

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN081723\  
 Data File : VN078926.D  
 Acq On : 17 Aug 2023 15:05  
 Operator : JC\MD  
 Sample : VSTDICV020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN081723

Quant Time: Aug 18 05:27:10 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N081723W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Aug 18 05:21:14 2023  
 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   | 126   | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 20.000  | 19.670  | 1.6   | 124   | 0.00     |
| 3 M  | Chloromethane               | 20.000  | 19.932  | 0.3   | 125   | 0.00     |
| 4 M  | Vinyl Chloride              | 20.000  | 20.330  | -1.6  | 127   | 0.00     |
| 5 M  | Bromomethane                | 20.000  | 20.113  | -0.6  | 130   | 0.00     |
| 6 M  | Chloroethane                | 20.000  | 19.500  | 2.5   | 126   | 0.00     |
| 7 M  | Trichlorofluoromethane      | 20.000  | 19.962  | 0.2   | 130   | 0.00     |
| 8 T  | Diethyl Ether               | 20.000  | 19.944  | 0.3   | 124   | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 20.000  | 20.832  | -4.2  | 131   | 0.00     |
| 10 M | 1,1-Dichloroethene          | 20.000  | 20.239  | -1.2  | 124   | 0.00     |
| 11   | Methyl Iodide               | 20.000  | 19.909  | 0.5   | 125   | 0.00     |
| 12   | Methyl Acetate              | 20.000  | 20.579  | -2.9  | 128   | 0.00     |
| 13 M | Acrolein                    | 100.000 | 73.548  | 26.5# | 97    | 0.00     |
| 14 M | Acrylonitrile               | 100.000 | 101.328 | -1.3  | 124   | -0.01    |
| 15 M | Acetone                     | 100.000 | 104.067 | -4.1  | 133   | 0.00     |
| 16 M | Carbon Disulfide            | 20.000  | 19.424  | 2.9   | 119   | 0.00     |
| 17   | Allyl chloride              | 20.000  | 19.672  | 1.6   | 124   | 0.00     |
| 18 M | Methylene Chloride          | 20.000  | 20.137  | -0.7  | 125   | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 20.000  | 20.101  | -0.5  | 130   | 0.00     |
| 20 T | Diisopropyl ether           | 20.000  | 21.407  | -7.0  | 132   | 0.00     |
| 21 M | 1,1-Dichloroethane          | 20.000  | 20.402  | -2.0  | 126   | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 20.000  | 20.205  | -1.0  | 121   | 0.00     |
| 23 M | tert-Butyl Alcohol          | 100.000 | 106.320 | -6.3  | 127   | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 20.000  | 20.907  | -4.5  | 127   | 0.00     |
| 25 M | Chloroform                  | 20.000  | 20.564  | -2.8  | 130   | 0.00     |
| 26   | Cyclohexane                 | 20.000  | 20.062  | -0.3  | 124   | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 30.000  | 29.127  | 2.9   | 123   | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 30.000  | 30.000  | 0.0   | 124   | 0.00     |
| 29   | 1,1-Dichloropropene         | 20.000  | 20.953  | -4.8  | 124   | 0.00     |
| 30 M | 2-Butanone                  | 100.000 | 106.695 | -6.7  | 133   | 0.00     |
| 31   | 2,2-Dichloropropane         | 20.000  | 21.965  | -9.8  | 133   | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 20.000  | 20.603  | -3.0  | 125   | 0.00     |
| 33 M | Carbon Tetrachloride        | 20.000  | 20.538  | -2.7  | 124   | 0.00     |
| 34 M | Benzene                     | 20.000  | 21.186  | -5.9  | 128   | 0.00     |
| 35   | Methacrylonitrile           | 20.000  | 21.098  | -5.5  | 125   | 0.00     |
| 36 M | 1,2-Dichloroethane          | 20.000  | 20.714  | -3.6  | 128   | 0.00     |
| 37 M | Trichloroethene             | 20.000  | 20.508  | -2.5  | 128   | 0.00     |
| 38   | Methylcyclohexane           | 20.000  | 20.750  | -3.8  | 126   | 0.00     |
| 39 M | 1,2-Dichloropropane         | 20.000  | 20.678  | -3.4  | 129   | 0.00     |
| 40   | Dibromomethane              | 20.000  | 20.301  | -1.5  | 123   | 0.00     |
| 41 M | Bromodichloromethane        | 20.000  | 21.096  | -5.5  | 128   | 0.00     |
| 42 M | Vinyl Acetate               | 100.000 | 106.877 | -6.9  | 127   | 0.00     |
| 43   | Ethyl Acetate               | 20.000  | 20.509  | -2.5  | 130   | 0.00     |
| 44   | Isopropyl Acetate           | 20.000  | 20.639  | -3.2  | 124   | 0.00     |
| 45 T | 1,4-Dioxane                 | 400.000 | 416.603 | -4.2  | 126   | 0.00     |
| 46   | Methyl methacrylate         | 20.000  | 20.985  | -4.9  | 125   | 0.00     |
| 47   | n-amyl Acetate              | 20.000  | 20.926  | -4.6  | 123   | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 20.000  | 21.175  | -5.9  | 129   | 0.00     |

