

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN082322\  
 Data File : VN074081.D  
 Acq On : 23 Aug 2022 20:32  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Aug 24 01:22:27 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N072722W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Jul 27 18:07:26 2022  
 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   | 137   | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 20.000  | 18.458  | 7.7   | 125   | 0.00     |
| 3 M  | Chloromethane               | 20.000  | 17.919  | 10.4  | 117   | 0.00     |
| 4 M  | Vinyl Chloride              | 20.000  | 15.336  | 23.3  | 104   | 0.00     |
| 5 M  | Bromomethane                | 20.000  | 17.365  | 13.2  | 102   | 0.00     |
| 6 M  | Chloroethane                | 20.000  | 14.590  | 27.1# | 98    | -0.01    |
| 7 M  | Trichlorofluoromethane      | 20.000  | 21.397  | -7.0  | 148   | 0.00     |
| 8 T  | Diethyl Ether               | 20.000  | 19.013  | 4.9   | 137   | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 20.000  | 18.526  | 7.4   | 129   | 0.00     |
| 10 M | 1,1-Dichloroethene          | 20.000  | 19.320  | 3.4   | 136   | 0.00     |
| 11   | Methyl Iodide               | 20.000  | 17.641  | 11.8  | 133   | 0.00     |
| 12   | Methyl Acetate              | 20.000  | 21.542  | -7.7  | 148   | 0.00     |
| 13 M | Acrolein                    | 100.000 | 79.251  | 20.7  | 108   | 0.00     |
| 14 M | Acrylonitrile               | 100.000 | 99.592  | 0.4   | 135   | 0.00     |
| 15 M | Acetone                     | 100.000 | 106.579 | -6.6  | 147   | 0.00     |
| 16 M | Carbon Disulfide            | 20.000  | 17.405  | 13.0  | 123   | 0.00     |
| 17   | Allyl chloride              | 20.000  | 17.823  | 10.9  | 127   | 0.00     |
| 18 M | Methylene Chloride          | 20.000  | 18.704  | 6.5   | 132   | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 20.000  | 18.806  | 6.0   | 131   | 0.00     |
| 20 T | Diisopropyl ether           | 20.000  | 18.293  | 8.5   | 126   | 0.00     |
| 21 M | 1,1-Dichloroethane          | 20.000  | 18.523  | 7.4   | 129   | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 20.000  | 18.926  | 5.4   | 136   | 0.00     |
| 23 M | tert-Butyl Alcohol          | 100.000 | 108.685 | -8.7  | 154   | 0.02     |
| 24 M | Methyl tert-Butyl Ether     | 20.000  | 19.434  | 2.8   | 139   | 0.00     |
| 25 M | Chloroform                  | 20.000  | 18.965  | 5.2   | 129   | 0.00     |
| 26   | Cyclohexane                 | 20.000  | 17.258  | 13.7  | 122   | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 30.000  | 29.088  | 3.0   | 128   | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 30.000  | 30.000  | 0.0   | 145   | 0.00     |
| 29   | 1,1-Dichloropropene         | 20.000  | 17.421  | 12.9  | 128   | 0.00     |
| 30 M | 2-Butanone                  | 100.000 | 92.776  | 7.2   | 134   | 0.00     |
| 31   | 2,2-Dichloropropane         | 20.000  | 11.821  | 40.9# | 87    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 20.000  | 18.350  | 8.2   | 132   | 0.00     |
| 33 M | Carbon Tetrachloride        | 20.000  | 18.301  | 8.5   | 136   | 0.00     |
| 34 M | Benzene                     | 20.000  | 17.825  | 10.9  | 128   | 0.00     |
| 35   | Methacrylonitrile           | 20.000  | 19.638  | 1.8   | 126   | 0.00     |
| 36 M | 1,2-Dichloroethane          | 20.000  | 17.779  | 11.1  | 126   | 0.00     |
| 37 M | Trichloroethene             | 20.000  | 18.297  | 8.5   | 137   | 0.00     |
| 38   | Methylcyclohexane           | 20.000  | 16.662  | 16.7  | 126   | 0.00     |
| 39 M | 1,2-Dichloropropane         | 20.000  | 17.618  | 11.9  | 126   | 0.00     |
| 40   | Dibromomethane              | 20.000  | 17.947  | 10.3  | 129   | 0.00     |
| 41 M | Bromodichloromethane        | 20.000  | 17.958  | 10.2  | 130   | 0.00     |
| 42 M | Vinyl Acetate               | 100.000 | 86.710  | 13.3  | 127   | 0.00     |
| 43   | Ethyl Acetate               | 20.000  | 18.988  | 5.1   | 147   | 0.00     |
| 44   | Isopropyl Acetate           | 20.000  | 17.522  | 12.4  | 128   | 0.00     |
| 45 T | 1,4-Dioxane                 | 400.000 | 408.712 | -2.2  | 148   | 0.00     |
| 46   | Methyl methacrylate         | 20.000  | 17.514  | 12.4  | 130   | 0.00     |
| 47   | n-amyl Acetate              | 20.000  | 17.344  | 13.3  | 134   | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 20.000  | 16.271  | 18.6  | 128   | 0.00     |

