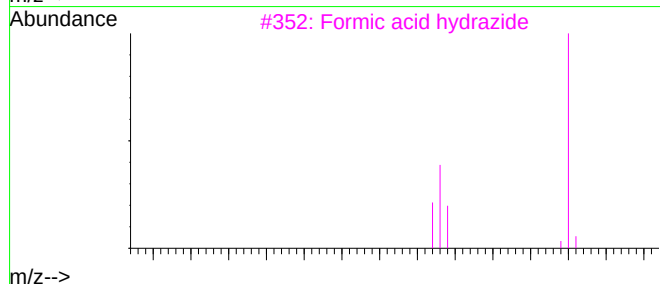
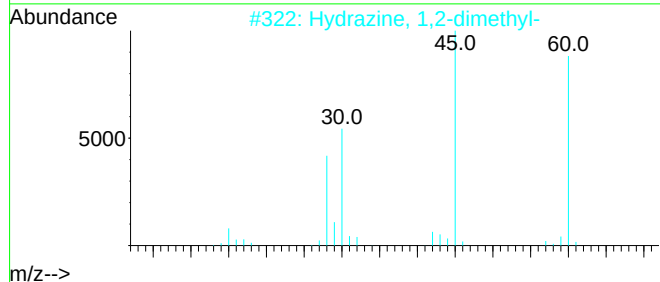
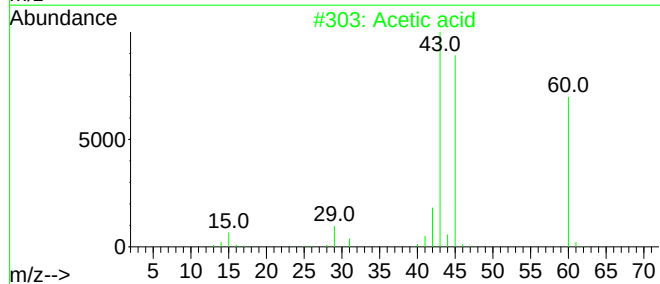
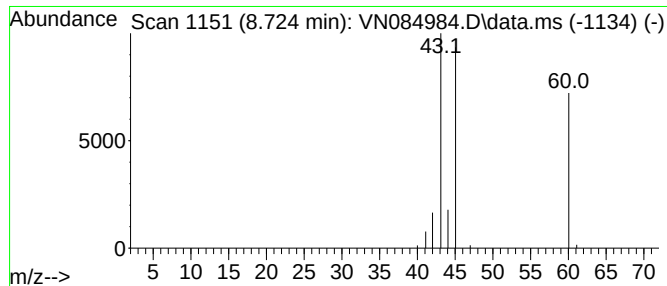
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

\*\*\*\*\*  
Peak Number 1 Acetic acid Concentration Rank 1

| R.T.  | EstConc   | Area   | Relative to ISTD    | R.T.  |
|-------|-----------|--------|---------------------|-------|
| 8.724 | 7.55 ug/l | 110216 | 1,4-Difluorobenzene | 9.100 |

| Hit# of 5 | Tentative ID             | MW | MolForm | CAS#        | Qual |
|-----------|--------------------------|----|---------|-------------|------|
| 1         | Acetic acid              | 60 | C2H4O2  | 000064-19-7 | 90   |
| 2         | Hydrazine, 1,2-dimethyl- | 60 | C2H8N2  | 000540-73-8 | 9    |
| 3         | Formic acid hydrazide    | 60 | CH4N2O  | 000624-84-0 | 9    |
| 4         | Ammonium acetate         | 77 | C2H7NO2 | 000631-61-8 | 9    |
| 5         | Formamidoxime            | 60 | CH4N2O  | 000624-82-8 | 7    |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084984.D  
Acq On : 20 Nov 2024 21:22  
Operator : JC\MD  
Sample : P4892-04  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
WB-310-SW

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT    | EstConc | Units | Response | # | RT    | Resp   | Conc |
|------------------|-------|---------|-------|----------|---|-------|--------|------|
| Acetic acid      | 8.724 | 7.5     | ug/l  | 110216   | 2 | 9.100 | 729969 | 50.0 |



# CALIBRATION SUMMARY





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

### VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06  
 Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG No.: P4892  
 Instrument ID: MSVOA\_N Calibration Date(s): 10/30/2024 10/30/2024  
 Heated Purge: (Y/N) N Calibration Time(s): 11:46 13:45  
 GC Column: RXI-624 ID: 0.25 (mm)

|                                |                     |        |        |                     |        |                     |       |       |
|--------------------------------|---------------------|--------|--------|---------------------|--------|---------------------|-------|-------|
| LAB FILE ID:                   | RRF100 = VN084570.D |        |        | RRF050 = VN084571.D |        | RRF020 = VN084572.D |       |       |
|                                | RRF010 = VN084573.D |        |        | RRF005 = VN084574.D |        | RRF001 = VN084575.D |       |       |
| COMPOUND                       | RRF100              | RRF050 | RRF020 | RRF010              | RRF005 | RRF001              | RRF   | % RSD |
| Dichlorodifluoromethane        | 0.571               | 0.552  | 0.552  | 0.598               | 0.594  | 0.581               | 0.575 | 3.4   |
| Chloromethane                  | 0.658               | 0.672  | 0.725  | 0.871               | 0.995  | 1.789               | 0.952 | 45.2  |
| Vinyl Chloride                 | 0.613               | 0.605  | 0.623  | 0.636               | 0.651  | 0.581               | 0.618 | 4     |
| Bromomethane                   | 0.292               | 0.296  | 0.310  | 0.336               | 0.405  |                     | 0.328 | 14.2  |
| Chloroethane                   | 0.378               | 0.376  | 0.413  | 0.426               | 0.475  | 0.863               | 0.488 | 38.3  |
| Trichlorofluoromethane         | 0.971               | 0.959  | 1.017  | 1.022               | 1.070  | 1.071               | 1.018 | 4.7   |
| 1,1,2-Trichlorotrifluoroethane | 0.566               | 0.557  | 0.571  | 0.585               | 0.588  | 0.586               | 0.575 | 2.2   |
| 1,1-Dichloroethene             | 0.548               | 0.538  | 0.560  | 0.575               | 0.552  | 0.644               | 0.569 | 6.8   |
| Acetone                        | 0.209               | 0.204  | 0.213  | 0.223               | 0.241  | 0.338               | 0.238 | 21.3  |
| Carbon Disulfide               | 1.604               | 1.603  | 1.700  | 1.714               | 1.784  | 2.117               | 1.753 | 10.9  |
| Methyl tert-butyl Ether        | 1.773               | 1.758  | 1.802  | 1.779               | 1.786  | 1.572               | 1.745 | 4.9   |
| Methyl Acetate                 | 0.731               | 0.749  | 0.954  | 1.044               | 1.266  | 2.291               | 1.172 | 49.7  |
| Methylene Chloride             | 0.604               | 0.602  | 0.633  | 0.658               | 0.714  | 0.600               | 0.635 | 7.1   |
| trans-1,2-Dichloroethene       | 0.565               | 0.563  | 0.596  | 0.600               | 0.584  | 0.601               | 0.585 | 2.9   |
| 1,1-Dichloroethane             | 1.067               | 1.066  | 1.114  | 1.127               | 1.203  | 1.033               | 1.102 | 5.5   |
| Cyclohexane                    | 0.956               | 0.938  | 0.956  | 1.043               | 1.093  |                     | 0.997 | 6.8   |
| 2-Butanone                     | 0.316               | 0.315  | 0.348  | 0.338               | 0.370  | 0.334               | 0.337 | 6.1   |
| Carbon Tetrachloride           | 0.530               | 0.514  | 0.532  | 0.548               | 0.537  | 0.488               | 0.525 | 4     |
| cis-1,2-Dichloroethene         | 0.675               | 0.662  | 0.697  | 0.685               | 0.705  | 0.673               | 0.683 | 2.4   |
| Bromochloromethane             | 0.483               | 0.511  | 0.388  | 0.415               | 0.408  | 0.429               | 0.439 | 10.8  |
| Chloroform                     | 1.099               | 1.086  | 1.142  | 1.154               | 1.222  | 1.025               | 1.121 | 6     |
| 1,1,1-Trichloroethane          | 1.000               | 0.991  | 1.046  | 1.073               | 1.032  | 0.980               | 1.021 | 3.5   |
| Methylcyclohexane              | 0.546               | 0.509  | 0.495  | 0.487               | 0.458  | 0.371               | 0.478 | 12.5  |
| Benzene                        | 1.494               | 1.448  | 1.509  | 1.507               | 1.546  | 1.540               | 1.507 | 2.4   |
| 1,2-Dichloroethane             | 0.488               | 0.494  | 0.493  | 0.492               | 0.503  | 0.459               | 0.488 | 3.1   |
| Trichloroethene                | 0.339               | 0.335  | 0.345  | 0.338               | 0.341  | 0.387               | 0.348 | 5.7   |
| 1,2-Dichloropropane            | 0.356               | 0.348  | 0.358  | 0.357               | 0.373  | 0.330               | 0.354 | 4     |
| Bromodichloromethane           | 0.528               | 0.521  | 0.526  | 0.522               | 0.529  | 0.530               | 0.526 | 0.7   |
| 4-Methyl-2-Pentanone           | 0.424               | 0.423  | 0.416  | 0.417               | 0.412  | 0.344               | 0.406 | 7.6   |
| Toluene                        | 0.923               | 0.899  | 0.919  | 0.902               | 0.891  | 0.757               | 0.882 | 7.1   |

\* 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.



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

### VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06  
 Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG No.: P4892  
 Instrument ID: MSVOA\_N Calibration Date(s): 10/30/2024 10/30/2024  
 Heated Purge: (Y/N) N Calibration Time(s): 11:46 13:45  
 GC Column: RXI-624 ID: 0.25 (mm)

| LAB FILE ID:                |        | RRF100 = VN084570.D |        | RRF050 = VN084571.D |        | RRF020 = VN084572.D |       |       |  |
|-----------------------------|--------|---------------------|--------|---------------------|--------|---------------------|-------|-------|--|
|                             |        | RRF010 = VN084573.D |        | RRF005 = VN084574.D |        | RRF001 = VN084575.D |       |       |  |
| COMPOUND                    | RRF100 | RRF050              | RRF020 | RRF010              | RRF005 | RRF001              | RRF   | % RSD |  |
| t-1,3-Dichloropropene       | 0.552  | 0.543               | 0.538  | 0.532               | 0.547  | 0.555               | 0.544 | 1.6   |  |
| cis-1,3-Dichloropropene     | 0.592  | 0.581               | 0.582  | 0.569               | 0.584  | 0.548               | 0.576 | 2.7   |  |
| 1,1,2-Trichloroethane       | 0.336  | 0.329               | 0.334  | 0.342               | 0.342  | 0.309               | 0.332 | 3.7   |  |
| 2-Hexanone                  | 0.314  | 0.312               | 0.301  | 0.297               | 0.294  | 0.256               | 0.296 | 7.1   |  |
| Dibromochloromethane        | 0.404  | 0.394               | 0.391  | 0.393               | 0.377  | 0.312               | 0.378 | 8.9   |  |
| 1,2-Dibromoethane           | 0.340  | 0.333               | 0.341  | 0.335               | 0.355  | 0.336               | 0.340 | 2.4   |  |
| Tetrachloroethene           | 0.326  | 0.313               | 0.333  | 0.347               | 0.351  | 0.325               | 0.333 | 4.3   |  |
| Chlorobenzene               | 1.068  | 1.061               | 1.149  | 1.123               | 1.165  | 1.146               | 1.119 | 3.9   |  |
| Ethyl Benzene               | 1.957  | 1.891               | 1.928  | 1.880               | 1.849  | 1.697               | 1.867 | 4.9   |  |
| m/p-Xylenes                 | 0.737  | 0.728               | 0.737  | 0.701               | 0.683  | 0.654               | 0.707 | 4.8   |  |
| o-Xylene                    | 0.703  | 0.690               | 0.701  | 0.679               | 0.645  | 0.550               | 0.661 | 8.9   |  |
| Styrene                     | 1.223  | 1.205               | 1.206  | 1.144               | 1.093  | 1.050               | 1.154 | 6.1   |  |
| Bromoform                   | 0.287  | 0.295               | 0.298  | 0.289               | 0.302  | 0.286               | 0.293 | 2.3   |  |
| Isopropylbenzene            | 3.558  | 3.570               | 3.701  | 3.605               | 3.402  | 3.188               | 3.504 | 5.2   |  |
| 1,1,2,2-Tetrachloroethane   | 1.052  | 1.073               | 1.163  | 1.190               | 1.317  | 1.222               | 1.170 | 8.4   |  |
| 1,3-Dichlorobenzene         | 1.642  | 1.668               | 1.770  | 1.802               | 1.884  | 2.264               | 1.838 | 12.3  |  |
| 1,4-Dichlorobenzene         | 1.646  | 1.674               | 1.782  | 1.867               | 1.879  | 2.773               | 1.937 | 21.7  |  |
| 1,2-Dichlorobenzene         | 1.601  | 1.618               | 1.748  | 1.732               | 1.879  | 2.021               | 1.766 | 9.1   |  |
| 1,2-Dibromo-3-Chloropropane | 0.204  | 0.217               | 0.229  | 0.226               | 0.274  | 0.272               | 0.237 | 12.3  |  |
| 1,2,4-Trichlorobenzene      | 0.852  | 0.865               | 0.895  | 0.881               | 0.956  | 1.353               | 0.967 | 19.9  |  |
| 1,2,3-Trichlorobenzene      | 0.832  | 0.841               | 0.953  | 0.877               | 0.939  | 1.189               | 0.939 | 14.1  |  |
| 1,2-Dichloroethane-d4       | 0.689  | 0.721               | 0.708  | 0.722               | 0.771  |                     | 0.722 | 4.2   |  |
| Dibromofluoromethane        | 0.334  | 0.344               | 0.326  | 0.336               | 0.353  |                     | 0.338 | 3.1   |  |
| Toluene-d8                  | 1.267  | 1.303               | 1.216  | 1.231               | 1.217  |                     | 1.247 | 3     |  |
| 4-Bromofluorobenzene        | 0.481  | 0.493               | 0.450  | 0.451               | 0.454  |                     | 0.466 | 4.3   |  |

\* 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.

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\  
 Method File : 82N103024W.M  
 Title : SW846 8260  
 Last Update : Thu Oct 31 18:45:38 2024  
 Response Via : Initial Calibration

## Calibration Files

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D

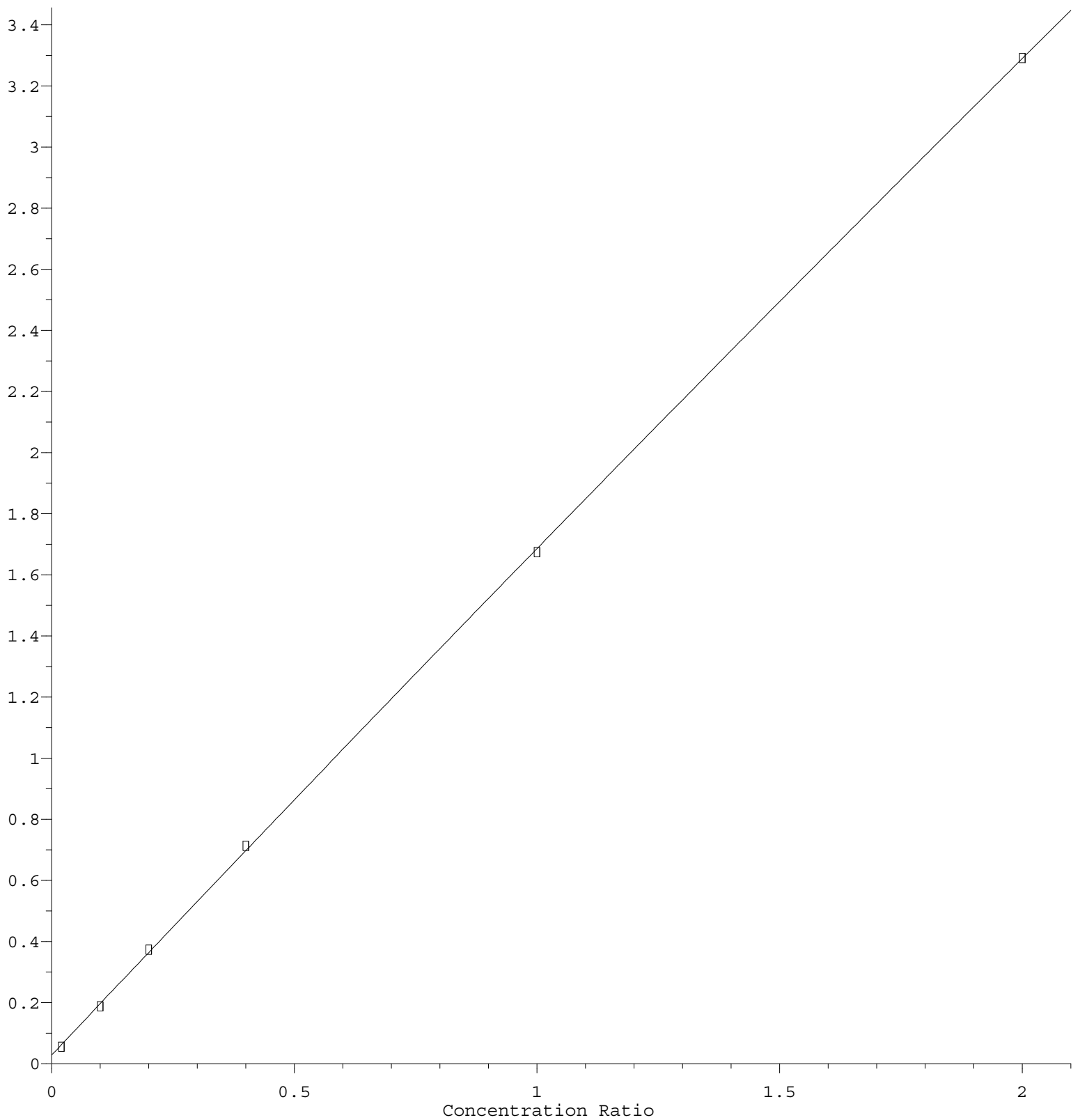
|        | Compound            | 1              | 5     | 10    | 20    | 50    | 100   | Avg   | %RSD  |
|--------|---------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 1) I   | Pentafluorobenzene  | -----ISTD----- |       |       |       |       |       |       |       |
| 2) T   | Dichlorodifluo...   | 0.581          | 0.594 | 0.598 | 0.552 | 0.552 | 0.571 | 0.575 | 3.43  |
| 3) P   | Chloromethane       | 1.789          | 0.995 | 0.871 | 0.725 | 0.672 | 0.658 | 0.952 | 45.21 |
| 4) C   | Vinyl Chloride      | 0.581          | 0.651 | 0.636 | 0.623 | 0.605 | 0.613 | 0.618 | 3.98# |
| 5) T   | Bromomethane        |                | 0.405 | 0.336 | 0.310 | 0.296 | 0.292 | 0.328 | 14.16 |
| 6) T   | Chloroethane        | 0.863          | 0.475 | 0.426 | 0.413 | 0.376 | 0.378 | 0.488 | 38.29 |
| 7) T   | Trichlorofluor...   | 1.071          | 1.070 | 1.022 | 1.017 | 0.959 | 0.971 | 1.018 | 4.66  |
| 8) T   | Diethyl Ether       | 0.358          | 0.371 | 0.364 | 0.359 | 0.353 | 0.351 | 0.359 | 2.08  |
| 9) T   | 1,1,2-Trichlor...   | 0.586          | 0.588 | 0.585 | 0.571 | 0.557 | 0.566 | 0.575 | 2.23  |
| 10) T  | Methyl Iodide       |                | 0.817 | 0.800 | 0.764 | 0.736 | 0.728 | 0.769 | 5.08  |
| 11) T  | Tert butyl alc...   |                | 0.118 | 0.100 | 0.090 | 0.086 | 0.082 | 0.095 | 15.11 |
| 12) CM | 1,1-Dichloroet...   | 0.644          | 0.552 | 0.575 | 0.560 | 0.538 | 0.548 | 0.569 | 6.78# |
| 13) T  | Acrolein            |                | 0.104 | 0.096 | 0.101 | 0.088 | 0.086 | 0.095 | 8.16  |
| 14) T  | Allyl chloride      | 0.849          | 0.977 | 0.925 | 0.939 | 0.917 | 0.934 | 0.923 | 4.56  |
| 15) T  | Acrylonitrile       | 0.263          | 0.294 | 0.282 | 0.282 | 0.271 | 0.264 | 0.276 | 4.42  |
| 16) T  | Acetone             | 0.338          | 0.241 | 0.223 | 0.213 | 0.204 | 0.209 | 0.238 | 21.31 |
| 17) T  | Carbon Disulfide    | 2.117          | 1.784 | 1.714 | 1.700 | 1.603 | 1.604 | 1.753 | 10.90 |
| 18) T  | Methyl Acetate      | 2.291          | 1.266 | 1.044 | 0.954 | 0.749 | 0.731 | 1.172 | 49.71 |
| 19) T  | Methyl tert-bu...   | 1.572          | 1.786 | 1.779 | 1.802 | 1.758 | 1.773 | 1.745 | 4.92  |
| 20) T  | Methylene Chlo...   | 0.600          | 0.714 | 0.658 | 0.633 | 0.602 | 0.604 | 0.635 | 7.09  |
| 21) T  | trans-1,2-Dich...   | 0.601          | 0.584 | 0.600 | 0.596 | 0.563 | 0.565 | 0.585 | 2.94  |
| 22) T  | Diisopropyl ether   | 1.623          | 1.843 | 1.909 | 1.921 | 1.855 | 1.858 | 1.835 | 5.91  |
| 23) T  | Vinyl Acetate       | 1.090          | 1.297 | 1.298 | 1.306 | 1.299 | 1.303 | 1.265 | 6.81  |
| 24) P  | 1,1-Dichloroet...   | 1.033          | 1.203 | 1.127 | 1.114 | 1.066 | 1.067 | 1.102 | 5.49  |
| 25) T  | 2-Butanone          | 0.334          | 0.370 | 0.338 | 0.348 | 0.315 | 0.316 | 0.337 | 6.14  |
| 26) T  | 2,2-Dichloropr...   | 0.933          | 0.959 | 0.978 | 0.974 | 0.941 | 0.968 | 0.959 | 1.93  |
| 27) T  | cis-1,2-Dichlo...   | 0.673          | 0.705 | 0.685 | 0.697 | 0.662 | 0.675 | 0.683 | 2.38  |
| 28) T  | Bromochloromet...   | 0.429          | 0.408 | 0.415 | 0.388 | 0.511 | 0.483 | 0.439 | 10.79 |
| 29) T  | Tetrahydrofuran     | 0.197          | 0.236 | 0.234 | 0.231 | 0.222 | 0.221 | 0.224 | 6.52  |
| 30) C  | Chloroform          | 1.025          | 1.222 | 1.154 | 1.142 | 1.086 | 1.099 | 1.121 | 6.02# |
| 31) T  | Cyclohexane         |                | 1.093 | 1.043 | 0.956 | 0.938 | 0.956 | 0.997 | 6.75  |
| 32) T  | 1,1,1-Trichlor...   | 0.980          | 1.032 | 1.073 | 1.046 | 0.991 | 1.000 | 1.021 | 3.53  |
| 33) S  | 1,2-Dichloroet...   |                | 0.771 | 0.722 | 0.708 | 0.721 | 0.689 | 0.722 | 4.20  |
| 34) I  | 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |       |
| 35) S  | Dibromofluorom...   |                | 0.353 | 0.336 | 0.326 | 0.344 | 0.334 | 0.338 | 3.07  |
| 36) T  | 1,1-Dichloropr...   | 0.474          | 0.477 | 0.468 | 0.471 | 0.451 | 0.476 | 0.469 | 2.02  |
| 37) T  | Ethyl Acetate       | 0.410          | 0.466 | 0.404 | 0.429 | 0.422 | 0.424 | 0.426 | 5.14  |
| 38) T  | Carbon Tetrach...   | 0.488          | 0.537 | 0.548 | 0.532 | 0.514 | 0.530 | 0.525 | 4.04  |
| 39) T  | Methylcyclohexane   | 0.371          | 0.458 | 0.487 | 0.495 | 0.509 | 0.546 | 0.478 | 12.46 |
| 40) TM | Benzene             | 1.540          | 1.546 | 1.507 | 1.509 | 1.448 | 1.494 | 1.507 | 2.35  |
| 41) T  | Methacrylonitrile   | 0.184          | 0.238 | 0.232 | 0.239 | 0.246 | 0.235 | 0.229 | 9.89  |
| 42) TM | 1,2-Dichloroet...   | 0.459          | 0.503 | 0.492 | 0.493 | 0.494 | 0.488 | 0.488 | 3.10  |
| 43) T  | Isopropyl Acetate   | 1.297          | 1.009 | 0.895 | 0.820 | 0.756 | 0.786 | 0.927 | 21.85 |
| 44) TM | Trichloroethene     | 0.387          | 0.341 | 0.338 | 0.345 | 0.335 | 0.339 | 0.348 | 5.66  |
| 45) C  | 1,2-Dichloropr...   | 0.330          | 0.373 | 0.357 | 0.358 | 0.348 | 0.356 | 0.354 | 3.95# |
| 46) T  | Dibromomethane      | 0.247          | 0.260 | 0.244 | 0.257 | 0.244 | 0.245 | 0.250 | 2.89  |
| 47) T  | Bromodichlorom...   | 0.530          | 0.529 | 0.522 | 0.526 | 0.521 | 0.528 | 0.526 | 0.70  |
| 48) T  | Methyl methacr...   | 0.277          | 0.335 | 0.336 | 0.339 | 0.346 | 0.355 | 0.331 | 8.32  |
| 49) T  | 1,4-Dioxane         | 0.005          | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 8.90  |
| 50) S  | Toluene-d8          |                | 1.217 | 1.231 | 1.216 | 1.303 | 1.267 | 1.247 | 3.02  |
| 51) T  | 4-Methyl-2-Pen...   | 0.344          | 0.412 | 0.417 | 0.416 | 0.423 | 0.424 | 0.406 | 7.59  |
| 52) CM | Toluene             | 0.757          | 0.891 | 0.902 | 0.919 | 0.899 | 0.923 | 0.882 | 7.07# |
| 53) T  | t-1,3-Dichloro...   | 0.555          | 0.547 | 0.532 | 0.538 | 0.543 | 0.552 | 0.544 | 1.60  |
| 54) T  | cis-1,3-Dichlo...   | 0.548          | 0.584 | 0.569 | 0.582 | 0.581 | 0.592 | 0.576 | 2.69  |
| 55) T  | 1,1,2-Trichlor...   | 0.309          | 0.342 | 0.342 | 0.334 | 0.329 | 0.336 | 0.332 | 3.72  |

|                                                  |    |                       |       |       |       |       |       |       |       |       |
|--------------------------------------------------|----|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Method Path : Z:\voasrv\HPCHEM1\MSVOA_N\methods\ |    |                       |       |       |       |       |       |       |       |       |
| Method File : 82N103024W.M                       |    |                       |       |       |       |       |       |       |       |       |
| 56)                                              | T  | Ethyl methacry...     | 0.371 | 0.449 | 0.477 | 0.495 | 0.539 | 0.550 | 0.480 | 13.66 |
| 57)                                              | T  | 1,3-Dichloropr...     | 0.527 | 0.598 | 0.573 | 0.579 | 0.565 | 0.577 | 0.570 | 4.16  |
| 58)                                              | T  | 2-Chloroethyl ...     | 0.167 | 0.202 | 0.214 | 0.229 | 0.262 | 0.275 | 0.225 | 17.62 |
| 59)                                              | T  | 2-Hexanone            | 0.256 | 0.294 | 0.297 | 0.301 | 0.312 | 0.314 | 0.296 | 7.11  |
| 60)                                              | T  | Dibromochlorom...     | 0.312 | 0.377 | 0.393 | 0.391 | 0.394 | 0.404 | 0.378 | 8.92  |
| 61)                                              | T  | 1,2-Dibromoethane     | 0.336 | 0.355 | 0.335 | 0.341 | 0.333 | 0.340 | 0.340 | 2.38  |
| 62)                                              | S  | 4-Bromofluorob...     | 0.454 | 0.451 | 0.450 | 0.493 | 0.481 | 0.466 |       | 4.26  |
| -----ISTD-----                                   |    |                       |       |       |       |       |       |       |       |       |
| 63)                                              | I  | Chlorobenzene-d5      |       |       |       |       |       |       |       |       |
| 64)                                              | T  | Tetrachloroethene     | 0.325 | 0.351 | 0.347 | 0.333 | 0.313 | 0.326 | 0.333 | 4.29  |
| 65)                                              | PM | Chlorobenzene         | 1.146 | 1.164 | 1.123 | 1.149 | 1.061 | 1.068 | 1.119 | 3.93  |
| 66)                                              | T  | 1,1,1,2-Tetrac...     | 0.399 | 0.404 | 0.390 | 0.392 | 0.375 | 0.375 | 0.389 | 3.01  |
| 67)                                              | C  | Ethyl Benzene         | 1.697 | 1.849 | 1.880 | 1.928 | 1.891 | 1.957 | 1.867 | 4.90# |
| 68)                                              | T  | m/p-Xylenes           | 0.654 | 0.683 | 0.701 | 0.737 | 0.728 | 0.737 | 0.707 | 4.76  |
| 69)                                              | T  | o-Xylene              | 0.550 | 0.645 | 0.679 | 0.701 | 0.690 | 0.703 | 0.661 | 8.89  |
| 70)                                              | T  | Styrene               | 1.050 | 1.093 | 1.144 | 1.206 | 1.205 | 1.223 | 1.154 | 6.11  |
| 71)                                              | P  | Bromoform             | 0.286 | 0.302 | 0.289 | 0.298 | 0.295 | 0.287 | 0.293 | 2.26  |
| -----ISTD-----                                   |    |                       |       |       |       |       |       |       |       |       |
| 72)                                              | I  | 1,4-Dichlorobenzen... |       |       |       |       |       |       |       |       |
| 73)                                              | T  | Isopropylbenzene      | 3.188 | 3.402 | 3.605 | 3.701 | 3.570 | 3.558 | 3.504 | 5.21  |
| 74)                                              | T  | N-amyl acetate        | 1.223 | 1.572 | 1.527 | 1.552 | 1.528 | 1.546 | 1.491 | 8.88  |
| 75)                                              | P  | 1,1,2,2-Tetrac...     | 1.222 | 1.317 | 1.190 | 1.163 | 1.073 | 1.052 | 1.170 | 8.39  |
| 76)                                              | T  | 1,2,3-Trichlor...     | 1.246 | 1.013 | 1.020 | 0.958 | 0.887 | 0.873 | 0.999 | 13.58 |
| 77)                                              | T  | Bromobenzene          | 1.114 | 0.931 | 0.943 | 0.921 | 0.883 | 0.860 | 0.942 | 9.52  |
| 78)                                              | T  | n-propylbenzene       | 3.621 | 4.041 | 4.188 | 4.316 | 4.236 | 4.233 | 4.106 | 6.19  |
| 79)                                              | T  | 2-Chlorotoluene       | 2.601 | 2.746 | 2.700 | 2.848 | 2.621 | 2.581 | 2.683 | 3.82  |
| 80)                                              | T  | 1,3,5-Trimethy...     | 2.418 | 2.765 | 3.038 | 3.099 | 3.068 | 3.037 | 2.904 | 9.19  |
| 81)                                              | T  | trans-1,4-Dich...     | 0.431 | 0.446 | 0.423 | 0.401 | 0.406 | 0.421 |       | 4.33  |
| 82)                                              | T  | 4-Chlorotoluene       | 3.049 | 2.848 | 2.822 | 2.838 | 2.716 | 2.667 | 2.823 | 4.70  |
| 83)                                              | T  | tert-Butylbenzene     | 1.893 | 2.271 | 2.461 | 2.648 | 2.531 | 2.617 | 2.403 | 11.81 |
| 84)                                              | T  | 1,2,4-Trimethy...     | 2.579 | 2.766 | 3.075 | 3.265 | 3.148 | 3.151 | 2.997 | 8.86  |
| 85)                                              | T  | sec-Butylbenzene      | 2.962 | 3.145 | 3.517 | 3.608 | 3.538 | 3.600 | 3.395 | 8.04  |
| 86)                                              | T  | p-Isopropyltol...     | 2.218 | 2.518 | 2.843 | 3.003 | 3.050 | 3.075 | 2.784 | 12.43 |
| 87)                                              | T  | 1,3-Dichlorobe...     | 2.264 | 1.884 | 1.802 | 1.770 | 1.668 | 1.642 | 1.838 | 12.33 |
| 88)                                              | T  | 1,4-Dichlorobe...     | 2.773 | 1.879 | 1.867 | 1.782 | 1.674 | 1.646 | 1.937 | 21.72 |
| 89)                                              | T  | n-Butylbenzene        | 2.747 | 2.454 | 2.457 | 2.623 | 2.619 | 2.728 | 2.605 | 4.88  |
| 90)                                              | T  | Hexachloroethane      | 0.681 | 0.626 | 0.633 | 0.617 | 0.589 | 0.578 | 0.621 | 5.88  |
| 91)                                              | T  | 1,2-Dichlorobe...     | 2.021 | 1.879 | 1.732 | 1.748 | 1.618 | 1.601 | 1.766 | 9.07  |
| 92)                                              | T  | 1,2-Dibromo-3-...     | 0.272 | 0.274 | 0.226 | 0.229 | 0.217 | 0.204 | 0.237 | 12.28 |
| 93)                                              | T  | 1,2,4-Trichlor...     | 1.353 | 0.956 | 0.881 | 0.895 | 0.865 | 0.852 | 0.967 | 19.90 |
| 94)                                              | T  | Hexachlorobuta...     | 0.551 | 0.438 | 0.403 | 0.426 | 0.369 | 0.359 | 0.425 | 16.33 |
| 95)                                              | T  | Naphthalene           | 3.355 | 2.788 | 2.710 | 2.953 | 2.780 | 2.778 | 2.894 | 8.29  |
| 96)                                              | T  | 1,2,3-Trichlor...     | 1.189 | 0.939 | 0.877 | 0.953 | 0.841 | 0.832 | 0.939 | 14.09 |

(#) = Out of Range

# 1,4-Dichlorobenzene

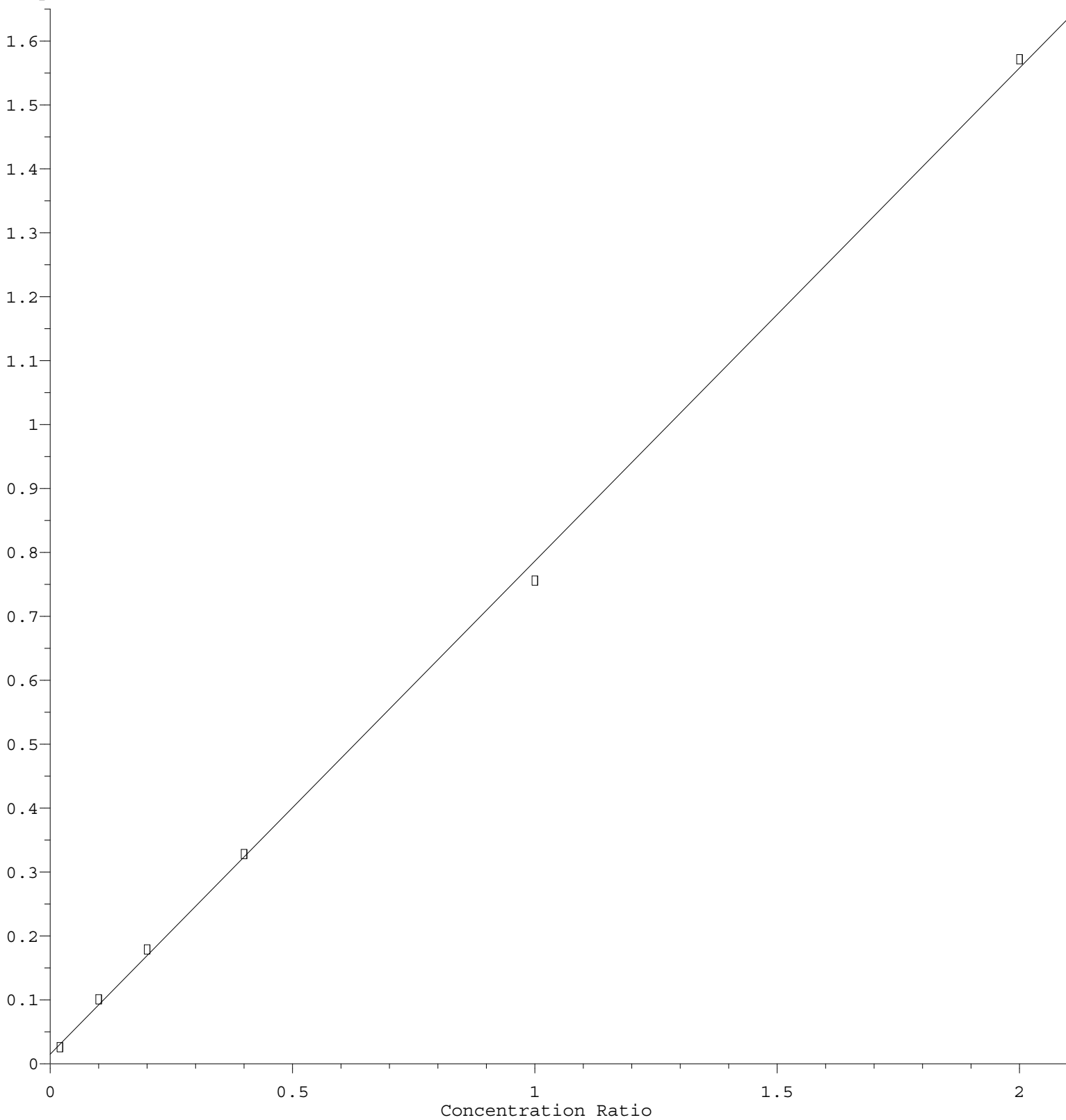
Response Ratio



$R = -2.647e-002 A^2 + 1.683e+000 A + 2.851e-002$   
 Coef of Det ( $r^2$ ) = 0.999927    Curve Fit: Quadratic  
 Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N103024W.M  
 Calibration Table Last Updated: Thu Oct 31 18:45:38 2024

# Isopropyl Acetate

Response Ratio



$$\text{Response} = 7.716\text{e-}001 * \text{Amt} + 1.519\text{e-}002$$

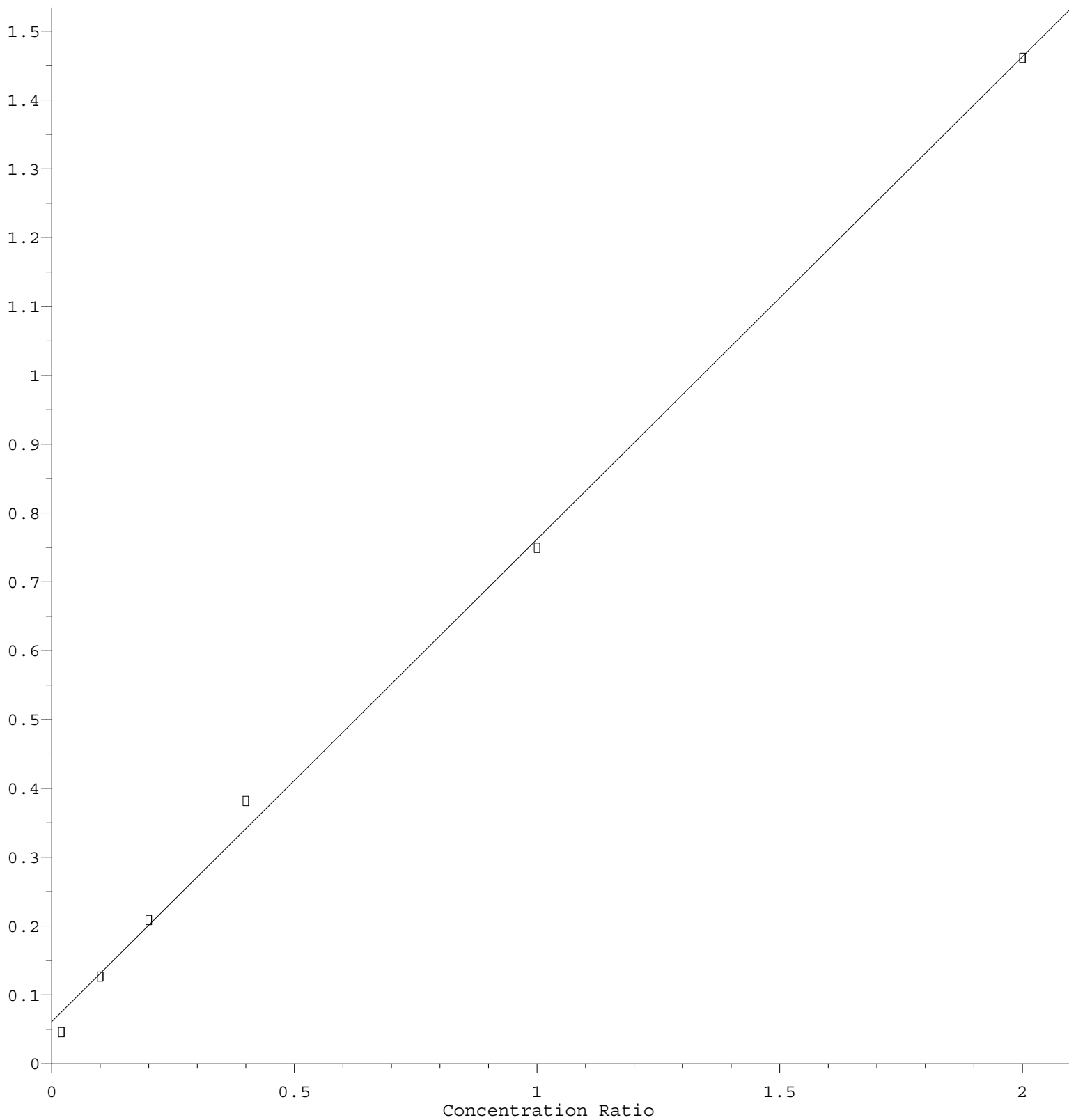
Coef of Det (r^2) = 0.999234 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N103024W.M

Calibration Table Last Updated: Thu Oct 31 18:45:38 2024

## Methyl Acetate

Response Ratio



$$\text{Response} = 7.012\text{e-}001 * \text{Amt} + 6.084\text{e-}002$$

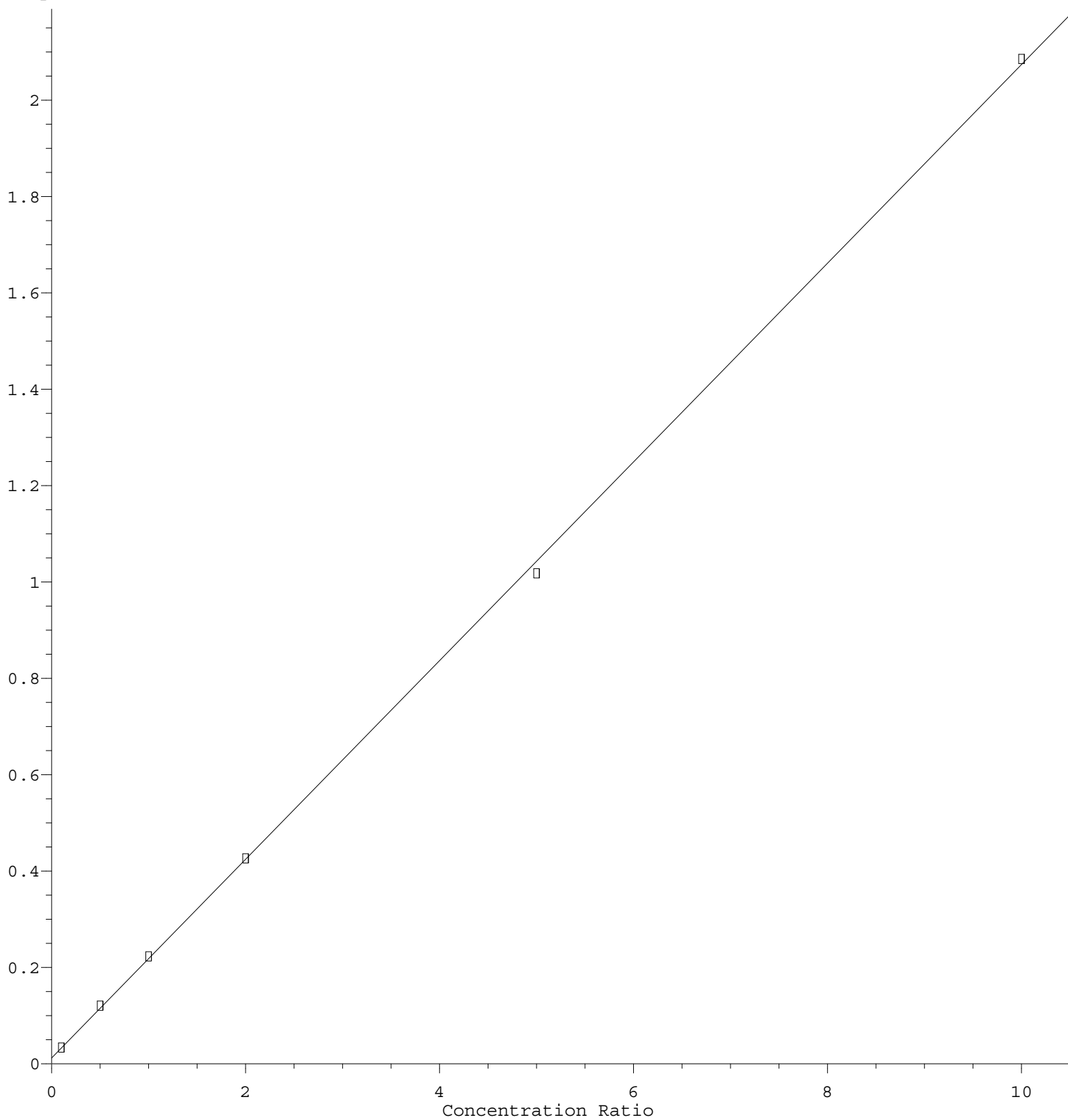
Coef of Det ( $r^2$ ) = 0.998099 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N103024W.M

Calibration Table Last Updated: Thu Oct 31 18:45:38 2024

# Acetone

Response Ratio



$$\text{Response} = 2.062\text{e-}001 * \text{Amt} + 1.190\text{e-}002$$

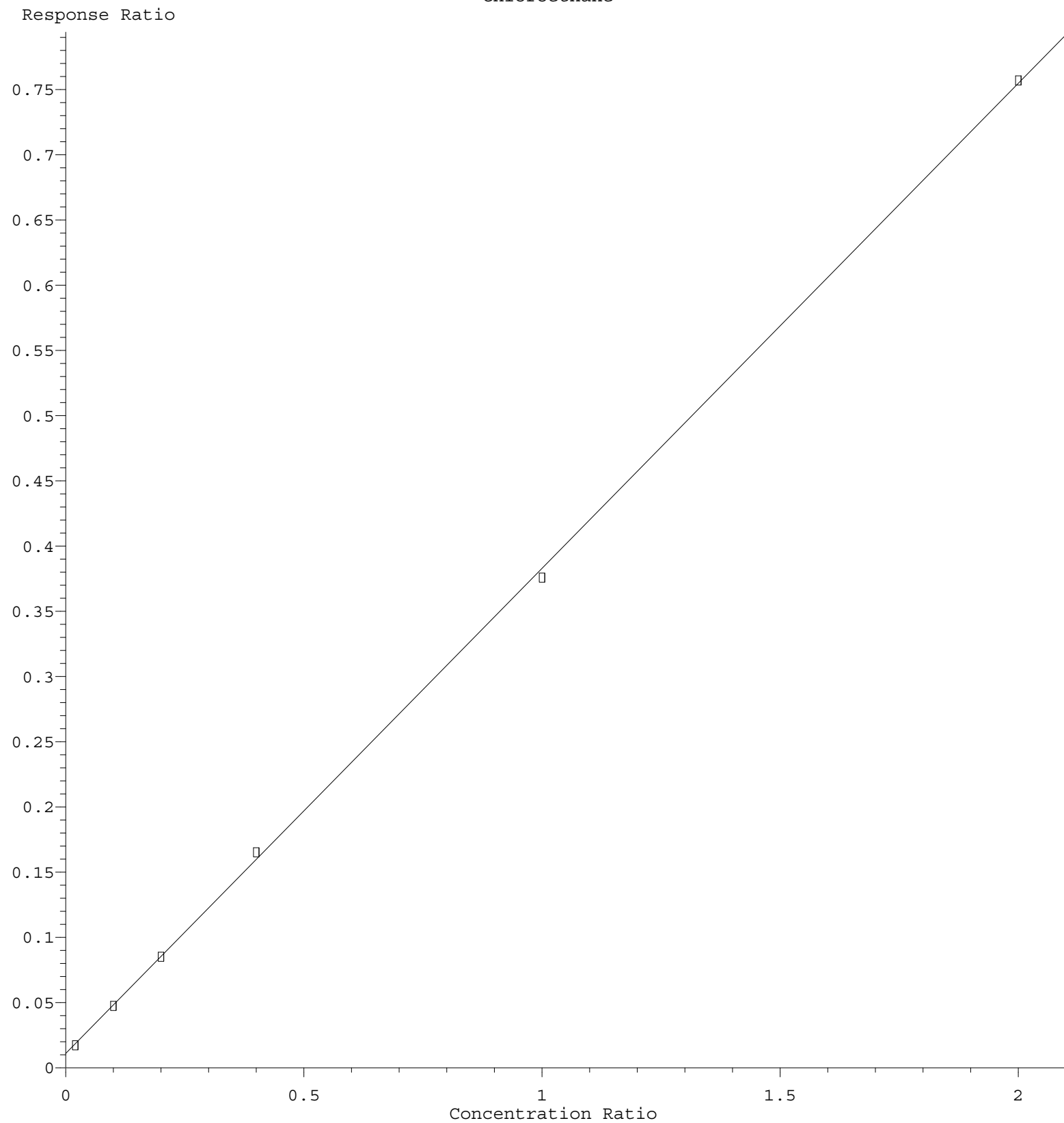
Coef of Det ( $r^2$ ) = 0.999735 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N103024W.M

Calibration Table Last Updated: Thu Oct 31 18:45:38 2024



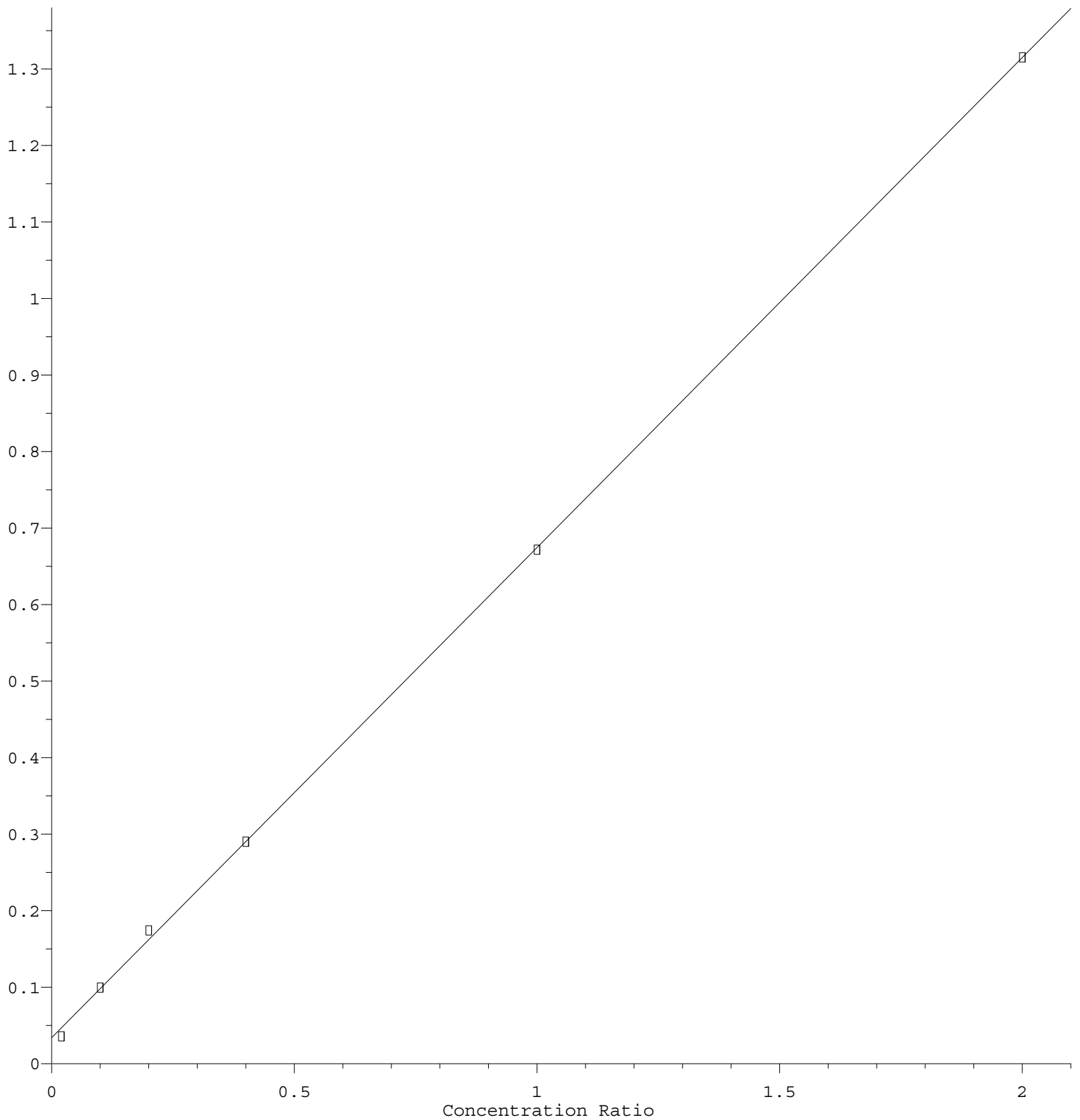
## Chloroethane



Response =  $3.720 \times 10^{-1} \times \text{Amt} + 1.067 \times 10^{-2}$   
Coef of Det ( $r^2$ ) = 0.999785    Curve Fit: Linear  
Method Name:    Z:\voasrv\HPCHEM1\MSVOA N\methods\82N103024W.M  
Calibration Table Last Updated: Thu Oct 31 18:45:38 2024

# Chloromethane

Response Ratio



$$\text{Response} = 6.405\text{e-}001 * \text{Amt} + 3.399\text{e-}002$$

Coef of Det ( $r^2$ ) = 0.999766 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA N\methods\82N103024W.M

Calibration Table Last Updated: Thu Oct 31 18:45:38 2024

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084570.D  
 Acq On : 30 Oct 2024 11:46  
 Operator : JC\MD  
 Sample : VSTDICC100  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 11/04/2024  
 Supervised By : Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:18:26 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:18:08 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 187429   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 309230   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 282514   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152  | 142702   | 50.000 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |           |
|---------------------------|--------|-------|----------|----------|------|-----------|
| 33) 1,2-Dichloroethane-d4 | 8.577  | 65    | 258269   | 95.404   | ug/l | 0.00      |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | =    | 190.800%# |
| 35) Dibromofluoromethane  | 8.165  | 113   | 206417   | 98.617   | ug/l | 0.00      |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | =    | 197.240%# |
| 50) Toluene-d8            | 10.565 | 98    | 783727   | 101.646  | ug/l | 0.00      |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | =    | 203.300%# |
| 62) 4-Bromofluorobenzene  | 12.847 | 95    | 297647   | 103.292  | ug/l | 0.00      |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | =    | 206.580%# |

## Target Compounds

|                              |       |     |         |         |      | Qvalue |
|------------------------------|-------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 214094  | 99.364  | ug/l | 93     |
| 3) Chloromethane             | 2.359 | 50  | 246492  | 100.015 | ug/l | 97     |
| 4) Vinyl Chloride            | 2.512 | 62  | 229760  | 99.144  | ug/l | 99     |
| 5) Bromomethane              | 2.901 | 94  | 109436  | 89.128  | ug/l | 97     |
| 6) Chloroethane              | 3.071 | 64  | 141883  | 100.310 | ug/l | 98     |
| 7) Trichlorofluoromethane    | 3.465 | 101 | 363937  | 95.335  | ug/l | 100    |
| 8) Diethyl Ether             | 3.953 | 74  | 131399  | 97.575  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluo... | 4.347 | 101 | 212244  | 98.394  | ug/l | 99     |
| 10) Methyl Iodide            | 4.577 | 142 | 272990  | 94.692  | ug/l | 96     |
| 11) Tert butyl alcohol       | 5.547 | 59  | 153595  | 429.840 | ug/l | 100    |
| 12) 1,1-Dichloroethene       | 4.324 | 96  | 205332  | 96.200  | ug/l | 98     |
| 13) Acrolein                 | 4.171 | 56  | 161607  | 453.545 | ug/l | 100    |
| 14) Allyl chloride           | 5.012 | 41  | 350014  | 101.116 | ug/l | 92     |
| 15) Acrylonitrile            | 5.712 | 53  | 494070  | 477.613 | ug/l | 100    |
| 16) Acetone                  | 4.424 | 43  | 390888  | 502.753 | ug/l | 98     |
| 17) Carbon Disulfide         | 4.700 | 76  | 601202  | 91.464  | ug/l | 99     |
| 18) Methyl Acetate           | 5.018 | 43  | 273870  | 99.857  | ug/l | 100    |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 664800  | 101.618 | ug/l | 99     |
| 20) Methylene Chloride       | 5.271 | 84  | 226231  | 95.017  | ug/l | 90     |
| 21) trans-1,2-Dichloroethene | 5.777 | 96  | 211649  | 96.569  | ug/l | 93     |
| 22) Diisopropyl ether        | 6.665 | 45  | 696527  | 101.268 | ug/l | 99     |
| 23) Vinyl Acetate            | 6.600 | 43  | 2441301 | 514.697 | ug/l | 99     |
| 24) 1,1-Dichloroethane       | 6.559 | 63  | 399999  | 96.866  | ug/l | 98     |
| 25) 2-Butanone               | 7.483 | 43  | 591863  | 468.634 | ug/l | 98     |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 362927  | 100.979 | ug/l | 99     |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 252932  | 98.835  | ug/l | 96     |
| 28) Bromochloromethane       | 7.812 | 49  | 180881  | 109.944 | ug/l | 96     |
| 29) Tetrahydrofuran          | 7.835 | 42  | 415033  | 495.347 | ug/l | 97     |
| 30) Chloroform               | 7.959 | 83  | 412084  | 98.045  | ug/l | 100    |
| 31) Cyclohexane              | 8.253 | 56  | 358350  | 95.881  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 374940  | 98.012  | ug/l | 98     |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 294131  | 101.323 | ug/l | 99     |
| 37) Ethyl Acetate            | 7.559 | 43  | 262200  | 99.553  | ug/l | 98     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 327651  | 100.981 | ug/l | 98     |
| 39) Methylcyclohexane        | 9.600 | 83  | 337677  | 114.344 | ug/l | 97     |
| 40) Benzene                  | 8.600 | 78  | 924038  | 99.119  | ug/l | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084570.D  
 Acq On : 30 Oct 2024 11:46  
 Operator : JC\MD  
 Sample : VSTDICC100  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
 Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:18:26 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:18:08 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 145041   | 102.406  | ug/l   | 95       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 301932   | 100.005  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.688  | 43   | 485962   | 100.857  | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 209438   | 97.413   | ug/l   | 98       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 220258   | 100.718  | ug/l   | 95       |
| 46) Dibromomethane            | 9.706  | 93   | 151661   | 98.281   | ug/l   | 98       |
| 47) Bromodichloromethane      | 9.888  | 83   | 326466   | 100.364  | ug/l # | 96       |
| 48) Methyl methacrylate       | 9.677  | 41   | 219838   | 107.249  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 76189    | 2097.505 | ug/l # | 80       |
| 51) 4-Methyl-2-Pentanone      | 10.447 | 43   | 1312148  | 522.607  | ug/l   | 99       |
| 52) Toluene                   | 10.629 | 92   | 570832   | 104.696  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 341196   | 101.334  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 366358   | 102.804  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.018 | 97   | 207689   | 101.124  | ug/l   | 97       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 340367   | 114.573  | ug/l   | 97       |
| 57) 1,3-Dichloropropane       | 11.165 | 76   | 357131   | 101.320  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 849817   | 611.330  | ug/l   | 98       |
| 59) 2-Hexanone                | 11.194 | 43   | 971064   | 531.346  | ug/l   | 97       |
| 60) Dibromochloromethane      | 11.359 | 129  | 249733   | 106.691  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.471 | 107  | 210043   | 99.870   | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.100 | 164  | 184478   | 98.169   | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 603595   | 95.500   | ug/l   | 96       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 212055   | 96.458   | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.965 | 91   | 1106035  | 104.837  | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.070 | 106  | 832448   | 208.419  | ug/l   | 99       |
| 69) o-Xylene                  | 12.400 | 106  | 397449   | 106.372  | ug/l   | 100      |
| 70) Styrene                   | 12.412 | 104  | 691175   | 106.042  | ug/l   | 98       |
| 71) Bromoform                 | 12.582 | 173  | 162189   | 98.044   | ug/l # | 97       |
| 73) Isopropylbenzene          | 12.694 | 105  | 1015352  | 101.533  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.494 | 43   | 441232   | 103.666  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 300162   | 89.924   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 249062m  | 88.446   | ug/l   |          |
| 77) Bromobenzene              | 12.982 | 156  | 245558   | 91.341   | ug/l   | 94       |
| 78) n-propylbenzene           | 13.035 | 91   | 1208185  | 103.100  | ug/l   | 98       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 736738   | 96.217   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 866736   | 104.573  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 115847   | 96.347   | ug/l   | 98       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 761196   | 94.462   | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 746926   | 108.888  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 899374   | 105.136  | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.617 | 105  | 1027413  | 106.032  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 877717   | 110.451  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.735 | 146  | 468620   | 89.320   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 469714   | 100.067  | ug/l   | 98       |
| 89) n-Butylbenzene            | 14.053 | 91   | 778487   | 104.727  | ug/l   | 100      |
| 90) Hexachloroethane          | 14.335 | 117  | 165030   | 93.123   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 456925   | 90.631   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 58247    | 86.136   | ug/l   | 97       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 243087   | 88.091   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 102558   | 84.631   | ug/l   | 99       |
| 95) Naphthalene               | 15.641 | 128  | 792903   | 95.997   | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.841 | 180  | 237515   | 88.667   | ug/l   | 98       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084570.D  
Acq On : 30 Oct 2024 11:46  
Operator : JC\MD  
Sample : VSTDICC100  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC100

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:18:26 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:18:08 2024  
Response via : Initial Calibration

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084570.D  
Acq On : 30 Oct 2024 11:46  
Operator : JC\MD  
Sample : VSTDICC100  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

## Instrument :

MSVOA\_N

## ClientSampleId :

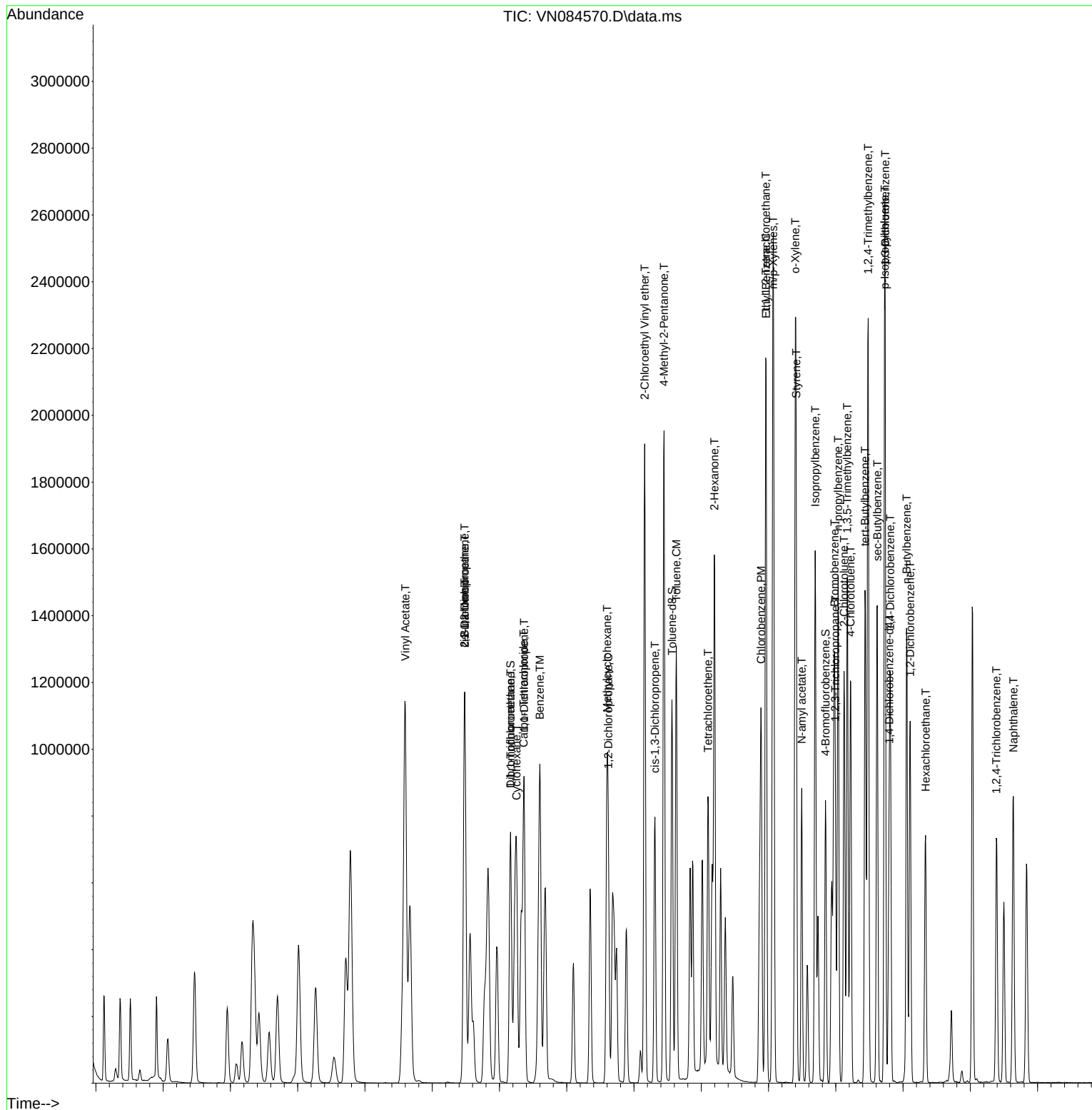
VSTDICC100

## Manual Integrations

## APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:18:26 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:18:08 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084571.D  
 Acq On : 30 Oct 2024 12:09  
 Operator : JC\MD  
 Sample : VSTDICCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 11/04/2024  
 Supervised By : Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:18:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:18:08 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 186594   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 311554   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 279228   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 138307   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 134521   | 49.914   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 99.820%  |
| 35) Dibromofluoromethane    | 8.165  | 113   | 107131   | 50.801   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 101.600% |
| 50) Toluene-d8              | 10.565 | 98    | 405874   | 52.247   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 104.500% |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 153622   | 52.913   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 105.820% |

|                              |       |     |         |         |        |     |
|------------------------------|-------|-----|---------|---------|--------|-----|
| Target Compounds             |       |     |         |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 103092  | 48.061  | ug/l   | 97  |
| 3) Chloromethane             | 2.365 | 50  | 125344  | 49.788  | ug/l   | 95  |
| 4) Vinyl Chloride            | 2.512 | 62  | 112961  | 48.962  | ug/l   | 95  |
| 5) Bromomethane              | 2.901 | 94  | 55194   | 45.153  | ug/l   | 100 |
| 6) Chloroethane              | 3.071 | 64  | 70126   | 49.078  | ug/l   | 96  |
| 7) Trichlorofluoromethane    | 3.471 | 101 | 178947  | 47.086  | ug/l   | 97  |
| 8) Diethyl Ether             | 3.953 | 74  | 65946   | 49.190  | ug/l   | 99  |
| 9) 1,1,2-Trichlorotrifluo... | 4.353 | 101 | 103864  | 48.366  | ug/l   | 98  |
| 10) Methyl Iodide            | 4.583 | 142 | 137274  | 47.829  | ug/l   | 97  |
| 11) Tert butyl alcohol       | 5.536 | 59  | 80598   | 226.565 | ug/l   | 100 |
| 12) 1,1-Dichloroethene       | 4.324 | 96  | 100445  | 47.270  | ug/l   | 96  |
| 13) Acrolein                 | 4.171 | 56  | 82129   | 231.524 | ug/l   | 99  |
| 14) Allyl chloride           | 5.012 | 41  | 171045  | 49.635  | ug/l   | 92  |
| 15) Acrylonitrile            | 5.718 | 53  | 252853  | 245.525 | ug/l   | 98  |
| 16) Acetone                  | 4.424 | 43  | 189949  | 243.925 | ug/l   | 99  |
| 17) Carbon Disulfide         | 4.700 | 76  | 299041  | 45.698  | ug/l   | 99  |
| 18) Methyl Acetate           | 5.024 | 43  | 139826  | 49.097  | ug/l   | 100 |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 328099  | 50.376  | ug/l   | 97  |
| 20) Methylene Chloride       | 5.271 | 84  | 112282  | 47.370  | ug/l   | 92  |
| 21) trans-1,2-Dichloroethene | 5.777 | 96  | 105050  | 48.146  | ug/l   | 96  |
| 22) Diisopropyl ether        | 6.671 | 45  | 346126  | 50.549  | ug/l   | 98  |
| 23) Vinyl Acetate            | 6.600 | 43  | 1212022 | 256.673 | ug/l   | 99  |
| 24) 1,1-Dichloroethane       | 6.559 | 63  | 198817  | 48.362  | ug/l   | 100 |
| 25) 2-Butanone               | 7.483 | 43  | 294207  | 233.994 | ug/l   | 98  |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 175511  | 49.052  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 123436  | 48.450  | ug/l   | 97  |
| 28) Bromochloromethane       | 7.812 | 49  | 95269   | 58.166  | ug/l   | 95  |
| 29) Tetrahydrofuran          | 7.835 | 42  | 206980  | 248.139 | ug/l   | 97  |
| 30) Chloroform               | 7.965 | 83  | 202589  | 48.417  | ug/l   | 98  |
| 31) Cyclohexane              | 8.253 | 56  | 175038  | 47.043  | ug/l   | 97  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 184986  | 48.573  | ug/l   | 98  |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 140593  | 48.071  | ug/l   | 99  |
| 37) Ethyl Acetate            | 7.553 | 43  | 131332  | 49.493  | ug/l   | 99  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 160134  | 48.985  | ug/l   | 97  |
| 39) Methylcyclohexane        | 9.600 | 83  | 158489  | 53.267  | ug/l   | 99  |
| 40) Benzene                  | 8.600 | 78  | 451074  | 48.024  | ug/l   | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084571.D  
 Acq On : 30 Oct 2024 12:09  
 Operator : JC\MD  
 Sample : VSTDICCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
 Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:18:47 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:18:08 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 76791    | 53.814   | ug/l   | 97       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 153960   | 50.614   | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.688  | 43   | 235517   | 48.004   | ug/l   | 99       |
| 44) Trichloroethene           | 9.353  | 130  | 104498   | 48.241   | ug/l   | 98       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 108302   | 49.154   | ug/l   | 95       |
| 46) Dibromomethane            | 9.706  | 93   | 76019    | 48.895   | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.888  | 83   | 162307   | 49.525   | ug/l   | 97       |
| 48) Methyl methacrylate       | 9.677  | 41   | 107828   | 52.212   | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 37719    | 1030.669 | ug/l # | 82       |
| 51) 4-Methyl-2-Pentanone      | 10.447 | 43   | 658351   | 260.254  | ug/l   | 98       |
| 52) Toluene                   | 10.629 | 92   | 280034   | 50.978   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 169085   | 49.843   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 180909   | 50.386   | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane     | 11.018 | 97   | 102401   | 49.487   | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 168060   | 56.150   | ug/l   | 96       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 175929   | 49.539   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 407857   | 291.210  | ug/l   | 97       |
| 59) 2-Hexanone                | 11.194 | 43   | 485391   | 263.615  | ug/l   | 98       |
| 60) Dibromochloromethane      | 11.359 | 129  | 122816   | 52.078   | ug/l   | 98       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 103901   | 49.034   | ug/l   | 98       |
| 64) Tetrachloroethene         | 11.100 | 164  | 87457    | 47.088   | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 296199   | 47.416   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 104844   | 48.252   | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.965 | 91   | 528107   | 50.646   | ug/l   | 100      |
| 68) m/p-Xylenes               | 12.070 | 106  | 406816   | 103.053  | ug/l   | 98       |
| 69) o-Xylene                  | 12.394 | 106  | 192710   | 52.183   | ug/l   | 99       |
| 70) Styrene                   | 12.412 | 104  | 336570   | 52.245   | ug/l   | 99       |
| 71) Bromoform                 | 12.576 | 173  | 82245    | 50.303   | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 493742   | 50.942   | ug/l   | 99       |
| 74) N-ethyl acetate           | 12.494 | 43   | 211326   | 51.228   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 148441   | 45.884   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 122649m  | 44.939   | ug/l   |          |
| 77) Bromobenzene              | 12.982 | 156  | 122062   | 46.847   | ug/l   | 95       |
| 78) n-propylbenzene           | 13.035 | 91   | 585903   | 51.587   | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 362526   | 48.850   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 424332   | 52.823   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 55485    | 47.612   | ug/l   | 92       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 375636   | 48.097   | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 350031   | 52.649   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 435421   | 52.518   | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 489305   | 52.102   | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 421834   | 54.770   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 230686   | 45.366   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 231568   | 49.658   | ug/l   | 98       |
| 89) n-Butylbenzene            | 14.053 | 91   | 362215   | 50.276   | ug/l   | 99       |
| 90) Hexachloroethane          | 14.335 | 117  | 81515    | 47.459   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 223772   | 45.796   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.711 | 75   | 29987    | 45.754   | ug/l   | 98       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 119579   | 44.711   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 51033    | 43.451   | ug/l   | 98       |
| 95) Naphthalene               | 15.635 | 128  | 384553   | 48.037   | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 116341   | 44.812   | ug/l   | 99       |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084571.D  
Acq On : 30 Oct 2024 12:09  
Operator : JC\MD  
Sample : VSTDICCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICCC050

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:18:47 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:18:08 2024  
Response via : Initial Calibration

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

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

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VSTDICCC050

## Manual Integrations APPROVED

TIC: VN084571.D\data.ms

Abundance

Time-->

Labeled compounds (from left to right):

- Methyl tert-butyl Ether, T
- Vinyl Acetate, T
- 2-Ethyl-1-hexanol, T
- Pentamethylsilane, S
- Dibutyltin dichloride, T
- 1,2-Dichloropropane, T
- Benzene, TM
- 1,4-Difluorobenzene, I
- 1,2-Dichloroethane, T
- cis-1,3-Dichloropropene, T
- Toluene, CM
- 2-Hexanone, T
- Tetrachloroethene, T
- Chlorobenzene, TM
- Ethyl Benzoate, T
- N-amyl acetate, T
- Styrene, T
- Isopropylbenzene, T
- 4-Bromofluorobenzene, S
- 1,2,3-Trichlorobenzene, T
- 1,2,4-Trichlorobenzene, T
- sec-Butylbenzene, T
- tert-Butylbenzene, T
- 1,4-Dichlorobenzene, T
- Hexachloroethane, T
- 1,2-Dichlorobenzene, T
- 1,2,4-Trichlorobenzene, T
- Naphthalene, T

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084572.D  
 Acq On : 30 Oct 2024 12:33  
 Operator : JC\MD  
 Sample : VSTDICC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC020

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
 Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:07 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:18:08 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 187576   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 319890   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 275857   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 130374   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.571  | 65    | 53102    | 19.600   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 39.200%# |
| 35) Dibromofluoromethane    | 8.165  | 113   | 41686    | 19.252   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 38.500%# |
| 50) Toluene-d8              | 10.565 | 98    | 155563   | 19.504   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 39.000%# |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 57622    | 19.330   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 38.660%# |

|                              |       |     |        |         |        |     |
|------------------------------|-------|-----|--------|---------|--------|-----|
| Target Compounds             |       |     |        |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 41443  | 19.219  | ug/l   | 99  |
| 3) Chloromethane             | 2.359 | 50  | 54414  | 19.993  | ug/l   | 97  |
| 4) Vinyl Chloride            | 2.512 | 62  | 46710  | 20.140  | ug/l   | 93  |
| 5) Bromomethane              | 2.901 | 94  | 23244  | 18.916  | ug/l   | 100 |
| 6) Chloroethane              | 3.042 | 64  | 30992  | 20.772  | ug/l   | 94  |
| 7) Trichlorofluoromethane    | 3.442 | 101 | 76339  | 19.982  | ug/l   | 96  |
| 8) Diethyl Ether             | 3.948 | 74  | 26904  | 19.963  | ug/l   | 96  |
| 9) 1,1,2-Trichlorotrifluo... | 4.342 | 101 | 42830  | 19.840  | ug/l   | 99  |
| 10) Methyl Iodide            | 4.565 | 142 | 57315  | 19.865  | ug/l   | 96  |
| 11) Tert butyl alcohol       | 5.559 | 59  | 33927  | 94.871  | ug/l   | 99  |
| 12) 1,1-Dichloroethene       | 4.318 | 96  | 41980  | 19.653  | ug/l   | 89  |
| 13) Acrolein                 | 4.171 | 56  | 38007  | 106.582 | ug/l   | 96  |
| 14) Allyl chloride           | 5.006 | 41  | 70420  | 20.328  | ug/l   | 92  |
| 15) Acrylonitrile            | 5.718 | 53  | 105912 | 102.304 | ug/l   | 97  |
| 16) Acetone                  | 4.430 | 43  | 79971  | 100.481 | ug/l   | 99  |
| 17) Carbon Disulfide         | 4.689 | 76  | 127521 | 19.385  | ug/l   | 98  |
| 18) Methyl Acetate           | 5.024 | 43  | 71604  | 22.882  | ug/l   | 98  |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 135170 | 20.645  | ug/l   | 100 |
| 20) Methylene Chloride       | 5.271 | 84  | 47467  | 19.921  | ug/l   | 88  |
| 21) trans-1,2-Dichloroethene | 5.771 | 96  | 44697  | 20.378  | ug/l   | 93  |
| 22) Diisopropyl ether        | 6.671 | 45  | 144115 | 20.937  | ug/l   | 97  |
| 23) Vinyl Acetate            | 6.594 | 43  | 490034 | 103.232 | ug/l   | 100 |
| 24) 1,1-Dichloroethane       | 6.559 | 63  | 83555  | 20.218  | ug/l   | 97  |
| 25) 2-Butanone               | 7.483 | 43  | 130541 | 103.281 | ug/l   | 99  |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 73066  | 20.313  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 52279  | 20.412  | ug/l   | 97  |
| 28) Bromochloromethane       | 7.806 | 49  | 29146  | 17.702  | ug/l   | 91  |
| 29) Tetrahydrofuran          | 7.836 | 42  | 86837  | 103.560 | ug/l   | 97  |
| 30) Chloroform               | 7.959 | 83  | 85675  | 20.368  | ug/l   | 100 |
| 31) Cyclohexane              | 8.247 | 56  | 71698  | 19.169  | ug/l   | 96  |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 78458  | 20.493  | ug/l   | 97  |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 60208  | 20.050  | ug/l   | 99  |
| 37) Ethyl Acetate            | 7.559 | 43  | 54942  | 20.165  | ug/l   | 97  |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 68076  | 20.282  | ug/l   | 98  |
| 39) Methylcyclohexane        | 9.600 | 83  | 63305  | 20.722  | ug/l   | 93  |
| 40) Benzene                  | 8.600 | 78  | 193129 | 20.026  | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084572.D  
 Acq On : 30 Oct 2024 12:33  
 Operator : JC\MD  
 Sample : VSTDICC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC020

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 11/04/2024  
 Supervised By : Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:07 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:18:08 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.771  | 41   | 30596    | 20.882  | ug/l   | 97       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 63026    | 20.180  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.688  | 43   | 104951   | 20.277  | ug/l   | 98       |
| 44) Trichloroethene           | 9.347  | 130  | 44176    | 19.862  | ug/l   | 99       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 45764    | 20.229  | ug/l   | 93       |
| 46) Dibromomethane            | 9.706  | 93   | 32857    | 20.583  | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.888  | 83   | 67288    | 19.997  | ug/l # | 98       |
| 48) Methyl methacrylate       | 9.682  | 41   | 43398    | 20.466  | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.700  | 88   | 15417    | 410.291 | ug/l # | 79       |
| 51) 4-Methyl-2-Pentanone      | 10.447 | 43   | 266010   | 102.417 | ug/l   | 100      |
| 52) Toluene                   | 10.629 | 92   | 117530   | 20.838  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 68847    | 19.766  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 74498    | 20.208  | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 42791    | 20.141  | ug/l   | 95       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 63347    | 20.613  | ug/l   | 96       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 74082    | 20.317  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 146372   | 101.786 | ug/l   | 98       |
| 59) 2-Hexanone                | 11.194 | 43   | 192335   | 101.735 | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.359 | 129  | 50039    | 20.665  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 43666    | 20.070  | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.106 | 164  | 36798    | 20.054  | ug/l   | 92       |
| 65) Chlorobenzene             | 11.888 | 112  | 126753   | 20.539  | ug/l   | 96       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 43201    | 20.125  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.965 | 91   | 212737   | 20.651  | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.071 | 106  | 162754   | 41.732  | ug/l   | 99       |
| 69) o-Xylene                  | 12.400 | 106  | 77396    | 21.214  | ug/l   | 99       |
| 70) Styrene                   | 12.412 | 104  | 133059   | 20.907  | ug/l   | 96       |
| 71) Bromoform                 | 12.576 | 173  | 32901    | 20.369  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 193023   | 21.127  | ug/l   | 100      |
| 74) N-ethyl acetate           | 12.494 | 43   | 80939    | 20.815  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 60645    | 19.886  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 49947m   | 19.414  | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 48017    | 19.550  | ug/l   | 97       |
| 78) n-propylbenzene           | 13.035 | 91   | 225085   | 21.024  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 148533   | 21.233  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 161619   | 21.343  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 22047    | 20.070  | ug/l # | 85       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 147989   | 20.102  | ug/l   | 100      |
| 83) tert-Butylbenzene         | 13.435 | 119  | 138079   | 22.033  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 170246   | 21.783  | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.618 | 105  | 188158   | 21.255  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 156598   | 21.569  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 92310    | 19.258  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 92940    | 20.458  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 136771   | 20.139  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.329 | 117  | 32199    | 19.887  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 91138    | 19.787  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 11962    | 19.362  | ug/l   | 96       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 46698    | 18.523  | ug/l   | 96       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 22216    | 20.066  | ug/l   | 96       |
| 95) Naphthalene               | 15.635 | 128  | 153972   | 20.404  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 49699    | 20.308  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084572.D  
Acq On : 30 Oct 2024 12:33  
Operator : JC\MD  
Sample : VSTDICC020  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC020

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:07 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:18:08 2024  
Response via : Initial Calibration

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

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

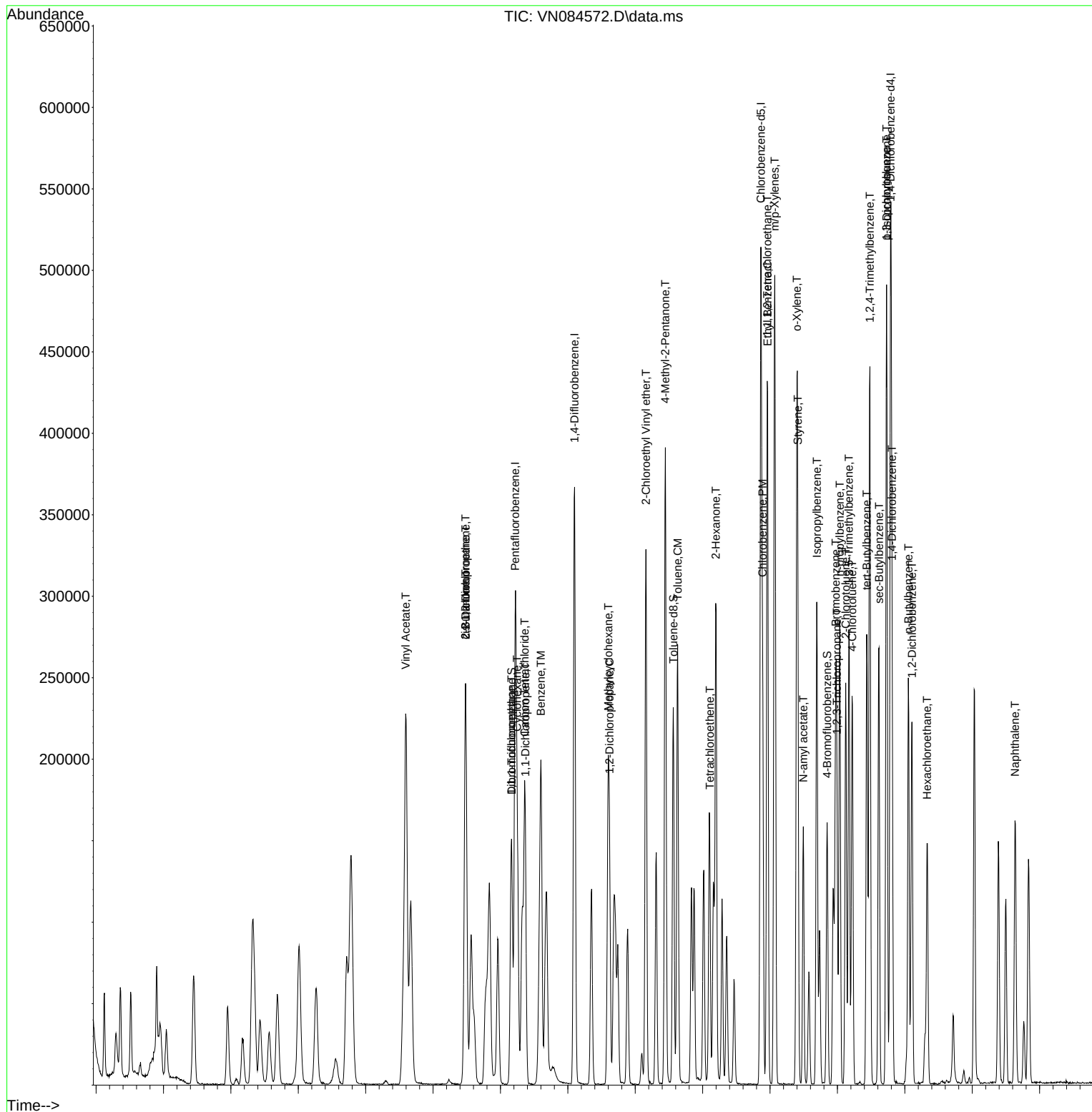
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN103024\  
Data File : VN084572.D  
Acq On    : 30 Oct 2024 12:33  
Operator  : JC\MD  
Sample    : VSTDICC020  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 1 Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VSTDICC020

## Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:07 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:18:08 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084573.D  
 Acq On : 30 Oct 2024 12:57  
 Operator : JC\MD  
 Sample : VSTDICC010  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC010

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
 Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:25 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:18:08 2024  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response   | Conc     | Units  | Dev(Min) |
|------------------------------|----------------|------|------------|----------|--------|----------|
| -----                        |                |      |            |          |        |          |
| Internal Standards           |                |      |            |          |        |          |
| 1) Pentafluorobenzene        | 8.224          | 168  | 179863     | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene      | 9.100          | 114  | 312244     | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5         | 11.865         | 117  | 270408     | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4   | 13.788         | 152  | 127178     | 50.000   | ug/l   | 0.00     |
|                              |                |      |            |          |        |          |
| System Monitoring Compounds  |                |      |            |          |        |          |
| 33) 1,2-Dichloroethane-d4    | 8.583          | 65   | 25986      | 10.003   | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 74 - 125 |      | Recovery = | 20.000%# |        |          |
| 35) Dibromofluoromethane     | 8.159          | 113  | 20969      | 9.921    | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 75 - 124 |      | Recovery = | 19.840%# |        |          |
| 50) Toluene-d8               | 10.565         | 98   | 76892      | 9.876    | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 86 - 113 |      | Recovery = | 19.760%# |        |          |
| 62) 4-Bromofluorobenzene     | 12.847         | 95   | 28191      | 9.689    | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 77 - 121 |      | Recovery = | 19.380%# |        |          |
|                              |                |      |            |          |        |          |
| Target Compounds             |                |      |            |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.124          | 85   | 21501      | 10.399   | ug/l   | 96       |
| 3) Chloromethane             | 2.359          | 50   | 31342      | 10.950   | ug/l   | 98       |
| 4) Vinyl Chloride            | 2.512          | 62   | 22896      | 10.295   | ug/l   | 93       |
| 5) Bromomethane              | 2.901          | 94   | 12071      | 10.245   | ug/l   | 95       |
| 6) Chloroethane              | 3.059          | 64   | 15315      | 10.010   | ug/l # | 83       |
| 7) Trichlorofluoromethane    | 3.459          | 101  | 36747      | 10.031   | ug/l   | 99       |
| 8) Diethyl Ether             | 3.953          | 74   | 13090      | 10.129   | ug/l   | 100      |
| 9) 1,1,2-Trichlorotrifluo... | 4.353          | 101  | 21028      | 10.158   | ug/l   | 98       |
| 10) Methyl Iodide            | 4.577          | 142  | 28795      | 10.408   | ug/l   | 97       |
| 11) Tert butyl alcohol       | 5.542          | 59   | 17899      | 52.198   | ug/l # | 85       |
| 12) 1,1-Dichloroethene       | 4.324          | 96   | 20669      | 10.091   | ug/l   | 87       |
| 13) Acrolein                 | 4.177          | 56   | 17284      | 50.547   | ug/l   | 99       |
| 14) Allyl chloride           | 5.012          | 41   | 33287      | 10.021   | ug/l   | 93       |
| 15) Acrylonitrile            | 5.718          | 53   | 50731      | 51.104   | ug/l   | 98       |
| 16) Acetone                  | 4.430          | 43   | 40100      | 51.168   | ug/l   | 93       |
| 17) Carbon Disulfide         | 4.695          | 76   | 61652      | 9.774    | ug/l   | 97       |
| 18) Methyl Acetate           | 5.030          | 43   | 37538      | 10.544   | ug/l   | 100      |
| 19) Methyl tert-butyl Ether  | 5.789          | 73   | 64007      | 10.195   | ug/l   | 97       |
| 20) Methylene Chloride       | 5.265          | 84   | 23684      | 10.366   | ug/l   | 94       |
| 21) trans-1,2-Dichloroethene | 5.771          | 96   | 21581      | 10.261   | ug/l   | 84       |
| 22) Diisopropyl ether        | 6.671          | 45   | 68672      | 10.404   | ug/l # | 97       |
| 23) Vinyl Acetate            | 6.600          | 43   | 233407     | 51.279   | ug/l   | 99       |
| 24) 1,1-Dichloroethane       | 6.565          | 63   | 40556      | 10.234   | ug/l # | 95       |
| 25) 2-Butanone               | 7.483          | 43   | 60876      | 50.229   | ug/l   | 96       |
| 26) 2,2-Dichloropropane      | 7.483          | 77   | 35189      | 10.203   | ug/l   | 100      |
| 27) cis-1,2-Dichloroethene   | 7.483          | 96   | 24626      | 10.028   | ug/l   | 99       |
| 28) Bromochloromethane       | 7.806          | 49   | 14918      | 9.449    | ug/l # | 15       |
| 29) Tetrahydrofuran          | 7.841          | 42   | 42072      | 52.326   | ug/l   | 99       |
| 30) Chloroform               | 7.965          | 83   | 41496      | 10.288   | ug/l   | 97       |
| 31) Cyclohexane              | 8.247          | 56   | 37514      | 10.460   | ug/l   | 96       |
| 32) 1,1,1-Trichloroethane    | 8.165          | 97   | 38612      | 10.518   | ug/l   | 94       |
| 36) 1,1-Dichloropropene      | 8.371          | 75   | 29218      | 9.968    | ug/l   | 99       |
| 37) Ethyl Acetate            | 7.559          | 43   | 25249      | 9.494    | ug/l   | 96       |
| 38) Carbon Tetrachloride     | 8.359          | 117  | 34214      | 10.443   | ug/l   | 95       |
| 39) Methylcyclohexane        | 9.600          | 83   | 30390      | 10.191   | ug/l   | 96       |
| 40) Benzene                  | 8.606          | 78   | 94121      | 9.999    | ug/l   | 95       |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084573.D  
 Acq On : 30 Oct 2024 12:57  
 Operator : JC\MD  
 Sample : VSTDICC010  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC010

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 11/04/2024  
 Supervised By : Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:25 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:18:08 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 14485    | 10.128  | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.671  | 62   | 30752    | 10.087  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.688  | 43   | 55871    | 10.611  | ug/l   | 94       |
| 44) Trichloroethene           | 9.353  | 130  | 21099    | 9.719   | ug/l   | 98       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 22314    | 10.105  | ug/l   | 96       |
| 46) Dibromomethane            | 9.706  | 93   | 15211    | 9.762   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.883  | 83   | 32612    | 9.929   | ug/l # | 93       |
| 48) Methyl methacrylate       | 9.683  | 41   | 20961    | 10.127  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.700  | 88   | 7375     | 201.076 | ug/l # | 76       |
| 51) 4-Methyl-2-Pentanone      | 10.447 | 43   | 130324   | 51.405  | ug/l   | 99       |
| 52) Toluene                   | 10.630 | 92   | 56321    | 10.230  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 33220    | 9.771   | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 35562    | 9.883   | ug/l   | 92       |
| 55) 1,1,2-Trichloroethane     | 11.018 | 97   | 21367    | 10.303  | ug/l   | 94       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 29804    | 9.936   | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.165 | 76   | 35790    | 10.056  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 66790    | 47.583  | ug/l   | 97       |
| 59) 2-Hexanone                | 11.200 | 43   | 92772    | 50.273  | ug/l   | 100      |
| 60) Dibromochloromethane      | 11.359 | 129  | 24541    | 10.383  | ug/l   | 97       |
| 61) 1,2-Dibromoethane         | 11.471 | 107  | 20895    | 9.839   | ug/l   | 97       |
| 64) Tetrachloroethene         | 11.100 | 164  | 18777    | 10.439  | ug/l   | 94       |
| 65) Chlorobenzene             | 11.888 | 112  | 60746    | 10.041  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 21080    | 10.018  | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.965 | 91   | 101653   | 10.067  | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.071 | 106  | 75857    | 19.842  | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 36696    | 10.261  | ug/l   | 100      |
| 70) Styrene                   | 12.412 | 104  | 61865    | 9.916   | ug/l   | 98       |
| 71) Bromoform                 | 12.576 | 173  | 15630    | 9.871   | ug/l # | 95       |
| 73) Isopropylbenzene          | 12.694 | 105  | 91683    | 10.287  | ug/l   | 98       |
| 74) N-amyl acetate            | 12.494 | 43   | 38841    | 10.240  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 30270    | 10.175  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 25940m   | 10.336  | ug/l   |          |
| 77) Bromobenzene              | 12.982 | 156  | 23987    | 10.012  | ug/l   | 94       |
| 78) n-propylbenzene           | 13.035 | 91   | 106518   | 10.199  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 68678    | 10.064  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 77273    | 10.461  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 11334    | 10.577  | ug/l   | 96       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 71787    | 9.996   | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 62600    | 10.240  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 78207    | 10.258  | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.612 | 105  | 89469    | 10.361  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 72307    | 10.210  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 45832    | 9.802   | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 47483    | 10.276  | ug/l   | 97       |
| 89) n-Butylbenzene            | 14.053 | 91   | 62495    | 9.433   | ug/l   | 100      |
| 90) Hexachloroethane          | 14.335 | 117  | 16100    | 10.194  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 44055    | 9.805   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 5744     | 9.531   | ug/l   | 97       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 22413    | 9.114   | ug/l   | 97       |
| 94) Hexachlorobutadiene       | 15.494 | 225  | 10263    | 9.503   | ug/l   | 97       |
| 95) Naphthalene               | 15.641 | 128  | 68919    | 9.363   | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 22303    | 9.342   | ug/l   | 99       |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084573.D  
Acq On : 30 Oct 2024 12:57  
Operator : JC\MD  
Sample : VSTDICC010  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC010