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 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICSVN081723

Quant Time: Aug 18 05:27:10 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N081723W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Aug 18 05:21:14 2023  
 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  | 21.650  | -8.2  | 131   | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 20.000  | 20.626  | -3.1  | 123   | 0.00     |
| 51   | Ethyl methacrylate          | 20.000  | 21.692  | -8.5  | 129   | 0.00     |
| 52   | 1,3-Dichloropropane         | 20.000  | 20.895  | -4.5  | 127   | 0.00     |
| 53 M | Dibromochloromethane        | 20.000  | 20.897  | -4.5  | 130   | 0.00     |
| 54 M | 1,2-Dibromoethane           | 20.000  | 20.644  | -3.2  | 125   | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 100.000 | 94.536  | 5.5   | 122   | 0.00     |
| 56 M | Bromoform                   | 20.000  | 20.392  | -2.0  | 126   | 0.00     |
| 57 I | Chlorobenzene-d5            | 30.000  | 30.000  | 0.0   | 121   | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 100.000 | 105.729 | -5.7  | 130   | 0.00     |
| 59 M | 2-Hexanone                  | 100.000 | 107.084 | -7.1  | 130   | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 30.000  | 29.966  | 0.1   | 122   | 0.00     |
| 61 M | Tetrachloroethene           | 20.000  | 19.691  | 1.5   | 120   | 0.00     |
| 62 M | Toluene                     | 20.000  | 21.114  | -5.6  | 128   | 0.00     |
| 63 S | Toluene-d8                  | 30.000  | 30.209  | -0.7  | 123   | 0.00     |
| 64 M | Chlorobenzene               | 20.000  | 21.016  | -5.1  | 127   | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 20.000  | 20.632  | -3.2  | 124   | 0.00     |
| 66 M | Ethyl Benzene               | 20.000  | 21.004  | -5.0  | 129   | 0.00     |
| 67 M | m/p-Xylenes                 | 40.000  | 42.567  | -6.4  | 128   | 0.00     |
| 68 M | o-Xylene                    | 20.000  | 21.630  | -8.1  | 132   | 0.00     |
| 69 M | Styrene                     | 20.000  | 22.094  | -10.5 | 131   | 0.00     |
| 70   | Isopropylbenzene            | 20.000  | 21.068  | -5.3  | 127   | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 20.000  | 20.567  | -2.8  | 125   | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 20.000  | 20.632  | -3.2  | 129   | 0.00     |
| 73   | Bromobenzene                | 20.000  | 20.525  | -2.6  | 125   | 0.00     |
| 74   | n-propylbenzene             | 20.000  | 21.297  | -6.5  | 127   | 0.00     |
| 75   | 2-Chlorotoluene             | 20.000  | 21.327  | -6.6  | 129   | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 20.000  | 21.034  | -5.2  | 126   | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 20.000  | 22.588  | -12.9 | 138   | 0.00     |
| 78   | 4-Chlorotoluene             | 20.000  | 21.118  | -5.6  | 127   | 0.00     |
| 79   | tert-butylbenzene           | 20.000  | 20.823  | -4.1  | 129   | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 20.000  | 21.290  | -6.4  | 127   | 0.00     |
| 81   | sec-Butylbenzene            | 20.000  | 20.859  | -4.3  | 123   | 0.00     |
| 82   | p-Isopropyltoluene          | 20.000  | 20.574  | -2.9  | 119   | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 20.000  | 21.447  | -7.2  | 133   | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 20.000  | 21.361  | -6.8  | 126   | 0.00     |
| 85   | n-Butylbenzene              | 20.000  | 20.732  | -3.7  | 122   | 0.00     |
| 86 T | Hexachloroethane            | 20.000  | 20.063  | -0.3  | 124   | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 20.000  | 21.126  | -5.6  | 126   | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 20.000  | 21.071  | -5.4  | 120   | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 20.000  | 19.860  | 0.7   | 113   | 0.00     |
| 90   | Hexachlorobutadiene         | 20.000  | 18.769  | 6.2   | 104   | 0.00     |
| 91 M | Naphthalene                 | 20.000  | 20.193  | -1.0  | 115   | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 20.000  | 19.860  | 0.7   | 113   | 0.00     |

(#) = Out of Range

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