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 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Aug 24 01:22:27 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N072722W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Jul 27 18:07:26 2022  
 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  | 16.492  | 17.5 | 124   | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 20.000  | 18.304  | 8.5  | 135   | 0.00     |
| 51   | Ethyl methacrylate          | 20.000  | 18.204  | 9.0  | 140   | 0.00     |
| 52   | 1,3-Dichloropropane         | 20.000  | 17.859  | 10.7 | 132   | 0.00     |
| 53 M | Dibromochloromethane        | 20.000  | 18.432  | 7.8  | 139   | 0.00     |
| 54 M | 1,2-Dibromoethane           | 20.000  | 18.308  | 8.5  | 137   | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 100.000 | 107.375 | -7.4 | 162   | 0.00     |
| 56 M | Bromoform                   | 20.000  | 18.870  | 5.6  | 154   | 0.00     |
| 57 I | Chlorobenzene-d5            | 30.000  | 30.000  | 0.0  | 138   | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 100.000 | 95.737  | 4.3  | 128   | 0.00     |
| 59 M | 2-Hexanone                  | 100.000 | 97.415  | 2.6  | 132   | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 30.000  | 30.016  | -0.1 | 140   | 0.00     |
| 61 M | Tetrachloroethene           | 20.000  | 17.127  | 14.4 | 118   | 0.00     |
| 62 M | Toluene                     | 20.000  | 18.754  | 6.2  | 128   | 0.00     |
| 63 S | Toluene-d8                  | 30.000  | 29.812  | 0.6  | 132   | 0.00     |
| 64 M | Chlorobenzene               | 20.000  | 19.165  | 4.2  | 136   | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 20.000  | 19.377  | 3.1  | 138   | 0.00     |
| 66 M | Ethyl Benzene               | 20.000  | 18.222  | 8.9  | 129   | 0.00     |
| 67 M | m/p-Xylenes                 | 40.000  | 38.151  | 4.6  | 133   | 0.00     |
| 68 M | o-Xylene                    | 20.000  | 18.859  | 5.7  | 134   | 0.00     |
| 69 M | Styrene                     | 20.000  | 18.716  | 6.4  | 132   | 0.00     |
| 70   | Isopropylbenzene            | 20.000  | 18.819  | 5.9  | 133   | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 20.000  | 19.987  | 0.1  | 137   | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 20.000  | 20.235  | -1.2 | 154   | 0.00     |
| 73   | Bromobenzene                | 20.000  | 19.702  | 1.5  | 144   | 0.00     |
| 74   | n-propylbenzene             | 20.000  | 17.841  | 10.8 | 128   | 0.00     |
| 75   | 2-Chlorotoluene             | 20.000  | 18.932  | 5.3  | 132   | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 20.000  | 18.622  | 6.9  | 130   | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 20.000  | 15.716  | 21.4 | 119   | 0.00     |
| 78   | 4-Chlorotoluene             | 20.000  | 18.487  | 7.6  | 132   | 0.00     |
| 79   | tert-butylbenzene           | 20.000  | 19.220  | 3.9  | 138   | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 20.000  | 18.714  | 6.4  | 131   | 0.00     |
| 81   | sec-Butylbenzene            | 20.000  | 17.887  | 10.6 | 129   | 0.00     |
| 82   | p-Isopropyltoluene          | 20.000  | 18.104  | 9.5  | 133   | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 20.000  | 18.824  | 5.9  | 138   | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 20.000  | 18.719  | 6.4  | 136   | 0.00     |
| 85   | n-Butylbenzene              | 20.000  | 16.399  | 18.0 | 127   | 0.00     |
| 86 T | Hexachloroethane            | 20.000  | 18.131  | 9.3  | 134   | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 20.000  | 19.532  | 2.3  | 138   | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 20.000  | 20.073  | -0.4 | 143   | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 20.000  | 19.884  | 0.6  | 162   | 0.00     |
| 90   | Hexachlorobutadiene         | 20.000  | 20.185  | -0.9 | 153   | 0.00     |
| 91 M | Naphthalene                 | 20.000  | 21.826  | -9.1 | 171   | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 20.000  | 20.966  | -4.8 | 162   | 0.00     |

(#) = Out of Range

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