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:25 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:18:08 2024  
Response via : Initial Calibration

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

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

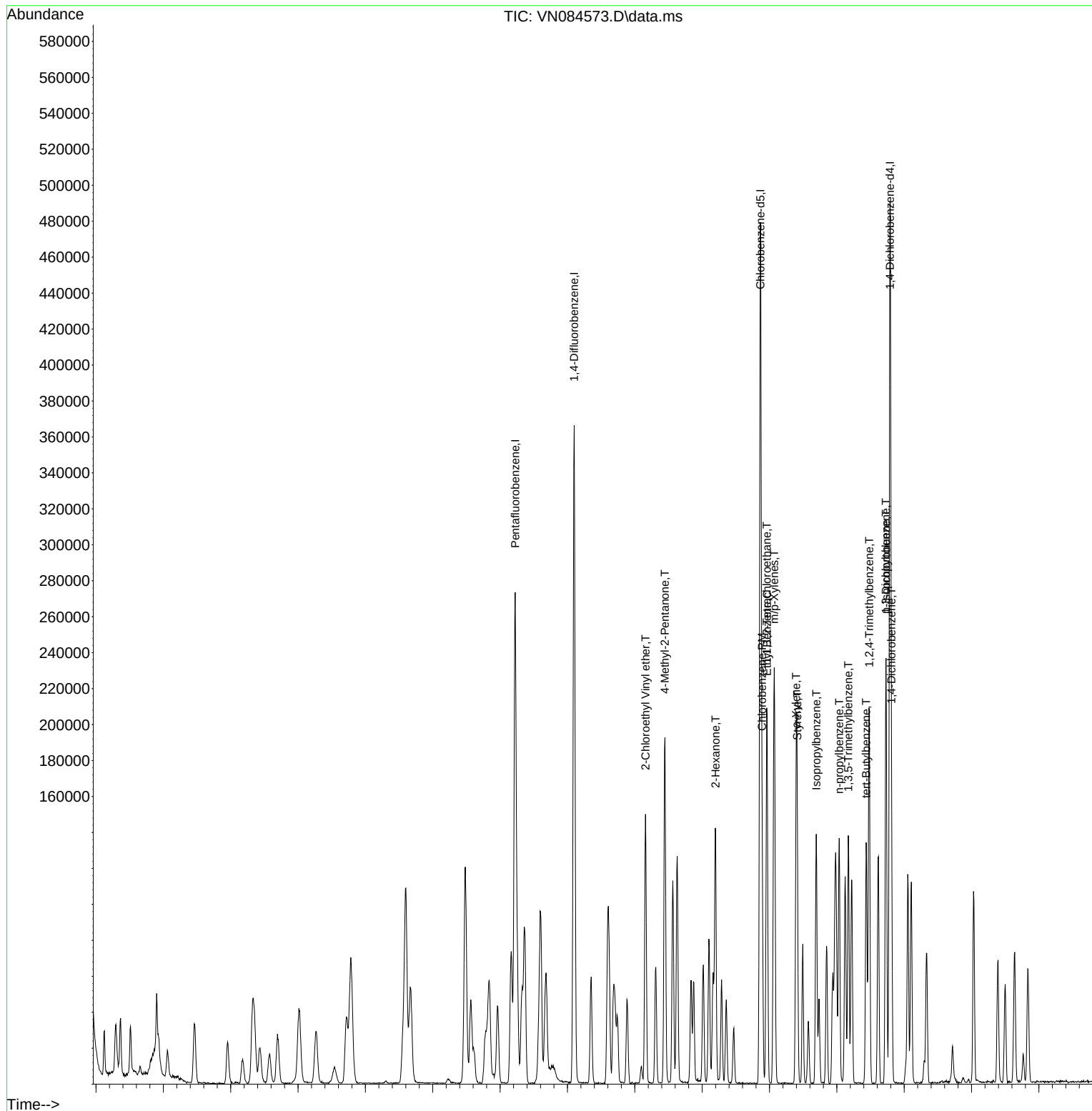
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084573.D  
Acq On : 30 Oct 2024 12:57  
Operator : JC\MD  
Sample : VSTDIC010  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC010

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 11/04/2024  
Supervised By : Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:25 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:18:08 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084574.D  
 Acq On : 30 Oct 2024 13:21  
 Operator : JC\MD  
 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 11/04/2024  
 Supervised By : Mahesh Dadoda 11/04/2024

Quant Time : Oct 31 18:19:43 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:18:08 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 171598   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 297777   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 254342   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152  | 118229   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 13227    | 5.337    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 10.680%# |
| 35) Dibromofluoromethane    | 8.165  | 113   | 10512    | 5.215    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 10.440%# |
| 50) Toluene-d8              | 10.565 | 98    | 36225    | 4.879    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 9.760%#  |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 13506    | 4.867    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 9.740%#  |

|                              |       |     |        |        |        |    |
|------------------------------|-------|-----|--------|--------|--------|----|
| Target Compounds             |       |     |        |        | Qvalue |    |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 10192  | 5.167  | ug/l   | 93 |
| 3) Chloromethane             | 2.360 | 50  | 17076  | 5.115  | ug/l   | 97 |
| 4) Vinyl Chloride            | 2.513 | 62  | 11174  | 5.267  | ug/l   | 96 |
| 5) Bromomethane              | 2.901 | 94  | 6944   | 6.177  | ug/l   | 98 |
| 6) Chloroethane              | 3.060 | 64  | 8146   | 4.946  | ug/l   | 98 |
| 7) Trichlorofluoromethane    | 3.460 | 101 | 18362  | 5.254  | ug/l   | 98 |
| 8) Diethyl Ether             | 3.954 | 74  | 6372   | 5.168  | ug/l   | 91 |
| 9) 1,1,2-Trichlorotrifluo... | 4.348 | 101 | 10090  | 5.109  | ug/l   | 99 |
| 10) Methyl Iodide            | 4.571 | 142 | 14021  | 5.312  | ug/l # | 96 |
| 11) Tert butyl alcohol       | 5.536 | 59  | 10153  | 31.035 | ug/l # | 87 |
| 12) 1,1-Dichloroethene       | 4.324 | 96  | 9474   | 4.848  | ug/l   | 91 |
| 13) Acrolein                 | 4.183 | 56  | 8890   | 27.251 | ug/l   | 97 |
| 14) Allyl chloride           | 5.012 | 41  | 16771  | 5.292  | ug/l   | 94 |
| 15) Acrylonitrile            | 5.724 | 53  | 25212  | 26.621 | ug/l   | 99 |
| 16) Acetone                  | 4.430 | 43  | 20706  | 26.370 | ug/l   | 91 |
| 17) Carbon Disulfide         | 4.689 | 76  | 30614  | 5.087  | ug/l # | 86 |
| 18) Methyl Acetate           | 5.030 | 43  | 21727  | 4.691  | ug/l   | 99 |
| 19) Methyl tert-butyl Ether  | 5.795 | 73  | 30655  | 5.118  | ug/l # | 89 |
| 20) Methylene Chloride       | 5.265 | 84  | 12258  | 5.623  | ug/l   | 91 |
| 21) trans-1,2-Dichloroethene | 5.771 | 96  | 10024  | 4.996  | ug/l   | 94 |
| 22) Diisopropyl ether        | 6.671 | 45  | 31631  | 5.023  | ug/l   | 93 |
| 23) Vinyl Acetate            | 6.601 | 43  | 111267 | 25.622 | ug/l   | 98 |
| 24) 1,1-Dichloroethane       | 6.559 | 63  | 20644  | 5.460  | ug/l   | 96 |
| 25) 2-Butanone               | 7.489 | 43  | 31742  | 27.452 | ug/l   | 97 |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 16462  | 5.003  | ug/l   | 94 |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 12105  | 5.167  | ug/l   | 98 |
| 28) Bromochloromethane       | 7.806 | 49  | 7002   | 4.649  | ug/l # | 91 |
| 29) Tetrahydrofuran          | 7.842 | 42  | 20240  | 26.385 | ug/l   | 99 |
| 30) Chloroform               | 7.959 | 83  | 20974  | 5.451  | ug/l   | 92 |
| 31) Cyclohexane              | 8.253 | 56  | 18750  | 5.480  | ug/l   | 98 |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 17717  | 5.059  | ug/l   | 97 |
| 36) 1,1-Dichloropropene      | 8.371 | 75  | 14193  | 5.077  | ug/l   | 99 |
| 37) Ethyl Acetate            | 7.559 | 43  | 13884  | 5.474  | ug/l # | 94 |
| 38) Carbon Tetrachloride     | 8.353 | 117 | 15977  | 5.113  | ug/l   | 96 |
| 39) Methylcyclohexane        | 9.600 | 83  | 13624  | 4.791  | ug/l   | 95 |
| 40) Benzene                  | 8.600 | 78  | 46044  | 5.129  | ug/l   | 99 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084574.D  
 Acq On : 30 Oct 2024 13:21  
 Operator : JC\MD  
 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
 Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:43 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:18:08 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.771  | 41   | 7091     | 5.199   | ug/l   | 97       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 14972    | 5.150   | ug/l   | 98       |
| 43) Isopropyl Acetate         | 8.689  | 43   | 30044    | 5.554   | ug/l # | 90       |
| 44) Trichloroethene           | 9.347  | 130  | 10168    | 4.911   | ug/l   | 89       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 11095    | 5.269   | ug/l   | 97       |
| 46) Dibromomethane            | 9.706  | 93   | 7752     | 5.217   | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.889  | 83   | 15749    | 5.028   | ug/l # | 98       |
| 48) Methyl methacrylate       | 9.677  | 41   | 9971     | 5.051   | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.700  | 88   | 3729     | 106.609 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone      | 10.447 | 43   | 61332    | 25.367  | ug/l   | 100      |
| 52) Toluene                   | 10.630 | 92   | 26518    | 5.051   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.836 | 75   | 16279    | 5.021   | ug/l   | 93       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 17395    | 5.069   | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane     | 11.018 | 97   | 10193    | 5.154   | ug/l   | 93       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 13362    | 4.671   | ug/l   | 94       |
| 57) 1,3-Dichloropropane       | 11.165 | 76   | 17816    | 5.249   | ug/l   | 96       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 30088    | 22.477  | ug/l   | 98       |
| 59) 2-Hexanone                | 11.194 | 43   | 43750    | 24.860  | ug/l   | 97       |
| 60) Dibromochloromethane      | 11.359 | 129  | 11226    | 4.980   | ug/l   | 96       |
| 61) 1,2-Dibromoethane         | 11.471 | 107  | 10584    | 5.226   | ug/l   | 97       |
| 64) Tetrachloroethene         | 11.100 | 164  | 8917     | 5.271   | ug/l # | 87       |
| 65) Chlorobenzene             | 11.888 | 112  | 29618    | 5.205   | ug/l   | 94       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 10265    | 5.186   | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.965 | 91   | 47037    | 4.952   | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.065 | 106  | 34753    | 9.665   | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 16393    | 4.873   | ug/l   | 99       |
| 70) Styrene                   | 12.412 | 104  | 27807    | 4.739   | ug/l   | 98       |
| 71) Bromoform                 | 12.577 | 173  | 7686     | 5.161   | ug/l # | 95       |
| 73) Isopropylbenzene          | 12.694 | 105  | 40223    | 4.855   | ug/l   | 99       |
| 74) N-amyl acetate            | 12.494 | 43   | 18583    | 5.270   | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 15573    | 5.631   | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 11982m   | 5.136   | ug/l   |          |
| 77) Bromobenzene              | 12.983 | 156  | 11012    | 4.944   | ug/l   | 98       |
| 78) n-propylbenzene           | 13.035 | 91   | 47776    | 4.921   | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.124 | 91   | 32460    | 5.117   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 13.171 | 105  | 32685    | 4.760   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-b... | 12.730 | 75   | 5096     | 5.116   | ug/l   | 93       |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 33672    | 5.044   | ug/l   | 98       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 26850    | 4.724   | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene    | 13.483 | 105  | 32703    | 4.614   | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.612 | 105  | 37187    | 4.632   | ug/l   | 97       |
| 86) p-Isopropyltoluene        | 13.730 | 119  | 29767    | 4.521   | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene       | 13.730 | 146  | 22272    | 5.124   | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 22213    | 4.741   | ug/l   | 91       |
| 89) n-Butylbenzene            | 14.053 | 91   | 29010    | 4.710   | ug/l   | 99       |
| 90) Hexachloroethane          | 14.335 | 117  | 7404     | 5.043   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 22221    | 5.320   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.718 | 75   | 3239     | 5.781   | ug/l   | 93       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 11298    | 4.942   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 5184     | 5.163   | ug/l   | 96       |
| 95) Naphthalene               | 15.641 | 128  | 32966    | 4.817   | ug/l   | 98       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 11106    | 5.004   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084574.D  
Acq On : 30 Oct 2024 13:21  
Operator : JC\MD  
Sample : VSTDICC005  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:43 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:18:08 2024  
Response via : Initial Calibration

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

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

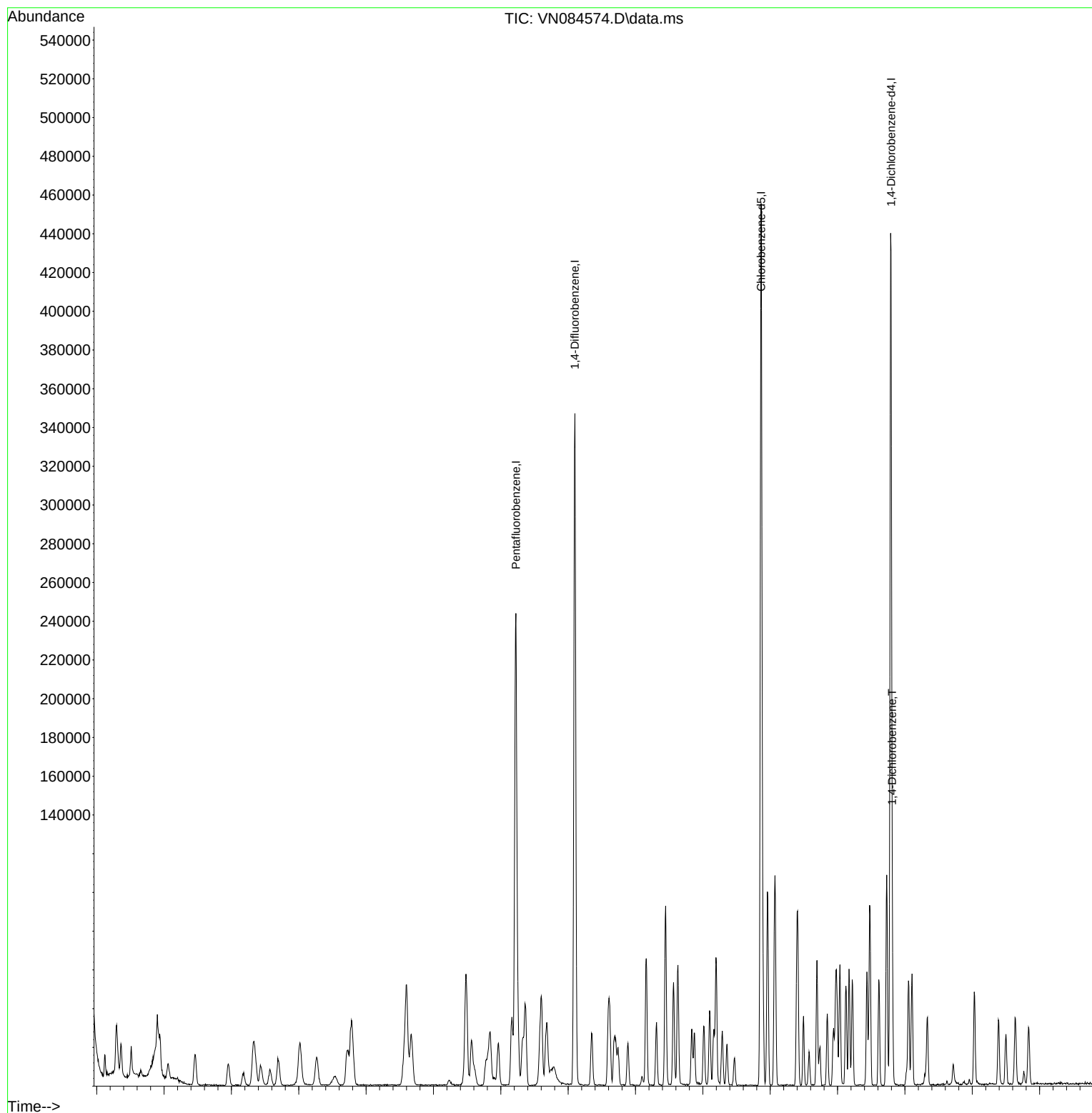
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084574.D  
Acq On : 30 Oct 2024 13:21  
Operator : JC\MD  
Sample : VSTDIC005  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC005

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 11/04/2024  
Supervised By : Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:19:43 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:18:08 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084575.D  
 Acq On : 30 Oct 2024 13:45  
 Operator : JC\MD  
 Sample : VSTDICC001  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC001

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
 Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:14:28 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:13:36 2024  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response   | Conc   | Units  | Dev(Min) |
|------------------------------|----------------|------|------------|--------|--------|----------|
| -----                        |                |      |            |        |        |          |
| Internal Standards           |                |      |            |        |        |          |
| 1) Pentafluorobenzene        | 8.224          | 168  | 168991     | 50.000 | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene      | 9.100          | 114  | 297772     | 50.000 | ug/l   | 0.00     |
| 63) Chlorobenzene-d5         | 11.865         | 117  | 250990     | 50.000 | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4   | 13.794         | 152  | 109560     | 50.000 | ug/l   | 0.00     |
|                              |                |      |            |        |        |          |
| System Monitoring Compounds  |                |      |            |        |        |          |
| 33) 1,2-Dichloroethane-d4    | 0.000          | 65   | 0d         | 0.000  | ug/l   |          |
| Spiked Amount 50.000         | Range 74 - 125 |      | Recovery = | 0.000  | %#     |          |
| 35) Dibromofluoromethane     | 0.000          | 113  | 0d         | 0.000  | ug/l   |          |
| Spiked Amount 50.000         | Range 75 - 124 |      | Recovery = | 0.000  | %#     |          |
| 50) Toluene-d8               | 0.000          | 98   | 0d         | 0.000  | ug/l   |          |
| Spiked Amount 50.000         | Range 86 - 113 |      | Recovery = | 0.000  | %#     |          |
| 62) 4-Bromofluorobenzene     | 0.000          | 95   | 0d         | 0.000  | ug/l   |          |
| Spiked Amount 50.000         | Range 77 - 121 |      | Recovery = | 0.000  | %#     |          |
|                              |                |      |            |        |        |          |
| Target Compounds             |                |      |            |        | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.124          | 85   | 1964       | 1.011  | ug/l   | 100      |
| 3) Chloromethane             | 2.365          | 50   | 6046       | 1.880  | ug/l # | 80       |
| 4) Vinyl Chloride            | 2.512          | 62   | 1963       | 0.939  | ug/l   | 89       |
| 6) Chloroethane              | 3.083          | 64   | 2917       | 0.885  | ug/l   | 98       |
| 7) Trichlorofluoromethane    | 3.471          | 101  | 3621       | 1.052  | ug/l # | 74       |
| 8) Diethyl Ether             | 3.971          | 74   | 1209m      | 0.996  | ug/l   |          |
| 9) 1,1,2-Trichlorotrifluo... | 4.359          | 101  | 1982       | 1.019  | ug/l   | 90       |
| 12) 1,1-Dichloroethene       | 4.336          | 96   | 2177       | 1.131  | ug/l # | 68       |
| 14) Allyl chloride           | 5.006          | 41   | 2869       | 0.919  | ug/l # | 29       |
| 15) Acrylonitrile            | 5.730          | 53   | 4443       | 4.764  | ug/l # | 55       |
| 16) Acetone                  | 4.430          | 43   | 5707m      | 5.302  | ug/l   |          |
| 17) Carbon Disulfide         | 4.700          | 76   | 7155       | 1.207  | ug/l # | 93       |
| 18) Methyl Acetate           | 5.024          | 43   | 7743       | 1.954  | ug/l # | 89       |
| 19) Methyl tert-butyl Ether  | 5.806          | 73   | 5314       | 0.901  | ug/l   | 95       |
| 20) Methylene Chloride       | 5.271          | 84   | 2029       | 0.945  | ug/l # | 81       |
| 21) trans-1,2-Dichloroethene | 5.789          | 96   | 2030       | 1.027  | ug/l # | 78       |
| 22) Diisopropyl ether        | 6.665          | 45   | 5485       | 0.884  | ug/l # | 89       |
| 23) Vinyl Acetate            | 6.600          | 43   | 18413      | 4.306  | ug/l   | 96       |
| 24) 1,1-Dichloroethane       | 6.553          | 63   | 3491       | 0.938  | ug/l # | 83       |
| 25) 2-Butanone               | 7.494          | 43   | 5644       | 4.956  | ug/l # | 88       |
| 26) 2,2-Dichloropropane      | 7.488          | 77   | 3152       | 0.973  | ug/l # | 70       |
| 27) cis-1,2-Dichloroethene   | 7.477          | 96   | 2275       | 0.986  | ug/l # | 75       |
| 28) Bromochloromethane       | 7.812          | 49   | 1450       | 0.978  | ug/l # | 97       |
| 29) Tetrahydrofuran          | 7.847          | 42   | 3321       | 4.396  | ug/l   | 96       |
| 30) Chloroform               | 7.965          | 83   | 3463       | 0.914  | ug/l   | 87       |
| 32) 1,1,1-Trichloroethane    | 8.171          | 97   | 3312       | 0.960  | ug/l # | 34       |
| 36) 1,1-Dichloropropene      | 8.365          | 75   | 2825       | 1.011  | ug/l   | 97       |
| 37) Ethyl Acetate            | 7.559          | 43   | 2440       | 0.962  | ug/l # | 88       |
| 38) Carbon Tetrachloride     | 8.353          | 117  | 2904       | 0.929  | ug/l # | 73       |
| 39) Methylcyclohexane        | 9.600          | 83   | 2212       | 0.778  | ug/l   | 89       |
| 40) Benzene                  | 8.600          | 78   | 9169       | 1.021  | ug/l   | 94       |
| 41) Methacrylonitrile        | 7.777          | 41   | 1095       | 0.803  | ug/l # | 84       |
| 42) 1,2-Dichloroethane       | 8.665          | 62   | 2733       | 0.940  | ug/l   | 81       |
| 43) Isopropyl Acetate        | 8.688          | 43   | 7724       | 0.697  | ug/l # | 78       |
| 44) Trichloroethene          | 9.353          | 130  | 2306       | 1.114  | ug/l   | 74       |
| 45) 1,2-Dichloropropane      | 9.624          | 63   | 1967       | 0.934  | ug/l # | 86       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084575.D  
 Acq On : 30 Oct 2024 13:45  
 Operator : JC\MD  
 Sample : VSTDICC001  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC001

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
 Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:14:28 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:13:36 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) Dibromomethane            | 9.712  | 93   | 1472     | 0.991  | ug/l   | 93       |
| 47) Bromodichloromethane      | 9.882  | 83   | 3156     | 1.008  | ug/l # | 96       |
| 48) Methyl methacrylate       | 9.682  | 41   | 1652     | 0.837  | ug/l # | 84       |
| 49) 1,4-Dioxane               | 9.700  | 88   | 576      | 16.468 | ug/l # | 73       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 10237    | 4.234  | ug/l   | 92       |
| 52) Toluene                   | 10.629 | 92   | 4507     | 0.858  | ug/l   | 89       |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 3308     | 1.020  | ug/l   | 93       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 3266     | 0.952  | ug/l # | 94       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 1841     | 0.931  | ug/l # | 86       |
| 56) Ethyl methacrylate        | 10.876 | 69   | 2211     | 0.773  | ug/l   | 94       |
| 57) 1,3-Dichloropropane       | 11.165 | 76   | 3139     | 0.925  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 4979     | 3.720  | ug/l # | 87       |
| 59) 2-Hexanone                | 11.194 | 43   | 7617     | 4.328  | ug/l   | 89       |
| 60) Dibromochloromethane      | 11.353 | 129  | 1857     | 0.824  | ug/l   | 88       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 2001     | 0.988  | ug/l   | 89       |
| 64) Tetrachloroethene         | 11.100 | 164  | 1629     | 0.976  | ug/l # | 69       |
| 65) Chlorobenzene             | 11.894 | 112  | 5753     | 1.025  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 2002     | 1.025  | ug/l # | 61       |
| 67) Ethyl Benzene             | 11.965 | 91   | 8520     | 0.909  | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.070 | 106  | 6568     | 1.851  | ug/l   | 96       |
| 69) o-Xylene                  | 12.400 | 106  | 2759     | 0.831  | ug/l   | 99       |
| 70) Styrene                   | 12.406 | 104  | 5269     | 0.910  | ug/l   | 95       |
| 71) Bromoform                 | 12.582 | 173  | 1434     | 0.976  | ug/l # | 95       |
| 73) Isopropylbenzene          | 12.694 | 105  | 6985     | 0.910  | ug/l   | 99       |
| 74) N-amyl acetate            | 12.488 | 43   | 2680     | 0.820  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane | 12.929 | 83   | 2678     | 1.045  | ug/l # | 91       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 2731m    | 1.263  | ug/l   |          |
| 77) Bromobenzene              | 12.982 | 156  | 2440     | 1.182  | ug/l   | 95       |
| 78) n-propylbenzene           | 13.035 | 91   | 7935     | 0.882  | ug/l   | 95       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 5699     | 0.969  | ug/l   | 96       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 5298     | 0.833  | ug/l   | 98       |
| 82) 4-Chlorotoluene           | 13.223 | 91   | 6682     | 1.080  | ug/l   | 96       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 4148     | 0.788  | ug/l   | 89       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 5651     | 0.860  | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.617 | 105  | 6490     | 0.872  | ug/l   | 93       |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 4859     | 0.796  | ug/l   | 94       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 4961     | 1.232  | ug/l   | 95       |
| 88) 1,4-Dichlorobenzene       | 13.817 | 146  | 6076m    | 0.801  | ug/l   |          |
| 89) n-Butylbenzene            | 14.059 | 91   | 6020     | 1.055  | ug/l   | 95       |
| 90) Hexachloroethane          | 14.329 | 117  | 1493     | 1.097  | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 4428     | 1.144  | ug/l   | 91       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 595      | 1.146  | ug/l   | 83       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 2964     | 1.399  | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.506 | 225  | 1208     | 1.298  | ug/l   | 88       |
| 95) Naphthalene               | 15.635 | 128  | 7352     | 1.159  | ug/l   | 96       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 2605     | 1.267  | ug/l   | 91       |

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



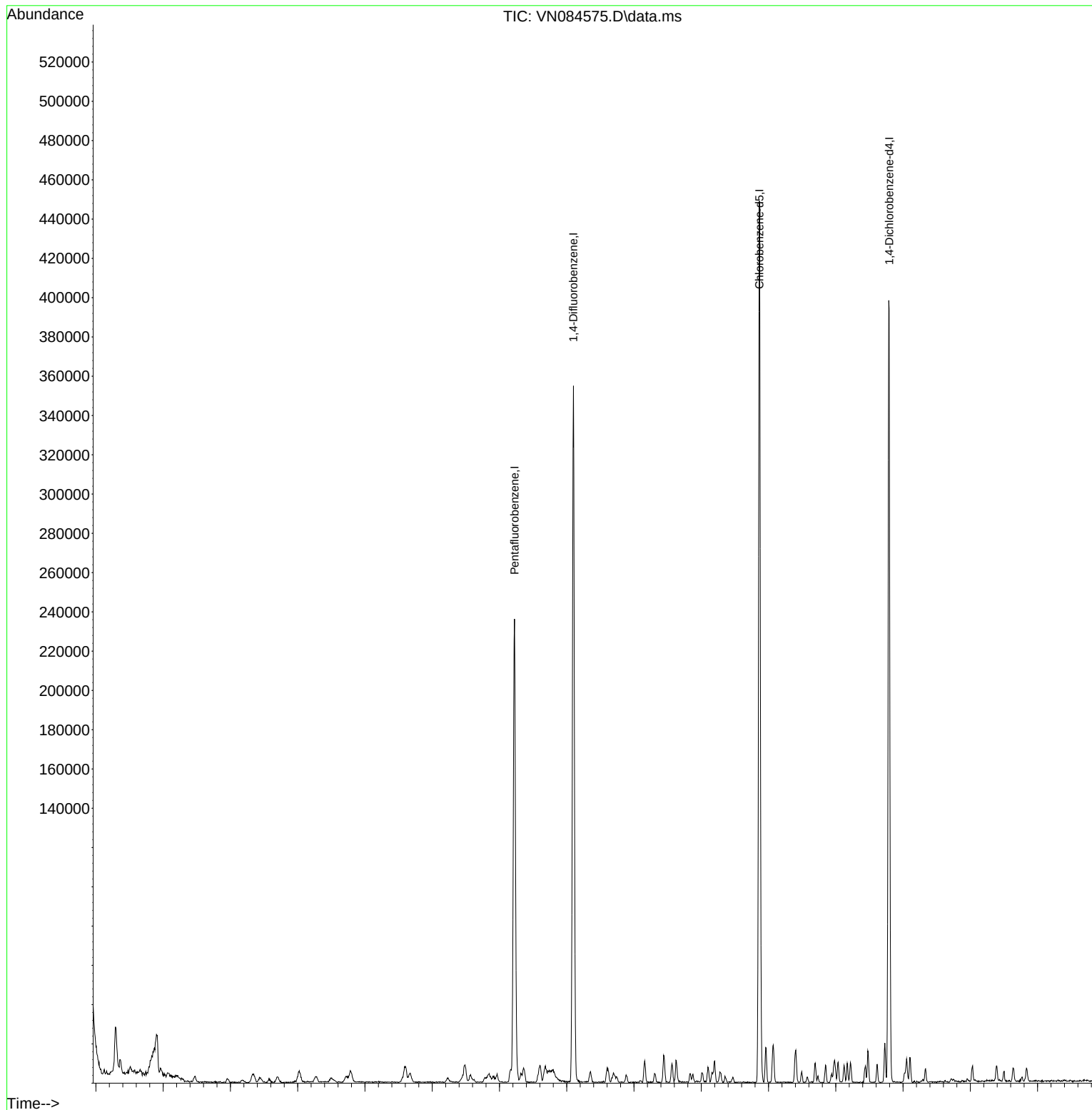
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Data File : VN084575.D  
Acq On : 30 Oct 2024 13:45  
Operator : JC\MD  
Sample : VSTDIC001  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDIC001

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 11/04/2024  
Supervised By : Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:14:28 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:13:36 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084577.D  
 Acq On : 30 Oct 2024 15:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN103024

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
 Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:28:48 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:24:48 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 192202   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 324264   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 291586   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 142817   | 50.000 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 33) 1,2-Dichloroethane-d4 | 8.577  | 65    | 132029   | 47.560   | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | =    | 95.120% |
| 35) Dibromofluoromethane  | 8.165  | 113   | 104306   | 47.522   | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | =    | 95.040% |
| 50) Toluene-d8            | 10.565 | 98    | 390989   | 48.359   | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | =    | 96.720% |
| 62) 4-Bromofluorobenzene  | 12.847 | 95    | 144180   | 47.715   | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | =    | 95.420% |

## Target Compounds

|                              |       |     |         |         |      | Qvalue |
|------------------------------|-------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 101605  | 45.985  | ug/l | 97     |
| 3) Chloromethane             | 2.359 | 50  | 118060  | 45.299  | ug/l | 99     |
| 4) Vinyl Chloride            | 2.512 | 62  | 110340  | 46.430  | ug/l | 95     |
| 5) Bromomethane              | 2.900 | 94  | 54764   | 43.494  | ug/l | 100    |
| 6) Chloroethane              | 3.071 | 64  | 68330   | 46.348  | ug/l | 93     |
| 7) Trichlorofluoromethane    | 3.471 | 101 | 178683  | 45.644  | ug/l | 98     |
| 8) Diethyl Ether             | 3.959 | 74  | 64407   | 46.640  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluo... | 4.359 | 101 | 101094  | 45.702  | ug/l | 98     |
| 10) Methyl Iodide            | 4.577 | 142 | 137594  | 46.542  | ug/l | 97     |
| 11) Tert butyl alcohol       | 5.536 | 59  | 80556   | 219.840 | ug/l | 99     |
| 12) 1,1-Dichloroethene       | 4.330 | 96  | 99235   | 45.338  | ug/l | 99     |
| 13) Acrolein                 | 4.171 | 56  | 79788   | 218.362 | ug/l | 98     |
| 14) Allyl chloride           | 5.012 | 41  | 170293  | 47.975  | ug/l | 92     |
| 15) Acrylonitrile            | 5.718 | 53  | 251141  | 236.747 | ug/l | 100    |
| 16) Acetone                  | 4.430 | 43  | 196070  | 244.445 | ug/l | 100    |
| 17) Carbon Disulfide         | 4.700 | 76  | 287697  | 42.682  | ug/l | 99     |
| 18) Methyl Acetate           | 5.024 | 43  | 132834  | 44.944  | ug/l | 99     |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 326067  | 48.603  | ug/l | 97     |
| 20) Methylene Chloride       | 5.265 | 84  | 111618  | 45.716  | ug/l | 91     |
| 21) trans-1,2-Dichloroethene | 5.777 | 96  | 101181  | 45.019  | ug/l | 98     |
| 22) Diisopropyl ether        | 6.671 | 45  | 343763  | 48.739  | ug/l | 99     |
| 23) Vinyl Acetate            | 6.600 | 43  | 1204384 | 247.614 | ug/l | 99     |
| 24) 1,1-Dichloroethane       | 6.559 | 63  | 196518  | 46.408  | ug/l | 97     |
| 25) 2-Butanone               | 7.483 | 43  | 307765  | 237.635 | ug/l | 97     |
| 26) 2,2-Dichloropropane      | 7.488 | 77  | 166234  | 45.103  | ug/l | 97     |
| 27) cis-1,2-Dichloroethene   | 7.483 | 96  | 121280  | 46.214  | ug/l | 97     |
| 28) Bromochloromethane       | 7.806 | 49  | 92741   | 54.971  | ug/l | 97     |
| 29) Tetrahydrofuran          | 7.835 | 42  | 211210  | 245.822 | ug/l | 98     |
| 30) Chloroform               | 7.965 | 83  | 203935  | 47.316  | ug/l | 100    |
| 31) Cyclohexane              | 8.253 | 56  | 172671  | 45.053  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 183488  | 46.774  | ug/l | 98     |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 141152  | 46.370  | ug/l | 100    |
| 37) Ethyl Acetate            | 7.559 | 43  | 132993  | 48.154  | ug/l | 99     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 157005  | 46.145  | ug/l | 97     |
| 39) Methylcyclohexane        | 9.600 | 83  | 154743  | 49.969  | ug/l | 99     |
| 40) Benzene                  | 8.606 | 78  | 452351  | 46.273  | ug/l | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084577.D  
 Acq On : 30 Oct 2024 15:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN103024

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
 Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:28:48 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:24:48 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 77176    | 51.964   | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.671  | 62   | 149173   | 47.118   | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.688  | 43   | 232558   | 45.492   | ug/l   | 98       |
| 44) Trichloroethene           | 9.347  | 130  | 100849   | 44.732   | ug/l   | 99       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 108229   | 47.196   | ug/l   | 96       |
| 46) Dibromomethane            | 9.706  | 93   | 74292    | 45.911   | ug/l   | 96       |
| 47) Bromodichloromethane      | 9.888  | 83   | 158814   | 46.560   | ug/l # | 99       |
| 48) Methyl methacrylate       | 9.676  | 41   | 109745   | 51.057   | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 40527    | 1063.992 | ug/l # | 95       |
| 51) 4-Methyl-2-Pentanone      | 10.447 | 43   | 665397   | 252.729  | ug/l   | 98       |
| 52) Toluene                   | 10.629 | 92   | 277957   | 48.616   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 162100   | 45.911   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 175008   | 46.832   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 11.018 | 97   | 102553   | 47.618   | ug/l   | 97       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 164370   | 52.764   | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 11.165 | 76   | 176546   | 47.765   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 408174   | 280.013  | ug/l   | 98       |
| 59) 2-Hexanone                | 11.194 | 43   | 489776   | 255.570  | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.359 | 129  | 120465   | 49.079   | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 102316   | 46.393   | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.100 | 164  | 88124    | 45.436   | ug/l   | 98       |
| 65) Chlorobenzene             | 11.888 | 112  | 292713   | 44.872   | ug/l   | 95       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 105108   | 46.323   | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.965 | 91   | 526140   | 48.319   | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.070 | 106  | 408029   | 98.979   | ug/l   | 99       |
| 69) o-Xylene                  | 12.400 | 106  | 194895   | 50.538   | ug/l   | 99       |
| 70) Styrene                   | 12.412 | 104  | 333668   | 49.600   | ug/l   | 98       |
| 71) Bromoform                 | 12.576 | 173  | 78822    | 46.166   | ug/l # | 98       |
| 73) Isopropylbenzene          | 12.694 | 105  | 491033   | 49.063   | ug/l   | 100      |
| 74) N-amyl acetate            | 12.494 | 43   | 209049   | 49.076   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 147181   | 44.058   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 122725m  | 42.988   | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 119728   | 44.500   | ug/l   | 97       |
| 78) n-propylbenzene           | 13.035 | 91   | 576495   | 49.156   | ug/l   | 98       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 367294   | 47.930   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 420675   | 50.714   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 54512    | 45.300   | ug/l   | 99       |
| 82) 4-Chlorotoluene           | 13.223 | 91   | 361596   | 44.837   | ug/l   | 98       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 361800   | 52.701   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 428517   | 50.053   | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.617 | 105  | 483212   | 49.829   | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 410129   | 51.568   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 219757   | 41.852   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 221608   | 45.904   | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 341775   | 45.941   | ug/l   | 100      |
| 90) Hexachloroethane          | 14.329 | 117  | 77324    | 43.597   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 220824   | 43.765   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 30895    | 45.651   | ug/l   | 98       |
| 93) 1,2,4-Trichlorobenzene    | 15.388 | 180  | 111270   | 40.290   | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 47959    | 39.544   | ug/l   | 97       |
| 95) Naphthalene               | 15.641 | 128  | 375360   | 45.408   | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.841 | 180  | 108830   | 40.595   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084577.D  
Acq On : 30 Oct 2024 15:06  
Operator : JC\MD  
Sample : VSTDICV050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN103024

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:28:48 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:24:48 2024  
Response via : Initial Calibration

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

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

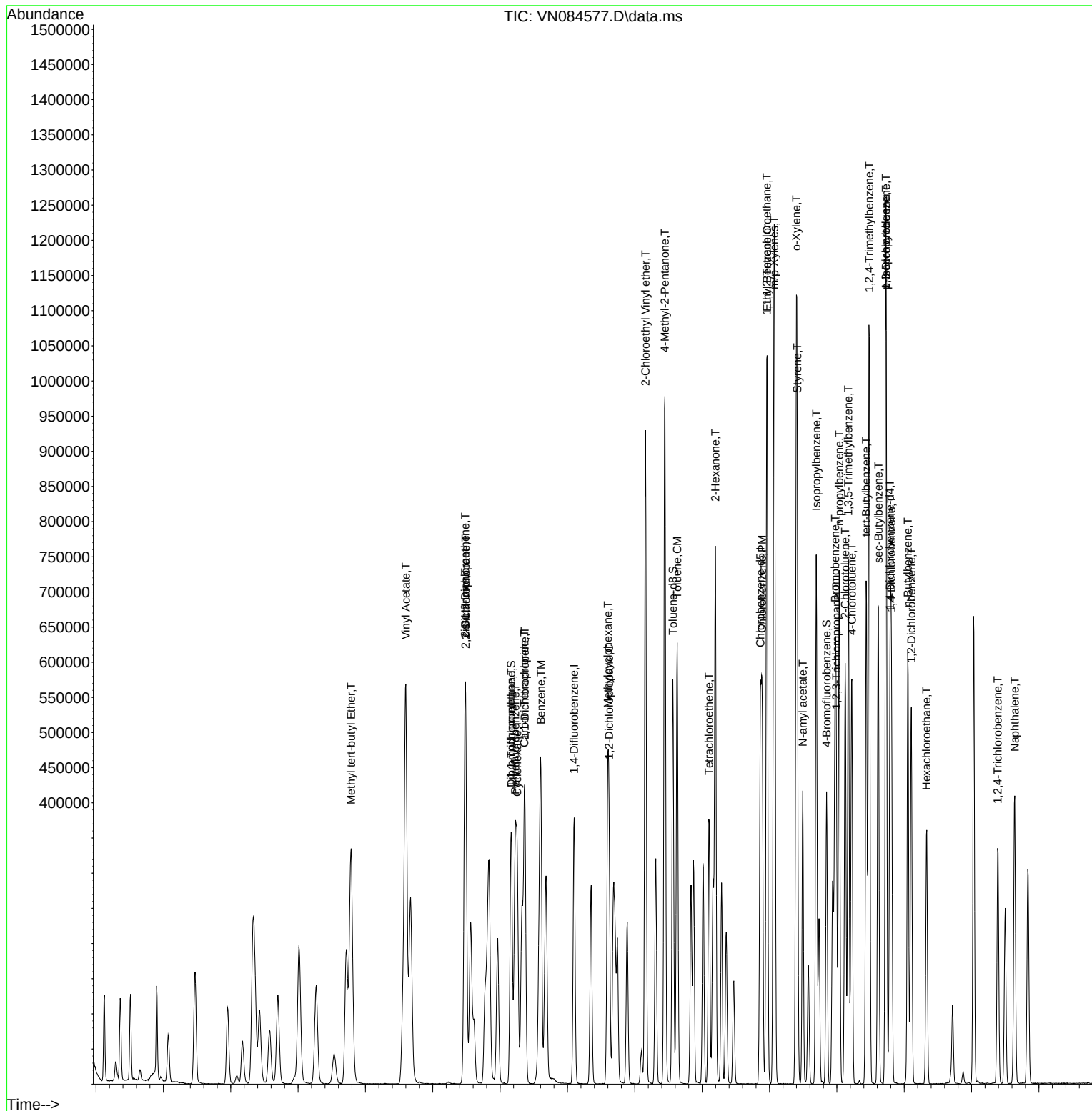
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Data File : VN084577.D  
Acq On : 30 Oct 2024 15:06  
Operator : JC\MD  
Sample : VSTDICV050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN103024

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 11/04/2024  
Supervised By :Mahesh Dadoda 11/04/2024

Quant Time: Oct 31 18:28:48 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:24:48 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084577.D  
 Acq On : 30 Oct 2024 15:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN103024

Quant Time: Oct 31 18:28:48 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:24:48 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 103   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.575 | 0.529 | 8.0   | 99    | 0.00     |
| 3 P   | Chloromethane               | 0.952 | 0.614 | 35.5# | 94    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.618 | 0.574 | 7.1#  | 98    | 0.00     |
| 5 T   | Bromomethane                | 0.328 | 0.285 | 13.1  | 99    | -0.05    |
| 6 T   | Chloroethane                | 0.488 | 0.356 | 27.0# | 97    | -0.05    |
| 7 T   | Trichlorofluoromethane      | 1.018 | 0.930 | 8.6   | 100   | -0.02    |
| 8 T   | Diethyl Ether               | 0.359 | 0.335 | 6.7   | 98    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.575 | 0.526 | 8.5   | 97    | -0.01    |
| 10 T  | Methyl Iodide               | 0.769 | 0.716 | 6.9   | 100   | -0.02    |
| 11 T  | Tert butyl alcohol          | 0.095 | 0.084 | 11.6  | 100   | 0.01     |
| 12 CM | 1,1-Dichloroethene          | 0.569 | 0.516 | 9.3#  | 99    | -0.01    |
| 13 T  | Acrolein                    | 0.095 | 0.083 | 12.6  | 97    | 0.00     |
| 14 T  | Allyl chloride              | 0.923 | 0.886 | 4.0   | 100   | -0.01    |
| 15 T  | Acrylonitrile               | 0.276 | 0.261 | 5.4   | 99    | 0.00     |
| 16 T  | Acetone                     | 0.238 | 0.204 | 14.3  | 103   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.753 | 1.497 | 14.6  | 96    | -0.01    |
| 18 T  | Methyl Acetate              | 1.172 | 0.691 | 41.0# | 95    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.745 | 1.696 | 2.8   | 99    | 0.00     |
| 20 T  | Methylene Chloride          | 0.635 | 0.581 | 8.5   | 99    | -0.01    |
| 21 T  | trans-1,2-Dichloroethene    | 0.585 | 0.526 | 10.1  | 96    | -0.01    |
| 22 T  | Diisopropyl ether           | 1.835 | 1.789 | 2.5   | 99    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.265 | 1.253 | 0.9   | 99    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.102 | 1.022 | 7.3   | 99    | -0.01    |
| 25 T  | 2-Butanone                  | 0.337 | 0.320 | 5.0   | 105   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.959 | 0.865 | 9.8   | 95    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.683 | 0.631 | 7.6   | 98    | 0.00     |
| 28 T  | Bromochloromethane          | 0.439 | 0.483 | -10.0 | 97    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.224 | 0.220 | 1.8   | 102   | 0.00     |
| 30 C  | Chloroform                  | 1.121 | 1.061 | 5.4#  | 101   | 0.00     |
| 31 T  | Cyclohexane                 | 0.997 | 0.898 | 9.9   | 99    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.021 | 0.955 | 6.5   | 99    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.722 | 0.687 | 4.8   | 98    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 104   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.338 | 0.322 | 4.7   | 97    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.469 | 0.435 | 7.2   | 100   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.426 | 0.410 | 3.8   | 101   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.525 | 0.484 | 7.8   | 98    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.478 | 0.477 | 0.2   | 98    | 0.00     |
| 40 TM | Benzene                     | 1.507 | 1.395 | 7.4   | 100   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.229 | 0.238 | -3.9  | 101   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.488 | 0.460 | 5.7   | 97    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.927 | 0.717 | 22.7  | 99    | 0.00     |
| 44 TM | Trichloroethene             | 0.348 | 0.311 | 10.6  | 97    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.354 | 0.334 | 5.6#  | 100   | 0.00     |
| 46 T  | Dibromomethane              | 0.250 | 0.229 | 8.4   | 98    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.526 | 0.490 | 6.8   | 98    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.331 | 0.338 | -2.1  | 102   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
 Data File : VN084577.D  
 Acq On : 30 Oct 2024 15:06  
 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN103024

Quant Time: Oct 31 18:28:48 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:24:48 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 0.006 | 0.006 | 0.0   | 107   | 0.00     |
| 50 S  | Toluene-d8                  | 1.247 | 1.206 | 3.3   | 96    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.406 | 0.410 | -1.0  | 101   | 0.00     |
| 52 CM | Toluene                     | 0.882 | 0.857 | 2.8#  | 99    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.544 | 0.500 | 8.1   | 96    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.576 | 0.540 | 6.2   | 97    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.332 | 0.316 | 4.8   | 100   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.480 | 0.507 | -5.6  | 98    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.570 | 0.544 | 4.6   | 100   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.225 | 0.252 | -12.0 | 100   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.296 | 0.302 | -2.0  | 101   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.378 | 0.372 | 1.6   | 98    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.340 | 0.316 | 7.1   | 98    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.466 | 0.445 | 4.5   | 94    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 104   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.333 | 0.302 | 9.3   | 101   | 0.00     |
| 65 PM | Chlorobenzene               | 1.119 | 1.004 | 10.3  | 99    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.389 | 0.360 | 7.5   | 100   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.867 | 1.804 | 3.4#  | 100   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.707 | 0.700 | 1.0   | 100   | 0.00     |
| 69 T  | o-Xylene                    | 0.661 | 0.668 | -1.1  | 101   | 0.00     |
| 70 T  | Styrene                     | 1.154 | 1.144 | 0.9   | 99    | 0.00     |
| 71 P  | Bromoform                   | 0.293 | 0.270 | 7.8   | 96    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 103   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.504 | 3.438 | 1.9   | 99    | 0.00     |
| 74 T  | N-amyl acetate              | 1.491 | 1.464 | 1.8   | 99    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.170 | 1.031 | 11.9  | 99    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.999 | 0.859 | 14.0  | 100   | 0.00     |
| 77 T  | Bromobenzene                | 0.942 | 0.838 | 11.0  | 98    | 0.00     |
| 78 T  | n-propylbenzene             | 4.106 | 4.037 | 1.7   | 98    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.683 | 2.572 | 4.1   | 101   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.904 | 2.946 | -1.4  | 99    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.421 | 0.382 | 9.3   | 98    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.823 | 2.532 | 10.3  | 96    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.403 | 2.533 | -5.4  | 103   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.997 | 3.000 | -0.1  | 98    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.395 | 3.383 | 0.4   | 99    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.784 | 2.872 | -3.2  | 97    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.838 | 1.539 | 16.3  | 95    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.937 | 1.552 | 19.9  | 96    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.605 | 2.393 | 8.1   | 94    | 0.00     |
| 90 T  | Hexachloroethane            | 0.621 | 0.541 | 12.9  | 95    | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 1.766 | 1.546 | 12.5  | 99    | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.237 | 0.216 | 8.9   | 103   | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.967 | 0.779 | 19.4  | 93    | 0.00     |
| 94 T  | Hexachlorobutadiene         | 0.425 | 0.336 | 20.9  | 94    | 0.00     |
| 95 T  | Naphthalene                 | 2.894 | 2.628 | 9.2   | 98    | 0.00     |

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Sample : VSTDICV050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN103024

Quant Time: Oct 31 18:28:48 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:24:48 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|------------------------|-------|-------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 0.939 | 0.762 | 18.8 | 94    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



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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  | 103   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 45.985  | 8.0  | 99    | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 45.299  | 9.4  | 94    | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 46.430  | 7.1# | 98    | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 43.494  | 13.0 | 99    | -0.05    |
| 6 T   | Chloroethane                | 50.000  | 46.348  | 7.3  | 97    | -0.05    |
| 7 T   | Trichlorofluoromethane      | 50.000  | 45.644  | 8.7  | 100   | -0.02    |
| 8 T   | Diethyl Ether               | 50.000  | 46.640  | 6.7  | 98    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 45.702  | 8.6  | 97    | -0.01    |
| 10 T  | Methyl Iodide               | 50.000  | 46.542  | 6.9  | 100   | -0.02    |
| 11 T  | Tert butyl alcohol          | 250.000 | 219.840 | 12.1 | 100   | 0.01     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 45.338  | 9.3# | 99    | -0.01    |
| 13 T  | Acrolein                    | 250.000 | 218.362 | 12.7 | 97    | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 47.975  | 4.0  | 100   | -0.01    |
| 15 T  | Acrylonitrile               | 250.000 | 236.747 | 5.3  | 99    | 0.00     |
| 16 T  | Acetone                     | 250.000 | 244.445 | 2.2  | 103   | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 42.682  | 14.6 | 96    | -0.01    |
| 18 T  | Methyl Acetate              | 50.000  | 44.944  | 10.1 | 95    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 48.603  | 2.8  | 99    | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 45.716  | 8.6  | 99    | -0.01    |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 45.019  | 10.0 | 96    | -0.01    |
| 22 T  | Diisopropyl ether           | 50.000  | 48.739  | 2.5  | 99    | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 247.614 | 1.0  | 99    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 46.408  | 7.2  | 99    | -0.01    |
| 25 T  | 2-Butanone                  | 250.000 | 237.635 | 4.9  | 105   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 45.103  | 9.8  | 95    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 46.214  | 7.6  | 98    | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 54.971  | -9.9 | 97    | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 245.822 | 1.7  | 102   | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 47.316  | 5.4# | 101   | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 45.053  | 9.9  | 99    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 46.774  | 6.5  | 99    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 47.560  | 4.9  | 98    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0  | 104   | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 47.522  | 5.0  | 97    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 46.370  | 7.3  | 100   | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 48.154  | 3.7  | 101   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 46.145  | 7.7  | 98    | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 49.969  | 0.1  | 98    | 0.00     |
| 40 TM | Benzene                     | 50.000  | 46.273  | 7.5  | 100   | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 51.964  | -3.9 | 101   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 47.118  | 5.8  | 97    | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 45.492  | 9.0  | 99    | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 44.732  | 10.5 | 97    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 47.196  | 5.6# | 100   | 0.00     |
| 46 T  | Dibromomethane              | 50.000  | 45.911  | 8.2  | 98    | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000  | 46.560  | 6.9  | 98    | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000  | 51.057  | -2.1 | 102   | 0.00     |

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 Operator : JC\MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN103024

Quant Time: Oct 31 18:28:48 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:24:48 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount   | Calc.    | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|----------|----------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 1000.000 | 1063.992 | -6.4  | 107   | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 48.359   | 3.3   | 96    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 252.729  | -1.1  | 101   | 0.00     |
| 52 CM | Toluene                     | 50.000   | 48.616   | 2.8#  | 99    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 45.911   | 8.2   | 96    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 46.832   | 6.3   | 97    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 47.618   | 4.8   | 100   | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 52.764   | -5.5  | 98    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 47.765   | 4.5   | 100   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 280.013  | -12.0 | 100   | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 255.570  | -2.2  | 101   | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 49.079   | 1.8   | 98    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 46.393   | 7.2   | 98    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 47.715   | 4.6   | 94    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0   | 104   | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 45.436   | 9.1   | 101   | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 44.872   | 10.3  | 99    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 46.323   | 7.4   | 100   | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 48.319   | 3.4#  | 100   | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 98.979   | 1.0   | 100   | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 50.538   | -1.1  | 101   | 0.00     |
| 70 T  | Styrene                     | 50.000   | 49.600   | 0.8   | 99    | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 46.166   | 7.7   | 96    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0   | 103   | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 49.063   | 1.9   | 99    | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 49.076   | 1.8   | 99    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 44.058   | 11.9  | 99    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 42.988   | 14.0  | 100   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 44.500   | 11.0  | 98    | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 49.156   | 1.7   | 98    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 47.930   | 4.1   | 101   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 50.714   | -1.4  | 99    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 45.300   | 9.4   | 98    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 44.837   | 10.3  | 96    | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 52.701   | -5.4  | 103   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 50.053   | -0.1  | 98    | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 49.829   | 0.3   | 99    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 51.568   | -3.1  | 97    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 41.852   | 16.3  | 95    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 45.904   | 8.2   | 96    | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 45.941   | 8.1   | 94    | 0.00     |
| 90 T  | Hexachloroethane            | 50.000   | 43.597   | 12.8  | 95    | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 50.000   | 43.765   | 12.5  | 99    | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 50.000   | 45.651   | 8.7   | 103   | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 50.000   | 40.290   | 19.4  | 93    | 0.00     |
| 94 T  | Hexachlorobutadiene         | 50.000   | 39.544   | 20.9  | 94    | 0.00     |
| 95 T  | Naphthalene                 | 50.000   | 45.408   | 9.2   | 98    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084577.D  
Acq On : 30 Oct 2024 15:06  
Operator : JC\MD  
Sample : VSTDICV050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
ICVVN103024

Quant Time: Oct 31 18:28:48 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:24:48 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | Amount | Calc.  | %Dev | Area% | Dev(min) |
|------|------------------------|--------|--------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 40.595 | 18.8 | 94    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



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

### VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG No.: P4892

Instrument ID: MSVOA\_Y Calibration Date(s): 11/19/2024 11/19/2024

Heated Purge: (Y/N) Y Calibration Time(s): 15:49 17:42

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

|                                |                     |        |                     |        |                     |        |                     |       |                     |  |                     |  |
|--------------------------------|---------------------|--------|---------------------|--------|---------------------|--------|---------------------|-------|---------------------|--|---------------------|--|
| LAB FILE ID:                   | RRF005 = VY020338.D |        | RRF010 = VY020339.D |        | RRF020 = VY020340.D |        | RRF050 = VY020341.D |       | RRF100 = VY020342.D |  | RRF150 = VY020343.D |  |
| COMPOUND                       | RRF005              | RRF010 | RRF020              | RRF050 | RRF100              | RRF150 | RRF                 | % RSD |                     |  |                     |  |
| Dichlorodifluoromethane        | 0.573               | 0.448  | 0.467               | 0.454  | 0.465               | 0.506  | 0.485               | 9.8   |                     |  |                     |  |
| Chloromethane                  | 0.989               | 0.788  | 0.765               | 0.681  | 0.589               | 0.599  | 0.735               | 20.3  |                     |  |                     |  |
| Vinyl Chloride                 | 0.816               | 0.722  | 0.664               | 0.622  | 0.572               | 0.599  | 0.666               | 13.6  |                     |  |                     |  |
| Bromomethane                   | 0.415               | 0.391  | 0.293               | 0.314  | 0.280               | 0.302  | 0.333               | 16.9  |                     |  |                     |  |
| Chloroethane                   | 0.531               | 0.376  | 0.362               | 0.370  | 0.334               | 0.357  | 0.388               | 18.3  |                     |  |                     |  |
| Trichlorofluoromethane         | 1.130               | 0.863  | 0.896               | 0.931  | 0.821               | 0.910  | 0.925               | 11.6  |                     |  |                     |  |
| 1,1,2-Trichlorotrifluoroethane | 0.666               | 0.508  | 0.536               | 0.592  | 0.479               | 0.525  | 0.551               | 12.3  |                     |  |                     |  |
| 1,1-Dichloroethene             | 0.647               | 0.492  | 0.536               | 0.586  | 0.488               | 0.524  | 0.545               | 11.2  |                     |  |                     |  |
| Acetone                        | 0.160               | 0.110  | 0.132               | 0.160  | 0.141               | 0.123  | 0.138               | 14.7  |                     |  |                     |  |
| Carbon Disulfide               | 2.169               | 1.635  | 1.750               | 2.073  | 1.647               | 1.753  | 1.838               | 12.4  |                     |  |                     |  |
| Methyl tert-butyl Ether        | 1.574               | 1.297  | 1.482               | 1.399  | 1.404               | 1.346  | 1.417               | 7     |                     |  |                     |  |
| Methyl Acetate                 | 0.388               | 0.283  | 0.339               | 0.302  | 0.327               | 0.288  | 0.321               | 12.2  |                     |  |                     |  |
| Methylene Chloride             | 0.693               | 0.546  | 0.595               | 0.571  | 0.543               | 0.552  | 0.583               | 9.8   |                     |  |                     |  |
| trans-1,2-Dichloroethene       | 0.721               | 0.563  | 0.627               | 0.601  | 0.552               | 0.571  | 0.606               | 10.4  |                     |  |                     |  |
| 1,1-Dichloroethane             | 1.461               | 1.141  | 1.083               | 1.137  | 1.101               | 1.117  | 1.173               | 12.2  |                     |  |                     |  |
| Cyclohexane                    | 1.318               | 1.107  | 1.004               | 1.035  | 0.969               | 0.991  | 1.071               | 12.2  |                     |  |                     |  |
| 2-Butanone                     | 0.179               | 0.176  | 0.168               | 0.180  | 0.197               | 0.165  | 0.177               | 6.5   |                     |  |                     |  |
| Carbon Tetrachloride           | 0.575               | 0.500  | 0.500               | 0.478  | 0.483               | 0.533  | 0.511               | 7.2   |                     |  |                     |  |
| cis-1,2-Dichloroethene         | 0.710               | 0.664  | 0.643               | 0.687  | 0.647               | 0.653  | 0.667               | 3.9   |                     |  |                     |  |
| Bromochloromethane             | 0.534               | 0.553  | 0.441               | 0.509  | 0.450               | 0.476  | 0.494               | 9.2   |                     |  |                     |  |
| Chloroform                     | 1.198               | 1.161  | 1.069               | 1.236  | 1.064               | 1.072  | 1.133               | 6.6   |                     |  |                     |  |
| 1,1,1-Trichloroethane          | 1.068               | 1.042  | 0.941               | 0.997  | 0.940               | 0.982  | 0.995               | 5.3   |                     |  |                     |  |
| Methylcyclohexane              | 0.695               | 0.587  | 0.612               | 0.583  | 0.570               | 0.630  | 0.613               | 7.5   |                     |  |                     |  |
| Benzene                        | 1.632               | 1.376  | 1.440               | 1.348  | 1.378               | 1.435  | 1.435               | 7.2   |                     |  |                     |  |
| 1,2-Dichloroethane             | 0.416               | 0.372  | 0.398               | 0.364  | 0.386               | 0.389  | 0.387               | 4.8   |                     |  |                     |  |
| Trichloroethene                | 0.388               | 0.331  | 0.343               | 0.320  | 0.318               | 0.339  | 0.340               | 7.5   |                     |  |                     |  |
| 1,2-Dichloropropane            | 0.374               | 0.331  | 0.348               | 0.319  | 0.334               | 0.347  | 0.342               | 5.5   |                     |  |                     |  |
| Bromodichloromethane           | 0.525               | 0.458  | 0.479               | 0.492  | 0.463               | 0.490  | 0.484               | 5     |                     |  |                     |  |
| 4-Methyl-2-Pentanone           | 0.210               | 0.190  | 0.219               | 0.246  | 0.245               | 0.219  | 0.221               | 9.7   |                     |  |                     |  |
| Toluene                        | 0.970               | 0.836  | 0.890               | 0.850  | 0.829               | 0.889  | 0.877               | 6     |                     |  |                     |  |

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



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

### VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: PORT06  
 Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG No.: P4892  
 Instrument ID: MSVOA\_Y Calibration Date(s): 11/19/2024 11/19/2024  
 Heated Purge: (Y/N) Y Calibration Time(s): 15:49 17:42  
 GC Column: RXI-624 ID: 0.25 (mm)

| LAB FILE ID:                |        | RRF005 = VY020338.D |        | RRF010 = VY020339.D |        | RRF020 = VY020340.D |       |       |  |
|-----------------------------|--------|---------------------|--------|---------------------|--------|---------------------|-------|-------|--|
|                             |        | RRF050 = VY020341.D |        | RRF100 = VY020342.D |        | RRF150 = VY020343.D |       |       |  |
| COMPOUND                    | RRF005 | RRF010              | RRF020 | RRF050              | RRF100 | RRF150              | RRF   | % RSD |  |
| t-1,3-Dichloropropene       | 0.534  | 0.401               | 0.446  | 0.448               | 0.456  | 0.463               | 0.458 | 9.5   |  |
| cis-1,3-Dichloropropene     | 0.541  | 0.493               | 0.527  | 0.505               | 0.530  | 0.551               | 0.524 | 4.1   |  |
| 1,1,2-Trichloroethane       | 0.250  | 0.223               | 0.263  | 0.219               | 0.222  | 0.221               | 0.233 | 8.1   |  |
| 2-Hexanone                  | 0.142  | 0.135               | 0.160  | 0.171               | 0.177  | 0.155               | 0.157 | 10.3  |  |
| Dibromochloromethane        | 0.319  | 0.273               | 0.307  | 0.305               | 0.297  | 0.300               | 0.300 | 5.1   |  |
| 1,2-Dibromoethane           | 0.247  | 0.200               | 0.221  | 0.217               | 0.204  | 0.206               | 0.216 | 8.1   |  |
| Tetrachloroethene           | 0.402  | 0.344               | 0.401  | 0.331               | 0.333  | 0.350               | 0.360 | 9.1   |  |
| Chlorobenzene               | 1.258  | 1.079               | 1.083  | 1.144               | 1.040  | 1.085               | 1.115 | 7     |  |
| Ethyl Benzene               | 2.319  | 1.973               | 2.002  | 2.051               | 1.932  | 2.063               | 2.057 | 6.7   |  |
| m/p-Xylenes                 | 0.829  | 0.725               | 0.742  | 0.708               | 0.696  | 0.745               | 0.741 | 6.4   |  |
| o-Xylene                    | 0.770  | 0.694               | 0.711  | 0.668               | 0.666  | 0.706               | 0.703 | 5.4   |  |
| Styrene                     | 1.261  | 1.128               | 1.165  | 1.131               | 1.131  | 1.188               | 1.167 | 4.5   |  |
| Bromoform                   | 0.207  | 0.180               | 0.195  | 0.189               | 0.199  | 0.194               | 0.194 | 4.7   |  |
| Isopropylbenzene            | 4.851  | 4.028               | 4.070  | 4.314               | 3.899  | 4.251               | 4.236 | 8     |  |
| 1,1,2,2-Tetrachloroethane   | 0.729  | 0.646               | 0.683  | 0.728               | 0.676  | 0.646               | 0.685 | 5.4   |  |
| 1,3-Dichlorobenzene         | 2.072  | 1.668               | 1.839  | 1.848               | 1.621  | 1.719               | 1.794 | 9.1   |  |
| 1,4-Dichlorobenzene         | 1.938  | 1.651               | 1.709  | 1.730               | 1.579  | 1.679               | 1.714 | 7.1   |  |
| 1,2-Dichlorobenzene         | 1.630  | 1.401               | 1.506  | 1.547               | 1.414  | 1.474               | 1.495 | 5.7   |  |
| 1,2-Dibromo-3-Chloropropane | 0.130  | 0.098               | 0.108  | 0.119               | 0.113  | 0.105               | 0.112 | 10    |  |
| 1,2,4-Trichlorobenzene      | 0.974  | 0.841               | 0.856  | 0.894               | 0.900  | 0.958               | 0.904 | 5.9   |  |
| 1,2,3-Trichlorobenzene      | 0.817  | 0.784               | 0.721  | 0.748               | 0.762  | 0.806               | 0.773 | 4.7   |  |
| 1,2-Dichloroethane-d4       | 0.609  | 0.523               | 0.545  | 0.636               | 0.563  | 0.571               | 0.574 | 7.3   |  |
| Dibromofluoromethane        | 0.346  | 0.347               | 0.307  | 0.323               | 0.288  | 0.312               | 0.321 | 7.2   |  |
| Toluene-d8                  | 1.397  | 1.186               | 1.208  | 1.398               | 1.130  | 1.259               | 1.263 | 8.9   |  |
| 4-Bromofluorobenzene        | 0.459  | 0.381               | 0.384  | 0.430               | 0.369  | 0.413               | 0.406 | 8.5   |  |

\* 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.

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\  
 Method File : 82Y111924S.M  
 Title : SW846 8260  
 Last Update : Wed Nov 20 04:38:24 2024  
 Response Via : Initial Calibration

## Calibration Files

5 =VY020338.D 10 =VY020339.D 20 =VY020340.D 50 =VY020341.D 100 =VY020342.D 150 =VY020343.D

D

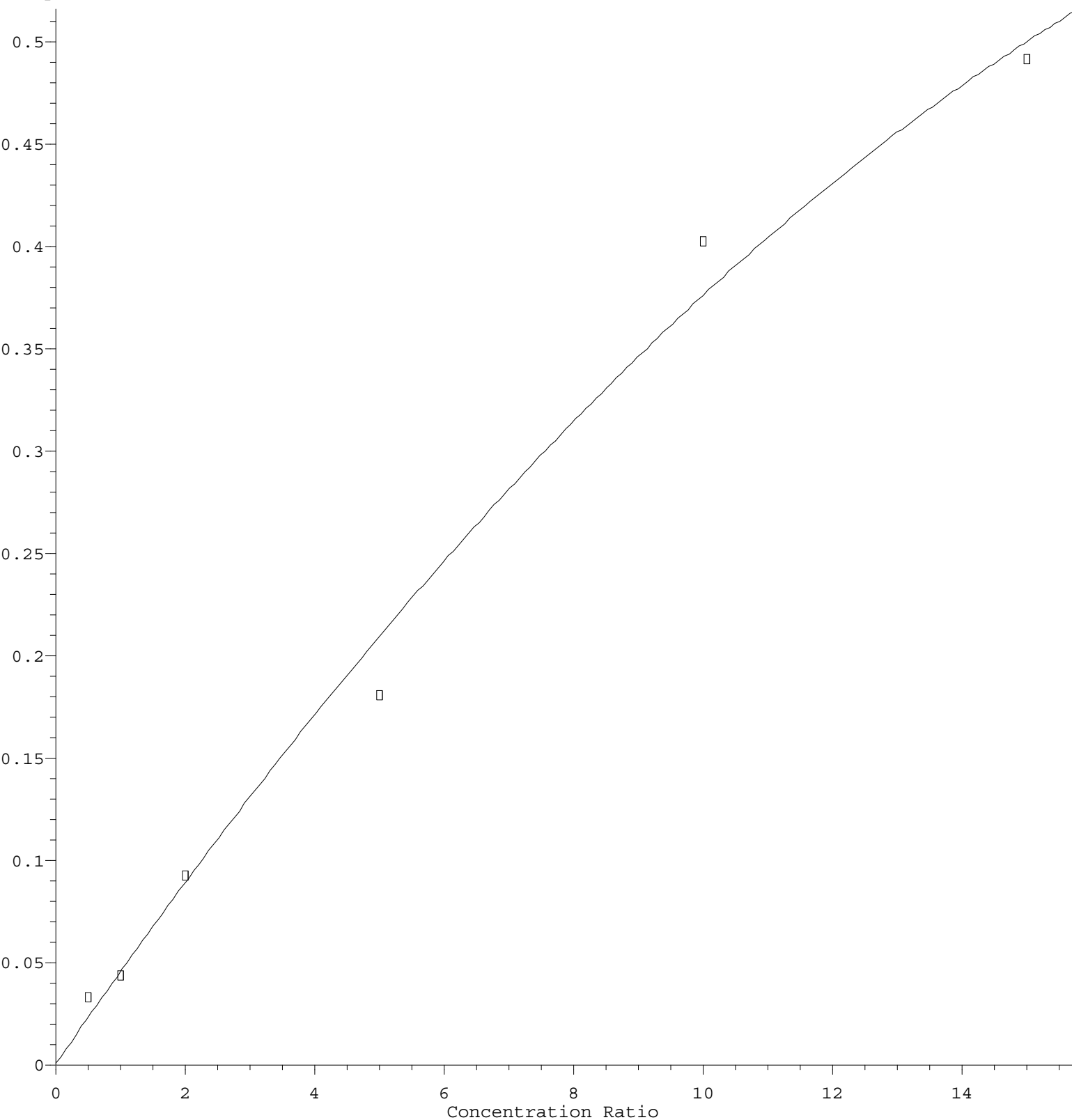
| Compound |                     | 5              | 10    | 20    | 50    | 100   | 150   | Avg   | %RSD   |
|----------|---------------------|----------------|-------|-------|-------|-------|-------|-------|--------|
| -----    |                     |                |       |       |       |       |       |       |        |
| 1) I     | Pentafluorobenzene  | -----ISTD----- |       |       |       |       |       |       |        |
| 2) T     | Dichlorodifluo...   | 0.573          | 0.448 | 0.467 | 0.454 | 0.465 | 0.506 | 0.485 | 9.77   |
| 3) P     | Chloromethane       | 0.989          | 0.788 | 0.765 | 0.681 | 0.589 | 0.599 | 0.735 | 20.27  |
| 4) C     | Vinyl Chloride      | 0.816          | 0.722 | 0.664 | 0.622 | 0.572 | 0.599 | 0.666 | 13.59# |
| 5) T     | Bromomethane        | 0.415          | 0.391 | 0.293 | 0.314 | 0.280 | 0.302 | 0.333 | 16.91  |
| 6) T     | Chloroethane        | 0.531          | 0.376 | 0.362 | 0.370 | 0.334 | 0.357 | 0.388 | 18.34  |
| 7) T     | Trichlorofluor...   | 1.130          | 0.863 | 0.896 | 0.931 | 0.821 | 0.910 | 0.925 | 11.61  |
| 8) T     | Diethyl Ether       | 0.319          | 0.262 | 0.294 | 0.306 | 0.286 | 0.285 | 0.292 | 6.73   |
| 9) T     | 1,1,2-Trichlor...   | 0.666          | 0.508 | 0.536 | 0.592 | 0.479 | 0.525 | 0.551 | 12.27  |
| 10) T    | Methyl Iodide       | 0.846          | 0.657 | 0.727 | 0.826 | 0.670 | 0.703 | 0.738 | 10.80  |
| 11) T    | Tert butyl alc...   | 0.066          | 0.044 | 0.046 | 0.036 | 0.040 | 0.033 | 0.044 | 26.83  |
| 12) CM   | 1,1-Dichloroet...   | 0.647          | 0.492 | 0.536 | 0.586 | 0.488 | 0.524 | 0.545 | 11.22# |
| 13) T    | Acrolein            | 0.038          | 0.031 | 0.035 | 0.036 | 0.036 | 0.037 | 0.036 | 6.69   |
| 14) T    | Allyl chloride      | 1.289          | 0.978 | 1.079 | 0.946 | 0.999 | 1.039 | 1.055 | 11.72  |
| 15) T    | Acrylonitrile       | 0.143          | 0.116 | 0.139 | 0.124 | 0.133 | 0.119 | 0.129 | 8.54   |
| 16) T    | Acetone             | 0.160          | 0.110 | 0.132 | 0.160 | 0.141 | 0.123 | 0.138 | 14.66  |
| 17) T    | Carbon Disulfide    | 2.169          | 1.635 | 1.750 | 2.073 | 1.647 | 1.753 | 1.838 | 12.35  |
| 18) T    | Methyl Acetate      | 0.388          | 0.283 | 0.339 | 0.302 | 0.327 | 0.288 | 0.321 | 12.22  |
| 19) T    | Methyl tert-bu...   | 1.574          | 1.297 | 1.482 | 1.399 | 1.404 | 1.346 | 1.417 | 6.97   |
| 20) T    | Methylene Chlo...   | 0.693          | 0.546 | 0.595 | 0.571 | 0.543 | 0.552 | 0.583 | 9.77   |
| 21) T    | trans-1,2-Dich...   | 0.721          | 0.563 | 0.627 | 0.601 | 0.552 | 0.571 | 0.606 | 10.41  |
| 22) T    | Diisopropyl ether   | 2.561          | 2.032 | 1.887 | 2.014 | 2.022 | 1.955 | 2.079 | 11.67  |
| 23) T    | Vinyl Acetate       | 1.344          | 1.107 | 1.066 | 1.147 | 1.203 | 1.101 | 1.162 | 8.67   |
| 24) P    | 1,1-Dichloroet...   | 1.461          | 1.141 | 1.083 | 1.137 | 1.101 | 1.117 | 1.173 | 12.15  |
| 25) T    | 2-Butanone          | 0.179          | 0.176 | 0.168 | 0.180 | 0.197 | 0.165 | 0.177 | 6.49   |
| 26) T    | 2,2-Dichloropr...   | 1.105          | 0.981 | 0.898 | 0.958 | 0.919 | 0.958 | 0.970 | 7.51   |
| 27) T    | cis-1,2-Dichlo...   | 0.710          | 0.664 | 0.643 | 0.687 | 0.647 | 0.653 | 0.667 | 3.92   |
| 28) T    | Bromochloromet...   | 0.534          | 0.553 | 0.441 | 0.509 | 0.450 | 0.476 | 0.494 | 9.25   |
| 29) T    | Tetrahydrofuran     | 0.099          | 0.110 | 0.100 | 0.107 | 0.120 | 0.100 | 0.106 | 7.54   |
| 30) C    | Chloroform          | 1.198          | 1.161 | 1.069 | 1.236 | 1.064 | 1.072 | 1.133 | 6.64#  |
| 31) T    | Cyclohexane         | 1.318          | 1.107 | 1.004 | 1.035 | 0.969 | 0.991 | 1.071 | 12.17  |
| 32) T    | 1,1,1-Trichlor...   | 1.068          | 1.042 | 0.941 | 0.997 | 0.940 | 0.982 | 0.995 | 5.27   |
| 33) S    | 1,2-Dichloroet...   | 0.609          | 0.523 | 0.545 | 0.636 | 0.563 | 0.571 | 0.574 | 7.26   |
|          |                     |                |       |       |       |       |       |       |        |
| 34) I    | 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |        |
| 35) S    | Dibromofluorom...   | 0.346          | 0.347 | 0.307 | 0.323 | 0.288 | 0.312 | 0.321 | 7.16   |
| 36) T    | 1,1-Dichloropr...   | 0.583          | 0.478 | 0.485 | 0.454 | 0.453 | 0.486 | 0.490 | 9.77   |
| 37) T    | Ethyl Acetate       | 0.209          | 0.244 | 0.224 | 0.212 | 0.244 | 0.213 | 0.224 | 7.19   |
| 38) T    | Carbon Tetrach...   | 0.575          | 0.500 | 0.500 | 0.478 | 0.483 | 0.533 | 0.511 | 7.16   |
| 39) T    | Methylcyclohexane   | 0.695          | 0.587 | 0.612 | 0.583 | 0.570 | 0.630 | 0.613 | 7.47   |
| 40) TM   | Benzene             | 1.632          | 1.376 | 1.440 | 1.348 | 1.378 | 1.435 | 1.435 | 7.18   |
| 41) T    | Methacrylonitrile   | 0.137          | 0.131 | 0.119 | 0.118 | 0.136 | 0.126 | 0.128 | 6.61   |
| 42) TM   | 1,2-Dichloroet...   | 0.416          | 0.372 | 0.398 | 0.364 | 0.386 | 0.389 | 0.387 | 4.78   |
| 43) T    | Isopropyl Acetate   | 0.428          | 0.389 | 0.442 | 0.423 | 0.492 | 0.442 | 0.436 | 7.70   |
| 44) TM   | Trichloroethene     | 0.388          | 0.331 | 0.343 | 0.320 | 0.318 | 0.339 | 0.340 | 7.54   |
| 45) C    | 1,2-Dichloropr...   | 0.374          | 0.331 | 0.348 | 0.319 | 0.334 | 0.347 | 0.342 | 5.52#  |
| 46) T    | Dibromomethane      | 0.185          | 0.173 | 0.177 | 0.172 | 0.175 | 0.171 | 0.175 | 3.01   |
| 47) T    | Bromodichlorom...   | 0.525          | 0.458 | 0.479 | 0.492 | 0.463 | 0.490 | 0.484 | 4.96   |
| 48) T    | Methyl methacr...   | 0.208          | 0.184 | 0.206 | 0.201 | 0.234 | 0.219 | 0.209 | 8.07   |
| 49) T    | 1,4-Dioxane         | 0.002          | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 5.32   |
| 50) S    | Toluene-d8          | 1.397          | 1.186 | 1.208 | 1.398 | 1.130 | 1.259 | 1.263 | 8.88   |
| 51) T    | 4-Methyl-2-Pen...   | 0.210          | 0.190 | 0.219 | 0.246 | 0.245 | 0.219 | 0.221 | 9.68   |
| 52) CM   | Toluene             | 0.970          | 0.836 | 0.890 | 0.850 | 0.829 | 0.889 | 0.877 | 5.99#  |
| 53) T    | t-1,3-Dichloro...   | 0.534          | 0.401 | 0.446 | 0.448 | 0.456 | 0.463 | 0.458 | 9.46   |
| 54) T    | cis-1,3-Dichlo...   | 0.541          | 0.493 | 0.527 | 0.505 | 0.530 | 0.551 | 0.524 | 4.14   |
| 55) T    | 1,1,2-Trichlor...   | 0.250          | 0.223 | 0.263 | 0.219 | 0.222 | 0.221 | 0.233 | 8.10   |

|                                                  |    |                       |       |       |       |       |       |       |       |       |
|--------------------------------------------------|----|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\ |    |                       |       |       |       |       |       |       |       |       |
| Method File : 82Y111924S.M                       |    |                       |       |       |       |       |       |       |       |       |
| 56)                                              | T  | Ethyl methacry...     | 0.378 | 0.307 | 0.339 | 0.354 | 0.367 | 0.354 | 0.350 | 7.09  |
| 57)                                              | T  | 1,3-Dichloropr...     | 0.435 | 0.390 | 0.444 | 0.417 | 0.417 | 0.409 | 0.419 | 4.51  |
| 58)                                              | T  | 2-Chloroethyl ...     | 0.178 | 0.162 | 0.160 | 0.156 | 0.167 | 0.172 | 0.166 | 4.96  |
| 59)                                              | T  | 2-Hexanone            | 0.142 | 0.135 | 0.160 | 0.171 | 0.177 | 0.155 | 0.157 | 10.27 |
| 60)                                              | T  | Dibromochlorom...     | 0.319 | 0.273 | 0.307 | 0.305 | 0.297 | 0.300 | 0.300 | 5.06  |
| 61)                                              | T  | 1,2-Dibromoethane     | 0.247 | 0.200 | 0.221 | 0.217 | 0.204 | 0.206 | 0.216 | 8.07  |
| 62)                                              | S  | 4-Bromofluorob...     | 0.459 | 0.381 | 0.384 | 0.430 | 0.369 | 0.413 | 0.406 | 8.52  |
| -----ISTD-----                                   |    |                       |       |       |       |       |       |       |       |       |
| 63)                                              | I  | Chlorobenzene-d5      |       |       |       |       |       |       |       |       |
| 64)                                              | T  | Tetrachloroethene     | 0.402 | 0.344 | 0.401 | 0.331 | 0.333 | 0.350 | 0.360 | 9.08  |
| 65)                                              | PM | Chlorobenzene         | 1.258 | 1.079 | 1.083 | 1.144 | 1.040 | 1.085 | 1.115 | 6.97  |
| 66)                                              | T  | 1,1,1,2-Tetrac...     | 0.428 | 0.351 | 0.360 | 0.369 | 0.354 | 0.372 | 0.372 | 7.60  |
| 67)                                              | C  | Ethyl Benzene         | 2.319 | 1.973 | 2.002 | 2.051 | 1.932 | 2.063 | 2.057 | 6.69# |
| 68)                                              | T  | m/p-Xylenes           | 0.829 | 0.725 | 0.742 | 0.708 | 0.696 | 0.745 | 0.741 | 6.35  |
| 69)                                              | T  | o-Xylene              | 0.770 | 0.694 | 0.711 | 0.668 | 0.666 | 0.706 | 0.703 | 5.42  |
| 70)                                              | T  | Styrene               | 1.261 | 1.128 | 1.165 | 1.131 | 1.131 | 1.188 | 1.167 | 4.45  |
| 71)                                              | P  | Bromoform             | 0.207 | 0.180 | 0.195 | 0.189 | 0.199 | 0.194 | 0.194 | 4.68  |
| -----ISTD-----                                   |    |                       |       |       |       |       |       |       |       |       |
| 72)                                              | I  | 1,4-Dichlorobenzen... |       |       |       |       |       |       |       |       |
| 73)                                              | T  | Isopropylbenzene      | 4.851 | 4.028 | 4.070 | 4.314 | 3.899 | 4.251 | 4.236 | 7.96  |
| 74)                                              | T  | N-amyl acetate        | 0.918 | 0.878 | 1.001 | 1.094 | 1.164 | 1.085 | 1.024 | 10.82 |
| 75)                                              | P  | 1,1,2,2-Tetrac...     | 0.729 | 0.646 | 0.683 | 0.728 | 0.676 | 0.646 | 0.685 | 5.44  |
| 76)                                              | T  | 1,2,3-Trichlor...     | 0.415 | 0.455 | 0.479 | 0.511 | 0.503 | 0.465 | 0.471 | 7.45  |
| 77)                                              | T  | Bromobenzene          | 0.973 | 0.840 | 0.858 | 0.923 | 0.847 | 0.883 | 0.887 | 5.84  |
| 78)                                              | T  | n-propylbenzene       | 5.602 | 4.857 | 4.973 | 5.199 | 4.722 | 5.146 | 5.083 | 6.10  |
| 79)                                              | T  | 2-Chlorotoluene       | 3.136 | 2.687 | 3.201 | 2.886 | 2.706 | 2.920 | 2.923 | 7.28  |
| 80)                                              | T  | 1,3,5-Trimethy...     | 3.622 | 3.162 | 3.792 | 3.392 | 3.156 | 3.414 | 3.423 | 7.34  |
| 81)                                              | T  | trans-1,4-Dich...     | 0.235 | 0.214 | 0.230 | 0.256 | 0.257 | 0.252 | 0.241 | 7.14  |
| 82)                                              | T  | 4-Chlorotoluene       | 3.301 | 2.810 | 3.266 | 2.948 | 2.773 | 3.000 | 3.016 | 7.42  |
| 83)                                              | T  | tert-Butylbenzene     | 3.233 | 2.921 | 3.004 | 3.092 | 2.801 | 3.073 | 3.021 | 4.94  |
| 84)                                              | T  | 1,2,4-Trimethy...     | 3.600 | 3.376 | 3.453 | 3.404 | 3.134 | 3.395 | 3.394 | 4.45  |
| 85)                                              | T  | sec-Butylbenzene      | 5.836 | 4.237 | 4.948 | 5.073 | 4.046 | 4.434 | 4.762 | 13.87 |
| 86)                                              | T  | p-Isopropyltol...     | 4.038 | 3.365 | 3.793 | 3.854 | 3.357 | 3.687 | 3.682 | 7.43  |
| 87)                                              | T  | 1,3-Dichlorobe...     | 2.072 | 1.668 | 1.839 | 1.848 | 1.621 | 1.719 | 1.794 | 9.11  |
| 88)                                              | T  | 1,4-Dichlorobe...     | 1.938 | 1.651 | 1.709 | 1.730 | 1.579 | 1.679 | 1.714 | 7.10  |
| 89)                                              | T  | n-Butylbenzene        | 3.853 | 3.314 | 3.479 | 3.661 | 3.259 | 3.589 | 3.526 | 6.31  |
| 90)                                              | T  | Hexachloroethane      | 0.756 | 0.650 | 0.719 | 0.771 | 0.654 | 0.715 | 0.711 | 7.07  |
| 91)                                              | T  | 1,2-Dichlorobe...     | 1.630 | 1.401 | 1.506 | 1.547 | 1.414 | 1.474 | 1.495 | 5.75  |
| 92)                                              | T  | 1,2-Dibromo-3-...     | 0.130 | 0.098 | 0.108 | 0.119 | 0.113 | 0.105 | 0.112 | 9.98  |
| 93)                                              | T  | 1,2,4-Trichlor...     | 0.974 | 0.841 | 0.856 | 0.894 | 0.900 | 0.958 | 0.904 | 5.92  |
| 94)                                              | T  | Hexachlorobuta...     | 0.603 | 0.519 | 0.530 | 0.539 | 0.529 | 0.590 | 0.552 | 6.46  |
| 95)                                              | T  | Naphthalene           | 1.445 | 1.394 | 1.453 | 1.636 | 1.720 | 1.691 | 1.557 | 9.11  |
| 96)                                              | T  | 1,2,3-Trichlor...     | 0.817 | 0.784 | 0.721 | 0.748 | 0.762 | 0.806 | 0.773 | 4.69  |

(#) = Out of Range

# Tert butyl alcohol

Response Ratio

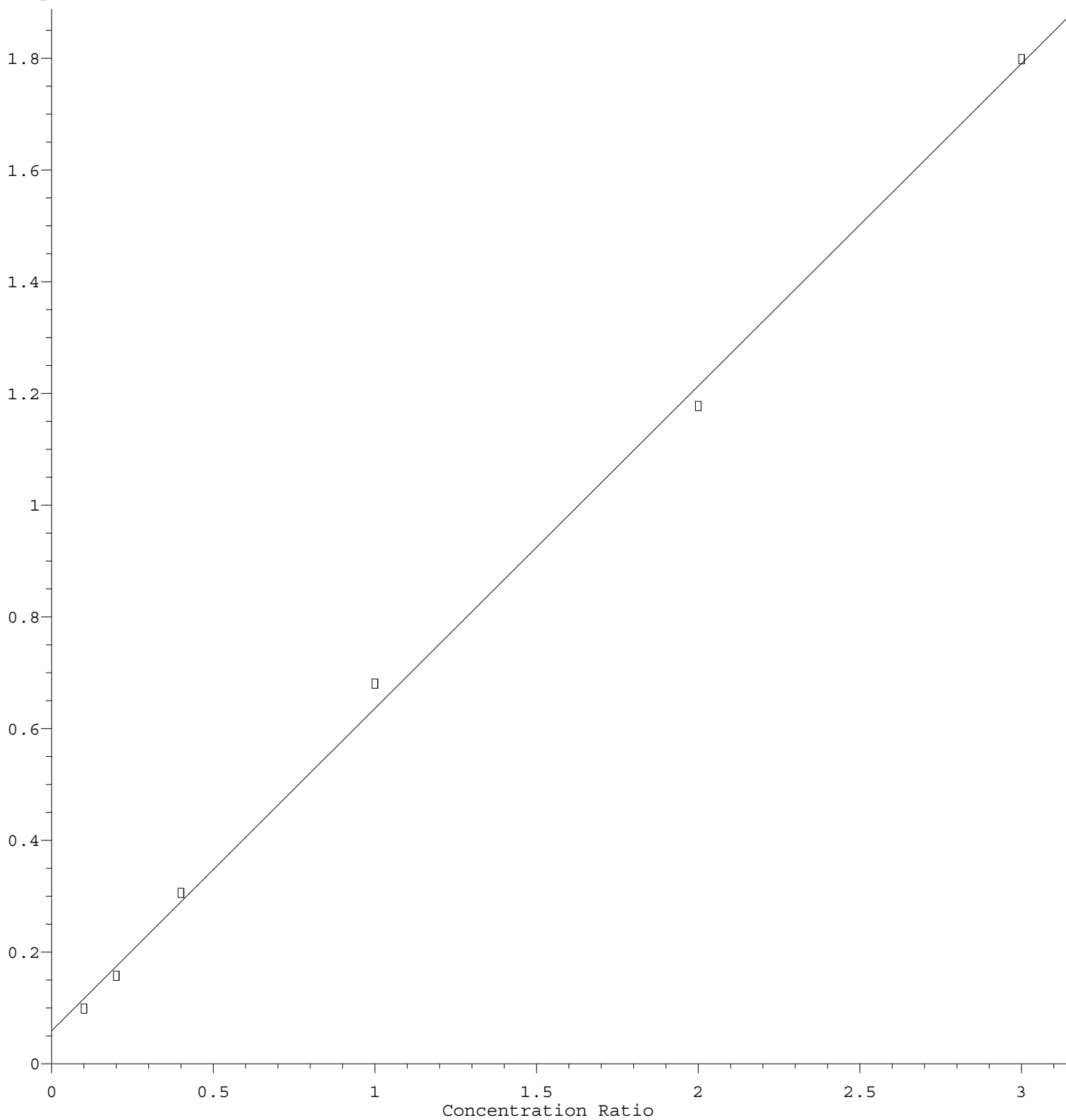


$R = -8.522e-004 A^2 + 4.609e-002 A + 5.442e-004$   
 Coef of Det ( $r^2$ ) = 0.990971    Curve Fit: Quadratic  
 Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y111924S.M  
 Calibration Table Last Updated: Wed Nov 20 04:38:24 2024



## Chloromethane

Response Ratio



$$\text{Response} = 5.772\text{e-}001 * \text{Amt} + 5.864\text{e-}002$$

Coef of Det ( $r^2$ ) = 0.998139 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y111924S.M

Calibration Table Last Updated: Wed Nov 20 04:38:24 2024

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020338.D  
 Acq On : 19 Nov 2024 15:49  
 Operator : SY/MD  
 Sample : VSTDICC005  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Semsettin Yesilyurt 11/25/2024

Quant Time: Nov 20 04:33:57 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:33:54 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.707  | 168  | 227223   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.616  | 114  | 374127   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.414 | 117  | 306982   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.347 | 152  | 140473   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.061  | 65    | 13832    | 5.299    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 10.600%# |
| 35) Dibromofluoromethane    | 7.634  | 113   | 12960    | 5.402    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 10.800%# |
| 50) Toluene-d8              | 10.109 | 98    | 52284    | 5.533    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 11.060%# |
| 62) 4-Bromofluorobenzene    | 12.408 | 95    | 17179    | 5.655    | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 11.300%# |

|                              |       |     |        |        |        |     |
|------------------------------|-------|-----|--------|--------|--------|-----|
| Target Compounds             |       |     |        |        | Qvalue |     |
| 2) Dichlorodifluoromethane   | 1.867 | 85  | 13013  | 5.900  | ug/l   | 93  |
| 3) Chloromethane             | 2.068 | 50  | 22477  | 3.541  | ug/l   | 98  |
| 4) Vinyl Chloride            | 2.208 | 62  | 18543  | 6.128  | ug/l   | 99  |
| 5) Bromomethane              | 2.605 | 94  | 9432   | 6.242  | ug/l   | 98  |
| 6) Chloroethane              | 2.745 | 64  | 12063  | 6.834  | ug/l   | 94  |
| 7) Trichlorofluoromethane    | 3.068 | 101 | 25672  | 6.106  | ug/l   | 97  |
| 8) Diethyl Ether             | 3.452 | 74  | 7250   | 5.465  | ug/l   | 92  |
| 9) 1,1,2-Trichlorotrifluo... | 3.818 | 101 | 15136  | 6.045  | ug/l   | 99  |
| 10) Methyl Iodide            | 4.013 | 142 | 19213  | 5.728  | ug/l   | 98  |
| 11) Tert butyl alcohol       | 4.860 | 59  | 7536m  | 35.866 | ug/l   |     |
| 12) 1,1-Dichloroethene       | 3.800 | 96  | 14708  | 5.934  | ug/l   | 94  |
| 13) Acrolein                 | 3.659 | 56  | 4362   | 26.985 | ug/l   | 95  |
| 14) Allyl chloride           | 4.391 | 41  | 29279  | 6.108  | ug/l   | 93  |
| 15) Acrylonitrile            | 5.061 | 53  | 16245  | 27.700 | ug/l   | 97  |
| 16) Acetone                  | 3.867 | 43  | 18219  | 29.112 | ug/l   | 92  |
| 17) Carbon Disulfide         | 4.110 | 76  | 49286  | 5.902  | ug/l   | 99  |
| 18) Methyl Acetate           | 4.397 | 43  | 8805   | 6.036  | ug/l   | 94  |
| 19) Methyl tert-butyl Ether  | 5.122 | 73  | 35762  | 5.554  | ug/l   | 100 |
| 20) Methylene Chloride       | 4.623 | 84  | 15740  | 5.939  | ug/l   | 93  |
| 21) trans-1,2-Dichloroethene | 5.116 | 96  | 16393  | 5.955  | ug/l   | 93  |
| 22) Diisopropyl ether        | 6.019 | 45  | 58191  | 6.160  | ug/l   | 98  |
| 23) Vinyl Acetate            | 5.964 | 43  | 152663 | 28.920 | ug/l   | 98  |
| 24) 1,1-Dichloroethane       | 5.921 | 63  | 33199  | 6.226  | ug/l   | 98  |
| 25) 2-Butanone               | 6.890 | 43  | 20288  | 25.181 | ug/l   | 96  |
| 26) 2,2-Dichloropropane      | 6.890 | 77  | 25115  | 5.698  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 6.897 | 96  | 16128  | 5.319  | ug/l   | 92  |
| 28) Bromochloromethane       | 7.244 | 49  | 12131  | 5.405  | ug/l   | 99  |
| 29) Tetrahydrofuran          | 7.262 | 42  | 11283  | 23.431 | ug/l   | 96  |
| 30) Chloroform               | 7.421 | 83  | 27219  | 5.286  | ug/l   | 100 |
| 31) Cyclohexane              | 7.707 | 56  | 29956  | 6.156  | ug/l # | 79  |
| 32) 1,1,1-Trichloroethane    | 7.622 | 97  | 24268  | 5.367  | ug/l   | 98  |
| 36) 1,1-Dichloropropene      | 7.835 | 75  | 21801  | 5.950  | ug/l   | 98  |
| 37) Ethyl Acetate            | 6.988 | 43  | 7806   | 4.569  | ug/l # | 79  |
| 38) Carbon Tetrachloride     | 7.823 | 117 | 21497  | 5.619  | ug/l   | 93  |
| 39) Methylcyclohexane        | 9.110 | 83  | 26014  | 5.673  | ug/l   | 93  |
| 40) Benzene                  | 8.079 | 78  | 61067  | 5.687  | ug/l   | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020338.D  
 Acq On : 19 Nov 2024 15:49  
 Operator : SY/MD  
 Sample : VSTDICC005  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

