

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN022324\  
 Data File : VN081151.D  
 Acq On : 23 Feb 2024 09:35  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Feb 24 00:08:52 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N020924W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Feb 10 01:55:02 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  | Bromochloromethane          | 30.000  | 30.000  | 0.0    | 76    | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 20.000  | 19.722  | 1.4    | 83    | 0.00     |
| 3 M  | Chloromethane               | 20.000  | 20.095  | -0.5   | 82    | 0.00     |
| 4 M  | Vinyl Chloride              | 20.000  | 17.460  | 12.7   | 71    | 0.00     |
| 5 M  | Bromomethane                | 20.000  | 17.721  | 11.4   | 71    | 0.05     |
| 6 M  | Chloroethane                | 20.000  | 17.979  | 10.1   | 72    | 0.02     |
| 7 M  | Trichlorofluoromethane      | 20.000  | 19.474  | 2.6    | 76    | 0.02     |
| 8 T  | Diethyl Ether               | 20.000  | 20.220  | -1.1   | 81    | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 20.000  | 20.761  | -3.8   | 81    | 0.00     |
| 10 M | 1,1-Dichloroethene          | 20.000  | 19.175  | 4.1    | 75    | 0.01     |
| 11   | Methyl Iodide               | 20.000  | 18.459  | 7.7    | 77    | 0.00     |
| 12   | Methyl Acetate              | 20.000  | 24.678  | -23.4  | 101   | -0.01    |
| 13 M | Acrolein                    | 100.000 | 124.735 | -24.7  | 95    | 0.00     |
| 14 M | Acrylonitrile               | 100.000 | 115.285 | -15.3  | 92    | 0.00     |
| 15 M | Acetone                     | 100.000 | 88.790  | 11.2   | 71    | 0.00     |
| 16 M | Carbon Disulfide            | 20.000  | 18.301  | 8.5    | 71    | 0.01     |
| 17   | Allyl chloride              | 20.000  | 22.765  | -13.8  | 89    | 0.00     |
| 18 M | Methylene Chloride          | 20.000  | 19.451  | 2.7    | 75    | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 20.000  | 19.198  | 4.0    | 74    | 0.00     |
| 20 T | Diisopropyl ether           | 20.000  | 22.693  | -13.5  | 92    | 0.00     |
| 21 M | 1,1-Dichloroethane          | 20.000  | 20.394  | -2.0   | 80    | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 20.000  | 19.180  | 4.1    | 74    | 0.00     |
| 23 M | tert-Butyl Alcohol          | 100.000 | 121.793 | -21.8  | 95    | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 20.000  | 20.304  | -1.5   | 80    | 0.00     |
| 25 M | Chloroform                  | 20.000  | 19.529  | 2.4    | 76    | 0.00     |
| 26   | Cyclohexane                 | 20.000  | 23.588  | -17.9  | 90    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 30.000  | 31.102  | -3.7   | 81    | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 30.000  | 30.000  | 0.0    | 75    | 0.00     |
| 29   | 1,1-Dichloropropene         | 20.000  | 20.015  | -0.1   | 76    | 0.00     |
| 30 M | 2-Butanone                  | 100.000 | 108.273 | -8.3   | 85    | 0.00     |
| 31   | 2,2-Dichloropropane         | 20.000  | 20.604  | -3.0   | 79    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 20.000  | 19.413  | 2.9    | 75    | 0.00     |
| 33 M | Carbon Tetrachloride        | 20.000  | 19.927  | 0.4    | 76    | 0.00     |
| 34 M | Benzene                     | 20.000  | 19.922  | 0.4    | 76    | 0.00     |
| 35   | Methacrylonitrile           | 20.000  | 24.172  | -20.9  | 98    | 0.00     |
| 36 M | 1,2-Dichloroethane          | 20.000  | 20.106  | -0.5   | 76    | 0.00     |
| 37 M | Trichloroethene             | 20.000  | 19.100  | 4.5    | 71    | 0.00     |
| 38   | Methylcyclohexane           | 20.000  | 23.802  | -19.0  | 91    | 0.00     |
| 39 M | 1,2-Dichloropropane         | 20.000  | 21.188  | -5.9   | 81    | 0.00     |
| 40   | Dibromomethane              | 20.000  | 19.790  | 1.1    | 76    | 0.00     |
| 41 M | Bromodichloromethane        | 20.000  | 19.397  | 3.0    | 76    | 0.00     |
| 42 M | Vinyl Acetate               | 100.000 | 117.372 | -17.4  | 93    | 0.00     |
| 43   | Ethyl Acetate               | 20.000  | 25.818  | -29.1# | 99    | 0.00     |
| 44   | Isopropyl Acetate           | 20.000  | 25.183  | -25.9# | 99    | 0.00     |
| 45 T | 1,4-Dioxane                 | 400.000 | 472.492 | -18.1  | 91    | 0.00     |
| 46   | Methyl methacrylate         | 20.000  | 24.388  | -21.9  | 97    | 0.00     |
| 47   | n-amyl Acetate              | 20.000  | 23.941  | -19.7  | 94    | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 20.000  | 20.166  | -0.8   | 80    | 0.00     |