## Instrument :

MSVOA\_Y

## ClientSampleId :

VSTDICC005

## Manual Integrations

## APPROVED

Reviewed By :Romaben Patel 11/20/2024

Supervised By :Semsettin Yesilyurt 11/25/2024

Quant Time: Nov 20 04:33:57 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M

Quant Title : SW846 8260

QLast Update : Wed Nov 20 04:33:54 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.226  | 41   | 5114     | 5.355   | ug/l   | 92       |
| 42) 1,2-Dichloroethane        | 8.165  | 62   | 15552    | 5.366   | ug/l   | 98       |
| 43) Isopropyl Acetate         | 8.195  | 43   | 16024    | 4.909   | ug/l # | 87       |
| 44) Trichloroethene           | 8.866  | 130  | 14519    | 5.707   | ug/l   | 93       |
| 45) 1,2-Dichloropropane       | 9.140  | 63   | 13999    | 5.464   | ug/l   | 94       |
| 46) Dibromomethane            | 9.231  | 93   | 6930     | 5.278   | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.420  | 83   | 19627    | 5.415   | ug/l   | 95       |
| 48) Methyl methacrylate       | 9.225  | 41   | 7791     | 4.992   | ug/l   | 94       |
| 49) 1,4-Dioxane               | 9.238  | 88   | 1421     | 105.186 | ug/l # | 86       |
| 51) 4-Methyl-2-Pentanone      | 10.000 | 43   | 39329    | 23.742  | ug/l   | 99       |
| 52) Toluene                   | 10.170 | 92   | 36298    | 5.530   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.396 | 75   | 19995    | 5.833   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 9.853  | 75   | 20222    | 5.153   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 10.573 | 97   | 9364     | 5.372   | ug/l   | 94       |
| 56) Ethyl methacrylate        | 10.439 | 69   | 14134    | 5.399   | ug/l   | 97       |
| 57) 1,3-Dichloropropane       | 10.719 | 76   | 16257    | 5.190   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 9.713  | 63   | 33342    | 26.863  | ug/l   | 98       |
| 59) 2-Hexanone                | 10.762 | 43   | 26616    | 22.690  | ug/l   | 99       |
| 60) Dibromochloromethane      | 10.908 | 129  | 11937    | 5.313   | ug/l   | 95       |
| 61) 1,2-Dibromoethane         | 11.018 | 107  | 9249     | 5.726   | ug/l   | 98       |
| 64) Tetrachloroethene         | 10.646 | 164  | 12352    | 5.582   | ug/l   | 95       |
| 65) Chlorobenzene             | 11.444 | 112  | 38618    | 5.642   | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane | 11.518 | 131  | 13130    | 5.742   | ug/l   | 95       |
| 67) Ethyl Benzene             | 11.518 | 91   | 71195    | 5.638   | ug/l   | 100      |
| 68) m/p-Xylenes               | 11.627 | 106  | 50872    | 11.185  | ug/l   | 97       |
| 69) o-Xylene                  | 11.957 | 106  | 23650    | 5.482   | ug/l   | 99       |
| 70) Styrene                   | 11.969 | 104  | 38724    | 5.403   | ug/l   | 99       |
| 71) Bromoform                 | 12.133 | 173  | 6352     | 5.330   | ug/l # | 96       |
| 73) Isopropylbenzene          | 12.255 | 105  | 68143    | 5.726   | ug/l   | 99       |
| 74) N-amyl acetate            | 12.072 | 43   | 12902    | 4.487   | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane | 12.505 | 83   | 10246    | 5.328   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.560 | 75   | 5823m    | 4.398   | ug/l   |          |
| 77) Bromobenzene              | 12.536 | 156  | 13674    | 5.485   | ug/l   | 99       |
| 78) n-propylbenzene           | 12.597 | 91   | 78696    | 5.511   | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 12.682 | 91   | 44055    | 5.365   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 12.737 | 105  | 50883    | 5.291   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.304 | 75   | 3305     | 4.891   | ug/l   | 97       |
| 82) 4-Chlorotoluene           | 12.780 | 91   | 46376    | 5.473   | ug/l   | 97       |
| 83) tert-Butylbenzene         | 12.999 | 119  | 45414    | 5.351   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.048 | 105  | 50575    | 5.304   | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.176 | 105  | 81980    | 6.127   | ug/l   | 98       |
| 86) p-Isopropyltoluene        | 13.292 | 119  | 56716    | 5.483   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.292 | 146  | 29101    | 5.773   | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.371 | 146  | 27229    | 5.653   | ug/l   | 93       |
| 89) n-Butylbenzene            | 13.621 | 91   | 54128    | 5.464   | ug/l   | 99       |
| 90) Hexachloroethane          | 13.883 | 117  | 10618    | 5.318   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 13.664 | 146  | 22894    | 5.451   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.279 | 75   | 1828     | 5.792   | ug/l   | 94       |
| 93) 1,2,4-Trichlorobenzene    | 14.926 | 180  | 13686    | 5.389   | ug/l   | 97       |
| 94) Hexachlorobutadiene       | 15.029 | 225  | 8471     | 5.465   | ug/l   | 100      |
| 95) Naphthalene               | 15.151 | 128  | 20303    | 4.642   | ug/l   | 98       |
| 96) 1,2,3-Trichlorobenzene    | 15.334 | 180  | 11474    | 5.284   | ug/l   | 98       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020338.D  
Acq On : 19 Nov 2024 15:49  
Operator : SY/MD  
Sample : VSTDICC005  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICC005

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Semsettin Yesilyurt 11/25/2024

Quant Time: Nov 20 04:33:57 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:33:54 2024  
Response via : Initial Calibration

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

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

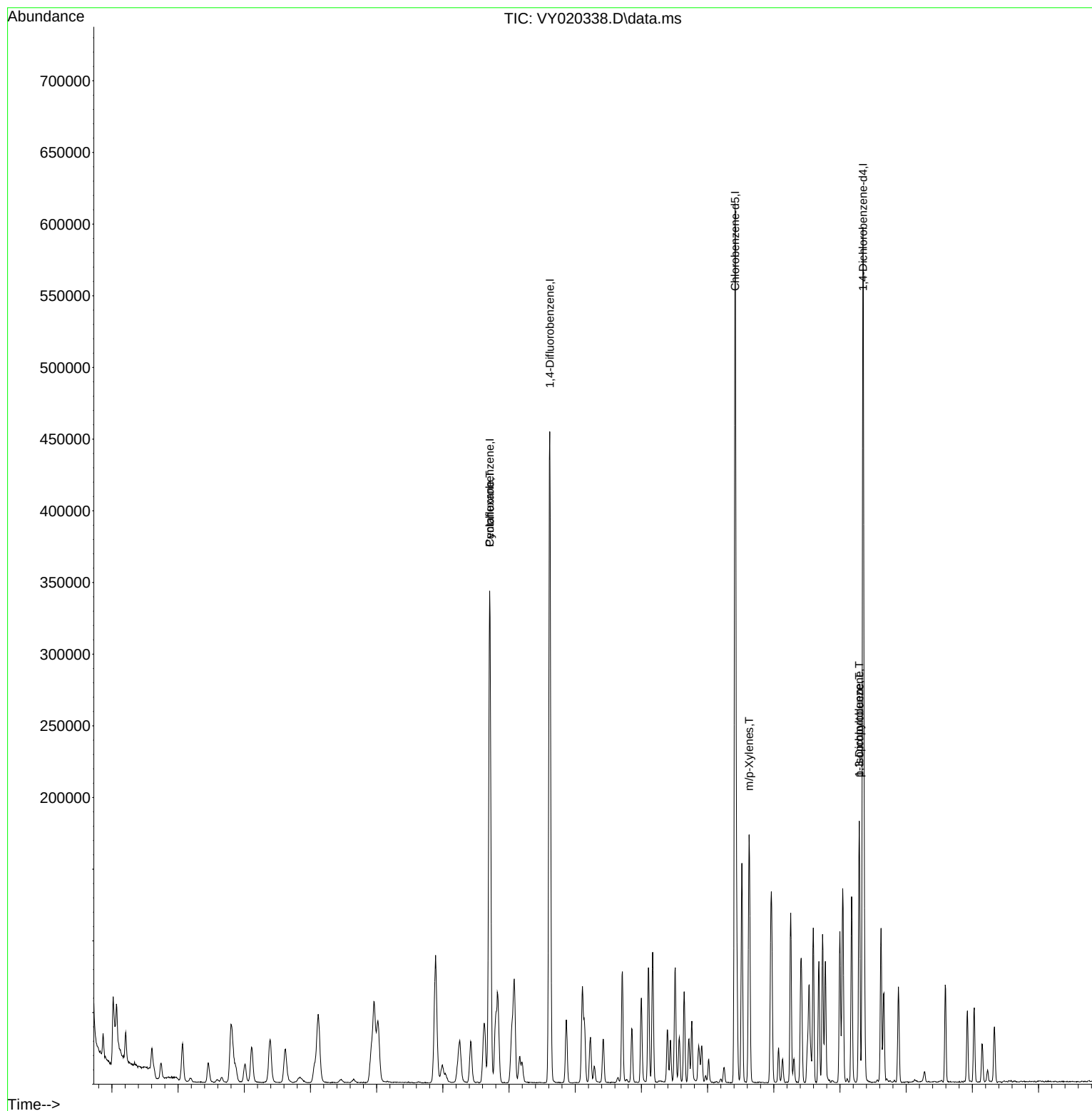
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020338.D  
Acq On : 19 Nov 2024 15:49  
Operator : SY/MD  
Sample : VSTDICC005  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICC005

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Semsettin Yesilyurt 11/25/2024

Quant Time: Nov 20 04:33:57 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:33:54 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020339.D  
 Acq On : 19 Nov 2024 16:12  
 Operator : SY/MD  
 Sample : VSTDICC010  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICC010

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 00:58:59 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 00:48:27 2024  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response   | Conc     | Units  | Dev(Min) |
|------------------------------|----------------|------|------------|----------|--------|----------|
| -----                        |                |      |            |          |        |          |
| Internal Standards           |                |      |            |          |        |          |
| 1) Pentafluorobenzene        | 7.707          | 168  | 244176     | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene      | 8.616          | 114  | 390316     | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5         | 11.414         | 117  | 319281     | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4   | 13.346         | 152  | 146946     | 50.000   | ug/l   | 0.00     |
|                              |                |      |            |          |        |          |
| System Monitoring Compounds  |                |      |            |          |        |          |
| 33) 1,2-Dichloroethane-d4    | 8.061          | 65   | 25534      | 9.102    | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 50 - 163 |      | Recovery = | 18.200%# |        |          |
| 35) Dibromofluoromethane     | 7.634          | 113  | 27064      | 10.813   | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 54 - 147 |      | Recovery = | 21.620%# |        |          |
| 50) Toluene-d8               | 10.103         | 98   | 92555      | 9.388    | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 58 - 134 |      | Recovery = | 18.780%# |        |          |
| 62) 4-Bromofluorobenzene     | 12.408         | 95   | 29715      | 9.376    | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 29 - 146 |      | Recovery = | 18.760%# |        |          |
|                              |                |      |            |          |        |          |
| Target Compounds             |                |      |            |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 1.867          | 85   | 21870      | 9.227    | ug/l   | 97       |
| 3) Chloromethane             | 2.068          | 50   | 38473      | 8.570    | ug/l   | 98       |
| 4) Vinyl Chloride            | 2.208          | 62   | 35263      | 10.845   | ug/l   | 94       |
| 5) Bromomethane              | 2.598          | 94   | 19085      | 11.753   | ug/l   | 95       |
| 6) Chloroethane              | 2.739          | 64   | 18368      | 9.684    | ug/l   | 99       |
| 7) Trichlorofluoromethane    | 3.062          | 101  | 42149      | 9.328    | ug/l   | 99       |
| 8) Diethyl Ether             | 3.458          | 74   | 12779      | 8.964    | ug/l   | 99       |
| 9) 1,1,2-Trichlorotrifluo... | 3.824          | 101  | 24798      | 9.215    | ug/l   | 99       |
| 10) Methyl Iodide            | 4.007          | 142  | 32100      | 8.906    | ug/l   | 96       |
| 11) Tert butyl alcohol       | 4.884          | 59   | 10698      | 47.785   | ug/l # | 73       |
| 12) 1,1-Dichloroethene       | 3.793          | 96   | 24035      | 9.023    | ug/l   | 98       |
| 13) Acrolein                 | 3.659          | 56   | 7635       | 43.953   | ug/l   | 96       |
| 14) Allyl chloride           | 4.385          | 41   | 47740      | 9.268    | ug/l   | 93       |
| 15) Acrylonitrile            | 5.067          | 53   | 28314      | 44.928   | ug/l   | 100      |
| 16) Acetone                  | 3.872          | 43   | 26883      | 39.974   | ug/l   | 93       |
| 17) Carbon Disulfide         | 4.110          | 76   | 79822      | 8.895    | ug/l   | 99       |
| 18) Methyl Acetate           | 4.397          | 43   | 13811      | 8.810    | ug/l   | 97       |
| 19) Methyl tert-butyl Ether  | 5.122          | 73   | 63324      | 9.152    | ug/l   | 99       |
| 20) Methylene Chloride       | 4.616          | 84   | 26668      | 9.364    | ug/l   | 94       |
| 21) trans-1,2-Dichloroethene | 5.116          | 96   | 27492      | 9.293    | ug/l   | 91       |
| 22) Diisopropyl ether        | 6.018          | 45   | 99254      | 9.778    | ug/l   | 96       |
| 23) Vinyl Acetate            | 5.964          | 43   | 270395     | 47.667   | ug/l   | 98       |
| 24) 1,1-Dichloroethane       | 5.915          | 63   | 55718      | 9.723    | ug/l   | 98       |
| 25) 2-Butanone               | 6.896          | 43   | 42909      | 49.561   | ug/l   | 97       |
| 26) 2,2-Dichloropropane      | 6.884          | 77   | 47901      | 10.114   | ug/l   | 99       |
| 27) cis-1,2-Dichloroethene   | 6.896          | 96   | 32422      | 9.950    | ug/l   | 95       |
| 28) Bromochloromethane       | 7.244          | 49   | 27023      | 11.205   | ug/l   | 94       |
| 29) Tetrahydrofuran          | 7.262          | 42   | 26874      | 51.935   | ug/l   | 94       |
| 30) Chloroform               | 7.421          | 83   | 56708      | 10.248   | ug/l   | 93       |
| 31) Cyclohexane              | 7.701          | 56   | 54063      | 10.338   | ug/l # | 91       |
| 32) 1,1,1-Trichloroethane    | 7.622          | 97   | 50897      | 10.475   | ug/l   | 100      |
| 36) 1,1-Dichloropropene      | 7.835          | 75   | 37302      | 9.758    | ug/l   | 98       |
| 37) Ethyl Acetate            | 6.982          | 43   | 19056      | 10.691   | ug/l   | 100      |
| 38) Carbon Tetrachloride     | 7.817          | 117  | 38996      | 9.770    | ug/l   | 97       |
| 39) Methylcyclohexane        | 9.103          | 83   | 45833      | 9.580    | ug/l   | 99       |
| 40) Benzene                  | 8.079          | 78   | 107451     | 9.592    | ug/l   | 97       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020339.D  
 Acq On : 19 Nov 2024 16:12  
 Operator : SY/MD  
 Sample : VSTDICC010  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICC010

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 00:58:59 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 00:48:27 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.226  | 41   | 10243    | 10.280  | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.158  | 62   | 29009    | 9.593   | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.201  | 43   | 30398    | 8.926   | ug/l # | 88       |
| 44) Trichloroethene           | 8.865  | 130  | 25870    | 9.747   | ug/l   | 98       |
| 45) 1,2-Dichloropropane       | 9.140  | 63   | 25874    | 9.680   | ug/l   | 98       |
| 46) Dibromomethane            | 9.231  | 93   | 13498    | 9.853   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.420  | 83   | 35727    | 9.447   | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.219  | 41   | 14343    | 8.809   | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.237  | 88   | 2821     | 200.157 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone      | 9.999  | 43   | 74041    | 42.842  | ug/l   | 100      |
| 52) Toluene                   | 10.170 | 92   | 65234    | 9.527   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.390 | 75   | 31288    | 8.749   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene   | 9.859  | 75   | 38511    | 9.407   | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane     | 10.566 | 97   | 17413    | 9.576   | ug/l   | 97       |
| 56) Ethyl methacrylate        | 10.438 | 69   | 23973    | 8.778   | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 10.713 | 76   | 30481    | 9.327   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 9.713  | 63   | 63051    | 48.691  | ug/l   | 100      |
| 59) 2-Hexanone                | 10.761 | 43   | 52821    | 43.163  | ug/l   | 100      |
| 60) Dibromochloromethane      | 10.914 | 129  | 21348    | 9.108   | ug/l   | 96       |
| 61) 1,2-Dibromoethane         | 11.011 | 107  | 15582    | 9.247   | ug/l   | 99       |
| 64) Tetrachloroethene         | 10.646 | 164  | 21998    | 9.558   | ug/l   | 99       |
| 65) Chlorobenzene             | 11.438 | 112  | 68874    | 9.675   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.517 | 131  | 22433    | 9.433   | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.517 | 91   | 126010   | 9.595   | ug/l   | 97       |
| 68) m/p-Xylenes               | 11.627 | 106  | 92641    | 19.583  | ug/l   | 99       |
| 69) o-Xylene                  | 11.950 | 106  | 44303    | 9.874   | ug/l   | 100      |
| 70) Styrene                   | 11.969 | 104  | 72003    | 9.659   | ug/l   | 99       |
| 71) Bromoform                 | 12.133 | 173  | 11513    | 9.289   | ug/l # | 98       |
| 73) Isopropylbenzene          | 12.255 | 105  | 118383   | 9.510   | ug/l   | 99       |
| 74) N-amyl acetate            | 12.066 | 43   | 25808    | 8.579   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.505 | 83   | 18981    | 9.435   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.554 | 75   | 13381m   | 9.631   | ug/l   |          |
| 77) Bromobenzene              | 12.529 | 156  | 24689    | 9.467   | ug/l   | 99       |
| 78) n-propylbenzene           | 12.596 | 91   | 142756   | 9.556   | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 12.676 | 91   | 78983    | 9.195   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 12.737 | 105  | 92937    | 9.238   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-b... | 12.304 | 75   | 6286     | 8.893   | ug/l   | 99       |
| 82) 4-Chlorotoluene           | 12.779 | 91   | 82594    | 9.317   | ug/l   | 99       |
| 83) tert-Butylbenzene         | 12.999 | 119  | 85832    | 9.668   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.042 | 105  | 99218    | 9.948   | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.176 | 105  | 124529   | 8.898   | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.291 | 119  | 98901    | 9.139   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.285 | 146  | 49013    | 9.295   | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.365 | 146  | 48510    | 9.628   | ug/l   | 98       |
| 89) n-Butylbenzene            | 13.621 | 91   | 97403    | 9.399   | ug/l   | 99       |
| 90) Hexachloroethane          | 13.883 | 117  | 19103    | 9.146   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene       | 13.657 | 146  | 41163    | 9.369   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.279 | 75   | 2892     | 8.760   | ug/l   | 100      |
| 93) 1,2,4-Trichlorobenzene    | 14.925 | 180  | 24704    | 9.299   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.029 | 225  | 15256    | 9.408   | ug/l   | 98       |
| 95) Naphthalene               | 15.145 | 128  | 40980    | 8.957   | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.334 | 180  | 23029    | 10.139  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020339.D  
Acq On : 19 Nov 2024 16:12  
Operator : SY/MD  
Sample : VSTDICC010  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICC010

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 00:58:59 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 00:48:27 2024  
Response via : Initial Calibration

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

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



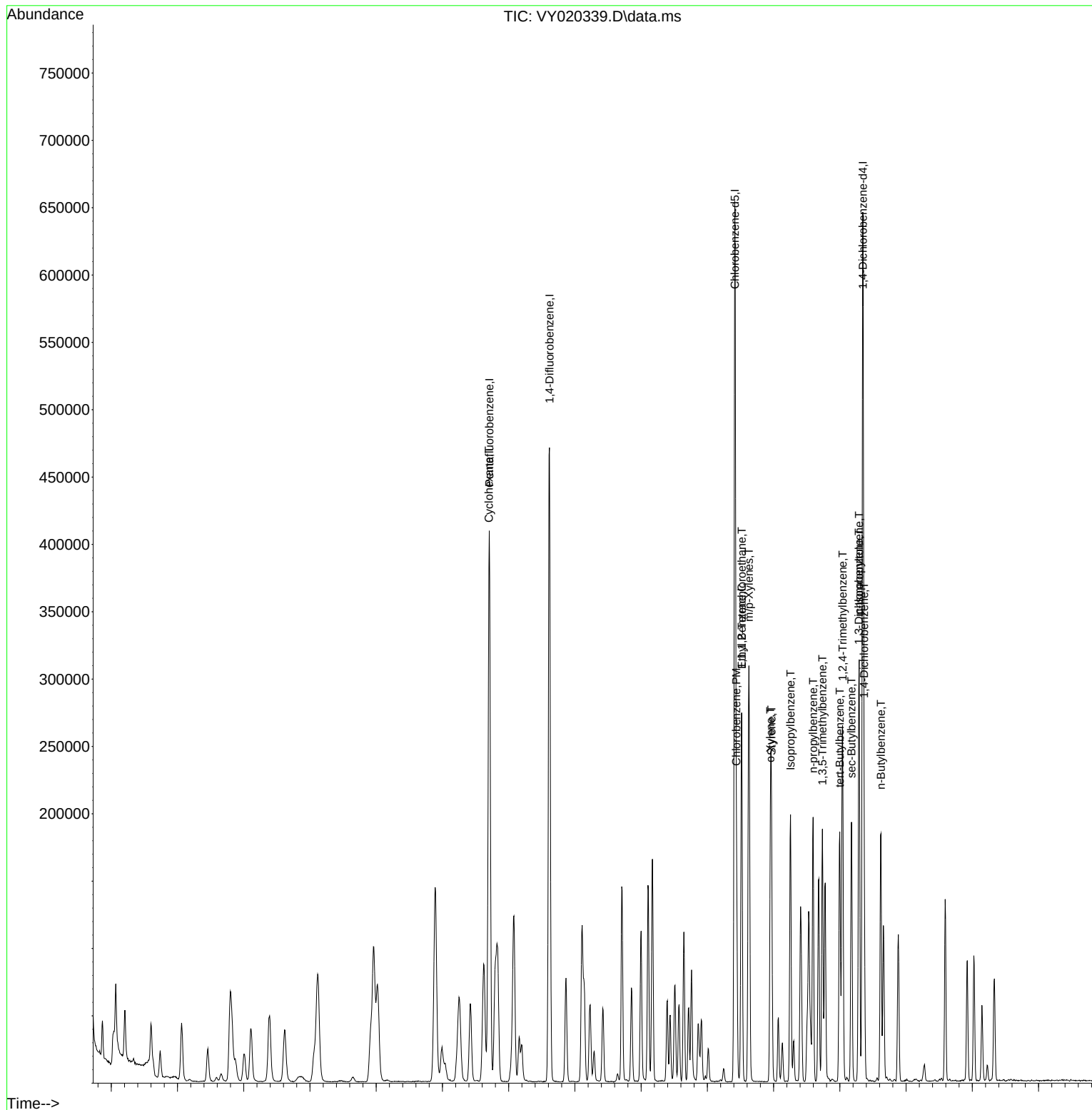
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020339.D  
Acq On : 19 Nov 2024 16:12  
Operator : SY/MD  
Sample : VSTDICC010  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICC010

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 00:58:59 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 00:48:27 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020340.D  
 Acq On : 19 Nov 2024 16:35  
 Operator : SY/MD  
 Sample : VSTDICC020  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICC020

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:00:05 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 00:48:27 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.707  | 168  | 236844   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.616  | 114  | 387251   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.414 | 117  | 330555   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.347 | 152  | 152521   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.061  | 65    | 51590    | 18.960   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 37.920%# |
| 35) Dibromofluoromethane    | 7.634  | 113   | 47609    | 19.173   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 38.340%# |
| 50) Toluene-d8              | 10.103 | 98    | 187150   | 19.133   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 38.260%# |
| 62) 4-Bromofluorobenzene    | 12.402 | 95    | 59520    | 18.928   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 37.860%  |

|                              |       |     |        |         |        |        |
|------------------------------|-------|-----|--------|---------|--------|--------|
| Target Compounds             |       |     |        |         |        | Qvalue |
| 2) Dichlorodifluoromethane   | 1.867 | 85  | 44219  | 19.234  | ug/l   | 98     |
| 3) Chloromethane             | 2.068 | 50  | 72456  | 21.422  | ug/l   | 98     |
| 4) Vinyl Chloride            | 2.208 | 62  | 62913  | 19.948  | ug/l   | 94     |
| 5) Bromomethane              | 2.598 | 94  | 27790  | 17.643  | ug/l   | 98     |
| 6) Chloroethane              | 2.739 | 64  | 34289  | 18.637  | ug/l   | 95     |
| 7) Trichlorofluoromethane    | 3.062 | 101 | 84918  | 19.375  | ug/l   | 98     |
| 8) Diethyl Ether             | 3.458 | 74  | 27857  | 20.145  | ug/l   | 99     |
| 9) 1,1,2-Trichlorotrifluo... | 3.818 | 101 | 50736  | 19.438  | ug/l   | 100    |
| 10) Methyl Iodide            | 4.007 | 142 | 68857  | 19.695  | ug/l   | 98     |
| 11) Tert butyl alcohol       | 4.879 | 59  | 21940  | 103.899 | ug/l   | 96     |
| 12) 1,1-Dichloroethene       | 3.793 | 96  | 50747  | 19.641  | ug/l   | 96     |
| 13) Acrolein                 | 3.665 | 56  | 16692  | 99.067  | ug/l   | 93     |
| 14) Allyl chloride           | 4.385 | 41  | 102220 | 20.460  | ug/l   | 92     |
| 15) Acrylonitrile            | 5.061 | 53  | 66014  | 107.992 | ug/l   | 99     |
| 16) Acetone                  | 3.873 | 43  | 62372  | 95.616  | ug/l   | 95     |
| 17) Carbon Disulfide         | 4.110 | 76  | 165744 | 19.041  | ug/l   | 98     |
| 18) Methyl Acetate           | 4.385 | 43  | 32091  | 21.105  | ug/l   | 96     |
| 19) Methyl tert-butyl Ether  | 5.116 | 73  | 140395 | 20.918  | ug/l   | 100    |
| 20) Methylene Chloride       | 4.616 | 84  | 56330  | 20.392  | ug/l   | 94     |
| 21) trans-1,2-Dichloroethene | 5.122 | 96  | 59438  | 20.713  | ug/l   | 91     |
| 22) Diisopropyl ether        | 6.019 | 45  | 178817 | 18.162  | ug/l   | 95     |
| 23) Vinyl Acetate            | 5.964 | 43  | 505150 | 91.808  | ug/l   | 100    |
| 24) 1,1-Dichloroethane       | 5.915 | 63  | 102627 | 18.464  | ug/l   | 98     |
| 25) 2-Butanone               | 6.903 | 43  | 79554  | 94.731  | ug/l   | 99     |
| 26) 2,2-Dichloropropane      | 6.890 | 77  | 85051  | 18.513  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene   | 6.896 | 96  | 60883  | 19.263  | ug/l   | 98     |
| 28) Bromochloromethane       | 7.244 | 49  | 41798  | 17.867  | ug/l   | 99     |
| 29) Tetrahydrofuran          | 7.262 | 42  | 47318  | 94.274  | ug/l   | 99     |
| 30) Chloroform               | 7.421 | 83  | 101251 | 18.864  | ug/l   | 98     |
| 31) Cyclohexane              | 7.707 | 56  | 95143  | 18.757  | ug/l # | 91     |
| 32) 1,1,1-Trichloroethane    | 7.616 | 97  | 89105  | 18.907  | ug/l   | 99     |
| 36) 1,1-Dichloropropene      | 7.835 | 75  | 75098  | 19.801  | ug/l   | 99     |
| 37) Ethyl Acetate            | 6.988 | 43  | 34643  | 19.590  | ug/l   | 98     |
| 38) Carbon Tetrachloride     | 7.823 | 117 | 77388  | 19.543  | ug/l   | 96     |
| 39) Methylcyclohexane        | 9.109 | 83  | 94807  | 19.974  | ug/l   | 98     |
| 40) Benzene                  | 8.085 | 78  | 223070 | 20.070  | ug/l   | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020340.D  
 Acq On : 19 Nov 2024 16:35  
 Operator : SY/MD  
 Sample : VSTDICC020  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICC020

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:00:05 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 00:48:27 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.220  | 41   | 18360    | 18.572  | ug/l   | 94       |
| 42) 1,2-Dichloroethane        | 8.158  | 62   | 61623    | 20.540  | ug/l   | 98       |
| 43) Isopropyl Acetate         | 8.195  | 43   | 68510    | 20.277  | ug/l # | 86       |
| 44) Trichloroethene           | 8.866  | 130  | 53189    | 20.198  | ug/l   | 93       |
| 45) 1,2-Dichloropropane       | 9.140  | 63   | 53935    | 20.339  | ug/l   | 98       |
| 46) Dibromomethane            | 9.231  | 93   | 27481    | 20.219  | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.420  | 83   | 74220    | 19.781  | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.219  | 41   | 31955    | 19.782  | ug/l   | 99       |
| 49) 1,4-Dioxane               | 9.231  | 88   | 5466     | 390.895 | ug/l   | 90       |
| 51) 4-Methyl-2-Pentanone      | 10.000 | 43   | 169490   | 98.848  | ug/l   | 99       |
| 52) Toluene                   | 10.170 | 92   | 137874   | 20.295  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.390 | 75   | 69154    | 19.491  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 9.853  | 75   | 81594    | 20.089  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 10.573 | 97   | 40747    | 22.585  | ug/l   | 97       |
| 56) Ethyl methacrylate        | 10.439 | 69   | 52436    | 19.353  | ug/l   | 97       |
| 57) 1,3-Dichloropropane       | 10.713 | 76   | 68770    | 21.210  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 9.707  | 63   | 123646   | 96.241  | ug/l   | 99       |
| 59) 2-Hexanone                | 10.762 | 43   | 123944   | 102.083 | ug/l   | 99       |
| 60) Dibromochloromethane      | 10.908 | 129  | 47578    | 20.459  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.012 | 107  | 34244    | 20.483  | ug/l   | 99       |
| 64) Tetrachloroethene         | 10.646 | 164  | 53034    | 22.257  | ug/l   | 97       |
| 65) Chlorobenzene             | 11.438 | 112  | 143190   | 19.428  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane | 11.518 | 131  | 47541    | 19.309  | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.518 | 91   | 264743   | 19.471  | ug/l   | 99       |
| 68) m/p-Xylenes               | 11.627 | 106  | 196288   | 40.078  | ug/l   | 100      |
| 69) o-Xylene                  | 11.950 | 106  | 94022    | 20.240  | ug/l   | 97       |
| 70) Styrene                   | 11.969 | 104  | 154055   | 19.960  | ug/l   | 99       |
| 71) Bromoform                 | 12.133 | 173  | 25826    | 20.127  | ug/l # | 98       |
| 73) Isopropylbenzene          | 12.255 | 105  | 248304   | 19.218  | ug/l   | 99       |
| 74) N-amyl acetate            | 12.072 | 43   | 61053    | 19.554  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.505 | 83   | 41646    | 19.944  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.554 | 75   | 29239m   | 20.276  | ug/l   |          |
| 77) Bromobenzene              | 12.530 | 156  | 52340    | 19.335  | ug/l   | 98       |
| 78) n-propylbenzene           | 12.597 | 91   | 303366   | 19.564  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 12.676 | 91   | 195281   | 21.904  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 12.737 | 105  | 231329   | 22.154  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.304 | 75   | 14013    | 19.100  | ug/l   | 98       |
| 82) 4-Chlorotoluene           | 12.773 | 91   | 199278   | 21.658  | ug/l   | 98       |
| 83) tert-Butylbenzene         | 12.999 | 119  | 183294   | 19.892  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.042 | 105  | 210671   | 20.350  | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.176 | 105  | 301882   | 20.781  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.292 | 119  | 231391   | 20.601  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.286 | 146  | 112176   | 20.495  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.365 | 146  | 104265   | 19.938  | ug/l   | 99       |
| 89) n-Butylbenzene            | 13.615 | 91   | 212277   | 19.735  | ug/l   | 100      |
| 90) Hexachloroethane          | 13.883 | 117  | 43848    | 20.226  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene       | 13.657 | 146  | 91859    | 20.143  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.279 | 75   | 6596     | 19.250  | ug/l   | 91       |
| 93) 1,2,4-Trichlorobenzene    | 14.919 | 180  | 52226    | 18.941  | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.023 | 225  | 32319    | 19.202  | ug/l   | 99       |
| 95) Naphthalene               | 15.145 | 128  | 88652    | 18.669  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.328 | 180  | 43998    | 18.662  | ug/l   | 97       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020340.D  
Acq On : 19 Nov 2024 16:35  
Operator : SY/MD  
Sample : VSTDICC020  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICC020

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:00:05 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 00:48:27 2024  
Response via : Initial Calibration

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

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

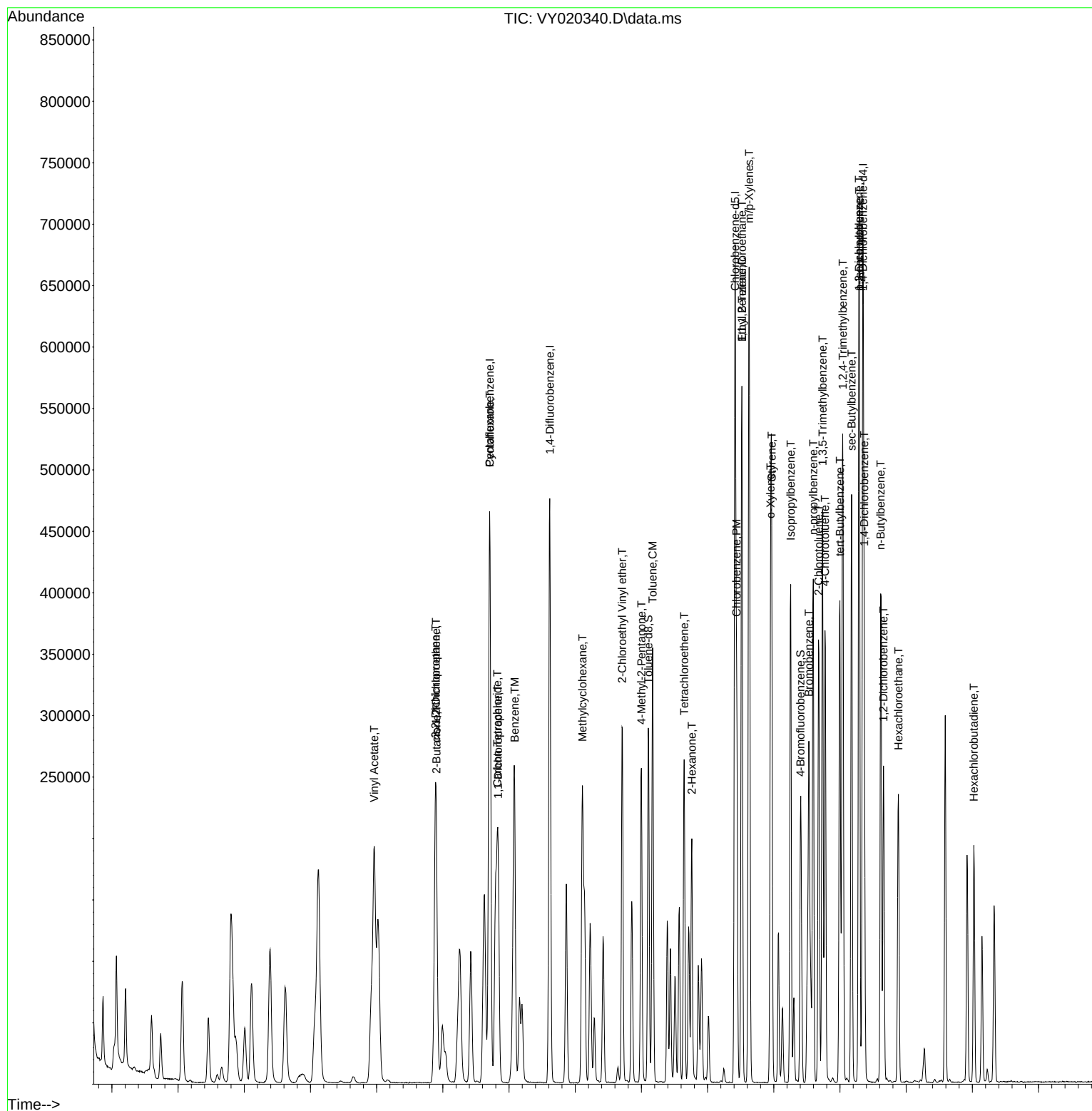
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020340.D  
Acq On : 19 Nov 2024 16:35  
Operator : SY/MD  
Sample : VSTDICC020  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICC020

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:00:05 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 00:48:27 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020341.D  
 Acq On : 19 Nov 2024 16:57  
 Operator : SY/MD  
 Sample : VSTDICCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:01:06 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 00:48:27 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.713  | 168  | 227113   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.616  | 114  | 420316   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.414 | 117  | 360842   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.347 | 152  | 149547   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.061  | 65    | 144497   | 55.378   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 110.760% |
| 35) Dibromofluoromethane    | 7.634  | 113   | 135608   | 50.315   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 100.620% |
| 50) Toluene-d8              | 10.109 | 98    | 587453   | 55.332   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 110.660% |
| 62) 4-Bromofluorobenzene    | 12.402 | 95    | 180882   | 52.998   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 106.000% |

|                              |       |     |         |         |      |        |
|------------------------------|-------|-----|---------|---------|------|--------|
| Target Compounds             |       |     |         |         |      | Qvalue |
| 2) Dichlorodifluoromethane   | 1.867 | 85  | 103026  | 46.735  | ug/l | 100    |
| 3) Chloromethane             | 2.068 | 50  | 154573  | 53.880  | ug/l | 100    |
| 4) Vinyl Chloride            | 2.208 | 62  | 141208  | 46.691  | ug/l | 100    |
| 5) Bromomethane              | 2.598 | 94  | 71314   | 47.214  | ug/l | 100    |
| 6) Chloroethane              | 2.739 | 64  | 83973   | 47.597  | ug/l | 100    |
| 7) Trichlorofluoromethane    | 3.062 | 101 | 211527  | 50.331  | ug/l | 100    |
| 8) Diethyl Ether             | 3.458 | 74  | 69448   | 52.373  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluo... | 3.818 | 101 | 134494  | 53.736  | ug/l | 100    |
| 10) Methyl Iodide            | 4.007 | 142 | 187546  | 55.942  | ug/l | 100    |
| 11) Tert butyl alcohol       | 4.879 | 59  | 41051   | 212.148 | ug/l | 100    |
| 12) 1,1-Dichloroethene       | 3.793 | 96  | 133044  | 53.701  | ug/l | 100    |
| 13) Acrolein                 | 3.659 | 56  | 41213   | 255.080 | ug/l | 100    |
| 14) Allyl chloride           | 4.391 | 41  | 214855  | 44.846  | ug/l | 100    |
| 15) Acrylonitrile            | 5.061 | 53  | 140610  | 239.879 | ug/l | 100    |
| 16) Acetone                  | 3.873 | 43  | 181648  | 290.397 | ug/l | 100    |
| 17) Carbon Disulfide         | 4.110 | 76  | 470701  | 56.393  | ug/l | 100    |
| 18) Methyl Acetate           | 4.391 | 43  | 68494   | 46.975  | ug/l | 100    |
| 19) Methyl tert-butyl Ether  | 5.116 | 73  | 317819  | 49.382  | ug/l | 100    |
| 20) Methylene Chloride       | 4.616 | 84  | 129583  | 48.919  | ug/l | 100    |
| 21) trans-1,2-Dichloroethene | 5.122 | 96  | 136395  | 49.567  | ug/l | 100    |
| 22) Diisopropyl ether        | 6.025 | 45  | 457338  | 48.440  | ug/l | 100    |
| 23) Vinyl Acetate            | 5.964 | 43  | 1302817 | 246.924 | ug/l | 100    |
| 24) 1,1-Dichloroethane       | 5.921 | 63  | 258252  | 48.453  | ug/l | 100    |
| 25) 2-Butanone               | 6.896 | 43  | 203885  | 253.183 | ug/l | 100    |
| 26) 2,2-Dichloropropane      | 6.884 | 77  | 217639  | 49.403  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene   | 6.896 | 96  | 156034  | 51.482  | ug/l | 100    |
| 28) Bromochloromethane       | 7.244 | 49  | 115631  | 51.546  | ug/l | 100    |
| 29) Tetrahydrofuran          | 7.268 | 42  | 121226  | 251.872 | ug/l | 100    |
| 30) Chloroform               | 7.421 | 83  | 280651  | 54.528  | ug/l | 100    |
| 31) Cyclohexane              | 7.701 | 56  | 235065  | 48.327  | ug/l | 100    |
| 32) 1,1,1-Trichloroethane    | 7.622 | 97  | 226463  | 50.111  | ug/l | 100    |
| 36) 1,1-Dichloropropene      | 7.841 | 75  | 190663  | 46.316  | ug/l | 100    |
| 37) Ethyl Acetate            | 6.988 | 43  | 89102   | 46.422  | ug/l | 100    |
| 38) Carbon Tetrachloride     | 7.823 | 117 | 200826  | 46.725  | ug/l | 100    |
| 39) Methylcyclohexane        | 9.110 | 83  | 245019  | 47.559  | ug/l | 100    |
| 40) Benzene                  | 8.079 | 78  | 566676  | 46.974  | ug/l | 100    |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020341.D  
 Acq On : 19 Nov 2024 16:57  
 Operator : SY/MD  
 Sample : VSTDICCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICCC050

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:01:06 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 00:48:27 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| 41) Methacrylonitrile         | 7.226  | 41   | 49407    | 46.047  | ug/l  | 100      |
| 42) 1,2-Dichloroethane        | 8.158  | 62   | 152946   | 46.970  | ug/l  | 100      |
| 43) Isopropyl Acetate         | 8.195  | 43   | 177802   | 48.484  | ug/l  | 100      |
| 44) Trichloroethene           | 8.866  | 130  | 134577   | 47.083  | ug/l  | 100      |
| 45) 1,2-Dichloropropane       | 9.140  | 63   | 134142   | 46.606  | ug/l  | 100      |
| 46) Dibromomethane            | 9.231  | 93   | 72212    | 48.950  | ug/l  | 100      |
| 47) Bromodichloromethane      | 9.420  | 83   | 206587   | 50.729  | ug/l  | 100      |
| 48) Methyl methacrylate       | 9.219  | 41   | 84404    | 48.140  | ug/l  | 100      |
| 49) 1,4-Dioxane               | 9.238  | 88   | 14757    | 972.312 | ug/l  | 100      |
| 51) 4-Methyl-2-Pentanone      | 10.000 | 43   | 516270   | 277.407 | ug/l  | 100      |
| 52) Toluene                   | 10.170 | 92   | 357134   | 48.435  | ug/l  | 100      |
| 53) t-1,3-Dichloropropene     | 10.390 | 75   | 188307   | 48.898  | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene   | 9.853  | 75   | 212293   | 48.156  | ug/l  | 100      |
| 55) 1,1,2-Trichloroethane     | 10.573 | 97   | 91951    | 46.957  | ug/l  | 100      |
| 56) Ethyl methacrylate        | 10.439 | 69   | 148986   | 50.661  | ug/l  | 100      |
| 57) 1,3-Dichloropropane       | 10.713 | 76   | 175316   | 49.817  | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether | 9.713  | 63   | 328825   | 235.811 | ug/l  | 100      |
| 59) 2-Hexanone                | 10.762 | 43   | 358788   | 272.258 | ug/l  | 100      |
| 60) Dibromochloromethane      | 10.908 | 129  | 128210   | 50.796  | ug/l  | 100      |
| 61) 1,2-Dibromoethane         | 11.012 | 107  | 91358    | 50.347  | ug/l  | 100      |
| 64) Tetrachloroethene         | 10.646 | 164  | 119531   | 45.954  | ug/l  | 100      |
| 65) Chlorobenzene             | 11.438 | 112  | 412910   | 51.322  | ug/l  | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.518 | 131  | 133303   | 49.598  | ug/l  | 100      |
| 67) Ethyl Benzene             | 11.518 | 91   | 740094   | 49.862  | ug/l  | 100      |
| 68) m/p-Xylenes               | 11.627 | 106  | 510631   | 95.509  | ug/l  | 100      |
| 69) o-Xylene                  | 11.957 | 106  | 241061   | 47.538  | ug/l  | 100      |
| 70) Styrene                   | 11.969 | 104  | 408085   | 48.436  | ug/l  | 100      |
| 71) Bromoform                 | 12.133 | 173  | 68064    | 48.591  | ug/l  | 100      |
| 73) Isopropylbenzene          | 12.255 | 105  | 645114   | 50.923  | ug/l  | 100      |
| 74) N-ethyl acetate           | 12.072 | 43   | 163678   | 53.464  | ug/l  | 100      |
| 75) 1,1,2,2-Tetrachloroethane | 12.505 | 83   | 108812   | 53.145  | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane    | 12.554 | 75   | 76443m   | 54.065  | ug/l  |          |
| 77) Bromobenzene              | 12.530 | 156  | 137993   | 51.991  | ug/l  | 100      |
| 78) n-propylbenzene           | 12.597 | 91   | 777424   | 51.134  | ug/l  | 100      |
| 79) 2-Chlorotoluene           | 12.682 | 91   | 431579   | 49.371  | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene    | 12.737 | 105  | 507211   | 49.541  | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.304 | 75   | 38276    | 53.209  | ug/l  | 100      |
| 82) 4-Chlorotoluene           | 12.780 | 91   | 440797   | 48.859  | ug/l  | 100      |
| 83) tert-Butylbenzene         | 12.999 | 119  | 462472   | 51.187  | ug/l  | 100      |
| 84) 1,2,4-Trimethylbenzene    | 13.042 | 105  | 508985   | 50.144  | ug/l  | 100      |
| 85) sec-Butylbenzene          | 13.176 | 105  | 758609   | 53.259  | ug/l  | 100      |
| 86) p-Isopropyltoluene        | 13.292 | 119  | 576317   | 52.331  | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene       | 13.286 | 146  | 276359   | 51.496  | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene       | 13.365 | 146  | 258732   | 50.459  | ug/l  | 100      |
| 89) n-Butylbenzene            | 13.621 | 91   | 547533   | 51.917  | ug/l  | 100      |
| 90) Hexachloroethane          | 13.877 | 117  | 115268   | 54.229  | ug/l  | 100      |
| 91) 1,2-Dichlorobenzene       | 13.657 | 146  | 231279   | 51.724  | ug/l  | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.273 | 75   | 17802    | 52.987  | ug/l  | 100      |
| 93) 1,2,4-Trichlorobenzene    | 14.919 | 180  | 133647   | 49.434  | ug/l  | 100      |
| 94) Hexachlorobutadiene       | 15.023 | 225  | 80673    | 48.885  | ug/l  | 100      |
| 95) Naphthalene               | 15.145 | 128  | 244680   | 52.551  | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.328 | 180  | 111791   | 48.361  | ug/l  | 100      |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020341.D  
Acq On : 19 Nov 2024 16:57  
Operator : SY/MD  
Sample : VSTDIC050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICCC050

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:01:06 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 00:48:27 2024  
Response via : Initial Calibration

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

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



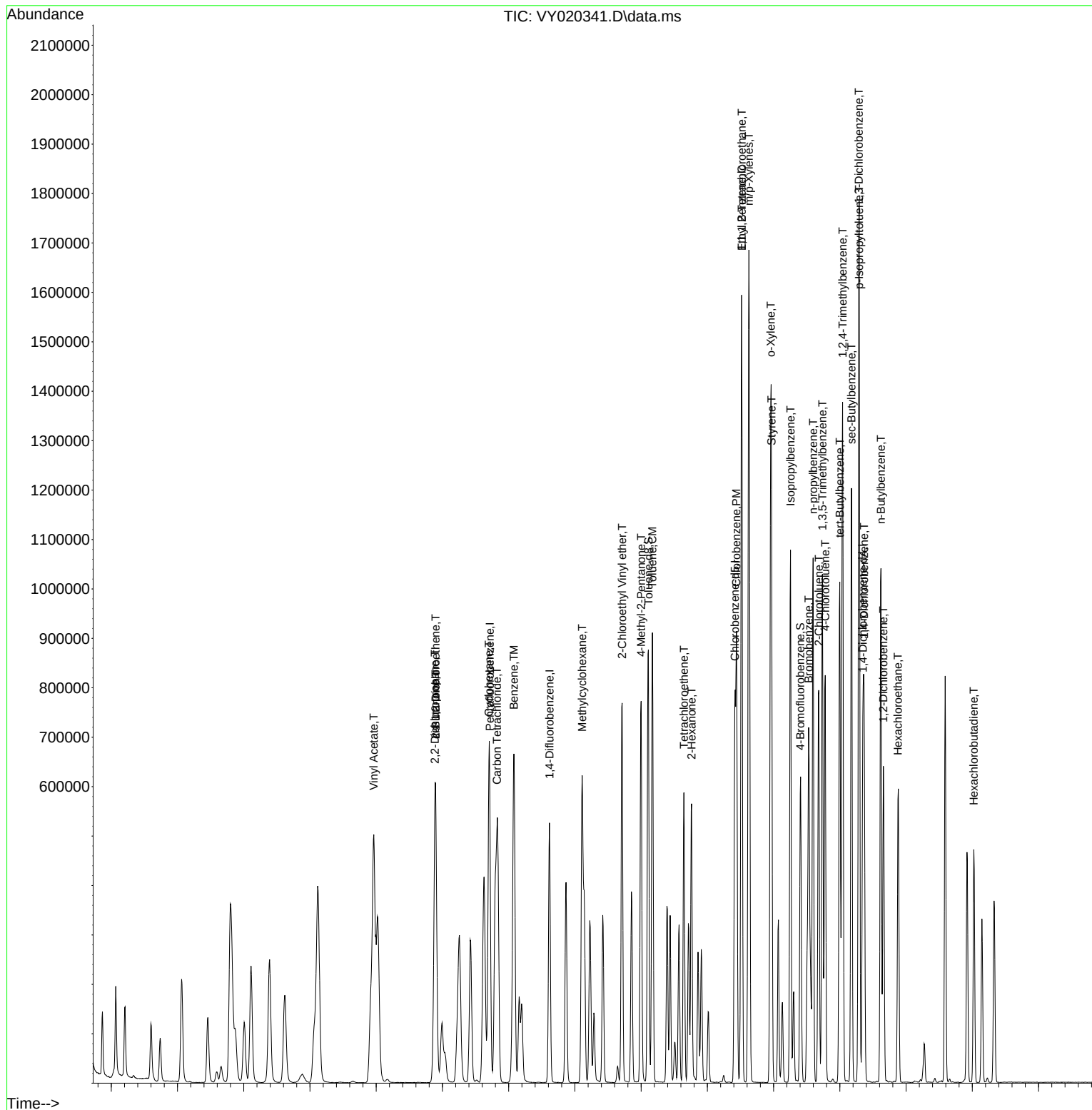
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020341.D  
Acq On : 19 Nov 2024 16:57  
Operator : SY/MD  
Sample : VSTDICCC050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICCC050

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:01:06 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 00:48:27 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020342.D  
 Acq On : 19 Nov 2024 17:20  
 Operator : SY/MD  
 Sample : VSTDICC100  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:02:07 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 00:48:27 2024  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response             | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|----------------------|---------|--------|----------|
| -----                        |                |      |                      |         |        |          |
| Internal Standards           |                |      |                      |         |        |          |
| 1) Pentafluorobenzene        | 7.713          | 168  | 242950               | 50.000  | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene      | 8.615          | 114  | 418120               | 50.000  | ug/l   | 0.00     |
| 63) Chlorobenzene-d5         | 11.414         | 117  | 343084               | 50.000  | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4   | 13.346         | 152  | 154843               | 50.000  | ug/l   | 0.00     |
|                              |                |      |                      |         |        |          |
| System Monitoring Compounds  |                |      |                      |         |        |          |
| 33) 1,2-Dichloroethane-d4    | 8.060          | 65   | 273625               | 98.031  | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 50 - 163 |      | Recovery = 196.060%# |         |        |          |
| 35) Dibromofluoromethane     | 7.634          | 113  | 241148               | 89.944  | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 54 - 147 |      | Recovery = 179.880%# |         |        |          |
| 50) Toluene-d8               | 10.109         | 98   | 944968               | 89.473  | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 58 - 134 |      | Recovery = 178.940%# |         |        |          |
| 62) 4-Bromofluorobenzene     | 12.401         | 95   | 308231               | 90.785  | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 29 - 146 |      | Recovery = 181.580%# |         |        |          |
|                              |                |      |                      |         |        |          |
| Target Compounds             |                |      |                      |         | Qvalue |          |
| 2) Dichlorodifluoromethane   | 1.866          | 85   | 225851               | 95.772  | ug/l   | 100      |
| 3) Chloromethane             | 2.068          | 50   | 286074               | 96.926  | ug/l   | 98       |
| 4) Vinyl Chloride            | 2.202          | 62   | 278011               | 85.934  | ug/l   | 100      |
| 5) Bromomethane              | 2.598          | 94   | 135928               | 84.127  | ug/l   | 99       |
| 6) Chloroethane              | 2.738          | 64   | 162455               | 86.079  | ug/l   | 99       |
| 7) Trichlorofluoromethane    | 3.061          | 101  | 399021               | 88.755  | ug/l   | 100      |
| 8) Diethyl Ether             | 3.458          | 74   | 138894               | 97.917  | ug/l   | 99       |
| 9) 1,1,2-Trichlorotrifluo... | 3.817          | 101  | 232946               | 87.004  | ug/l   | 100      |
| 10) Methyl Iodide            | 4.006          | 142  | 325705               | 90.820  | ug/l   | 97       |
| 11) Tert butyl alcohol       | 4.890          | 59   | 97795                | 546.604 | ug/l   | 99       |
| 12) 1,1-Dichloroethene       | 3.793          | 96   | 236992               | 89.422  | ug/l   | 99       |
| 13) Acrolein                 | 3.659          | 56   | 86380                | 499.781 | ug/l   | 97       |
| 14) Allyl chloride           | 4.384          | 41   | 485310               | 94.695  | ug/l   | 92       |
| 15) Acrylonitrile            | 5.061          | 53   | 322609               | 514.491 | ug/l   | 99       |
| 16) Acetone                  | 3.878          | 43   | 343146               | 512.820 | ug/l   | 98       |
| 17) Carbon Disulfide         | 4.110          | 76   | 800247               | 89.624  | ug/l   | 99       |
| 18) Methyl Acetate           | 4.390          | 43   | 159022               | 101.952 | ug/l   | 98       |
| 19) Methyl tert-butyl Ether  | 5.122          | 73   | 681962               | 99.054  | ug/l   | 97       |
| 20) Methylene Chloride       | 4.616          | 84   | 264054               | 93.186  | ug/l   | 97       |
| 21) trans-1,2-Dichloroethene | 5.116          | 96   | 267977               | 91.038  | ug/l   | 91       |
| 22) Diisopropyl ether        | 6.024          | 45   | 982564               | 97.286  | ug/l   | 98       |
| 23) Vinyl Acetate            | 5.963          | 43   | 2923388              | 517.954 | ug/l   | 98       |
| 24) 1,1-Dichloroethane       | 5.921          | 63   | 535189               | 93.866  | ug/l   | 99       |
| 25) 2-Butanone               | 6.896          | 43   | 479489               | 556.614 | ug/l   | 97       |
| 26) 2,2-Dichloropropane      | 6.890          | 77   | 446478               | 94.743  | ug/l   | 99       |
| 27) cis-1,2-Dichloroethene   | 6.896          | 96   | 314285               | 96.937  | ug/l   | 98       |
| 28) Bromochloromethane       | 7.250          | 49   | 218420               | 91.020  | ug/l   | 95       |
| 29) Tetrahydrofuran          | 7.268          | 42   | 290644               | 564.509 | ug/l   | 96       |
| 30) Chloroform               | 7.420          | 83   | 516773               | 93.860  | ug/l   | 98       |
| 31) Cyclohexane              | 7.707          | 56   | 470793               | 90.481  | ug/l   | 96       |
| 32) 1,1,1-Trichloroethane    | 7.622          | 97   | 456631               | 94.454  | ug/l   | 99       |
| 36) 1,1-Dichloropropene      | 7.835          | 75   | 379162               | 92.591  | ug/l   | 99       |
| 37) Ethyl Acetate            | 6.988          | 43   | 204144               | 106.917 | ug/l   | 99       |
| 38) Carbon Tetrachloride     | 7.823          | 117  | 403792               | 94.441  | ug/l   | 99       |
| 39) Methylcyclohexane        | 9.109          | 83   | 476688               | 93.013  | ug/l   | 98       |
| 40) Benzene                  | 8.079          | 78   | 1152457              | 96.033  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020342.D  
 Acq On : 19 Nov 2024 17:20  
 Operator : SY/MD  
 Sample : VSTDICC100  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICC100

Quant Time: Nov 20 01:02:07 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 00:48:27 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Mahesh Dadoda 11/20/2024

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.219  | 41   | 113838   | 106.653  | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.158  | 62   | 322641   | 99.603   | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.201  | 43   | 411623   | 112.833  | ug/l   | 99       |
| 44) Trichloroethene           | 8.865  | 130  | 265744   | 93.462   | ug/l   | 99       |
| 45) 1,2-Dichloropropane       | 9.140  | 63   | 279709   | 97.691   | ug/l   | 100      |
| 46) Dibromomethane            | 9.231  | 93   | 145980   | 99.474   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.420  | 83   | 387534   | 95.661   | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.219  | 41   | 195485   | 112.081  | ug/l   | 94       |
| 49) 1,4-Dioxane               | 9.243  | 88   | 32314    | 2140.293 | ug/l # | 82       |
| 51) 4-Methyl-2-Pentanone      | 9.999  | 43   | 1025042  | 553.677  | ug/l   | 99       |
| 52) Toluene                   | 10.170 | 92   | 692884   | 94.463   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.389 | 75   | 380932   | 99.436   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene   | 9.853  | 75   | 442841   | 100.981  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 10.572 | 97   | 185332   | 95.141   | ug/l   | 100      |
| 56) Ethyl methacrylate        | 10.438 | 69   | 307069   | 104.964  | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 10.712 | 76   | 348373   | 99.512   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 9.713  | 63   | 700335   | 504.870  | ug/l   | 98       |
| 59) 2-Hexanone                | 10.761 | 43   | 741041   | 565.275  | ug/l   | 100      |
| 60) Dibromochloromethane      | 10.908 | 129  | 248066   | 98.797   | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.011 | 107  | 170430   | 94.416   | ug/l   | 100      |
| 64) Tetrachloroethene         | 10.645 | 164  | 228791   | 92.512   | ug/l   | 98       |
| 65) Chlorobenzene             | 11.438 | 112  | 713827   | 93.316   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.517 | 131  | 243130   | 95.143   | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.517 | 91   | 1325393  | 93.917   | ug/l   | 100      |
| 68) m/p-Xylenes               | 11.627 | 106  | 955240   | 187.918  | ug/l   | 97       |
| 69) o-Xylene                  | 11.956 | 106  | 457290   | 94.846   | ug/l   | 98       |
| 70) Styrene                   | 11.968 | 104  | 776130   | 96.888   | ug/l   | 98       |
| 71) Bromoform                 | 12.133 | 173  | 136679   | 102.627  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.255 | 105  | 1207507  | 92.057   | ug/l   | 99       |
| 74) N-amyl acetate            | 12.072 | 43   | 360546   | 113.742  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane | 12.505 | 83   | 209284   | 98.722   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.554 | 75   | 155715m  | 106.363  | ug/l   |          |
| 77) Bromobenzene              | 12.529 | 156  | 262304   | 95.447   | ug/l   | 96       |
| 78) n-propylbenzene           | 12.596 | 91   | 1462491  | 92.904   | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 12.682 | 91   | 837998   | 92.584   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 12.736 | 105  | 977514   | 92.211   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-b... | 12.304 | 75   | 79441    | 106.658  | ug/l   | 97       |
| 82) 4-Chlorotoluene           | 12.779 | 91   | 858743   | 91.930   | ug/l   | 97       |
| 83) tert-Butylbenzene         | 12.999 | 119  | 867475   | 92.729   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.041 | 105  | 970690   | 92.360   | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.175 | 105  | 1252922  | 84.955   | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.291 | 119  | 1039560  | 91.166   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.285 | 146  | 502006   | 90.342   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.364 | 146  | 489016   | 92.108   | ug/l   | 99       |
| 89) n-Butylbenzene            | 13.620 | 91   | 1009278  | 92.426   | ug/l   | 99       |
| 90) Hexachloroethane          | 13.883 | 117  | 202571   | 92.042   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene       | 13.657 | 146  | 437794   | 94.562   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.273 | 75   | 35093    | 100.881  | ug/l   | 94       |
| 93) 1,2,4-Trichlorobenzene    | 14.919 | 180  | 278868   | 99.621   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.023 | 225  | 163774   | 95.847   | ug/l   | 98       |
| 95) Naphthalene               | 15.145 | 128  | 532709   | 110.498  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.334 | 180  | 235988   | 98.597   | ug/l   | 100      |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020342.D  
Acq On : 19 Nov 2024 17:20  
Operator : SY/MD  
Sample : VSTDICC100  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICC100

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:02:07 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 00:48:27 2024  
Response via : Initial Calibration

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

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

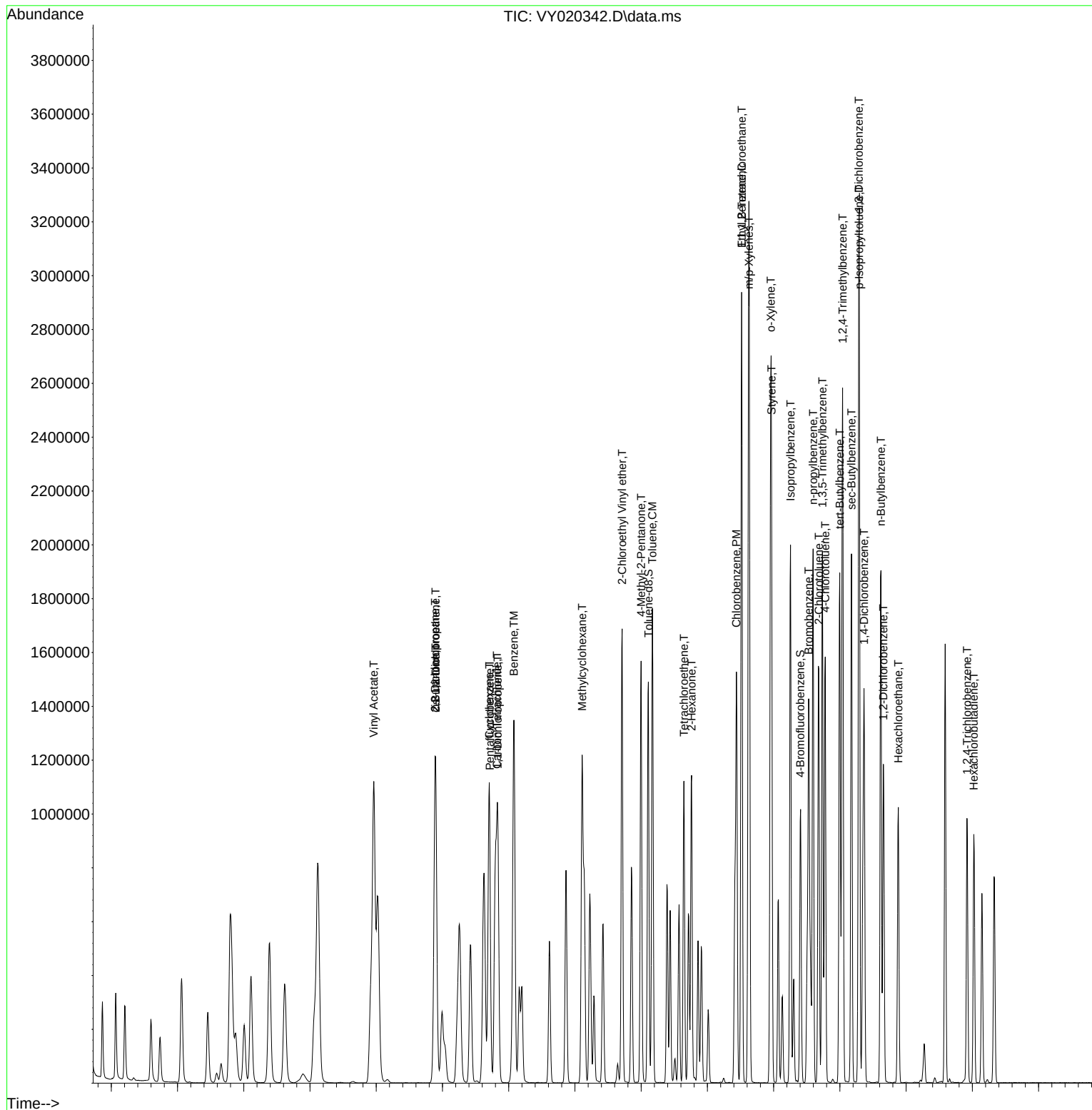
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020342.D  
Acq On : 19 Nov 2024 17:20  
Operator : SY/MD  
Sample : VSTDICC100  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 6 Sample Multiplier: 1

**Instrument :**  
MSVOA\_Y  
**ClientSampleId :**  
VSTDICC100

## Manual Integrations APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:02:07 2024  
Quant Method : Z:\voasrv\HPCHEM1\M\$VOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 00:48:27 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020343.D  
 Acq On : 19 Nov 2024 17:42  
 Operator : SY/MD  
 Sample : VSTDICC150  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICC150

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:03:08 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 00:48:27 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.713  | 168  | 211886   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.615  | 114  | 350739   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.414 | 117  | 296115   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.346 | 152  | 130996   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |           |
|-----------------------------|--------|-------|----------|----------|------|-----------|
| System Monitoring Compounds |        |       |          |          |      |           |
| 33) 1,2-Dichloroethane-d4   | 8.061  | 65    | 363043   | 149.135  | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 298.280%# |
| 35) Dibromofluoromethane    | 7.634  | 113   | 328532   | 146.077  | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 292.160%# |
| 50) Toluene-d8              | 10.109 | 98    | 1324547  | 149.507  | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 299.020%# |
| 62) 4-Bromofluorobenzene    | 12.407 | 95    | 434570   | 152.587  | ug/l | 0.00      |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 305.180%# |

|                              |       |     |         |         |        |     |
|------------------------------|-------|-----|---------|---------|--------|-----|
| Target Compounds             |       |     |         |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 1.867 | 85  | 321802  | 156.466 | ug/l   | 99  |
| 3) Chloromethane             | 2.068 | 50  | 381050  | 150.712 | ug/l   | 97  |
| 4) Vinyl Chloride            | 2.208 | 62  | 380588  | 134.887 | ug/l   | 99  |
| 5) Bromomethane              | 2.598 | 94  | 192082  | 136.310 | ug/l   | 98  |
| 6) Chloroethane              | 2.738 | 64  | 227195  | 138.032 | ug/l   | 99  |
| 7) Trichlorofluoromethane    | 3.062 | 101 | 578218  | 147.470 | ug/l   | 99  |
| 8) Diethyl Ether             | 3.458 | 74  | 181261  | 146.519 | ug/l   | 97  |
| 9) 1,1,2-Trichlorotrifluo... | 3.818 | 101 | 333758  | 142.933 | ug/l   | 99  |
| 10) Methyl Iodide            | 4.007 | 142 | 446636  | 142.799 | ug/l   | 97  |
| 11) Tert butyl alcohol       | 4.891 | 59  | 104155  | 729.517 | ug/l   | 99  |
| 12) 1,1-Dichloroethene       | 3.793 | 96  | 333059  | 144.094 | ug/l   | 100 |
| 13) Acrolein                 | 3.659 | 56  | 116557  | 773.250 | ug/l   | 100 |
| 14) Allyl chloride           | 4.384 | 41  | 660146  | 147.694 | ug/l   | 93  |
| 15) Acrylonitrile            | 5.061 | 53  | 379392  | 693.752 | ug/l   | 99  |
| 16) Acetone                  | 3.872 | 43  | 390697  | 669.485 | ug/l   | 97  |
| 17) Carbon Disulfide         | 4.110 | 76  | 1114337 | 143.098 | ug/l   | 100 |
| 18) Methyl Acetate           | 4.384 | 43  | 183151  | 134.637 | ug/l   | 99  |
| 19) Methyl tert-butyl Ether  | 5.116 | 73  | 855630  | 142.499 | ug/l   | 98  |
| 20) Methylene Chloride       | 4.616 | 84  | 350664  | 141.893 | ug/l   | 95  |
| 21) trans-1,2-Dichloroethene | 5.116 | 96  | 362921  | 141.368 | ug/l   | 93  |
| 22) Diisopropyl ether        | 6.024 | 45  | 1242472 | 141.056 | ug/l   | 97  |
| 23) Vinyl Acetate            | 5.963 | 43  | 3500470 | 711.125 | ug/l   | 99  |
| 24) 1,1-Dichloroethane       | 5.921 | 63  | 709814  | 142.745 | ug/l   | 99  |
| 25) 2-Butanone               | 6.896 | 43  | 523049  | 696.197 | ug/l   | 99  |
| 26) 2,2-Dichloropropane      | 6.884 | 77  | 608998  | 148.175 | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 6.890 | 96  | 415289  | 146.869 | ug/l   | 98  |
| 28) Bromochloromethane       | 7.250 | 49  | 302639  | 144.606 | ug/l   | 97  |
| 29) Tetrahydrofuran          | 7.268 | 42  | 318185  | 708.605 | ug/l   | 96  |
| 30) Chloroform               | 7.427 | 83  | 681143  | 141.851 | ug/l   | 99  |
| 31) Cyclohexane              | 7.701 | 56  | 630214  | 138.877 | ug/l   | 96  |
| 32) 1,1,1-Trichloroethane    | 7.622 | 97  | 624176  | 148.040 | ug/l   | 98  |
| 36) 1,1-Dichloropropene      | 7.835 | 75  | 511136  | 148.798 | ug/l   | 99  |
| 37) Ethyl Acetate            | 6.988 | 43  | 224596  | 140.226 | ug/l   | 99  |
| 38) Carbon Tetrachloride     | 7.823 | 117 | 561195  | 156.470 | ug/l   | 97  |
| 39) Methylcyclohexane        | 9.109 | 83  | 662542  | 154.113 | ug/l   | 95  |
| 40) Benzene                  | 8.085 | 78  | 1510257 | 150.024 | ug/l   | 99  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020343.D  
 Acq On : 19 Nov 2024 17:42  
 Operator : SY/MD  
 Sample : VSTDICC150  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

## Instrument :

MSVOA\_Y

## ClientSampleId :

VSTDICC150

## Manual Integrations

## APPROVED

Reviewed By :Romaben Patel 11/20/2024

Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:03:08 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M

Quant Title : SW846 8260

QLast Update : Wed Nov 20 00:48:27 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.219  | 41   | 132286   | 147.746  | ug/l   | 94       |
| 42) 1,2-Dichloroethane        | 8.158  | 62   | 409666   | 150.765  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.195  | 43   | 465329   | 152.060  | ug/l # | 89       |
| 44) Trichloroethene           | 8.865  | 130  | 356988   | 149.672  | ug/l   | 99       |
| 45) 1,2-Dichloropropane       | 9.140  | 63   | 365003   | 151.971  | ug/l   | 98       |
| 46) Dibromomethane            | 9.231  | 93   | 179946   | 146.176  | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.420  | 83   | 515924   | 151.819  | ug/l   | 97       |
| 48) Methyl methacrylate       | 9.219  | 41   | 229979   | 157.189  | ug/l   | 95       |
| 49) 1,4-Dioxane               | 9.237  | 88   | 35246    | 2782.975 | ug/l   | 94       |
| 51) 4-Methyl-2-Pentanone      | 9.999  | 43   | 1150805  | 741.026  | ug/l   | 100      |
| 52) Toluene                   | 10.170 | 92   | 935063   | 151.970  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.390 | 75   | 487634   | 151.743  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 9.853  | 75   | 580042   | 157.678  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane     | 10.572 | 97   | 232403   | 142.225  | ug/l   | 99       |
| 56) Ethyl methacrylate        | 10.438 | 69   | 372428   | 151.763  | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 10.713 | 76   | 430536   | 146.608  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 9.713  | 63   | 904374   | 777.210  | ug/l   | 99       |
| 59) 2-Hexanone                | 10.761 | 43   | 815456   | 741.541  | ug/l   | 99       |
| 60) Dibromochloromethane      | 10.908 | 129  | 315843   | 149.957  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.011 | 107  | 216859   | 143.217  | ug/l   | 100      |
| 64) Tetrachloroethene         | 10.646 | 164  | 310822   | 145.616  | ug/l   | 98       |
| 65) Chlorobenzene             | 11.438 | 112  | 963689   | 145.962  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane | 11.517 | 131  | 330635   | 149.908  | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.517 | 91   | 1832488  | 150.446  | ug/l   | 100      |
| 68) m/p-Xylenes               | 11.627 | 106  | 1323776  | 301.724  | ug/l   | 97       |
| 69) o-Xylene                  | 11.956 | 106  | 627311   | 150.747  | ug/l   | 97       |
| 70) Styrene                   | 11.968 | 104  | 1055739  | 152.698  | ug/l   | 98       |
| 71) Bromoform                 | 12.127 | 173  | 172522   | 150.087  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.255 | 105  | 1670748  | 150.561  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.066 | 43   | 426531   | 159.054  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.505 | 83   | 253871   | 141.554  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.554 | 75   | 182550m  | 147.393  | ug/l   |          |
| 77) Bromobenzene              | 12.529 | 156  | 347120   | 149.303  | ug/l   | 97       |
| 78) n-propylbenzene           | 12.596 | 91   | 2022361  | 151.856  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 12.682 | 91   | 1147443  | 149.851  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 12.737 | 105  | 1341749  | 149.611  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-b... | 12.304 | 75   | 98926    | 156.997  | ug/l   | 96       |
| 82) 4-Chlorotoluene           | 12.779 | 91   | 1178773  | 149.162  | ug/l   | 97       |
| 83) tert-Butylbenzene         | 12.999 | 119  | 1207733  | 152.603  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.041 | 105  | 1334165  | 150.053  | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.176 | 105  | 1742388  | 139.651  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.291 | 119  | 1448758  | 150.180  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.285 | 146  | 675457   | 143.686  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.371 | 146  | 659854   | 146.911  | ug/l   | 99       |
| 89) n-Butylbenzene            | 13.621 | 91   | 1410591  | 152.692  | ug/l   | 99       |
| 90) Hexachloroethane          | 13.883 | 117  | 280814   | 150.820  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene       | 13.657 | 146  | 579091   | 147.851  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.273 | 75   | 41248    | 140.161  | ug/l   | 95       |
| 93) 1,2,4-Trichlorobenzene    | 14.919 | 180  | 376647   | 159.045  | ug/l   | 100      |
| 94) Hexachlorobutadiene       | 15.029 | 225  | 232003   | 160.494  | ug/l   | 99       |
| 95) Naphthalene               | 15.145 | 128  | 664631   | 162.960  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.334 | 180  | 316780   | 156.446  | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020343.D  
Acq On : 19 Nov 2024 17:42  
Operator : SY/MD  
Sample : VSTDICC150  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICC150

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:03:08 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 00:48:27 2024  
Response via : Initial Calibration

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

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



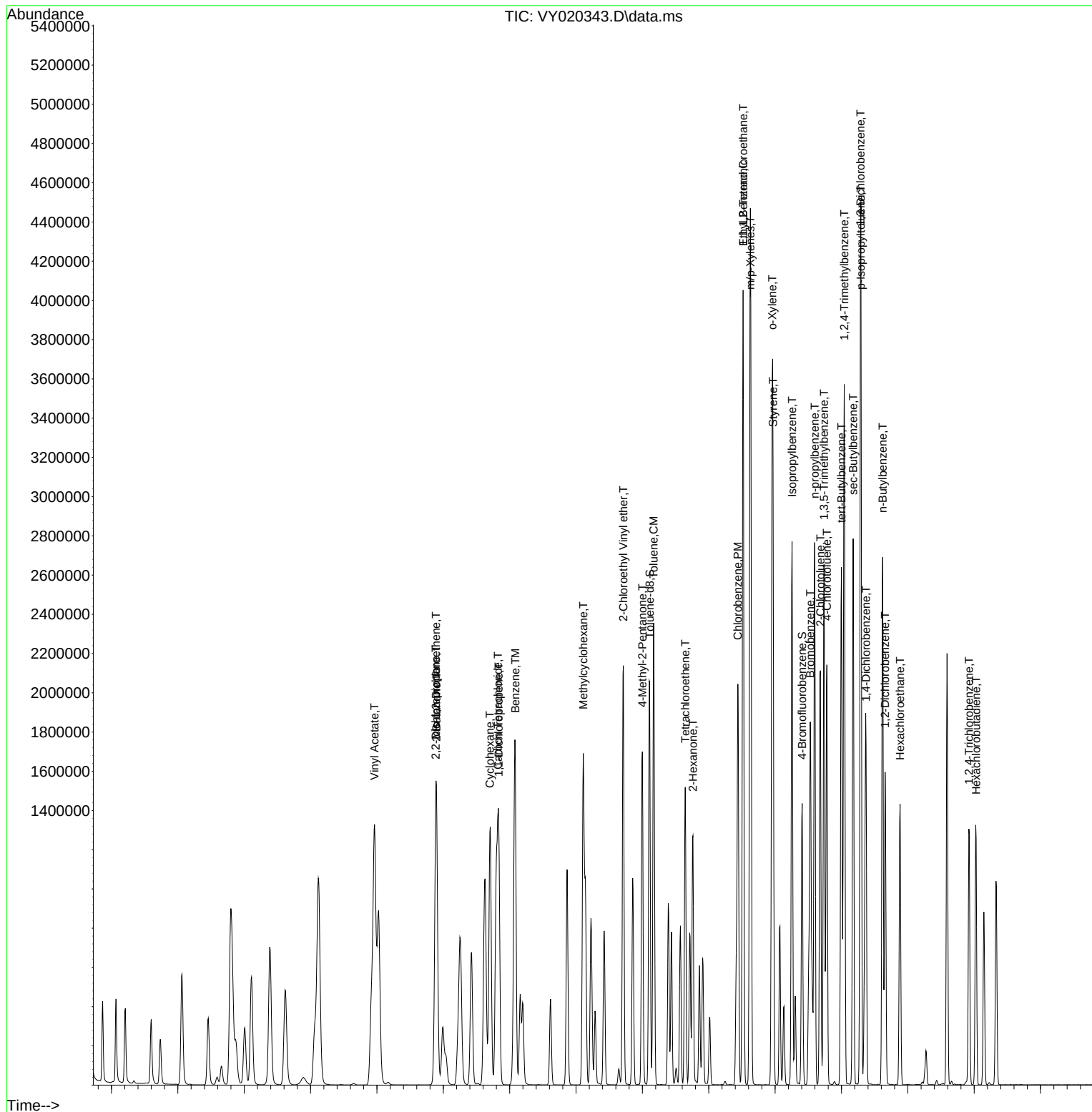
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020343.D  
Acq On : 19 Nov 2024 17:42  
Operator : SY/MD  
Sample : VSTDIC150  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDIC150

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Mahesh Dadoda 11/20/2024

Quant Time: Nov 20 01:03:08 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 00:48:27 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020345.D  
 Acq On : 19 Nov 2024 18:52  
 Operator : SY/MD  
 Sample : VSTDICV050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 ICVVY111924

Quant Time: Nov 20 04:42:09 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:33:54 2024  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Semsettin Yesilyurt 11/25/2024

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.707  | 168  | 218521   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.616  | 114  | 364341   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.414 | 117  | 309693   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.347 | 152  | 141489   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 33) 1,2-Dichloroethane-d4   | 8.067  | 65    | 110537   | 44.029   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 88.060% |
| 35) Dibromofluoromethane    | 7.634  | 113   | 97280    | 41.639   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 83.280% |
| 50) Toluene-d8              | 10.103 | 98    | 388428   | 42.207   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 84.420% |
| 62) 4-Bromofluorobenzene    | 12.408 | 95    | 130125   | 43.984   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 87.960% |

|                              |       |     |         |         |        |     |
|------------------------------|-------|-----|---------|---------|--------|-----|
| Target Compounds             |       |     |         |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 1.867 | 85  | 111072  | 52.365  | ug/l   | 97  |
| 3) Chloromethane             | 2.068 | 50  | 125077  | 44.505  | ug/l   | 99  |
| 4) Vinyl Chloride            | 2.208 | 62  | 123286  | 42.368  | ug/l   | 99  |
| 5) Bromomethane              | 2.598 | 94  | 68717   | 47.284  | ug/l   | 99  |
| 6) Chloroethane              | 2.739 | 64  | 75903   | 44.715  | ug/l   | 99  |
| 7) Trichlorofluoromethane    | 3.062 | 101 | 199645  | 49.372  | ug/l   | 99  |
| 8) Diethyl Ether             | 3.458 | 74  | 62415   | 48.920  | ug/l   | 97  |
| 9) 1,1,2-Trichlorotrifluo... | 3.818 | 101 | 113049  | 46.944  | ug/l   | 98  |
| 10) Methyl Iodide            | 4.007 | 142 | 155561  | 48.226  | ug/l   | 96  |
| 11) Tert butyl alcohol       | 4.872 | 59  | 41539   | 224.231 | ug/l   | 100 |
| 12) 1,1-Dichloroethene       | 3.793 | 96  | 112225  | 47.078  | ug/l   | 95  |
| 13) Acrolein                 | 3.659 | 56  | 41518   | 267.071 | ug/l   | 100 |
| 14) Allyl chloride           | 4.385 | 41  | 220954  | 47.933  | ug/l   | 94  |
| 15) Acrylonitrile            | 5.061 | 53  | 143447  | 254.341 | ug/l   | 99  |
| 16) Acetone                  | 3.873 | 43  | 143018  | 237.630 | ug/l   | 98  |
| 17) Carbon Disulfide         | 4.110 | 76  | 373607  | 46.520  | ug/l   | 99  |
| 18) Methyl Acetate           | 4.385 | 43  | 70746   | 50.427  | ug/l   | 98  |
| 19) Methyl tert-butyl Ether  | 5.116 | 73  | 308971  | 49.895  | ug/l   | 98  |
| 20) Methylene Chloride       | 4.616 | 84  | 123291  | 48.374  | ug/l   | 97  |
| 21) trans-1,2-Dichloroethene | 5.116 | 96  | 124677  | 47.091  | ug/l   | 92  |
| 22) Diisopropyl ether        | 6.025 | 45  | 437612  | 48.173  | ug/l   | 97  |
| 23) Vinyl Acetate            | 5.964 | 43  | 1280046 | 252.147 | ug/l   | 99  |
| 24) 1,1-Dichloroethane       | 5.915 | 63  | 244354  | 47.648  | ug/l   | 98  |
| 25) 2-Butanone               | 6.896 | 43  | 202028  | 260.742 | ug/l   | 99  |
| 26) 2,2-Dichloropropane      | 6.890 | 77  | 205933  | 48.584  | ug/l   | 100 |
| 27) cis-1,2-Dichloroethene   | 6.896 | 96  | 145516  | 49.900  | ug/l   | 99  |
| 28) Bromochloromethane       | 7.250 | 49  | 103614  | 48.005  | ug/l   | 96  |
| 29) Tetrahydrofuran          | 7.262 | 42  | 124725  | 269.331 | ug/l   | 97  |
| 30) Chloroform               | 7.421 | 83  | 238810  | 48.223  | ug/l   | 97  |
| 31) Cyclohexane              | 7.701 | 56  | 224125  | 47.890  | ug/l   | 98  |
| 32) 1,1,1-Trichloroethane    | 7.622 | 97  | 219357  | 50.447  | ug/l   | 97  |
| 36) 1,1-Dichloropropene      | 7.835 | 75  | 177989  | 49.880  | ug/l   | 99  |
| 37) Ethyl Acetate            | 6.988 | 43  | 89280   | 54.618  | ug/l   | 99  |
| 38) Carbon Tetrachloride     | 7.823 | 117 | 194915  | 52.317  | ug/l   | 99  |
| 39) Methylcyclohexane        | 9.110 | 83  | 229207  | 51.325  | ug/l   | 98  |
| 40) Benzene                  | 8.079 | 78  | 531435  | 50.820  | ug/l   | 100 |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020345.D  
 Acq On : 19 Nov 2024 18:52  
 Operator : SY/MD  
 Sample : VSTDICV050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 ICSVY111924

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/20/2024  
 Supervised By :Semsettin Yesilyurt 11/25/2024

Quant Time: Nov 20 04:42:09 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:33:54 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.220  | 41   | 51821    | 55.717   | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.158  | 62   | 148909   | 52.755   | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.195  | 43   | 177020   | 55.687   | ug/l   | 99       |
| 44) Trichloroethene           | 8.866  | 130  | 124155   | 50.110   | ug/l   | 95       |
| 45) 1,2-Dichloropropane       | 9.140  | 63   | 126442   | 50.680   | ug/l   | 99       |
| 46) Dibromomethane            | 9.231  | 93   | 64729    | 50.618   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.420  | 83   | 180213   | 51.051   | ug/l   | 98       |
| 48) Methyl methacrylate       | 9.219  | 41   | 84558    | 55.637   | ug/l   | 95       |
| 49) 1,4-Dioxane               | 9.238  | 88   | 13548    | 1029.795 | ug/l   | 90       |
| 51) 4-Methyl-2-Pentanone      | 10.000 | 43   | 442279   | 274.160  | ug/l   | 100      |
| 52) Toluene                   | 10.170 | 92   | 326653   | 51.107   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.390 | 75   | 172434   | 51.655   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene   | 9.853  | 75   | 202123   | 52.893   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 10.573 | 97   | 85673    | 50.472   | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.439 | 69   | 136602   | 53.587   | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 10.713 | 76   | 159236   | 52.199   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 9.713  | 63   | 300898   | 248.935  | ug/l   | 100      |
| 59) 2-Hexanone                | 10.762 | 43   | 313607   | 274.534  | ug/l   | 99       |
| 60) Dibromochloromethane      | 10.908 | 129  | 114042   | 52.124   | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.012 | 107  | 79188    | 50.344   | ug/l   | 98       |
| 64) Tetrachloroethene         | 10.646 | 164  | 109940   | 49.247   | ug/l   | 98       |
| 65) Chlorobenzene             | 11.438 | 112  | 338718   | 49.054   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.512 | 131  | 115723   | 50.168   | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.518 | 91   | 635246   | 49.867   | ug/l   | 100      |
| 68) m/p-Xylenes               | 11.627 | 106  | 465220   | 101.387  | ug/l   | 97       |
| 69) o-Xylene                  | 11.957 | 106  | 221747   | 50.951   | ug/l   | 99       |
| 70) Styrene                   | 11.969 | 104  | 371095   | 51.321   | ug/l   | 98       |
| 71) Bromoform                 | 12.133 | 173  | 63418    | 52.752   | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.255 | 105  | 592489   | 49.433   | ug/l   | 100      |
| 74) N-amyl acetate            | 12.072 | 43   | 158787   | 54.821   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.505 | 83   | 97478    | 50.321   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.554 | 75   | 71473m   | 53.595   | ug/l   |          |
| 77) Bromobenzene              | 12.530 | 156  | 124523   | 49.588   | ug/l   | 96       |
| 78) n-propylbenzene           | 12.597 | 91   | 717478   | 49.879   | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 12.676 | 91   | 407383   | 49.257   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 12.737 | 105  | 478483   | 49.396   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-b... | 12.304 | 75   | 34976    | 51.391   | ug/l   | 99       |
| 82) 4-Chlorotoluene           | 12.780 | 91   | 419222   | 49.114   | ug/l   | 97       |
| 83) tert-Butylbenzene         | 12.999 | 119  | 433770   | 50.744   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.042 | 105  | 475972   | 49.562   | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.176 | 105  | 620804   | 46.067   | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.292 | 119  | 516099   | 49.532   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.286 | 146  | 242241   | 47.709   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.365 | 146  | 239050   | 49.275   | ug/l   | 99       |
| 89) n-Butylbenzene            | 13.615 | 91   | 497286   | 49.838   | ug/l   | 99       |
| 90) Hexachloroethane          | 13.877 | 117  | 97244    | 48.355   | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene       | 13.657 | 146  | 212235   | 50.169   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.273 | 75   | 15688    | 49.354   | ug/l   | 96       |
| 93) 1,2,4-Trichlorobenzene    | 14.919 | 180  | 133013   | 52.001   | ug/l   | 100      |
| 94) Hexachlorobutadiene       | 15.023 | 225  | 82641    | 52.929   | ug/l   | 99       |
| 95) Naphthalene               | 15.145 | 128  | 250875   | 56.950   | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.328 | 180  | 112500   | 51.439   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020345.D  
Acq On : 19 Nov 2024 18:52  
Operator : SY/MD  
Sample : VSTDICV050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
ICVY111924

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Semsettin Yesilyurt 11/25/2024

Quant Time: Nov 20 04:42:09 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:33:54 2024  
Response via : Initial Calibration

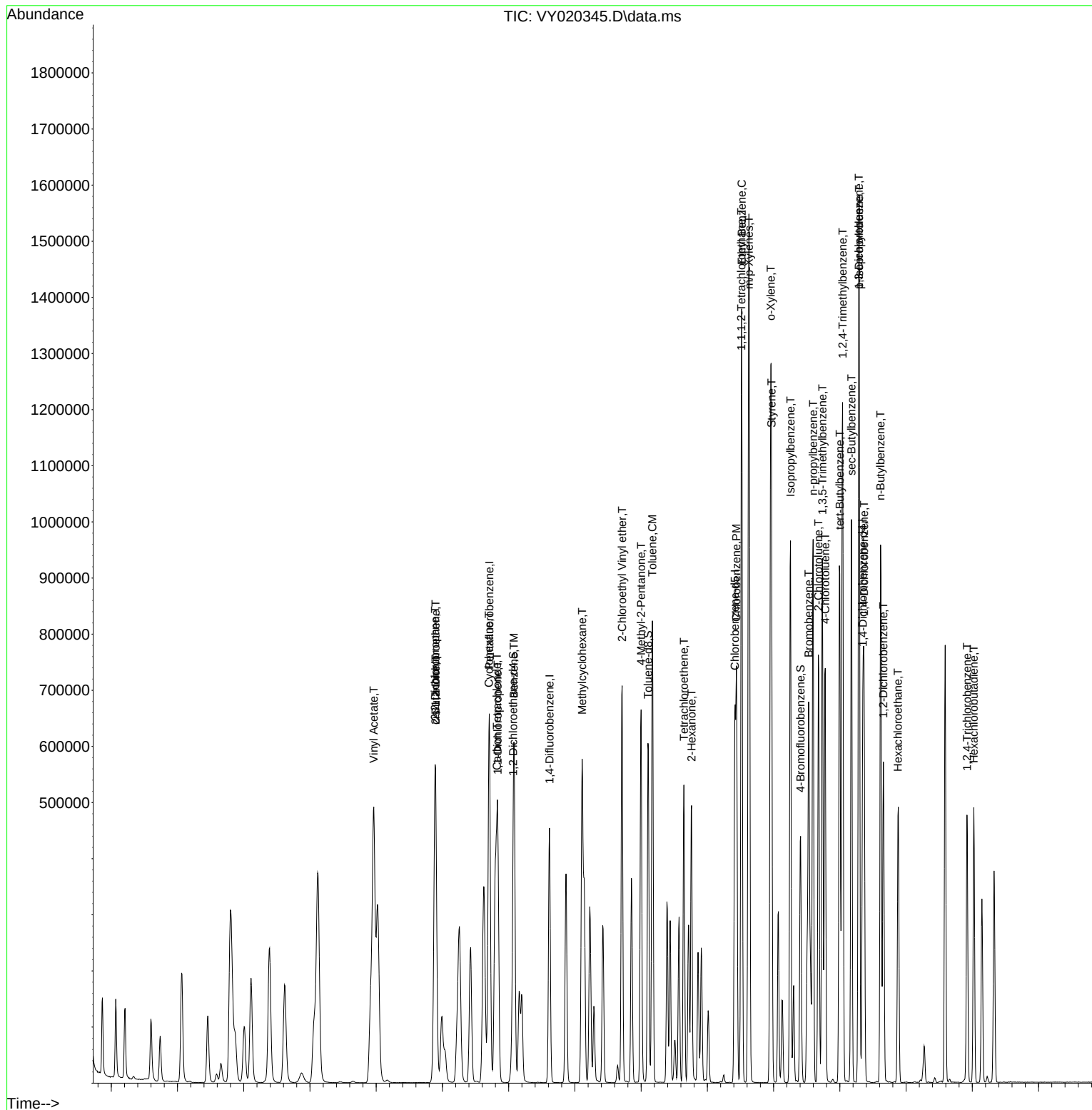
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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

**Instrument :**  
MSVOA\_Y  
**ClientSampleId :**  
ICVVY111924

## Manual Integrations APPROVED

Reviewed By :Romaben Patel 11/20/2024  
Supervised By :Semsettin Yesilyurt 11/25/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020345.D  
 Acq On : 19 Nov 2024 18:52  
 Operator : SY/MD  
 Sample : VSTDICV050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 ICVVY111924

Quant Time: Nov 20 04:42:09 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:33:54 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 96    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.485 | 0.508 | -4.7  | 108   | 0.00     |
| 3 P   | Chloromethane               | 0.735 | 0.572 | 22.2  | 81    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.666 | 0.564 | 15.3# | 87    | 0.00     |
| 5 T   | Bromomethane                | 0.333 | 0.314 | 5.7   | 96    | 0.00     |
| 6 T   | Chloroethane                | 0.388 | 0.347 | 10.6  | 90    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.925 | 0.914 | 1.2   | 94    | 0.00     |
| 8 T   | Diethyl Ether               | 0.292 | 0.286 | 2.1   | 90    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.551 | 0.517 | 6.2   | 84    | 0.00     |
| 10 T  | Methyl Iodide               | 0.738 | 0.712 | 3.5   | 83    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.044 | 0.038 | 13.6  | 101   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.545 | 0.514 | 5.7#  | 84    | 0.00     |
| 13 T  | Acrolein                    | 0.036 | 0.038 | -5.6  | 101   | 0.00     |
| 14 T  | Allyl chloride              | 1.055 | 1.011 | 4.2   | 103   | 0.00     |
| 15 T  | Acrylonitrile               | 0.129 | 0.131 | -1.6  | 102   | 0.00     |
| 16 T  | Acetone                     | 0.138 | 0.131 | 5.1   | 79    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.838 | 1.710 | 7.0   | 79    | 0.00     |
| 18 T  | Methyl Acetate              | 0.321 | 0.324 | -0.9  | 103   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.417 | 1.414 | 0.2   | 97    | 0.00     |
| 20 T  | Methylene Chloride          | 0.583 | 0.564 | 3.3   | 95    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.606 | 0.571 | 5.8   | 91    | 0.00     |
| 22 T  | Diisopropyl ether           | 2.079 | 2.003 | 3.7   | 96    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.162 | 1.172 | -0.9  | 98    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.173 | 1.118 | 4.7   | 95    | 0.00     |
| 25 T  | 2-Butanone                  | 0.177 | 0.185 | -4.5  | 99    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.970 | 0.942 | 2.9   | 95    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.667 | 0.666 | 0.1   | 93    | 0.00     |
| 28 T  | Bromochloromethane          | 0.494 | 0.474 | 4.0   | 90    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.106 | 0.114 | -7.5  | 103   | 0.00     |
| 30 C  | Chloroform                  | 1.133 | 1.093 | 3.5#  | 85    | 0.00     |
| 31 T  | Cyclohexane                 | 1.071 | 1.026 | 4.2   | 95    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.995 | 1.004 | -0.9  | 97    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.574 | 0.506 | 11.8  | 76    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 87    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.321 | 0.267 | 16.8  | 72    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.490 | 0.489 | 0.2   | 93    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.224 | 0.245 | -9.4  | 100   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.511 | 0.535 | -4.7  | 97    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.613 | 0.629 | -2.6  | 94    | 0.00     |
| 40 TM | Benzene                     | 1.435 | 1.459 | -1.7  | 94    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.128 | 0.142 | -10.9 | 105   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.387 | 0.409 | -5.7  | 97    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.436 | 0.486 | -11.5 | 100   | 0.00     |
| 44 TM | Trichloroethene             | 0.340 | 0.341 | -0.3  | 92    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.342 | 0.347 | -1.5# | 94    | 0.00     |
| 46 T  | Dibromomethane              | 0.175 | 0.178 | -1.7  | 90    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.484 | 0.495 | -2.3  | 87    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.209 | 0.232 | -11.0 | 100   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020345.D  
 Acq On : 19 Nov 2024 18:52  
 Operator : SY/MD  
 Sample : VSTDICV050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 ICVVY111924

Quant Time: Nov 20 04:42:09 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:33:54 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 0.002 | 0.002 | 0.0   | 92    | 0.00     |
| 50 S  | Toluene-d8                  | 1.263 | 1.066 | 15.6  | 66    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.221 | 0.243 | -10.0 | 86    | 0.00     |
| 52 CM | Toluene                     | 0.877 | 0.897 | -2.3# | 91    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.458 | 0.473 | -3.3  | 92    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.524 | 0.555 | -5.9  | 95    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.233 | 0.235 | -0.9  | 93    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.350 | 0.375 | -7.1  | 92    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.419 | 0.437 | -4.3  | 91    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.166 | 0.165 | 0.6   | 92    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.157 | 0.172 | -9.6  | 87    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.300 | 0.313 | -4.3  | 89    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.216 | 0.217 | -0.5  | 87    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.406 | 0.357 | 12.1  | 72    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 86    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.360 | 0.355 | 1.4   | 92    | 0.00     |
| 65 PM | Chlorobenzene               | 1.115 | 1.094 | 1.9   | 82    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.372 | 0.374 | -0.5  | 87    | 0.00     |
| 67 C  | Ethyl Benzene               | 2.057 | 2.051 | 0.3#  | 86    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.741 | 0.751 | -1.3  | 91    | 0.00     |
| 69 T  | o-Xylene                    | 0.703 | 0.716 | -1.8  | 92    | 0.00     |
| 70 T  | Styrene                     | 1.167 | 1.198 | -2.7  | 91    | 0.00     |
| 71 P  | Bromoform                   | 0.194 | 0.205 | -5.7  | 93    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 95    | 0.00     |
| 73 T  | Isopropylbenzene            | 4.236 | 4.188 | 1.1   | 92    | 0.00     |
| 74 T  | N-amyl acetate              | 1.024 | 1.122 | -9.6  | 97    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.685 | 0.689 | -0.6  | 90    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.471 | 0.505 | -7.2  | 93    | 0.00     |
| 77 T  | Bromobenzene                | 0.887 | 0.880 | 0.8   | 90    | 0.00     |
| 78 T  | n-propylbenzene             | 5.083 | 5.071 | 0.2   | 92    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.923 | 2.879 | 1.5   | 94    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.423 | 3.382 | 1.2   | 94    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.241 | 0.247 | -2.5  | 91    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 3.016 | 2.963 | 1.8   | 95    | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.021 | 3.066 | -1.5  | 94    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.394 | 3.364 | 0.9   | 94    | 0.00     |
| 85 T  | sec-Butylbenzene            | 4.762 | 4.388 | 7.9   | 82    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.682 | 3.648 | 0.9   | 90    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.794 | 1.712 | 4.6   | 88    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.714 | 1.690 | 1.4   | 92    | 0.00     |
| 89 T  | n-Butylbenzene              | 3.526 | 3.515 | 0.3   | 91    | 0.00     |
| 90 T  | Hexachloroethane            | 0.711 | 0.687 | 3.4   | 84    | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 1.495 | 1.500 | -0.3  | 92    | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.112 | 0.111 | 0.9   | 88    | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.904 | 0.940 | -4.0  | 100   | 0.00     |
| 94 T  | Hexachlorobutadiene         | 0.552 | 0.584 | -5.8  | 102   | 0.00     |
| 95 T  | Naphthalene                 | 1.557 | 1.773 | -13.9 | 103   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020345.D  
Acq On : 19 Nov 2024 18:52  
Operator : SY/MD  
Sample : VSTDICV050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
ICVY111924

Quant Time: Nov 20 04:42:09 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:33:54 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|------------------------|-------|-------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 0.773 | 0.795 | -2.8 | 101   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020345.D  
 Acq On : 19 Nov 2024 18:52  
 Operator : SY/MD  
 Sample : VSTDICV050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 ICVVY111924

Quant Time: Nov 20 04:42:09 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:33:54 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount  | Calc.   | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|---------|---------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 50.000  | 50.000  | 0.0   | 96    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 52.365  | -4.7  | 108   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 44.505  | 11.0  | 81    | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 42.368  | 15.3# | 87    | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 47.284  | 5.4   | 96    | 0.00     |
| 6 T   | Chloroethane                | 50.000  | 44.715  | 10.6  | 90    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 49.372  | 1.3   | 94    | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 48.920  | 2.2   | 90    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 46.944  | 6.1   | 84    | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 48.226  | 3.5   | 83    | 0.00     |
| 11 T  | Tert butyl alcohol          | 250.000 | 224.231 | 10.3  | 101   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 47.078  | 5.8#  | 84    | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 267.071 | -6.8  | 101   | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 47.933  | 4.1   | 103   | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 254.341 | -1.7  | 102   | 0.00     |
| 16 T  | Acetone                     | 250.000 | 237.630 | 4.9   | 79    | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 46.520  | 7.0   | 79    | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 50.427  | -0.9  | 103   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 49.895  | 0.2   | 97    | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 48.374  | 3.3   | 95    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 47.091  | 5.8   | 91    | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 48.173  | 3.7   | 96    | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 252.147 | -0.9  | 98    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 47.648  | 4.7   | 95    | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 260.742 | -4.3  | 99    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 48.584  | 2.8   | 95    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 49.900  | 0.2   | 93    | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 48.005  | 4.0   | 90    | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 269.331 | -7.7  | 103   | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 48.223  | 3.6#  | 85    | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 47.890  | 4.2   | 95    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 50.447  | -0.9  | 97    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 44.029  | 11.9  | 76    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0   | 87    | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 41.639  | 16.7  | 72    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 49.880  | 0.2   | 93    | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 54.618  | -9.2  | 100   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 52.317  | -4.6  | 97    | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 51.325  | -2.7  | 94    | 0.00     |
| 40 TM | Benzene                     | 50.000  | 50.820  | -1.6  | 94    | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 55.717  | -11.4 | 105   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 52.755  | -5.5  | 97    | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 55.687  | -11.4 | 100   | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 50.110  | -0.2  | 92    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 50.680  | -1.4# | 94    | 0.00     |
| 46 T  | Dibromomethane              | 50.000  | 50.618  | -1.2  | 90    | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000  | 51.051  | -2.1  | 87    | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000  | 55.637  | -11.3 | 100   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
 Data File : VY020345.D  
 Acq On : 19 Nov 2024 18:52  
 Operator : SY/MD  
 Sample : VSTDICV050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 ICSVY111924

Quant Time: Nov 20 04:42:09 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:33:54 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount   | Calc.    | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|----------|----------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 1000.000 | 1029.795 | -3.0  | 92    | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 42.207   | 15.6  | 66    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 274.160  | -9.7  | 86    | 0.00     |
| 52 CM | Toluene                     | 50.000   | 51.107   | -2.2# | 91    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 51.655   | -3.3  | 92    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 52.893   | -5.8  | 95    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 50.472   | -0.9  | 93    | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 53.587   | -7.2  | 92    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 52.199   | -4.4  | 91    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 248.935  | 0.4   | 92    | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 274.534  | -9.8  | 87    | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 52.124   | -4.2  | 89    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 50.344   | -0.7  | 87    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 43.984   | 12.0  | 72    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0   | 86    | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 49.247   | 1.5   | 92    | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 49.054   | 1.9   | 82    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 50.168   | -0.3  | 87    | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 49.867   | 0.3#  | 86    | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 101.387  | -1.4  | 91    | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 50.951   | -1.9  | 92    | 0.00     |
| 70 T  | Styrene                     | 50.000   | 51.321   | -2.6  | 91    | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 52.752   | -5.5  | 93    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0   | 95    | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 49.433   | 1.1   | 92    | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 54.821   | -9.6  | 97    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 50.321   | -0.6  | 90    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 53.595   | -7.2  | 93    | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 49.588   | 0.8   | 90    | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 49.879   | 0.2   | 92    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 49.257   | 1.5   | 94    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 49.396   | 1.2   | 94    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 51.391   | -2.8  | 91    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 49.114   | 1.8   | 95    | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 50.744   | -1.5  | 94    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 49.562   | 0.9   | 94    | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 46.067   | 7.9   | 82    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 49.532   | 0.9   | 90    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 47.709   | 4.6   | 88    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 49.275   | 1.5   | 92    | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 49.838   | 0.3   | 91    | 0.00     |
| 90 T  | Hexachloroethane            | 50.000   | 48.355   | 3.3   | 84    | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 50.000   | 50.169   | -0.3  | 92    | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 50.000   | 49.354   | 1.3   | 88    | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 50.000   | 52.001   | -4.0  | 100   | 0.00     |
| 94 T  | Hexachlorobutadiene         | 50.000   | 52.929   | -5.9  | 102   | 0.00     |
| 95 T  | Naphthalene                 | 50.000   | 56.950   | -13.9 | 103   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020345.D  
Acq On : 19 Nov 2024 18:52  
Operator : SY/MD  
Sample : VSTDICV050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
ICVVY111924

Quant Time: Nov 20 04:42:09 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:33:54 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | Amount | Calc.  | %Dev | Area% | Dev(min) |
|------|------------------------|--------|--------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 51.439 | -2.9 | 101   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG No.: P4892

Instrument ID: MSVOA\_N Calibration Date/Time: 11/20/2024 11:18

Lab File ID: VN084960.D Init. Calib. Date(s): 10/30/2024 10/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:46 13:45

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

| COMPOUND                       | RRF   | RRF050 | MIN<br>RRF | %D     | MAX%D |
|--------------------------------|-------|--------|------------|--------|-------|
| Dichlorodifluoromethane        | 0.575 | 0.624  |            | 8.52   | 20    |
| Chloromethane                  | 0.952 | 0.671  | 0.1        | -29.52 | 20    |
| Vinyl Chloride                 | 0.618 | 0.652  |            | 5.5    | 20    |
| Bromomethane                   | 0.328 | 0.340  |            | 3.66   | 20    |
| Chloroethane                   | 0.488 | 0.408  |            | -16.39 | 20    |
| Trichlorofluoromethane         | 1.018 | 1.068  |            | 4.91   | 20    |
| 1,1,2-Trichlorotrifluoroethane | 0.575 | 0.616  |            | 7.13   | 20    |
| 1,1-Dichloroethene             | 0.569 | 0.576  |            | 1.23   | 20    |
| Acetone                        | 0.238 | 0.200  |            | -15.97 | 20    |
| Carbon Disulfide               | 1.753 | 1.680  |            | -4.16  | 20    |
| Methyl tert-butyl Ether        | 1.745 | 1.961  |            | 12.38  | 20    |
| Methyl Acetate                 | 1.172 | 0.768  |            | -34.47 | 20    |
| Methylene Chloride             | 0.635 | 0.652  |            | 2.68   | 20    |
| trans-1,2-Dichloroethene       | 0.585 | 0.594  |            | 1.54   | 20    |
| 1,1-Dichloroethane             | 1.102 | 1.147  | 0.1        | 4.08   | 20    |
| Cyclohexane                    | 0.997 | 1.018  |            | 2.11   | 20    |
| 2-Butanone                     | 0.337 | 0.365  |            | 8.31   | 20    |
| Carbon Tetrachloride           | 0.525 | 0.576  |            | 9.71   | 20    |
| cis-1,2-Dichloroethene         | 0.683 | 0.719  |            | 5.27   | 20    |
| Bromochloromethane             | 0.439 | 0.438  |            | -0.23  | 20    |
| Chloroform                     | 1.121 | 1.175  |            | 4.82   | 20    |
| 1,1,1-Trichloroethane          | 1.021 | 1.085  |            | 6.27   | 20    |
| Methylcyclohexane              | 0.478 | 0.571  |            | 19.46  | 20    |
| Benzene                        | 1.507 | 1.573  |            | 4.38   | 20    |
| 1,2-Dichloroethane             | 0.488 | 0.528  |            | 8.2    | 20    |
| Trichloroethene                | 0.348 | 0.365  |            | 4.89   | 20    |
| 1,2-Dichloropropane            | 0.354 | 0.384  |            | 8.48   | 20    |
| Bromodichloromethane           | 0.526 | 0.569  |            | 8.18   | 20    |
| 4-Methyl-2-Pentanone           | 0.406 | 0.504  |            | 24.14  | 20    |
| Toluene                        | 0.882 | 0.995  |            | 12.81  | 20    |
| t-1,3-Dichloropropene          | 0.544 | 0.592  |            | 8.82   | 20    |
| cis-1,3-Dichloropropene        | 0.576 | 0.634  |            | 10.07  | 20    |
| 1,1,2-Trichloroethane          | 0.332 | 0.361  |            | 8.73   | 20    |
| 2-Hexanone                     | 0.296 | 0.396  |            | 33.78  | 20    |
| Dibromochloromethane           | 0.378 | 0.434  |            | 14.81  | 20    |
| 1,2-Dibromoethane              | 0.340 | 0.370  |            | 8.82   | 20    |
| Tetrachloroethene              | 0.333 | 0.356  |            | 6.91   | 20    |
| Chlorobenzene                  | 1.119 | 1.182  | 0.3        | 5.63   | 20    |

All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.



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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG No.: P4892

Instrument ID: MSVOA\_N Calibration Date/Time: 11/20/2024 11:18

Lab File ID: VN084960.D Init. Calib. Date(s): 10/30/2024 10/30/2024

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:46 13:45

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

| COMPOUND                    | RRF   | RRF050 | MIN<br>RRF | %D     | MAX%D |
|-----------------------------|-------|--------|------------|--------|-------|
| Ethyl Benzene               | 1.867 | 2.112  |            | 13.12  | 20    |
| m/p-Xylenes                 | 0.707 | 0.815  |            | 15.28  | 20    |
| o-Xylene                    | 0.661 | 0.779  |            | 17.85  | 20    |
| Styrene                     | 1.154 | 1.329  |            | 15.16  | 20    |
| Bromoform                   | 0.293 | 0.330  | 0.1        | 12.63  | 20    |
| Isopropylbenzene            | 3.504 | 3.902  |            | 11.36  | 20    |
| 1,1,2,2-Tetrachloroethane   | 1.170 | 1.194  | 0.3        | 2.05   | 20    |
| 1,3-Dichlorobenzene         | 1.838 | 1.743  |            | -5.17  | 20    |
| 1,4-Dichlorobenzene         | 1.937 | 1.741  |            | -10.12 | 20    |
| 1,2-Dichlorobenzene         | 1.766 | 1.729  |            | -2.1   | 20    |
| 1,2-Dibromo-3-Chloropropane | 0.237 | 0.253  |            | 6.75   | 20    |
| 1,2,4-Trichlorobenzene      | 0.967 | 0.914  |            | -5.48  | 20    |
| 1,2,3-Trichlorobenzene      | 0.939 | 0.869  |            | -7.45  | 20    |
| 1,2-Dichloroethane-d4       | 0.722 | 0.653  |            | -9.56  | 20    |
| Dibromofluoromethane        | 0.338 | 0.317  |            | -6.21  | 20    |
| Toluene-d8                  | 1.247 | 1.145  |            | -8.18  | 20    |
| 4-Bromofluorobenzene        | 0.466 | 0.449  |            | -3.65  | 20    |

All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084960.D  
 Acq On : 20 Nov 2024 11:18  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2024  
 Supervised By :Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:32:21 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 164992   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 271316   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 240365   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 122785   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65    | 107759   | 45.219   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 74 - 125 | Recovery | =    | 90.440% |
| 35) Dibromofluoromethane    | 8.159  | 113   | 85890    | 46.769   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 75 - 124 | Recovery | =    | 93.540% |
| 50) Toluene-d8              | 10.565 | 98    | 310714   | 45.930   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 86 - 113 | Recovery | =    | 91.860% |
| 62) 4-Bromofluorobenzene    | 12.847 | 95    | 121953   | 48.235   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 77 - 121 | Recovery | =    | 96.480% |

|                              |       |     |         |         |      |        |
|------------------------------|-------|-----|---------|---------|------|--------|
| Target Compounds             |       |     |         |         |      | Qvalue |
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 102999  | 54.304  | ug/l | 94     |
| 3) Chloromethane             | 2.359 | 50  | 110719  | 49.734  | ug/l | 98     |
| 4) Vinyl Chloride            | 2.512 | 62  | 107639  | 52.764  | ug/l | 98     |
| 5) Bromomethane              | 2.900 | 94  | 56156   | 51.955  | ug/l | 97     |
| 6) Chloroethane              | 3.071 | 64  | 67311   | 53.398  | ug/l | 94     |
| 7) Trichlorofluoromethane    | 3.471 | 101 | 176242  | 52.445  | ug/l | 98     |
| 8) Diethyl Ether             | 3.953 | 74  | 63921   | 53.922  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluo... | 4.353 | 101 | 101609  | 53.510  | ug/l | 100    |
| 10) Methyl Iodide            | 4.571 | 142 | 137664  | 54.245  | ug/l | 95     |
| 11) Tert butyl alcohol       | 5.541 | 59  | 90985   | 289.250 | ug/l | 99     |
| 12) 1,1-Dichloroethene       | 4.324 | 96  | 95095   | 50.612  | ug/l | 97     |
| 13) Acrolein                 | 4.177 | 56  | 83697   | 266.836 | ug/l | 98     |
| 14) Allyl chloride           | 5.012 | 41  | 161833  | 53.110  | ug/l | 93     |
| 15) Acrylonitrile            | 5.718 | 53  | 255741  | 280.842 | ug/l | 99     |
| 16) Acetone                  | 4.430 | 43  | 165010  | 239.592 | ug/l | 97     |
| 17) Carbon Disulfide         | 4.700 | 76  | 277268  | 47.919  | ug/l | 100    |
| 18) Methyl Acetate           | 5.024 | 43  | 126759  | 50.446  | ug/l | 98     |
| 19) Methyl tert-butyl Ether  | 5.794 | 73  | 323521  | 56.177  | ug/l | 97     |
| 20) Methylene Chloride       | 5.265 | 84  | 107519  | 51.299  | ug/l | 92     |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 97972   | 50.781  | ug/l | 98     |
| 22) Diisopropyl ether        | 6.665 | 45  | 326570  | 53.937  | ug/l | 97     |
| 23) Vinyl Acetate            | 6.594 | 43  | 1220460 | 292.299 | ug/l | 99     |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 189216  | 52.053  | ug/l | 99     |
| 25) 2-Butanone               | 7.482 | 43  | 301402  | 271.102 | ug/l | 98     |
| 26) 2,2-Dichloropropane      | 7.482 | 77  | 175340  | 55.420  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene   | 7.482 | 96  | 118648  | 52.668  | ug/l | 96     |
| 28) Bromochloromethane       | 7.812 | 49  | 72293   | 49.917  | ug/l | 92     |
| 29) Tetrahydrofuran          | 7.835 | 42  | 216108  | 293.003 | ug/l | 95     |
| 30) Chloroform               | 7.965 | 83  | 193933  | 52.416  | ug/l | 97     |
| 31) Cyclohexane              | 8.253 | 56  | 167902  | 51.034  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 178940  | 53.137  | ug/l | 98     |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 137824  | 54.113  | ug/l | 100    |
| 37) Ethyl Acetate            | 7.559 | 43  | 134705  | 58.292  | ug/l | 97     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 156315  | 54.908  | ug/l | 99     |
| 39) Methylcyclohexane        | 9.600 | 83  | 154889  | 59.777  | ug/l | 98     |
| 40) Benzene                  | 8.606 | 78  | 426723  | 52.170  | ug/l | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084960.D  
 Acq On : 20 Nov 2024 11:18  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2024  
 Supervised By :Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:32:21 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 78926    | 63.513   | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 143286   | 54.090   | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.688  | 43   | 242469   | 56.930   | ug/l   | 100      |
| 44) Trichloroethene           | 9.347  | 130  | 99056    | 52.511   | ug/l   | 100      |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 104248   | 54.331   | ug/l   | 96       |
| 46) Dibromomethane            | 9.706  | 93   | 73957    | 54.624   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.888  | 83   | 154269   | 54.053   | ug/l   | 99       |
| 48) Methyl methacrylate       | 9.676  | 41   | 109069   | 60.645   | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.700  | 88   | 36313    | 1139.408 | ug/l # | 81       |
| 51) 4-Methyl-2-Pentanone      | 10.441 | 43   | 683902   | 310.450  | ug/l   | 98       |
| 52) Toluene                   | 10.629 | 92   | 270072   | 56.456   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 160608   | 54.366   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 172110   | 55.045   | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane     | 11.018 | 97   | 98018    | 54.394   | ug/l   | 96       |
| 56) Ethyl methacrylate        | 10.870 | 69   | 165749   | 63.590   | ug/l   | 96       |
| 57) 1,3-Dichloropropane       | 11.165 | 76   | 172010   | 55.619   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 371343   | 304.461  | ug/l   | 98       |
| 59) 2-Hexanone                | 11.194 | 43   | 536530   | 334.603  | ug/l   | 98       |
| 60) Dibromochloromethane      | 11.359 | 129  | 117689   | 57.305   | ug/l   | 100      |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 100326   | 54.368   | ug/l   | 100      |
| 64) Tetrachloroethene         | 11.100 | 164  | 85588    | 53.532   | ug/l   | 97       |
| 65) Chlorobenzene             | 11.888 | 112  | 284076   | 52.828   | ug/l   | 96       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 101276   | 54.146   | ug/l   | 99       |
| 67) Ethyl Benzene             | 11.965 | 91   | 507651   | 56.556   | ug/l   | 100      |
| 68) m/p-Xylenes               | 12.070 | 106  | 391940   | 115.337  | ug/l   | 100      |
| 69) o-Xylene                  | 12.394 | 106  | 187331   | 58.928   | ug/l   | 99       |
| 70) Styrene                   | 12.412 | 104  | 319362   | 57.589   | ug/l   | 100      |
| 71) Bromoform                 | 12.576 | 173  | 79345    | 56.375   | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.694 | 105  | 479086   | 55.679   | ug/l   | 99       |
| 74) N-ethyl acetate           | 12.494 | 43   | 205323   | 56.065   | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83   | 146589   | 51.040   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 125143m  | 50.987   | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 113414   | 49.030   | ug/l   | 98       |
| 78) n-propylbenzene           | 13.035 | 91   | 563327   | 55.869   | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 349601   | 53.064   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 407010   | 57.072   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 56982    | 55.078   | ug/l   | 94       |
| 82) 4-Chlorotoluene           | 13.217 | 91   | 353895   | 51.041   | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 348071   | 58.973   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 414294   | 56.287   | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.611 | 105  | 467025   | 56.017   | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 401222   | 58.679   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.735 | 146  | 213991   | 47.403   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene       | 13.811 | 146  | 213744   | 51.698   | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 339784   | 53.124   | ug/l   | 99       |
| 90) Hexachloroethane          | 14.335 | 117  | 75005    | 49.189   | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 212272   | 48.934   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 31109    | 53.467   | ug/l   | 97       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 112274   | 47.286   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 49818    | 47.779   | ug/l   | 98       |
| 95) Naphthalene               | 15.641 | 128  | 368434   | 51.842   | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 106677   | 46.284   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084960.D  
Acq On : 20 Nov 2024 11:18  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2024  
Supervised By :Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:32:21 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration

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

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



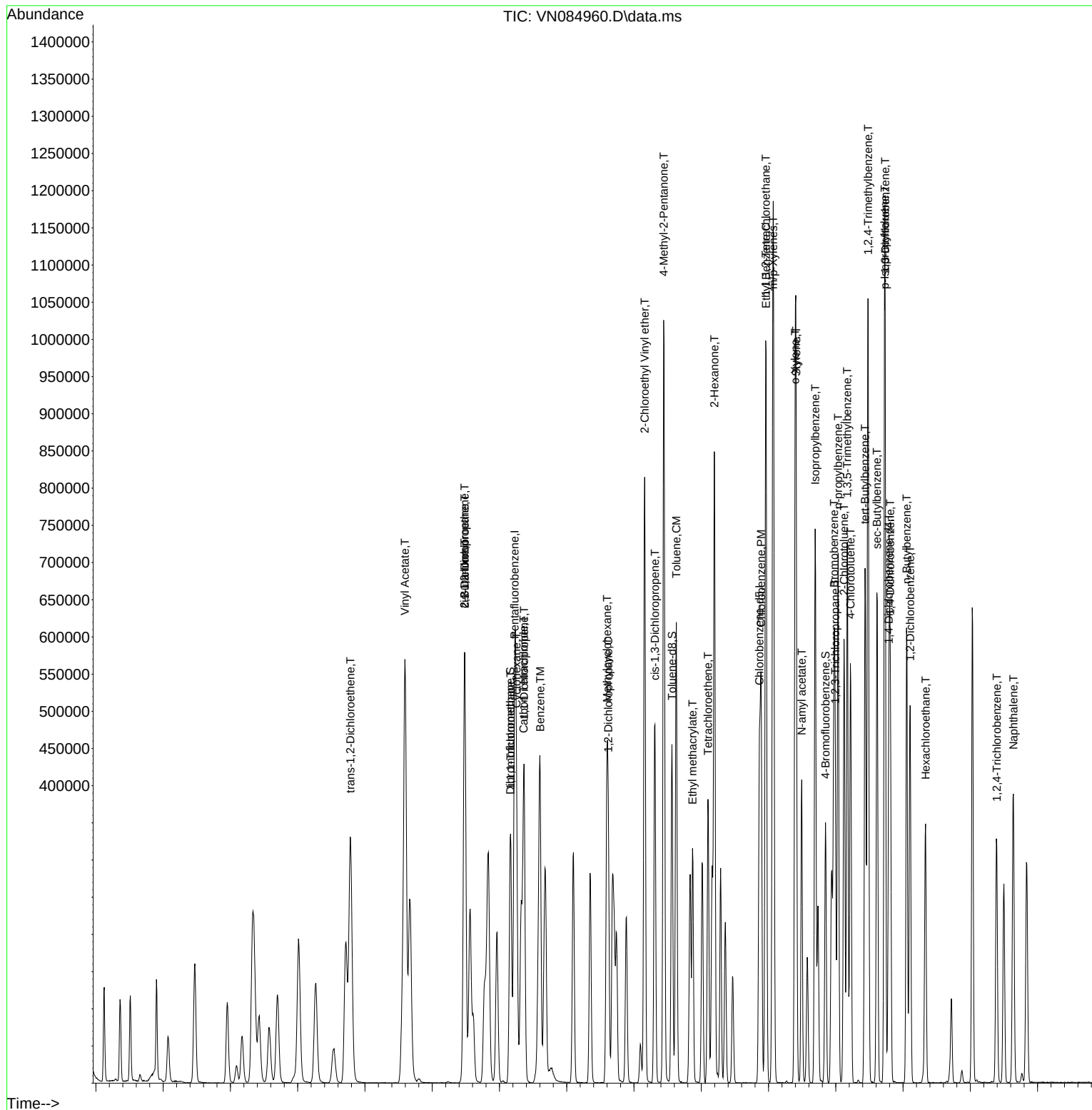
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN112024\  
Data File : VN084960.D  
Acq On    : 20 Nov 2024  11:18  
Operator  : JC\MD  
Sample    : VSTDCCC050  
Misc      : 5.0mL/MSVOA_N/WATER  
ALS Vial  : 3    Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_N  
**ClientSampleId :**  
VSTDCCC050

## Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2024  
Supervised By :Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:32:21 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084960.D  
 Acq On : 20 Nov 2024 11:18  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 21 00:32:21 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0    | 88    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.575 | 0.624 | -8.5   | 100   | 0.00     |
| 3 P   | Chloromethane               | 0.952 | 0.671 | 29.5#  | 88    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.618 | 0.652 | -5.5#  | 95    | 0.00     |
| 5 T   | Bromomethane                | 0.328 | 0.340 | -3.7   | 102   | -0.05    |
| 6 T   | Chloroethane                | 0.488 | 0.408 | 16.4   | 96    | -0.05    |
| 7 T   | Trichlorofluoromethane      | 1.018 | 1.068 | -4.9   | 98    | -0.02    |
| 8 T   | Diethyl Ether               | 0.359 | 0.387 | -7.8   | 97    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.575 | 0.616 | -7.1   | 98    | -0.02    |
| 10 T  | Methyl Iodide               | 0.769 | 0.834 | -8.5   | 100   | -0.02    |
| 11 T  | Tert butyl alcohol          | 0.095 | 0.110 | -15.8  | 113   | 0.02     |
| 12 CM | 1,1-Dichloroethene          | 0.569 | 0.576 | -1.2#  | 95    | -0.02    |
| 13 T  | Acrolein                    | 0.095 | 0.101 | -6.3   | 102   | 0.00     |
| 14 T  | Allyl chloride              | 0.923 | 0.981 | -6.3   | 95    | -0.01    |
| 15 T  | Acrylonitrile               | 0.276 | 0.310 | -12.3  | 101   | 0.00     |
| 16 T  | Acetone                     | 0.238 | 0.200 | 16.0   | 87    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.753 | 1.680 | 4.2    | 93    | -0.01    |
| 18 T  | Methyl Acetate              | 1.172 | 0.768 | 34.5#  | 91    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.745 | 1.961 | -12.4  | 99    | 0.00     |
| 20 T  | Methylene Chloride          | 0.635 | 0.652 | -2.7   | 96    | -0.01    |
| 21 T  | trans-1,2-Dichloroethene    | 0.585 | 0.594 | -1.5   | 93    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.835 | 1.979 | -7.8   | 94    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.265 | 1.479 | -16.9  | 101   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.102 | 1.147 | -4.1   | 95    | 0.00     |
| 25 T  | 2-Butanone                  | 0.337 | 0.365 | -8.3   | 102   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.959 | 1.063 | -10.8  | 100   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.683 | 0.719 | -5.3   | 96    | 0.00     |
| 28 T  | Bromochloromethane          | 0.439 | 0.438 | 0.2    | 76    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.224 | 0.262 | -17.0  | 104   | 0.00     |
| 30 C  | Chloroform                  | 1.121 | 1.175 | -4.8#  | 96    | 0.00     |
| 31 T  | Cyclohexane                 | 0.997 | 1.018 | -2.1   | 96    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.021 | 1.085 | -6.3   | 97    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.722 | 0.653 | 9.6    | 80    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 87    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.338 | 0.317 | 6.2    | 80    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.469 | 0.508 | -8.3   | 98    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.426 | 0.496 | -16.4  | 103   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.525 | 0.576 | -9.7   | 98    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.478 | 0.571 | -19.5  | 98    | 0.00     |
| 40 TM | Benzene                     | 1.507 | 1.573 | -4.4   | 95    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.229 | 0.291 | -27.1# | 103   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.488 | 0.528 | -8.2   | 93    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.927 | 0.894 | 3.6    | 103   | 0.00     |
| 44 TM | Trichloroethene             | 0.348 | 0.365 | -4.9   | 95    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.354 | 0.384 | -8.5#  | 96    | 0.00     |
| 46 T  | Dibromomethane              | 0.250 | 0.273 | -9.2   | 97    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.526 | 0.569 | -8.2   | 95    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.331 | 0.402 | -21.5  | 101   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084960.D  
 Acq On : 20 Nov 2024 11:18  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 21 00:32:21 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 0.006 | 0.007 | -16.7  | 96    | 0.00     |
| 50 S  | Toluene-d8                  | 1.247 | 1.145 | 8.2    | 77    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.406 | 0.504 | -24.1  | 104   | 0.00     |
| 52 CM | Toluene                     | 0.882 | 0.995 | -12.8# | 96    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.544 | 0.592 | -8.8   | 95    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.576 | 0.634 | -10.1  | 95    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.332 | 0.361 | -8.7   | 96    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.480 | 0.611 | -27.3# | 99    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.570 | 0.634 | -11.2  | 98    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.225 | 0.274 | -21.8  | 91    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.296 | 0.396 | -33.8# | 111   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.378 | 0.434 | -14.8  | 96    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.340 | 0.370 | -8.8   | 97    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.466 | 0.449 | 3.6    | 79    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 86    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.333 | 0.356 | -6.9   | 98    | 0.00     |
| 65 PM | Chlorobenzene               | 1.119 | 1.182 | -5.6   | 96    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.389 | 0.421 | -8.2   | 97    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.867 | 2.112 | -13.1# | 96    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.707 | 0.815 | -15.3  | 96    | 0.00     |
| 69 T  | o-Xylene                    | 0.661 | 0.779 | -17.9  | 97    | 0.00     |
| 70 T  | Styrene                     | 1.154 | 1.329 | -15.2  | 95    | 0.00     |
| 71 P  | Bromoform                   | 0.293 | 0.330 | -12.6  | 96    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 89    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.504 | 3.902 | -11.4  | 97    | 0.00     |
| 74 T  | N-amyl acetate              | 1.491 | 1.672 | -12.1  | 97    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.170 | 1.194 | -2.1   | 99    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.999 | 1.019 | -2.0   | 102   | 0.00     |
| 77 T  | Bromobenzene                | 0.942 | 0.924 | 1.9    | 93    | 0.00     |
| 78 T  | n-propylbenzene             | 4.106 | 4.588 | -11.7  | 96    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.683 | 2.847 | -6.1   | 96    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.904 | 3.315 | -14.2  | 96    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.421 | 0.464 | -10.2  | 103   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.823 | 2.882 | -2.1   | 94    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.403 | 2.835 | -18.0  | 99    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.997 | 3.374 | -12.6  | 95    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.395 | 3.804 | -12.0  | 95    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.784 | 3.268 | -17.4  | 95    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.838 | 1.743 | 5.2    | 93    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.937 | 1.741 | 10.1   | 92    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.605 | 2.767 | -6.2   | 94    | 0.00     |
| 90 T  | Hexachloroethane            | 0.621 | 0.611 | 1.6    | 92    | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 1.766 | 1.729 | 2.1    | 95    | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.237 | 0.253 | -6.8   | 104   | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.967 | 0.914 | 5.5    | 94    | 0.00     |
| 94 T  | Hexachlorobutadiene         | 0.425 | 0.406 | 4.5    | 98    | 0.00     |
| 95 T  | Naphthalene                 | 2.894 | 3.001 | -3.7   | 96    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084960.D  
Acq On : 20 Nov 2024 11:18  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Nov 21 00:32:21 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|------------------------|-------|-------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 0.939 | 0.869 | 7.5  | 92    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084960.D  
 Acq On : 20 Nov 2024 11:18  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 21 00:32:21 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount  | Calc.   | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|---------|---------|--------|-------|----------|
| 1 I   | Pentafluorobenzene          | 50.000  | 50.000  | 0.0    | 88    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 54.304  | -8.6   | 100   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 49.734  | 0.5    | 88    | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 52.764  | -5.5#  | 95    | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 51.955  | -3.9   | 102   | -0.05    |
| 6 T   | Chloroethane                | 50.000  | 53.398  | -6.8   | 96    | -0.05    |
| 7 T   | Trichlorofluoromethane      | 50.000  | 52.445  | -4.9   | 98    | -0.02    |
| 8 T   | Diethyl Ether               | 50.000  | 53.922  | -7.8   | 97    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 53.510  | -7.0   | 98    | -0.02    |
| 10 T  | Methyl Iodide               | 50.000  | 54.245  | -8.5   | 100   | -0.02    |
| 11 T  | Tert butyl alcohol          | 250.000 | 289.250 | -15.7  | 113   | 0.02     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 50.612  | -1.2#  | 95    | -0.02    |
| 13 T  | Acrolein                    | 250.000 | 266.836 | -6.7   | 102   | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 53.110  | -6.2   | 95    | -0.01    |
| 15 T  | Acrylonitrile               | 250.000 | 280.842 | -12.3  | 101   | 0.00     |
| 16 T  | Acetone                     | 250.000 | 239.592 | 4.2    | 87    | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 47.919  | 4.2    | 93    | -0.01    |
| 18 T  | Methyl Acetate              | 50.000  | 50.446  | -0.9   | 91    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 56.177  | -12.4  | 99    | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 51.299  | -2.6   | 96    | -0.01    |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 50.781  | -1.6   | 93    | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 53.937  | -7.9   | 94    | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 292.299 | -16.9  | 101   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 52.053  | -4.1   | 95    | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 271.102 | -8.4   | 102   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 55.420  | -10.8  | 100   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 52.668  | -5.3   | 96    | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 49.917  | 0.2    | 76    | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 293.003 | -17.2  | 104   | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 52.416  | -4.8#  | 96    | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 51.034  | -2.1   | 96    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 53.137  | -6.3   | 97    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 45.219  | 9.6    | 80    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0    | 87    | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 46.769  | 6.5    | 80    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 54.113  | -8.2   | 98    | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 58.292  | -16.6  | 103   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 54.908  | -9.8   | 98    | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 59.777  | -19.6  | 98    | 0.00     |
| 40 TM | Benzene                     | 50.000  | 52.170  | -4.3   | 95    | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 63.513  | -27.0# | 103   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 54.090  | -8.2   | 93    | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 56.930  | -13.9  | 103   | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 52.511  | -5.0   | 95    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 54.331  | -8.7#  | 96    | 0.00     |
| 46 T  | Dibromomethane              | 50.000  | 54.624  | -9.2   | 97    | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000  | 54.053  | -8.1   | 95    | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000  | 60.645  | -21.3  | 101   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084960.D  
 Acq On : 20 Nov 2024 11:18  
 Operator : JC\MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 21 00:32:21 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount   | Calc.    | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|----------|----------|--------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 1000.000 | 1139.408 | -13.9  | 96    | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 45.930   | 8.1    | 77    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 310.450  | -24.2  | 104   | 0.00     |
| 52 CM | Toluene                     | 50.000   | 56.456   | -12.9# | 96    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 54.366   | -8.7   | 95    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 55.045   | -10.1  | 95    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 54.394   | -8.8   | 96    | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 63.590   | -27.2# | 99    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 55.619   | -11.2  | 98    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 304.461  | -21.8  | 91    | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 334.603  | -33.8# | 111   | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 57.305   | -14.6  | 96    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 54.368   | -8.7   | 97    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 48.235   | 3.5    | 79    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0    | 86    | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 53.532   | -7.1   | 98    | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 52.828   | -5.7   | 96    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 54.146   | -8.3   | 97    | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 56.556   | -13.1# | 96    | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 115.337  | -15.3  | 96    | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 58.928   | -17.9  | 97    | 0.00     |
| 70 T  | Styrene                     | 50.000   | 57.589   | -15.2  | 95    | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 56.375   | -12.8  | 96    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0    | 89    | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 55.679   | -11.4  | 97    | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 56.065   | -12.1  | 97    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 51.040   | -2.1   | 99    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 50.987   | -2.0   | 102   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 49.030   | 1.9    | 93    | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 55.869   | -11.7  | 96    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 53.064   | -6.1   | 96    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 57.072   | -14.1  | 96    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 55.078   | -10.2  | 103   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 51.041   | -2.1   | 94    | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 58.973   | -17.9  | 99    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 56.287   | -12.6  | 95    | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 56.017   | -12.0  | 95    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 58.679   | -17.4  | 95    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 47.403   | 5.2    | 93    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 51.698   | -3.4   | 92    | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 53.124   | -6.2   | 94    | 0.00     |
| 90 T  | Hexachloroethane            | 50.000   | 49.189   | 1.6    | 92    | 0.00     |
| 91 T  | 1,2-Dichlorobenzene         | 50.000   | 48.934   | 2.1    | 95    | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 50.000   | 53.467   | -6.9   | 104   | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 50.000   | 47.286   | 5.4    | 94    | 0.00     |
| 94 T  | Hexachlorobutadiene         | 50.000   | 47.779   | 4.4    | 98    | 0.00     |
| 95 T  | Naphthalene                 | 50.000   | 51.842   | -3.7   | 96    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084960.D  
Acq On : 20 Nov 2024 11:18  
Operator : JC\MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Nov 21 00:32:21 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | Amount | Calc.  | %Dev | Area% | Dev(min) |
|------|------------------------|--------|--------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 46.284 | 7.4  | 92    | 0.00     |

(#) = Out of Range                      SPCC's out = 0    CCC's out = 6



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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG No.: P4892

Instrument ID: MSVOA\_Y Calibration Date/Time: 11/21/2024 09:25

Lab File ID: VY020373.D Init. Calib. Date(s): 11/19/2024 11/19/2024

Heated Purge: (Y/N) Y Init. Calib. Time(s): 15:49 17:42

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

| COMPOUND                       | RRF   | RRF050 | MIN<br>RRF | %D     | MAX%D |
|--------------------------------|-------|--------|------------|--------|-------|
| Dichlorodifluoromethane        | 0.485 | 0.554  |            | 14.23  | 20    |
| Chloromethane                  | 0.735 | 0.578  | 0.1        | -21.36 | 20    |
| Vinyl Chloride                 | 0.666 | 0.567  |            | -14.86 | 20    |
| Bromomethane                   | 0.333 | 0.304  |            | -8.71  | 20    |
| Chloroethane                   | 0.388 | 0.335  |            | -13.66 | 20    |
| Trichlorofluoromethane         | 0.925 | 0.962  |            | 4      | 20    |
| 1,1,2-Trichlorotrifluoroethane | 0.551 | 0.533  |            | -3.27  | 20    |
| 1,1-Dichloroethene             | 0.545 | 0.530  |            | -2.75  | 20    |
| Acetone                        | 0.138 | 0.163  |            | 18.12  | 20    |
| Carbon Disulfide               | 1.838 | 1.752  |            | -4.68  | 20    |
| Methyl tert-butyl Ether        | 1.417 | 1.447  |            | 2.12   | 20    |
| Methyl Acetate                 | 0.321 | 0.327  |            | 1.87   | 20    |
| Methylene Chloride             | 0.583 | 0.567  |            | -2.74  | 20    |
| trans-1,2-Dichloroethene       | 0.606 | 0.581  |            | -4.13  | 20    |
| 1,1-Dichloroethane             | 1.173 | 1.127  | 0.1        | -3.92  | 20    |
| Cyclohexane                    | 1.071 | 1.017  |            | -5.04  | 20    |
| 2-Butanone                     | 0.177 | 0.204  |            | 15.25  | 20    |
| Carbon Tetrachloride           | 0.511 | 0.577  |            | 12.92  | 20    |
| cis-1,2-Dichloroethene         | 0.667 | 0.667  |            | 0      | 20    |
| Bromochloromethane             | 0.494 | 0.461  |            | -6.68  | 20    |
| Chloroform                     | 1.133 | 1.101  |            | -2.82  | 20    |
| 1,1,1-Trichloroethane          | 0.995 | 1.042  |            | 4.72   | 20    |
| Methylcyclohexane              | 0.613 | 0.632  |            | 3.1    | 20    |
| Benzene                        | 1.435 | 1.479  |            | 3.07   | 20    |
| 1,2-Dichloroethane             | 0.387 | 0.423  |            | 9.3    | 20    |
| Trichloroethene                | 0.340 | 0.348  |            | 2.35   | 20    |
| 1,2-Dichloropropane            | 0.342 | 0.348  |            | 1.75   | 20    |
| Bromodichloromethane           | 0.484 | 0.509  |            | 5.16   | 20    |
| 4-Methyl-2-Pentanone           | 0.221 | 0.244  |            | 10.41  | 20    |
| Toluene                        | 0.877 | 0.905  |            | 3.19   | 20    |
| t-1,3-Dichloropropene          | 0.458 | 0.480  |            | 4.8    | 20    |
| cis-1,3-Dichloropropene        | 0.524 | 0.559  |            | 6.68   | 20    |
| 1,1,2-Trichloroethane          | 0.233 | 0.236  |            | 1.29   | 20    |
| 2-Hexanone                     | 0.157 | 0.185  |            | 17.83  | 20    |
| Dibromochloromethane           | 0.300 | 0.320  |            | 6.67   | 20    |
| 1,2-Dibromoethane              | 0.216 | 0.221  |            | 2.32   | 20    |
| Tetrachloroethene              | 0.360 | 0.362  |            | 0.56   | 20    |
| Chlorobenzene                  | 1.115 | 1.107  | 0.3        | -0.72  | 20    |

All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.





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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG No.: P4892

Instrument ID: MSVOA\_Y Calibration Date/Time: 11/21/2024 09:25

Lab File ID: VY020373.D Init. Calib. Date(s): 11/19/2024 11/19/2024

Heated Purge: (Y/N) Y Init. Calib. Time(s): 15:49 17:42

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

| COMPOUND                    | RRF   | RRF050 | MIN<br>RRF | %D    | MAX%D |
|-----------------------------|-------|--------|------------|-------|-------|
| Ethyl Benzene               | 2.057 | 2.103  |            | 2.24  | 20    |
| m/p-Xylenes                 | 0.741 | 0.763  |            | 2.97  | 20    |
| o-Xylene                    | 0.703 | 0.723  |            | 2.85  | 20    |
| Styrene                     | 1.167 | 1.231  |            | 5.48  | 20    |
| Bromoform                   | 0.194 | 0.213  | 0.1        | 9.79  | 20    |
| Isopropylbenzene            | 4.236 | 4.245  |            | 0.21  | 20    |
| 1,1,2,2-Tetrachloroethane   | 0.685 | 0.699  | 0.3        | 2.04  | 20    |
| 1,3-Dichlorobenzene         | 1.794 | 1.751  |            | -2.4  | 20    |
| 1,4-Dichlorobenzene         | 1.714 | 1.699  |            | -0.88 | 20    |
| 1,2-Dichlorobenzene         | 1.495 | 1.513  |            | 1.2   | 20    |
| 1,2-Dibromo-3-Chloropropane | 0.112 | 0.112  |            | 0     | 20    |
| 1,2,4-Trichlorobenzene      | 0.904 | 0.922  |            | 1.99  | 20    |
| 1,2,3-Trichlorobenzene      | 0.773 | 0.768  |            | -0.65 | 20    |
| 1,2-Dichloroethane-d4       | 0.574 | 0.598  |            | 4.18  | 20    |
| Dibromofluoromethane        | 0.321 | 0.316  |            | -1.56 | 20    |
| Toluene-d8                  | 1.263 | 1.242  |            | -1.66 | 20    |
| 4-Bromofluorobenzene        | 0.406 | 0.415  |            | 2.22  | 20    |

All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020373.D  
 Acq On : 21 Nov 2024 09:25  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/22/2024  
 Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:55:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.713  | 168  | 191018   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.622  | 114  | 313957   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.420 | 117  | 263957   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.352 | 152  | 121826   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.067  | 65    | 114241   | 52.056   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 104.120% |
| 35) Dibromofluoromethane    | 7.640  | 113   | 99082    | 49.217   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 98.440%  |
| 50) Toluene-d8              | 10.109 | 98    | 389849   | 49.159   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 98.320%  |
| 62) 4-Bromofluorobenzene    | 12.408 | 95    | 130147   | 51.051   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 102.100% |

|                              |       |     |         |         |          |
|------------------------------|-------|-----|---------|---------|----------|
| Target Compounds             |       |     |         |         | Qvalue   |
| 2) Dichlorodifluoromethane   | 1.873 | 85  | 105756  | 57.038  | ug/l 99  |
| 3) Chloromethane             | 2.074 | 50  | 110402  | 44.989  | ug/l 98  |
| 4) Vinyl Chloride            | 2.214 | 62  | 108241  | 42.554  | ug/l 99  |
| 5) Bromomethane              | 2.604 | 94  | 58141   | 45.767  | ug/l 100 |
| 6) Chloroethane              | 2.745 | 64  | 64064   | 43.174  | ug/l 99  |
| 7) Trichlorofluoromethane    | 3.068 | 101 | 183733  | 51.979  | ug/l 99  |
| 8) Diethyl Ether             | 3.464 | 74  | 55454   | 49.722  | ug/l 97  |
| 9) 1,1,2-Trichlorotrifluo... | 3.824 | 101 | 101743  | 48.332  | ug/l 100 |
| 10) Methyl Iodide            | 4.019 | 142 | 134068  | 47.547  | ug/l 94  |
| 11) Tert butyl alcohol       | 4.872 | 59  | 36712   | 226.965 | ug/l 99  |
| 12) 1,1-Dichloroethene       | 3.799 | 96  | 101210  | 48.571  | ug/l 91  |
| 13) Acrolein                 | 3.665 | 56  | 41887   | 308.240 | ug/l 97  |
| 14) Allyl chloride           | 4.391 | 41  | 194056  | 48.159  | ug/l 94  |
| 15) Acrylonitrile            | 5.067 | 53  | 127193  | 257.993 | ug/l 100 |
| 16) Acetone                  | 3.879 | 43  | 156029  | 296.575 | ug/l 93  |
| 17) Carbon Disulfide         | 4.116 | 76  | 334637  | 47.667  | ug/l 100 |
| 18) Methyl Acetate           | 4.397 | 43  | 62427   | 50.904  | ug/l 99  |
| 19) Methyl tert-butyl Ether  | 5.122 | 73  | 276461  | 51.073  | ug/l 100 |
| 20) Methylene Chloride       | 4.628 | 84  | 108400  | 48.655  | ug/l 97  |
| 21) trans-1,2-Dichloroethene | 5.128 | 96  | 111034  | 47.976  | ug/l 95  |
| 22) Diisopropyl ether        | 6.025 | 45  | 379634  | 47.808  | ug/l 98  |
| 23) Vinyl Acetate            | 5.970 | 43  | 1113464 | 250.913 | ug/l 98  |
| 24) 1,1-Dichloroethane       | 5.927 | 63  | 215234  | 48.013  | ug/l 99  |
| 25) 2-Butanone               | 6.902 | 43  | 194697  | 287.460 | ug/l 98  |
| 26) 2,2-Dichloropropane      | 6.890 | 77  | 191447  | 51.670  | ug/l 99  |
| 27) cis-1,2-Dichloroethene   | 6.902 | 96  | 127322  | 49.947  | ug/l 98  |
| 28) Bromochloromethane       | 7.250 | 49  | 88109   | 46.699  | ug/l 100 |
| 29) Tetrahydrofuran          | 7.268 | 42  | 109090  | 269.487 | ug/l 98  |
| 30) Chloroform               | 7.427 | 83  | 210274  | 48.574  | ug/l 99  |
| 31) Cyclohexane              | 7.707 | 56  | 194230  | 47.477  | ug/l 97  |
| 32) 1,1,1-Trichloroethane    | 7.622 | 97  | 199027  | 52.361  | ug/l 98  |
| 36) 1,1-Dichloropropene      | 7.841 | 75  | 159083  | 51.736  | ug/l 99  |
| 37) Ethyl Acetate            | 6.988 | 43  | 78302   | 55.589  | ug/l 99  |
| 38) Carbon Tetrachloride     | 7.823 | 117 | 181264  | 56.460  | ug/l 97  |
| 39) Methylcyclohexane        | 9.115 | 83  | 198413  | 51.560  | ug/l 96  |
| 40) Benzene                  | 8.085 | 78  | 464288  | 51.524  | ug/l 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020373.D  
 Acq On : 21 Nov 2024 09:25  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/22/2024  
 Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:55:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.232  | 41   | 45520    | 56.796   | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.164  | 62   | 132760   | 54.582   | ug/l   | 98       |
| 43) Isopropyl Acetate         | 8.201  | 43   | 152400   | 55.636   | ug/l # | 90       |
| 44) Trichloroethene           | 8.872  | 130  | 109148   | 51.123   | ug/l   | 100      |
| 45) 1,2-Dichloropropane       | 9.146  | 63   | 109335   | 50.856   | ug/l   | 99       |
| 46) Dibromomethane            | 9.237  | 93   | 58050    | 52.680   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.426  | 83   | 159849   | 52.549   | ug/l   | 98       |
| 48) Methyl methacrylate       | 9.225  | 41   | 72620    | 55.450   | ug/l   | 96       |
| 49) 1,4-Dioxane               | 9.237  | 88   | 11733    | 1034.957 | ug/l # | 88       |
| 51) 4-Methyl-2-Pentanone      | 9.999  | 43   | 382611   | 275.235  | ug/l   | 99       |
| 52) Toluene                   | 10.176 | 92   | 284192   | 51.599   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.396 | 75   | 150684   | 52.384   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 9.859  | 75   | 175444   | 53.280   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 10.573 | 97   | 73941    | 50.551   | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.444 | 69   | 117267   | 53.384   | ug/l   | 99       |
| 57) 1,3-Dichloropropane       | 10.719 | 76   | 138386   | 52.644   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 9.713  | 63   | 287613   | 276.129  | ug/l   | 98       |
| 59) 2-Hexanone                | 10.762 | 43   | 289969   | 294.578  | ug/l   | 99       |
| 60) Dibromochloromethane      | 10.914 | 129  | 100432   | 53.270   | ug/l   | 98       |
| 61) 1,2-Dibromoethane         | 11.018 | 107  | 69299    | 51.128   | ug/l   | 100      |
| 64) Tetrachloroethene         | 10.652 | 164  | 95629    | 50.259   | ug/l   | 97       |
| 65) Chlorobenzene             | 11.444 | 112  | 292282   | 49.663   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane | 11.517 | 131  | 101973   | 51.867   | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.524 | 91   | 554988   | 51.115   | ug/l   | 100      |
| 68) m/p-Xylenes               | 11.633 | 106  | 402780   | 102.989  | ug/l   | 97       |
| 69) o-Xylene                  | 11.956 | 106  | 190779   | 51.431   | ug/l   | 97       |
| 70) Styrene                   | 11.975 | 104  | 324962   | 52.727   | ug/l   | 98       |
| 71) Bromoform                 | 12.139 | 173  | 56258    | 54.905   | ug/l # | 98       |
| 73) Isopropylbenzene          | 12.261 | 105  | 517205   | 50.117   | ug/l   | 100      |
| 74) N-ethyl acetate           | 12.072 | 43   | 134142   | 53.787   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.511 | 83   | 85136    | 51.044   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.560 | 75   | 63029m   | 54.892   | ug/l   |          |
| 77) Bromobenzene              | 12.536 | 156  | 108458   | 50.161   | ug/l   | 97       |
| 78) n-propylbenzene           | 12.603 | 91   | 622006   | 50.221   | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 12.682 | 91   | 352846   | 49.548   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 12.743 | 105  | 423200   | 50.741   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-b... | 12.310 | 75   | 31947    | 54.517   | ug/l   | 97       |
| 82) 4-Chlorotoluene           | 12.786 | 91   | 360361   | 49.033   | ug/l   | 98       |
| 83) tert-Butylbenzene         | 13.005 | 119  | 377510   | 51.291   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.048 | 105  | 413969   | 50.063   | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.182 | 105  | 539489   | 46.494   | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.298 | 119  | 447545   | 49.885   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.292 | 146  | 213276   | 48.784   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.371 | 146  | 207020   | 49.561   | ug/l   | 99       |
| 89) n-Butylbenzene            | 13.627 | 91   | 426701   | 49.666   | ug/l   | 100      |
| 90) Hexachloroethane          | 13.889 | 117  | 85124    | 49.160   | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene       | 13.663 | 146  | 184340   | 50.608   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.279 | 75   | 13654    | 49.889   | ug/l   | 95       |
| 93) 1,2,4-Trichlorobenzene    | 14.931 | 180  | 112273   | 50.977   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.029 | 225  | 69051    | 51.363   | ug/l   | 99       |
| 95) Naphthalene               | 15.151 | 128  | 205233   | 54.108   | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.340 | 180  | 93604    | 49.707   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020373.D  
Acq On : 21 Nov 2024 09:25  
Operator : SY/MD  
Sample : VSTDCCC050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/22/2024  
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:55:51 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

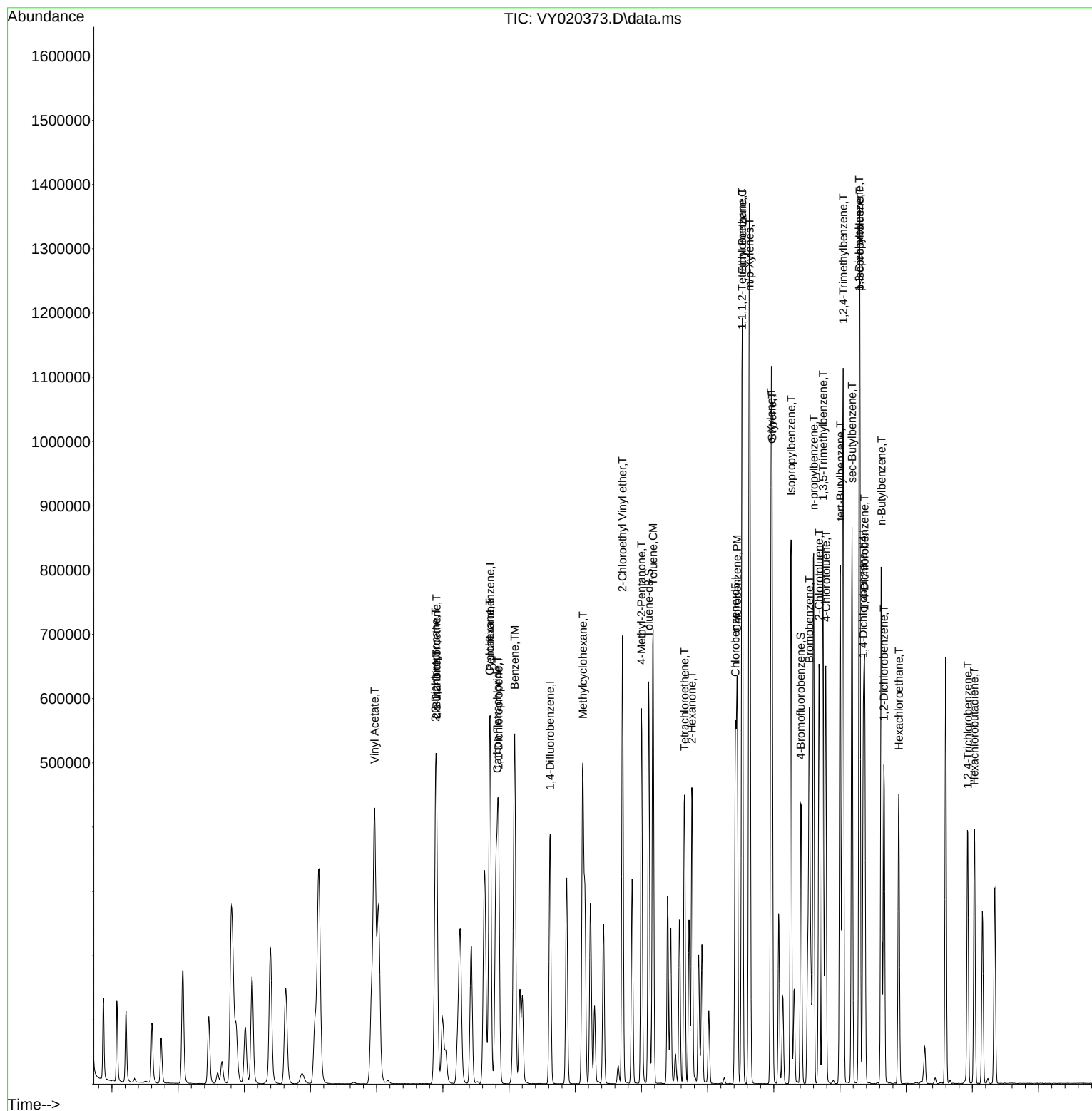
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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

**Instrument :**  
MSVOA\_Y  
**ClientSampleId :**  
VSTDCCC050

## Manual Integrations APPROVED

Reviewed By :Romaben Patel 11/22/2024  
Supervised By :Mahesh Dadoda 11/22/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020373.D  
 Acq On : 21 Nov 2024 09:25  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 21 13:55:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 84    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.485 | 0.554 | -14.2 | 103   | 0.00     |
| 3 P   | Chloromethane               | 0.735 | 0.578 | 21.4  | 71    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.666 | 0.567 | 14.9# | 77    | 0.00     |
| 5 T   | Bromomethane                | 0.333 | 0.304 | 8.7   | 82    | 0.00     |
| 6 T   | Chloroethane                | 0.388 | 0.335 | 13.7  | 76    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.925 | 0.962 | -4.0  | 87    | 0.00     |
| 8 T   | Diethyl Ether               | 0.292 | 0.290 | 0.7   | 80    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.551 | 0.533 | 3.3   | 76    | 0.00     |
| 10 T  | Methyl Iodide               | 0.738 | 0.702 | 4.9   | 71    | 0.01     |
| 11 T  | Tert butyl alcohol          | 0.044 | 0.038 | 13.6  | 89    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.545 | 0.530 | 2.8#  | 76    | 0.00     |
| 13 T  | Acrolein                    | 0.036 | 0.044 | -22.2 | 102   | 0.00     |
| 14 T  | Allyl chloride              | 1.055 | 1.016 | 3.7   | 90    | 0.00     |
| 15 T  | Acrylonitrile               | 0.129 | 0.133 | -3.1  | 90    | 0.00     |
| 16 T  | Acetone                     | 0.138 | 0.163 | -18.1 | 86    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.838 | 1.752 | 4.7   | 71    | 0.00     |
| 18 T  | Methyl Acetate              | 0.321 | 0.327 | -1.9  | 91    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.417 | 1.447 | -2.1  | 87    | 0.00     |
| 20 T  | Methylene Chloride          | 0.583 | 0.567 | 2.7   | 84    | 0.01     |
| 21 T  | trans-1,2-Dichloroethene    | 0.606 | 0.581 | 4.1   | 81    | 0.00     |
| 22 T  | Diisopropyl ether           | 2.079 | 1.987 | 4.4   | 83    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.162 | 1.166 | -0.3  | 85    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.173 | 1.127 | 3.9   | 83    | 0.00     |
| 25 T  | 2-Butanone                  | 0.177 | 0.204 | -15.3 | 95    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.970 | 1.002 | -3.3  | 88    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.667 | 0.667 | 0.0   | 82    | 0.00     |
| 28 T  | Bromochloromethane          | 0.494 | 0.461 | 6.7   | 76    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.106 | 0.114 | -7.5  | 90    | 0.00     |
| 30 C  | Chloroform                  | 1.133 | 1.101 | 2.8#  | 75    | 0.00     |
| 31 T  | Cyclohexane                 | 1.071 | 1.017 | 5.0   | 83    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.995 | 1.042 | -4.7  | 88    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.574 | 0.598 | -4.2  | 79    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 75    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.321 | 0.316 | 1.6   | 73    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.490 | 0.507 | -3.5  | 83    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.224 | 0.249 | -11.2 | 88    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.511 | 0.577 | -12.9 | 90    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.613 | 0.632 | -3.1  | 81    | 0.00     |
| 40 TM | Benzene                     | 1.435 | 1.479 | -3.1  | 82    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.128 | 0.145 | -13.3 | 92    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.387 | 0.423 | -9.3  | 87    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.436 | 0.485 | -11.2 | 86    | 0.00     |
| 44 TM | Trichloroethene             | 0.340 | 0.348 | -2.4  | 81    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.342 | 0.348 | -1.8# | 82    | 0.00     |
| 46 T  | Dibromomethane              | 0.175 | 0.185 | -5.7  | 80    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.484 | 0.509 | -5.2  | 77    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.209 | 0.231 | -10.5 | 86    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020373.D  
 Acq On : 21 Nov 2024 09:25  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 21 13:55:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 0.002 | 0.002 | 0.0   | 80    | 0.00     |
| 50 S  | Toluene-d8                  | 1.263 | 1.242 | 1.7   | 66    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.221 | 0.244 | -10.4 | 74    | 0.00     |
| 52 CM | Toluene                     | 0.877 | 0.905 | -3.2# | 80    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.458 | 0.480 | -4.8  | 80    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.524 | 0.559 | -6.7  | 83    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.233 | 0.236 | -1.3  | 80    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.350 | 0.374 | -6.9  | 79    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.419 | 0.441 | -5.3  | 79    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.166 | 0.183 | -10.2 | 87    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.157 | 0.185 | -17.8 | 81    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.300 | 0.320 | -6.7  | 78    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.216 | 0.221 | -2.3  | 76    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.406 | 0.415 | -2.2  | 72    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 73    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.360 | 0.362 | -0.6  | 80    | 0.00     |
| 65 PM | Chlorobenzene               | 1.115 | 1.107 | 0.7   | 71    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.372 | 0.386 | -3.8  | 76    | 0.00     |
| 67 C  | Ethyl Benzene               | 2.057 | 2.103 | -2.2# | 75    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.741 | 0.763 | -3.0  | 79    | 0.00     |
| 69 T  | o-Xylene                    | 0.703 | 0.723 | -2.8  | 79    | 0.00     |
| 70 T  | Styrene                     | 1.167 | 1.231 | -5.5  | 80    | 0.00     |
| 71 P  | Bromoform                   | 0.194 | 0.213 | -9.8  | 83    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 81    | 0.00     |
| 73 T  | Isopropylbenzene            | 4.236 | 4.245 | -0.2  | 80    | 0.00     |
| 74 T  | N-amyl acetate              | 1.024 | 1.101 | -7.5  | 82    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.685 | 0.699 | -2.0  | 78    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.471 | 0.517 | -9.8  | 82    | 0.00     |
| 77 T  | Bromobenzene                | 0.887 | 0.890 | -0.3  | 79    | 0.00     |
| 78 T  | n-propylbenzene             | 5.083 | 5.106 | -0.5  | 80    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.923 | 2.896 | 0.9   | 82    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.423 | 3.474 | -1.5  | 83    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.241 | 0.262 | -8.7  | 83    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 3.016 | 2.958 | 1.9   | 82    | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.021 | 3.099 | -2.6  | 82    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.394 | 3.398 | -0.1  | 81    | 0.00     |
| 85 T  | sec-Butylbenzene            | 4.762 | 4.428 | 7.0   | 71    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.682 | 3.674 | 0.2   | 78    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.794 | 1.751 | 2.4   | 77    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.714 | 1.699 | 0.9   | 80    | 0.00     |
| 89 T  | n-Butylbenzene              | 3.526 | 3.503 | 0.7   | 78    | 0.00     |
| 90 T  | Hexachloroethane            | 0.711 | 0.699 | 1.7   | 74    | 0.01     |
| 91 T  | 1,2-Dichlorobenzene         | 1.495 | 1.513 | -1.2  | 80    | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.112 | 0.112 | 0.0   | 77    | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.904 | 0.922 | -2.0  | 84    | 0.01     |
| 94 T  | Hexachlorobutadiene         | 0.552 | 0.567 | -2.7  | 86    | 0.00     |
| 95 T  | Naphthalene                 | 1.557 | 1.685 | -8.2  | 84    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020373.D  
Acq On : 21 Nov 2024 09:25  
Operator : SY/MD  
Sample : VSTDCCC050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
LabSampleId :  
VSTDCCC050

Quant Time: Nov 21 13:55:51 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|------------------------|-------|-------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 0.773 | 0.768 | 0.6  | 84    | 0.01     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020373.D  
 Acq On : 21 Nov 2024 09:25  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 21 13:55:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount  | Calc.   | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|---------|---------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 50.000  | 50.000  | 0.0   | 84    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 57.038  | -14.1 | 103   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 44.989  | 10.0  | 71    | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 42.554  | 14.9# | 77    | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 45.767  | 8.5   | 82    | 0.00     |
| 6 T   | Chloroethane                | 50.000  | 43.174  | 13.7  | 76    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 51.979  | -4.0  | 87    | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 49.722  | 0.6   | 80    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 48.332  | 3.3   | 76    | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 47.547  | 4.9   | 71    | 0.01     |
| 11 T  | Tert butyl alcohol          | 250.000 | 226.965 | 9.2   | 89    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 48.571  | 2.9#  | 76    | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 308.240 | -23.3 | 102   | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 48.159  | 3.7   | 90    | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 257.993 | -3.2  | 90    | 0.00     |
| 16 T  | Acetone                     | 250.000 | 296.575 | -18.6 | 86    | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 47.667  | 4.7   | 71    | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 50.904  | -1.8  | 91    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 51.073  | -2.1  | 87    | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 48.655  | 2.7   | 84    | 0.01     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 47.976  | 4.0   | 81    | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 47.808  | 4.4   | 83    | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 250.913 | -0.4  | 85    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 48.013  | 4.0   | 83    | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 287.460 | -15.0 | 95    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 51.670  | -3.3  | 88    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 49.947  | 0.1   | 82    | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 46.699  | 6.6   | 76    | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 269.487 | -7.8  | 90    | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 48.574  | 2.9#  | 75    | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 47.477  | 5.0   | 83    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 52.361  | -4.7  | 88    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 52.056  | -4.1  | 79    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0   | 75    | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 49.217  | 1.6   | 73    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 51.736  | -3.5  | 83    | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 55.589  | -11.2 | 88    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 56.460  | -12.9 | 90    | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 51.560  | -3.1  | 81    | 0.00     |
| 40 TM | Benzene                     | 50.000  | 51.524  | -3.0  | 82    | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 56.796  | -13.6 | 92    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 54.582  | -9.2  | 87    | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 55.636  | -11.3 | 86    | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 51.123  | -2.2  | 81    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 50.856  | -1.7# | 82    | 0.00     |
| 46 T  | Dibromomethane              | 50.000  | 52.680  | -5.4  | 80    | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000  | 52.549  | -5.1  | 77    | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000  | 55.450  | -10.9 | 86    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020373.D  
 Acq On : 21 Nov 2024 09:25  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 21 13:55:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount   | Calc.    | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|----------|----------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 1000.000 | 1034.957 | -3.5  | 80    | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 49.159   | 1.7   | 66    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 275.235  | -10.1 | 74    | 0.00     |
| 52 CM | Toluene                     | 50.000   | 51.599   | -3.2# | 80    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 52.384   | -4.8  | 80    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 53.280   | -6.6  | 83    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 50.551   | -1.1  | 80    | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 53.384   | -6.8  | 79    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 52.644   | -5.3  | 79    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 276.129  | -10.5 | 87    | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 294.578  | -17.8 | 81    | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 53.270   | -6.5  | 78    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 51.128   | -2.3  | 76    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 51.051   | -2.1  | 72    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0   | 73    | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 50.259   | -0.5  | 80    | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 49.663   | 0.7   | 71    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 51.867   | -3.7  | 76    | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 51.115   | -2.2# | 75    | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 102.989  | -3.0  | 79    | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 51.431   | -2.9  | 79    | 0.00     |
| 70 T  | Styrene                     | 50.000   | 52.727   | -5.5  | 80    | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 54.905   | -9.8  | 83    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0   | 81    | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 50.117   | -0.2  | 80    | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 53.787   | -7.6  | 82    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 51.044   | -2.1  | 78    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 54.892   | -9.8  | 82    | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 50.161   | -0.3  | 79    | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 50.221   | -0.4  | 80    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 49.548   | 0.9   | 82    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 50.741   | -1.5  | 83    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 54.517   | -9.0  | 83    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 49.033   | 1.9   | 82    | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 51.291   | -2.6  | 82    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 50.063   | -0.1  | 81    | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 46.494   | 7.0   | 71    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 49.885   | 0.2   | 78    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 48.784   | 2.4   | 77    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 49.561   | 0.9   | 80    | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 49.666   | 0.7   | 78    | 0.00     |
| 90 T  | Hexachloroethane            | 50.000   | 49.160   | 1.7   | 74    | 0.01     |
| 91 T  | 1,2-Dichlorobenzene         | 50.000   | 50.608   | -1.2  | 80    | 0.00     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 50.000   | 49.889   | 0.2   | 77    | 0.00     |
| 93 T  | 1,2,4-Trichlorobenzene      | 50.000   | 50.977   | -2.0  | 84    | 0.01     |
| 94 T  | Hexachlorobutadiene         | 50.000   | 51.363   | -2.7  | 86    | 0.00     |
| 95 T  | Naphthalene                 | 50.000   | 54.108   | -8.2  | 84    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020373.D  
Acq On : 21 Nov 2024 09:25  
Operator : SY/MD  
Sample : VSTDCCC050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
LabSampleId :  
VSTDCCC050

Quant Time: Nov 21 13:55:51 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | Amount | Calc.  | %Dev | Area% | Dev(min) |
|------|------------------------|--------|--------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 49.707 | 0.6  | 84    | 0.01     |

(#) = Out of Range                      SPCC's out = 0    CCC's out = 6



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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG No.: P4892

Instrument ID: MSVOA\_Y Calibration Date/Time: 11/22/2024 09:40

Lab File ID: VY020401.D Init. Calib. Date(s): 11/19/2024 11/19/2024

Heated Purge: (Y/N) Y Init. Calib. Time(s): 15:49 17:42

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

| COMPOUND                       | RRF   | RRF050 | MIN<br>RRF | %D     | MAX%D |
|--------------------------------|-------|--------|------------|--------|-------|
| Dichlorodifluoromethane        | 0.485 | 0.559  |            | 15.26  | 20    |
| Chloromethane                  | 0.735 | 0.555  | 0.1        | -24.49 | 20    |
| Vinyl Chloride                 | 0.666 | 0.563  |            | -15.47 | 20    |
| Bromomethane                   | 0.333 | 0.308  |            | -7.51  | 20    |
| Chloroethane                   | 0.388 | 0.332  |            | -14.43 | 20    |
| Trichlorofluoromethane         | 0.925 | 0.989  |            | 6.92   | 20    |
| 1,1,2-Trichlorotrifluoroethane | 0.551 | 0.552  |            | 0.18   | 20    |
| 1,1-Dichloroethene             | 0.545 | 0.541  |            | -0.73  | 20    |
| Acetone                        | 0.138 | 0.143  |            | 3.62   | 20    |
| Carbon Disulfide               | 1.838 | 1.754  |            | -4.57  | 20    |
| Methyl tert-butyl Ether        | 1.417 | 1.349  |            | -4.8   | 20    |
| Methyl Acetate                 | 0.321 | 0.284  |            | -11.53 | 20    |
| Methylene Chloride             | 0.583 | 0.546  |            | -6.35  | 20    |
| trans-1,2-Dichloroethene       | 0.606 | 0.585  |            | -3.46  | 20    |
| 1,1-Dichloroethane             | 1.173 | 1.087  | 0.1        | -7.33  | 20    |
| Cyclohexane                    | 1.071 | 1.017  |            | -5.04  | 20    |
| 2-Butanone                     | 0.177 | 0.179  |            | 1.13   | 20    |
| Carbon Tetrachloride           | 0.511 | 0.607  |            | 18.79  | 20    |
| cis-1,2-Dichloroethene         | 0.667 | 0.653  |            | -2.1   | 20    |
| Bromochloromethane             | 0.494 | 0.432  |            | -12.55 | 20    |
| Chloroform                     | 1.133 | 1.084  |            | -4.32  | 20    |
| 1,1,1-Trichloroethane          | 0.995 | 1.045  |            | 5.03   | 20    |
| Methylcyclohexane              | 0.613 | 0.678  |            | 10.6   | 20    |
| Benzene                        | 1.435 | 1.495  |            | 4.18   | 20    |
| 1,2-Dichloroethane             | 0.387 | 0.406  |            | 4.91   | 20    |
| Trichloroethene                | 0.340 | 0.363  |            | 6.76   | 20    |
| 1,2-Dichloropropane            | 0.342 | 0.346  |            | 1.17   | 20    |
| Bromodichloromethane           | 0.484 | 0.496  |            | 2.48   | 20    |
| 4-Methyl-2-Pentanone           | 0.221 | 0.221  |            | 0      | 20    |
| Toluene                        | 0.877 | 0.922  |            | 5.13   | 20    |
| t-1,3-Dichloropropene          | 0.458 | 0.465  |            | 1.53   | 20    |
| cis-1,3-Dichloropropene        | 0.524 | 0.555  |            | 5.92   | 20    |
| 1,1,2-Trichloroethane          | 0.233 | 0.227  |            | -2.58  | 20    |
| 2-Hexanone                     | 0.157 | 0.167  |            | 6.37   | 20    |
| Dibromochloromethane           | 0.300 | 0.315  |            | 5      | 20    |
| 1,2-Dibromoethane              | 0.216 | 0.211  |            | -2.32  | 20    |
| Tetrachloroethene              | 0.360 | 0.390  |            | 8.33   | 20    |
| Chlorobenzene                  | 1.115 | 1.152  | 0.3        | 3.32   | 20    |

All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.



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

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4892 SAS No.: P4892 SDG No.: P4892

Instrument ID: MSVOA\_Y Calibration Date/Time: 11/22/2024 09:40

Lab File ID: VY020401.D Init. Calib. Date(s): 11/19/2024 11/19/2024

Heated Purge: (Y/N) Y Init. Calib. Time(s): 15:49 17:42

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

| COMPOUND                    | RRF   | RRF050 | MIN<br>RRF | %D    | MAX%D |
|-----------------------------|-------|--------|------------|-------|-------|
| Ethyl Benzene               | 2.057 | 2.201  |            | 7     | 20    |
| m/p-Xylenes                 | 0.741 | 0.797  |            | 7.56  | 20    |
| o-Xylene                    | 0.703 | 0.745  |            | 5.97  | 20    |
| Styrene                     | 1.167 | 1.258  |            | 7.8   | 20    |
| Bromoform                   | 0.194 | 0.214  | 0.1        | 10.31 | 20    |
| Isopropylbenzene            | 4.236 | 4.572  |            | 7.93  | 20    |
| 1,1,2,2-Tetrachloroethane   | 0.685 | 0.683  | 0.3        | -0.29 | 20    |
| 1,3-Dichlorobenzene         | 1.794 | 1.819  |            | 1.39  | 20    |
| 1,4-Dichlorobenzene         | 1.714 | 1.766  |            | 3.03  | 20    |
| 1,2-Dichlorobenzene         | 1.495 | 1.545  |            | 3.34  | 20    |
| 1,2-Dibromo-3-Chloropropane | 0.112 | 0.113  |            | 0.89  | 20    |
| 1,2,4-Trichlorobenzene      | 0.904 | 0.904  |            | 0     | 20    |
| 1,2,3-Trichlorobenzene      | 0.773 | 0.732  |            | -5.3  | 20    |
| 1,2-Dichloroethane-d4       | 0.574 | 0.585  |            | 1.92  | 20    |
| Dibromofluoromethane        | 0.321 | 0.339  |            | 5.61  | 20    |
| Toluene-d8                  | 1.263 | 1.353  |            | 7.13  | 20    |
| 4-Bromofluorobenzene        | 0.406 | 0.442  |            | 8.87  | 20    |

All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
 Data File : VY020401.D  
 Acq On : 22 Nov 2024 09:40  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDCCC050

### Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 11/25/2024  
 Supervised By :Semsettin Yesilyurt 11/25/2024

Quant Time: Nov 22 23:55:38 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.719  | 168  | 199094   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.628  | 114  | 315114   | 50.000 | ug/l  | 0.01     |
| 63) Chlorobenzene-d5       | 11.426 | 117  | 255079   | 50.000 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 13.359 | 152  | 114938   | 50.000 | ug/l  | 0.01     |

#### System Monitoring Compounds

|                           |        |       |          |          |      |          |
|---------------------------|--------|-------|----------|----------|------|----------|
| 33) 1,2-Dichloroethane-d4 | 8.073  | 65    | 116494   | 50.929   | ug/l | 0.01     |
| Spiked Amount             | 50.000 | Range | 50 - 163 | Recovery | =    | 101.860% |
| 35) Dibromofluoromethane  | 7.646  | 113   | 106905   | 52.908   | ug/l | 0.01     |
| Spiked Amount             | 50.000 | Range | 54 - 147 | Recovery | =    | 105.820% |
| 50) Toluene-d8            | 10.115 | 98    | 426296   | 53.558   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 58 - 134 | Recovery | =    | 107.120% |
| 62) 4-Bromofluorobenzene  | 12.414 | 95    | 139180   | 54.394   | ug/l | 0.01     |
| Spiked Amount             | 50.000 | Range | 29 - 146 | Recovery | =    | 108.780% |

#### Target Compounds

|                              |       |     |         |         |      | Qvalue |
|------------------------------|-------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane   | 1.873 | 85  | 111376  | 57.632  | ug/l | 100    |
| 3) Chloromethane             | 2.080 | 50  | 110497  | 42.999  | ug/l | 98     |
| 4) Vinyl Chloride            | 2.214 | 62  | 112180  | 42.313  | ug/l | 100    |
| 5) Bromomethane              | 2.611 | 94  | 61402   | 46.373  | ug/l | 99     |
| 6) Chloroethane              | 2.751 | 64  | 66071   | 42.720  | ug/l | 99     |
| 7) Trichlorofluoromethane    | 3.074 | 101 | 196810  | 53.420  | ug/l | 99     |
| 8) Diethyl Ether             | 3.464 | 74  | 54576   | 46.950  | ug/l | 93     |
| 9) 1,1,2-Trichlorotrifluo... | 3.836 | 101 | 109913  | 50.095  | ug/l | 98     |
| 10) Methyl Iodide            | 4.019 | 142 | 137554  | 46.804  | ug/l | 95     |
| 11) Tert butyl alcohol       | 4.878 | 59  | 35102   | 206.445 | ug/l | 99     |
| 12) 1,1-Dichloroethene       | 3.805 | 96  | 107768  | 49.620  | ug/l | 99     |
| 13) Acrolein                 | 3.665 | 56  | 39559   | 279.300 | ug/l | 98     |
| 14) Allyl chloride           | 4.403 | 41  | 192511  | 45.838  | ug/l | 95     |
| 15) Acrylonitrile            | 5.074 | 53  | 119045  | 231.671 | ug/l | 99     |
| 16) Acetone                  | 3.885 | 43  | 142708  | 260.251 | ug/l | 98     |
| 17) Carbon Disulfide         | 4.122 | 76  | 349289  | 47.736  | ug/l | 99     |
| 18) Methyl Acetate           | 4.397 | 43  | 56454   | 44.167  | ug/l | 99     |
| 19) Methyl tert-butyl Ether  | 5.134 | 73  | 268639  | 47.615  | ug/l | 97     |
| 20) Methylene Chloride       | 4.635 | 84  | 108761  | 46.837  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene | 5.134 | 96  | 116492  | 48.292  | ug/l | 96     |
| 22) Diisopropyl ether        | 6.037 | 45  | 365369  | 44.145  | ug/l | 98     |
| 23) Vinyl Acetate            | 5.976 | 43  | 1034978 | 223.766 | ug/l | 100    |
| 24) 1,1-Dichloroethane       | 5.933 | 63  | 216453  | 46.326  | ug/l | 100    |
| 25) 2-Butanone               | 6.902 | 43  | 178437  | 252.766 | ug/l | 97     |
| 26) 2,2-Dichloropropane      | 6.902 | 77  | 198476  | 51.394  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene   | 6.909 | 96  | 130033  | 48.941  | ug/l | 99     |
| 28) Bromochloromethane       | 7.262 | 49  | 86074   | 43.770  | ug/l | 97     |
| 29) Tetrahydrofuran          | 7.274 | 42  | 97664   | 231.474 | ug/l | 99     |
| 30) Chloroform               | 7.433 | 83  | 215847  | 47.839  | ug/l | 99     |
| 31) Cyclohexane              | 7.713 | 56  | 202534  | 47.499  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane    | 7.628 | 97  | 207961  | 52.493  | ug/l | 97     |
| 36) 1,1-Dichloropropene      | 7.847 | 75  | 165899  | 53.755  | ug/l | 100    |
| 37) Ethyl Acetate            | 6.994 | 43  | 70523   | 49.883  | ug/l | 99     |
| 38) Carbon Tetrachloride     | 7.829 | 117 | 191327  | 59.376  | ug/l | 97     |
| 39) Methylcyclohexane        | 9.115 | 83  | 213556  | 55.291  | ug/l | 99     |
| 40) Benzene                  | 8.091 | 78  | 471211  | 52.101  | ug/l | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
 Data File : VY020401.D  
 Acq On : 22 Nov 2024 09:40  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

## Instrument :

MSVOA\_Y

## ClientSampleId :

VSTDCCC050

## Manual Integrations

## APPROVED

Reviewed By :Mahesh Dadoda 11/25/2024

Supervised By :Semsettin Yesilyurt 11/25/2024

Quant Time: Nov 22 23:55:38 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M

Quant Title : SW846 8260

QLast Update : Wed Nov 20 04:38:24 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 41) Methacrylonitrile         | 7.238  | 41   | 41340    | 51.391   | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.171  | 62   | 127783   | 52.343   | ug/l   | 98       |
| 43) Isopropyl Acetate         | 8.207  | 43   | 140171   | 50.983   | ug/l # | 87       |
| 44) Trichloroethene           | 8.878  | 130  | 114339   | 53.358   | ug/l   | 96       |
| 45) 1,2-Dichloropropane       | 9.152  | 63   | 108877   | 50.457   | ug/l   | 98       |
| 46) Dibromomethane            | 9.237  | 93   | 56398    | 50.993   | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.432  | 83   | 156354   | 51.211   | ug/l   | 98       |
| 48) Methyl methacrylate       | 9.231  | 41   | 65774    | 50.039   | ug/l   | 97       |
| 49) 1,4-Dioxane               | 9.237  | 88   | 11635    | 1022.544 | ug/l   | 92       |
| 51) 4-Methyl-2-Pentanone      | 10.006 | 43   | 348385   | 249.694  | ug/l   | 99       |
| 52) Toluene                   | 10.176 | 92   | 290653   | 52.578   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 10.402 | 75   | 146519   | 50.749   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 9.865  | 75   | 174944   | 52.933   | ug/l   | 93       |
| 55) 1,1,2-Trichloroethane     | 10.579 | 97   | 71662    | 48.813   | ug/l   | 99       |
| 56) Ethyl methacrylate        | 10.445 | 69   | 110773   | 50.243   | ug/l   | 96       |
| 57) 1,3-Dichloropropane       | 10.725 | 76   | 131122   | 49.698   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 9.719  | 63   | 266968   | 255.368  | ug/l   | 99       |
| 59) 2-Hexanone                | 10.768 | 43   | 263747   | 266.955  | ug/l   | 98       |
| 60) Dibromochloromethane      | 10.920 | 129  | 99205    | 52.426   | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.024 | 107  | 66598    | 48.955   | ug/l   | 100      |
| 64) Tetrachloroethene         | 10.658 | 164  | 99509    | 54.118   | ug/l   | 97       |
| 65) Chlorobenzene             | 11.450 | 112  | 293820   | 51.662   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.524 | 131  | 102611   | 54.008   | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.524 | 91   | 561497   | 53.514   | ug/l   | 100      |
| 68) m/p-Xylenes               | 11.633 | 106  | 406534   | 107.567  | ug/l   | 97       |
| 69) o-Xylene                  | 11.963 | 106  | 189987   | 53.000   | ug/l   | 96       |
| 70) Styrene                   | 11.975 | 104  | 320963   | 53.891   | ug/l   | 98       |
| 71) Bromoform                 | 12.139 | 173  | 54500    | 55.040   | ug/l # | 100      |
| 73) Isopropylbenzene          | 12.261 | 105  | 525466   | 53.968   | ug/l   | 99       |
| 74) N-ethyl acetate           | 12.078 | 43   | 117939   | 50.124   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.517 | 83   | 78489    | 49.878   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.566 | 75   | 52372m   | 48.344   | ug/l   |          |
| 77) Bromobenzene              | 12.542 | 156  | 108422   | 53.150   | ug/l   | 100      |
| 78) n-propylbenzene           | 12.603 | 91   | 628054   | 53.748   | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 12.688 | 91   | 347387   | 51.705   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 12.743 | 105  | 421591   | 53.577   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-b... | 12.310 | 75   | 28956    | 52.374   | ug/l   | 98       |
| 82) 4-Chlorotoluene           | 12.786 | 91   | 355075   | 51.209   | ug/l   | 98       |
| 83) tert-Butylbenzene         | 13.005 | 119  | 373316   | 53.760   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.054 | 105  | 409729   | 52.520   | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.182 | 105  | 549366   | 50.183   | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.304 | 119  | 454931   | 53.747   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.298 | 146  | 209104   | 50.696   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.377 | 146  | 203002   | 51.511   | ug/l   | 99       |
| 89) n-Butylbenzene            | 13.627 | 91   | 429585   | 52.998   | ug/l   | 99       |
| 90) Hexachloroethane          | 13.889 | 117  | 85761    | 52.496   | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene       | 13.670 | 146  | 177537   | 51.661   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.285 | 75   | 12951    | 50.156   | ug/l   | 95       |
| 93) 1,2,4-Trichlorobenzene    | 14.932 | 180  | 103928   | 50.016   | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.035 | 225  | 70815    | 55.832   | ug/l   | 97       |
| 95) Naphthalene               | 15.157 | 128  | 180259   | 50.372   | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.340 | 180  | 84155    | 47.368   | ug/l   | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020401.D  
Acq On : 22 Nov 2024 09:40  
Operator : SY/MD  
Sample : VSTDCCC050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 11/25/2024  
Supervised By :Semsettin Yesilyurt 11/25/2024

Quant Time: Nov 22 23:55:38 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

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

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



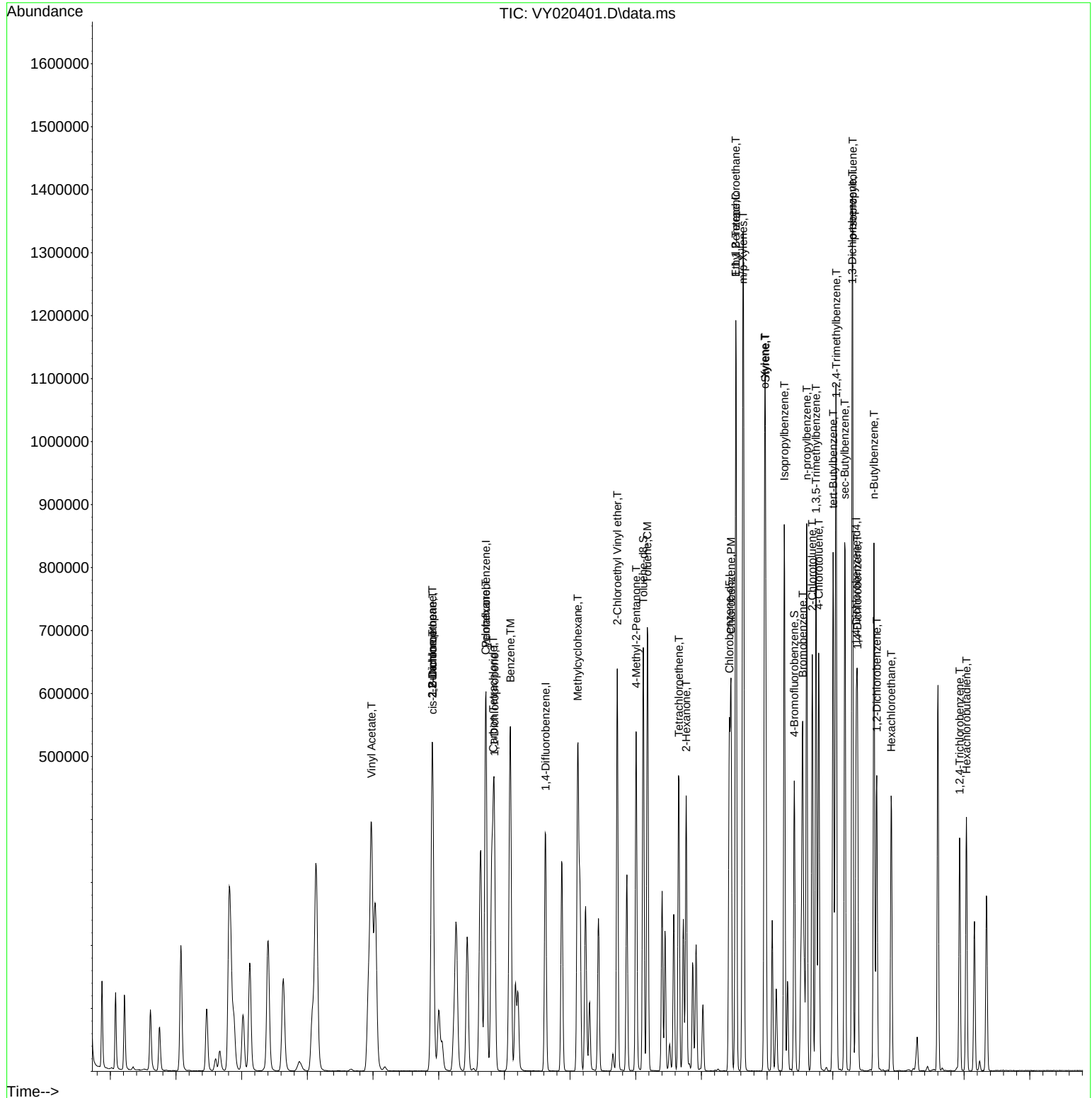
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020401.D  
Acq On : 22 Nov 2024 09:40  
Operator : SY/MD  
Sample : VSTDCCC050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 11/25/2024  
Supervised By :Semsettin Yesilyurt 11/25/2024