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 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Feb 24 00:08:52 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N020924W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Feb 10 01:55:02 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 | cis-1,3-Dichloropropene     | 20.000  | 20.303  | -1.5   | 78    | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 20.000  | 19.161  | 4.2    | 75    | 0.00     |
| 51   | Ethyl methacrylate          | 20.000  | 20.955  | -4.8   | 83    | 0.00     |
| 52   | 1,3-Dichloropropane         | 20.000  | 20.571  | -2.9   | 79    | 0.00     |
| 53 M | Dibromochloromethane        | 20.000  | 18.104  | 9.5    | 72    | 0.00     |
| 54 M | 1,2-Dibromoethane           | 20.000  | 19.088  | 4.6    | 75    | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 100.000 | 113.288 | -13.3  | 89    | 0.00     |
| 56 M | Bromoform                   | 20.000  | 17.929  | 10.4   | 72    | 0.00     |
| 57 I | Chlorobenzene-d5            | 30.000  | 30.000  | 0.0    | 75    | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 100.000 | 126.138 | -26.1# | 97    | 0.00     |
| 59 M | 2-Hexanone                  | 100.000 | 120.947 | -20.9  | 94    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 30.000  | 31.259  | -4.2   | 76    | 0.00     |
| 61 M | Tetrachloroethene           | 20.000  | 19.943  | 0.3    | 74    | 0.00     |
| 62 M | Toluene                     | 20.000  | 20.147  | -0.7   | 76    | 0.00     |
| 63 S | Toluene-d8                  | 30.000  | 30.811  | -2.7   | 76    | 0.00     |
| 64 M | Chlorobenzene               | 20.000  | 19.644  | 1.8    | 74    | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 20.000  | 19.557  | 2.2    | 73    | 0.00     |
| 66 M | Ethyl Benzene               | 20.000  | 20.709  | -3.5   | 77    | 0.00     |
| 67 M | m/p-Xylenes                 | 40.000  | 40.241  | -0.6   | 74    | 0.00     |
| 68 M | o-Xylene                    | 20.000  | 20.061  | -0.3   | 76    | 0.00     |
| 69 M | Styrene                     | 20.000  | 20.030  | -0.2   | 76    | 0.00     |
| 70   | Isopropylbenzene            | 20.000  | 21.703  | -8.5   | 80    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 20.000  | 21.128  | -5.6   | 80    | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 20.000  | 24.290  | -21.4  | 95    | 0.00     |
| 73   | Bromobenzene                | 20.000  | 19.347  | 3.3    | 71    | 0.00     |
| 74   | n-propylbenzene             | 20.000  | 22.662  | -13.3  | 84    | 0.00     |
| 75   | 2-Chlorotoluene             | 20.000  | 21.574  | -7.9   | 79    | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 20.000  | 22.267  | -11.3  | 82    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 20.000  | 22.327  | -11.6  | 88    | 0.00     |
| 78   | 4-Chlorotoluene             | 20.000  | 20.991  | -5.0   | 77    | 0.00     |
| 79   | tert-butylbenzene           | 20.000  | 22.453  | -12.3  | 81    | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 20.000  | 22.215  | -11.1  | 82    | 0.00     |
| 81   | sec-Butylbenzene            | 20.000  | 23.617  | -18.1  | 87    | 0.00     |
| 82   | p-Isopropyltoluene          | 20.000  | 22.899  | -14.5  | 86    | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 20.000  | 20.516  | -2.6   | 74    | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 20.000  | 20.680  | -3.4   | 75    | 0.00     |
| 85   | n-Butylbenzene              | 20.000  | 24.953  | -24.8  | 94    | 0.00     |
| 86 T | Hexachloroethane            | 20.000  | 24.640  | -23.2  | 94    | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 20.000  | 20.959  | -4.8   | 80    | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 20.000  | 22.060  | -10.3  | 90    | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 20.000  | 23.679  | -18.4  | 87    | 0.00     |
| 90   | Hexachlorobutadiene         | 20.000  | 20.535  | -2.7   | 77    | 0.00     |
| 91 M | Naphthalene                 | 20.000  | 23.642  | -18.2  | 90    | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 20.000  | 23.679  | -18.4  | 87    | 0.00     |

(#) = Out of Range

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