Quant Time: Nov 22 23:55:38 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
 Data File : VY020401.D  
 Acq On : 22 Nov 2024 09:40  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 22 23:55:38 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 88    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.485 | 0.559 | -15.3 | 108   | 0.00     |
| 3 P   | Chloromethane               | 0.735 | 0.555 | 24.5  | 71    | 0.01     |
| 4 C   | Vinyl Chloride              | 0.666 | 0.563 | 15.5# | 79    | 0.00     |
| 5 T   | Bromomethane                | 0.333 | 0.308 | 7.5   | 86    | 0.01     |
| 6 T   | Chloroethane                | 0.388 | 0.332 | 14.4  | 79    | 0.01     |
| 7 T   | Trichlorofluoromethane      | 0.925 | 0.989 | -6.9  | 93    | 0.01     |
| 8 T   | Diethyl Ether               | 0.292 | 0.274 | 6.2   | 79    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.551 | 0.552 | -0.2  | 82    | 0.02     |
| 10 T  | Methyl Iodide               | 0.738 | 0.691 | 6.4   | 73    | 0.01     |
| 11 T  | Tert butyl alcohol          | 0.044 | 0.035 | 20.5  | 86    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.545 | 0.541 | 0.7#  | 81    | 0.01     |
| 13 T  | Acrolein                    | 0.036 | 0.040 | -11.1 | 96    | 0.00     |
| 14 T  | Allyl chloride              | 1.055 | 0.967 | 8.3   | 90    | 0.01     |
| 15 T  | Acrylonitrile               | 0.129 | 0.120 | 7.0   | 85    | 0.01     |
| 16 T  | Acetone                     | 0.138 | 0.143 | -3.6  | 79    | 0.01     |
| 17 T  | Carbon Disulfide            | 1.838 | 1.754 | 4.6   | 74    | 0.01     |
| 18 T  | Methyl Acetate              | 0.321 | 0.284 | 11.5  | 82    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.417 | 1.349 | 4.8   | 85    | 0.02     |
| 20 T  | Methylene Chloride          | 0.583 | 0.546 | 6.3   | 84    | 0.02     |
| 21 T  | trans-1,2-Dichloroethene    | 0.606 | 0.585 | 3.5   | 85    | 0.01     |
| 22 T  | Diisopropyl ether           | 2.079 | 1.835 | 11.7  | 80    | 0.01     |
| 23 T  | Vinyl Acetate               | 1.162 | 1.040 | 10.5  | 79    | 0.01     |
| 24 P  | 1,1-Dichloroethane          | 1.173 | 1.087 | 7.3   | 84    | 0.01     |
| 25 T  | 2-Butanone                  | 0.177 | 0.179 | -1.1  | 88    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.970 | 0.997 | -2.8  | 91    | 0.02     |
| 27 T  | cis-1,2-Dichloroethene      | 0.667 | 0.653 | 2.1   | 83    | 0.01     |
| 28 T  | Bromochloromethane          | 0.494 | 0.432 | 12.6  | 74    | 0.02     |
| 29 T  | Tetrahydrofuran             | 0.106 | 0.098 | 7.5   | 81    | 0.00     |
| 30 C  | Chloroform                  | 1.133 | 1.084 | 4.3#  | 77    | 0.01     |
| 31 T  | Cyclohexane                 | 1.071 | 1.017 | 5.0   | 86    | 0.01     |
| 32 T  | 1,1,1-Trichloroethane       | 0.995 | 1.045 | -5.0  | 92    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.574 | 0.585 | -1.9  | 81    | 0.01     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 75    | 0.01     |
| 35 S  | Dibromofluoromethane        | 0.321 | 0.339 | -5.6  | 79    | 0.01     |
| 36 T  | 1,1-Dichloropropene         | 0.490 | 0.526 | -7.3  | 87    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.224 | 0.224 | 0.0   | 79    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.511 | 0.607 | -18.8 | 95    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.613 | 0.678 | -10.6 | 87    | 0.00     |
| 40 TM | Benzene                     | 1.435 | 1.495 | -4.2  | 83    | 0.01     |
| 41 T  | Methacrylonitrile           | 0.128 | 0.131 | -2.3  | 84    | 0.01     |
| 42 TM | 1,2-Dichloroethane          | 0.387 | 0.406 | -4.9  | 84    | 0.01     |
| 43 T  | Isopropyl Acetate           | 0.436 | 0.445 | -2.1  | 79    | 0.01     |
| 44 TM | Trichloroethene             | 0.340 | 0.363 | -6.8  | 85    | 0.01     |
| 45 C  | 1,2-Dichloropropane         | 0.342 | 0.346 | -1.2# | 81    | 0.01     |
| 46 T  | Dibromomethane              | 0.175 | 0.179 | -2.3  | 78    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.484 | 0.496 | -2.5  | 76    | 0.01     |
| 48 T  | Methyl methacrylate         | 0.209 | 0.209 | 0.0   | 78    | 0.01     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
 Data File : VY020401.D  
 Acq On : 22 Nov 2024 09:40  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 22 23:55:38 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 0.002 | 0.002 | 0.0   | 79    | 0.00     |
| 50 S  | Toluene-d8                  | 1.263 | 1.353 | -7.1  | 73    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.221 | 0.221 | 0.0   | 67    | 0.00     |
| 52 CM | Toluene                     | 0.877 | 0.922 | -5.1# | 81    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.458 | 0.465 | -1.5  | 78    | 0.01     |
| 54 T  | cis-1,3-Dichloropropene     | 0.524 | 0.555 | -5.9  | 82    | 0.01     |
| 55 T  | 1,1,2-Trichloroethane       | 0.233 | 0.227 | 2.6   | 78    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.350 | 0.352 | -0.6  | 74    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.419 | 0.416 | 0.7   | 75    | 0.01     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.166 | 0.169 | -1.8  | 81    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.157 | 0.167 | -6.4  | 74    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.300 | 0.315 | -5.0  | 77    | 0.01     |
| 61 T  | 1,2-Dibromoethane           | 0.216 | 0.211 | 2.3   | 73    | 0.01     |
| 62 S  | 4-Bromofluorobenzene        | 0.406 | 0.442 | -8.9  | 77    | 0.01     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 71    | 0.01     |
| 64 T  | Tetrachloroethene           | 0.360 | 0.390 | -8.3  | 83    | 0.01     |
| 65 PM | Chlorobenzene               | 1.115 | 1.152 | -3.3  | 71    | 0.01     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.372 | 0.402 | -8.1  | 77    | 0.00     |
| 67 C  | Ethyl Benzene               | 2.057 | 2.201 | -7.0# | 76    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.741 | 0.797 | -7.6  | 80    | 0.00     |
| 69 T  | o-Xylene                    | 0.703 | 0.745 | -6.0  | 79    | 0.00     |
| 70 T  | Styrene                     | 1.167 | 1.258 | -7.8  | 79    | 0.00     |
| 71 P  | Bromoform                   | 0.194 | 0.214 | -10.3 | 80    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 77    | 0.01     |
| 73 T  | Isopropylbenzene            | 4.236 | 4.572 | -7.9  | 81    | 0.00     |
| 74 T  | N-amyl acetate              | 1.024 | 1.026 | -0.2  | 72    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.685 | 0.683 | 0.3   | 72    | 0.01     |
| 76 T  | 1,2,3-Trichloropropane      | 0.471 | 0.456 | 3.2   | 69    | 0.01     |
| 77 T  | Bromobenzene                | 0.887 | 0.943 | -6.3  | 79    | 0.01     |
| 78 T  | n-propylbenzene             | 5.083 | 5.464 | -7.5  | 81    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.923 | 3.022 | -3.4  | 80    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.423 | 3.668 | -7.2  | 83    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.241 | 0.252 | -4.6  | 76    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 3.016 | 3.089 | -2.4  | 81    | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.021 | 3.248 | -7.5  | 81    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.394 | 3.565 | -5.0  | 80    | 0.01     |
| 85 T  | sec-Butylbenzene            | 4.762 | 4.780 | -0.4  | 72    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.682 | 3.958 | -7.5  | 79    | 0.01     |
| 87 T  | 1,3-Dichlorobenzene         | 1.794 | 1.819 | -1.4  | 76    | 0.01     |
| 88 T  | 1,4-Dichlorobenzene         | 1.714 | 1.766 | -3.0  | 78    | 0.01     |
| 89 T  | n-Butylbenzene              | 3.526 | 3.738 | -6.0  | 78    | 0.00     |
| 90 T  | Hexachloroethane            | 0.711 | 0.746 | -4.9  | 74    | 0.01     |
| 91 T  | 1,2-Dichlorobenzene         | 1.495 | 1.545 | -3.3  | 77    | 0.01     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 0.112 | 0.113 | -0.9  | 73    | 0.01     |
| 93 T  | 1,2,4-Trichlorobenzene      | 0.904 | 0.904 | 0.0   | 78    | 0.01     |
| 94 T  | Hexachlorobutadiene         | 0.552 | 0.616 | -11.6 | 88    | 0.01     |
| 95 T  | Naphthalene                 | 1.557 | 1.568 | -0.7  | 74    | 0.01     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020401.D  
Acq On : 22 Nov 2024 09:40  
Operator : SY/MD  
Sample : VSTDCCC050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
LabSampleId :  
VSTDCCC050

Quant Time: Nov 22 23:55:38 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|------------------------|-------|-------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 0.773 | 0.732 | 5.3  | 75    | 0.01     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
 Data File : VY020401.D  
 Acq On : 22 Nov 2024 09:40  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 LabSampleId :  
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Quant Time: Nov 22 23:55:38 2024  
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 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount  | Calc.   | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|---------|---------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 50.000  | 50.000  | 0.0   | 88    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 57.632  | -15.3 | 108   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 42.999  | 14.0  | 71    | 0.01     |
| 4 C   | Vinyl Chloride              | 50.000  | 42.313  | 15.4# | 79    | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 46.373  | 7.3   | 86    | 0.01     |
| 6 T   | Chloroethane                | 50.000  | 42.720  | 14.6  | 79    | 0.01     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 53.420  | -6.8  | 93    | 0.01     |
| 8 T   | Diethyl Ether               | 50.000  | 46.950  | 6.1   | 79    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 50.095  | -0.2  | 82    | 0.02     |
| 10 T  | Methyl Iodide               | 50.000  | 46.804  | 6.4   | 73    | 0.01     |
| 11 T  | Tert butyl alcohol          | 250.000 | 206.445 | 17.4  | 86    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 49.620  | 0.8#  | 81    | 0.01     |
| 13 T  | Acrolein                    | 250.000 | 279.300 | -11.7 | 96    | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 45.838  | 8.3   | 90    | 0.01     |
| 15 T  | Acrylonitrile               | 250.000 | 231.671 | 7.3   | 85    | 0.01     |
| 16 T  | Acetone                     | 250.000 | 260.251 | -4.1  | 79    | 0.01     |
| 17 T  | Carbon Disulfide            | 50.000  | 47.736  | 4.5   | 74    | 0.01     |
| 18 T  | Methyl Acetate              | 50.000  | 44.167  | 11.7  | 82    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 47.615  | 4.8   | 85    | 0.02     |
| 20 T  | Methylene Chloride          | 50.000  | 46.837  | 6.3   | 84    | 0.02     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 48.292  | 3.4   | 85    | 0.01     |
| 22 T  | Diisopropyl ether           | 50.000  | 44.145  | 11.7  | 80    | 0.01     |
| 23 T  | Vinyl Acetate               | 250.000 | 223.766 | 10.5  | 79    | 0.01     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 46.326  | 7.3   | 84    | 0.01     |
| 25 T  | 2-Butanone                  | 250.000 | 252.766 | -1.1  | 88    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 51.394  | -2.8  | 91    | 0.02     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 48.941  | 2.1   | 83    | 0.01     |
| 28 T  | Bromochloromethane          | 50.000  | 43.770  | 12.5  | 74    | 0.02     |
| 29 T  | Tetrahydrofuran             | 250.000 | 231.474 | 7.4   | 81    | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 47.839  | 4.3#  | 77    | 0.01     |
| 31 T  | Cyclohexane                 | 50.000  | 47.499  | 5.0   | 86    | 0.01     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 52.493  | -5.0  | 92    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 50.929  | -1.9  | 81    | 0.01     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0   | 75    | 0.01     |
| 35 S  | Dibromofluoromethane        | 50.000  | 52.908  | -5.8  | 79    | 0.01     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 53.755  | -7.5  | 87    | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 49.883  | 0.2   | 79    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 59.376  | -18.8 | 95    | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 55.291  | -10.6 | 87    | 0.00     |
| 40 TM | Benzene                     | 50.000  | 52.101  | -4.2  | 83    | 0.01     |
| 41 T  | Methacrylonitrile           | 50.000  | 51.391  | -2.8  | 84    | 0.01     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 52.343  | -4.7  | 84    | 0.01     |
| 43 T  | Isopropyl Acetate           | 50.000  | 50.983  | -2.0  | 79    | 0.01     |
| 44 TM | Trichloroethene             | 50.000  | 53.358  | -6.7  | 85    | 0.01     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 50.457  | -0.9# | 81    | 0.01     |
| 46 T  | Dibromomethane              | 50.000  | 50.993  | -2.0  | 78    | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000  | 51.211  | -2.4  | 76    | 0.01     |
| 48 T  | Methyl methacrylate         | 50.000  | 50.039  | -0.1  | 78    | 0.01     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
 Data File : VY020401.D  
 Acq On : 22 Nov 2024 09:40  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 22 23:55:38 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | Amount   | Calc.    | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|----------|----------|-------|-------|----------|
| 49 T  | 1,4-Dioxane                 | 1000.000 | 1022.544 | -2.3  | 79    | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 53.558   | -7.1  | 73    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 249.694  | 0.1   | 67    | 0.00     |
| 52 CM | Toluene                     | 50.000   | 52.578   | -5.2# | 81    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 50.749   | -1.5  | 78    | 0.01     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 52.933   | -5.9  | 82    | 0.01     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 48.813   | 2.4   | 78    | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 50.243   | -0.5  | 74    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 49.698   | 0.6   | 75    | 0.01     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 255.368  | -2.1  | 81    | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 266.955  | -6.8  | 74    | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 52.426   | -4.9  | 77    | 0.01     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 48.955   | 2.1   | 73    | 0.01     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 54.394   | -8.8  | 77    | 0.01     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0   | 71    | 0.01     |
| 64 T  | Tetrachloroethene           | 50.000   | 54.118   | -8.2  | 83    | 0.01     |
| 65 PM | Chlorobenzene               | 50.000   | 51.662   | -3.3  | 71    | 0.01     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 54.008   | -8.0  | 77    | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 53.514   | -7.0# | 76    | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 107.567  | -7.6  | 80    | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 53.000   | -6.0  | 79    | 0.00     |
| 70 T  | Styrene                     | 50.000   | 53.891   | -7.8  | 79    | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 55.040   | -10.1 | 80    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0   | 77    | 0.01     |
| 73 T  | Isopropylbenzene            | 50.000   | 53.968   | -7.9  | 81    | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 50.124   | -0.2  | 72    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 49.878   | 0.2   | 72    | 0.01     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 48.344   | 3.3   | 69    | 0.01     |
| 77 T  | Bromobenzene                | 50.000   | 53.150   | -6.3  | 79    | 0.01     |
| 78 T  | n-propylbenzene             | 50.000   | 53.748   | -7.5  | 81    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 51.705   | -3.4  | 80    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 53.577   | -7.2  | 83    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 52.374   | -4.7  | 76    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 51.209   | -2.4  | 81    | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 53.760   | -7.5  | 81    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 52.520   | -5.0  | 80    | 0.01     |
| 85 T  | sec-Butylbenzene            | 50.000   | 50.183   | -0.4  | 72    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 53.747   | -7.5  | 79    | 0.01     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 50.696   | -1.4  | 76    | 0.01     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 51.511   | -3.0  | 78    | 0.01     |
| 89 T  | n-Butylbenzene              | 50.000   | 52.998   | -6.0  | 78    | 0.00     |
| 90 T  | Hexachloroethane            | 50.000   | 52.496   | -5.0  | 74    | 0.01     |
| 91 T  | 1,2-Dichlorobenzene         | 50.000   | 51.661   | -3.3  | 77    | 0.01     |
| 92 T  | 1,2-Dibromo-3-Chloropropane | 50.000   | 50.156   | -0.3  | 73    | 0.01     |
| 93 T  | 1,2,4-Trichlorobenzene      | 50.000   | 50.016   | -0.0  | 78    | 0.01     |
| 94 T  | Hexachlorobutadiene         | 50.000   | 55.832   | -11.7 | 88    | 0.01     |
| 95 T  | Naphthalene                 | 50.000   | 50.372   | -0.7  | 74    | 0.01     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020401.D  
Acq On : 22 Nov 2024 09:40  
Operator : SY/MD  
Sample : VSTDCCC050  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
LabSampleId :  
VSTDCCC050

Quant Time: Nov 22 23:55:38 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound               | Amount | Calc.  | %Dev | Area% | Dev(min) |
|------|------------------------|--------|--------|------|-------|----------|
| 96 T | 1,2,3-Trichlorobenzene | 50.000 | 47.368 | 5.3  | 75    | 0.01     |

(#) = Out of Range                      SPCC's out = 0    CCC's out = 6



# QC SAMPLE DATA

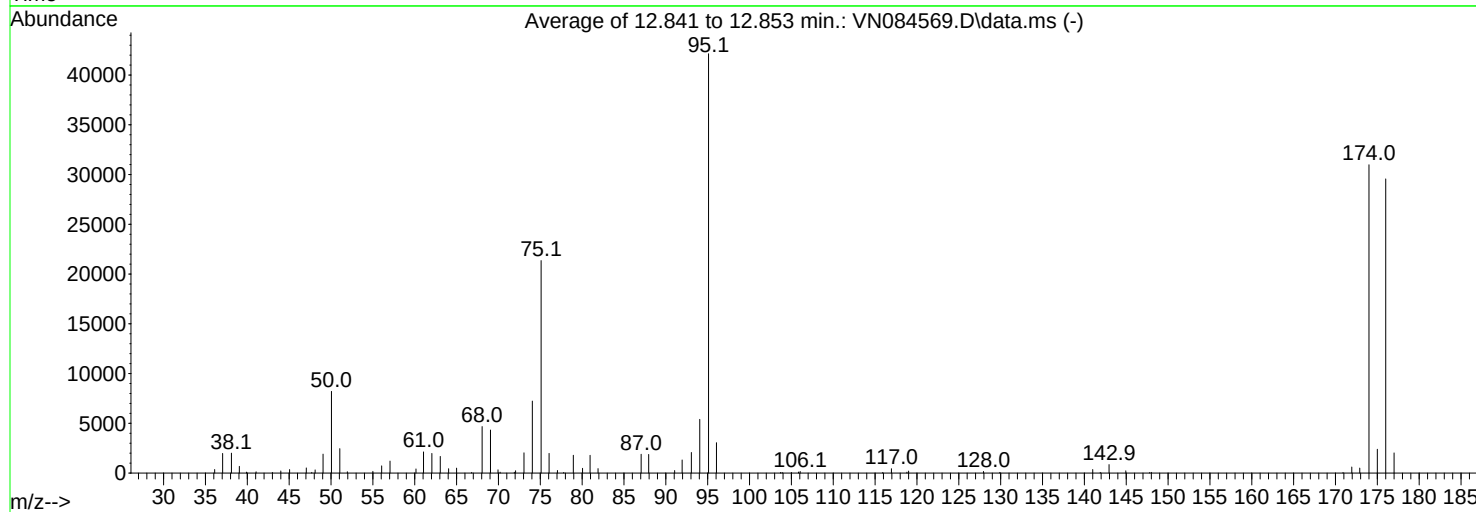
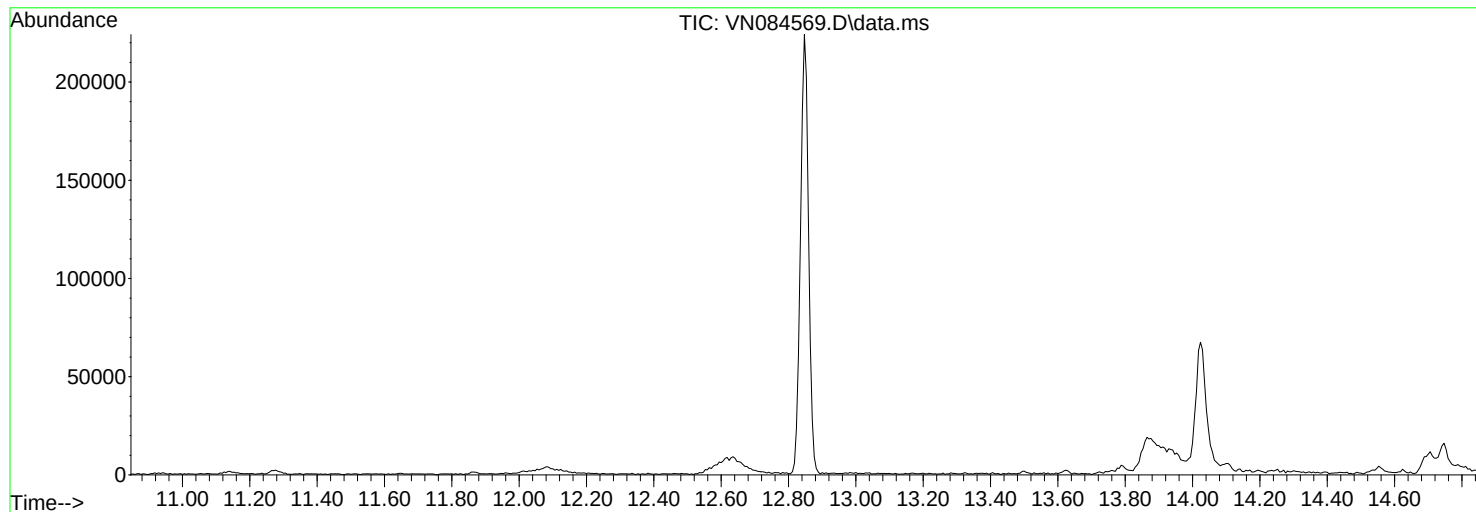


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN103024\  
Data File : VN084569.D  
Acq On : 30 Oct 2024 10:42  
Operator : JC\MD  
Sample : BFB  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Title : SW846 8260  
Last Update : Thu Oct 31 18:45:38 2024



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 50             | 95              | 15              | 40              | 19.5         | 8210       | PASS                |
| 75             | 95              | 30              | 60              | 50.7         | 21357      | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 42141      | PASS                |
| 96             | 95              | 5               | 9               | 7.2          | 3053       | PASS                |
| 173            | 174             | 0.00            | 2               | 1.6          | 502        | PASS                |
| 174            | 95              | 50              | 100             | 73.5         | 30984      | PASS                |
| 175            | 174             | 5               | 9               | 7.7          | 2392       | PASS                |
| 176            | 174             | 95              | 101             | 95.4         | 29560      | PASS                |
| 177            | 176             | 5               | 9               | 6.9          | 2026       | PASS                |

BFB

Modified:subtracted

| m/z   | abund. | m/z   | abund. | m/z   | abund. | m/z   | abund. |
|-------|--------|-------|--------|-------|--------|-------|--------|
| 36.10 | 359    | 48.10 | 321    | 63.05 | 1677   | 74.05 | 7235   |
| 37.05 | 1972   | 49.05 | 1905   | 64.05 | 441    | 75.10 | 21357  |
| 38.10 | 2004   | 50.05 | 8210   | 65.00 | 496    | 76.05 | 1981   |
| 39.05 | 674    | 51.05 | 2454   | 66.80 | 70     | 77.05 | 260    |
| 39.90 | 98     | 51.95 | 137    | 68.05 | 4674   | 77.80 | 63     |
| 41.05 | 129    | 55.00 | 174    | 69.05 | 4327   | 78.95 | 1789   |
| 43.00 | 58     | 56.05 | 724    | 69.95 | 329    | 80.05 | 481    |
| 44.00 | 211    | 57.05 | 1205   | 70.20 | 94     | 80.95 | 1784   |
| 45.05 | 351    | 60.15 | 415    | 71.90 | 82     | 81.90 | 450    |
| 47.05 | 515    | 61.05 | 2127   | 72.05 | 237    | 87.05 | 1893   |
| 47.70 | 66     | 62.05 | 1973   | 73.05 | 2035   | 87.95 | 1870   |

Average of 12.841 to 12.853 min.: VN084569.D\data.ms

BFB

Modified:subtracted

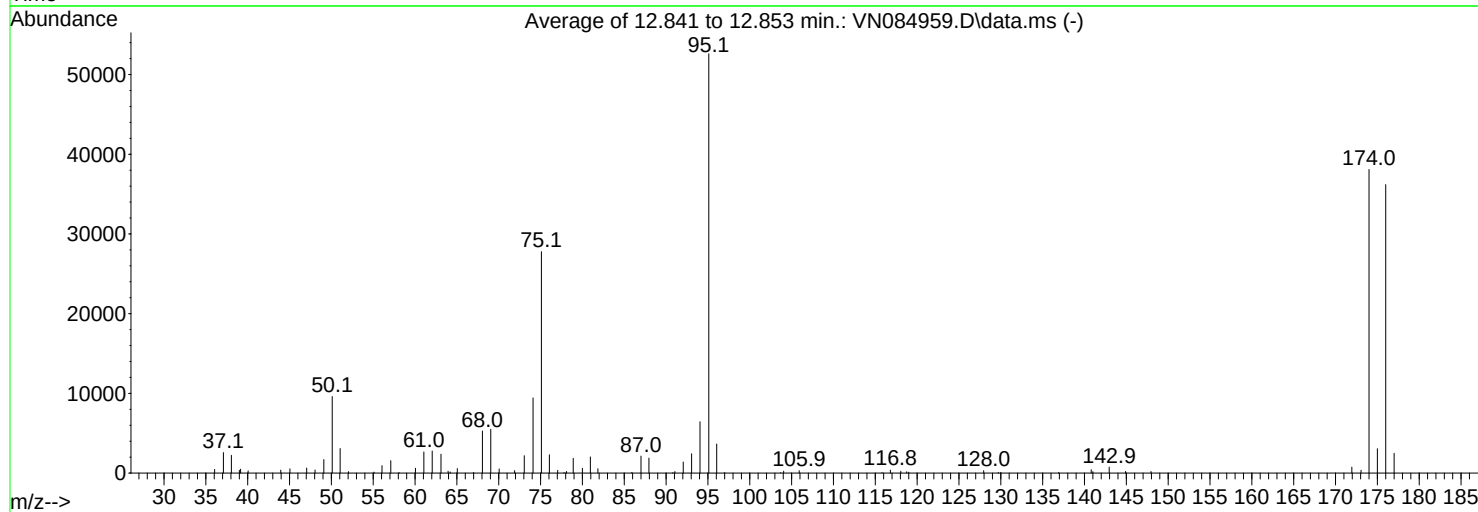
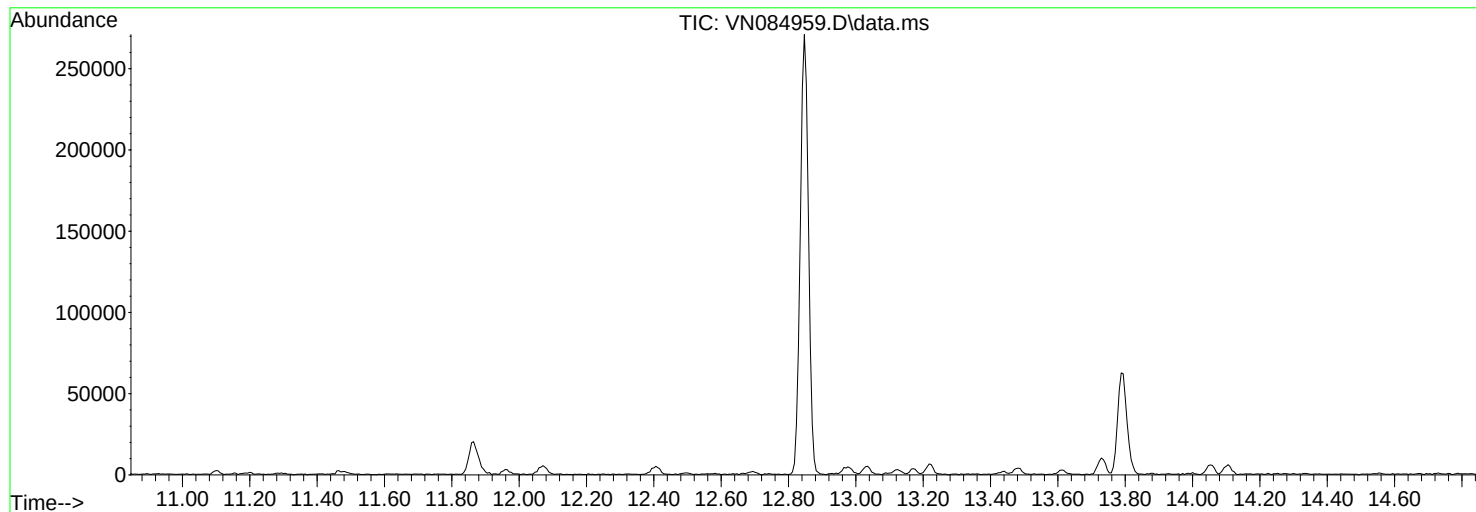
| m/z    | abund. | m/z    | abund. | m/z    | abund. | m/z | abund. |
|--------|--------|--------|--------|--------|--------|-----|--------|
| 91.05  | 256    | 115.90 | 54     | 148.00 | 75     |     |        |
| 91.95  | 1316   | 116.95 | 438    | 170.90 | 52     |     |        |
| 93.05  | 2070   | 118.80 | 90     | 171.95 | 607    |     |        |
| 94.05  | 5401   | 119.00 | 202    | 172.90 | 502    |     |        |
| 95.10  | 42141  | 127.95 | 162    | 174.00 | 30984  |     |        |
| 96.05  | 3053   | 129.90 | 69     | 175.00 | 2392   |     |        |
| 103.70 | 65     | 141.00 | 358    | 176.00 | 29560  |     |        |
| 103.90 | 65     | 141.90 | 66     | 177.00 | 2026   |     |        |
| 105.00 | 53     | 142.95 | 857    |        |        |     |        |
| 105.85 | 107    | 144.95 | 228    |        |        |     |        |
| 106.05 | 162    | 147.80 | 53     |        |        |     |        |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084959.D  
Acq On : 20 Nov 2024 09:51  
Operator : JC\MD  
Sample : BFB  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Title : SW846 8260  
Last Update : Thu Oct 31 18:45:38 2024



AutoFind: Scans 1851, 1852, 1853; Background Corrected with Scan 1843

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 50             | 95              | 15              | 40              | 18.3         | 9603       | PASS                |
| 75             | 95              | 30              | 60              | 52.8         | 27779      | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 52611      | PASS                |
| 96             | 95              | 5               | 9               | 6.9          | 3649       | PASS                |
| 173            | 174             | 0.00            | 2               | 0.9          | 361        | PASS                |
| 174            | 95              | 50              | 100             | 72.4         | 38096      | PASS                |
| 175            | 174             | 5               | 9               | 8.0          | 3061       | PASS                |
| 176            | 174             | 95              | 101             | 95.0         | 36195      | PASS                |
| 177            | 176             | 5               | 9               | 6.9          | 2485       | PASS                |

BFB

Modified:subtracted

| m/z   | abund. | m/z   | abund. | m/z   | abund. | m/z   | abund. |
|-------|--------|-------|--------|-------|--------|-------|--------|
| 36.05 | 462    | 50.10 | 9603   | 63.95 | 245    | 76.05 | 2292   |
| 37.10 | 2574   | 51.05 | 3083   | 64.20 | 136    | 77.05 | 349    |
| 38.05 | 2230   | 52.05 | 179    | 65.05 | 566    | 77.80 | 61     |
| 39.00 | 357    | 55.10 | 123    | 67.00 | 73     | 78.10 | 204    |
| 39.15 | 489    | 56.05 | 935    | 68.05 | 5275   | 78.90 | 1859   |
| 40.05 | 285    | 57.10 | 1561   | 69.05 | 5496   | 80.00 | 607    |
| 43.95 | 376    | 58.10 | 57     | 70.05 | 524    | 80.95 | 2029   |
| 45.05 | 537    | 60.05 | 607    | 71.90 | 314    | 81.85 | 551    |
| 47.05 | 633    | 61.05 | 2652   | 73.05 | 2179   | 85.90 | 70     |
| 48.05 | 394    | 62.05 | 2768   | 74.10 | 9434   | 87.00 | 2133   |
| 49.10 | 1701   | 63.10 | 2374   | 75.10 | 27779  | 87.95 | 1883   |

Average of 12.841 to 12.853 min.: VN084959.D\data.ms

BFB

Modified:subtracted

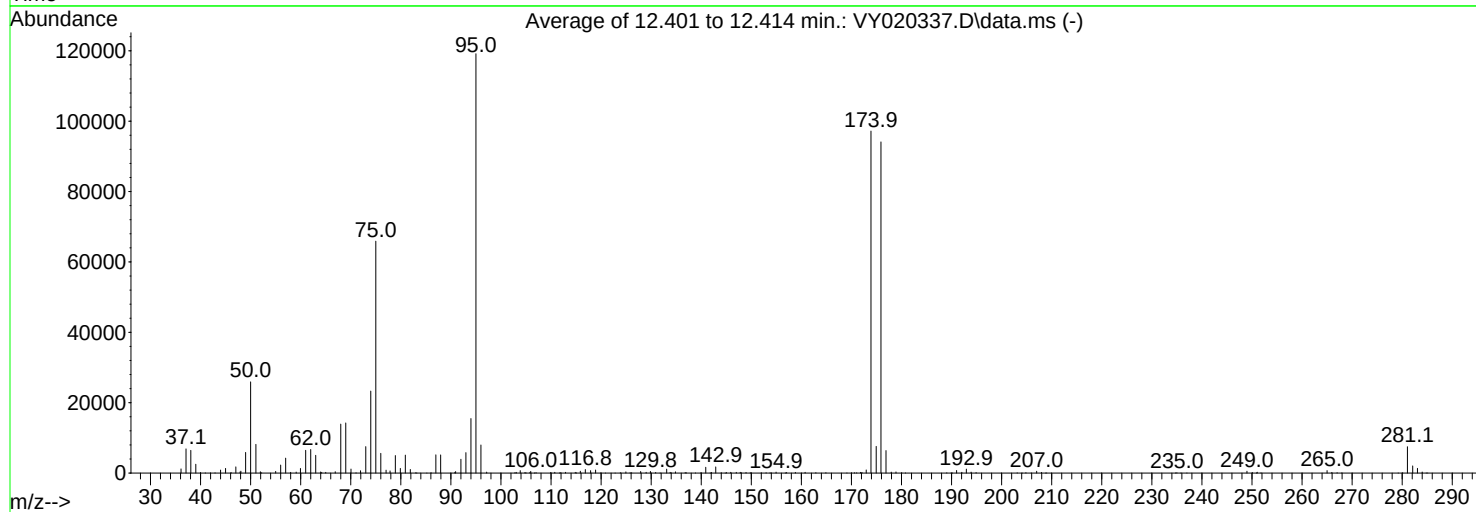
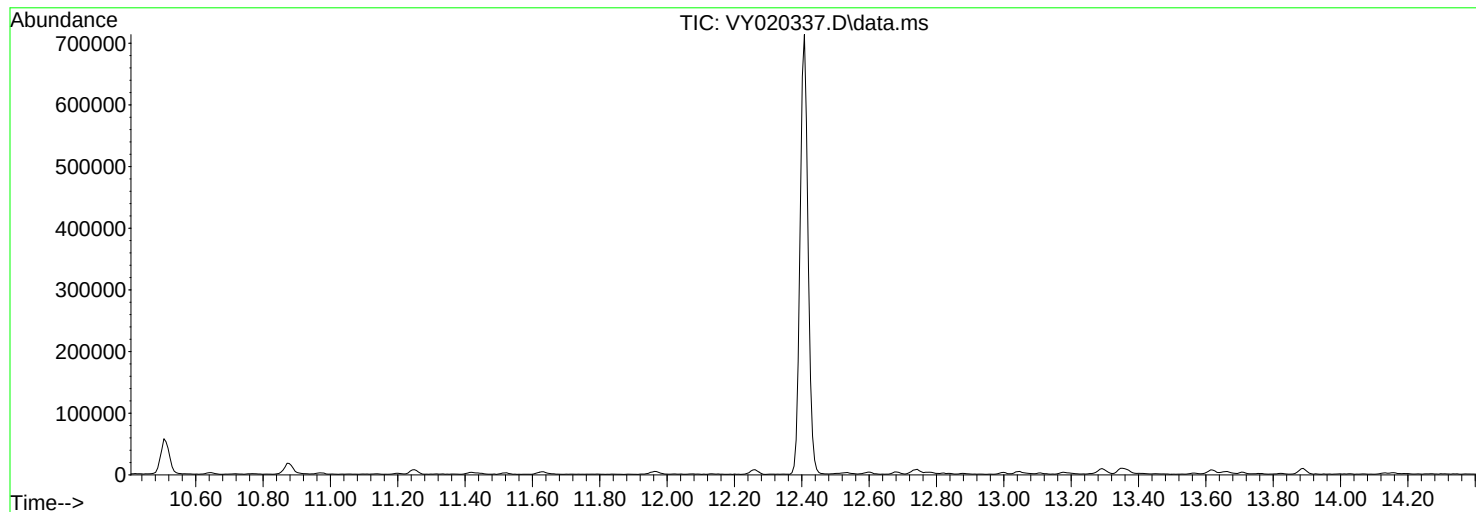
| m/z    | abund. | m/z    | abund. | m/z    | abund. | m/z | abund. |
|--------|--------|--------|--------|--------|--------|-----|--------|
| 90.80  | 56     | 115.80 | 58     | 142.95 | 744    |     |        |
| 91.05  | 200    | 116.80 | 382    | 144.90 | 202    |     |        |
| 92.05  | 1389   | 118.05 | 245    | 147.95 | 202    |     |        |
| 93.05  | 2427   | 118.75 | 167    | 171.95 | 747    |     |        |
| 94.05  | 6446   | 119.00 | 115    | 173.05 | 361    |     |        |
| 95.10  | 52611  | 127.95 | 301    | 174.00 | 38096  |     |        |
| 96.05  | 3649   | 129.70 | 75     | 175.00 | 3061   |     |        |
| 97.00  | 52     | 130.00 | 76     | 176.00 | 36195  |     |        |
| 103.70 | 56     | 136.90 | 54     | 177.00 | 2485   |     |        |
| 104.05 | 241    | 140.80 | 424    |        |        |     |        |
| 105.90 | 304    | 141.00 | 188    |        |        |     |        |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY111924\  
Data File : VY020337.D  
Acq On : 19 Nov 2024 14:40  
Operator : SY/MD  
Sample : BFB  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Title : SW846 8260  
Last Update : Wed Nov 20 04:38:24 2024



AutoFind: Scans 1752, 1753, 1754; Background Corrected with Scan 1744

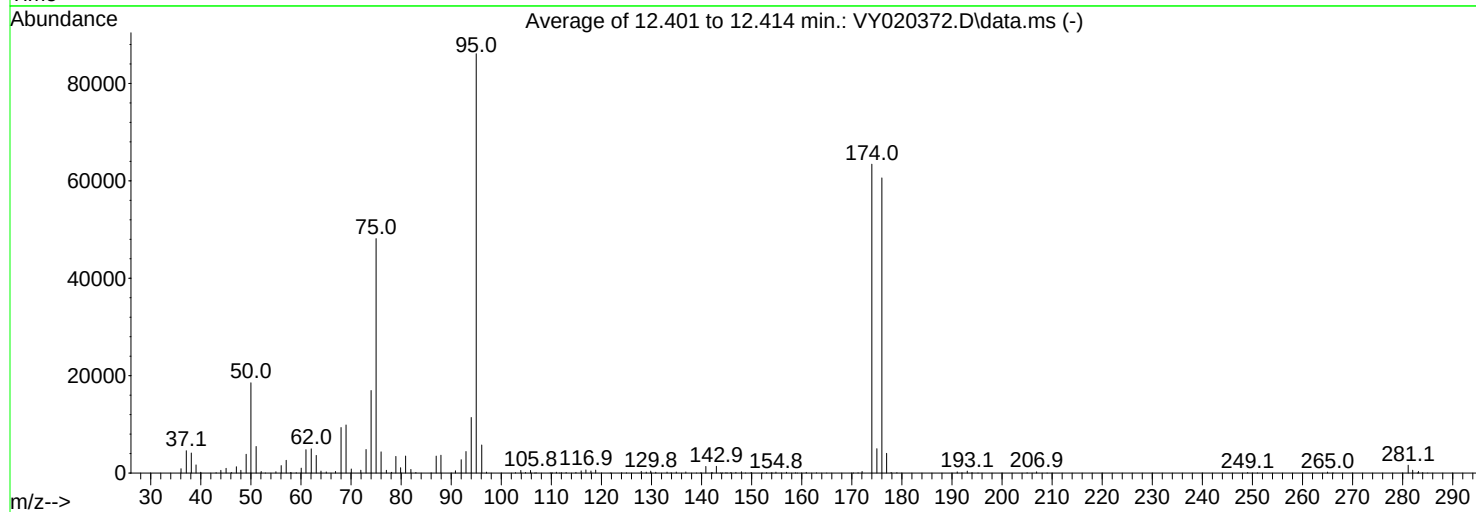
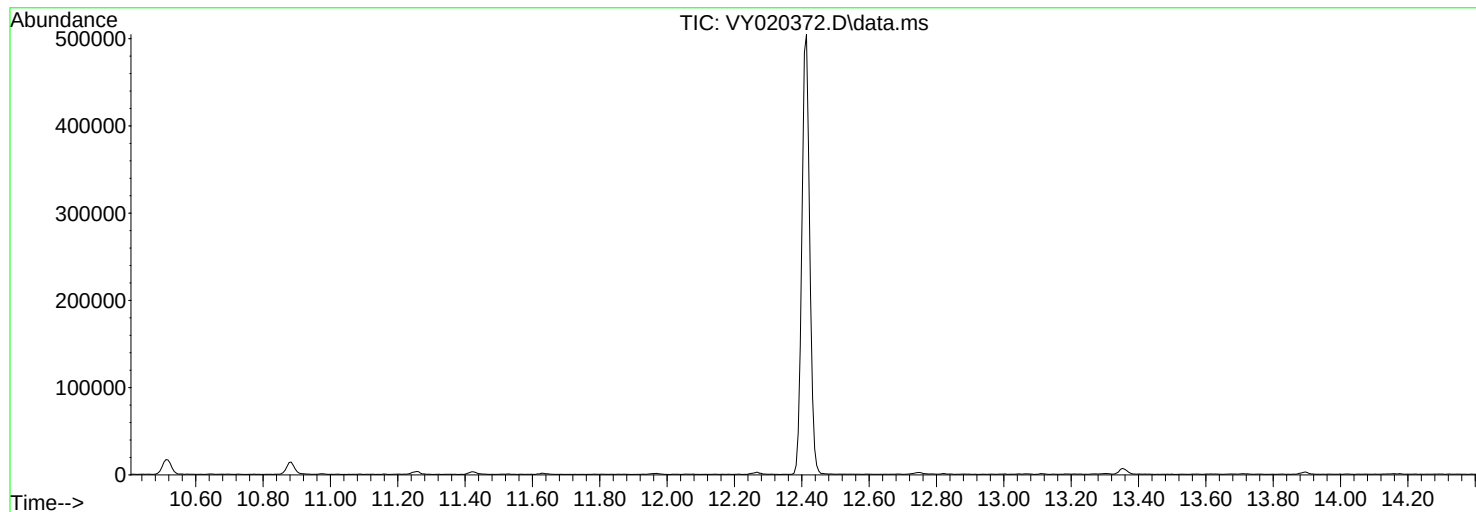
| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 50             | 95              | 15              | 40              | 21.7         | 25915      | PASS                |
| 75             | 95              | 30              | 60              | 55.3         | 65907      | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 119168     | PASS                |
| 96             | 95              | 5               | 9               | 6.7          | 7986       | PASS                |
| 173            | 174             | 0.00            | 2               | 0.9          | 895        | PASS                |
| 174            | 95              | 50              | 100             | 81.6         | 97187      | PASS                |
| 175            | 174             | 5               | 9               | 7.8          | 7585       | PASS                |
| 176            | 174             | 95              | 101             | 96.8         | 94104      | PASS                |
| 177            | 176             | 5               | 9               | 6.8          | 6392       | PASS                |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020372.D  
Acq On : 21 Nov 2024 08:32  
Operator : SY/MD  
Sample : BFB  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Title : SW846 8260  
Last Update : Wed Nov 20 04:38:24 2024



AutoFind: Scans 1752, 1753, 1754; Background Corrected with Scan 1745

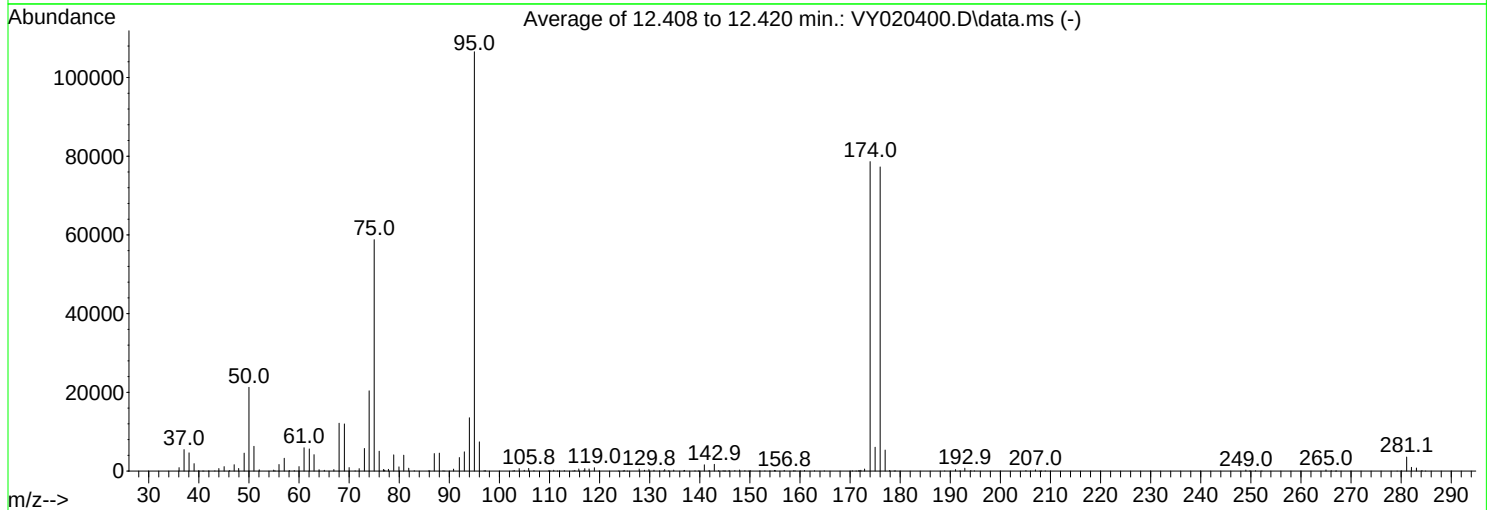
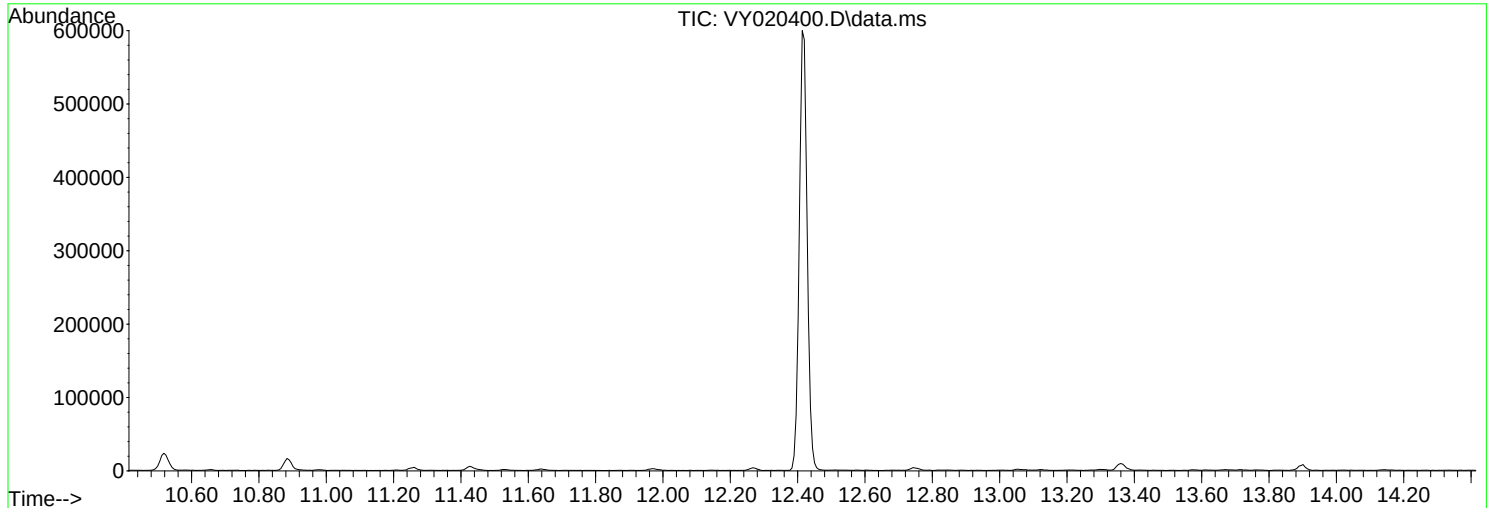
| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 50             | 95              | 15              | 40              | 21.5         | 18537      | PASS                |
| 75             | 95              | 30              | 60              | 55.9         | 48139      | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 86101      | PASS                |
| 96             | 95              | 5               | 9               | 6.7          | 5771       | PASS                |
| 173            | 174             | 0.00            | 2               | 0.0          | 0          | PASS                |
| 174            | 95              | 50              | 100             | 73.7         | 63419      | PASS                |
| 175            | 174             | 5               | 9               | 7.9          | 5005       | PASS                |
| 176            | 174             | 95              | 101             | 95.6         | 60600      | PASS                |
| 177            | 176             | 5               | 9               | 6.7          | 4051       | PASS                |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020400.D  
Acq On : 22 Nov 2024 08:56  
Operator : SY/MD  
Sample : BFB  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Title : SW846 8260  
Last Update : Wed Nov 20 04:38:24 2024



AutoFind: Scans 1753, 1754, 1755; Background Corrected with Scan 1746

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 50             | 95              | 15              | 40              | 20.0         | 21291      | PASS                |
| 75             | 95              | 30              | 60              | 55.2         | 58803      | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 106549     | PASS                |
| 96             | 95              | 5               | 9               | 7.0          | 7433       | PASS                |
| 173            | 174             | 0.00            | 2               | 0.7          | 521        | PASS                |
| 174            | 95              | 50              | 100             | 73.8         | 78624      | PASS                |
| 175            | 174             | 5               | 9               | 7.7          | 6067       | PASS                |
| 176            | 174             | 95              | 101             | 98.3         | 77283      | PASS                |
| 177            | 176             | 5               | 9               | 6.9          | 5341       | PASS                |

## Report of Analysis

|                    |                              |                 |               |
|--------------------|------------------------------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  |               |
| Client Sample ID:  | VN1120WBL01                  | SDG No.:        | P4892         |
| Lab Sample ID:     | VN1120WBL01                  | Matrix:         | Water         |
| Analytical Method: | SW8260                       | % Solid:        | 0             |
| Sample Wt/Vol:     | 5      Units:    mL          | Final Vol:      | 5000      uL  |
| Soil Aliquot Vol:  | uL                           | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624      ID :    0.25    | Level :         | LOW           |
| Prep Method :      |                              |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN084962.D        | 1         |           | 11/20/24 12:21 | VN112024      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |            |       |
| 75-71-8        | Dichlorodifluoromethane        | 0.21  | U         | 0.21 | 1.00       | ug/L  |
| 74-87-3        | Chloromethane                  | 0.35  | U         | 0.35 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 0.34  | U         | 0.34 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 1.40  | U         | 1.40 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 0.56  | U         | 0.56 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 0.34  | U         | 0.34 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 0.25  | U         | 0.25 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 0.26  | U         | 0.26 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 1.40  | U         | 1.40 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 0.32  | U         | 0.32 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.16  | U         | 0.16 | 1.00       | ug/L  |
| 79-20-9        | Methyl Acetate                 | 0.60  | U         | 0.60 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 0.32  | U         | 0.32 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.25  | U         | 0.25 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 0.23  | U         | 0.23 | 1.00       | ug/L  |
| 110-82-7       | Cyclohexane                    | 1.60  | U         | 1.60 | 5.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 1.30  | U         | 1.30 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 0.25  | U         | 0.25 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.25  | U         | 0.25 | 1.00       | ug/L  |
| 74-97-5        | Bromochloromethane             | 0.18  | U         | 0.18 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 0.26  | U         | 0.26 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.19  | U         | 0.19 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 0.19  | U         | 0.19 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 0.16  | U         | 0.16 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 0.24  | U         | 0.24 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 0.32  | U         | 0.32 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 0.19  | U         | 0.19 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 0.24  | U         | 0.24 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 0.75  | U         | 0.75 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 0.18  | U         | 0.18 | 1.00       | ug/L  |



## Report of Analysis

|                    |                              |        |      |                 |               |
|--------------------|------------------------------|--------|------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  |        |      | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 |        |      | Date Received:  |               |
| Client Sample ID:  | VN1120WBL01                  |        |      | SDG No.:        | P4892         |
| Lab Sample ID:     | VN1120WBL01                  |        |      | Matrix:         | Water         |
| Analytical Method: | SW8260                       |        |      | % Solid:        | 0             |
| Sample Wt/Vol:     | 5                            | Units: | mL   | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  |                              |        | uL   | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624                      | ID :   | 0.25 | Level :         | LOW           |
| Prep Method :      |                              |        |      |                 |               |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VN084962.D        | 1         |           | 11/20/24 12:21 | VN112024      |

| CAS Number                | Parameter                   | Conc.  | Qualifier | MDL                 | LOQ / CRQL | Units   |
|---------------------------|-----------------------------|--------|-----------|---------------------|------------|---------|
| 10061-02-6                | t-1,3-Dichloropropene       | 0.21   | U         | 0.21                | 1.00       | ug/L    |
| 10061-01-5                | cis-1,3-Dichloropropene     | 0.18   | U         | 0.18                | 1.00       | ug/L    |
| 79-00-5                   | 1,1,2-Trichloroethane       | 0.21   | U         | 0.21                | 1.00       | ug/L    |
| 591-78-6                  | 2-Hexanone                  | 1.10   | U         | 1.10                | 5.00       | ug/L    |
| 124-48-1                  | Dibromochloromethane        | 0.18   | U         | 0.18                | 1.00       | ug/L    |
| 106-93-4                  | 1,2-Dibromoethane           | 0.16   | U         | 0.16                | 1.00       | ug/L    |
| 127-18-4                  | Tetrachloroethene           | 0.25   | U         | 0.25                | 1.00       | ug/L    |
| 108-90-7                  | Chlorobenzene               | 0.13   | U         | 0.13                | 1.00       | ug/L    |
| 100-41-4                  | Ethyl Benzene               | 0.16   | U         | 0.16                | 1.00       | ug/L    |
| 179601-23-1               | m/p-Xylenes                 | 0.31   | U         | 0.31                | 2.00       | ug/L    |
| 95-47-6                   | o-Xylene                    | 0.14   | U         | 0.14                | 1.00       | ug/L    |
| 100-42-5                  | Styrene                     | 0.16   | U         | 0.16                | 1.00       | ug/L    |
| 75-25-2                   | Bromoform                   | 0.21   | U         | 0.21                | 1.00       | ug/L    |
| 98-82-8                   | Isopropylbenzene            | 0.13   | U         | 0.13                | 1.00       | ug/L    |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane   | 0.27   | U         | 0.27                | 1.00       | ug/L    |
| 541-73-1                  | 1,3-Dichlorobenzene         | 0.24   | U         | 0.24                | 1.00       | ug/L    |
| 106-46-7                  | 1,4-Dichlorobenzene         | 0.27   | U         | 0.27                | 1.00       | ug/L    |
| 95-50-1                   | 1,2-Dichlorobenzene         | 0.19   | U         | 0.19                | 1.00       | ug/L    |
| 96-12-8                   | 1,2-Dibromo-3-Chloropropane | 0.46   | U         | 0.46                | 1.00       | ug/L    |
| 120-82-1                  | 1,2,4-Trichlorobenzene      | 0.42   | U         | 0.42                | 1.00       | ug/L    |
| 87-61-6                   | 1,2,3-Trichlorobenzene      | 0.51   | U         | 0.51                | 1.00       | ug/L    |
| <b>SURROGATES</b>         |                             |        |           |                     |            |         |
| 17060-07-0                | 1,2-Dichloroethane-d4       | 51.1   |           | 70 (74) - 130 (125) | 102%       | SPK: 50 |
| 1868-53-7                 | Dibromofluoromethane        | 49.5   |           | 70 (75) - 130 (124) | 99%        | SPK: 50 |
| 2037-26-5                 | Toluene-d8                  | 46.1   |           | 70 (86) - 130 (113) | 92%        | SPK: 50 |
| 460-00-4                  | 4-Bromofluorobenzene        | 46.4   |           | 70 (77) - 130 (121) | 93%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b> |                             |        |           |                     |            |         |
| 363-72-4                  | Pentafluorobenzene          | 179000 | 8.218     |                     |            |         |
| 540-36-3                  | 1,4-Difluorobenzene         | 319000 | 9.1       |                     |            |         |
| 3114-55-4                 | Chlorobenzene-d5            | 278000 | 11.865    |                     |            |         |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4      | 124000 | 13.794    |                     |            |         |

## Report of Analysis

|                    |                              |           |                 |               |
|--------------------|------------------------------|-----------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  |           | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 |           | Date Received:  |               |
| Client Sample ID:  | VN1120WBL01                  |           | SDG No.:        | P4892         |
| Lab Sample ID:     | VN1120WBL01                  |           | Matrix:         | Water         |
| Analytical Method: | SW8260                       |           | % Solid:        | 0             |
| Sample Wt/Vol:     | 5                            | Units: mL | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  |                              | uL        | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624                      | ID : 0.25 | Level :         | LOW           |
| Prep Method :      |                              |           |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN084962.D        | 1         |           | 11/20/24 12:21 | VN112024      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|------------|-------|
|------------|-----------|-------|-----------|-----|------------|-------|

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084962.D  
Acq On : 20 Nov 2024 12:21  
Operator : JC\MD  
Sample : VN1120WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBL01

Quant Time: Nov 21 00:34:27 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.218  | 168  | 178908   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 319489   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 277659   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.794 | 152  | 123641   | 50.000 | ug/l  | 0.00     |

|                             |        |                |          |        |          |      |
|-----------------------------|--------|----------------|----------|--------|----------|------|
| System Monitoring Compounds |        |                |          |        |          |      |
| 33) 1,2-Dichloroethane-d4   | 8.577  | 65             | 131967   | 51.070 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | =      | 102.140% |      |
| 35) Dibromofluoromethane    | 8.165  | 113            | 107113   | 49.531 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | =      | 99.060%  |      |
| 50) Toluene-d8              | 10.565 | 98             | 366987   | 46.068 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | =      | 92.140%  |      |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 138133   | 46.397 | ug/l     | 0.00 |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | =      | 92.800%  |      |

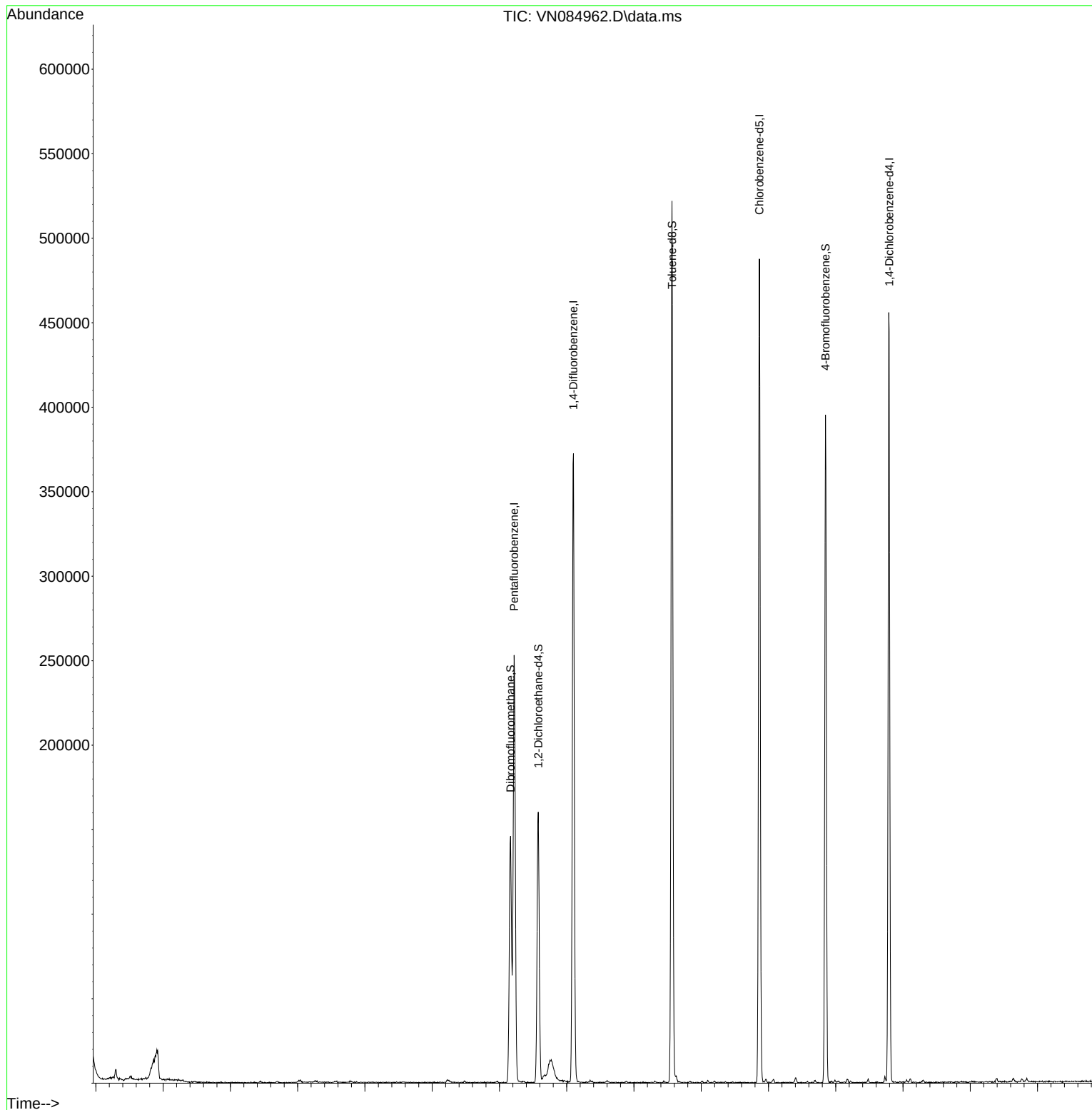
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

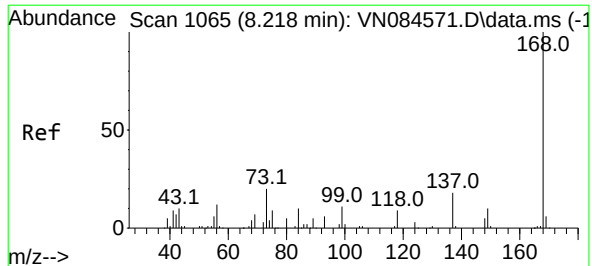
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084962.D  
Acq On : 20 Nov 2024 12:21  
Operator : JC\MD  
Sample : VN1120WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBL01

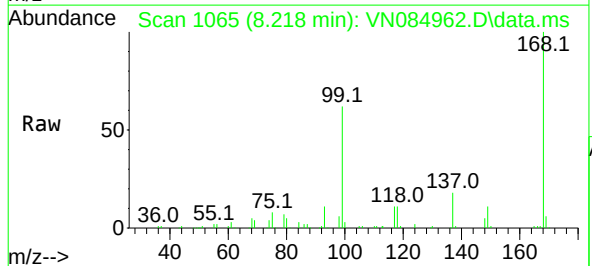
Quant Time: Nov 21 00:34:27 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration



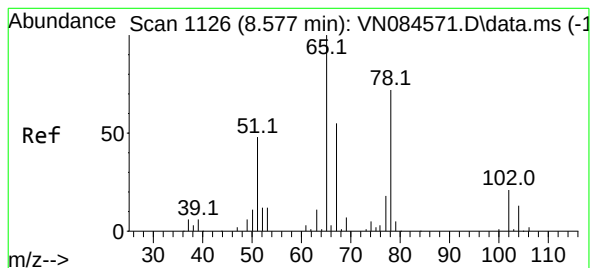
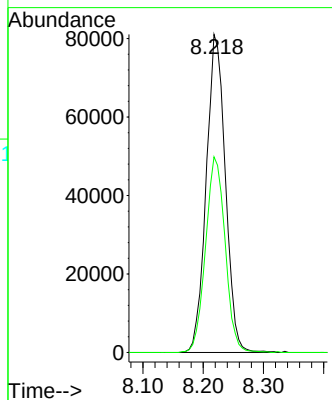
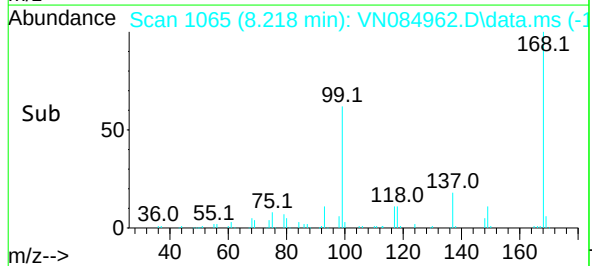


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.218 min Scan# 1065  
Delta R.T. -0.006 min  
Lab File: VN084962.D  
Acq: 20 Nov 2024 12:21

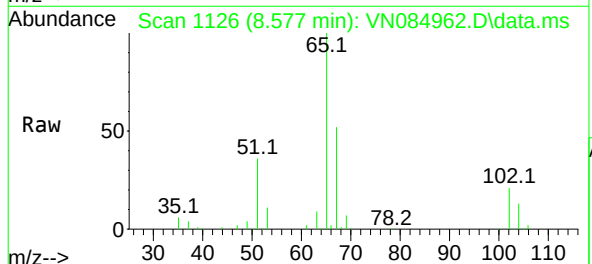
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBL01



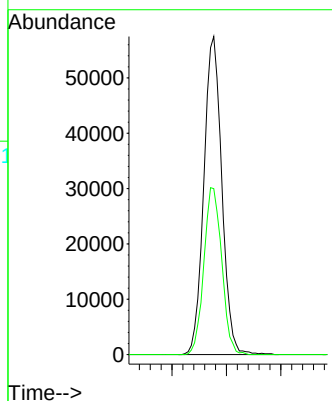
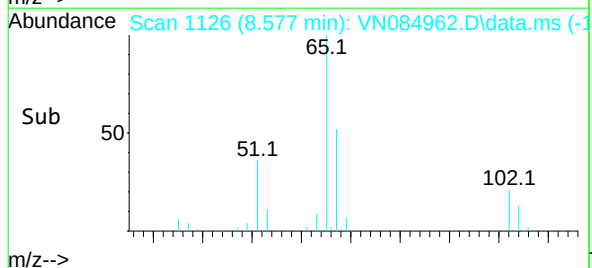
Tgt Ion:168 Resp: 178908  
Ion Ratio Lower Upper  
168 100  
99 61.5 54.2 81.2

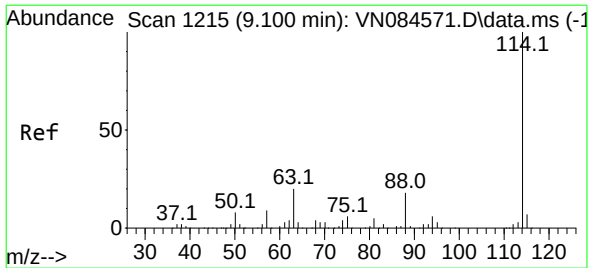


#33  
1,2-Dichloroethane-d4  
Concen: 51.070 ug/l  
RT: 8.577 min Scan# 1126  
Delta R.T. -0.000 min  
Lab File: VN084962.D  
Acq: 20 Nov 2024 12:21



Tgt Ion: 65 Resp: 131967  
Ion Ratio Lower Upper  
65 100  
67 52.0 0.0 102.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. 0.000 min

Lab File: VN084962.D

Acq: 20 Nov 2024 12:21

Instrument :

MSVOA\_N

ClientSampleId :

VN1120WBL01

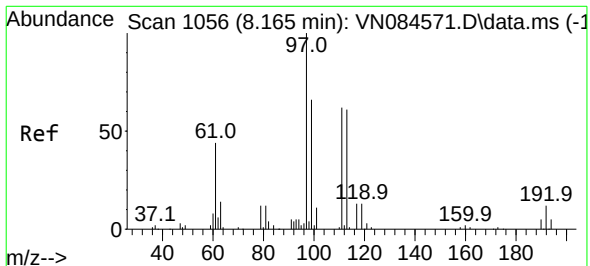
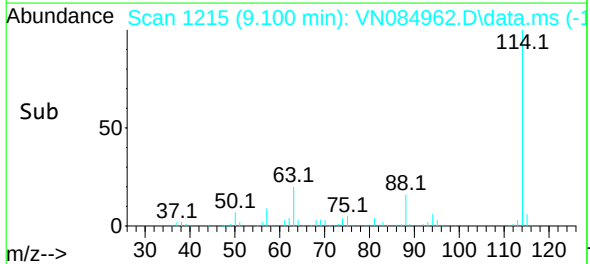
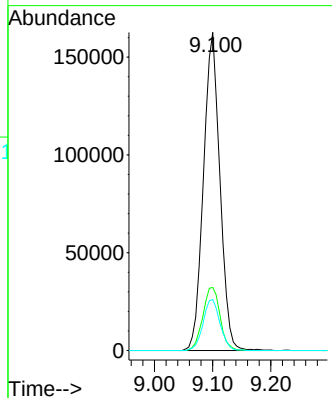
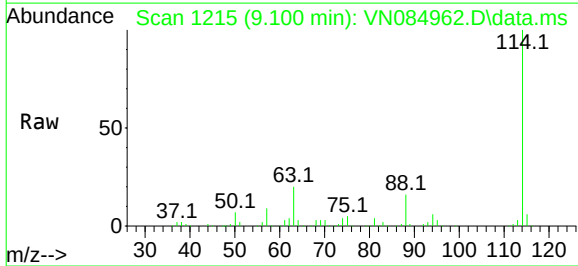
Tgt Ion:114 Resp: 319489

Ion Ratio Lower Upper

114 100

63 19.8 0.0 43.8

88 16.0 0.0 31.6



#35

Dibromofluoromethane

Concen: 49.531 ug/l

RT: 8.165 min Scan# 1056

Delta R.T. 0.000 min

Lab File: VN084962.D

Acq: 20 Nov 2024 12:21

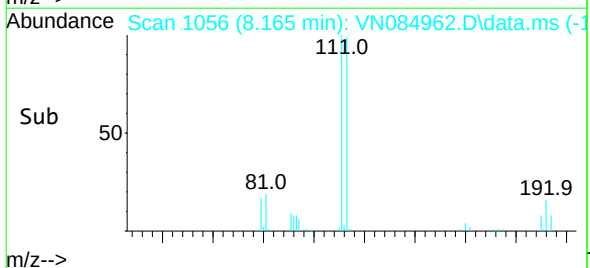
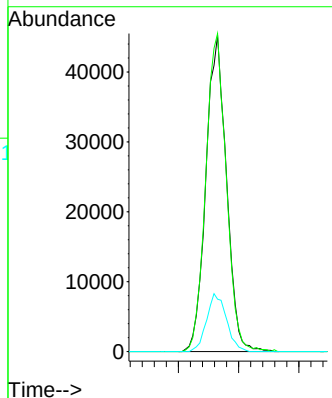
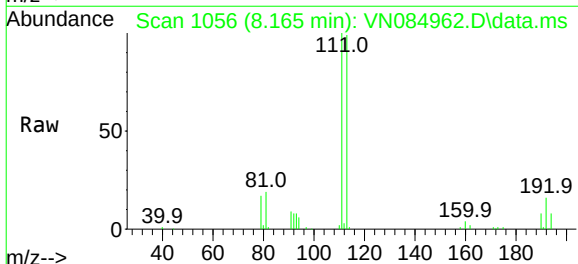
Tgt Ion:113 Resp: 107113

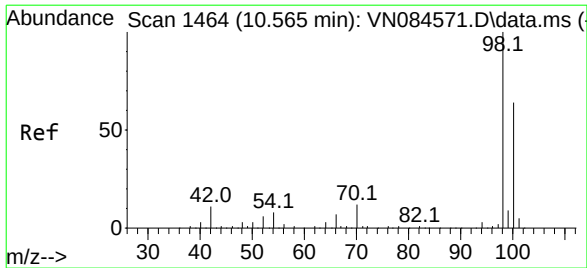
Ion Ratio Lower Upper

113 100

111 100.6 83.3 124.9

192 17.7 13.5 20.3





#50

Toluene-d8

Concen: 46.068 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN084962.D

Acq: 20 Nov 2024 12:21

Instrument :

MSVOA\_N

ClientSampleId :

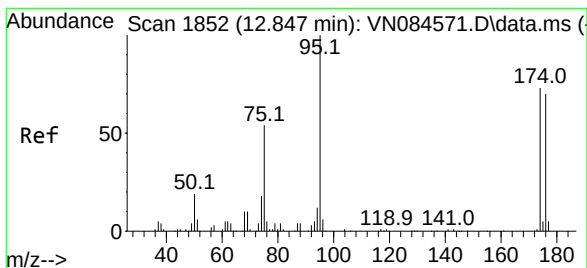
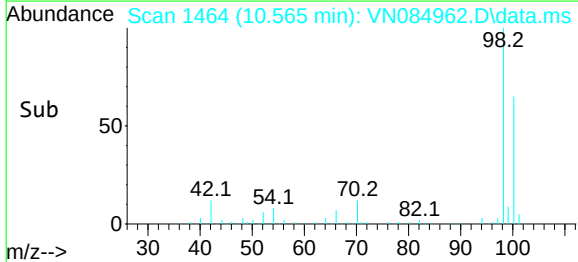
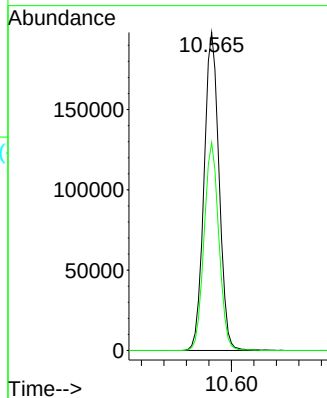
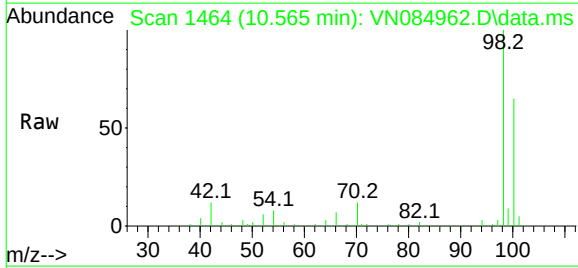
VN1120WBL01

Tgt Ion: 98 Resp: 366987

Ion Ratio Lower Upper

98 100

100 64.3 52.7 79.1



#62

4-Bromofluorobenzene

Concen: 46.397 ug/l

RT: 12.847 min Scan# 1852

Delta R.T. 0.000 min

Lab File: VN084962.D

Acq: 20 Nov 2024 12:21

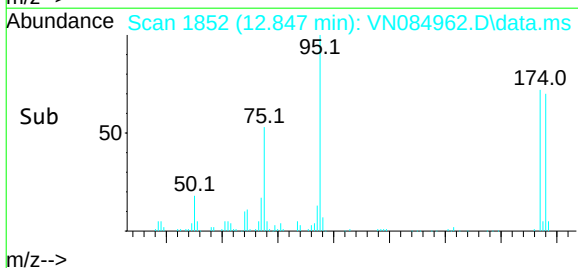
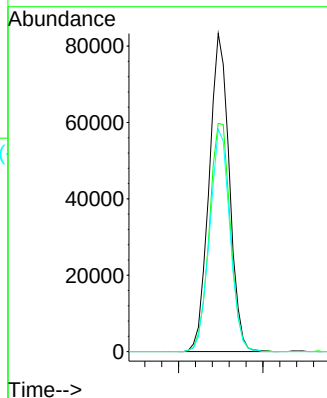
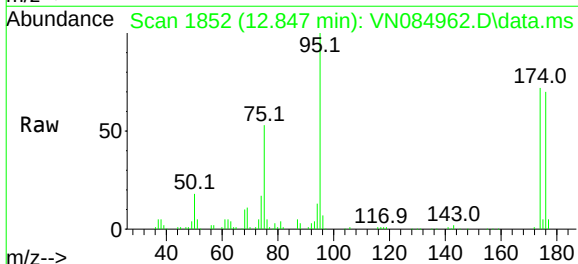
Tgt Ion: 95 Resp: 138133

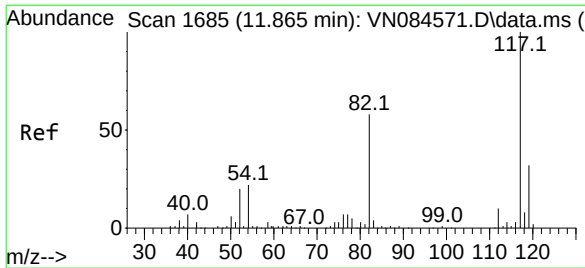
Ion Ratio Lower Upper

95 100

174 74.9 0.0 145.2

176 70.5 0.0 140.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 16

Delta R.T. -0.000 min

Lab File: VN084962.D

Acq: 20 Nov 2024 12:21

Instrument :

MSVOA\_N

ClientSampleId :

VN1120WBL01

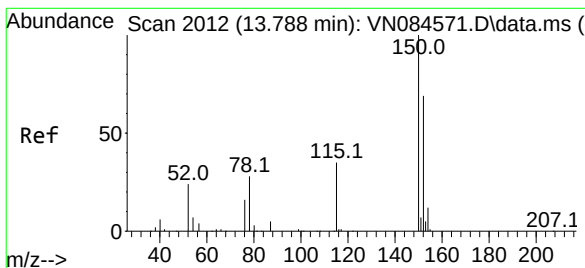
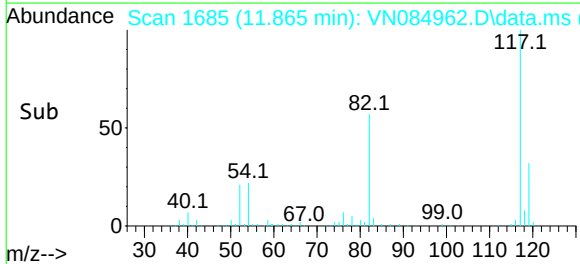
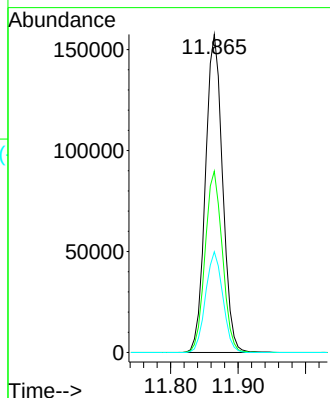
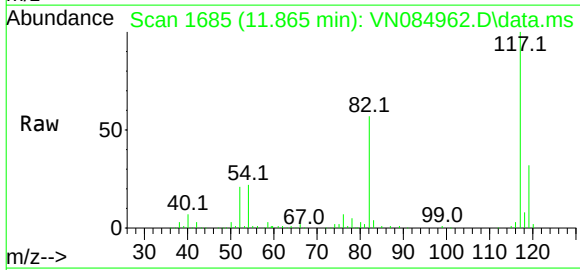
Tgt Ion:117 Resp: 277659

Ion Ratio Lower Upper

117 100

82 57.0 47.2 70.8

119 31.7 25.4 38.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.794 min Scan# 2013

Delta R.T. 0.006 min

Lab File: VN084962.D

Acq: 20 Nov 2024 12:21

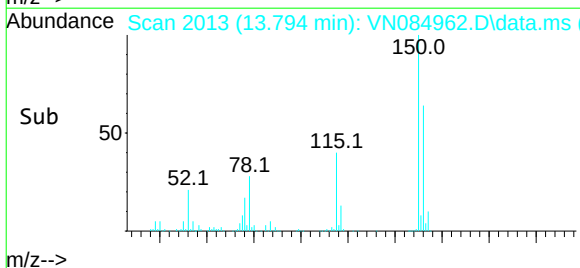
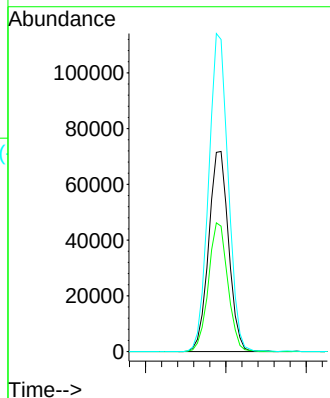
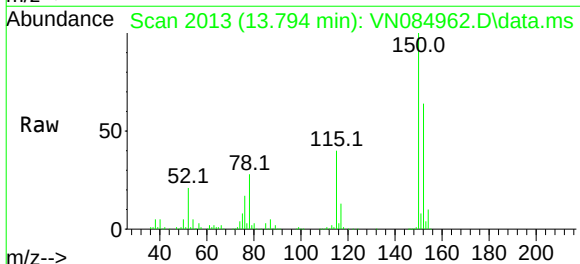
Tgt Ion:152 Resp: 123641

Ion Ratio Lower Upper

152 100

115 62.5 31.3 93.9

150 155.7 0.0 349.8





Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084962.D  
Acq On : 20 Nov 2024 12:21  
Operator : JC\MD  
Sample : VN1120WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M

Title : SW846 8260

Signal : TIC: VN084962.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 2.295       | 54            | 58          | 66           | rVB2     | 6509           | 12920         | 1.33%           | 0.243%        |
| 2         | 2.818       | 137           | 147         | 148          | rBV4     | 6310           | 10780         | 1.11%           | 0.202%        |
| 3         | 8.165       | 1044          | 1056        | 1060         | rBV      | 145988         | 346283        | 35.65%          | 6.502%        |
| 4         | 8.218       | 1060          | 1065        | 1076         | rVB      | 252421         | 559884        | 57.64%          | 10.513%       |
| 5         | 8.577       | 1116          | 1126        | 1134         | rBV      | 160114         | 359847        | 37.05%          | 6.757%        |
| 6         | 8.753       | 1147          | 1156        | 1157         | rBV3     | 8578           | 18416         | 1.90%           | 0.346%        |
| 7         | 9.100       | 1206          | 1215        | 1225         | rBV      | 371811         | 754393        | 77.66%          | 14.166%       |
| 8         | 10.565      | 1452          | 1464        | 1474         | rBV      | 521713         | 971376        | 100.00%         | 18.240%       |
| 9         | 11.865      | 1676          | 1685        | 1694         | rBV      | 487545         | 863950        | 88.94%          | 16.223%       |
| 10        | 12.847      | 1845          | 1852        | 1861         | rBV      | 395157         | 659134        | 67.86%          | 12.377%       |
| 11        | 13.788      | 2005          | 2012        | 2022         | rVB      | 455514         | 768453        | 79.11%          | 14.430%       |

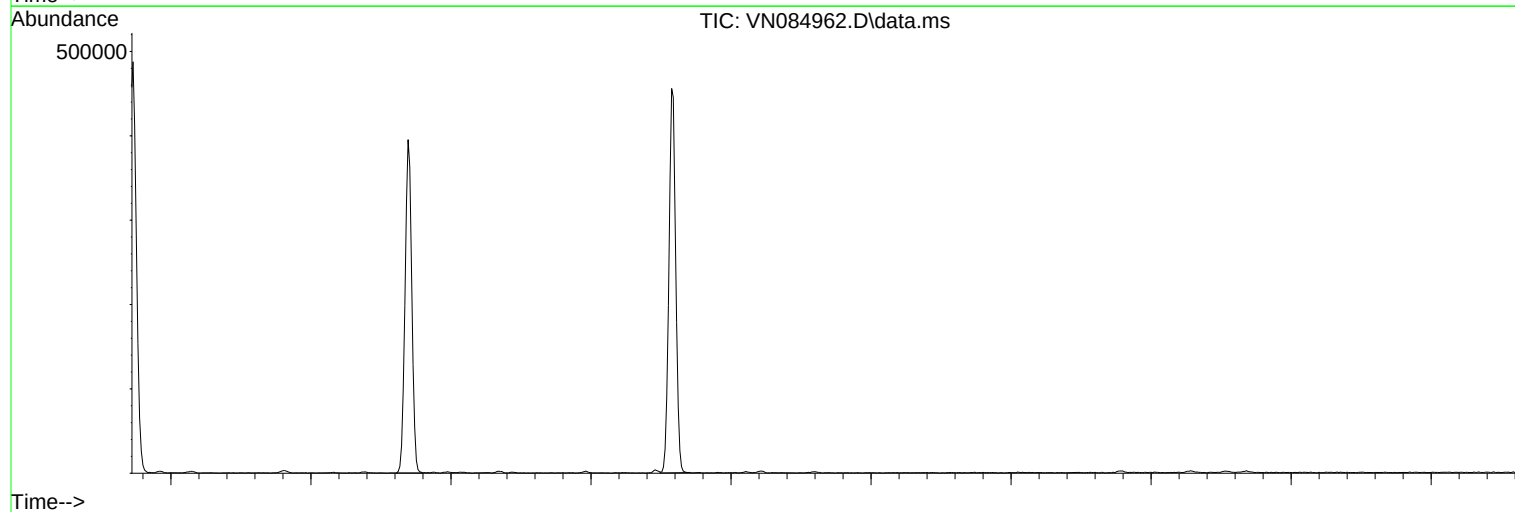
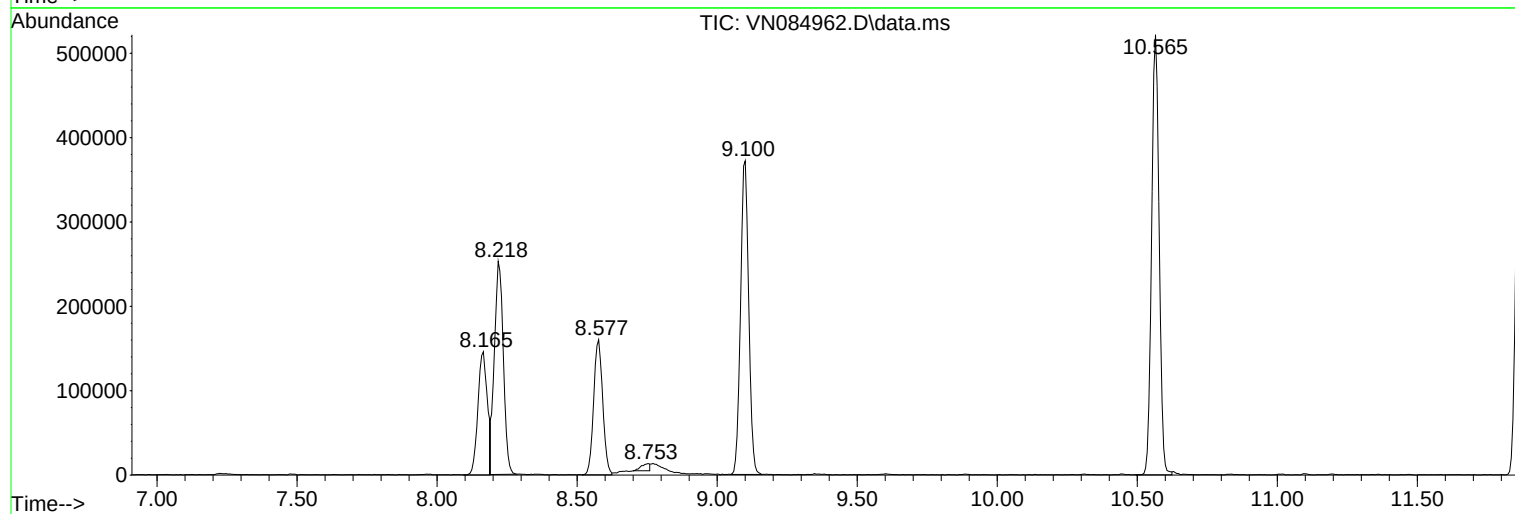
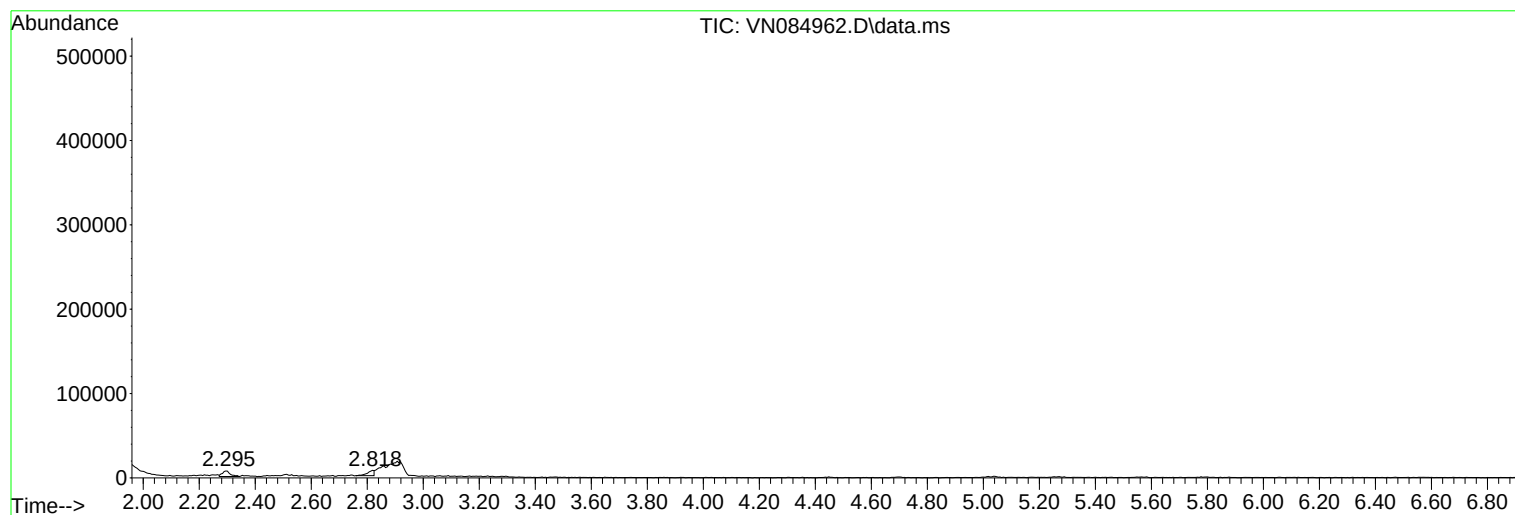
Sum of corrected areas: 5325436

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084962.D  
Acq On : 20 Nov 2024 12:21  
Operator : JC\MD  
Sample : VN1120WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084962.D  
Acq On : 20 Nov 2024 12:21  
Operator : JC\MD  
Sample : VN1120WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084962.D  
Acq On : 20 Nov 2024 12:21  
Operator : JC\MD  
Sample : VN1120WBL01  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard-- |
|------------------|----|---------|-------|----------|-----------------------|
|                  |    |         |       | #        | RT Resp Conc          |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Portal Partners Tri-Venture               | Date Collected: |                              |
| Project:           | Amtrak Sawtooth Bridges 2024              | Date Received:  |                              |
| Client Sample ID:  | VY1121SBL01                               | SDG No.:        | P4892                        |
| Lab Sample ID:     | VY1121SBL01                               | Matrix:         | SOIL                         |
| Analytical Method: | SW8260                                    | % Solid:        | 100                          |
| Sample Wt/Vol:     | 5                      Units:    g        | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOC-TCLVOA-10                |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020374.D        | 1         |           | 11/21/24 09:59 | VY112124      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units(Dry Weight) |
|----------------|--------------------------------|-------|-----------|------|------------|-------------------|
| <b>TARGETS</b> |                                |       |           |      |            |                   |
| 75-71-8        | Dichlorodifluoromethane        | 1.70  | U         | 1.70 | 5.00       | ug/Kg             |
| 74-87-3        | Chloromethane                  | 1.20  | U         | 1.20 | 5.00       | ug/Kg             |
| 75-01-4        | Vinyl Chloride                 | 0.77  | U         | 0.77 | 5.00       | ug/Kg             |
| 74-83-9        | Bromomethane                   | 1.00  | U         | 1.00 | 5.00       | ug/Kg             |
| 75-00-3        | Chloroethane                   | 1.00  | U         | 1.00 | 5.00       | ug/Kg             |
| 75-69-4        | Trichlorofluoromethane         | 0.91  | U         | 0.91 | 5.00       | ug/Kg             |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 1.10  | U         | 1.10 | 5.00       | ug/Kg             |
| 75-35-4        | 1,1-Dichloroethene             | 0.78  | U         | 0.78 | 5.00       | ug/Kg             |
| 67-64-1        | Acetone                        | 6.20  | U         | 6.20 | 25.0       | ug/Kg             |
| 75-15-0        | Carbon Disulfide               | 1.30  | U         | 1.30 | 5.00       | ug/Kg             |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.67  | U         | 0.67 | 5.00       | ug/Kg             |
| 79-20-9        | Methyl Acetate                 | 1.80  | U         | 1.80 | 5.00       | ug/Kg             |
| 75-09-2        | Methylene Chloride             | 3.40  | U         | 3.40 | 10.0       | ug/Kg             |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.84  | U         | 0.84 | 5.00       | ug/Kg             |
| 75-34-3        | 1,1-Dichloroethane             | 0.63  | U         | 0.63 | 5.00       | ug/Kg             |
| 110-82-7       | Cyclohexane                    | 0.69  | U         | 0.69 | 5.00       | ug/Kg             |
| 78-93-3        | 2-Butanone                     | 5.70  | U         | 5.70 | 25.0       | ug/Kg             |
| 56-23-5        | Carbon Tetrachloride           | 0.87  | U         | 0.87 | 5.00       | ug/Kg             |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.61  | U         | 0.61 | 5.00       | ug/Kg             |
| 74-97-5        | Bromochloromethane             | 2.40  | U         | 2.40 | 5.00       | ug/Kg             |
| 67-66-3        | Chloroform                     | 0.67  | U         | 0.67 | 5.00       | ug/Kg             |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.78  | U         | 0.78 | 5.00       | ug/Kg             |
| 108-87-2       | Methylcyclohexane              | 0.87  | U         | 0.87 | 5.00       | ug/Kg             |
| 71-43-2        | Benzene                        | 0.72  | U         | 0.72 | 5.00       | ug/Kg             |
| 107-06-2       | 1,2-Dichloroethane             | 0.61  | U         | 0.61 | 5.00       | ug/Kg             |
| 79-01-6        | Trichloroethene                | 0.75  | U         | 0.75 | 5.00       | ug/Kg             |
| 78-87-5        | 1,2-Dichloropropane            | 0.66  | U         | 0.66 | 5.00       | ug/Kg             |
| 75-27-4        | Bromodichloromethane           | 0.56  | U         | 0.56 | 5.00       | ug/Kg             |
| 108-10-1       | 4-Methyl-2-Pentanone           | 4.40  | U         | 4.40 | 25.0       | ug/Kg             |
| 108-88-3       | Toluene                        | 0.67  | U         | 0.67 | 5.00       | ug/Kg             |

## Report of Analysis

|                    |                              |                 |       |
|--------------------|------------------------------|-----------------|-------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: |       |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  |       |
| Client Sample ID:  | VY1121SBL01                  | SDG No.:        | P4892 |
| Lab Sample ID:     | VY1121SBL01                  | Matrix:         | SOIL  |
| Analytical Method: | SW8260                       | % Solid:        | 100   |
| Sample Wt/Vol:     | 5                            | Units:          | g     |
| Soil Aliquot Vol:  |                              |                 | uL    |
| GC Column:         | RXI-624                      | ID :            | 0.25  |
| Prep Method :      |                              | Level :         | LOW   |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VY020374.D        | 1         |           | 11/21/24 09:59 | VY112124      |

| CAS Number                | Parameter                   | Conc.  | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-----------------------------|--------|-----------|---------------------|------------|-------------------|
| 10061-02-6                | t-1,3-Dichloropropene       | 0.60   | U         | 0.60                | 5.00       | ug/Kg             |
| 10061-01-5                | cis-1,3-Dichloropropene     | 0.57   | U         | 0.57                | 5.00       | ug/Kg             |
| 79-00-5                   | 1,1,2-Trichloroethane       | 0.84   | U         | 0.84                | 5.00       | ug/Kg             |
| 591-78-6                  | 2-Hexanone                  | 4.80   | U         | 4.80                | 25.0       | ug/Kg             |
| 124-48-1                  | Dibromochloromethane        | 0.65   | U         | 0.65                | 5.00       | ug/Kg             |
| 106-93-4                  | 1,2-Dibromoethane           | 0.79   | U         | 0.79                | 5.00       | ug/Kg             |
| 127-18-4                  | Tetrachloroethene           | 0.89   | U         | 0.89                | 5.00       | ug/Kg             |
| 108-90-7                  | Chlorobenzene               | 0.74   | U         | 0.74                | 5.00       | ug/Kg             |
| 100-41-4                  | Ethyl Benzene               | 0.62   | U         | 0.62                | 5.00       | ug/Kg             |
| 179601-23-1               | m/p-Xylenes                 | 1.40   | U         | 1.40                | 10.0       | ug/Kg             |
| 95-47-6                   | o-Xylene                    | 0.70   | U         | 0.70                | 5.00       | ug/Kg             |
| 100-42-5                  | Styrene                     | 0.60   | U         | 0.60                | 5.00       | ug/Kg             |
| 75-25-2                   | Bromoform                   | 0.81   | U         | 0.81                | 5.00       | ug/Kg             |
| 98-82-8                   | Isopropylbenzene            | 0.67   | U         | 0.67                | 5.00       | ug/Kg             |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane   | 1.10   | U         | 1.10                | 5.00       | ug/Kg             |
| 541-73-1                  | 1,3-Dichlorobenzene         | 0.74   | U         | 0.74                | 5.00       | ug/Kg             |
| 106-46-7                  | 1,4-Dichlorobenzene         | 0.80   | U         | 0.80                | 5.00       | ug/Kg             |
| 95-50-1                   | 1,2-Dichlorobenzene         | 0.59   | U         | 0.59                | 5.00       | ug/Kg             |
| 96-12-8                   | 1,2-Dibromo-3-Chloropropane | 1.60   | U         | 1.60                | 5.00       | ug/Kg             |
| 120-82-1                  | 1,2,4-Trichlorobenzene      | 0.79   | U         | 0.79                | 5.00       | ug/Kg             |
| 87-61-6                   | 1,2,3-Trichlorobenzene      | 0.78   | U         | 0.78                | 5.00       | ug/Kg             |
| <b>SURROGATES</b>         |                             |        |           |                     |            |                   |
| 17060-07-0                | 1,2-Dichloroethane-d4       | 51.9   |           | 70 (50) - 130 (163) | 104%       | SPK: 50           |
| 1868-53-7                 | Dibromofluoromethane        | 48.5   |           | 70 (54) - 130 (147) | 97%        | SPK: 50           |
| 2037-26-5                 | Toluene-d8                  | 48.2   |           | 70 (58) - 130 (134) | 96%        | SPK: 50           |
| 460-00-4                  | 4-Bromofluorobenzene        | 47.3   |           | 70 (29) - 130 (146) | 95%        | SPK: 50           |
| <b>INTERNAL STANDARDS</b> |                             |        |           |                     |            |                   |
| 363-72-4                  | Pentafluorobenzene          | 140000 | 7.713     |                     |            |                   |
| 540-36-3                  | 1,4-Difluorobenzene         | 271000 | 8.616     |                     |            |                   |
| 3114-55-4                 | Chlorobenzene-d5            | 245000 | 11.42     |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4      | 89000  | 13.353    |                     |            |                   |

## Report of Analysis

|                    |                              |           |                 |               |
|--------------------|------------------------------|-----------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  |           | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 |           | Date Received:  |               |
| Client Sample ID:  | VY1121SBL01                  |           | SDG No.:        | P4892         |
| Lab Sample ID:     | VY1121SBL01                  |           | Matrix:         | SOIL          |
| Analytical Method: | SW8260                       |           | % Solid:        | 100           |
| Sample Wt/Vol:     | 5                            | Units: g  | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  |                              | uL        | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624                      | ID : 0.25 | Level :         | LOW           |
| Prep Method :      |                              |           |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020374.D        | 1         |           | 11/21/24 09:59 | VY112124      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|------------|-------|
|------------|-----------|-------|-----------|-----|------------|-------|

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\_Y\Data\VY112124\  
 Data File : VY020374.D  
 Acq On : 21 Nov 2024 09:59  
 Operator : SY/MD  
 Sample : VY1121SBL01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1121SBL01

Quant Time: Nov 21 13:56:07 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.713  | 168  | 139506   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.616  | 114  | 270751   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.420 | 117  | 245370   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.353 | 152  | 89046    | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.061  | 65    | 83114    | 51.857   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 103.720% |
| 35) Dibromofluoromethane    | 7.640  | 113   | 84115    | 48.450   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 96.900%  |
| 50) Toluene-d8              | 10.109 | 98    | 329763   | 48.218   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 96.440%  |
| 62) 4-Bromofluorobenzene    | 12.408 | 95    | 104043   | 47.324   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 94.640%  |

| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

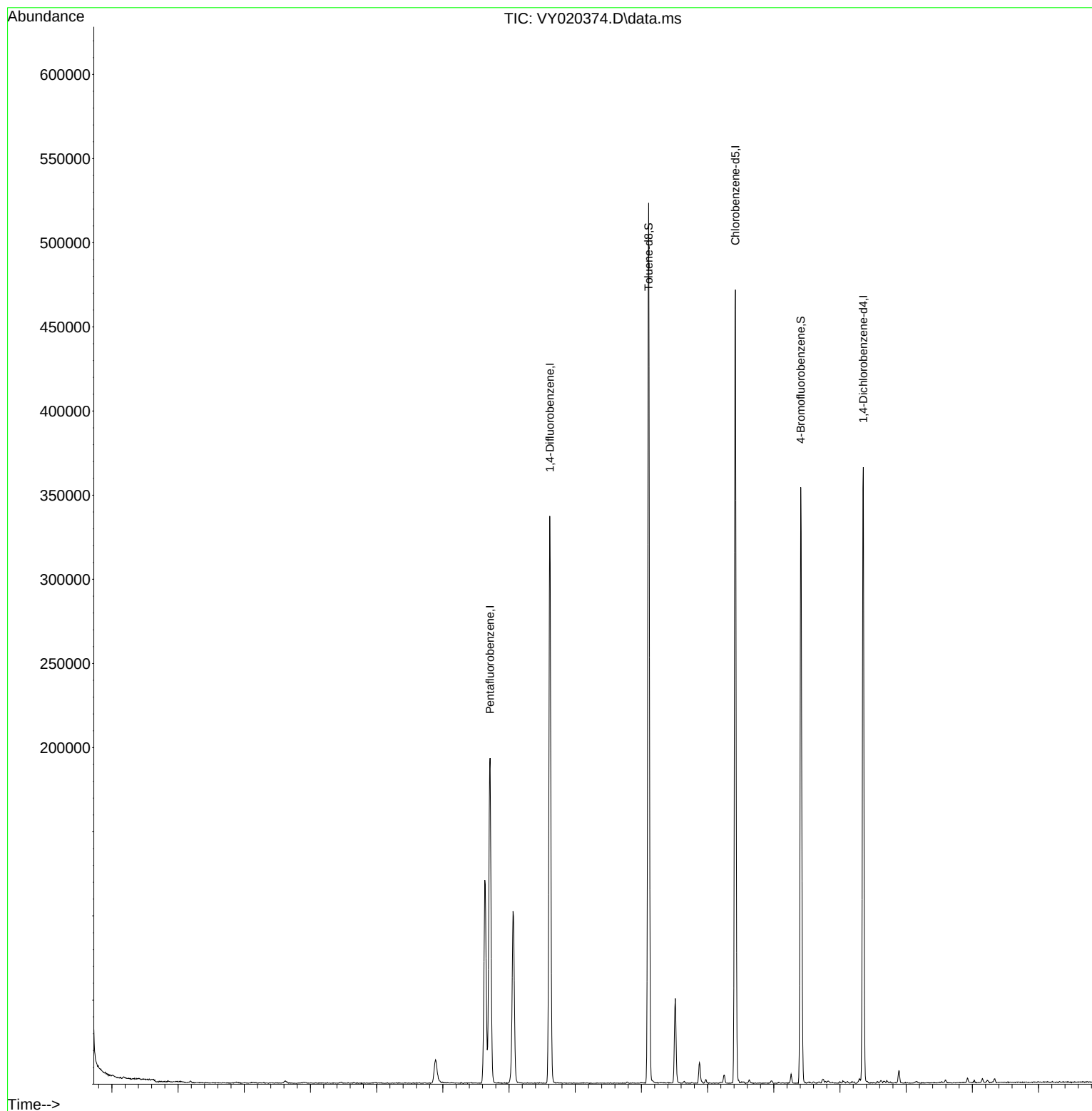
(#) = qualifier out of range (m) = manual integration (+) = signals summed

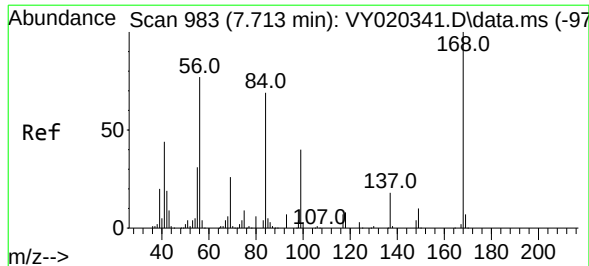


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020374.D  
Acq On : 21 Nov 2024 09:59  
Operator : SY/MD  
Sample : VY1121SBL01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1121SBL01

Quant Time: Nov 21 13:56:07 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

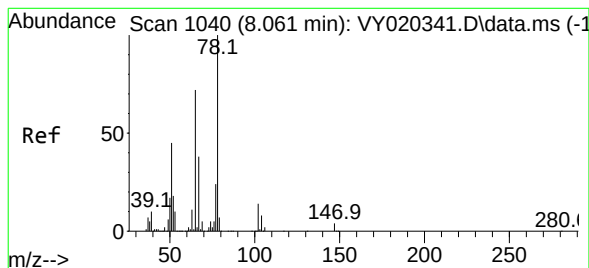
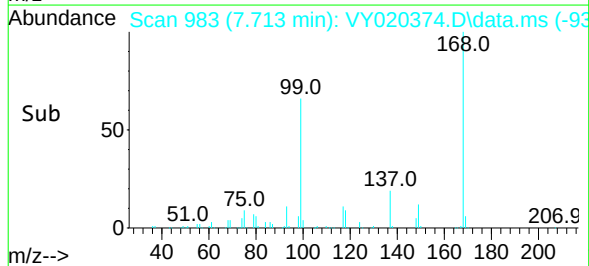
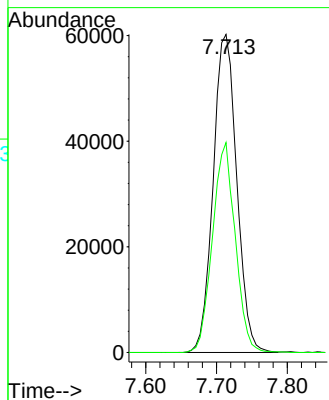
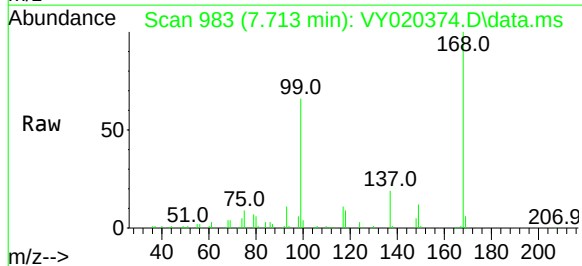




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.713 min Scan# 98  
Delta R.T. 0.000 min  
Lab File: VY020374.D  
Acq: 21 Nov 2024 09:59

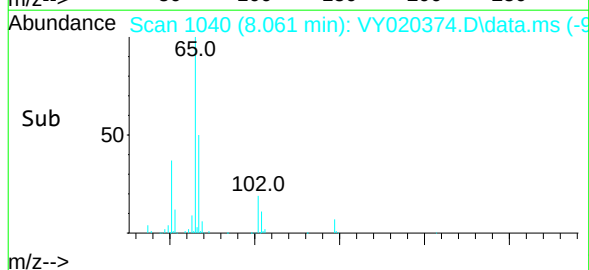
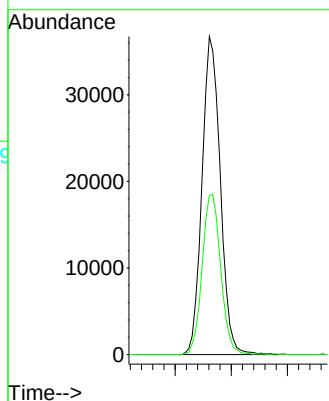
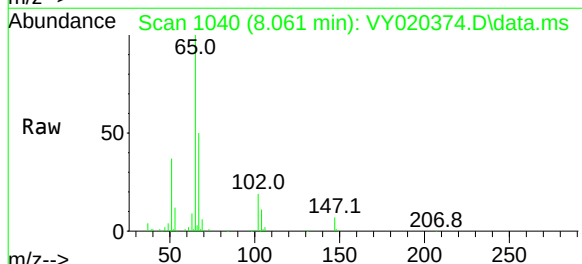
Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1121SBL01

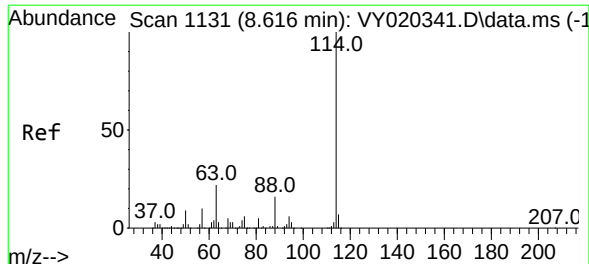
Tgt Ion:168 Resp: 139506  
Ion Ratio Lower Upper  
168 100  
99 66.0 46.6 69.8



#33  
1,2-Dichloroethane-d4  
Concen: 51.857 ug/l  
RT: 8.061 min Scan# 1040  
Delta R.T. -0.000 min  
Lab File: VY020374.D  
Acq: 21 Nov 2024 09:59

Tgt Ion: 65 Resp: 83114  
Ion Ratio Lower Upper  
65 100  
67 51.2 0.0 105.8

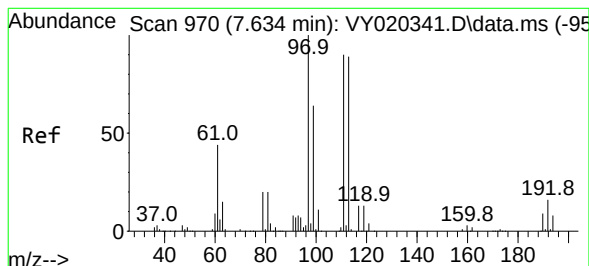
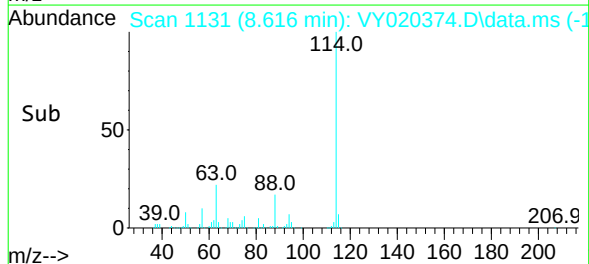
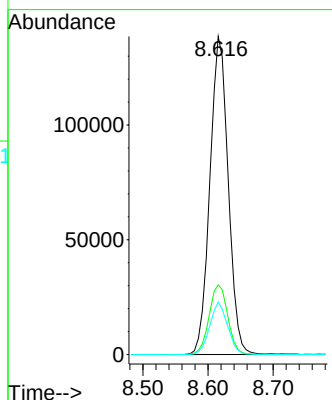
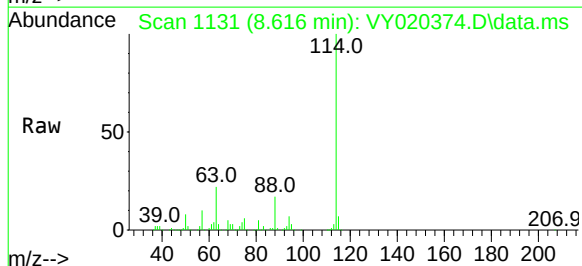




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.616 min Scan# 1131  
Delta R.T. -0.000 min  
Lab File: VY020374.D  
Acq: 21 Nov 2024 09:59

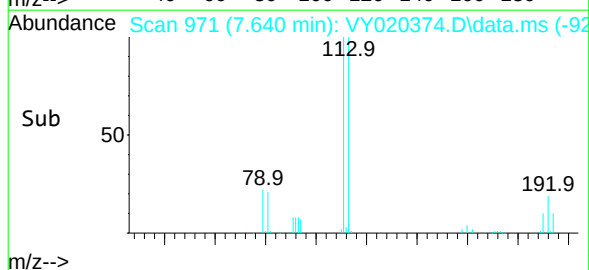
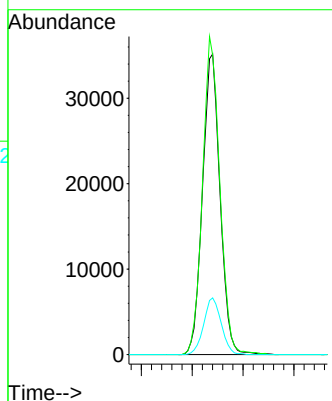
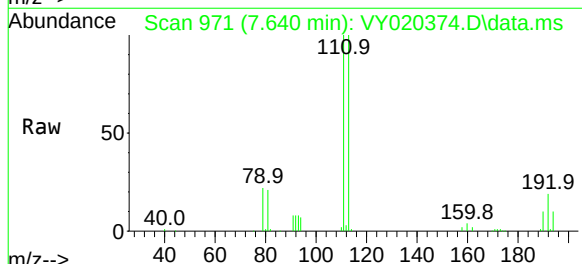
Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1121SBL01

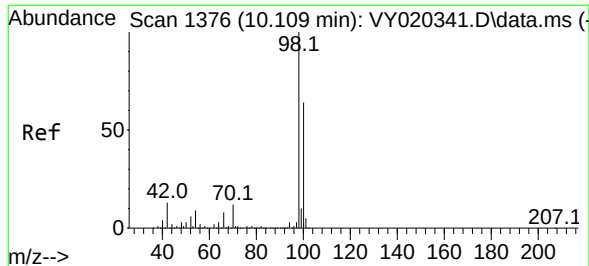
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 21.9  | 0.0   | 44.8  |
| 88      | 16.5  | 0.0   | 32.0  |



#35  
Dibromofluoromethane  
Concen: 48.450 ug/l  
RT: 7.640 min Scan# 971  
Delta R.T. 0.006 min  
Lab File: VY020374.D  
Acq: 21 Nov 2024 09:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 104.4 | 81.4  | 122.0 |
| 192     | 18.9  | 15.1  | 22.7  |





#50

Toluene-d8

Concen: 48.218 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. -0.000 min

Lab File: VY020374.D

Acq: 21 Nov 2024 09:59

Instrument :

MSVOA\_Y

ClientSampleId :

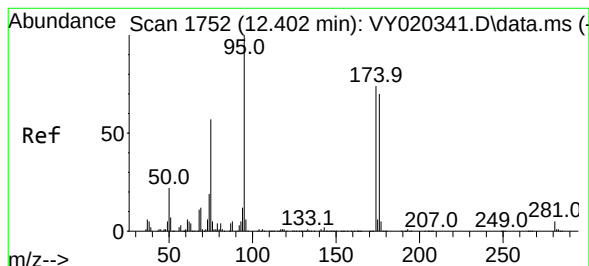
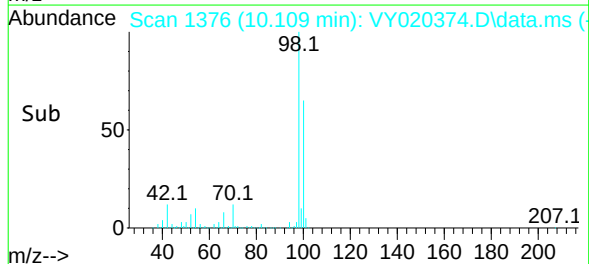
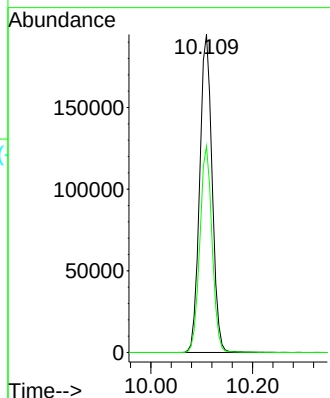
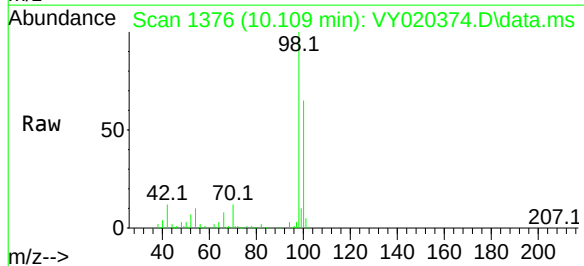
VY1121SBL01

Tgt Ion: 98 Resp: 329763

Ion Ratio Lower Upper

98 100

100 63.9 51.3 76.9



#62

4-Bromofluorobenzene

Concen: 47.324 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.006 min

Lab File: VY020374.D

Acq: 21 Nov 2024 09:59

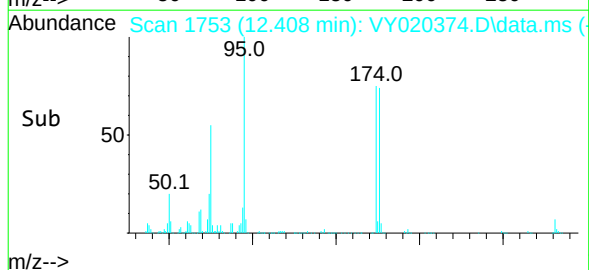
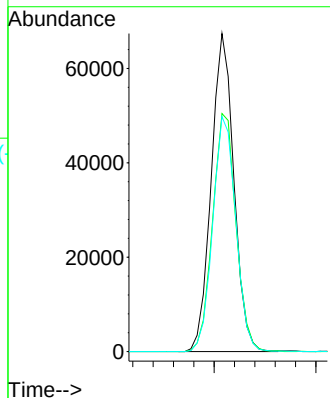
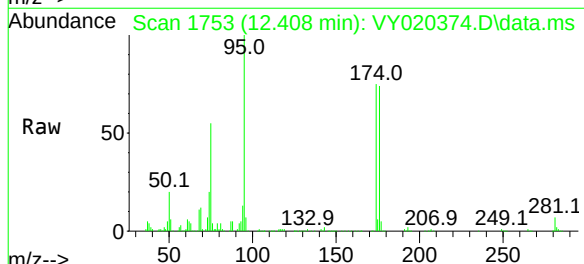
Tgt Ion: 95 Resp: 104043

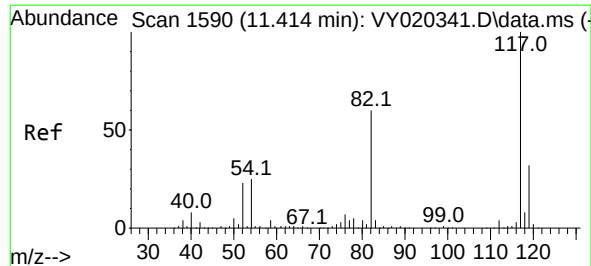
Ion Ratio Lower Upper

95 100

174 77.3 0.0 156.8

176 75.4 0.0 152.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 15

Delta R.T. 0.006 min

Lab File: VY020374.D

Acq: 21 Nov 2024 09:59

Instrument :

MSVOA\_Y

ClientSampleId :

VY1121SBL01

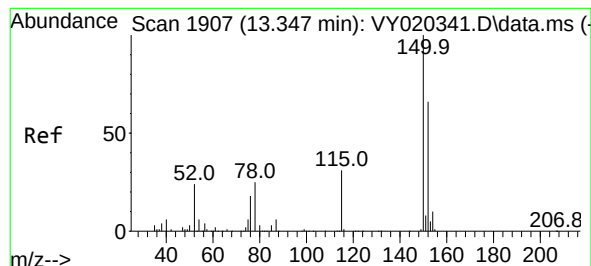
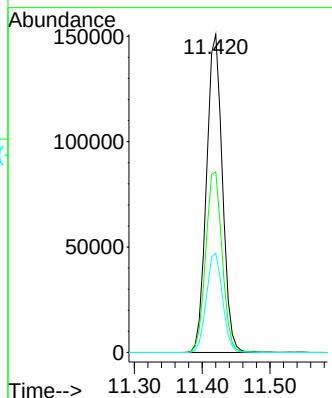
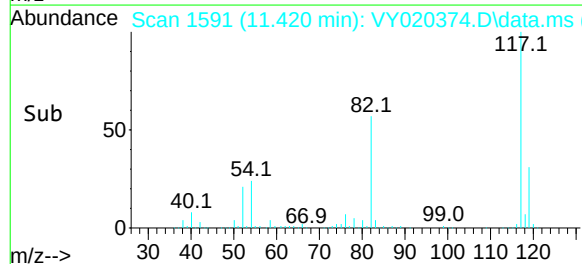
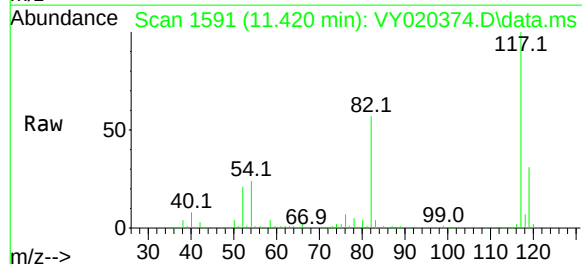
Tgt Ion:117 Resp: 245370

Ion Ratio Lower Upper

117 100

82 56.8 48.2 72.4

119 31.2 25.8 38.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY020374.D

Acq: 21 Nov 2024 09:59

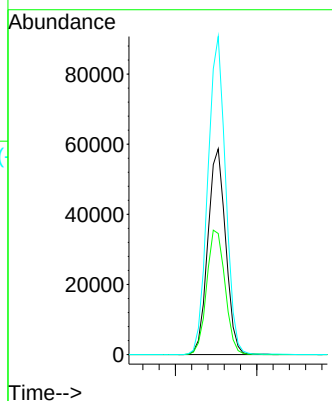
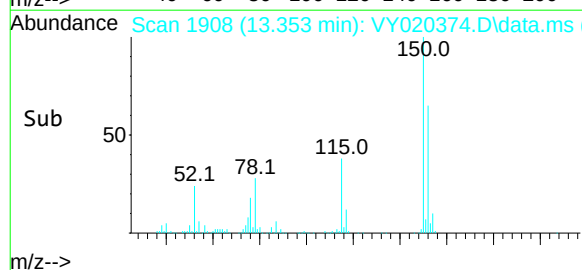
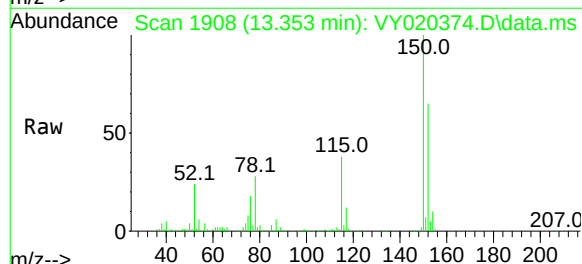
Tgt Ion:152 Resp: 89046

Ion Ratio Lower Upper

152 100

115 62.6 30.0 90.0

150 154.3 0.0 348.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020374.D  
 Acq On : 21 Nov 2024 09:59  
 Operator : SY/MD  
 Sample : VY1121SBL01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1121SBL01

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\_Y\methods\82Y111924S.M  
 Title : SW846 8260

Signal : TIC: VY020374.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 6.890       | 835           | 848         | 857          | rBV      | 14023          | 45838         | 5.14%           | 0.989%        |
| 2         | 7.634       | 961           | 970         | 976          | rBV      | 120761         | 283920        | 31.86%          | 6.127%        |
| 3         | 7.713       | 976           | 983         | 996          | rVB      | 193066         | 443131        | 49.72%          | 9.563%        |
| 4         | 8.061       | 1026          | 1040        | 1051         | rBV      | 102248         | 242886        | 27.25%          | 5.242%        |
| 5         | 8.616       | 1122          | 1131        | 1142         | rBV      | 337014         | 659966        | 74.05%          | 14.242%       |
| 6         | 10.109      | 1368          | 1376        | 1393         | rBV      | 523019         | 891259        | 100.00%         | 19.234%       |
| 7         | 10.512      | 1433          | 1442        | 1453         | rBV      | 50195          | 90808         | 10.19%          | 1.960%        |
| 8         | 10.877      | 1497          | 1502        | 1512         | rVB      | 12217          | 22092         | 2.48%           | 0.477%        |
| 9         | 11.420      | 1584          | 1591        | 1602         | rBV      | 471263         | 780231        | 87.54%          | 16.838%       |
| 10        | 12.408      | 1747          | 1753        | 1764         | rBV2     | 354121         | 591084        | 66.32%          | 12.756%       |
| 11        | 13.353      | 1901          | 1908        | 1917         | rVB      | 365341         | 570479        | 64.01%          | 12.311%       |
| 12        | 13.889      | 1989          | 1996        | 2001         | rBV      | 7330           | 12146         | 1.36%           | 0.262%        |

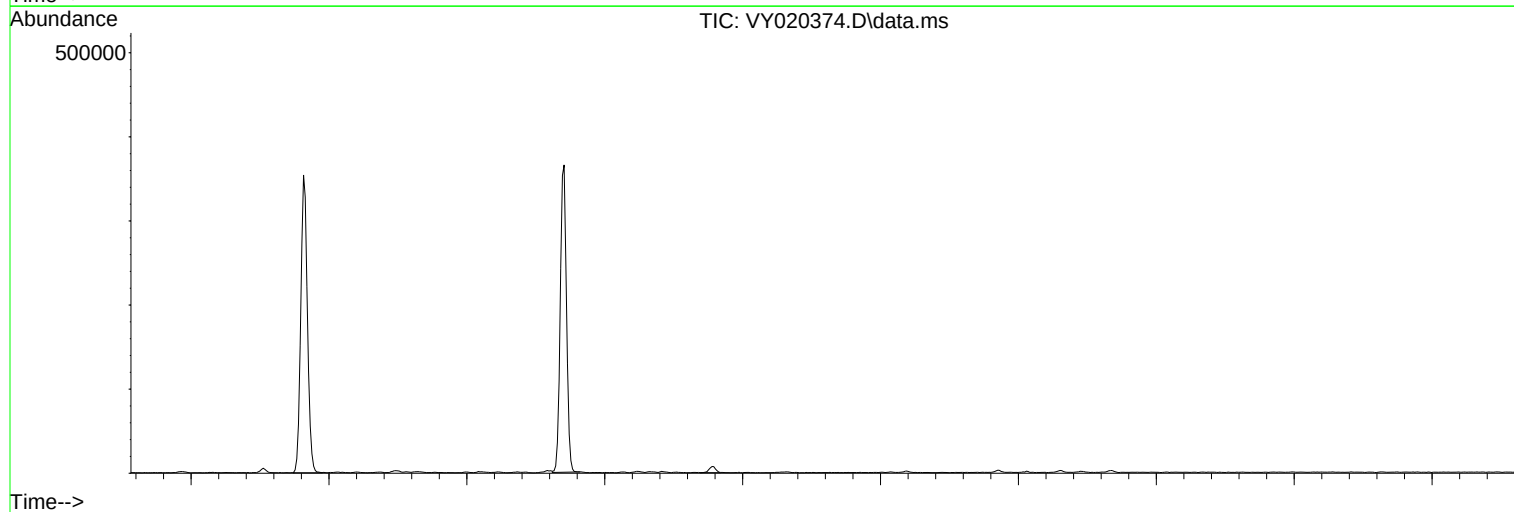
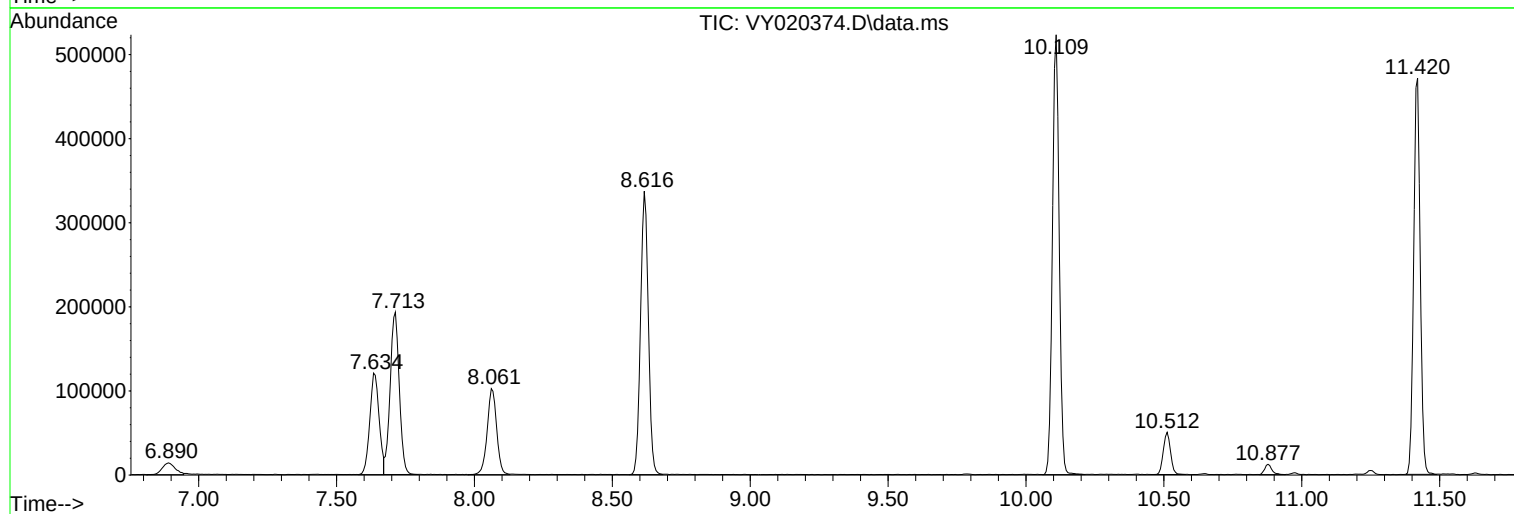
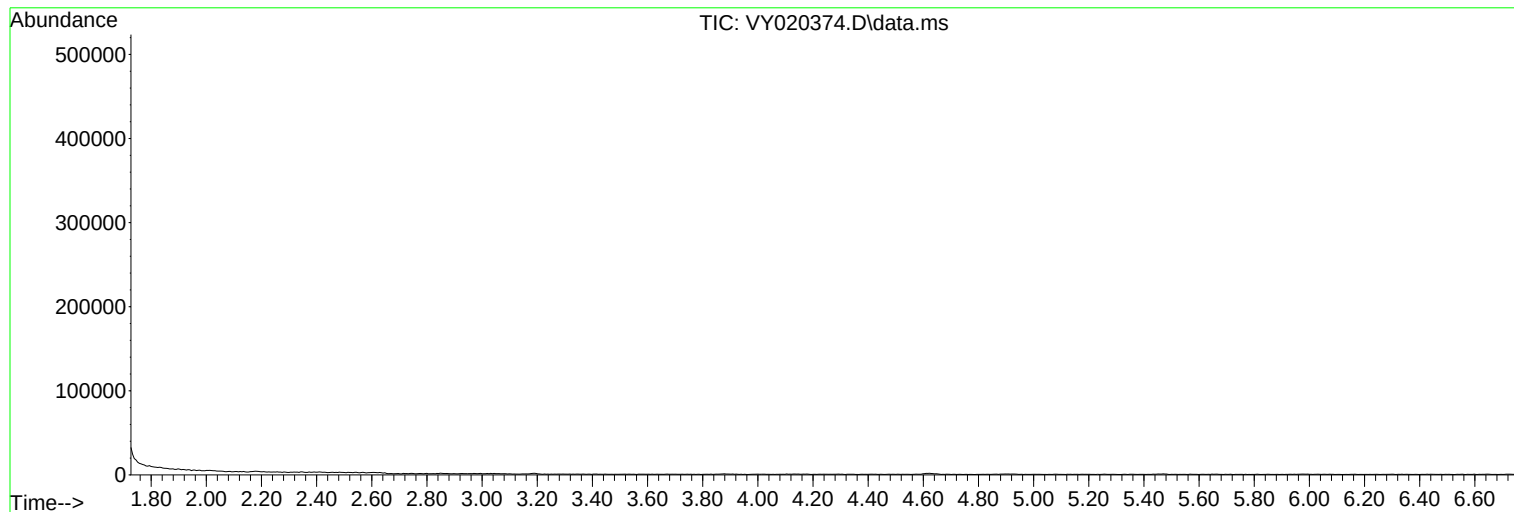
Sum of corrected areas: 4633840

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020374.D  
Acq On : 21 Nov 2024 09:59  
Operator : SY/MD  
Sample : VY1121SBL01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1121SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020374.D  
Acq On : 21 Nov 2024 09:59  
Operator : SY/MD  
Sample : VY1121SBL01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1121SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020374.D  
Acq On : 21 Nov 2024 09:59  
Operator : SY/MD  
Sample : VY1121SBL01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1121SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard-- |
|------------------|----|---------|-------|----------|-----------------------|
|                  |    |         |       |          | # RT Resp Conc        |

## Report of Analysis

|                    |                              |                 |               |
|--------------------|------------------------------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  |               |
| Client Sample ID:  | VY1122SBL01                  | SDG No.:        | P4892         |
| Lab Sample ID:     | VY1122SBL01                  | Matrix:         | SOIL          |
| Analytical Method: | SW8260                       | % Solid:        | 100           |
| Sample Wt/Vol:     | 5      Units:    g           | Final Vol:      | 5000      uL  |
| Soil Aliquot Vol:  | uL                           | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624      ID :    0.25    | Level :         | LOW           |
| Prep Method :      |                              |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020402.D        | 1         |           | 11/22/24 10:15 | VY112224      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units(Dry Weight) |
|----------------|--------------------------------|-------|-----------|------|------------|-------------------|
| <b>TARGETS</b> |                                |       |           |      |            |                   |
| 75-71-8        | Dichlorodifluoromethane        | 1.70  | U         | 1.70 | 5.00       | ug/Kg             |
| 74-87-3        | Chloromethane                  | 1.20  | U         | 1.20 | 5.00       | ug/Kg             |
| 75-01-4        | Vinyl Chloride                 | 0.77  | U         | 0.77 | 5.00       | ug/Kg             |
| 74-83-9        | Bromomethane                   | 1.00  | U         | 1.00 | 5.00       | ug/Kg             |
| 75-00-3        | Chloroethane                   | 1.00  | U         | 1.00 | 5.00       | ug/Kg             |
| 75-69-4        | Trichlorofluoromethane         | 0.91  | U         | 0.91 | 5.00       | ug/Kg             |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 1.10  | U         | 1.10 | 5.00       | ug/Kg             |
| 75-35-4        | 1,1-Dichloroethene             | 0.78  | U         | 0.78 | 5.00       | ug/Kg             |
| 67-64-1        | Acetone                        | 6.20  | U         | 6.20 | 25.0       | ug/Kg             |
| 75-15-0        | Carbon Disulfide               | 1.30  | U         | 1.30 | 5.00       | ug/Kg             |
| 1634-04-4      | Methyl tert-butyl Ether        | 0.67  | U         | 0.67 | 5.00       | ug/Kg             |
| 79-20-9        | Methyl Acetate                 | 1.80  | U         | 1.80 | 5.00       | ug/Kg             |
| 75-09-2        | Methylene Chloride             | 3.40  | U         | 3.40 | 10.0       | ug/Kg             |
| 156-60-5       | trans-1,2-Dichloroethene       | 0.84  | U         | 0.84 | 5.00       | ug/Kg             |
| 75-34-3        | 1,1-Dichloroethane             | 0.63  | U         | 0.63 | 5.00       | ug/Kg             |
| 110-82-7       | Cyclohexane                    | 0.69  | U         | 0.69 | 5.00       | ug/Kg             |
| 78-93-3        | 2-Butanone                     | 5.70  | U         | 5.70 | 25.0       | ug/Kg             |
| 56-23-5        | Carbon Tetrachloride           | 0.87  | U         | 0.87 | 5.00       | ug/Kg             |
| 156-59-2       | cis-1,2-Dichloroethene         | 0.61  | U         | 0.61 | 5.00       | ug/Kg             |
| 74-97-5        | Bromochloromethane             | 2.40  | U         | 2.40 | 5.00       | ug/Kg             |
| 67-66-3        | Chloroform                     | 0.67  | U         | 0.67 | 5.00       | ug/Kg             |
| 71-55-6        | 1,1,1-Trichloroethane          | 0.78  | U         | 0.78 | 5.00       | ug/Kg             |
| 108-87-2       | Methylcyclohexane              | 0.87  | U         | 0.87 | 5.00       | ug/Kg             |
| 71-43-2        | Benzene                        | 0.72  | U         | 0.72 | 5.00       | ug/Kg             |
| 107-06-2       | 1,2-Dichloroethane             | 0.61  | U         | 0.61 | 5.00       | ug/Kg             |
| 79-01-6        | Trichloroethene                | 0.75  | U         | 0.75 | 5.00       | ug/Kg             |
| 78-87-5        | 1,2-Dichloropropane            | 0.66  | U         | 0.66 | 5.00       | ug/Kg             |
| 75-27-4        | Bromodichloromethane           | 0.56  | U         | 0.56 | 5.00       | ug/Kg             |
| 108-10-1       | 4-Methyl-2-Pentanone           | 4.40  | U         | 4.40 | 25.0       | ug/Kg             |
| 108-88-3       | Toluene                        | 0.67  | U         | 0.67 | 5.00       | ug/Kg             |

## Report of Analysis

|                    |                              |                 |       |
|--------------------|------------------------------|-----------------|-------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: |       |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  |       |
| Client Sample ID:  | VY1122SBL01                  | SDG No.:        | P4892 |
| Lab Sample ID:     | VY1122SBL01                  | Matrix:         | SOIL  |
| Analytical Method: | SW8260                       | % Solid:        | 100   |
| Sample Wt/Vol:     | 5                            | Units:          | g     |
| Soil Aliquot Vol:  |                              |                 | uL    |
| GC Column:         | RXI-624                      | ID :            | 0.25  |
| Prep Method :      |                              | Level :         | LOW   |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VY020402.D        | 1         |           | 11/22/24 10:15 | VY112224      |

| CAS Number                | Parameter                   | Conc.  | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-----------------------------|--------|-----------|---------------------|------------|-------------------|
| 10061-02-6                | t-1,3-Dichloropropene       | 0.60   | U         | 0.60                | 5.00       | ug/Kg             |
| 10061-01-5                | cis-1,3-Dichloropropene     | 0.57   | U         | 0.57                | 5.00       | ug/Kg             |
| 79-00-5                   | 1,1,2-Trichloroethane       | 0.84   | U         | 0.84                | 5.00       | ug/Kg             |
| 591-78-6                  | 2-Hexanone                  | 4.80   | U         | 4.80                | 25.0       | ug/Kg             |
| 124-48-1                  | Dibromochloromethane        | 0.65   | U         | 0.65                | 5.00       | ug/Kg             |
| 106-93-4                  | 1,2-Dibromoethane           | 0.79   | U         | 0.79                | 5.00       | ug/Kg             |
| 127-18-4                  | Tetrachloroethene           | 0.89   | U         | 0.89                | 5.00       | ug/Kg             |
| 108-90-7                  | Chlorobenzene               | 0.74   | U         | 0.74                | 5.00       | ug/Kg             |
| 100-41-4                  | Ethyl Benzene               | 0.62   | U         | 0.62                | 5.00       | ug/Kg             |
| 179601-23-1               | m/p-Xylenes                 | 1.40   | U         | 1.40                | 10.0       | ug/Kg             |
| 95-47-6                   | o-Xylene                    | 0.70   | U         | 0.70                | 5.00       | ug/Kg             |
| 100-42-5                  | Styrene                     | 0.60   | U         | 0.60                | 5.00       | ug/Kg             |
| 75-25-2                   | Bromoform                   | 0.81   | U         | 0.81                | 5.00       | ug/Kg             |
| 98-82-8                   | Isopropylbenzene            | 0.67   | U         | 0.67                | 5.00       | ug/Kg             |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane   | 1.10   | U         | 1.10                | 5.00       | ug/Kg             |
| 541-73-1                  | 1,3-Dichlorobenzene         | 0.74   | U         | 0.74                | 5.00       | ug/Kg             |
| 106-46-7                  | 1,4-Dichlorobenzene         | 0.80   | U         | 0.80                | 5.00       | ug/Kg             |
| 95-50-1                   | 1,2-Dichlorobenzene         | 0.59   | U         | 0.59                | 5.00       | ug/Kg             |
| 96-12-8                   | 1,2-Dibromo-3-Chloropropane | 1.60   | U         | 1.60                | 5.00       | ug/Kg             |
| 120-82-1                  | 1,2,4-Trichlorobenzene      | 0.79   | U         | 0.79                | 5.00       | ug/Kg             |
| 87-61-6                   | 1,2,3-Trichlorobenzene      | 0.78   | U         | 0.78                | 5.00       | ug/Kg             |
| <b>SURROGATES</b>         |                             |        |           |                     |            |                   |
| 17060-07-0                | 1,2-Dichloroethane-d4       | 47.6   |           | 70 (50) - 130 (163) | 95%        | SPK: 50           |
| 1868-53-7                 | Dibromofluoromethane        | 48.4   |           | 70 (54) - 130 (147) | 97%        | SPK: 50           |
| 2037-26-5                 | Toluene-d8                  | 47.6   |           | 70 (58) - 130 (134) | 95%        | SPK: 50           |
| 460-00-4                  | 4-Bromofluorobenzene        | 45.3   |           | 70 (29) - 130 (146) | 91%        | SPK: 50           |
| <b>INTERNAL STANDARDS</b> |                             |        |           |                     |            |                   |
| 363-72-4                  | Pentafluorobenzene          | 161000 | 7.72      |                     |            |                   |
| 540-36-3                  | 1,4-Difluorobenzene         | 307000 | 8.622     |                     |            |                   |
| 3114-55-4                 | Chlorobenzene-d5            | 269000 | 11.426    |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4      | 94800  | 13.359    |                     |            |                   |

## Report of Analysis

|                    |                              |           |                 |               |
|--------------------|------------------------------|-----------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  |           | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 |           | Date Received:  |               |
| Client Sample ID:  | VY1122SBL01                  |           | SDG No.:        | P4892         |
| Lab Sample ID:     | VY1122SBL01                  |           | Matrix:         | SOIL          |
| Analytical Method: | SW8260                       |           | % Solid:        | 100           |
| Sample Wt/Vol:     | 5                            | Units: g  | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  |                              | uL        | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624                      | ID : 0.25 | Level :         | LOW           |
| Prep Method :      |                              |           |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020402.D        | 1         |           | 11/22/24 10:15 | VY112224      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|------------|-------|
|------------|-----------|-------|-----------|-----|------------|-------|

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\_Y\Data\VY112224\  
 Data File : VY020402.D  
 Acq On : 22 Nov 2024 10:15  
 Operator : SY/MD  
 Sample : VY1122SBL01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1122SBL01

Quant Time: Nov 22 23:56:34 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.720  | 168  | 161234   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.622  | 114  | 306842   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.426 | 117  | 269008   | 50.000 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 13.359 | 152  | 94757    | 50.000 | ug/l  | 0.01     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 33) 1,2-Dichloroethane-d4   | 8.073  | 65    | 88239    | 47.635   | ug/l | 0.01    |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 95.280% |
| 35) Dibromofluoromethane    | 7.646  | 113   | 95193    | 48.381   | ug/l | 0.01    |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 96.760% |
| 50) Toluene-d8              | 10.115 | 98    | 368920   | 47.599   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 95.200% |
| 62) 4-Bromofluorobenzene    | 12.414 | 95    | 112970   | 45.341   | ug/l | 0.01    |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 90.680% |

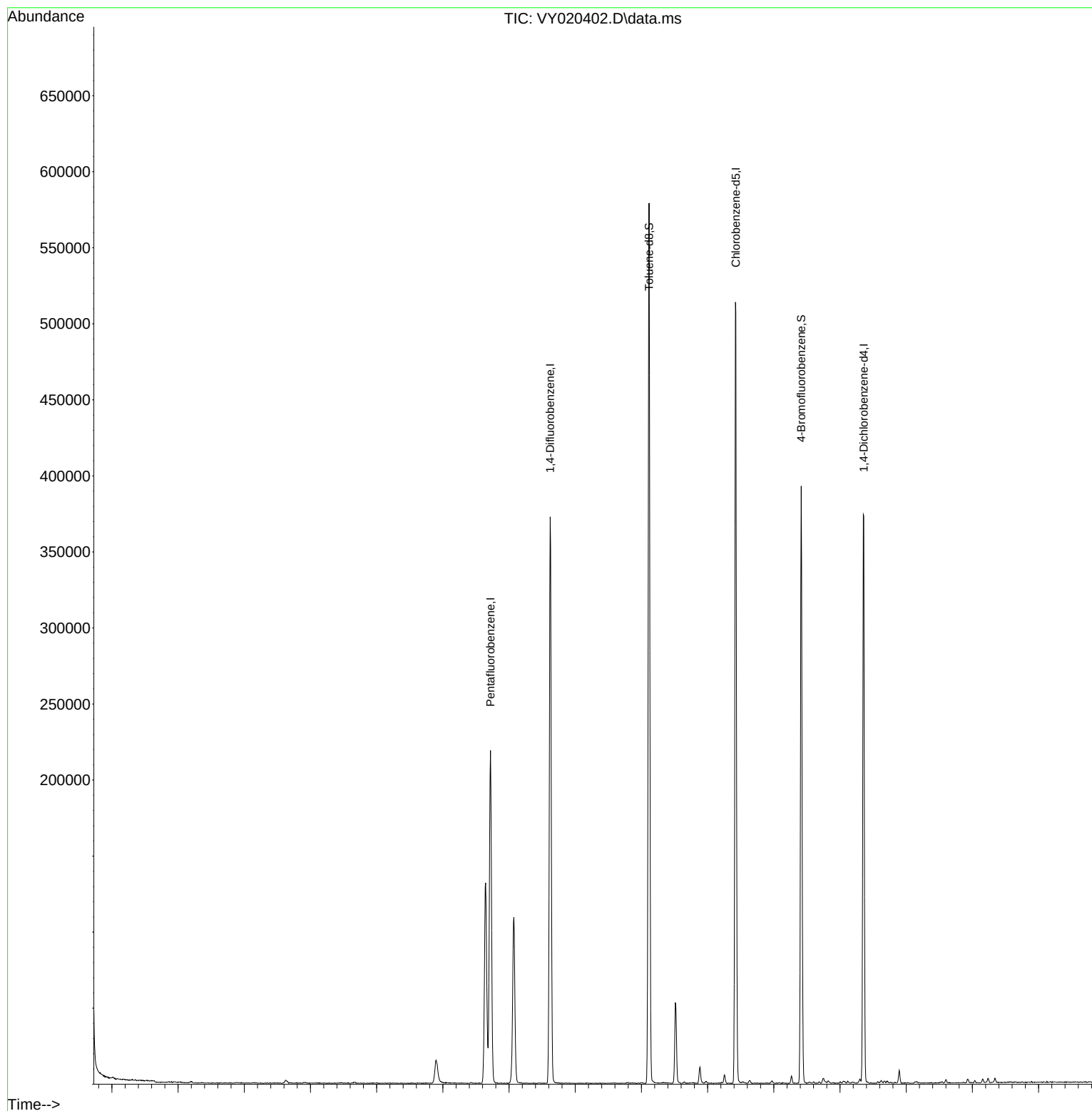
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

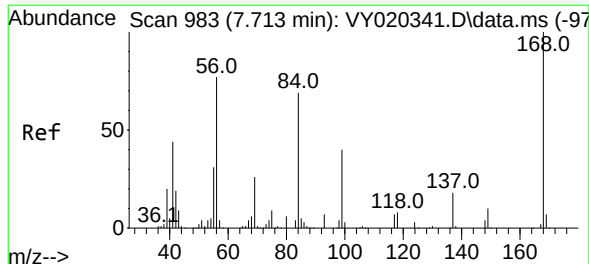
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020402.D  
Acq On : 22 Nov 2024 10:15  
Operator : SY/MD  
Sample : VY1122SBL01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1122SBL01

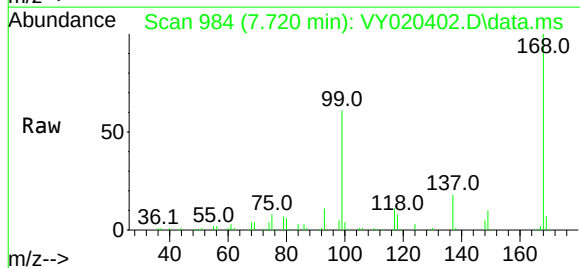
Quant Time: Nov 22 23:56:34 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration



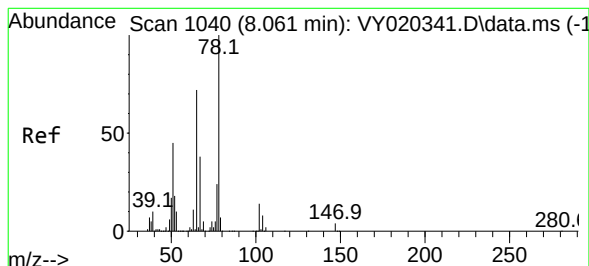
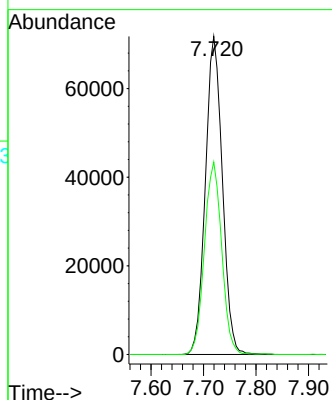
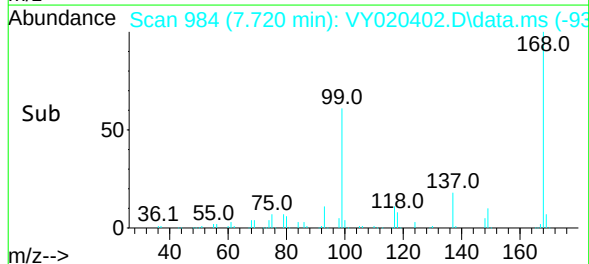


#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 7.720 min Scan# 98  
Delta R.T. 0.006 min  
Lab File: VY020402.D  
Acq: 22 Nov 2024 10:15

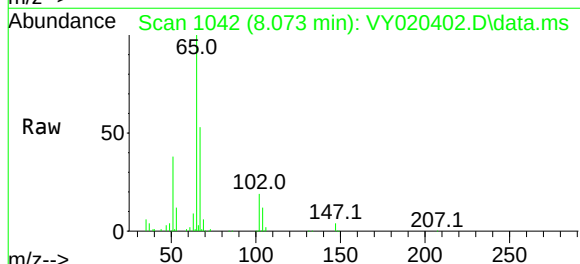
Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1122SBL01



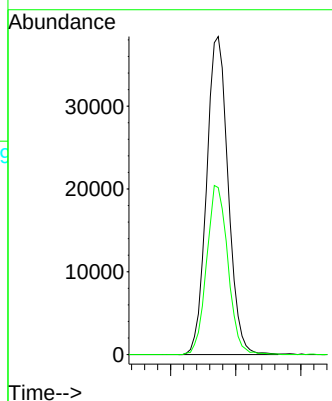
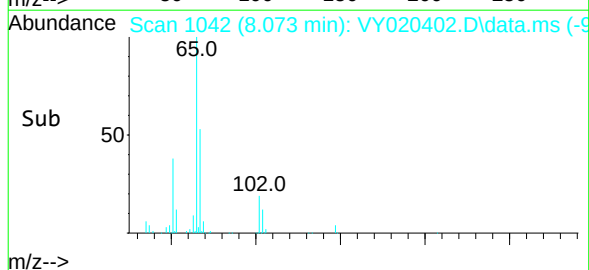
Tgt Ion: 168 Resp: 161234  
Ion Ratio Lower Upper  
168 100  
99 60.5 46.6 69.8

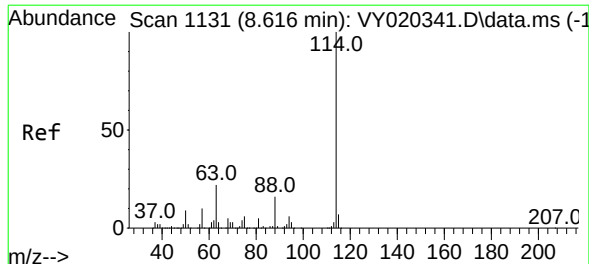


#33  
1,2-Dichloroethane-d4  
Concen: 47.635 ug/l  
RT: 8.073 min Scan# 1042  
Delta R.T. 0.012 min  
Lab File: VY020402.D  
Acq: 22 Nov 2024 10:15



Tgt Ion: 65 Resp: 88239  
Ion Ratio Lower Upper  
65 100  
67 52.6 0.0 105.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY020402.D

Acq: 22 Nov 2024 10:15

Instrument :

MSVOA\_Y

ClientSampleId :

VY1122SBL01

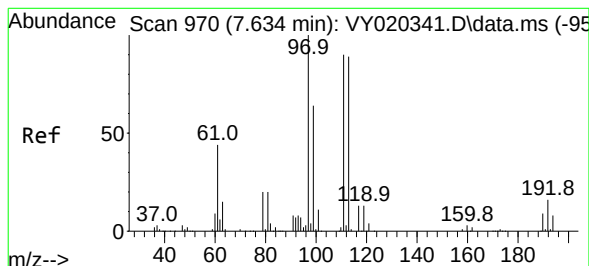
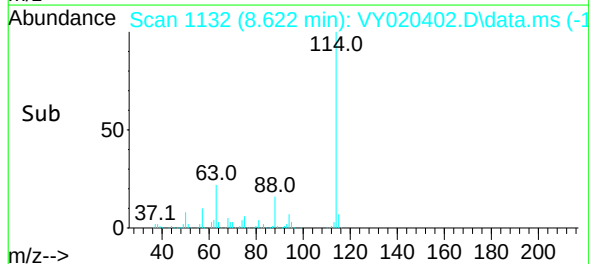
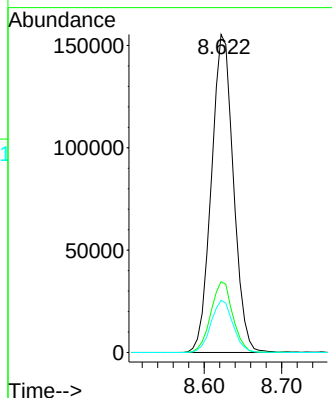
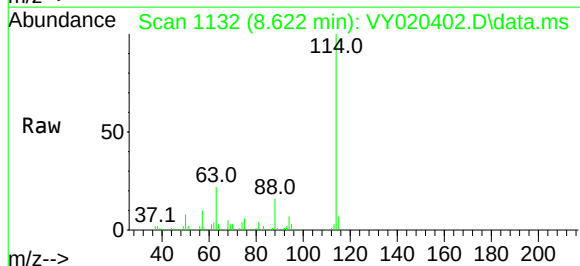
Tgt Ion:114 Resp: 306842

Ion Ratio Lower Upper

114 100

63 22.3 0.0 44.8

88 16.4 0.0 32.0



#35

Dibromofluoromethane

Concen: 48.381 ug/l

RT: 7.646 min Scan# 972

Delta R.T. 0.012 min

Lab File: VY020402.D

Acq: 22 Nov 2024 10:15

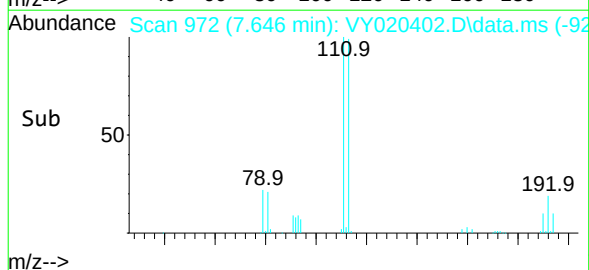
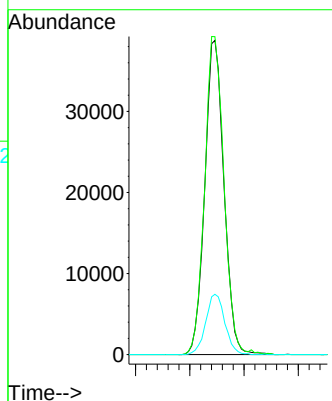
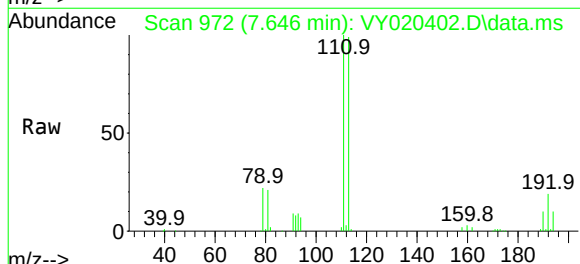
Tgt Ion:113 Resp: 95193

Ion Ratio Lower Upper

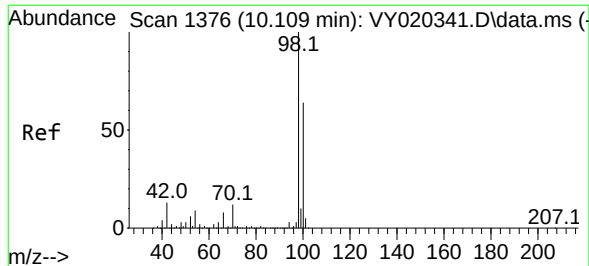
113 100

111 101.4 81.4 122.0

192 19.2 15.1 22.7







#50

Toluene-d8

Concen: 47.599 ug/l

RT: 10.115 min Scan# 1376

Delta R.T. 0.006 min

Lab File: VY020402.D

Acq: 22 Nov 2024 10:15

Instrument :

MSVOA\_Y

ClientSampleId :

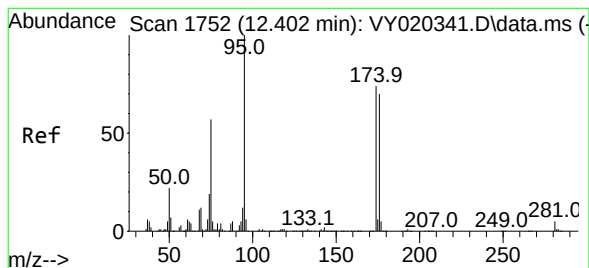
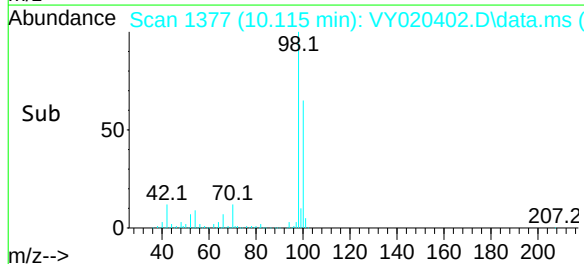
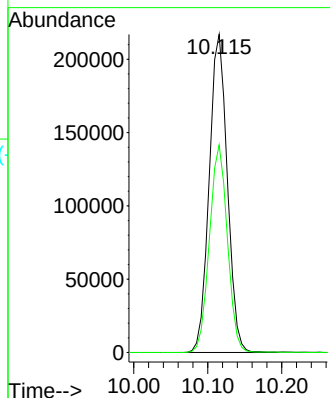
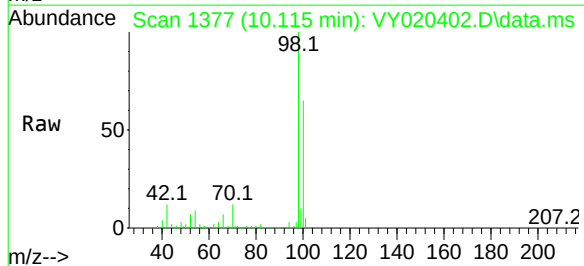
VY1122SBL01

Tgt Ion: 98 Resp: 368920

Ion Ratio Lower Upper

98 100

100 64.6 51.3 76.9



#62

4-Bromofluorobenzene

Concen: 45.341 ug/l

RT: 12.414 min Scan# 1754

Delta R.T. 0.012 min

Lab File: VY020402.D

Acq: 22 Nov 2024 10:15

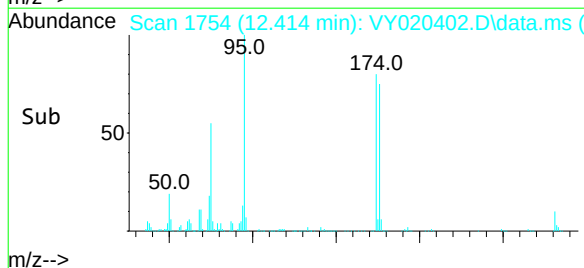
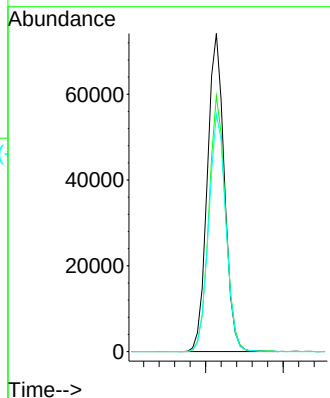
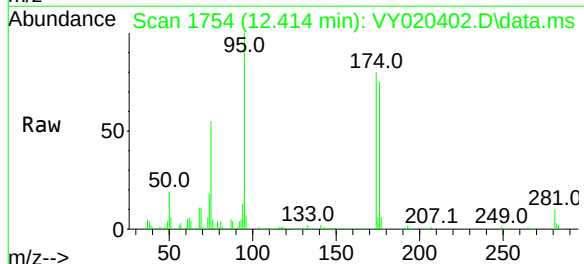
Tgt Ion: 95 Resp: 112970

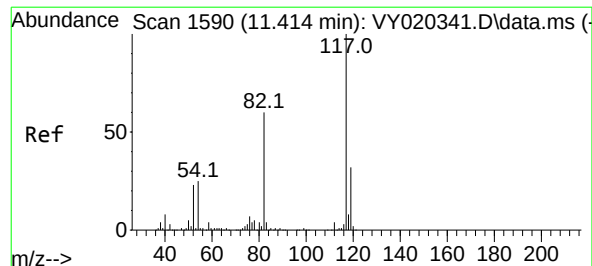
Ion Ratio Lower Upper

95 100

174 78.8 0.0 156.8

176 75.2 0.0 152.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.426 min Scan# 15

Delta R.T. 0.012 min

Lab File: VY020402.D

Acq: 22 Nov 2024 10:15

Instrument :

MSVOA\_Y

ClientSampleId :

VY1122SBL01

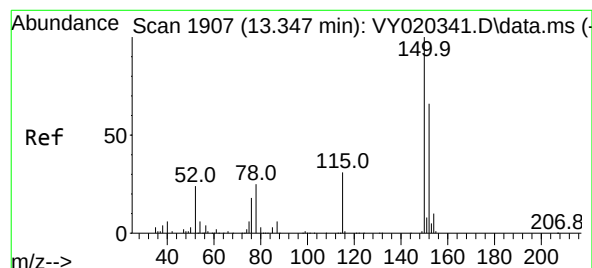
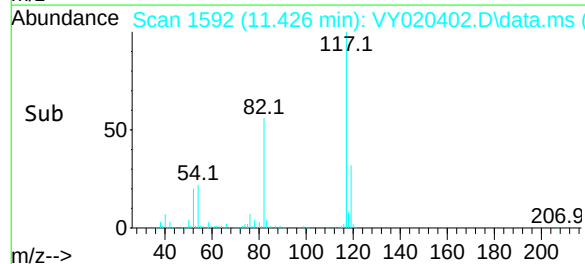
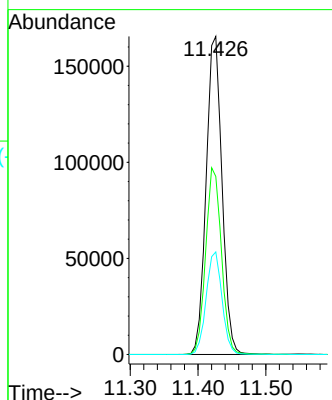
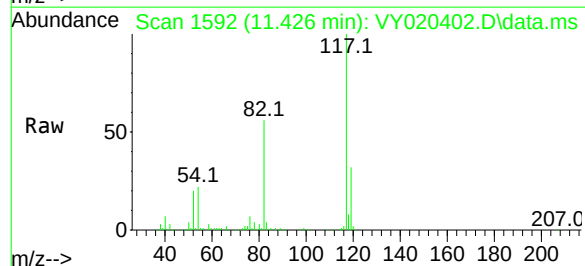
Tgt Ion:117 Resp: 269008

Ion Ratio Lower Upper

117 100

82 56.0 48.2 72.4

119 32.2 25.8 38.8



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.359 min Scan# 1909

Delta R.T. 0.012 min

Lab File: VY020402.D

Acq: 22 Nov 2024 10:15

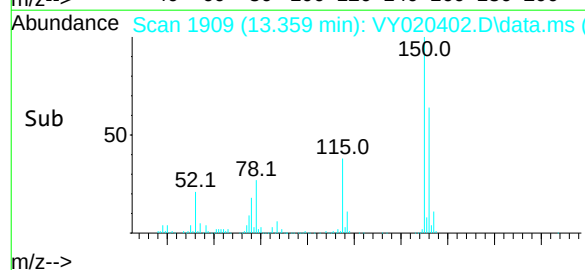
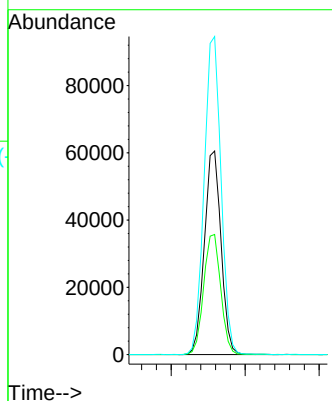
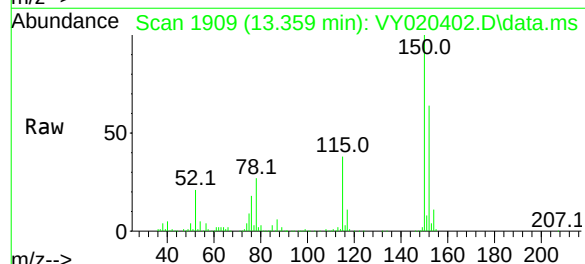
Tgt Ion:152 Resp: 94757

Ion Ratio Lower Upper

152 100

115 60.4 30.0 90.0

150 158.3 0.0 348.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020402.D  
Acq On : 22 Nov 2024 10:15  
Operator : SY/MD  
Sample : VY1122SBL01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1122SBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M

Title : SW846 8260

Signal : TIC: VY020402.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 6.896       | 837           | 849         | 860          | rBV2     | 15164          | 49393         | 5.01%           | 0.975%        |
| 2         | 7.646       | 962           | 972         | 978          | rBV      | 131653         | 323040        | 32.75%          | 6.375%        |
| 3         | 7.720       | 978           | 984         | 997          | rVB      | 218762         | 495760        | 50.26%          | 9.783%        |
| 4         | 8.073       | 1030          | 1042        | 1052         | rBV      | 109046         | 257161        | 26.07%          | 5.075%        |
| 5         | 8.622       | 1124          | 1132        | 1145         | rBV      | 372459         | 737886        | 74.81%          | 14.561%       |
| 6         | 10.115      | 1369          | 1377        | 1386         | rBV      | 578837         | 986383        | 100.00%         | 19.465%       |
| 7         | 10.512      | 1435          | 1442        | 1456         | rVB      | 52910          | 100548        | 10.19%          | 1.984%        |
| 8         | 10.884      | 1498          | 1503        | 1512         | rBV      | 10612          | 19038         | 1.93%           | 0.376%        |
| 9         | 11.420      | 1584          | 1591        | 1604         | rBV      | 513727         | 848917        | 86.06%          | 16.752%       |
| 10        | 12.414      | 1747          | 1754        | 1765         | rBV2     | 392586         | 640465        | 64.93%          | 12.639%       |
| 11        | 13.353      | 1902          | 1908        | 1917         | rVB      | 373217         | 595680        | 60.39%          | 11.755%       |
| 12        | 13.895      | 1990          | 1997        | 2002         | rVB      | 8385           | 13200         | 1.34%           | 0.260%        |

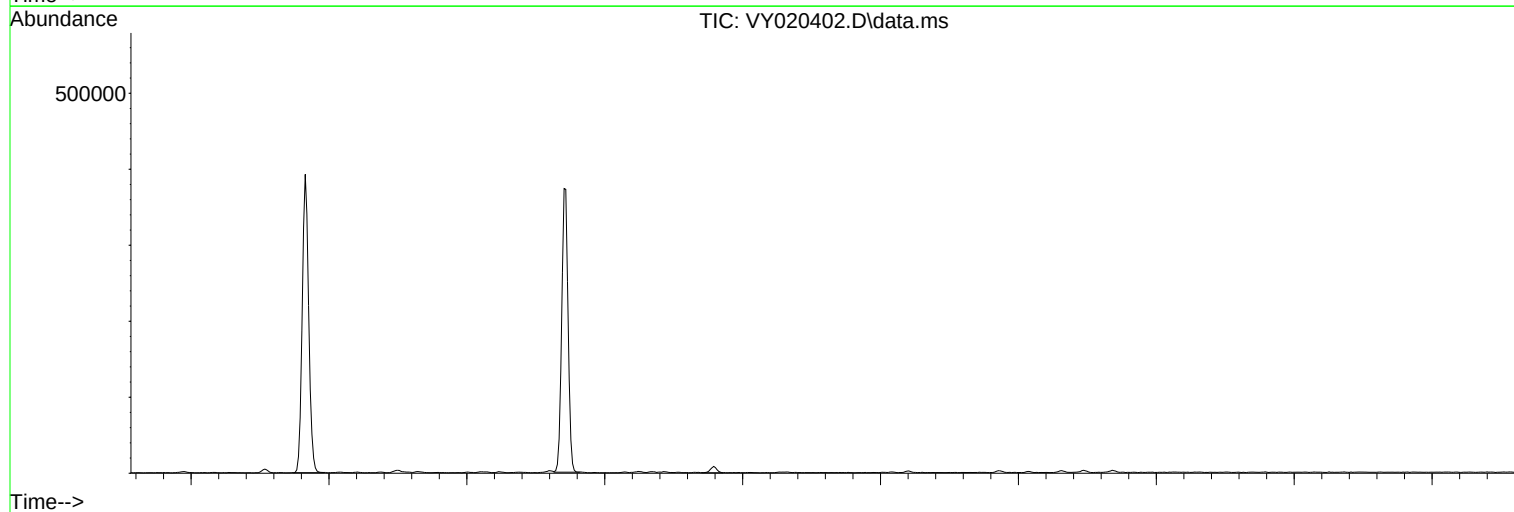
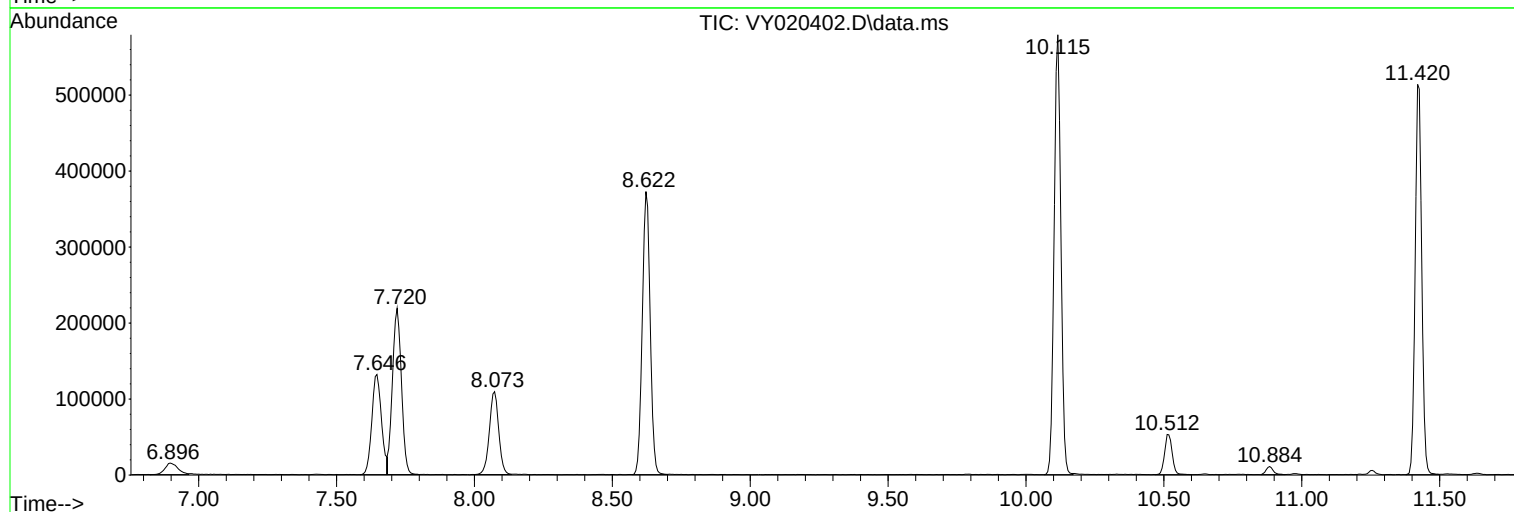
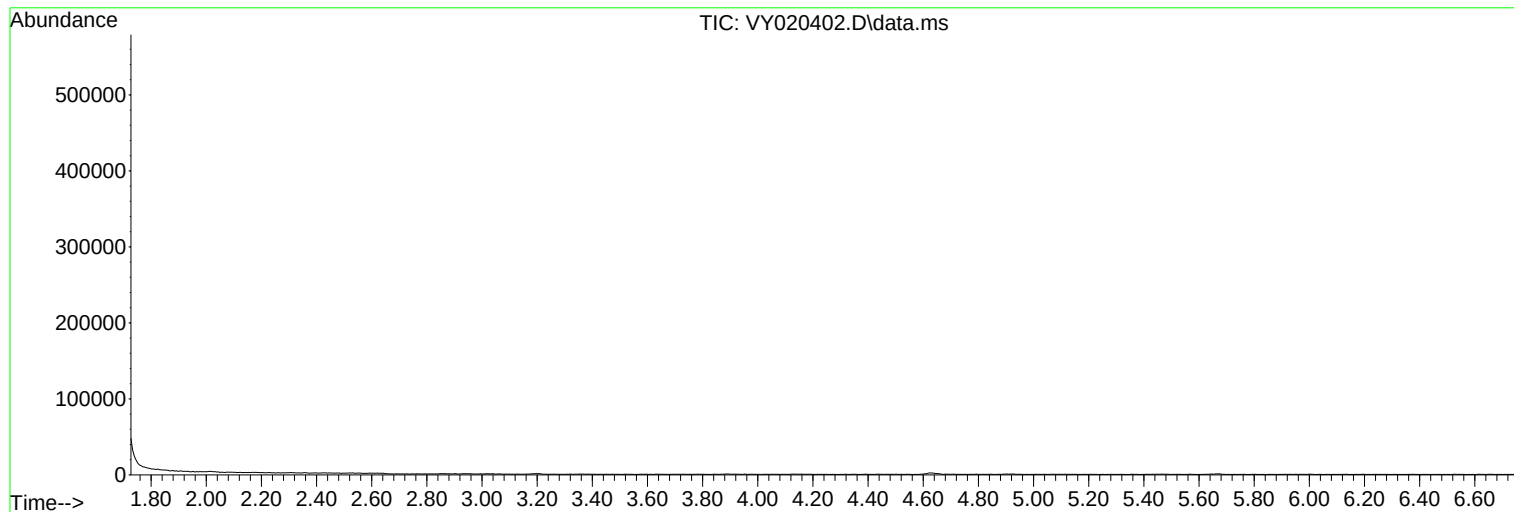
Sum of corrected areas: 5067471

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020402.D  
Acq On : 22 Nov 2024 10:15  
Operator : SY/MD  
Sample : VY1122SBL01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1122SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020402.D  
Acq On : 22 Nov 2024 10:15  
Operator : SY/MD  
Sample : VY1122SBL01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1122SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

\*\*\*\*\*

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020402.D  
Acq On : 22 Nov 2024 10:15  
Operator : SY/MD  
Sample : VY1122SBL01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1122SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260

TIC Library : C:\Database\NIST20.L  
TIC Integration Parameters: LSCINT.P

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard-- |
|------------------|----|---------|-------|----------|-----------------------|
|                  |    |         |       |          | # RT Resp Conc        |

## Report of Analysis

|                    |                              |                 |               |
|--------------------|------------------------------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  |               |
| Client Sample ID:  | VN1120WBS02                  | SDG No.:        | P4892         |
| Lab Sample ID:     | VN1120WBS02                  | Matrix:         | Water         |
| Analytical Method: | SW8260                       | % Solid:        | 0             |
| Sample Wt/Vol:     | 5      Units:    mL          | Final Vol:      | 5000      uL  |
| Soil Aliquot Vol:  | uL                           | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624      ID :    0.25    | Level :         | LOW           |
| Prep Method :      |                              |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN084964.D        | 1         |           | 11/20/24 13:20 | VN112024      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |            |       |
| 75-71-8        | Dichlorodifluoromethane        | 20.6  |           | 0.21 | 1.00       | ug/L  |
| 74-87-3        | Chloromethane                  | 17.8  |           | 0.35 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 19.3  |           | 0.34 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 20.1  |           | 1.40 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 19.2  |           | 0.56 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 19.8  |           | 0.34 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 19.6  |           | 0.25 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 19.0  |           | 0.26 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 110   |           | 1.40 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 17.8  |           | 0.32 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 21.8  |           | 0.16 | 1.00       | ug/L  |
| 79-20-9        | Methyl Acetate                 | 19.7  |           | 0.60 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 20.2  |           | 0.32 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 19.2  |           | 0.25 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 19.8  |           | 0.23 | 1.00       | ug/L  |
| 110-82-7       | Cyclohexane                    | 18.8  |           | 1.60 | 5.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 120   |           | 1.30 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 20.8  |           | 0.25 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 20.1  |           | 0.25 | 1.00       | ug/L  |
| 74-97-5        | Bromochloromethane             | 21.8  |           | 0.18 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 20.6  |           | 0.26 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 20.0  |           | 0.19 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 20.6  |           | 0.19 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 19.8  |           | 0.16 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 21.4  |           | 0.24 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 19.6  |           | 0.32 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 20.7  |           | 0.19 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 20.2  |           | 0.24 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 130   |           | 0.75 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 20.7  |           | 0.18 | 1.00       | ug/L  |

## Report of Analysis

|                    |                              |        |      |                 |               |
|--------------------|------------------------------|--------|------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  |        |      | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 |        |      | Date Received:  |               |
| Client Sample ID:  | VN1120WBS02                  |        |      | SDG No.:        | P4892         |
| Lab Sample ID:     | VN1120WBS02                  |        |      | Matrix:         | Water         |
| Analytical Method: | SW8260                       |        |      | % Solid:        | 0             |
| Sample Wt/Vol:     | 5                            | Units: | mL   | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  |                              |        | uL   | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624                      | ID :   | 0.25 | Level :         | LOW           |
| Prep Method :      |                              |        |      |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN084964.D        | 1         |           | 11/20/24 13:20 | VN112024      |

| CAS Number                | Parameter                   | Conc.  | Qualifier | MDL                 | LOQ / CRQL | Units   |
|---------------------------|-----------------------------|--------|-----------|---------------------|------------|---------|
| 10061-02-6                | t-1,3-Dichloropropene       | 19.4   |           | 0.21                | 1.00       | ug/L    |
| 10061-01-5                | cis-1,3-Dichloropropene     | 20.2   |           | 0.18                | 1.00       | ug/L    |
| 79-00-5                   | 1,1,2-Trichloroethane       | 21.9   |           | 0.21                | 1.00       | ug/L    |
| 591-78-6                  | 2-Hexanone                  | 130    |           | 1.10                | 5.00       | ug/L    |
| 124-48-1                  | Dibromochloromethane        | 21.5   |           | 0.18                | 1.00       | ug/L    |
| 106-93-4                  | 1,2-Dibromoethane           | 21.3   |           | 0.16                | 1.00       | ug/L    |
| 127-18-4                  | Tetrachloroethene           | 19.7   |           | 0.25                | 1.00       | ug/L    |
| 108-90-7                  | Chlorobenzene               | 19.3   |           | 0.13                | 1.00       | ug/L    |
| 100-41-4                  | Ethyl Benzene               | 19.6   |           | 0.16                | 1.00       | ug/L    |
| 179601-23-1               | m/p-Xylenes                 | 39.3   |           | 0.31                | 2.00       | ug/L    |
| 95-47-6                   | o-Xylene                    | 20.7   |           | 0.14                | 1.00       | ug/L    |
| 100-42-5                  | Styrene                     | 20.2   |           | 0.16                | 1.00       | ug/L    |
| 75-25-2                   | Bromoform                   | 20.0   |           | 0.21                | 1.00       | ug/L    |
| 98-82-8                   | Isopropylbenzene            | 19.3   |           | 0.13                | 1.00       | ug/L    |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane   | 20.4   |           | 0.27                | 1.00       | ug/L    |
| 541-73-1                  | 1,3-Dichlorobenzene         | 17.5   |           | 0.24                | 1.00       | ug/L    |
| 106-46-7                  | 1,4-Dichlorobenzene         | 18.0   |           | 0.27                | 1.00       | ug/L    |
| 95-50-1                   | 1,2-Dichlorobenzene         | 18.0   |           | 0.19                | 1.00       | ug/L    |
| 96-12-8                   | 1,2-Dibromo-3-Chloropropane | 20.6   |           | 0.46                | 1.00       | ug/L    |
| 120-82-1                  | 1,2,4-Trichlorobenzene      | 16.0   |           | 0.42                | 1.00       | ug/L    |
| 87-61-6                   | 1,2,3-Trichlorobenzene      | 16.5   |           | 0.51                | 1.00       | ug/L    |
| <b>SURROGATES</b>         |                             |        |           |                     |            |         |
| 17060-07-0                | 1,2-Dichloroethane-d4       | 46.9   |           | 70 (74) - 130 (125) | 94%        | SPK: 50 |
| 1868-53-7                 | Dibromofluoromethane        | 48.3   |           | 70 (75) - 130 (124) | 97%        | SPK: 50 |
| 2037-26-5                 | Toluene-d8                  | 44.9   |           | 70 (86) - 130 (113) | 90%        | SPK: 50 |
| 460-00-4                  | 4-Bromofluorobenzene        | 48.2   |           | 70 (77) - 130 (121) | 96%        | SPK: 50 |
| <b>INTERNAL STANDARDS</b> |                             |        |           |                     |            |         |
| 363-72-4                  | Pentafluorobenzene          | 151000 | 8.224     |                     |            |         |
| 540-36-3                  | 1,4-Difluorobenzene         | 254000 | 9.1       |                     |            |         |
| 3114-55-4                 | Chlorobenzene-d5            | 230000 | 11.865    |                     |            |         |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4      | 115000 | 13.788    |                     |            |         |



## Report of Analysis

|                    |                              |           |                 |               |
|--------------------|------------------------------|-----------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  |           | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 |           | Date Received:  |               |
| Client Sample ID:  | VN1120WBS02                  |           | SDG No.:        | P4892         |
| Lab Sample ID:     | VN1120WBS02                  |           | Matrix:         | Water         |
| Analytical Method: | SW8260                       |           | % Solid:        | 0             |
| Sample Wt/Vol:     | 5                            | Units: mL | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  |                              | uL        | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624                      | ID : 0.25 | Level :         | LOW           |
| Prep Method :      |                              |           |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN084964.D        | 1         |           | 11/20/24 13:20 | VN112024      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|------------|-------|
|------------|-----------|-------|-----------|-----|------------|-------|

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084964.D  
 Acq On : 20 Nov 2024 13:20  
 Operator : JC\MD  
 Sample : VN1120WBS02  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1120WBS02

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2024  
 Supervised By :Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:36:06 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 150630   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 253557   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 229692   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 114872   | 50.000 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 33) 1,2-Dichloroethane-d4 | 8.571  | 65    | 102086   | 46.923   | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | =    | 93.840% |
| 35) Dibromofluoromethane  | 8.165  | 113   | 82888    | 48.295   | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | =    | 96.600% |
| 50) Toluene-d8            | 10.565 | 98    | 283802   | 44.890   | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | =    | 89.780% |
| 62) 4-Bromofluorobenzene  | 12.847 | 95    | 113847   | 48.183   | ug/l | 0.00    |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | =    | 96.360% |

## Target Compounds

|                              |       |     |        |         |      | Qvalue |
|------------------------------|-------|-----|--------|---------|------|--------|
|                              |       |     |        |         |      |        |
| 2) Dichlorodifluoromethane   | 2.118 | 85  | 35618  | 20.569  | ug/l | 97     |
| 3) Chloromethane             | 2.359 | 50  | 39396  | 17.764  | ug/l | 96     |
| 4) Vinyl Chloride            | 2.506 | 62  | 35932  | 19.293  | ug/l | 94     |
| 5) Bromomethane              | 2.901 | 94  | 19858  | 20.124  | ug/l | 91     |
| 6) Chloroethane              | 3.071 | 64  | 23127  | 19.201  | ug/l | 98     |
| 7) Trichlorofluoromethane    | 3.465 | 101 | 60800  | 19.818  | ug/l | 99     |
| 8) Diethyl Ether             | 3.953 | 74  | 23262  | 21.494  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluo... | 4.353 | 101 | 34019  | 19.624  | ug/l | 98     |
| 10) Methyl Iodide            | 4.577 | 142 | 48587  | 20.971  | ug/l | 98     |
| 11) Tert butyl alcohol       | 5.542 | 59  | 33696  | 117.336 | ug/l | 98     |
| 12) 1,1-Dichloroethene       | 4.330 | 96  | 32651  | 19.034  | ug/l | 94     |
| 13) Acrolein                 | 4.171 | 56  | 31534  | 110.120 | ug/l | 97     |
| 14) Allyl chloride           | 5.012 | 41  | 54299  | 19.519  | ug/l | 94     |
| 15) Acrylonitrile            | 5.712 | 53  | 96254  | 115.780 | ug/l | 98     |
| 16) Acetone                  | 4.430 | 43  | 72399  | 113.647 | ug/l | 96     |
| 17) Carbon Disulfide         | 4.700 | 76  | 93961  | 17.787  | ug/l | 98     |
| 18) Methyl Acetate           | 5.024 | 43  | 50778  | 19.700  | ug/l | 99     |
| 19) Methyl tert-butyl Ether  | 5.794 | 73  | 114824 | 21.839  | ug/l | 98     |
| 20) Methylene Chloride       | 5.265 | 84  | 38672  | 20.210  | ug/l | 92     |
| 21) trans-1,2-Dichloroethene | 5.777 | 96  | 33847  | 19.216  | ug/l | 95     |
| 22) Diisopropyl ether        | 6.671 | 45  | 116859 | 21.141  | ug/l | 97     |
| 23) Vinyl Acetate            | 6.600 | 43  | 432838 | 113.548 | ug/l | 98     |
| 24) 1,1-Dichloroethane       | 6.559 | 63  | 65568  | 19.757  | ug/l | 97     |
| 25) 2-Butanone               | 7.483 | 43  | 124217 | 122.382 | ug/l | 97     |
| 26) 2,2-Dichloropropane      | 7.483 | 77  | 58388  | 20.214  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene   | 7.477 | 96  | 41367  | 20.114  | ug/l | 97     |
| 28) Bromochloromethane       | 7.806 | 49  | 28846  | 21.817  | ug/l | 90     |
| 29) Tetrahydrofuran          | 7.841 | 42  | 81330  | 120.782 | ug/l | 96     |
| 30) Chloroform               | 7.965 | 83  | 69698  | 20.634  | ug/l | 93     |
| 31) Cyclohexane              | 8.247 | 56  | 56449  | 18.794  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 61504  | 20.005  | ug/l | 97     |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 45714  | 19.205  | ug/l | 98     |
| 37) Ethyl Acetate            | 7.559 | 43  | 48545  | 22.479  | ug/l | 95     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 55251  | 20.767  | ug/l | 95     |
| 39) Methylcyclohexane        | 9.600 | 83  | 49871  | 20.595  | ug/l | 97     |
| 40) Benzene                  | 8.600 | 78  | 151055 | 19.761  | ug/l | 97     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084964.D  
 Acq On : 20 Nov 2024 13:20  
 Operator : JC\MD  
 Sample : VN1120WBS02  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1120WBS02

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2024  
 Supervised By :Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:36:06 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 28047    | 24.151  | ug/l   | 98       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 52979    | 21.400  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.688  | 43   | 89614    | 21.919  | ug/l   | 99       |
| 44) Trichloroethene           | 9.347  | 130  | 34468    | 19.552  | ug/l   | 97       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 37090    | 20.684  | ug/l   | 98       |
| 46) Dibromomethane            | 9.706  | 93   | 26646    | 21.059  | ug/l   | 96       |
| 47) Bromodichloromethane      | 9.888  | 83   | 53986    | 20.241  | ug/l # | 99       |
| 48) Methyl methacrylate       | 9.682  | 41   | 39511    | 23.508  | ug/l   | 98       |
| 49) 1,4-Dioxane               | 9.694  | 88   | 13647    | 458.199 | ug/l # | 95       |
| 51) 4-Methyl-2-Pentanone      | 10.447 | 43   | 257532   | 125.092 | ug/l   | 99       |
| 52) Toluene                   | 10.629 | 92   | 92522    | 20.695  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 53494    | 19.376  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 58965    | 20.179  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.012 | 97   | 36801    | 21.853  | ug/l   | 95       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 57695    | 23.685  | ug/l   | 96       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 61447    | 21.260  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 115920   | 101.699 | ug/l   | 95       |
| 59) 2-Hexanone                | 11.194 | 43   | 190538   | 127.150 | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.359 | 129  | 41243    | 21.489  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.471 | 107  | 36672    | 21.265  | ug/l   | 98       |
| 64) Tetrachloroethene         | 11.100 | 164  | 30097    | 19.699  | ug/l   | 93       |
| 65) Chlorobenzene             | 11.888 | 112  | 99409    | 19.345  | ug/l   | 96       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 35112    | 19.644  | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.965 | 91   | 168037   | 19.590  | ug/l   | 99       |
| 68) m/p-Xylenes               | 12.071 | 106  | 127695   | 39.323  | ug/l   | 99       |
| 69) o-Xylene                  | 12.400 | 106  | 62946    | 20.721  | ug/l   | 99       |
| 70) Styrene                   | 12.412 | 104  | 106834   | 20.160  | ug/l   | 99       |
| 71) Bromoform                 | 12.582 | 173  | 26831    | 19.950  | ug/l # | 95       |
| 73) Isopropylbenzene          | 12.694 | 105  | 155280   | 19.290  | ug/l   | 99       |
| 74) N-amyl acetate            | 12.494 | 43   | 72549    | 21.175  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane | 12.941 | 83   | 54852    | 20.414  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 46699m   | 20.337  | ug/l   |          |
| 77) Bromobenzene              | 12.976 | 156  | 40419    | 18.677  | ug/l   | 96       |
| 78) n-propylbenzene           | 13.035 | 91   | 178621   | 18.935  | ug/l   | 98       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 117308   | 19.032  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 132819   | 19.907  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 18261m   | 18.867  | ug/l   |          |
| 82) 4-Chlorotoluene           | 13.218 | 91   | 119090   | 18.359  | ug/l   | 98       |
| 83) tert-Butylbenzene         | 13.435 | 119  | 112021   | 20.287  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 138540   | 20.119  | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.618 | 105  | 149002   | 19.103  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 123982   | 19.382  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 73769    | 17.467  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 72532    | 18.009  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.059 | 91   | 102739   | 17.170  | ug/l   | 99       |
| 90) Hexachloroethane          | 14.335 | 117  | 25263    | 17.709  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 73040    | 17.997  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 11216    | 20.605  | ug/l   | 95       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 35527    | 15.994  | ug/l   | 98       |
| 94) Hexachlorobutadiene       | 15.500 | 225  | 16423    | 16.836  | ug/l   | 96       |
| 95) Naphthalene               | 15.641 | 128  | 117662   | 17.697  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.841 | 180  | 35531    | 16.478  | ug/l   | 100      |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084964.D  
Acq On : 20 Nov 2024 13:20  
Operator : JC\MD  
Sample : VN1120WBS02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBS02

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2024  
Supervised By :Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:36:06 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration

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

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

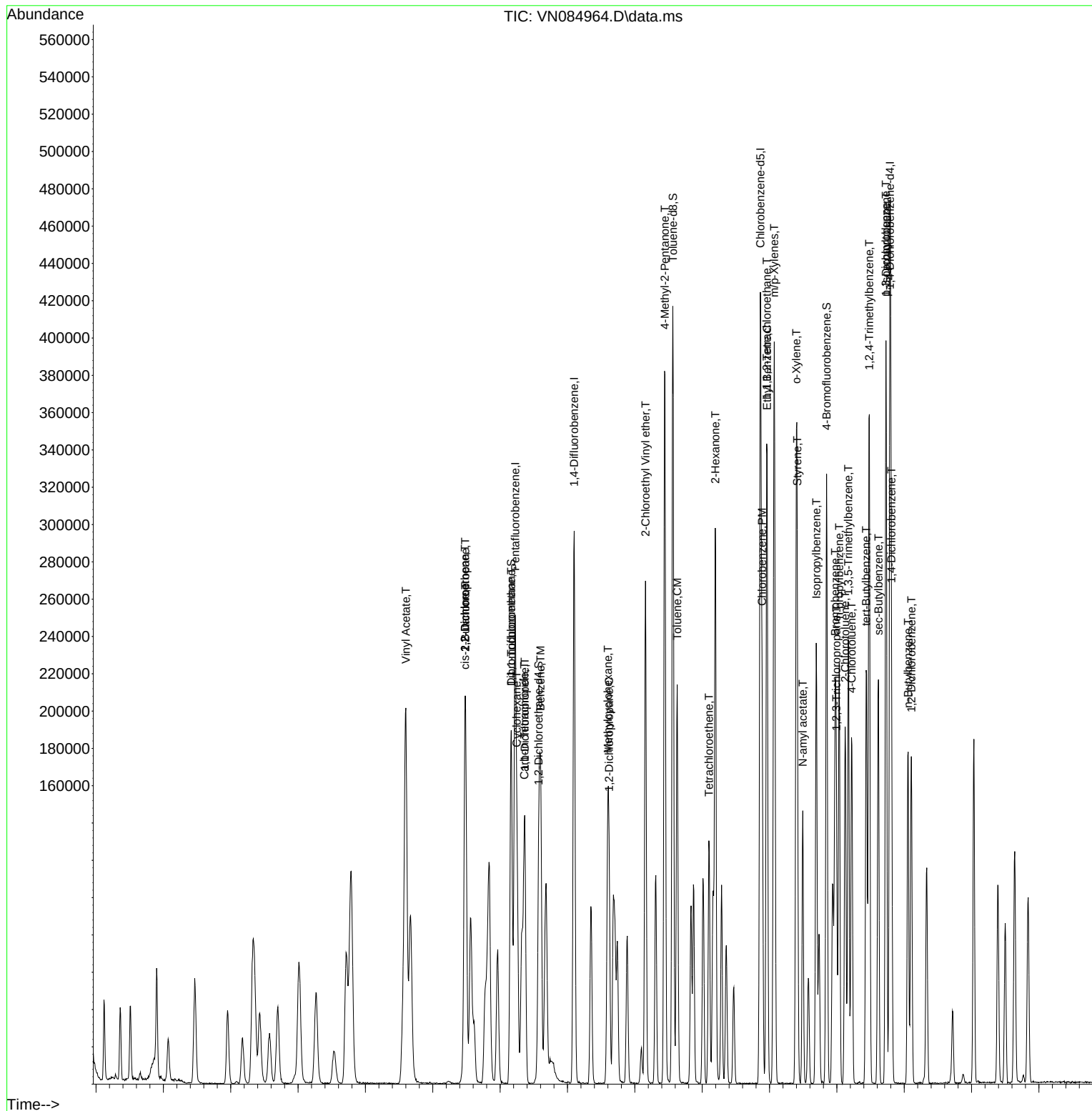
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084964.D  
Acq On : 20 Nov 2024 13:20  
Operator : JC\MD  
Sample : VN1120WBS02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBS02

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 11/21/2024  
Supervised By : Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:36:06 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration



## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Portal Partners Tri-Venture               | Date Collected: |                              |
| Project:           | Amtrak Sawtooth Bridges 2024              | Date Received:  |                              |
| Client Sample ID:  | VY1121SBS01                               | SDG No.:        | P4892                        |
| Lab Sample ID:     | VY1121SBS01                               | Matrix:         | SOIL                         |
| Analytical Method: | SW8260                                    | % Solid:        | 100                          |
| Sample Wt/Vol:     | 5                      Units:    g        | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOC-TCLVOA-10                |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020375.D        | 1         |           | 11/21/24 10:39 | VY112124      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units(Dry Weight) |
|----------------|--------------------------------|-------|-----------|------|------------|-------------------|
| <b>TARGETS</b> |                                |       |           |      |            |                   |
| 75-71-8        | Dichlorodifluoromethane        | 22.3  |           | 1.70 | 5.00       | ug/Kg             |
| 74-87-3        | Chloromethane                  | 14.3  |           | 1.20 | 5.00       | ug/Kg             |
| 75-01-4        | Vinyl Chloride                 | 15.8  |           | 0.77 | 5.00       | ug/Kg             |
| 74-83-9        | Bromomethane                   | 17.3  |           | 1.00 | 5.00       | ug/Kg             |
| 75-00-3        | Chloroethane                   | 17.0  |           | 1.00 | 5.00       | ug/Kg             |
| 75-69-4        | Trichlorofluoromethane         | 19.8  |           | 0.91 | 5.00       | ug/Kg             |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 18.3  |           | 1.10 | 5.00       | ug/Kg             |
| 75-35-4        | 1,1-Dichloroethene             | 18.3  |           | 0.78 | 5.00       | ug/Kg             |
| 67-64-1        | Acetone                        | 93.9  |           | 6.20 | 25.0       | ug/Kg             |
| 75-15-0        | Carbon Disulfide               | 17.3  |           | 1.30 | 5.00       | ug/Kg             |
| 1634-04-4      | Methyl tert-butyl Ether        | 19.3  |           | 0.67 | 5.00       | ug/Kg             |
| 79-20-9        | Methyl Acetate                 | 18.1  |           | 1.80 | 5.00       | ug/Kg             |
| 75-09-2        | Methylene Chloride             | 19.0  |           | 3.40 | 10.0       | ug/Kg             |
| 156-60-5       | trans-1,2-Dichloroethene       | 17.9  |           | 0.84 | 5.00       | ug/Kg             |
| 75-34-3        | 1,1-Dichloroethane             | 18.5  |           | 0.63 | 5.00       | ug/Kg             |
| 110-82-7       | Cyclohexane                    | 18.7  |           | 0.69 | 5.00       | ug/Kg             |
| 78-93-3        | 2-Butanone                     | 99.8  |           | 5.70 | 25.0       | ug/Kg             |
| 56-23-5        | Carbon Tetrachloride           | 21.1  |           | 0.87 | 5.00       | ug/Kg             |
| 156-59-2       | cis-1,2-Dichloroethene         | 18.9  |           | 0.61 | 5.00       | ug/Kg             |
| 74-97-5        | Bromochloromethane             | 18.1  |           | 2.40 | 5.00       | ug/Kg             |
| 67-66-3        | Chloroform                     | 19.0  |           | 0.67 | 5.00       | ug/Kg             |
| 71-55-6        | 1,1,1-Trichloroethane          | 20.2  |           | 0.78 | 5.00       | ug/Kg             |
| 108-87-2       | Methylcyclohexane              | 18.8  |           | 0.87 | 5.00       | ug/Kg             |
| 71-43-2        | Benzene                        | 19.6  |           | 0.72 | 5.00       | ug/Kg             |
| 107-06-2       | 1,2-Dichloroethane             | 20.7  |           | 0.61 | 5.00       | ug/Kg             |
| 79-01-6        | Trichloroethene                | 19.3  |           | 0.75 | 5.00       | ug/Kg             |
| 78-87-5        | 1,2-Dichloropropane            | 19.1  |           | 0.66 | 5.00       | ug/Kg             |
| 75-27-4        | Bromodichloromethane           | 19.9  |           | 0.56 | 5.00       | ug/Kg             |
| 108-10-1       | 4-Methyl-2-Pentanone           | 99.7  |           | 4.40 | 25.0       | ug/Kg             |
| 108-88-3       | Toluene                        | 19.3  |           | 0.67 | 5.00       | ug/Kg             |

## Report of Analysis

|                    |                              |                 |               |
|--------------------|------------------------------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  |               |
| Client Sample ID:  | VY1121SBS01                  | SDG No.:        | P4892         |
| Lab Sample ID:     | VY1121SBS01                  | Matrix:         | SOIL          |
| Analytical Method: | SW8260                       | % Solid:        | 100           |
| Sample Wt/Vol:     | 5                            | Units:          | g             |
| Soil Aliquot Vol:  |                              |                 | uL            |
| GC Column:         | RXI-624                      | Test:           | VOC-TCLVOA-10 |
| Prep Method :      | ID : 0.25                    | Level :         | LOW           |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VY020375.D        | 1         |           | 11/21/24 10:39 | VY112124      |

| CAS Number                | Parameter                   | Conc.  | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-----------------------------|--------|-----------|---------------------|------------|-------------------|
| 10061-02-6                | t-1,3-Dichloropropene       | 19.2   |           | 0.60                | 5.00       | ug/Kg             |
| 10061-01-5                | cis-1,3-Dichloropropene     | 19.9   |           | 0.57                | 5.00       | ug/Kg             |
| 79-00-5                   | 1,1,2-Trichloroethane       | 19.0   |           | 0.84                | 5.00       | ug/Kg             |
| 591-78-6                  | 2-Hexanone                  | 100    |           | 4.80                | 25.0       | ug/Kg             |
| 124-48-1                  | Dibromochloromethane        | 19.8   |           | 0.65                | 5.00       | ug/Kg             |
| 106-93-4                  | 1,2-Dibromoethane           | 18.7   |           | 0.79                | 5.00       | ug/Kg             |
| 127-18-4                  | Tetrachloroethene           | 18.6   |           | 0.89                | 5.00       | ug/Kg             |
| 108-90-7                  | Chlorobenzene               | 18.6   |           | 0.74                | 5.00       | ug/Kg             |
| 100-41-4                  | Ethyl Benzene               | 19.0   |           | 0.62                | 5.00       | ug/Kg             |
| 179601-23-1               | m/p-Xylenes                 | 39.2   |           | 1.40                | 10.0       | ug/Kg             |
| 95-47-6                   | o-Xylene                    | 19.5   |           | 0.70                | 5.00       | ug/Kg             |
| 100-42-5                  | Styrene                     | 19.8   |           | 0.60                | 5.00       | ug/Kg             |
| 75-25-2                   | Bromoform                   | 20.7   |           | 0.81                | 5.00       | ug/Kg             |
| 98-82-8                   | Isopropylbenzene            | 18.4   |           | 0.67                | 5.00       | ug/Kg             |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane   | 18.2   |           | 1.10                | 5.00       | ug/Kg             |
| 541-73-1                  | 1,3-Dichlorobenzene         | 17.8   |           | 0.74                | 5.00       | ug/Kg             |
| 106-46-7                  | 1,4-Dichlorobenzene         | 18.4   |           | 0.80                | 5.00       | ug/Kg             |
| 95-50-1                   | 1,2-Dichlorobenzene         | 18.6   |           | 0.59                | 5.00       | ug/Kg             |
| 96-12-8                   | 1,2-Dibromo-3-Chloropropane | 18.1   |           | 1.60                | 5.00       | ug/Kg             |
| 120-82-1                  | 1,2,4-Trichlorobenzene      | 17.9   |           | 0.79                | 5.00       | ug/Kg             |
| 87-61-6                   | 1,2,3-Trichlorobenzene      | 17.6   |           | 0.78                | 5.00       | ug/Kg             |
| <b>SURROGATES</b>         |                             |        |           |                     |            |                   |
| 17060-07-0                | 1,2-Dichloroethane-d4       | 46.0   |           | 70 (50) - 130 (163) | 92%        | SPK: 50           |
| 1868-53-7                 | Dibromofluoromethane        | 43.7   |           | 70 (54) - 130 (147) | 87%        | SPK: 50           |
| 2037-26-5                 | Toluene-d8                  | 43.3   |           | 70 (58) - 130 (134) | 87%        | SPK: 50           |
| 460-00-4                  | 4-Bromofluorobenzene        | 45.0   |           | 70 (29) - 130 (146) | 90%        | SPK: 50           |
| <b>INTERNAL STANDARDS</b> |                             |        |           |                     |            |                   |
| 363-72-4                  | Pentafluorobenzene          | 180000 | 7.713     |                     |            |                   |
| 540-36-3                  | 1,4-Difluorobenzene         | 304000 | 8.616     |                     |            |                   |
| 3114-55-4                 | Chlorobenzene-d5            | 255000 | 11.42     |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4      | 121000 | 13.352    |                     |            |                   |

## Report of Analysis

|                    |                              |           |                 |               |
|--------------------|------------------------------|-----------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  |           | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 |           | Date Received:  |               |
| Client Sample ID:  | VY1121SBS01                  |           | SDG No.:        | P4892         |
| Lab Sample ID:     | VY1121SBS01                  |           | Matrix:         | SOIL          |
| Analytical Method: | SW8260                       |           | % Solid:        | 100           |
| Sample Wt/Vol:     | 5                            | Units: g  | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  |                              | uL        | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624                      | ID : 0.25 | Level :         | LOW           |
| Prep Method :      |                              |           |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020375.D        | 1         |           | 11/21/24 10:39 | VY112124      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|------------|-------|
|------------|-----------|-------|-----------|-----|------------|-------|

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\_Y\Data\VY112124\  
 Data File : VY020375.D  
 Acq On : 21 Nov 2024 10:39  
 Operator : SY/MD  
 Sample : VY1121SBS01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1121SBS01

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/22/2024  
 Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:56:14 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.713  | 168  | 180247   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.616  | 114  | 303523   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.420 | 117  | 255135   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.352 | 152  | 121310   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 33) 1,2-Dichloroethane-d4   | 8.067  | 65    | 95330    | 46.035   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 92.060% |
| 35) Dibromofluoromethane    | 7.640  | 113   | 85002    | 43.674   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 87.340% |
| 50) Toluene-d8              | 10.109 | 98    | 332344   | 43.348   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 86.700% |
| 62) 4-Bromofluorobenzene    | 12.408 | 95    | 110943   | 45.014   | ug/l | 0.00    |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 90.020% |

|                              |       |     |        |         |        |        |
|------------------------------|-------|-----|--------|---------|--------|--------|
| Target Compounds             |       |     |        |         |        | Qvalue |
| 2) Dichlorodifluoromethane   | 1.867 | 85  | 38946  | 22.260  | ug/l   | 97     |
| 3) Chloromethane             | 2.074 | 50  | 40357  | 14.316  | ug/l   | 96     |
| 4) Vinyl Chloride            | 2.208 | 62  | 37886  | 15.784  | ug/l   | 98     |
| 5) Bromomethane              | 2.604 | 94  | 20743  | 17.304  | ug/l   | 100    |
| 6) Chloroethane              | 2.739 | 64  | 23745  | 16.958  | ug/l   | 98     |
| 7) Trichlorofluoromethane    | 3.068 | 101 | 66071  | 19.809  | ug/l   | 98     |
| 8) Diethyl Ether             | 3.458 | 74  | 19799  | 18.813  | ug/l   | 97     |
| 9) 1,1,2-Trichlorotrifluo... | 3.824 | 101 | 36345  | 18.297  | ug/l   | 100    |
| 10) Methyl Iodide            | 4.013 | 142 | 47517  | 17.859  | ug/l   | 95     |
| 11) Tert butyl alcohol       | 4.872 | 59  | 14695  | 90.913  | ug/l   | 95     |
| 12) 1,1-Dichloroethene       | 3.799 | 96  | 35988  | 18.303  | ug/l   | 98     |
| 13) Acrolein                 | 3.659 | 56  | 18523  | 144.453 | ug/l   | 99     |
| 14) Allyl chloride           | 4.391 | 41  | 68363  | 17.979  | ug/l   | 95     |
| 15) Acrylonitrile            | 5.067 | 53  | 43974  | 94.525  | ug/l   | 99     |
| 16) Acetone                  | 3.879 | 43  | 46611  | 93.891  | ug/l   | 94     |
| 17) Carbon Disulfide         | 4.110 | 76  | 114597 | 17.299  | ug/l   | 99     |
| 18) Methyl Acetate           | 4.391 | 43  | 20960  | 18.113  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether  | 5.122 | 73  | 98615  | 19.307  | ug/l   | 97     |
| 20) Methylene Chloride       | 4.622 | 84  | 39953  | 19.004  | ug/l   | 96     |
| 21) trans-1,2-Dichloroethene | 5.128 | 96  | 39135  | 17.920  | ug/l   | 94     |
| 22) Diisopropyl ether        | 6.031 | 45  | 137248 | 18.317  | ug/l   | 98     |
| 23) Vinyl Acetate            | 5.970 | 43  | 388407 | 92.756  | ug/l   | 99     |
| 24) 1,1-Dichloroethane       | 5.927 | 63  | 78285  | 18.507  | ug/l   | 96     |
| 25) 2-Butanone               | 6.902 | 43  | 63764  | 99.770  | ug/l   | 98     |
| 26) 2,2-Dichloropropane      | 6.896 | 77  | 69511  | 19.881  | ug/l   | 98     |
| 27) cis-1,2-Dichloroethene   | 6.902 | 96  | 45476  | 18.906  | ug/l   | 96     |
| 28) Bromochloromethane       | 7.256 | 49  | 32189  | 18.080  | ug/l   | 99     |
| 29) Tetrahydrofuran          | 7.268 | 42  | 37676  | 98.633  | ug/l   | 98     |
| 30) Chloroform               | 7.427 | 83  | 77412  | 18.951  | ug/l   | 98     |
| 31) Cyclohexane              | 7.707 | 56  | 72133  | 18.686  | ug/l # | 95     |
| 32) 1,1,1-Trichloroethane    | 7.622 | 97  | 72285  | 20.154  | ug/l   | 99     |
| 36) 1,1-Dichloropropene      | 7.841 | 75  | 57076  | 19.200  | ug/l   | 98     |
| 37) Ethyl Acetate            | 6.994 | 43  | 27101  | 19.901  | ug/l   | 99     |
| 38) Carbon Tetrachloride     | 7.823 | 117 | 65629  | 21.145  | ug/l   | 98     |
| 39) Methylcyclohexane        | 9.115 | 83  | 69833  | 18.771  | ug/l   | 97     |
| 40) Benzene                  | 8.085 | 78  | 171136 | 19.645  | ug/l   | 97     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020375.D  
 Acq On : 21 Nov 2024 10:39  
 Operator : SY/MD  
 Sample : VY1121SBS01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1121SBS01

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/22/2024  
 Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:56:14 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.226  | 41   | 13680    | 17.656  | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.164  | 62   | 48620    | 20.677  | ug/l   | 98       |
| 43) Isopropyl Acetate         | 8.201  | 43   | 53412    | 20.169  | ug/l # | 87       |
| 44) Trichloroethene           | 8.865  | 130  | 39835    | 19.299  | ug/l   | 97       |
| 45) 1,2-Dichloropropane       | 9.146  | 63   | 39715    | 19.108  | ug/l   | 99       |
| 46) Dibromomethane            | 9.237  | 93   | 20413    | 19.162  | ug/l   | 97       |
| 47) Bromodichloromethane      | 9.426  | 83   | 58594    | 19.924  | ug/l   | 98       |
| 48) Methyl methacrylate       | 9.225  | 41   | 24591    | 19.422  | ug/l   | 95       |
| 49) 1,4-Dioxane               | 9.231  | 88   | 4188     | 382.119 | ug/l # | 93       |
| 51) 4-Methyl-2-Pentanone      | 9.999  | 43   | 133986   | 99.697  | ug/l   | 99       |
| 52) Toluene                   | 10.176 | 92   | 102921   | 19.329  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene     | 10.396 | 75   | 53363    | 19.189  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene   | 9.859  | 75   | 63347    | 19.899  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 10.573 | 97   | 26820    | 18.966  | ug/l   | 100      |
| 56) Ethyl methacrylate        | 10.438 | 69   | 39987    | 18.829  | ug/l   | 98       |
| 57) 1,3-Dichloropropane       | 10.719 | 76   | 50296    | 19.791  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 9.713  | 63   | 100485   | 99.789  | ug/l   | 99       |
| 59) 2-Hexanone                | 10.761 | 43   | 97031    | 101.962 | ug/l   | 100      |
| 60) Dibromochloromethane      | 10.914 | 129  | 36034    | 19.770  | ug/l   | 98       |
| 61) 1,2-Dibromoethane         | 11.018 | 107  | 24532    | 18.722  | ug/l   | 100      |
| 64) Tetrachloroethene         | 10.652 | 164  | 34140    | 18.563  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.444 | 112  | 105916   | 18.619  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane | 11.517 | 131  | 37863    | 19.924  | ug/l   | 97       |
| 67) Ethyl Benzene             | 11.524 | 91   | 199885   | 19.046  | ug/l   | 100      |
| 68) m/p-Xylenes               | 11.633 | 106  | 148141   | 39.189  | ug/l   | 98       |
| 69) o-Xylene                  | 11.956 | 106  | 70006    | 19.525  | ug/l   | 98       |
| 70) Styrene                   | 11.975 | 104  | 117883   | 19.789  | ug/l   | 99       |
| 71) Bromoform                 | 12.133 | 173  | 20512    | 20.711  | ug/l # | 98       |
| 73) Isopropylbenzene          | 12.255 | 105  | 189065   | 18.398  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.072 | 43   | 45544    | 18.339  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane | 12.511 | 83   | 30208    | 18.188  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.560 | 75   | 21691m   | 18.971  | ug/l   |          |
| 77) Bromobenzene              | 12.536 | 156  | 39097    | 18.159  | ug/l   | 95       |
| 78) n-propylbenzene           | 12.597 | 91   | 228254   | 18.508  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 12.682 | 91   | 128274   | 18.090  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 12.743 | 105  | 153707   | 18.507  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-b... | 12.304 | 75   | 10525    | 18.037  | ug/l   | 95       |
| 82) 4-Chlorotoluene           | 12.779 | 91   | 130788   | 17.871  | ug/l   | 98       |
| 83) tert-Butylbenzene         | 13.005 | 119  | 134252   | 18.318  | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene    | 13.048 | 105  | 150805   | 18.315  | ug/l   | 99       |
| 85) sec-Butylbenzene          | 13.182 | 105  | 197873   | 17.126  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.298 | 119  | 162886   | 18.233  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.292 | 146  | 77470    | 17.796  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.371 | 146  | 76598    | 18.416  | ug/l   | 98       |
| 89) n-Butylbenzene            | 13.621 | 91   | 153757   | 17.973  | ug/l   | 99       |
| 90) Hexachloroethane          | 13.883 | 117  | 31013    | 17.986  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene       | 13.663 | 146  | 67451    | 18.596  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.279 | 75   | 4936     | 18.112  | ug/l   | 95       |
| 93) 1,2,4-Trichlorobenzene    | 14.925 | 180  | 39202    | 17.875  | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.029 | 225  | 24790    | 18.518  | ug/l   | 98       |
| 95) Naphthalene               | 15.151 | 128  | 69552    | 18.415  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.334 | 180  | 32957    | 17.576  | ug/l   | 100      |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020375.D  
Acq On : 21 Nov 2024 10:39  
Operator : SY/MD  
Sample : VY1121SBS01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1121SBS01

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/22/2024  
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:56:14 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

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

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

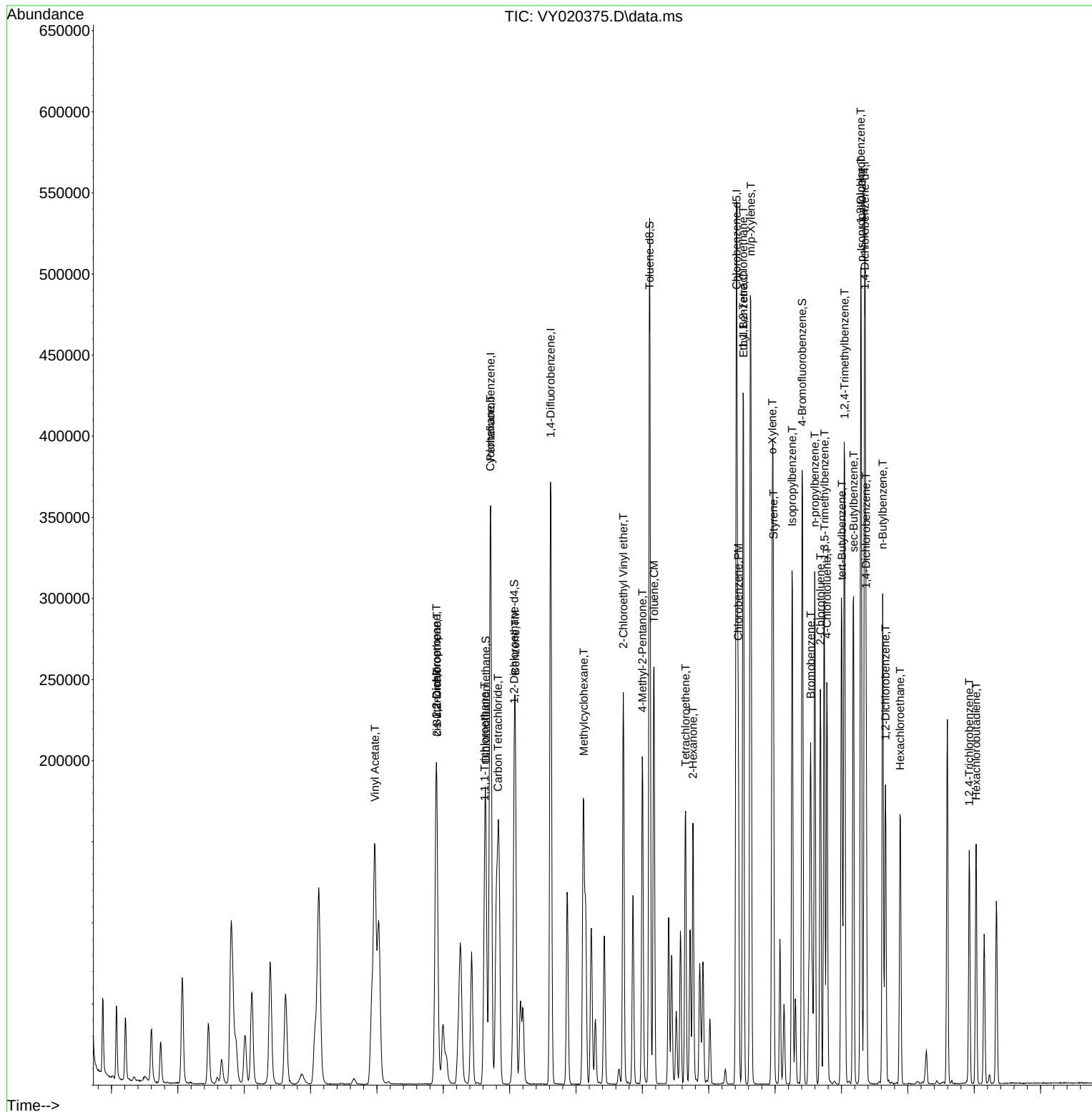
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020375.D  
 Acq On : 21 Nov 2024 10:39  
 Operator : SY/MD  
 Sample : VY1121SBS01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1121SBS01

### Manual Integrations APPROVED

Reviewed By :Romaben Patel 11/22/2024  
 Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:56:14 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration



## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Portal Partners Tri-Venture               | Date Collected: |                              |
| Project:           | Amtrak Sawtooth Bridges 2024              | Date Received:  |                              |
| Client Sample ID:  | VY1122SBS02                               | SDG No.:        | P4892                        |
| Lab Sample ID:     | VY1122SBS02                               | Matrix:         | SOIL                         |
| Analytical Method: | SW8260                                    | % Solid:        | 100                          |
| Sample Wt/Vol:     | 5                      Units:    g        | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOC-TCLVOA-10                |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020404.D        | 1         |           | 11/22/24 11:04 | VY112224      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units(Dry Weight) |
|----------------|--------------------------------|-------|-----------|------|------------|-------------------|
| <b>TARGETS</b> |                                |       |           |      |            |                   |
| 75-71-8        | Dichlorodifluoromethane        | 25.3  |           | 1.70 | 5.00       | ug/Kg             |
| 74-87-3        | Chloromethane                  | 15.7  |           | 1.20 | 5.00       | ug/Kg             |
| 75-01-4        | Vinyl Chloride                 | 17.6  |           | 0.77 | 5.00       | ug/Kg             |
| 74-83-9        | Bromomethane                   | 20.3  |           | 1.00 | 5.00       | ug/Kg             |
| 75-00-3        | Chloroethane                   | 18.1  |           | 1.00 | 5.00       | ug/Kg             |
| 75-69-4        | Trichlorofluoromethane         | 22.8  |           | 0.91 | 5.00       | ug/Kg             |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 21.5  |           | 1.10 | 5.00       | ug/Kg             |
| 75-35-4        | 1,1-Dichloroethene             | 20.8  |           | 0.78 | 5.00       | ug/Kg             |
| 67-64-1        | Acetone                        | 95.0  |           | 6.20 | 25.0       | ug/Kg             |
| 75-15-0        | Carbon Disulfide               | 19.5  |           | 1.30 | 5.00       | ug/Kg             |
| 1634-04-4      | Methyl tert-butyl Ether        | 20.5  |           | 0.67 | 5.00       | ug/Kg             |
| 79-20-9        | Methyl Acetate                 | 17.9  |           | 1.80 | 5.00       | ug/Kg             |
| 75-09-2        | Methylene Chloride             | 20.5  |           | 3.40 | 10.0       | ug/Kg             |
| 156-60-5       | trans-1,2-Dichloroethene       | 20.4  |           | 0.84 | 5.00       | ug/Kg             |
| 75-34-3        | 1,1-Dichloroethane             | 20.0  |           | 0.63 | 5.00       | ug/Kg             |
| 110-82-7       | Cyclohexane                    | 20.6  |           | 0.69 | 5.00       | ug/Kg             |
| 78-93-3        | 2-Butanone                     | 100   |           | 5.70 | 25.0       | ug/Kg             |
| 56-23-5        | Carbon Tetrachloride           | 24.8  |           | 0.87 | 5.00       | ug/Kg             |
| 156-59-2       | cis-1,2-Dichloroethene         | 21.5  |           | 0.61 | 5.00       | ug/Kg             |
| 74-97-5        | Bromochloromethane             | 18.3  |           | 2.40 | 5.00       | ug/Kg             |
| 67-66-3        | Chloroform                     | 21.1  |           | 0.67 | 5.00       | ug/Kg             |
| 71-55-6        | 1,1,1-Trichloroethane          | 22.9  |           | 0.78 | 5.00       | ug/Kg             |
| 108-87-2       | Methylcyclohexane              | 22.6  |           | 0.87 | 5.00       | ug/Kg             |
| 71-43-2        | Benzene                        | 22.5  |           | 0.72 | 5.00       | ug/Kg             |
| 107-06-2       | 1,2-Dichloroethane             | 22.7  |           | 0.61 | 5.00       | ug/Kg             |
| 79-01-6        | Trichloroethene                | 22.8  |           | 0.75 | 5.00       | ug/Kg             |
| 78-87-5        | 1,2-Dichloropropane            | 21.9  |           | 0.66 | 5.00       | ug/Kg             |
| 75-27-4        | Bromodichloromethane           | 22.1  |           | 0.56 | 5.00       | ug/Kg             |
| 108-10-1       | 4-Methyl-2-Pentanone           | 100   |           | 4.40 | 25.0       | ug/Kg             |
| 108-88-3       | Toluene                        | 22.5  |           | 0.67 | 5.00       | ug/Kg             |

### Report of Analysis

|                    |                              |           |                 |               |
|--------------------|------------------------------|-----------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  |           | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 |           | Date Received:  |               |
| Client Sample ID:  | VY1122SBS02                  |           | SDG No.:        | P4892         |
| Lab Sample ID:     | VY1122SBS02                  |           | Matrix:         | SOIL          |
| Analytical Method: | SW8260                       |           | % Solid:        | 100           |
| Sample Wt/Vol:     | 5                            | Units: g  | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  |                              | uL        | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624                      | ID : 0.25 | Level :         | LOW           |
| Prep Method :      |                              |           |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020404.D        | 1         |           | 11/22/24 11:04 | VY112224      |

| CAS Number                | Parameter                   | Conc.  | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-----------------------------|--------|-----------|---------------------|------------|-------------------|
| 10061-02-6                | t-1,3-Dichloropropene       | 21.2   |           | 0.60                | 5.00       | ug/Kg             |
| 10061-01-5                | cis-1,3-Dichloropropene     | 22.2   |           | 0.57                | 5.00       | ug/Kg             |
| 79-00-5                   | 1,1,2-Trichloroethane       | 21.7   |           | 0.84                | 5.00       | ug/Kg             |
| 591-78-6                  | 2-Hexanone                  | 100    |           | 4.80                | 25.0       | ug/Kg             |
| 124-48-1                  | Dibromochloromethane        | 22.6   |           | 0.65                | 5.00       | ug/Kg             |
| 106-93-4                  | 1,2-Dibromoethane           | 21.2   |           | 0.79                | 5.00       | ug/Kg             |
| 127-18-4                  | Tetrachloroethene           | 22.8   |           | 0.89                | 5.00       | ug/Kg             |
| 108-90-7                  | Chlorobenzene               | 22.3   |           | 0.74                | 5.00       | ug/Kg             |
| 100-41-4                  | Ethyl Benzene               | 22.6   |           | 0.62                | 5.00       | ug/Kg             |
| 179601-23-1               | m/p-Xylenes                 | 45.5   |           | 1.40                | 10.0       | ug/Kg             |
| 95-47-6                   | o-Xylene                    | 22.6   |           | 0.70                | 5.00       | ug/Kg             |
| 100-42-5                  | Styrene                     | 23.0   |           | 0.60                | 5.00       | ug/Kg             |
| 75-25-2                   | Bromoform                   | 23.6   |           | 0.81                | 5.00       | ug/Kg             |
| 98-82-8                   | Isopropylbenzene            | 22.9   |           | 0.67                | 5.00       | ug/Kg             |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane   | 21.1   |           | 1.10                | 5.00       | ug/Kg             |
| 541-73-1                  | 1,3-Dichlorobenzene         | 21.6   |           | 0.74                | 5.00       | ug/Kg             |
| 106-46-7                  | 1,4-Dichlorobenzene         | 22.6   |           | 0.80                | 5.00       | ug/Kg             |
| 95-50-1                   | 1,2-Dichlorobenzene         | 22.3   |           | 0.59                | 5.00       | ug/Kg             |
| 96-12-8                   | 1,2-Dibromo-3-Chloropropane | 19.8   |           | 1.60                | 5.00       | ug/Kg             |
| 120-82-1                  | 1,2,4-Trichlorobenzene      | 21.3   |           | 0.79                | 5.00       | ug/Kg             |
| 87-61-6                   | 1,2,3-Trichlorobenzene      | 20.6   |           | 0.78                | 5.00       | ug/Kg             |
| <b>SURROGATES</b>         |                             |        |           |                     |            |                   |
| 17060-07-0                | 1,2-Dichloroethane-d4       | 53.1   |           | 70 (50) - 130 (163) | 106%       | SPK: 50           |
| 1868-53-7                 | Dibromofluoromethane        | 53.2   |           | 70 (54) - 130 (147) | 106%       | SPK: 50           |
| 2037-26-5                 | Toluene-d8                  | 52.9   |           | 70 (58) - 130 (134) | 106%       | SPK: 50           |
| 460-00-4                  | 4-Bromofluorobenzene        | 54.6   |           | 70 (29) - 130 (146) | 109%       | SPK: 50           |
| <b>INTERNAL STANDARDS</b> |                             |        |           |                     |            |                   |
| 363-72-4                  | Pentafluorobenzene          | 182000 | 7.719     |                     |            |                   |
| 540-36-3                  | 1,4-Difluorobenzene         | 298000 | 8.622     |                     |            |                   |
| 3114-55-4                 | Chlorobenzene-d5            | 247000 | 11.42     |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4      | 113000 | 13.352    |                     |            |                   |

## Report of Analysis

|                    |                              |                 |       |
|--------------------|------------------------------|-----------------|-------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: |       |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  |       |
| Client Sample ID:  | VY1122SBS02                  | SDG No.:        | P4892 |
| Lab Sample ID:     | VY1122SBS02                  | Matrix:         | SOIL  |
| Analytical Method: | SW8260                       | % Solid:        | 100   |
| Sample Wt/Vol:     | 5                            | Units:          | g     |
| Soil Aliquot Vol:  |                              |                 | uL    |
| GC Column:         | RXI-624                      | ID :            | 0.25  |
| Prep Method :      |                              | Level :         | LOW   |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VY020404.D        | 1         |           | 11/22/24 11:04 | VY112224      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|------------|-------|
|------------|-----------|-------|-----------|-----|------------|-------|

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\_Y\Data\VY112224\  
 Data File : VY020404.D  
 Acq On : 22 Nov 2024 11:04  
 Operator : SY/MD  
 Sample : VY1122SBS01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1122SBS02

Manual Integrations  
 APPROVED

Reviewed By :Mahesh Dadoda 11/26/2024  
 Supervised By :Semsettin Yesilyurt 11/26/2024

Quant Time: Nov 22 23:57:57 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.719  | 168  | 182116   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.622  | 114  | 298132   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.420 | 117  | 246608   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.352 | 152  | 113255   | 50.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 33) 1,2-Dichloroethane-d4   | 8.067  | 65    | 111076   | 53.088   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 50 - 163 | Recovery | =    | 106.180% |
| 35) Dibromofluoromethane    | 7.640  | 113   | 101764   | 53.232   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 54 - 147 | Recovery | =    | 106.460% |
| 50) Toluene-d8              | 10.109 | 98    | 398203   | 52.878   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 58 - 134 | Recovery | =    | 105.760% |
| 62) 4-Bromofluorobenzene    | 12.408 | 95    | 132161   | 54.593   | ug/l | 0.00     |
| Spiked Amount               | 50.000 | Range | 29 - 146 | Recovery | =    | 109.180% |

|                              |       |     |        |         |        |     |
|------------------------------|-------|-----|--------|---------|--------|-----|
| Target Compounds             |       |     |        |         | Qvalue |     |
| 2) Dichlorodifluoromethane   | 1.867 | 85  | 44685  | 25.278  | ug/l   | 99  |
| 3) Chloromethane             | 2.074 | 50  | 43774  | 15.743  | ug/l   | 95  |
| 4) Vinyl Chloride            | 2.214 | 62  | 42648  | 17.586  | ug/l   | 96  |
| 5) Bromomethane              | 2.604 | 94  | 24646  | 20.349  | ug/l   | 98  |
| 6) Chloroethane              | 2.745 | 64  | 25674  | 18.148  | ug/l   | 97  |
| 7) Trichlorofluoromethane    | 3.068 | 101 | 76847  | 22.803  | ug/l   | 100 |
| 8) Diethyl Ether             | 3.458 | 74  | 21142  | 19.883  | ug/l   | 96  |
| 9) 1,1,2-Trichlorotrifluo... | 3.830 | 101 | 43231  | 21.540  | ug/l   | 99  |
| 10) Methyl Iodide            | 4.013 | 142 | 52717  | 19.610  | ug/l   | 94  |
| 11) Tert butyl alcohol       | 4.872 | 59  | 14325  | 87.581  | ug/l   | 100 |
| 12) 1,1-Dichloroethene       | 3.799 | 96  | 41271  | 20.774  | ug/l   | 99  |
| 13) Acrolein                 | 3.665 | 56  | 16167  | 124.786 | ug/l   | 99  |
| 14) Allyl chloride           | 4.397 | 41  | 72760  | 18.940  | ug/l   | 95  |
| 15) Acrylonitrile            | 5.067 | 53  | 45278  | 96.329  | ug/l   | 99  |
| 16) Acetone                  | 3.879 | 43  | 47644  | 94.987  | ug/l   | 92  |
| 17) Carbon Disulfide         | 4.116 | 76  | 130774 | 19.539  | ug/l   | 100 |
| 18) Methyl Acetate           | 4.391 | 43  | 20951  | 17.919  | ug/l   | 100 |
| 19) Methyl tert-butyl Ether  | 5.128 | 73  | 105998 | 20.539  | ug/l   | 96  |
| 20) Methylene Chloride       | 4.628 | 84  | 43466  | 20.463  | ug/l   | 95  |
| 21) trans-1,2-Dichloroethene | 5.128 | 96  | 45023  | 20.405  | ug/l   | 94  |
| 22) Diisopropyl ether        | 6.025 | 45  | 143258 | 18.922  | ug/l   | 94  |
| 23) Vinyl Acetate            | 5.970 | 43  | 397626 | 93.983  | ug/l   | 100 |
| 24) 1,1-Dichloroethane       | 5.927 | 63  | 85352  | 19.970  | ug/l   | 99  |
| 25) 2-Butanone               | 6.909 | 43  | 65000  | 100.660 | ug/l   | 99  |
| 26) 2,2-Dichloropropane      | 6.896 | 77  | 77236  | 21.864  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene   | 6.902 | 96  | 52238  | 21.494  | ug/l   | 98  |
| 28) Bromochloromethane       | 7.256 | 49  | 32981  | 18.335  | ug/l   | 98  |
| 29) Tetrahydrofuran          | 7.268 | 42  | 37344  | 96.761  | ug/l   | 99  |
| 30) Chloroform               | 7.433 | 83  | 87034  | 21.088  | ug/l   | 99  |
| 31) Cyclohexane              | 7.713 | 56  | 80472  | 20.632  | ug/l   | 94  |
| 32) 1,1,1-Trichloroethane    | 7.622 | 97  | 82882  | 22.871  | ug/l   | 98  |
| 36) 1,1-Dichloropropene      | 7.841 | 75  | 63439  | 21.727  | ug/l   | 99  |
| 37) Ethyl Acetate            | 6.994 | 43  | 26794  | 20.032  | ug/l   | 97  |
| 38) Carbon Tetrachloride     | 7.823 | 117 | 75608  | 24.801  | ug/l   | 98  |
| 39) Methylcyclohexane        | 9.115 | 83  | 82700  | 22.631  | ug/l   | 99  |
| 40) Benzene                  | 8.085 | 78  | 192195 | 22.461  | ug/l   | 99  |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
 Data File : VY020404.D  
 Acq On : 22 Nov 2024 11:04  
 Operator : SY/MD  
 Sample : VY1122SBS01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1122SBS02

Manual Integrations  
 APPROVED

Reviewed By :Mahesh Dadoda 11/26/2024  
 Supervised By :Semsettin Yesilyurt 11/26/2024

Quant Time: Nov 22 23:57:57 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units | Dev(Min) |
|-------------------------------|--------|------|----------|---------|-------|----------|
| 41) Methacrylonitrile         | 7.232  | 41   | 15027    | 19.745  | ug/l  | 98       |
| 42) 1,2-Dichloroethane        | 8.164  | 62   | 52455    | 22.711  | ug/l  | 100      |
| 43) Isopropyl Acetate         | 8.201  | 43   | 53749    | 20.663  | ug/l  | 96       |
| 44) Trichloroethene           | 8.872  | 130  | 46129    | 22.753  | ug/l  | 98       |
| 45) 1,2-Dichloropropane       | 9.146  | 63   | 44684    | 21.887  | ug/l  | 99       |
| 46) Dibromomethane            | 9.237  | 93   | 21891    | 20.921  | ug/l  | 97       |
| 47) Bromodichloromethane      | 9.426  | 83   | 63732    | 22.063  | ug/l  | 98       |
| 48) Methyl methacrylate       | 9.225  | 41   | 25223    | 20.282  | ug/l  | 97       |
| 49) 1,4-Dioxane               | 9.231  | 88   | 4426     | 411.137 | ug/l  | 92       |
| 51) 4-Methyl-2-Pentanone      | 9.999  | 43   | 134967   | 102.243 | ug/l  | 99       |
| 52) Toluene                   | 10.176 | 92   | 117588   | 22.483  | ug/l  | 100      |
| 53) t-1,3-Dichloropropene     | 10.396 | 75   | 57948    | 21.214  | ug/l  | 99       |
| 54) cis-1,3-Dichloropropene   | 9.859  | 75   | 69407    | 22.197  | ug/l  | 97       |
| 55) 1,1,2-Trichloroethane     | 10.579 | 97   | 30154    | 21.710  | ug/l  | 96       |
| 56) Ethyl methacrylate        | 10.444 | 69   | 41769    | 20.024  | ug/l  | 94       |
| 57) 1,3-Dichloropropane       | 10.719 | 76   | 52320    | 20.960  | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether | 9.713  | 63   | 99738    | 100.839 | ug/l  | 100      |
| 59) 2-Hexanone                | 10.761 | 43   | 96861    | 103.624 | ug/l  | 97       |
| 60) Dibromochloromethane      | 10.914 | 129  | 40445    | 22.591  | ug/l  | 99       |
| 61) 1,2-Dibromoethane         | 11.018 | 107  | 27281    | 21.196  | ug/l  | 99       |
| 64) Tetrachloroethene         | 10.652 | 164  | 40490    | 22.777  | ug/l  | 95       |
| 65) Chlorobenzene             | 11.444 | 112  | 122560   | 22.290  | ug/l  | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.517 | 131  | 41629    | 22.663  | ug/l  | 98       |
| 67) Ethyl Benzene             | 11.524 | 91   | 228903   | 22.565  | ug/l  | 100      |
| 68) m/p-Xylenes               | 11.633 | 106  | 166365   | 45.531  | ug/l  | 98       |
| 69) o-Xylene                  | 11.956 | 106  | 78340    | 22.605  | ug/l  | 96       |
| 70) Styrene                   | 11.975 | 104  | 132399   | 22.994  | ug/l  | 99       |
| 71) Bromoform                 | 12.133 | 173  | 22552    | 23.558  | ug/l  | 100      |
| 73) Isopropylbenzene          | 12.261 | 105  | 219664   | 22.896  | ug/l  | 100      |
| 74) N-amyl acetate            | 12.072 | 43   | 43939    | 18.952  | ug/l  | 97       |
| 75) 1,1,2,2-Tetrachloroethane | 12.511 | 83   | 32756    | 21.125  | ug/l  | 99       |
| 76) 1,2,3-Trichloropropane    | 12.560 | 75   | 22996m   | 21.543  | ug/l  |          |
| 77) Bromobenzene              | 12.536 | 156  | 43708    | 21.745  | ug/l  | 98       |
| 78) n-propylbenzene           | 12.597 | 91   | 253646   | 22.029  | ug/l  | 99       |
| 79) 2-Chlorotoluene           | 12.682 | 91   | 144796   | 21.872  | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene    | 12.743 | 105  | 176320   | 22.740  | ug/l  | 98       |
| 81) trans-1,4-Dichloro-2-b... | 12.310 | 75   | 11280    | 20.706  | ug/l  | 98       |
| 82) 4-Chlorotoluene           | 12.779 | 91   | 146063   | 21.378  | ug/l  | 99       |
| 83) tert-Butylbenzene         | 13.005 | 119  | 154600   | 22.594  | ug/l  | 97       |
| 84) 1,2,4-Trimethylbenzene    | 13.048 | 105  | 174090   | 22.647  | ug/l  | 98       |
| 85) sec-Butylbenzene          | 13.182 | 105  | 221656   | 20.548  | ug/l  | 100      |
| 86) p-Isopropyltoluene        | 13.298 | 119  | 184448   | 22.115  | ug/l  | 99       |
| 87) 1,3-Dichlorobenzene       | 13.292 | 146  | 87940    | 21.637  | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene       | 13.377 | 146  | 87853    | 22.624  | ug/l  | 99       |
| 89) n-Butylbenzene            | 13.621 | 91   | 171542   | 21.478  | ug/l  | 99       |
| 90) Hexachloroethane          | 13.883 | 117  | 34288    | 21.300  | ug/l  | 94       |
| 91) 1,2-Dichlorobenzene       | 13.663 | 146  | 75430    | 22.275  | ug/l  | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.279 | 75   | 5026     | 19.754  | ug/l  | 95       |
| 93) 1,2,4-Trichlorobenzene    | 14.931 | 180  | 43522    | 21.257  | ug/l  | 99       |
| 94) Hexachlorobutadiene       | 15.029 | 225  | 27642    | 22.118  | ug/l  | 99       |
| 95) Naphthalene               | 15.151 | 128  | 72288    | 20.501  | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.340 | 180  | 36036    | 20.585  | ug/l  | 99       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112224\  
Data File : VY020404.D  
Acq On : 22 Nov 2024 11:04  
Operator : SY/MD  
Sample : VY1122SBS01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1122SBS02

Manual Integrations  
APPROVED

Reviewed By :Mahesh Dadoda 11/26/2024  
Supervised By :Semsettin Yesilyurt 11/26/2024

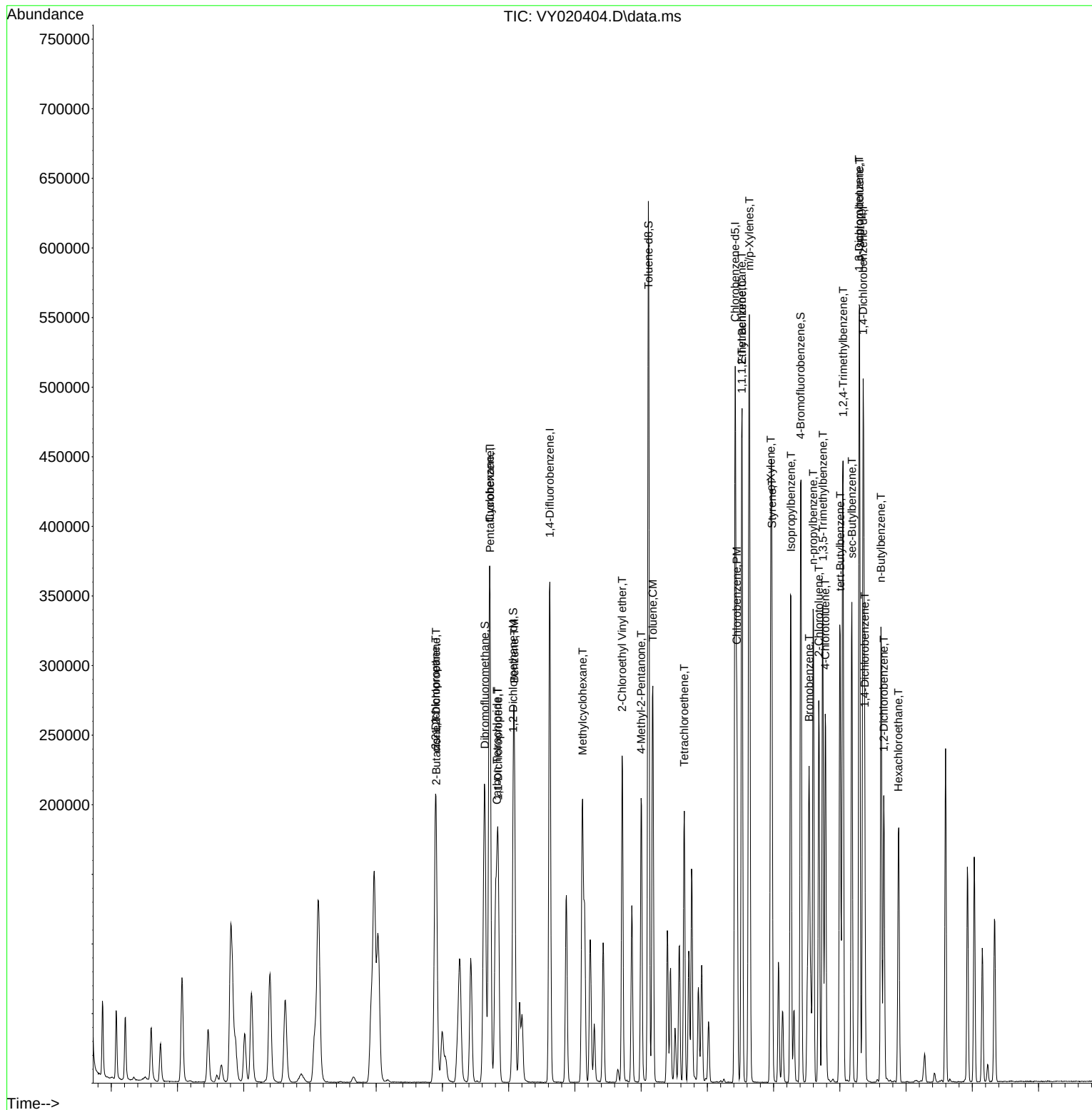
Quant Time: Nov 22 23:57:57 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

| Compound                                                                   | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------------------------------------------------------|------|------|----------|------|-------|----------|
| -----                                                                      |      |      |          |      |       |          |
| (#) = qualifier out of range (m) = manual integration (+) = signals summed |      |      |          |      |       |          |

**Instrument :**  
MSVOA\_Y  
**ClientSampleId :**  
VY1122SBS02

## Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 11/26/2024  
Supervised By :Semsettin Yesilyurt 11/26/2024



## Report of Analysis

|                    |                              |                 |               |
|--------------------|------------------------------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  |               |
| Client Sample ID:  | VN1120WBSD02                 | SDG No.:        | P4892         |
| Lab Sample ID:     | VN1120WBSD02                 | Matrix:         | Water         |
| Analytical Method: | SW8260                       | % Solid:        | 0             |
| Sample Wt/Vol:     | 5      Units:    mL          | Final Vol:      | 5000      uL  |
| Soil Aliquot Vol:  | uL                           | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624      ID :    0.25    | Level :         | LOW           |
| Prep Method :      |                              |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN084982.D        | 1         |           | 11/20/24 20:34 | VN112024      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units |
|----------------|--------------------------------|-------|-----------|------|------------|-------|
| <b>TARGETS</b> |                                |       |           |      |            |       |
| 75-71-8        | Dichlorodifluoromethane        | 19.7  |           | 0.21 | 1.00       | ug/L  |
| 74-87-3        | Chloromethane                  | 16.6  |           | 0.35 | 1.00       | ug/L  |
| 75-01-4        | Vinyl Chloride                 | 18.9  |           | 0.34 | 1.00       | ug/L  |
| 74-83-9        | Bromomethane                   | 19.2  |           | 1.40 | 5.00       | ug/L  |
| 75-00-3        | Chloroethane                   | 18.5  |           | 0.56 | 1.00       | ug/L  |
| 75-69-4        | Trichlorofluoromethane         | 19.5  |           | 0.34 | 1.00       | ug/L  |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 18.6  |           | 0.25 | 1.00       | ug/L  |
| 75-35-4        | 1,1-Dichloroethene             | 17.9  |           | 0.26 | 1.00       | ug/L  |
| 67-64-1        | Acetone                        | 110   |           | 1.40 | 5.00       | ug/L  |
| 75-15-0        | Carbon Disulfide               | 16.6  |           | 0.32 | 1.00       | ug/L  |
| 1634-04-4      | Methyl tert-butyl Ether        | 19.1  |           | 0.16 | 1.00       | ug/L  |
| 79-20-9        | Methyl Acetate                 | 18.7  |           | 0.60 | 1.00       | ug/L  |
| 75-09-2        | Methylene Chloride             | 19.0  |           | 0.32 | 1.00       | ug/L  |
| 156-60-5       | trans-1,2-Dichloroethene       | 18.4  |           | 0.25 | 1.00       | ug/L  |
| 75-34-3        | 1,1-Dichloroethane             | 19.0  |           | 0.23 | 1.00       | ug/L  |
| 110-82-7       | Cyclohexane                    | 17.9  |           | 1.60 | 5.00       | ug/L  |
| 78-93-3        | 2-Butanone                     | 110   |           | 1.30 | 5.00       | ug/L  |
| 56-23-5        | Carbon Tetrachloride           | 19.5  |           | 0.25 | 1.00       | ug/L  |
| 156-59-2       | cis-1,2-Dichloroethene         | 18.2  |           | 0.25 | 1.00       | ug/L  |
| 74-97-5        | Bromochloromethane             | 20.2  |           | 0.18 | 1.00       | ug/L  |
| 67-66-3        | Chloroform                     | 19.4  |           | 0.26 | 1.00       | ug/L  |
| 71-55-6        | 1,1,1-Trichloroethane          | 19.5  |           | 0.19 | 1.00       | ug/L  |
| 108-87-2       | Methylcyclohexane              | 17.7  |           | 0.19 | 1.00       | ug/L  |
| 71-43-2        | Benzene                        | 17.9  |           | 0.16 | 1.00       | ug/L  |
| 107-06-2       | 1,2-Dichloroethane             | 19.0  |           | 0.24 | 1.00       | ug/L  |
| 79-01-6        | Trichloroethene                | 17.3  |           | 0.32 | 1.00       | ug/L  |
| 78-87-5        | 1,2-Dichloropropane            | 18.5  |           | 0.19 | 1.00       | ug/L  |
| 75-27-4        | Bromodichloromethane           | 18.3  |           | 0.24 | 1.00       | ug/L  |
| 108-10-1       | 4-Methyl-2-Pentanone           | 110   |           | 0.75 | 5.00       | ug/L  |
| 108-88-3       | Toluene                        | 18.5  |           | 0.18 | 1.00       | ug/L  |

## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Portal Partners Tri-Venture               | Date Collected: |                              |
| Project:           | Amtrak Sawtooth Bridges 2024              | Date Received:  |                              |
| Client Sample ID:  | VN1120WBSD02                              | SDG No.:        | P4892                        |
| Lab Sample ID:     | VN1120WBSD02                              | Matrix:         | Water                        |
| Analytical Method: | SW8260                                    | % Solid:        | 0                            |
| Sample Wt/Vol:     | 5                      Units:    mL       | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOC-TCLVOA-10                |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN084982.D        | 1         |           | 11/20/24 20:34 | VN112024      |

| CAS Number                | Parameter                   | Conc.  | Qualifier | MDL                 | LOQ / CRQL | Units   |
|---------------------------|-----------------------------|--------|-----------|---------------------|------------|---------|
| 10061-02-6                | t-1,3-Dichloropropene       | 16.9   |           | 0.21                | 1.00       | ug/L    |
| 10061-01-5                | cis-1,3-Dichloropropene     | 17.7   |           | 0.18                | 1.00       | ug/L    |
| 79-00-5                   | 1,1,2-Trichloroethane       | 19.2   |           | 0.21                | 1.00       | ug/L    |
| 591-78-6                  | 2-Hexanone                  | 110    |           | 1.10                | 5.00       | ug/L    |
| 124-48-1                  | Dibromochloromethane        | 19.0   |           | 0.18                | 1.00       | ug/L    |
| 106-93-4                  | 1,2-Dibromoethane           | 18.0   |           | 0.16                | 1.00       | ug/L    |
| 127-18-4                  | Tetrachloroethene           | 18.0   |           | 0.25                | 1.00       | ug/L    |
| 108-90-7                  | Chlorobenzene               | 17.8   |           | 0.13                | 1.00       | ug/L    |
| 100-41-4                  | Ethyl Benzene               | 18.1   |           | 0.16                | 1.00       | ug/L    |
| 179601-23-1               | m/p-Xylenes                 | 36.6   |           | 0.31                | 2.00       | ug/L    |
| 95-47-6                   | o-Xylene                    | 19.1   |           | 0.14                | 1.00       | ug/L    |
| 100-42-5                  | Styrene                     | 17.9   |           | 0.16                | 1.00       | ug/L    |
| 75-25-2                   | Bromoform                   | 19.0   |           | 0.21                | 1.00       | ug/L    |
| 98-82-8                   | Isopropylbenzene            | 17.2   |           | 0.13                | 1.00       | ug/L    |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane   | 17.8   |           | 0.27                | 1.00       | ug/L    |
| 541-73-1                  | 1,3-Dichlorobenzene         | 15.0   |           | 0.24                | 1.00       | ug/L    |
| 106-46-7                  | 1,4-Dichlorobenzene         | 16.1   |           | 0.27                | 1.00       | ug/L    |
| 95-50-1                   | 1,2-Dichlorobenzene         | 15.8   |           | 0.19                | 1.00       | ug/L    |
| 96-12-8                   | 1,2-Dibromo-3-Chloropropane | 17.6   |           | 0.46                | 1.00       | ug/L    |
| 120-82-1                  | 1,2,4-Trichlorobenzene      | 13.0   |           | 0.42                | 1.00       | ug/L    |
| 87-61-6                   | 1,2,3-Trichlorobenzene      | 13.2   |           | 0.51                | 1.00       | ug/L    |
| <b>SURROGATES</b>         |                             |        |           |                     |            |         |
| 17060-07-0                | 1,2-Dichloroethane-d4       | 51.7   |           | 70 (74) - 130 (125) | 103%       | SPK: 50 |
| 1868-53-7                 | Dibromofluoromethane        | 50.6   |           | 70 (75) - 130 (124) | 101%       | SPK: 50 |
| 2037-26-5                 | Toluene-d8                  | 47.2   |           | 70 (86) - 130 (113) | 94%        | SPK: 50 |
| 460-00-4                  | 4-Bromofluorobenzene        | 50.5   |           | 70 (77) - 130 (121) | 101%       | SPK: 50 |
| <b>INTERNAL STANDARDS</b> |                             |        |           |                     |            |         |
| 363-72-4                  | Pentafluorobenzene          | 153000 | 8.224     |                     |            |         |
| 540-36-3                  | 1,4-Difluorobenzene         | 267000 | 9.1       |                     |            |         |
| 3114-55-4                 | Chlorobenzene-d5            | 232000 | 11.865    |                     |            |         |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4      | 120000 | 13.788    |                     |            |         |

## Report of Analysis

|                    |                              |           |                 |               |
|--------------------|------------------------------|-----------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  |           | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 |           | Date Received:  |               |
| Client Sample ID:  | VN1120WBSD02                 |           | SDG No.:        | P4892         |
| Lab Sample ID:     | VN1120WBSD02                 |           | Matrix:         | Water         |
| Analytical Method: | SW8260                       |           | % Solid:        | 0             |
| Sample Wt/Vol:     | 5                            | Units: mL | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  |                              | uL        | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624                      | ID : 0.25 | Level :         | LOW           |
| Prep Method :      |                              |           |                 |               |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VN084982.D        | 1         |           | 11/20/24 20:34 | VN112024      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|------------|-------|
|------------|-----------|-------|-----------|-----|------------|-------|

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084982.D  
 Acq On : 20 Nov 2024 20:34  
 Operator : JC\MD  
 Sample : VN1120WBSD02  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1120WBSD02

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2024  
 Supervised By :Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:48:01 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 8.224  | 168  | 152907   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 9.100  | 114  | 266547   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.865 | 117  | 231842   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.788 | 152  | 119679   | 50.000 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |          |
|---------------------------|--------|-------|----------|----------|------|----------|
| 33) 1,2-Dichloroethane-d4 | 8.577  | 65    | 114230   | 51.723   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 74 - 125 | Recovery | =    | 103.440% |
| 35) Dibromofluoromethane  | 8.159  | 113   | 91248    | 50.575   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 75 - 124 | Recovery | =    | 101.160% |
| 50) Toluene-d8            | 10.565 | 98    | 313909   | 47.232   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 86 - 113 | Recovery | =    | 94.460%  |
| 62) 4-Bromofluorobenzene  | 12.847 | 95    | 125548   | 50.545   | ug/l | 0.00     |
| Spiked Amount             | 50.000 | Range | 77 - 121 | Recovery | =    | 101.100% |

## Target Compounds

|                              |       |     |        |         |      | Qvalue |
|------------------------------|-------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane   | 2.124 | 85  | 34562  | 19.662  | ug/l | 99     |
| 3) Chloromethane             | 2.359 | 50  | 37667  | 16.577  | ug/l | 98     |
| 4) Vinyl Chloride            | 2.512 | 62  | 35774  | 18.922  | ug/l | 91     |
| 5) Bromomethane              | 2.900 | 94  | 19214  | 19.181  | ug/l | 98     |
| 6) Chloroethane              | 3.077 | 64  | 22681  | 18.502  | ug/l | 94     |
| 7) Trichlorofluoromethane    | 3.471 | 101 | 60720  | 19.497  | ug/l | 94     |
| 8) Diethyl Ether             | 3.953 | 74  | 20654  | 18.800  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluo... | 4.365 | 101 | 32772  | 18.623  | ug/l | 95     |
| 10) Methyl Iodide            | 4.583 | 142 | 44856  | 19.072  | ug/l | 99     |
| 11) Tert butyl alcohol       | 5.536 | 59  | 30573  | 104.876 | ug/l | 99     |
| 12) 1,1-Dichloroethene       | 4.330 | 96  | 31189  | 17.911  | ug/l | 98     |
| 13) Acrolein                 | 4.171 | 56  | 25199  | 86.687  | ug/l | 98     |
| 14) Allyl chloride           | 5.018 | 41  | 51587  | 18.268  | ug/l | 94     |
| 15) Acrylonitrile            | 5.718 | 53  | 85328  | 101.109 | ug/l | 99     |
| 16) Acetone                  | 4.430 | 43  | 71297  | 110.164 | ug/l | 97     |
| 17) Carbon Disulfide         | 4.700 | 76  | 89124  | 16.620  | ug/l | 97     |
| 18) Methyl Acetate           | 5.018 | 43  | 49465  | 18.730  | ug/l | 99     |
| 19) Methyl tert-butyl Ether  | 5.789 | 73  | 101746 | 19.064  | ug/l | 96     |
| 20) Methylene Chloride       | 5.259 | 84  | 36933  | 19.014  | ug/l | 90     |
| 21) trans-1,2-Dichloroethene | 5.783 | 96  | 32924  | 18.414  | ug/l | 98     |
| 22) Diisopropyl ether        | 6.665 | 45  | 109832 | 19.574  | ug/l | 97     |
| 23) Vinyl Acetate            | 6.600 | 43  | 390172 | 100.831 | ug/l | 100    |
| 24) 1,1-Dichloroethane       | 6.565 | 63  | 64019  | 19.003  | ug/l | 99     |
| 25) 2-Butanone               | 7.482 | 43  | 111299 | 108.022 | ug/l | 98     |
| 26) 2,2-Dichloropropane      | 7.482 | 77  | 51408  | 17.533  | ug/l | 97     |
| 27) cis-1,2-Dichloroethene   | 7.482 | 96  | 38034  | 18.218  | ug/l | 98     |
| 28) Bromochloromethane       | 7.812 | 49  | 27051  | 20.155  | ug/l | 96     |
| 29) Tetrahydrofuran          | 7.835 | 42  | 70167  | 102.653 | ug/l | 94     |
| 30) Chloroform               | 7.959 | 83  | 66479  | 19.388  | ug/l | 99     |
| 31) Cyclohexane              | 8.253 | 56  | 54537  | 17.887  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane    | 8.165 | 97  | 60845  | 19.496  | ug/l | 95     |
| 36) 1,1-Dichloropropene      | 8.365 | 75  | 43515  | 17.391  | ug/l | 98     |
| 37) Ethyl Acetate            | 7.559 | 43  | 45238  | 19.927  | ug/l | 99     |
| 38) Carbon Tetrachloride     | 8.359 | 117 | 54439  | 19.465  | ug/l | 93     |
| 39) Methylcyclohexane        | 9.600 | 83  | 44992  | 17.675  | ug/l | 98     |
| 40) Benzene                  | 8.600 | 78  | 143811 | 17.896  | ug/l | 93     |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
 Data File : VN084982.D  
 Acq On : 20 Nov 2024 20:34  
 Operator : JC\MD  
 Sample : VN1120WBSD02  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1120WBSD02

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2024  
 Supervised By :Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:48:01 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 31 18:45:38 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.777  | 41   | 25063    | 20.529  | ug/l   | 99       |
| 42) 1,2-Dichloroethane        | 8.665  | 62   | 49509    | 19.024  | ug/l   | 100      |
| 43) Isopropyl Acetate         | 8.694  | 43   | 171473   | 40.705  | ug/l # | 78       |
| 44) Trichloroethene           | 9.353  | 130  | 32132    | 17.338  | ug/l   | 95       |
| 45) 1,2-Dichloropropane       | 9.618  | 63   | 34804    | 18.463  | ug/l   | 99       |
| 46) Dibromomethane            | 9.706  | 93   | 24056    | 18.085  | ug/l   | 95       |
| 47) Bromodichloromethane      | 9.888  | 83   | 51390    | 18.328  | ug/l # | 98       |
| 48) Methyl methacrylate       | 9.676  | 41   | 34485    | 19.518  | ug/l   | 96       |
| 49) 1,4-Dioxane               | 9.700  | 88   | 12762    | 407.603 | ug/l # | 78       |
| 51) 4-Methyl-2-Pentanone      | 10.447 | 43   | 231343   | 106.895 | ug/l   | 100      |
| 52) Toluene                   | 10.629 | 92   | 87002    | 18.512  | ug/l   | 97       |
| 53) t-1,3-Dichloropropene     | 10.835 | 75   | 48918    | 16.855  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene   | 10.312 | 75   | 54329    | 17.687  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 11.018 | 97   | 33918    | 19.159  | ug/l   | 97       |
| 56) Ethyl methacrylate        | 10.871 | 69   | 50083    | 19.558  | ug/l   | 97       |
| 57) 1,3-Dichloropropane       | 11.159 | 76   | 56421    | 18.570  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 10.159 | 63   | 111870   | 93.362  | ug/l   | 99       |
| 59) 2-Hexanone                | 11.194 | 43   | 167822   | 106.534 | ug/l   | 99       |
| 60) Dibromochloromethane      | 11.359 | 129  | 38433    | 19.049  | ug/l   | 100      |
| 61) 1,2-Dibromoethane         | 11.465 | 107  | 32704    | 18.040  | ug/l   | 99       |
| 64) Tetrachloroethene         | 11.100 | 164  | 27789    | 18.020  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.888 | 112  | 92090    | 17.755  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.959 | 131  | 33837    | 18.756  | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.965 | 91   | 156291   | 18.052  | ug/l   | 98       |
| 68) m/p-Xylenes               | 12.070 | 106  | 120037   | 36.622  | ug/l   | 100      |
| 69) o-Xylene                  | 12.400 | 106  | 58460    | 19.066  | ug/l   | 99       |
| 70) Styrene                   | 12.412 | 104  | 95549    | 17.863  | ug/l   | 99       |
| 71) Bromoform                 | 12.582 | 173  | 25788    | 18.996  | ug/l # | 98       |
| 73) Isopropylbenzene          | 12.694 | 105  | 144330   | 17.209  | ug/l   | 99       |
| 74) N-amyl acetate            | 12.494 | 43   | 65496    | 18.348  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane | 12.935 | 83   | 49697    | 17.753  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane    | 12.994 | 75   | 42840m   | 17.907  | ug/l   |          |
| 77) Bromobenzene              | 12.982 | 156  | 36601    | 16.234  | ug/l   | 96       |
| 78) n-propylbenzene           | 13.035 | 91   | 168306   | 17.125  | ug/l   | 99       |
| 79) 2-Chlorotoluene           | 13.123 | 91   | 110671   | 17.234  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 13.170 | 105  | 122387   | 17.607  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-b... | 12.735 | 75   | 16717    | 16.578  | ug/l   | 97       |
| 82) 4-Chlorotoluene           | 13.223 | 91   | 109045   | 16.135  | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.441 | 119  | 105393   | 18.320  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene    | 13.482 | 105  | 126386   | 17.617  | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.617 | 105  | 136668   | 16.818  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.729 | 119  | 115130   | 17.275  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.729 | 146  | 66030    | 15.007  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.812 | 146  | 67804    | 16.062  | ug/l   | 99       |
| 89) n-Butylbenzene            | 14.053 | 91   | 90392    | 14.499  | ug/l   | 97       |
| 90) Hexachloroethane          | 14.335 | 117  | 23701    | 15.947  | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene       | 14.106 | 146  | 66831    | 15.806  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.717 | 75   | 9980     | 17.598  | ug/l   | 99       |
| 93) 1,2,4-Trichlorobenzene    | 15.394 | 180  | 30101    | 13.007  | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.506 | 225  | 14187    | 13.959  | ug/l   | 98       |
| 95) Naphthalene               | 15.641 | 128  | 95370    | 13.768  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.835 | 180  | 29583    | 13.168  | ug/l   | 96       |



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084982.D  
Acq On : 20 Nov 2024 20:34  
Operator : JC\MD  
Sample : VN1120WBSD02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBSD02

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 11/21/2024  
Supervised By :Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:48:01 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration

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

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

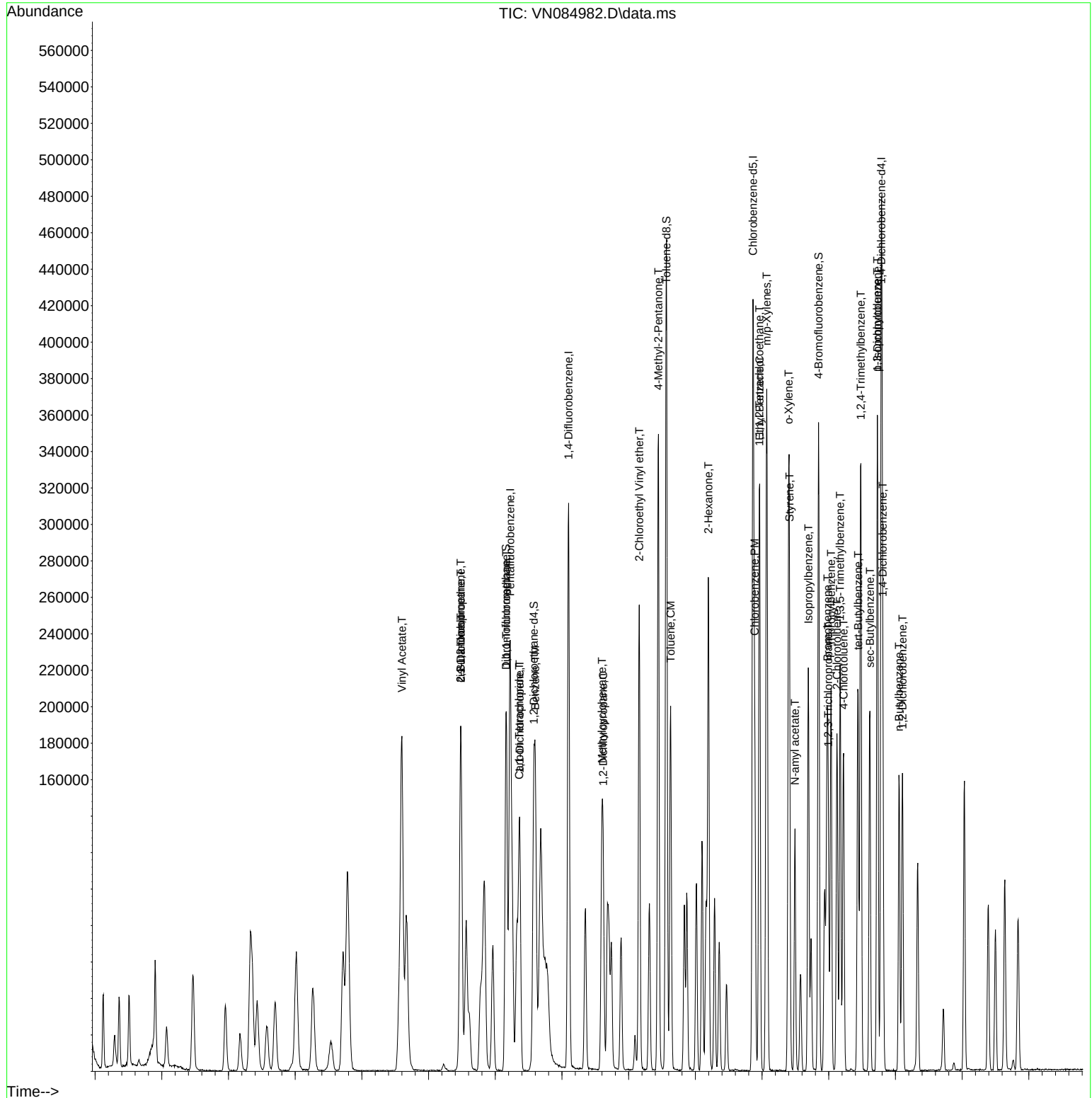
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112024\  
Data File : VN084982.D  
Acq On : 20 Nov 2024 20:34  
Operator : JC\MD  
Sample : VN1120WBSD02  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1120WBSD02

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 11/21/2024  
Supervised By : Mahesh Dadoda 11/21/2024

Quant Time: Nov 21 00:48:01 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N103024W.M  
Quant Title : SW846 8260  
QLast Update : Thu Oct 31 18:45:38 2024  
Response via : Initial Calibration



## Report of Analysis

|                    |                                           |                 |                              |
|--------------------|-------------------------------------------|-----------------|------------------------------|
| Client:            | Portal Partners Tri-Venture               | Date Collected: |                              |
| Project:           | Amtrak Sawtooth Bridges 2024              | Date Received:  |                              |
| Client Sample ID:  | VY1121SBSD01                              | SDG No.:        | P4892                        |
| Lab Sample ID:     | VY1121SBSD01                              | Matrix:         | SOIL                         |
| Analytical Method: | SW8260                                    | % Solid:        | 100                          |
| Sample Wt/Vol:     | 5                      Units:    g        | Final Vol:      | 5000                      uL |
| Soil Aliquot Vol:  | uL                                        | Test:           | VOC-TCLVOA-10                |
| GC Column:         | RXI-624                      ID :    0.25 | Level :         | LOW                          |
| Prep Method :      |                                           |                 |                              |

|                   |           |           |                |               |
|-------------------|-----------|-----------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
| VY020376.D        | 1         |           | 11/21/24 11:02 | VY112124      |

| CAS Number     | Parameter                      | Conc. | Qualifier | MDL  | LOQ / CRQL | Units(Dry Weight) |
|----------------|--------------------------------|-------|-----------|------|------------|-------------------|
| <b>TARGETS</b> |                                |       |           |      |            |                   |
| 75-71-8        | Dichlorodifluoromethane        | 23.8  |           | 1.70 | 5.00       | ug/Kg             |
| 74-87-3        | Chloromethane                  | 14.9  |           | 1.20 | 5.00       | ug/Kg             |
| 75-01-4        | Vinyl Chloride                 | 16.8  |           | 0.77 | 5.00       | ug/Kg             |
| 74-83-9        | Bromomethane                   | 19.1  |           | 1.00 | 5.00       | ug/Kg             |
| 75-00-3        | Chloroethane                   | 17.8  |           | 1.00 | 5.00       | ug/Kg             |
| 75-69-4        | Trichlorofluoromethane         | 21.1  |           | 0.91 | 5.00       | ug/Kg             |
| 76-13-1        | 1,1,2-Trichlorotrifluoroethane | 19.4  |           | 1.10 | 5.00       | ug/Kg             |
| 75-35-4        | 1,1-Dichloroethene             | 19.8  |           | 0.78 | 5.00       | ug/Kg             |
| 67-64-1        | Acetone                        | 95.5  |           | 6.20 | 25.0       | ug/Kg             |
| 75-15-0        | Carbon Disulfide               | 18.9  |           | 1.30 | 5.00       | ug/Kg             |
| 1634-04-4      | Methyl tert-butyl Ether        | 21.0  |           | 0.67 | 5.00       | ug/Kg             |
| 79-20-9        | Methyl Acetate                 | 19.0  |           | 1.80 | 5.00       | ug/Kg             |
| 75-09-2        | Methylene Chloride             | 20.4  |           | 3.40 | 10.0       | ug/Kg             |
| 156-60-5       | trans-1,2-Dichloroethene       | 19.5  |           | 0.84 | 5.00       | ug/Kg             |
| 75-34-3        | 1,1-Dichloroethane             | 19.8  |           | 0.63 | 5.00       | ug/Kg             |
| 110-82-7       | Cyclohexane                    | 19.4  |           | 0.69 | 5.00       | ug/Kg             |
| 78-93-3        | 2-Butanone                     | 110   |           | 5.70 | 25.0       | ug/Kg             |
| 56-23-5        | Carbon Tetrachloride           | 23.2  |           | 0.87 | 5.00       | ug/Kg             |
| 156-59-2       | cis-1,2-Dichloroethene         | 20.7  |           | 0.61 | 5.00       | ug/Kg             |
| 74-97-5        | Bromochloromethane             | 17.9  |           | 2.40 | 5.00       | ug/Kg             |
| 67-66-3        | Chloroform                     | 20.8  |           | 0.67 | 5.00       | ug/Kg             |
| 71-55-6        | 1,1,1-Trichloroethane          | 21.8  |           | 0.78 | 5.00       | ug/Kg             |
| 108-87-2       | Methylcyclohexane              | 20.4  |           | 0.87 | 5.00       | ug/Kg             |
| 71-43-2        | Benzene                        | 21.9  |           | 0.72 | 5.00       | ug/Kg             |
| 107-06-2       | 1,2-Dichloroethane             | 23.1  |           | 0.61 | 5.00       | ug/Kg             |
| 79-01-6        | Trichloroethene                | 21.1  |           | 0.75 | 5.00       | ug/Kg             |
| 78-87-5        | 1,2-Dichloropropane            | 21.1  |           | 0.66 | 5.00       | ug/Kg             |
| 75-27-4        | Bromodichloromethane           | 21.6  |           | 0.56 | 5.00       | ug/Kg             |
| 108-10-1       | 4-Methyl-2-Pentanone           | 110   |           | 4.40 | 25.0       | ug/Kg             |
| 108-88-3       | Toluene                        | 21.8  |           | 0.67 | 5.00       | ug/Kg             |

## Report of Analysis

|                    |                              |                 |               |
|--------------------|------------------------------|-----------------|---------------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: |               |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  |               |
| Client Sample ID:  | VY1121SBSD01                 | SDG No.:        | P4892         |
| Lab Sample ID:     | VY1121SBSD01                 | Matrix:         | SOIL          |
| Analytical Method: | SW8260                       | % Solid:        | 100           |
| Sample Wt/Vol:     | 5 Units: g                   | Final Vol:      | 5000 uL       |
| Soil Aliquot Vol:  | uL                           | Test:           | VOC-TCLVOA-10 |
| GC Column:         | RXI-624 ID : 0.25            | Level :         | LOW           |
| Prep Method :      |                              |                 |               |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VY020376.D        | 1         |           | 11/21/24 11:02 | VY112124      |

| CAS Number                | Parameter                   | Conc.  | Qualifier | MDL                 | LOQ / CRQL | Units(Dry Weight) |
|---------------------------|-----------------------------|--------|-----------|---------------------|------------|-------------------|
| 10061-02-6                | t-1,3-Dichloropropene       | 21.1   |           | 0.60                | 5.00       | ug/Kg             |
| 10061-01-5                | cis-1,3-Dichloropropene     | 22.0   |           | 0.57                | 5.00       | ug/Kg             |
| 79-00-5                   | 1,1,2-Trichloroethane       | 20.7   |           | 0.84                | 5.00       | ug/Kg             |
| 591-78-6                  | 2-Hexanone                  | 110    |           | 4.80                | 25.0       | ug/Kg             |
| 124-48-1                  | Dibromochloromethane        | 22.4   |           | 0.65                | 5.00       | ug/Kg             |
| 106-93-4                  | 1,2-Dibromoethane           | 20.9   |           | 0.79                | 5.00       | ug/Kg             |
| 127-18-4                  | Tetrachloroethene           | 20.9   |           | 0.89                | 5.00       | ug/Kg             |
| 108-90-7                  | Chlorobenzene               | 20.9   |           | 0.74                | 5.00       | ug/Kg             |
| 100-41-4                  | Ethyl Benzene               | 21.1   |           | 0.62                | 5.00       | ug/Kg             |
| 179601-23-1               | m/p-Xylenes                 | 42.8   |           | 1.40                | 10.0       | ug/Kg             |
| 95-47-6                   | o-Xylene                    | 21.5   |           | 0.70                | 5.00       | ug/Kg             |
| 100-42-5                  | Styrene                     | 22.1   |           | 0.60                | 5.00       | ug/Kg             |
| 75-25-2                   | Bromoform                   | 22.2   |           | 0.81                | 5.00       | ug/Kg             |
| 98-82-8                   | Isopropylbenzene            | 20.4   |           | 0.67                | 5.00       | ug/Kg             |
| 79-34-5                   | 1,1,2,2-Tetrachloroethane   | 19.7   |           | 1.10                | 5.00       | ug/Kg             |
| 541-73-1                  | 1,3-Dichlorobenzene         | 19.9   |           | 0.74                | 5.00       | ug/Kg             |
| 106-46-7                  | 1,4-Dichlorobenzene         | 20.5   |           | 0.80                | 5.00       | ug/Kg             |
| 95-50-1                   | 1,2-Dichlorobenzene         | 20.8   |           | 0.59                | 5.00       | ug/Kg             |
| 96-12-8                   | 1,2-Dibromo-3-Chloropropane | 20.2   |           | 1.60                | 5.00       | ug/Kg             |
| 120-82-1                  | 1,2,4-Trichlorobenzene      | 20.0   |           | 0.79                | 5.00       | ug/Kg             |
| 87-61-6                   | 1,2,3-Trichlorobenzene      | 19.4   |           | 0.78                | 5.00       | ug/Kg             |
| <b>SURROGATES</b>         |                             |        |           |                     |            |                   |
| 17060-07-0                | 1,2-Dichloroethane-d4       | 56.3   |           | 70 (50) - 130 (163) | 113%       | SPK: 50           |
| 1868-53-7                 | Dibromofluoromethane        | 53.1   |           | 70 (54) - 130 (147) | 106%       | SPK: 50           |
| 2037-26-5                 | Toluene-d8                  | 52.8   |           | 70 (58) - 130 (134) | 106%       | SPK: 50           |
| 460-00-4                  | 4-Bromofluorobenzene        | 55.2   |           | 70 (29) - 130 (146) | 110%       | SPK: 50           |
| <b>INTERNAL STANDARDS</b> |                             |        |           |                     |            |                   |
| 363-72-4                  | Pentafluorobenzene          | 169000 | 7.713     |                     |            |                   |
| 540-36-3                  | 1,4-Difluorobenzene         | 281000 | 8.615     |                     |            |                   |
| 3114-55-4                 | Chlorobenzene-d5            | 238000 | 11.42     |                     |            |                   |
| 3855-82-1                 | 1,4-Dichlorobenzene-d4      | 113000 | 13.352    |                     |            |                   |

## Report of Analysis

|                    |                              |                 |       |
|--------------------|------------------------------|-----------------|-------|
| Client:            | Portal Partners Tri-Venture  | Date Collected: |       |
| Project:           | Amtrak Sawtooth Bridges 2024 | Date Received:  |       |
| Client Sample ID:  | VY1121SBSD01                 | SDG No.:        | P4892 |
| Lab Sample ID:     | VY1121SBSD01                 | Matrix:         | SOIL  |
| Analytical Method: | SW8260                       | % Solid:        | 100   |
| Sample Wt/Vol:     | 5                            | Units:          | g     |
| Soil Aliquot Vol:  |                              |                 | uL    |
| GC Column:         | RXI-624                      | ID :            | 0.25  |
| Prep Method :      |                              | Level :         | LOW   |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed  | Prep Batch ID |
|-------------------|-----------|-----------|----------------|---------------|
| VY020376.D        | 1         |           | 11/21/24 11:02 | VY112124      |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|------------|-----------|-------|-----------|-----|------------|-------|
|------------|-----------|-------|-----------|-----|------------|-------|

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\_Y\Data\VY112124\  
 Data File : VY020376.D  
 Acq On : 21 Nov 2024 11:02  
 Operator : SY/MD  
 Sample : VY1121SBS01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1121SBS01

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/22/2024  
 Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:56:29 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| -----                      |        |      |          |        |       |          |
| Internal Standards         |        |      |          |        |       |          |
| 1) Pentafluorobenzene      | 7.713  | 168  | 168644   | 50.000 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.615  | 114  | 280583   | 50.000 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.420 | 117  | 238249   | 50.000 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.352 | 152  | 112550   | 50.000 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |            |      |
|---------------------------|--------|-------|----------|----------|------------|------|
| 33) 1,2-Dichloroethane-d4 | 8.067  | 65    | 109149   | 56.334   | ug/l       | 0.00 |
| Spiked Amount             | 50.000 | Range | 50 - 163 | Recovery | = 112.660% |      |
| 35) Dibromofluoromethane  | 7.640  | 113   | 95451    | 53.053   | ug/l       | 0.00 |
| Spiked Amount             | 50.000 | Range | 54 - 147 | Recovery | = 106.100% |      |
| 50) Toluene-d8            | 10.109 | 98    | 374478   | 52.838   | ug/l       | 0.00 |
| Spiked Amount             | 50.000 | Range | 58 - 134 | Recovery | = 105.680% |      |
| 62) 4-Bromofluorobenzene  | 12.407 | 95    | 125801   | 55.216   | ug/l       | 0.00 |
| Spiked Amount             | 50.000 | Range | 29 - 146 | Recovery | = 110.440% |      |

## Target Compounds

|                              |       |     |        |         |      | Qvalue |
|------------------------------|-------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane   | 1.867 | 85  | 38936  | 23.786  | ug/l | 99     |
| 3) Chloromethane             | 2.074 | 50  | 38975  | 14.941  | ug/l | 99     |
| 4) Vinyl Chloride            | 2.208 | 62  | 37620  | 16.752  | ug/l | 95     |
| 5) Bromomethane              | 2.598 | 94  | 21438  | 19.114  | ug/l | 91     |
| 6) Chloroethane              | 2.739 | 64  | 23307  | 17.791  | ug/l | 97     |
| 7) Trichlorofluoromethane    | 3.068 | 101 | 65889  | 21.113  | ug/l | 99     |
| 8) Diethyl Ether             | 3.458 | 74  | 20464  | 20.783  | ug/l | 94     |
| 9) 1,1,2-Trichlorotrifluo... | 3.824 | 101 | 35996  | 19.368  | ug/l | 97     |
| 10) Methyl Iodide            | 4.007 | 142 | 47884  | 19.235  | ug/l | 91     |
| 11) Tert butyl alcohol       | 4.872 | 59  | 14135  | 93.578  | ug/l | 98     |
| 12) 1,1-Dichloroethene       | 3.793 | 96  | 36398  | 19.785  | ug/l | 98     |
| 13) Acrolein                 | 3.659 | 56  | 16878  | 140.680 | ug/l | 97     |
| 14) Allyl chloride           | 4.385 | 41  | 68872  | 19.360  | ug/l | 95     |
| 15) Acrylonitrile            | 5.067 | 53  | 43291  | 99.459  | ug/l | 97     |
| 16) Acetone                  | 3.872 | 43  | 44344  | 95.470  | ug/l | 100    |
| 17) Carbon Disulfide         | 4.110 | 76  | 117350 | 18.934  | ug/l | 99     |
| 18) Methyl Acetate           | 4.391 | 43  | 20544  | 18.975  | ug/l | 96     |
| 19) Methyl tert-butyl Ether  | 5.122 | 73  | 100468 | 21.023  | ug/l | 99     |
| 20) Methylene Chloride       | 4.622 | 84  | 40132  | 20.403  | ug/l | 96     |
| 21) trans-1,2-Dichloroethene | 5.122 | 96  | 39892  | 19.523  | ug/l | 86     |
| 22) Diisopropyl ether        | 6.024 | 45  | 141471 | 20.179  | ug/l | 98     |
| 23) Vinyl Acetate            | 5.964 | 43  | 393377 | 100.406 | ug/l | 99     |
| 24) 1,1-Dichloroethane       | 5.921 | 63  | 78372  | 19.802  | ug/l | 99     |
| 25) 2-Butanone               | 6.902 | 43  | 63648  | 106.440 | ug/l | 97     |
| 26) 2,2-Dichloropropane      | 6.890 | 77  | 69713  | 21.311  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene   | 6.890 | 96  | 46613  | 20.712  | ug/l | 97     |
| 28) Bromochloromethane       | 7.250 | 49  | 29738  | 17.853  | ug/l | 99     |
| 29) Tetrahydrofuran          | 7.268 | 42  | 37235  | 104.185 | ug/l | 99     |
| 30) Chloroform               | 7.427 | 83  | 79341  | 20.760  | ug/l | 98     |
| 31) Cyclohexane              | 7.707 | 56  | 70124  | 19.415  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane    | 7.622 | 97  | 73140  | 21.795  | ug/l | 99     |
| 36) 1,1-Dichloropropene      | 7.835 | 75  | 57487  | 20.920  | ug/l | 99     |
| 37) Ethyl Acetate            | 6.988 | 43  | 26683  | 21.196  | ug/l | 99     |
| 38) Carbon Tetrachloride     | 7.817 | 117 | 66429  | 23.153  | ug/l | 92     |
| 39) Methylcyclohexane        | 9.109 | 83  | 70241  | 20.424  | ug/l | 97     |
| 40) Benzene                  | 8.085 | 78  | 176015 | 21.857  | ug/l | 100    |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020376.D  
 Acq On : 21 Nov 2024 11:02  
 Operator : SY/MD  
 Sample : VY1121SBS01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1121SBS01

Manual Integrations  
 APPROVED

Reviewed By :Romaben Patel 11/22/2024  
 Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:56:29 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.219  | 41   | 14488    | 20.227  | ug/l   | 96       |
| 42) 1,2-Dichloroethane        | 8.158  | 62   | 50126    | 23.060  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.201  | 43   | 53927    | 22.028  | ug/l # | 86       |
| 44) Trichloroethene           | 8.865  | 130  | 40165    | 21.050  | ug/l   | 96       |
| 45) 1,2-Dichloropropane       | 9.146  | 63   | 40575    | 21.118  | ug/l   | 98       |
| 46) Dibromomethane            | 9.231  | 93   | 21203    | 21.530  | ug/l   | 99       |
| 47) Bromodichloromethane      | 9.420  | 83   | 58718    | 21.599  | ug/l   | 97       |
| 48) Methyl methacrylate       | 9.225  | 41   | 25163    | 21.499  | ug/l   | 96       |
| 49) 1,4-Dioxane               | 9.231  | 88   | 4576     | 451.656 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone      | 9.999  | 43   | 134437   | 108.211 | ug/l   | 98       |
| 52) Toluene                   | 10.170 | 92   | 107310   | 21.801  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene     | 10.396 | 75   | 54196    | 21.082  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene   | 9.859  | 75   | 64670    | 21.975  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane     | 10.572 | 97   | 26999    | 20.654  | ug/l   | 98       |
| 56) Ethyl methacrylate        | 10.438 | 69   | 40228    | 20.492  | ug/l   | 97       |
| 57) 1,3-Dichloropropane       | 10.719 | 76   | 51078    | 21.742  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 9.713  | 63   | 93264    | 100.191 | ug/l   | 99       |
| 59) 2-Hexanone                | 10.761 | 43   | 95820    | 108.921 | ug/l   | 99       |
| 60) Dibromochloromethane      | 10.914 | 129  | 37704    | 22.377  | ug/l   | 100      |
| 61) 1,2-Dibromoethane         | 11.018 | 107  | 25357    | 20.933  | ug/l   | 99       |
| 64) Tetrachloroethene         | 10.646 | 164  | 35871    | 20.887  | ug/l   | 93       |
| 65) Chlorobenzene             | 11.444 | 112  | 111103   | 20.915  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.517 | 131  | 37985    | 21.405  | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.517 | 91   | 207216   | 21.144  | ug/l   | 99       |
| 68) m/p-Xylenes               | 11.627 | 106  | 151238   | 42.844  | ug/l   | 97       |
| 69) o-Xylene                  | 11.956 | 106  | 71860    | 21.463  | ug/l   | 97       |
| 70) Styrene                   | 11.969 | 104  | 122933   | 22.099  | ug/l   | 99       |
| 71) Bromoform                 | 12.133 | 173  | 20516    | 22.183  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.255 | 105  | 194695   | 20.421  | ug/l   | 100      |
| 74) N-amyl acetate            | 12.072 | 43   | 47073    | 20.430  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane | 12.505 | 83   | 30417    | 19.740  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane    | 12.560 | 75   | 20234m   | 19.074  | ug/l   |          |
| 77) Bromobenzene              | 12.536 | 156  | 41494    | 20.772  | ug/l   | 98       |
| 78) n-propylbenzene           | 12.596 | 91   | 234844   | 20.524  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 12.682 | 91   | 133978   | 20.364  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene    | 12.737 | 105  | 159056   | 20.642  | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-b... | 12.304 | 75   | 11345    | 20.956  | ug/l   | 96       |
| 82) 4-Chlorotoluene           | 12.779 | 91   | 137917   | 20.312  | ug/l   | 98       |
| 83) tert-Butylbenzene         | 12.999 | 119  | 139104   | 20.457  | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene    | 13.042 | 105  | 157416   | 20.606  | ug/l   | 100      |
| 85) sec-Butylbenzene          | 13.176 | 105  | 205536   | 19.173  | ug/l   | 99       |
| 86) p-Isopropyltoluene        | 13.291 | 119  | 168630   | 20.345  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.291 | 146  | 80241    | 19.867  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene       | 13.371 | 146  | 78947    | 20.458  | ug/l   | 98       |
| 89) n-Butylbenzene            | 13.621 | 91   | 157920   | 19.896  | ug/l   | 99       |
| 90) Hexachloroethane          | 13.883 | 117  | 31925    | 19.956  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene       | 13.663 | 146  | 69870    | 20.763  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropr... | 14.279 | 75   | 5113     | 20.221  | ug/l   | 91       |
| 93) 1,2,4-Trichlorobenzene    | 14.925 | 180  | 40599    | 19.953  | ug/l   | 99       |
| 94) Hexachlorobutadiene       | 15.029 | 225  | 25677    | 20.674  | ug/l   | 98       |
| 95) Naphthalene               | 15.151 | 128  | 71167    | 20.309  | ug/l   | 100      |
| 96) 1,2,3-Trichlorobenzene    | 15.334 | 180  | 33813    | 19.436  | ug/l   | 97       |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
Data File : VY020376.D  
Acq On : 21 Nov 2024 11:02  
Operator : SY/MD  
Sample : VY1121SBSD01  
Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VY1121SBSD01

Manual Integrations  
APPROVED

Reviewed By :Romaben Patel 11/22/2024  
Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:56:29 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 20 04:38:24 2024  
Response via : Initial Calibration

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

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



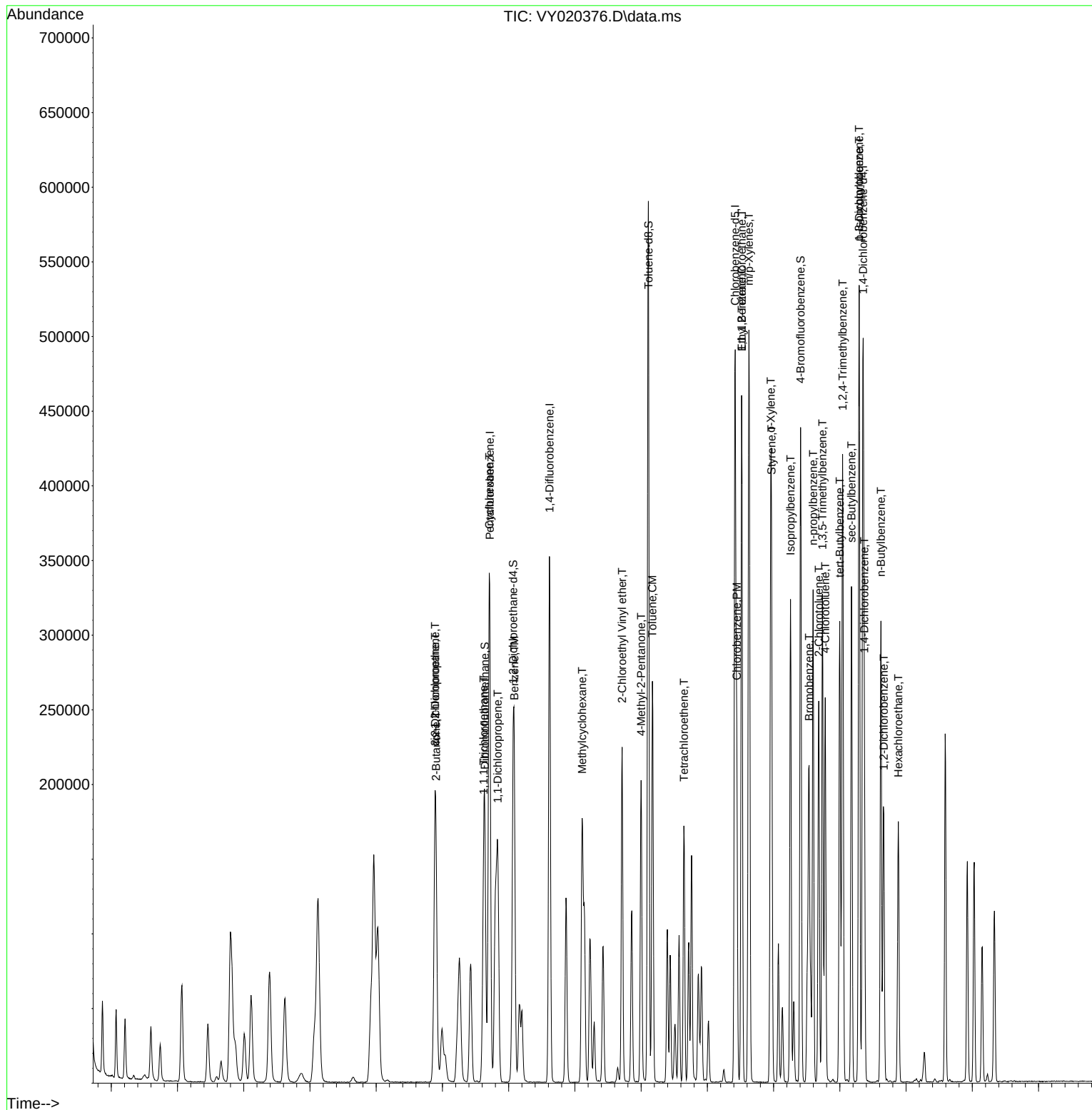
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_Y\Data\VY112124\  
 Data File : VY020376.D  
 Acq On : 21 Nov 2024 11:02  
 Operator : SY/MD  
 Sample : VY1121SBSD01  
 Misc : 5.00g/5.0mL/MSVOA\_Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1121SBSD01

### Manual Integrations APPROVED

Reviewed By :Romaben Patel 11/22/2024  
 Supervised By :Mahesh Dadoda 11/22/2024

Quant Time: Nov 21 13:56:29 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_Y\methods\82Y111924S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 20 04:38:24 2024  
 Response via : Initial Calibration



## Manual Integration Report

|           |          |            |         |
|-----------|----------|------------|---------|
| Sequence: | vn103024 | Instrument | MSVOA_n |
|-----------|----------|------------|---------|

| Sample ID   | File ID    | Parameter                   | Review By | Review On            | Supervised By | Supervised On        | Reason                      |
|-------------|------------|-----------------------------|-----------|----------------------|---------------|----------------------|-----------------------------|
| VSTDICC100  | VN084570.D | 1,2,3-Trichloropropane      | SAM       | 11/4/2024 1:12:14 AM | MMDadoda      | 11/4/2024 1:18:00 AM | Peak Integrated by Software |
| VSTDICCC050 | VN084571.D | 1,2,3-Trichloropropane      | SAM       | 11/4/2024 1:12:15 AM | MMDadoda      | 11/4/2024 1:18:01 AM | Peak Integrated by Software |
| VSTDICC020  | VN084572.D | 1,2,3-Trichloropropane      | SAM       | 11/4/2024 1:12:16 AM | MMDadoda      | 11/4/2024 1:18:03 AM | Peak Integrated by Software |
| VSTDICC010  | VN084573.D | 1,2,3-Trichloropropane      | SAM       | 11/4/2024 1:12:17 AM | MMDadoda      | 11/4/2024 1:18:04 AM | Peak Integrated by Software |
| VSTDICC005  | VN084574.D | 1,2,3-Trichloropropane      | SAM       | 11/4/2024 1:12:20 AM | MMDadoda      | 11/4/2024 1:18:05 AM | Peak Integrated by Software |
| VSTDICC001  | VN084575.D | 1,2,3-Trichloropropane      | SAM       | 11/4/2024 1:12:21 AM | MMDadoda      | 11/4/2024 1:18:07 AM | Peak Integrated by Software |
| VSTDICC001  | VN084575.D | 1,4-Dichlorobenzene         | SAM       | 11/4/2024 1:12:21 AM | MMDadoda      | 11/4/2024 1:18:07 AM | Peak Integrated by Software |
| VSTDICC001  | VN084575.D | Acetone                     | SAM       | 11/4/2024 1:12:21 AM | MMDadoda      | 11/4/2024 1:18:07 AM | Peak Integrated by Software |
| VSTDICC001  | VN084575.D | Diethyl Ether               | SAM       | 11/4/2024 1:12:21 AM | MMDadoda      | 11/4/2024 1:18:07 AM | Peak Integrated by Software |
| VSTDICV050  | VN084577.D | 1,2,3-Trichloropropane      | SAM       | 11/4/2024 1:12:23 AM | MMDadoda      | 11/4/2024 1:18:09 AM | Peak Integrated by Software |
| VSTDCCC050  | VN084579.D | 1,2,3-Trichloropropane      | SAM       | 11/4/2024 1:12:34 AM | MMDadoda      | 11/4/2024 1:18:38 AM | Peak Integrated by Software |
| VSTDCCC050  | VN084579.D | trans-1,4-Dichloro-2-butene | SAM       | 11/4/2024 1:12:34 AM | MMDadoda      | 11/4/2024 1:18:38 AM | Peak Integrated by Software |



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

## Manual Integration Report

Sequence:

vn103024

Instrument

MSVOA\_n

Sample ID

File ID

Parameter

Review By

Review On

Supervised  
By

Supervised On

Reason

## Manual Integration Report

Sequence:

VN112024

Instrument

MSVOA\_n

| Sample ID        | File ID    | Parameter                       | Review By | Review On                | Supervised By | Supervised On            | Reason                      |
|------------------|------------|---------------------------------|-----------|--------------------------|---------------|--------------------------|-----------------------------|
| VSTDCCC050       | VN084960.D | 1,2,3-Trichloropropane          | SAM       | 11/21/2024<br>6:43:26 AM | MMDadoda      | 11/21/2024<br>6:45:22 AM | Peak Integrated by Software |
| VN1120WBS02      | VN084964.D | 1,2,3-Trichloropropane          | SAM       | 11/21/2024<br>6:43:30 AM | MMDadoda      | 11/21/2024<br>6:45:25 AM | Peak Integrated by Software |
| VN1120WBS02      | VN084964.D | trans-1,4-Dichloro-2-but<br>ene | SAM       | 11/21/2024<br>6:43:30 AM | MMDadoda      | 11/21/2024<br>6:45:25 AM | Peak Integrated by Software |
| VN1120WBSD0<br>2 | VN084982.D | 1,2,3-Trichloropropane          | SAM       | 11/21/2024<br>6:43:52 AM | MMDadoda      | 11/21/2024 6:46:11<br>AM | Peak Integrated by Software |
| VSTDCCC050       | VN084985.D | 1,2,3-Trichloropropane          | SAM       | 11/21/2024<br>6:43:54 AM | MMDadoda      | 11/21/2024<br>6:46:13 AM | Peak Integrated by Software |

## Manual Integration Report

Sequence:

VY111924

Instrument

MSVOA\_y

| Sample ID   | File ID    | Parameter              | Review By | Review On                | Supervised By | Supervised On            | Reason                      |
|-------------|------------|------------------------|-----------|--------------------------|---------------|--------------------------|-----------------------------|
| VSTDICC005  | VY020338.D | 1,2,3-Trichloropropane | Romaben   | 11/20/2024<br>9:16:52 AM | SAM           | 11/25/2024<br>5:45:24 AM | Peak Integrated by Software |
| VSTDICC005  | VY020338.D | Tert butyl alcohol     | Romaben   | 11/20/2024<br>9:16:52 AM | SAM           | 11/25/2024<br>5:45:24 AM | Peak Integrated by Software |
| VSTDICC010  | VY020339.D | 1,2,3-Trichloropropane | Romaben   | 11/20/2024<br>9:16:57 AM | MMDadoda      | 11/20/2024<br>1:00:48 PM | Peak Integrated by Software |
| VSTDICC020  | VY020340.D | 1,2,3-Trichloropropane | Romaben   | 11/20/2024<br>9:17:07 AM | MMDadoda      | 11/20/2024<br>1:00:52 PM | Peak Integrated by Software |
| VSTDICCC050 | VY020341.D | 1,2,3-Trichloropropane | Romaben   | 11/20/2024<br>9:18:09 AM | MMDadoda      | 11/20/2024<br>1:00:53 PM | Peak Integrated by Software |
| VSTDICC100  | VY020342.D | 1,2,3-Trichloropropane | Romaben   | 11/20/2024<br>9:17:14 AM | MMDadoda      | 11/20/2024<br>1:00:55 PM | Peak Integrated by Software |
| VSTDICC150  | VY020343.D | 1,2,3-Trichloropropane | Romaben   | 11/20/2024<br>9:17:19 AM | MMDadoda      | 11/20/2024<br>1:00:56 PM | Peak Integrated by Software |
| VSTDICV050  | VY020345.D | 1,2,3-Trichloropropane | Romaben   | 11/20/2024<br>9:17:24 AM | SAM           | 11/25/2024<br>5:45:26 AM | Peak Integrated by Software |

## Manual Integration Report

Sequence:

VY112124

Instrument

MSVOA\_y

| Sample ID        | File ID    | Parameter              | Review By | Review On                 | Supervised By | Supervised On            | Reason                      |
|------------------|------------|------------------------|-----------|---------------------------|---------------|--------------------------|-----------------------------|
| VSTDCCC050       | VY020373.D | 1,2,3-Trichloropropane | Romaben   | 11/22/2024<br>11:06:56 AM | MMDadoda      | 11/22/2024<br>3:31:17 PM | Peak Integrated by Software |
| VY1121SBS01      | VY020375.D | 1,2,3-Trichloropropane | Romaben   | 11/22/2024<br>11:07:00 AM | MMDadoda      | 11/22/2024<br>3:31:16 PM | Peak Integrated by Software |
| VY1121SBSD0<br>1 | VY020376.D | 1,2,3-Trichloropropane | Romaben   | 11/22/2024<br>11:07:03 AM | MMDadoda      | 11/22/2024<br>3:31:18 PM | Peak Integrated by Software |
| VSTDCCC050       | VY020399.D | 1,2,3-Trichloropropane | Romaben   | 11/22/2024<br>11:11:47 AM | MMDadoda      | 11/22/2024<br>3:31:21 PM | Peak Integrated by Software |



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

## Manual Integration Report

Sequence:

VY112224

Instrument

MSVOA\_y

| Sample ID   | File ID    | Parameter              | Review By | Review On                | Supervised By | Supervised On            | Reason                      |
|-------------|------------|------------------------|-----------|--------------------------|---------------|--------------------------|-----------------------------|
| VSTDCCC050  | VY020401.D | 1,2,3-Trichloropropane | MMDadoda  | 11/25/2024<br>2:01:34 PM | SAM           | 11/25/2024<br>2:05:36 PM | Peak Integrated by Software |
| VY1122SBS02 | VY020404.D | 1,2,3-Trichloropropane | MMDadoda  | 11/26/2024<br>3:33:33 AM | SAM           | 11/26/2024<br>3:34:04 AM | Peak Integrated by Software |
| VSTDCCC050  | VY020421.D | 1,2,3-Trichloropropane | MMDadoda  | 11/25/2024<br>2:01:43 PM | SAM           | 11/25/2024<br>2:05:43 PM | Peak Integrated by Software |

Instrument ID: **MSVOA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # VN103024**

|                          |                     |                                                       |                      |                      |              |
|--------------------------|---------------------|-------------------------------------------------------|----------------------|----------------------|--------------|
| Review By                | Semsettin Yesilyurt | Review On                                             | 11/1/2024 2:56:11 PM |                      |              |
| Supervise By             | Maresh Dadoda       | Supervise On                                          | 11/4/2024 1:18:30 AM |                      |              |
| SubDirectory             | VN103024            | HP Acquire Method                                     | MSVOA_N              | HP Processing Method | 82n103024w.m |
| STD. NAME                |                     | STD REF.#                                             |                      |                      |              |
| Tune/Reschk              |                     | VP131194.VP131195                                     |                      |                      |              |
| Initial Calibration Stds |                     | VP131185,VP131186,VP131187,VP131188,VP131189,VP131190 |                      |                      |              |
| CCC                      |                     | VP131191,VP131192                                     |                      |                      |              |
| Internal Standard/PEM    |                     | VP128298                                              |                      |                      |              |
| ICV/I.BLK                |                     | VP131193                                              |                      |                      |              |
| Surrogate Standard       |                     |                                                       |                      |                      |              |
| MS/MSD Standard          |                     |                                                       |                      |                      |              |
| LCS Standard             |                     |                                                       |                      |                      |              |

| Sr# | Sampleld     | Data File Name | Date-Time         | Operator | Status |
|-----|--------------|----------------|-------------------|----------|--------|
| 1   | BFB          | VN084569.D     | 30 Oct 2024 10:42 | JC\MD    | Ok     |
| 2   | VSTDICC100   | VN084570.D     | 30 Oct 2024 11:46 | JC\MD    | Ok,M   |
| 3   | VSTDICCC050  | VN084571.D     | 30 Oct 2024 12:09 | JC\MD    | Ok,M   |
| 4   | VSTDICC020   | VN084572.D     | 30 Oct 2024 12:33 | JC\MD    | Ok,M   |
| 5   | VSTDICC010   | VN084573.D     | 30 Oct 2024 12:57 | JC\MD    | Ok,M   |
| 6   | VSTDICC005   | VN084574.D     | 30 Oct 2024 13:21 | JC\MD    | Ok,M   |
| 7   | VSTDICC001   | VN084575.D     | 30 Oct 2024 13:45 | JC\MD    | Ok,M   |
| 8   | VIBLK        | VN084576.D     | 30 Oct 2024 14:42 | JC\MD    | Ok     |
| 9   | VSTDICV050   | VN084577.D     | 30 Oct 2024 15:06 | JC\MD    | Ok,M   |
| 10  | BFB          | VN084578.D     | 30 Oct 2024 19:24 | JC\MD    | Ok     |
| 11  | VSTDCCC050   | VN084579.D     | 30 Oct 2024 20:12 | JC\MD    | Ok,M   |
| 12  | VN1030MBL01  | VN084580.D     | 30 Oct 2024 20:48 | JC\MD    | Ok     |
| 13  | VN1030WBL01  | VN084581.D     | 30 Oct 2024 21:12 | JC\MD    | Ok     |
| 14  | VN1030WBS01  | VN084582.D     | 30 Oct 2024 21:46 | JC\MD    | Ok,M   |
| 15  | VN1030WBSD01 | VN084583.D     | 30 Oct 2024 22:10 | JC\MD    | Ok,M   |
| 16  | P4594-04     | VN084584.D     | 30 Oct 2024 22:34 | JC\MD    | Ok,M   |
| 17  | P4594-08     | VN084585.D     | 30 Oct 2024 22:58 | JC\MD    | Ok     |
| 18  | P4594-12     | VN084586.D     | 30 Oct 2024 23:22 | JC\MD    | Ok     |
| 19  | P4594-16     | VN084587.D     | 30 Oct 2024 23:46 | JC\MD    | Ok     |
| 20  | P4594-20     | VN084588.D     | 31 Oct 2024 00:09 | JC\MD    | Ok     |
| 21  | P4597-03     | VN084589.D     | 31 Oct 2024 00:34 | JC\MD    | Ok     |



Instrument ID: **MSVOA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # VN103024**

| Review By                | Semsettin Yesilyurt                                   | Review On         | 11/1/2024 2:56:11 PM |                      |              |
|--------------------------|-------------------------------------------------------|-------------------|----------------------|----------------------|--------------|
| Supervise By             | Maresh Dadoda                                         | Supervise On      | 11/4/2024 1:18:30 AM |                      |              |
| SubDirectory             | VN103024                                              | HP Acquire Method | MSVOA_N              | HP Processing Method | 82n103024w.m |
| STD. NAME                | STD REF.#                                             |                   |                      |                      |              |
| Tune/Reschk              | VP131194.VP131195                                     |                   |                      |                      |              |
| Initial Calibration Stds | VP131185,VP131186,VP131187,VP131188,VP131189,VP131190 |                   |                      |                      |              |
| CCC                      | VP131191,VP131192                                     |                   |                      |                      |              |
| Internal Standard/PEM    | VP128298                                              |                   |                      |                      |              |
| ICV/I.BLK                | VP131193                                              |                   |                      |                      |              |
| Surrogate Standard       |                                                       |                   |                      |                      |              |
| MS/MSD Standard          |                                                       |                   |                      |                      |              |
| LCS Standard             |                                                       |                   |                      |                      |              |

|    |                |            |                   |       |      |
|----|----------------|------------|-------------------|-------|------|
| 22 | P4597-06       | VN084590.D | 31 Oct 2024 00:57 | JC\MD | Ok,M |
| 23 | P4597-09       | VN084591.D | 31 Oct 2024 01:21 | JC\MD | Ok   |
| 24 | P4597-12       | VN084592.D | 31 Oct 2024 01:45 | JC\MD | Ok,M |
| 25 | P4598-04       | VN084593.D | 31 Oct 2024 02:09 | JC\MD | Ok   |
| 26 | P4598-08       | VN084594.D | 31 Oct 2024 02:33 | JC\MD | Ok   |
| 27 | P4598-12       | VN084595.D | 31 Oct 2024 02:57 | JC\MD | Ok   |
| 28 | P4611-03       | VN084596.D | 31 Oct 2024 03:21 | JC\MD | Ok   |
| 29 | P4611-06       | VN084597.D | 31 Oct 2024 03:45 | JC\MD | Ok   |
| 30 | P4611-09       | VN084598.D | 31 Oct 2024 04:09 | JC\MD | Ok   |
| 31 | P4611-12       | VN084599.D | 31 Oct 2024 04:33 | JC\MD | Ok   |
| 32 | P4611-15       | VN084600.D | 31 Oct 2024 04:57 | JC\MD | Ok   |
| 33 | P4611-18       | VN084601.D | 31 Oct 2024 05:21 | JC\MD | Ok   |
| 34 | P4612-04       | VN084602.D | 31 Oct 2024 05:45 | JC\MD | Ok   |
| 35 | P4613-02       | VN084603.D | 31 Oct 2024 06:09 | JC\MD | Ok   |
| 36 | PB164501ZHE#13 | VN084604.D | 31 Oct 2024 06:33 | JC\MD | Ok,M |
| 37 | PB164501ZHE#14 | VN084605.D | 31 Oct 2024 06:57 | JC\MD | Ok,M |
| 38 | PB164501ZHE#15 | VN084606.D | 31 Oct 2024 07:22 | JC\MD | Ok,M |
| 39 | PB164501ZHE#16 | VN084607.D | 31 Oct 2024 07:46 | JC\MD | Ok   |
| 40 | PB164501ZHE#17 | VN084608.D | 31 Oct 2024 08:10 | JC\MD | Ok,M |
| 41 | PB164501ZHE#18 | VN084609.D | 31 Oct 2024 08:34 | JC\MD | Ok,M |
| 42 | PB164501ZHE#19 | VN084610.D | 31 Oct 2024 08:58 | JC\MD | Ok,M |
| 43 | PB164501ZHE#20 | VN084611.D | 31 Oct 2024 09:22 | JC\MD | Ok   |

M : Manual Integration

Instrument ID: **MSVOA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # VN112024**

|                                                                                                    |                     |                   |                                   |
|----------------------------------------------------------------------------------------------------|---------------------|-------------------|-----------------------------------|
| Review By                                                                                          | Semsettin Yesilyurt | Review On         | 11/21/2024 6:44:11 AM             |
| Supervise By                                                                                       | Maresh Dadoda       | Supervise On      | 11/21/2024 6:46:29 AM             |
| SubDirectory                                                                                       | VN112024            | HP Acquire Method | HP Processing Method 82N103024W.M |
| <b>STD. NAME</b>                                                                                   | <b>STD REF.#</b>    |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP131654            |                   |                                   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP131655,VP131656   |                   |                                   |

| Sr# | SampleId     | Data File Name | Date-Time         | Operator | Status |
|-----|--------------|----------------|-------------------|----------|--------|
| 1   | BFB          | VN084959.D     | 20 Nov 2024 09:51 | JC\MD    | Ok     |
| 2   | VSTDCCC050   | VN084960.D     | 20 Nov 2024 11:18 | JC\MD    | Ok,M   |
| 3   | VN1120MBL01  | VN084961.D     | 20 Nov 2024 11:57 | JC\MD    | Not Ok |
| 4   | VN1120WBL01  | VN084962.D     | 20 Nov 2024 12:21 | JC\MD    | Ok     |
| 5   | VN1120WBS01  | VN084963.D     | 20 Nov 2024 12:45 | JC\MD    | Not Ok |
| 6   | VN1120WBS02  | VN084964.D     | 20 Nov 2024 13:20 | JC\MD    | Ok,M   |
| 7   | P4864-01     | VN084965.D     | 20 Nov 2024 13:44 | JC\MD    | Ok     |
| 8   | PB165108TB   | VN084966.D     | 20 Nov 2024 14:08 | JC\MD    | Ok     |
| 9   | PB165122TB   | VN084967.D     | 20 Nov 2024 14:33 | JC\MD    | Ok     |
| 10  | P4770-01     | VN084968.D     | 20 Nov 2024 14:57 | JC\MD    | Not Ok |
| 11  | P4845-12     | VN084969.D     | 20 Nov 2024 15:21 | JC\MD    | Ok     |
| 12  | VN1120WBSD02 | VN084970.D     | 20 Nov 2024 15:45 | JC\MD    | Not Ok |
| 13  | P4893-04     | VN084971.D     | 20 Nov 2024 16:09 | JC\MD    | Ok     |
| 14  | P4893-08     | VN084972.D     | 20 Nov 2024 16:34 | JC\MD    | Ok     |
| 15  | P4910-04     | VN084973.D     | 20 Nov 2024 16:58 | JC\MD    | Ok,M   |
| 16  | P4910-08     | VN084974.D     | 20 Nov 2024 17:22 | JC\MD    | Ok,M   |
| 17  | P4916-04     | VN084975.D     | 20 Nov 2024 17:46 | JC\MD    | Ok,M   |
| 18  | P4916-08     | VN084976.D     | 20 Nov 2024 18:10 | JC\MD    | Ok,M   |
| 19  | P4916-12     | VN084977.D     | 20 Nov 2024 18:34 | JC\MD    | Ok,M   |
| 20  | P4924-04     | VN084978.D     | 20 Nov 2024 18:58 | JC\MD    | Ok,M   |
| 21  | P4925-04     | VN084979.D     | 20 Nov 2024 19:22 | JC\MD    | Ok,M   |

Instrument ID: **MSVOA\_N**

**Daily Analysis Runlog For Sequence/QC Batch ID # VN112024**

| Review By                                                                                          | Semsettin Yesilyurt | Review On         | 11/21/2024 6:44:11 AM             |
|----------------------------------------------------------------------------------------------------|---------------------|-------------------|-----------------------------------|
| Supervise By                                                                                       | Mahesh Dadoda       | Supervise On      | 11/21/2024 6:46:29 AM             |
| SubDirectory                                                                                       | VN112024            | HP Acquire Method | HP Processing Method 82N103024W.M |
| STD. NAME                                                                                          | STD REF.#           |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP131654            |                   |                                   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP131655,VP131656   |                   |                                   |

|    |              |            |                   |       |        |
|----|--------------|------------|-------------------|-------|--------|
| 22 | P4925-08     | VN084980.D | 20 Nov 2024 19:46 | JC\MD | Ok,M   |
| 23 | P4921-01     | VN084981.D | 20 Nov 2024 20:10 | JC\MD | Not Ok |
| 24 | VN1120WBSD02 | VN084982.D | 20 Nov 2024 20:34 | JC\MD | Ok,M   |
| 25 | P4770-01     | VN084983.D | 20 Nov 2024 20:58 | JC\MD | Ok     |
| 26 | P4892-04     | VN084984.D | 20 Nov 2024 21:22 | JC\MD | Ok     |
| 27 | VSTDCCC050   | VN084985.D | 20 Nov 2024 21:46 | JC\MD | Ok,M   |

M : Manual Integration

Instrument ID: **MSVOA\_Y**

**Daily Analysis Runlog For Sequence/QC Batch ID # VY111924**

|                          |                                                       |                   |                                   |
|--------------------------|-------------------------------------------------------|-------------------|-----------------------------------|
| Review By                | Mahesh Dadoda                                         | Review On         | 11/20/2024 1:01:03 PM             |
| Supervise By             | Semsettin Yesilyurt                                   | Supervise On      | 11/20/2024 1:03:18 PM             |
| SubDirectory             | VY111924                                              | HP Acquire Method | HP Processing Method 82y111924s.m |
| <b>STD. NAME</b>         | <b>STD REF.#</b>                                      |                   |                                   |
| Tune/Reschk              | VP131638                                              |                   |                                   |
| Initial Calibration Stds | VP131639,VP131640,VP131641,VP131642,VP131643,VP131644 |                   |                                   |
| CCC                      |                                                       |                   |                                   |
| Internal Standard/PEM    |                                                       |                   |                                   |
| ICV/I.BLK                | VP131645                                              |                   |                                   |
| Surrogate Standard       |                                                       |                   |                                   |
| MS/MSD Standard          |                                                       |                   |                                   |
| LCS Standard             |                                                       |                   |                                   |

| Sr# | SampleId   | Data File Name | Date-Time         | Operator | Status |
|-----|------------|----------------|-------------------|----------|--------|
| 1   | BFB        | VY020337.D     | 19 Nov 2024 14:40 | SY/MD    | Ok     |
| 2   | VSTDIC005  | VY020338.D     | 19 Nov 2024 15:49 | SY/MD    | Ok,M   |
| 3   | VSTDIC010  | VY020339.D     | 19 Nov 2024 16:12 | SY/MD    | Ok,M   |
| 4   | VSTDIC020  | VY020340.D     | 19 Nov 2024 16:35 | SY/MD    | Ok,M   |
| 5   | VSTDIC050  | VY020341.D     | 19 Nov 2024 16:57 | SY/MD    | Ok,M   |
| 6   | VSTDIC100  | VY020342.D     | 19 Nov 2024 17:20 | SY/MD    | Ok,M   |
| 7   | VSTDIC150  | VY020343.D     | 19 Nov 2024 17:42 | SY/MD    | Ok,M   |
| 8   | VIBLK      | VY020344.D     | 19 Nov 2024 18:06 | SY/MD    | Ok     |
| 9   | VSTDICV050 | VY020345.D     | 19 Nov 2024 18:52 | SY/MD    | Ok,M   |

M : Manual Integration

Instrument ID: **MSVOA\_Y**

**Daily Analysis Runlog For Sequence/QC Batch ID # VY112124**

|                                                                                                    |                               |                   |                                   |
|----------------------------------------------------------------------------------------------------|-------------------------------|-------------------|-----------------------------------|
| Review By                                                                                          | Mahesh Dadoda                 | Review On         | 11/22/2024 3:31:25 PM             |
| Supervise By                                                                                       | Semsettin Yesilyurt           | Supervise On      | 11/22/2024 3:36:07 PM             |
| SubDirectory                                                                                       | VY112124                      | HP Acquire Method | HP Processing Method 82y111924s.m |
| <b>STD. NAME</b>                                                                                   | <b>STD REF.#</b>              |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP131692                      |                   |                                   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP131693,VP131694<br>VP128297 |                   |                                   |

| Sr# | SampleId     | Data File Name | Date-Time         | Operator | Status   |
|-----|--------------|----------------|-------------------|----------|----------|
| 1   | BFB          | VY020372.D     | 21 Nov 2024 08:32 | SY/MD    | Ok       |
| 2   | VSTDCCC050   | VY020373.D     | 21 Nov 2024 09:25 | SY/MD    | Ok,M     |
| 3   | VY1121SBL01  | VY020374.D     | 21 Nov 2024 09:59 | SY/MD    | Ok       |
| 4   | VY1121SBS01  | VY020375.D     | 21 Nov 2024 10:39 | SY/MD    | Ok,M     |
| 5   | VY1121SBSD01 | VY020376.D     | 21 Nov 2024 11:02 | SY/MD    | Ok,M     |
| 6   | P4852-01     | VY020377.D     | 21 Nov 2024 11:25 | SY/MD    | Ok       |
| 7   | P4852-02RE   | VY020378.D     | 21 Nov 2024 11:49 | SY/MD    | Confirms |
| 8   | P4852-03     | VY020379.D     | 21 Nov 2024 12:12 | SY/MD    | Ok       |
| 9   | P4908-03     | VY020380.D     | 21 Nov 2024 12:36 | SY/MD    | Ok       |
| 10  | P4909-02     | VY020381.D     | 21 Nov 2024 12:59 | SY/MD    | Ok       |
| 11  | P4929-01RE   | VY020382.D     | 21 Nov 2024 13:23 | SY/MD    | Confirms |
| 12  | P4910-07     | VY020383.D     | 21 Nov 2024 13:46 | SY/MD    | Ok       |
| 13  | P4910-03     | VY020384.D     | 21 Nov 2024 14:09 | SY/MD    | Ok       |
| 14  | P4870-03     | VY020385.D     | 21 Nov 2024 14:33 | SY/MD    | Ok       |
| 15  | P4870-06     | VY020386.D     | 21 Nov 2024 14:56 | SY/MD    | Ok       |
| 16  | P4870-12     | VY020387.D     | 21 Nov 2024 15:20 | SY/MD    | Ok       |
| 17  | P4892-02     | VY020388.D     | 21 Nov 2024 15:43 | SY/MD    | ReRun    |
| 18  | P4860-10     | VY020389.D     | 21 Nov 2024 16:06 | SY/MD    | Ok       |
| 19  | P4860-09     | VY020390.D     | 21 Nov 2024 16:30 | SY/MD    | Ok       |
| 20  | P4925-03     | VY020391.D     | 21 Nov 2024 16:53 | SY/MD    | Ok       |
| 21  | P4893-03     | VY020392.D     | 21 Nov 2024 17:17 | SY/MD    | Ok       |

Instrument ID: **MSVOA\_Y**

**Daily Analysis Runlog For Sequence/QCBatch ID # VY112124**

| Review By                               | Maresh Dadoda       | Review On         | 11/22/2024 3:31:25 PM             |
|-----------------------------------------|---------------------|-------------------|-----------------------------------|
| Supervise By                            | Semsettin Yesilyurt | Supervise On      | 11/22/2024 3:36:07 PM             |
| SubDirectory                            | VY112124            | HP Acquire Method | HP Processing Method 82y111924s.m |
| STD. NAME                               | STD REF.#           |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds | VP131692            |                   |                                   |
| CCC                                     | VP131693,VP131694   |                   |                                   |
| Internal Standard/PEM                   | VP128297            |                   |                                   |
| ICV/I.BLK                               |                     |                   |                                   |
| Surrogate Standard                      |                     |                   |                                   |
| MS/MSD Standard                         |                     |                   |                                   |
| LCS Standard                            |                     |                   |                                   |

|    |            |            |                   |       |       |
|----|------------|------------|-------------------|-------|-------|
| 22 | P4893-07   | VY020393.D | 21 Nov 2024 17:40 | SY/MD | Ok    |
| 23 | P4925-07   | VY020394.D | 21 Nov 2024 18:04 | SY/MD | Ok    |
| 24 | P4892-01   | VY020395.D | 21 Nov 2024 18:27 | SY/MD | Ok    |
| 25 | P4938-07   | VY020396.D | 21 Nov 2024 18:50 | SY/MD | Ok    |
| 26 | P4938-03   | VY020397.D | 21 Nov 2024 19:14 | SY/MD | Ok    |
| 27 | P4936-01   | VY020398.D | 21 Nov 2024 19:37 | SY/MD | ReRun |
| 28 | VSTDCCC050 | VY020399.D | 21 Nov 2024 20:00 | SY/MD | Ok,M  |

M : Manual Integration

Instrument ID: **MSVOA\_Y**

**Daily Analysis Runlog For Sequence/QC Batch ID # VY112224**

|                                                                                                    |                               |                   |                       |
|----------------------------------------------------------------------------------------------------|-------------------------------|-------------------|-----------------------|
| Review By                                                                                          | Mahesh Dadoda                 | Review On         | 11/25/2024 2:01:45 PM |
| Supervise By                                                                                       | Semsettin Yesilyurt           | Supervise On      | 11/25/2024 2:05:55 PM |
| SubDirectory                                                                                       | VY112224                      | HP Acquire Method | HP Processing Method  |
| <b>STD. NAME</b>                                                                                   | <b>STD REF.#</b>              |                   |                       |
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP131732                      |                   |                       |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP131733,VP131734<br>VP128297 |                   |                       |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status   |
|-----|-------------|----------------|-------------------|----------|----------|
| 1   | BFB         | VY020400.D     | 22 Nov 2024 08:56 | SY/MD    | Ok       |
| 2   | VSTDCCC050  | VY020401.D     | 22 Nov 2024 09:40 | SY/MD    | Ok,M     |
| 3   | VY1122SBL01 | VY020402.D     | 22 Nov 2024 10:15 | SY/MD    | Ok       |
| 4   | VY1122SBS01 | VY020403.D     | 22 Nov 2024 10:42 | SY/MD    | Not Ok   |
| 5   | VY1122SBS02 | VY020404.D     | 22 Nov 2024 11:04 | SY/MD    | Ok,M     |
| 6   | P4936-01RE  | VY020405.D     | 22 Nov 2024 11:38 | SY/MD    | Confirms |
| 7   | P4892-02    | VY020406.D     | 22 Nov 2024 12:01 | SY/MD    | Ok       |
| 8   | P4954-03    | VY020407.D     | 22 Nov 2024 12:53 | SY/MD    | ReRun    |
| 9   | P4948-03    | VY020408.D     | 22 Nov 2024 13:16 | SY/MD    | ReRun    |
| 10  | P4948-01    | VY020409.D     | 22 Nov 2024 13:39 | SY/MD    | Ok       |
| 11  | P4951-02    | VY020410.D     | 22 Nov 2024 14:03 | SY/MD    | ReRun    |
| 12  | P4954-01    | VY020411.D     | 22 Nov 2024 14:26 | SY/MD    | ReRun    |
| 13  | P4946-02    | VY020412.D     | 22 Nov 2024 14:50 | SY/MD    | ReRun    |
| 14  | P4946-01    | VY020413.D     | 22 Nov 2024 15:13 | SY/MD    | Ok       |
| 15  | P4960-01    | VY020414.D     | 22 Nov 2024 15:36 | SY/MD    | Ok       |
| 16  | P4960-02    | VY020415.D     | 22 Nov 2024 16:00 | SY/MD    | Ok       |
| 17  | P4960-03    | VY020416.D     | 22 Nov 2024 16:23 | SY/MD    | Not Ok   |
| 18  | P4960-04    | VY020417.D     | 22 Nov 2024 16:47 | SY/MD    | Not Ok   |
| 19  | P4960-05    | VY020418.D     | 22 Nov 2024 17:10 | SY/MD    | Not Ok   |
| 20  | P4960-06    | VY020419.D     | 22 Nov 2024 17:33 | SY/MD    | Not Ok   |
| 21  | VIBLK       | VY020420.D     | 22 Nov 2024 17:57 | SY/MD    | Ok       |

Instrument ID: MSVOA\_Y

**Daily Analysis Runlog For Sequence/QC Batch ID # VY112224**

| Review By                               | Mahesh Dadoda       | Review On         | 11/25/2024 2:01:45 PM |
|-----------------------------------------|---------------------|-------------------|-----------------------|
| Supervise By                            | Semsettin Yesilyurt | Supervise On      | 11/25/2024 2:05:55 PM |
| SubDirectory                            | VY112224            | HP Acquire Method | HP Processing Method  |
| STD. NAME                               | STD REF.#           |                   |                       |
| Tune/Reschk<br>Initial Calibration Stds | VP131732            |                   |                       |
| CCC                                     | VP131733,VP131734   |                   |                       |
| Internal Standard/PEM                   | VP128297            |                   |                       |
| ICV/I.BLK                               |                     |                   |                       |
| Surrogate Standard                      |                     |                   |                       |
| MS/MSD Standard                         |                     |                   |                       |
| LCS Standard                            |                     |                   |                       |

|    |            |            |                   |       |      |
|----|------------|------------|-------------------|-------|------|
| 22 | VSTDCCC050 | VY020421.D | 22 Nov 2024 18:20 | SY/MD | Ok,M |
|----|------------|------------|-------------------|-------|------|

M : Manual Integration



Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN103024**

|              |                     |                   |                                           |
|--------------|---------------------|-------------------|-------------------------------------------|
| Review By    | Semsettin Yesilyurt | Review On         | 11/1/2024 2:56:11 PM                      |
| Supervise By | Maresh Dadoda       | Supervise On      | 11/4/2024 1:18:30 AM                      |
| SubDirectory | VN103024            | HP Acquire Method | MSVOA_N HP Processing Method 82n103024w.m |

| STD. NAME                | STD REF.#                                             |
|--------------------------|-------------------------------------------------------|
| Tune/Reschk              | VP131194,VP131195                                     |
| Initial Calibration Stds | VP131185,VP131186,VP131187,VP131188,VP131189,VP131190 |
| CCC                      | VP131191,VP131192                                     |
| Internal Standard/PEM    | VP128298                                              |
| ICV/I.BLK                | VP131193                                              |
| Surrogate Standard       |                                                       |
| MS/MSD Standard          |                                                       |
| LCS Standard             |                                                       |

| Sr# | Sampleld     | ClientID     | Data File Name | Date-Time         | Comment              | Operator | Status |
|-----|--------------|--------------|----------------|-------------------|----------------------|----------|--------|
| 1   | BFB          | BFB          | VN084569.D     | 30 Oct 2024 10:42 |                      | JC\MD    | Ok     |
| 2   | VSTDICC100   | VSTDICC100   | VN084570.D     | 30 Oct 2024 11:46 | Comp #03 fail for %D | JC\MD    | Ok,M   |
| 3   | VSTDICCC050  | VSTDICCC050  | VN084571.D     | 30 Oct 2024 12:09 | LR-03,06,16,18,43    | JC\MD    | Ok,M   |
| 4   | VSTDICC020   | VSTDICC020   | VN084572.D     | 30 Oct 2024 12:33 | QR-88                | JC\MD    | Ok,M   |
| 5   | VSTDICC010   | VSTDICC010   | VN084573.D     | 30 Oct 2024 12:57 |                      | JC\MD    | Ok,M   |
| 6   | VSTDICC005   | VSTDICC005   | VN084574.D     | 30 Oct 2024 13:21 |                      | JC\MD    | Ok,M   |
| 7   | VSTDICC001   | VSTDICC001   | VN084575.D     | 30 Oct 2024 13:45 |                      | JC\MD    | Ok,M   |
| 8   | VIBLK        | VIBLK        | VN084576.D     | 30 Oct 2024 14:42 |                      | JC\MD    | Ok     |
| 9   | VSTDICV050   | ICVVN103024  | VN084577.D     | 30 Oct 2024 15:06 |                      | JC\MD    | Ok,M   |
| 10  | BFB          | BFB          | VN084578.D     | 30 Oct 2024 19:24 |                      | JC\MD    | Ok     |
| 11  | VSTDCCC050   | VSTDCCC050   | VN084579.D     | 30 Oct 2024 20:12 |                      | JC\MD    | Ok,M   |
| 12  | VN1030MBL01  | VN1030MBL01  | VN084580.D     | 30 Oct 2024 20:48 |                      | JC\MD    | Ok     |
| 13  | VN1030WBL01  | VN1030WBL01  | VN084581.D     | 30 Oct 2024 21:12 |                      | JC\MD    | Ok     |
| 14  | VN1030WBS01  | VN1030WBS01  | VN084582.D     | 30 Oct 2024 21:46 |                      | JC\MD    | Ok,M   |
| 15  | VN1030WBSD01 | VN1030WBSD01 | VN084583.D     | 30 Oct 2024 22:10 |                      | JC\MD    | Ok,M   |
| 16  | P4594-04     | TP-4         | VN084584.D     | 30 Oct 2024 22:34 | pH#5.0 A             | JC\MD    | Ok,M   |
| 17  | P4594-08     | BP-F17       | VN084585.D     | 30 Oct 2024 22:58 | pH#5.0 A             | JC\MD    | Ok     |
| 18  | P4594-12     | BP-F16       | VN084586.D     | 30 Oct 2024 23:22 | pH#5.0 A             | JC\MD    | Ok     |

Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN103024**

| Review By                | Semsettin Yesilyurt | Review On                                             | 11/1/2024 2:56:11 PM |                      |              |
|--------------------------|---------------------|-------------------------------------------------------|----------------------|----------------------|--------------|
| Supervise By             | Mahesh Dadoda       | Supervise On                                          | 11/4/2024 1:18:30 AM |                      |              |
| SubDirectory             | VN103024            | HP Acquire Method                                     | MSVOA_N              | HP Processing Method | 82n103024w.m |
| STD. NAME                |                     | STD REF.#                                             |                      |                      |              |
| Tune/Reschk              |                     | VP131194.VP131195                                     |                      |                      |              |
| Initial Calibration Stds |                     | VP131185,VP131186,VP131187,VP131188,VP131189,VP131190 |                      |                      |              |
| CCC                      |                     | VP131191,VP131192                                     |                      |                      |              |
| Internal Standard/PEM    |                     | VP128298                                              |                      |                      |              |
| ICV/I.BLK                |                     | VP131193                                              |                      |                      |              |
| Surrogate Standard       |                     |                                                       |                      |                      |              |
| MS/MSD Standard          |                     |                                                       |                      |                      |              |
| LCS Standard             |                     |                                                       |                      |                      |              |

|    |                |                |            |                   |          |       |      |
|----|----------------|----------------|------------|-------------------|----------|-------|------|
| 19 | P4594-16       | TP-5           | VN084587.D | 30 Oct 2024 23:46 | pH#7.0 A | JC\MD | Ok   |
| 20 | P4594-20       | BP-F15         | VN084588.D | 31 Oct 2024 00:09 | pH#6.0 A | JC\MD | Ok   |
| 21 | P4597-03       | RED-1-1        | VN084589.D | 31 Oct 2024 00:34 | pH#6.0 A | JC\MD | Ok   |
| 22 | P4597-06       | RED-1-2        | VN084590.D | 31 Oct 2024 00:57 | pH#5.0 A | JC\MD | Ok,M |
| 23 | P4597-09       | BLUE-2-1       | VN084591.D | 31 Oct 2024 01:21 | pH#5.0 A | JC\MD | Ok   |
| 24 | P4597-12       | BLUE-2-2       | VN084592.D | 31 Oct 2024 01:45 | pH#5.0 A | JC\MD | Ok,M |
| 25 | P4598-04       | BP-F12         | VN084593.D | 31 Oct 2024 02:09 | pH#7.0 A | JC\MD | Ok   |
| 26 | P4598-08       | BP-F11         | VN084594.D | 31 Oct 2024 02:33 | pH#7.0 A | JC\MD | Ok   |
| 27 | P4598-12       | TP-8           | VN084595.D | 31 Oct 2024 02:57 | pH#6.0 A | JC\MD | Ok   |
| 28 | P4611-03       | TP-1           | VN084596.D | 31 Oct 2024 03:21 | pH#5.0 A | JC\MD | Ok   |
| 29 | P4611-06       | TP-2           | VN084597.D | 31 Oct 2024 03:45 | pH#5.0 A | JC\MD | Ok   |
| 30 | P4611-09       | TP-3           | VN084598.D | 31 Oct 2024 04:09 | pH#5.0 A | JC\MD | Ok   |
| 31 | P4611-12       | TP-4           | VN084599.D | 31 Oct 2024 04:33 | pH#5.0 A | JC\MD | Ok   |
| 32 | P4611-15       | TP-5           | VN084600.D | 31 Oct 2024 04:57 | pH#5.0 A | JC\MD | Ok   |
| 33 | P4611-18       | TP-6           | VN084601.D | 31 Oct 2024 05:21 | pH#5.0 A | JC\MD | Ok   |
| 34 | P4612-04       | MOO-24-00335   | VN084602.D | 31 Oct 2024 05:45 | pH#5.0 A | JC\MD | Ok   |
| 35 | P4613-02       | ARS20-0001     | VN084603.D | 31 Oct 2024 06:09 | pH#5.0 A | JC\MD | Ok   |
| 36 | PB164501ZHE#13 | PB164501ZHE#13 | VN084604.D | 31 Oct 2024 06:33 | pH#5.0 A | JC\MD | Ok,M |
| 37 | PB164501ZHE#14 | PB164501ZHE#14 | VN084605.D | 31 Oct 2024 06:57 | pH#5.0 A | JC\MD | Ok,M |

Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN103024**

| Review By                | Semsettin Yesilyurt | Review On                                             | 11/1/2024 2:56:11 PM |                      |              |
|--------------------------|---------------------|-------------------------------------------------------|----------------------|----------------------|--------------|
| Supervise By             | Mahesh Dadoda       | Supervise On                                          | 11/4/2024 1:18:30 AM |                      |              |
| SubDirectory             | VN103024            | HP Acquire Method                                     | MSVOA_N              | HP Processing Method | 82n103024w.m |
| STD. NAME                |                     | STD REF.#                                             |                      |                      |              |
| Tune/Reschk              |                     | VP131194.VP131195                                     |                      |                      |              |
| Initial Calibration Stds |                     | VP131185,VP131186,VP131187,VP131188,VP131189,VP131190 |                      |                      |              |
| CCC                      |                     | VP131191,VP131192                                     |                      |                      |              |
| Internal Standard/PEM    |                     | VP128298                                              |                      |                      |              |
| ICV/I.BLK                |                     | VP131193                                              |                      |                      |              |
| Surrogate Standard       |                     |                                                       |                      |                      |              |
| MS/MSD Standard          |                     |                                                       |                      |                      |              |
| LCS Standard             |                     |                                                       |                      |                      |              |

|    |                |                |            |                   |          |       |      |
|----|----------------|----------------|------------|-------------------|----------|-------|------|
| 38 | PB164501ZHE#15 | PB164501ZHE#15 | VN084606.D | 31 Oct 2024 07:22 | pH#5.0 A | JC\MD | Ok,M |
| 39 | PB164501ZHE#16 | PB164501ZHE#16 | VN084607.D | 31 Oct 2024 07:46 | pH#5.0 A | JC\MD | Ok   |
| 40 | PB164501ZHE#17 | PB164501ZHE#17 | VN084608.D | 31 Oct 2024 08:10 | pH#5.0 A | JC\MD | Ok,M |
| 41 | PB164501ZHE#18 | PB164501ZHE#18 | VN084609.D | 31 Oct 2024 08:34 | pH#5.0 A | JC\MD | Ok,M |
| 42 | PB164501ZHE#19 | PB164501ZHE#19 | VN084610.D | 31 Oct 2024 08:58 | pH#5.0 A | JC\MD | Ok,M |
| 43 | PB164501ZHE#20 | PB164501ZHE#20 | VN084611.D | 31 Oct 2024 09:22 | pH#5.0 A | JC\MD | Ok   |

M : Manual Integration

Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN112024**

|              |                     |                   |                                   |
|--------------|---------------------|-------------------|-----------------------------------|
| Review By    | Semsettin Yesilyurt | Review On         | 11/21/2024 6:44:11 AM             |
| Supervise By | Mahesh Dadoda       | Supervise On      | 11/21/2024 6:46:29 AM             |
| SubDirectory | VN112024            | HP Acquire Method | HP Processing Method 82N103024W.M |

| STD. NAME                                                                                          | STD REF.#         |
|----------------------------------------------------------------------------------------------------|-------------------|
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP131654          |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP131655,VP131656 |

| Sr# | SampleID     | ClientID           | Data File Name | Date-Time         | Comment       | Operator | Status |
|-----|--------------|--------------------|----------------|-------------------|---------------|----------|--------|
| 1   | BFB          | BFB                | VN084959.D     | 20 Nov 2024 09:51 |               | JC\MD    | Ok     |
| 2   | VSTDCCC050   | VSTDCCC050         | VN084960.D     | 20 Nov 2024 11:18 |               | JC\MD    | Ok,M   |
| 3   | VN1120MBL01  | VN1120MBL01        | VN084961.D     | 20 Nov 2024 11:57 | not needed    | JC\MD    | Not Ok |
| 4   | VN1120WBL01  | VN1120WBL01        | VN084962.D     | 20 Nov 2024 12:21 |               | JC\MD    | Ok     |
| 5   | VN1120WBS01  | VN1120WBS01        | VN084963.D     | 20 Nov 2024 12:45 | recovery low  | JC\MD    | Not Ok |
| 6   | VN1120WBS02  | VN1120WBS02        | VN084964.D     | 20 Nov 2024 13:20 |               | JC\MD    | Ok,M   |
| 7   | P4864-01     | MONTCLAIR-TOTE-2   | VN084965.D     | 20 Nov 2024 13:44 | vial A pH<2   | JC\MD    | Ok     |
| 8   | PB165108TB   | PB165108TB         | VN084966.D     | 20 Nov 2024 14:08 |               | JC\MD    | Ok     |
| 9   | PB165122TB   | PB165122TB         | VN084967.D     | 20 Nov 2024 14:33 |               | JC\MD    | Ok     |
| 10  | P4770-01     | MW-1               | VN084968.D     | 20 Nov 2024 14:57 | Not Required  | JC\MD    | Not Ok |
| 11  | P4845-12     | FSND-MW-31-2024111 | VN084969.D     | 20 Nov 2024 15:21 | vial B pH<2   | JC\MD    | Ok     |
| 12  | VN1120WBSD02 | VN1120WBSD02       | VN084970.D     | 20 Nov 2024 15:45 | Recovery fail | JC\MD    | Not Ok |
| 13  | P4893-04     | MH-763             | VN084971.D     | 20 Nov 2024 16:09 | vial A pH#5.0 | JC\MD    | Ok     |
| 14  | P4893-08     | MH-762             | VN084972.D     | 20 Nov 2024 16:34 | vial A pH#5.0 | JC\MD    | Ok     |
| 15  | P4910-04     | MH-COTTAGE         | VN084973.D     | 20 Nov 2024 16:58 | vial A pH#5.0 | JC\MD    | Ok,M   |
| 16  | P4910-08     | MH-759             | VN084974.D     | 20 Nov 2024 17:22 | vial A pH#5.0 | JC\MD    | Ok,M   |
| 17  | P4916-04     | TP-1-WC            | VN084975.D     | 20 Nov 2024 17:46 | vial A pH#5.0 | JC\MD    | Ok,M   |
| 18  | P4916-08     | TP-2-WC            | VN084976.D     | 20 Nov 2024 18:10 | vial A pH#5.0 | JC\MD    | Ok,M   |

Instrument ID: MSVOA\_N

**Daily Analysis Runlog For Sequence/QC Batch ID # VN112024**

| Review By                                                                                          | Semsettin Yesilyurt | Review On         | 11/21/2024 6:44:11 AM             |
|----------------------------------------------------------------------------------------------------|---------------------|-------------------|-----------------------------------|
| Supervise By                                                                                       | Mahesh Dadoda       | Supervise On      | 11/21/2024 6:46:29 AM             |
| SubDirectory                                                                                       | VN112024            | HP Acquire Method | HP Processing Method 82N103024W.M |
| STD. NAME                                                                                          | STD REF.#           |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP131654            |                   |                                   |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP131655,VP131656   |                   |                                   |

|    |              |                |            |                   |                                 |       |        |
|----|--------------|----------------|------------|-------------------|---------------------------------|-------|--------|
| 19 | P4916-12     | TP-3-WC        | VN084977.D | 20 Nov 2024 18:34 | vial A pH#5.0                   | JC\MD | Ok,M   |
| 20 | P4924-04     | MH-4           | VN084978.D | 20 Nov 2024 18:58 | vial A pH#5.0                   | JC\MD | Ok,M   |
| 21 | P4925-04     | MH-741         | VN084979.D | 20 Nov 2024 19:22 | vial A pH#5.0                   | JC\MD | Ok,M   |
| 22 | P4925-08     | MH-741         | VN084980.D | 20 Nov 2024 19:46 | vial A pH#5.0                   | JC\MD | Ok,M   |
| 23 | P4921-01     | WC-11-A-202411 | VN084981.D | 20 Nov 2024 20:10 | vial A pH#5.0 need straight run | JC\MD | Not Ok |
| 24 | VN1120WBSD02 | VN1120WBSD02   | VN084982.D | 20 Nov 2024 20:34 |                                 | JC\MD | Ok,M   |
| 25 | P4770-01     | MW-1           | VN084983.D | 20 Nov 2024 20:58 | vial B pH<2                     | JC\MD | Ok     |
| 26 | P4892-04     | WB-310-SW      | VN084984.D | 20 Nov 2024 21:22 | vial A pH<2                     | JC\MD | Ok     |
| 27 | VSTDCCC050   | VSTDCCC050EC   | VN084985.D | 20 Nov 2024 21:46 |                                 | JC\MD | Ok,M   |

M : Manual Integration

Instrument ID: MSVOA\_Y

**Daily Analysis Runlog For Sequence/QC Batch ID # VY111924**

|              |                     |                   |                                   |
|--------------|---------------------|-------------------|-----------------------------------|
| Review By    | Maresh Dadoda       | Review On         | 11/20/2024 1:01:03 PM             |
| Supervise By | Semsettin Yesilyurt | Supervise On      | 11/20/2024 1:03:18 PM             |
| SubDirectory | VY111924            | HP Acquire Method | HP Processing Method 82y111924s.m |

| STD. NAME                                                                                                                                         | STD REF.#                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Tune/Reschk<br>Initial Calibration Stds<br><br>CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP131638<br>VP131639,VP131640,VP131641,VP131642,VP131643,VP131644<br><br><br><br>VP131645 |

| Sr# | Sampled    | ClientID    | Data File Name | Date-Time         | Comment                             | Operator | Status |
|-----|------------|-------------|----------------|-------------------|-------------------------------------|----------|--------|
| 1   | BFB        | BFB         | VY020337.D     | 19 Nov 2024 14:40 |                                     | SY/MD    | Ok     |
| 2   | VSTDIC005  | VSTDIC005   | VY020338.D     | 19 Nov 2024 15:49 |                                     | SY/MD    | Ok,M   |
| 3   | VSTDIC010  | VSTDIC010   | VY020339.D     | 19 Nov 2024 16:12 |                                     | SY/MD    | Ok,M   |
| 4   | VSTDIC020  | VSTDIC020   | VY020340.D     | 19 Nov 2024 16:35 |                                     | SY/MD    | Ok,M   |
| 5   | VSTDIC050  | VSTDIC050   | VY020341.D     | 19 Nov 2024 16:57 | Comp.#3 is on Linear Regression     | SY/MD    | Ok,M   |
| 6   | VSTDIC100  | VSTDIC100   | VY020342.D     | 19 Nov 2024 17:20 | Comp.#11 is on Quadratic Regression | SY/MD    | Ok,M   |
| 7   | VSTDIC150  | VSTDIC150   | VY020343.D     | 19 Nov 2024 17:42 |                                     | SY/MD    | Ok,M   |
| 8   | VIBLK      | VIBLK       | VY020344.D     | 19 Nov 2024 18:06 |                                     | SY/MD    | Ok     |
| 9   | VSTDICV050 | ICVVY111924 | VY020345.D     | 19 Nov 2024 18:52 |                                     | SY/MD    | Ok,M   |

M : Manual Integration

Instrument ID: MSVOA\_Y

**Daily Analysis Runlog For Sequence/QC Batch ID # VY112124**

|              |                     |                   |                                   |
|--------------|---------------------|-------------------|-----------------------------------|
| Review By    | Maresh Dadoda       | Review On         | 11/22/2024 3:31:25 PM             |
| Supervise By | Semsettin Yesilyurt | Supervise On      | 11/22/2024 3:36:07 PM             |
| SubDirectory | VY112124            | HP Acquire Method | HP Processing Method 82y111924s.m |

| STD. NAME                                                                                          | STD REF.#                     |
|----------------------------------------------------------------------------------------------------|-------------------------------|
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP131692                      |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP131693,VP131694<br>VP128297 |

| Sr# | SampleID     | ClientID       | Data File Name | Date-Time         | Comment                       | Operator | Status   |
|-----|--------------|----------------|----------------|-------------------|-------------------------------|----------|----------|
| 1   | BFB          | BFB            | VY020372.D     | 21 Nov 2024 08:32 |                               | SY/MD    | Ok       |
| 2   | VSTDCCC050   | VSTDCCC050     | VY020373.D     | 21 Nov 2024 09:25 |                               | SY/MD    | Ok,M     |
| 3   | VY1121SBL01  | VY1121SBL01    | VY020374.D     | 21 Nov 2024 09:59 |                               | SY/MD    | Ok       |
| 4   | VY1121SBS01  | VY1121SBS01    | VY020375.D     | 21 Nov 2024 10:39 |                               | SY/MD    | Ok,M     |
| 5   | VY1121SBSD01 | VY1121SBSD01   | VY020376.D     | 21 Nov 2024 11:02 |                               | SY/MD    | Ok,M     |
| 6   | P4852-01     | COMP-1         | VY020377.D     | 21 Nov 2024 11:25 | vial-B                        | SY/MD    | Ok       |
| 7   | P4852-02RE   | COMP-2RE       | VY020378.D     | 21 Nov 2024 11:49 | ISTD Fail vial-B              | SY/MD    | Confirms |
| 8   | P4852-03     | COMP-3         | VY020379.D     | 21 Nov 2024 12:12 | vial-B                        | SY/MD    | Ok       |
| 9   | P4908-03     | SP-2           | VY020380.D     | 21 Nov 2024 12:36 | Vial-B                        | SY/MD    | Ok       |
| 10  | P4909-02     | BU-02-111824   | VY020381.D     | 21 Nov 2024 12:59 | Vial-B                        | SY/MD    | Ok       |
| 11  | P4929-01RE   | ARS520RE       | VY020382.D     | 21 Nov 2024 13:23 | Internal Standard Fail vial-B | SY/MD    | Confirms |
| 12  | P4910-07     | MH-759-VOC     | VY020383.D     | 21 Nov 2024 13:46 | vial-B                        | SY/MD    | Ok       |
| 13  | P4910-03     | MH-COTTAGE-VOC | VY020384.D     | 21 Nov 2024 14:09 | vial-B                        | SY/MD    | Ok       |
| 14  | P4870-03     | TP-1-VOC       | VY020385.D     | 21 Nov 2024 14:33 | vial-B                        | SY/MD    | Ok       |
| 15  | P4870-06     | MH-735-VOC     | VY020386.D     | 21 Nov 2024 14:56 | vial-B                        | SY/MD    | Ok       |
| 16  | P4870-12     | TP-15-VOC      | VY020387.D     | 21 Nov 2024 15:20 | vial-B                        | SY/MD    | Ok       |
| 17  | P4892-02     | WB-310-BOT     | VY020388.D     | 21 Nov 2024 15:43 | Internal Standard Fail vial-A | SY/MD    | ReRun    |
| 18  | P4860-10     | PH2-BOT-005    | VY020389.D     | 21 Nov 2024 16:06 | vial-A                        | SY/MD    | Ok       |

Instrument ID: MSVOA\_Y

**Daily Analysis Runlog For Sequence/QC Batch ID # VY112124**

| Review By                               | Mahesh Dadoda       | Review On         | 11/22/2024 3:31:25 PM             |
|-----------------------------------------|---------------------|-------------------|-----------------------------------|
| Supervise By                            | Semsettin Yesilyurt | Supervise On      | 11/22/2024 3:36:07 PM             |
| SubDirectory                            | VY112124            | HP Acquire Method | HP Processing Method 82y111924s.m |
| STD. NAME                               | STD REF.#           |                   |                                   |
| Tune/Reschk<br>Initial Calibration Stds | VP131692            |                   |                                   |
| CCC                                     | VP131693,VP131694   |                   |                                   |
| Internal Standard/PEM                   | VP128297            |                   |                                   |
| ICV/I.BLK                               |                     |                   |                                   |
| Surrogate Standard                      |                     |                   |                                   |
| MS/MSD Standard                         |                     |                   |                                   |
| LCS Standard                            |                     |                   |                                   |

|    |            |                |            |                   |                               |       |       |
|----|------------|----------------|------------|-------------------|-------------------------------|-------|-------|
| 19 | P4860-09   | PH2-BOT-006    | VY020390.D | 21 Nov 2024 16:30 | vial-A                        | SY/MD | Ok    |
| 20 | P4925-03   | MH-741-VOC     | VY020391.D | 21 Nov 2024 16:53 | vial-A                        | SY/MD | Ok    |
| 21 | P4893-03   | MH-763-VOC     | VY020392.D | 21 Nov 2024 17:17 | vial-A                        | SY/MD | Ok    |
| 22 | P4893-07   | MH-762-VOC     | VY020393.D | 21 Nov 2024 17:40 | vial-A                        | SY/MD | Ok    |
| 23 | P4925-07   | MH-758-VOC     | VY020394.D | 21 Nov 2024 18:04 | vial-A                        | SY/MD | Ok    |
| 24 | P4892-01   | WB-310-TOP     | VY020395.D | 21 Nov 2024 18:27 | vial-A                        | SY/MD | Ok    |
| 25 | P4938-07   | MH-734-VOC     | VY020396.D | 21 Nov 2024 18:50 | vial-A                        | SY/MD | Ok    |
| 26 | P4938-03   | MH-732-VOC     | VY020397.D | 21 Nov 2024 19:14 | vial-A                        | SY/MD | Ok    |
| 27 | P4936-01   | PL-01-11202024 | VY020398.D | 21 Nov 2024 19:37 | Internal Standard Fail vial-A | SY/MD | ReRun |
| 28 | VSTDCCC050 | VSTDCCC050EC   | VY020399.D | 21 Nov 2024 20:00 |                               | SY/MD | Ok,M  |

M : Manual Integration



Instrument ID: MSVOA\_Y

**Daily Analysis Runlog For Sequence/QC Batch ID # VY112224**

|              |                     |                   |                       |
|--------------|---------------------|-------------------|-----------------------|
| Review By    | Maresh Dadoda       | Review On         | 11/25/2024 2:01:45 PM |
| Supervise By | Semsettin Yesilyurt | Supervise On      | 11/25/2024 2:05:55 PM |
| SubDirectory | VY112224            | HP Acquire Method | HP Processing Method  |

| STD. NAME                                                                                          | STD REF.#                     |
|----------------------------------------------------------------------------------------------------|-------------------------------|
| Tune/Reschk<br>Initial Calibration Stds                                                            | VP131732                      |
| CCC<br>Internal Standard/PEM<br>ICV/I.BLK<br>Surrogate Standard<br>MS/MSD Standard<br>LCS Standard | VP131733,VP131734<br>VP128297 |

| Sr# | SampleID    | ClientID         | Data File Name | Date-Time         | Comment                                                      | Operator | Status   |
|-----|-------------|------------------|----------------|-------------------|--------------------------------------------------------------|----------|----------|
| 1   | BFB         | BFB              | VY020400.D     | 22 Nov 2024 08:56 |                                                              | SY/MD    | Ok       |
| 2   | VSTDCCC050  | VSTDCCC050       | VY020401.D     | 22 Nov 2024 09:40 |                                                              | SY/MD    | Ok,M     |
| 3   | VY1122SBL01 | VY1122SBL01      | VY020402.D     | 22 Nov 2024 10:15 |                                                              | SY/MD    | Ok       |
| 4   | VY1122SBS01 | VY1122SBS01      | VY020403.D     | 22 Nov 2024 10:42 | BS failed low                                                | SY/MD    | Not Ok   |
| 5   | VY1122SBS02 | VY1122SBS02      | VY020404.D     | 22 Nov 2024 11:04 |                                                              | SY/MD    | Ok,M     |
| 6   | P4936-01RE  | PL-01-11202024RE | VY020405.D     | 22 Nov 2024 11:38 | vial-B ISTD Fail                                             | SY/MD    | Confirms |
| 7   | P4892-02    | WB-310-BOT       | VY020406.D     | 22 Nov 2024 12:01 | vial-B BS failed low for comp. #3,28                         | SY/MD    | Ok       |
| 8   | P4954-03    | TR-06-112124     | VY020407.D     | 22 Nov 2024 12:53 | vial-A BS failed low for comp. #3,28; Internal Standard Fail | SY/MD    | ReRun    |
| 9   | P4948-03    | 72-11944         | VY020408.D     | 22 Nov 2024 13:16 | vial-A                                                       | SY/MD    | ReRun    |
| 10  | P4948-01    | 337              | VY020409.D     | 22 Nov 2024 13:39 | vial-A                                                       | SY/MD    | Ok       |
| 11  | P4951-02    | AU-05-112124     | VY020410.D     | 22 Nov 2024 14:03 | vial-A BS failed low for comp. #3,28; Internal Standard Fail | SY/MD    | ReRun    |
| 12  | P4954-01    | TR-05-112124     | VY020411.D     | 22 Nov 2024 14:26 | vial-A BS failed low for comp. #3,28; Internal Standard Fail | SY/MD    | ReRun    |
| 13  | P4946-02    | BW-2             | VY020412.D     | 22 Nov 2024 14:50 | vial-A Internal Standard Fail                                | SY/MD    | ReRun    |
| 14  | P4946-01    | BW-1             | VY020413.D     | 22 Nov 2024 15:13 | vial-A                                                       | SY/MD    | Ok       |
| 15  | P4960-01    | B1               | VY020414.D     | 22 Nov 2024 15:36 | vial-A                                                       | SY/MD    | Ok       |
| 16  | P4960-02    | B2               | VY020415.D     | 22 Nov 2024 16:00 | vial-A                                                       | SY/MD    | Ok       |
| 17  | P4960-03    | SW1              | VY020416.D     | 22 Nov 2024 16:23 | vial-A NOT PURGE                                             | SY/MD    | Not Ok   |

Instrument ID: MSVOA\_Y

**Daily Analysis Runlog For Sequence/QC Batch ID # VY112224**

| Review By                               | Maresh Dadoda       | Review On         | 11/25/2024 2:01:45 PM |
|-----------------------------------------|---------------------|-------------------|-----------------------|
| Supervise By                            | Semsettin Yesilyurt | Supervise On      | 11/25/2024 2:05:55 PM |
| SubDirectory                            | VY112224            | HP Acquire Method | HP Processing Method  |
| STD. NAME                               | STD REF.#           |                   |                       |
| Tune/Reschk<br>Initial Calibration Stds | VP131732            |                   |                       |
| CCC                                     | VP131733,VP131734   |                   |                       |
| Internal Standard/PEM                   | VP128297            |                   |                       |
| ICV/I.BLK                               |                     |                   |                       |
| Surrogate Standard                      |                     |                   |                       |
| MS/MSD Standard                         |                     |                   |                       |
| LCS Standard                            |                     |                   |                       |

|    |            |              |            |                   |                  |       |        |
|----|------------|--------------|------------|-------------------|------------------|-------|--------|
| 18 | P4960-04   | SW2          | VY020417.D | 22 Nov 2024 16:47 | vial-A NOT PURGE | SY/MD | Not Ok |
| 19 | P4960-05   | SW3          | VY020418.D | 22 Nov 2024 17:10 | vial-A NOT PURGE | SY/MD | Not Ok |
| 20 | P4960-06   | SW4          | VY020419.D | 22 Nov 2024 17:33 | vial-A NOT PURGE | SY/MD | Not Ok |
| 21 | VIBLK      | VIBLK        | VY020420.D | 22 Nov 2024 17:57 |                  | SY/MD | Ok     |
| 22 | VSTDCCC050 | VSTDCCC050EC | VY020421.D | 22 Nov 2024 18:20 |                  | SY/MD | Ok,M   |

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona  
Analyst: jignesh  
Date: 11/19/2024

OVENTEMP IN Celsius(°C): 107  
Time IN: 17:00  
In Date: 11/18/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
Time OUT: 08:11  
Out Date: 11/19/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLID- OVEN

QC:LB133489

| Lab ID   | Client SampleID    | Dish # | Dish Wt(g) (A) | Sample Wt(g) | Dish + Sample Wt(g) (B) | Dish+Dry Sample Wt(g) (C) | % Solid | Comments |
|----------|--------------------|--------|----------------|--------------|-------------------------|---------------------------|---------|----------|
| P4817-01 | BHK70              | 1      | 1.15           | 8.80         | 9.95                    | 9.07                      | 90.0    |          |
| P4817-02 | BHK71              | 2      | 1.14           | 8.42         | 9.56                    | 8.62                      | 88.8    |          |
| P4817-03 | BHK71MS            | 3      | 1.14           | 8.42         | 9.56                    | 8.62                      | 88.8    |          |
| P4817-04 | BHK71MSD           | 4      | 1.14           | 8.42         | 9.56                    | 8.62                      | 88.8    |          |
| P4888-01 | 01A-01B-01C        | 5      | 1.00           | 1.00         | 2.00                    | 2.00                      | 100.0   | caluk    |
| P4888-02 | 02A-02B-02C        | 6      | 1.00           | 1.00         | 2.00                    | 2.00                      | 100.0   | caluk    |
| P4890-06 | D3721              | 7      | 1.00           | 1.00         | 2.00                    | 2.00                      | 100.0   | debris   |
| P4892-01 | WB-310-TOP         | 8      | 1.16           | 8.74         | 9.9                     | 6.39                      | 59.8    |          |
| P4892-02 | WB-310-BOT         | 9      | 1.15           | 8.70         | 9.85                    | 8.64                      | 86.1    |          |
| P4893-01 | MH-763             | 10     | 1.18           | 8.44         | 9.62                    | 8.52                      | 87.0    |          |
| P4893-02 | MH-763-EPH         | 11     | 1.14           | 8.78         | 9.92                    | 8.81                      | 87.4    |          |
| P4893-03 | MH-763-VOC         | 12     | 1.14           | 8.83         | 9.97                    | 8.92                      | 88.1    |          |
| P4893-05 | MH-762             | 13     | 1.16           | 8.47         | 9.63                    | 8.68                      | 88.8    |          |
| P4893-06 | MH-762-EPH         | 14     | 1.19           | 8.65         | 9.84                    | 8.72                      | 87.1    |          |
| P4893-07 | MH-762-VOC         | 15     | 1.13           | 8.50         | 9.63                    | 8.39                      | 85.4    |          |
| P4894-01 | FES-SB401-1921     | 16     | 1.16           | 8.58         | 9.74                    | 8.92                      | 90.4    |          |
| P4894-02 | FES-SB401-6062     | 17     | 1.18           | 8.77         | 9.95                    | 7.77                      | 75.1    |          |
| P4894-03 | FES-DUP02-20241114 | 18     | 1.15           | 8.66         | 9.81                    | 9.17                      | 92.6    |          |
| P4908-01 | SP-1               | 19     | 1.16           | 8.50         | 9.66                    | 8.9                       | 91.1    |          |
| P4908-02 | SP-1-E2            | 20     | 1.17           | 8.54         | 9.71                    | 8.9                       | 90.5    |          |
| P4908-03 | SP-2               | 21     | 1.16           | 8.76         | 9.92                    | 9.22                      | 92.0    |          |
| P4908-04 | SP-2-E2            | 22     | 1.16           | 8.45         | 9.61                    | 8.9                       | 91.6    |          |
| P4909-01 | BU-02-111824       | 23     | 1.15           | 8.74         | 9.89                    | 9.43                      | 94.7    |          |
| P4909-02 | BU-02-111824       | 24     | 1.16           | 8.72         | 9.88                    | 9.09                      | 90.9    |          |
| P4910-01 | MH-COTTAGE         | 25     | 1.15           | 8.79         | 9.94                    | 8.87                      | 87.8    |          |
| P4910-02 | MH-COTTAGE-EPH     | 26     | 1.19           | 8.41         | 9.6                     | 8.44                      | 86.2    |          |
| P4910-03 | MH-COTTAGE-VOC     | 27     | 1.19           | 8.67         | 9.86                    | 8.81                      | 87.9    |          |
| P4910-05 | MH-759             | 28     | 1.11           | 8.80         | 9.91                    | 8.85                      | 88.0    |          |



PERCENT SOLID

Supervisor: Iwona  
Analyst: jignesh  
Date: 11/19/2024

OVENTEMP IN Celsius(°C): 107  
Time IN: 17:00  
In Date: 11/18/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103  
Time OUT: 08:11  
Out Date: 11/19/2024  
Weight Check 1.0g: 1.00  
Weight Check 10g: 10.00  
BalanceID: M SC-4  
Thermometer ID: % SOLID- OVEN

QC:LB133489

| Lab ID   | Client SampleID | Dish # | Dish Wt (g) (A) | Sample Wt (g) | Dish + Sample Wt (g) (B) | Dish+Dry Sample Wt (g) (C) | % Solid | Comments |
|----------|-----------------|--------|-----------------|---------------|--------------------------|----------------------------|---------|----------|
| P4910-06 | MH-759-EPH      | 29     | 1.15            | 8.82          | 9.97                     | 9.09                       | 90.0    |          |
| P4910-07 | MH-759-VOC      | 30     | 1.15            | 8.40          | 9.55                     | 8.57                       | 88.3    |          |

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

# WORKLIST(Hardcopy Internal Chain)

123489

WorkList Name : %1-111824

WorkList ID : 185509

Department : Wet-Chemistry

Date : 11-18-2024 08:23:47

| Sample   | Customer Sample    | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|--------------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| P4817-01 | BHK70              | Solid  | Percent Solids | Cool 4 deg C | USEP04   | Q11                         | 11/11/2024   | Chemtech -SO |
| P4817-02 | BHK71              | Solid  | Percent Solids | Cool 4 deg C | USEP04   | Q11                         | 11/11/2024   | Chemtech -SO |
| P4817-03 | BHK71MS            | Solid  | Percent Solids | Cool 4 deg C | USEP04   | Q11                         | 11/11/2024   | Chemtech -SO |
| P4817-04 | BHK71MSD           | Solid  | Percent Solids | Cool 4 deg C | USEP04   | Q11                         | 11/11/2024   | Chemtech -SO |
| P4888-01 | 01A-01B-01C        | Solid  | Percent Solids | Cool 4 deg C | BSIG01   | M11                         | 11/11/2024   | Chemtech -SO |
| P4888-02 | 02A-02B-02C        | Solid  | Percent Solids | Cool 4 deg C | BSIG01   | M11                         | 11/14/2024   | Chemtech -SO |
| P4890-06 | D3721              | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | M11                         | 11/14/2024   | Chemtech -SO |
| P4892-01 | WB-310-TOP         | Solid  | Percent Solids | Cool 4 deg C | PORT06   | M11                         | 11/15/2024   | Chemtech -SO |
| P4892-02 | WB-310-BOT         | Solid  | Percent Solids | Cool 4 deg C | PORT06   | M11                         | 11/15/2024   | Chemtech -SO |
| P4893-01 | MH-763             | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 11/16/2024   | Chemtech -SO |
| P4893-02 | MH-763-EPH         | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 11/16/2024   | Chemtech -SO |
| P4893-03 | MH-763-VOC         | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 11/16/2024   | Chemtech -SO |
| P4893-05 | MH-762             | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 11/16/2024   | Chemtech -SO |
| P4893-06 | MH-762-EPH         | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 11/16/2024   | Chemtech -SO |
| P4893-07 | MH-762-VOC         | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 11/16/2024   | Chemtech -SO |
| P4894-01 | FES-SB401-1921     | Solid  | Percent Solids | Cool 4 deg C | TETRO6   | L51                         | 11/14/2024   | Chemtech -SO |
| P4894-02 | FES-SB401-6062     | Solid  | Percent Solids | Cool 4 deg C | TETRO6   | L51                         | 11/14/2024   | Chemtech -SO |
| P4894-03 | FES-DUP02-20241114 | Solid  | Percent Solids | Cool 4 deg C | TETRO6   | L51                         | 11/14/2024   | Chemtech -SO |
| P4908-01 | SP-1               | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 11/18/2024   | Chemtech -SO |
| P4908-02 | SP-1-E2            | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 11/18/2024   | Chemtech -SO |
| P4908-03 | SP-2               | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 11/18/2024   | Chemtech -SO |

Date/Time 11-18-24 15:30

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 11-18-24

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

# WORKLIST(Hardcopy Internal Chain)

8133489

WorkList Name : %1-111824

WorkList ID : 185509

Department : Wet-Chemistry

Date : 11-18-2024 08:23:47

| Sample   | Customer Sample | Matrix | Test           | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method       |
|----------|-----------------|--------|----------------|--------------|----------|-----------------------------|--------------|--------------|
| P4908-04 | SP-2-E2         | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L51                         | 11/18/2024   | Chemtech -SO |
| P4909-01 | BU-02-111824    | Solid  | Percent Solids | Cool 4 deg C | PSEG05   | L51                         | 11/18/2024   | Chemtech -SO |
| P4909-02 | BU-02-111824    | Solid  | Percent Solids | Cool 4 deg C | PSEG05   | L51                         | 11/18/2024   | Chemtech -SO |
| P4910-01 | MH-COTTAGE      | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L61                         | 11/18/2024   | Chemtech -SO |
| P4910-02 | MH-COTTAGE-EPH  | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L61                         | 11/18/2024   | Chemtech -SO |
| P4910-03 | MH-COTTAGE-VOC  | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L61                         | 11/18/2024   | Chemtech -SO |
| P4910-05 | MH-759          | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L61                         | 11/18/2024   | Chemtech -SO |
| P4910-06 | MH-759-EPH      | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L61                         | 11/18/2024   | Chemtech -SO |
| P4910-07 | MH-759-VOC      | Solid  | Percent Solids | Cool 4 deg C | PSEG03   | L61                         | 11/18/2024   | Chemtech -SO |

Date/Time 11-18-24 15:30

Raw Sample Received by: 88 CWCJ

Raw Sample Relinquished by: 88 CWCJ

Date/Time 11-18-24

Raw Sample Received by: 88 CWCJ

Raw Sample Relinquished by: 88 CWCJ



# 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. P4891/P4892  
QUOTE NO.  
COC Number 2042035

### CLIENT INFORMATION

#### REPORT TO BE SENT TO:

COMPANY: Gannett Fleming  
ADDRESS: 1010 Adams Avenue  
CITY Andover STATE: PA ZIP: 17003  
ATTENTION: Joe Kupansky  
PHONE: 610-301-8362 FAX:

### CLIENT PROJECT INFORMATION

PROJECT NAME: Antioch's replacement of Sawtooth Bridge  
PROJECT NO.: 950000878 LOCATION: Keamy, NJ  
PROJECT MANAGER: Joe Kupansky  
e-mail: ben@bemis.com  
PHONE: 610-301-8362 FAX:

### CLIENT BILLING INFORMATION

BILL TO: Chen Alliance/chemtech PO#:  
ADDRESS: 984 Sheffield St  
CITY Mountainside STATE: NJ ZIP: 07093  
ATTENTION: PHONE:

### ANALYSIS

### DATA TURNAROUND INFORMATION

FAX (RUSH) \_\_\_\_\_ DAYS\*  
HARDCOPY (DATA PACKAGE): 10 DAYS\*  
EDD: 10 DAYS\*

\*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

### DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)  
☐ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP  
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B  
+ Raw Data ☐ Other \_\_\_\_\_

EDD FORMAT BEM EDD

1 PA VOC TO 2 ICL PAH 3 ICL Metals 4 PCB S 5 ALV. ALV. EPH 6 FILED ICA 7 PCRA PARA 8 TOX 9

| CHEMTECH<br>SAMPLE<br>ID | PROJECT<br>SAMPLE IDENTIFICATION | SAMPLE<br>MATRIX | SAMPLE<br>TYPE |      | SAMPLE<br>COLLECTION |       | # OF BOTTLES | PRESERVATIVES |   |   |   |   |   |   |   |                                                       | COMMENTS                   |  |
|--------------------------|----------------------------------|------------------|----------------|------|----------------------|-------|--------------|---------------|---|---|---|---|---|---|---|-------------------------------------------------------|----------------------------|--|
|                          |                                  |                  | COMP           | GRAB | DATE                 | TIME  |              | A             | B | F |   |   |   |   |   | ← Specify Preservatives<br>A-HCl<br>B-HNO3<br>C-H2SO4 | D-NaOH<br>E-ICE<br>F-OTHER |  |
|                          |                                  |                  |                |      |                      |       |              |               |   |   |   |   |   |   |   |                                                       |                            |  |
| 1.                       | WB-310-SW                        | GW               | X              |      | 11/15                | 8:05  | 7            | X             | X | X | X | X |   |   |   |                                                       |                            |  |
| 2.                       | WB-310-Top                       | S                | X              |      | 11/15                | 9:00  | 10           | X             | X | X | X | X |   |   |   |                                                       |                            |  |
| 3.                       | WB-310-Bot.                      | S                | X              |      | 11/15                | 12:30 | 9            | X             | X | X | X | X | X | X | X |                                                       |                            |  |
| 4.                       | TB-1152024                       | DTW              |                |      | 11/15                | LAB   | 2            | X             |   |   |   |   |   |   |   |                                                       |                            |  |
| 5.                       |                                  |                  |                |      |                      |       |              |               |   |   |   |   |   |   |   |                                                       |                            |  |
| 6.                       |                                  |                  |                |      |                      |       |              |               |   |   |   |   |   |   |   |                                                       |                            |  |
| 7.                       |                                  |                  |                |      |                      |       |              |               |   |   |   |   |   |   |   |                                                       |                            |  |
| 8.                       |                                  |                  |                |      |                      |       |              |               |   |   |   |   |   |   |   |                                                       |                            |  |
| 9.                       |                                  |                  |                |      |                      |       |              |               |   |   |   |   |   |   |   |                                                       |                            |  |
| 10.                      |                                  |                  |                |      |                      |       |              |               |   |   |   |   |   |   |   |                                                       |                            |  |

### SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

|                          |                     |                    |                                                                                                                                                                      |
|--------------------------|---------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RELINQUISHED BY SAMPLER: | DATE/TIME:          | RECEIVED BY:       | Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP _____ °C |
| 1. <u>Vennola</u>        | <u>11/15 5:02pm</u> | <u>[Signature]</u> | Comments: _____                                                                                                                                                      |
| RELINQUISHED BY SAMPLER: | DATE/TIME:          | RECEIVED BY:       |                                                                                                                                                                      |
| 2.                       |                     |                    |                                                                                                                                                                      |
| RELINQUISHED BY SAMPLER: | DATE/TIME:          | RECEIVED BY:       |                                                                                                                                                                      |
| 3. <u>[Signature]</u>    | <u>11-15-24</u>     | <u>[Signature]</u> |                                                                                                                                                                      |

Page \_\_\_\_\_ of \_\_\_\_\_

CLIENT: ☐ Hand Delivered ☐ Other \_\_\_\_\_  
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete  
☐ YES ☐ NO





284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

### Laboratory Certification

| Certified By         | License No.      |
|----------------------|------------------|
|                      |                  |
| CAS EPA CLP Contract | 68HERH20D0011    |
|                      |                  |
| Connecticut          | PH-0830          |
|                      |                  |
| DOD ELAP (ANAB)      | L2219            |
|                      |                  |
| Maine                | 2024021          |
|                      |                  |
| Maryland             | 296              |
|                      |                  |
| New Hampshire        | 255424 Rev 1     |
|                      |                  |
| New Jersey           | 20012            |
|                      |                  |
| New York             | 11376            |
|                      |                  |
| Pennsylvania         | 68-00548         |
|                      |                  |
| Soil Permit          | 525-24-234-08441 |
|                      |                  |
| Texas                | T104704488       |

**LOGIN REPORT/SAMPLE TRANSFER**

|                                                   |        |                                                 |                                              |
|---------------------------------------------------|--------|-------------------------------------------------|----------------------------------------------|
| <b>Order ID :</b> P4892                           | PORT06 | <b>Order Date :</b> 11/18/2024 8:10:00 AM       | <b>Project Mgr :</b> Kiran                   |
| <b>Client Name :</b> Portal Partners Tri-Venture  |        | <b>Project Name :</b> Amtrak Sawtooth Bridges 2 | <b>Report Type :</b> NJ Reduced              |
| <b>Client Contact :</b> Joseph Krupansky          |        | <b>Receive DateTime :</b> 11/15/2024 5:45:00 PM | <b>EDD Type :</b> EXCEL NJCLEANUP            |
| <b>Invoice Name :</b> Portal Partners Tri-Venture |        | <b>Purchase Order :</b>                         | <b>Hard Copy Date :</b>                      |
| <b>Invoice Contact :</b> Joseph Krupansky         |        |                                                 | <b>Date Signoff :</b> 11/18/2024 12:55:05 PM |

| LAB ID   | CLIENT ID  | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST          | TEST GROUP | METHOD   | FAX DATE     | DUE DATES |
|----------|------------|--------|-------------|-------------|---------------|------------|----------|--------------|-----------|
| P4892-01 | WB-310-TOP | Solid  | 11/15/2024  | 09:00       |               |            |          |              |           |
|          |            |        |             |             | VOC-TCLVOA-10 |            | 8260D    | 10 Bus. Days |           |
| P4892-02 | WB-310-BOT | Solid  | 11/15/2024  | 12:30       |               |            |          |              |           |
|          |            |        |             |             | VOC-TCLVOA-10 |            | 8260D    | 10 Bus. Days |           |
| P4892-04 | WB-310-SW  | Water  | 11/15/2024  | 08:05       |               |            |          |              |           |
|          |            |        |             |             | VOC-TCLVOA-10 |            | 8260-Low | 10 Bus. Days |           |

Relinquished By : 

Date / Time : 11-18-24 1322

Received By : 

Date / Time : 11/18/24 1372

Storage Area : VOA Refridgerator Room