

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX120522\  
 Data File : VX033223.D  
 Acq On : 05 Dec 2022 13:58  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC020

Quant Time: Dec 06 05:41:22 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X111022W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Nov 11 05:24:06 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                    | AvgRF  | CCRF   | %Dev   | Area% | Dev(min) |
|------|-----------------------------|--------|--------|--------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000  | 1.000  | 0.0    | 84    | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 2.655  | 1.677  | 36.8#  | 50#   | 0.00     |
| 3 M  | Chloromethane               | 2.635  | 2.207  | 16.2   | 67    | 0.00     |
| 4 M  | Vinyl Chloride              | 2.979  | 2.250  | 24.5   | 60    | 0.00     |
| 5 M  | Bromomethane                | 2.645  | 2.072  | 21.7   | 65    | 0.00     |
| 6 M  | Chloroethane                | 2.353  | 2.074  | 11.9   | 73    | 0.00     |
| 7 M  | Trichlorofluoromethane      | 5.743  | 4.435  | 22.8   | 62    | 0.00     |
| 8 T  | Diethyl Ether               | 1.857  | 2.127  | -14.5  | 94    | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 3.055  | 2.351  | 23.0   | 63    | 0.00     |
| 10 M | 1,1-Dichloroethene          | 2.918  | 2.182  | 25.2#  | 62    | 0.00     |
| 11   | Methyl Iodide               | 3.138  | 2.732  | 12.9   | 78    | 0.00     |
| 12   | Methyl Acetate              | 4.323  | 4.370  | -1.1   | 83    | 0.00     |
| 13 M | Acrolein                    | 0.576  | 0.656  | -13.9  | 99    | 0.00     |
| 14 M | Acrylonitrile               | 1.550  | 1.592  | -2.7   | 86    | 0.00     |
| 15 M | Acetone                     | 0.403  | 0.421  | -4.5   | 85    | 0.00     |
| 16 M | Carbon Disulfide            | 7.265  | 6.098  | 16.1   | 72    | 0.00     |
| 17   | Allyl chloride              | 4.637  | 4.052  | 12.6   | 74    | 0.00     |
| 18 M | Methylene Chloride          | 3.366  | 3.239  | 3.8    | 80    | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 3.215  | 2.665  | 17.1   | 70    | 0.00     |
| 20 T | Diisopropyl ether           | 10.398 | 10.006 | 3.8    | 82    | 0.00     |
| 21 M | 1,1-Dichloroethane          | 5.837  | 5.197  | 11.0   | 73    | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 3.754  | 3.508  | 6.6    | 79    | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.503  | 0.559  | -11.1  | 84    | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 10.450 | 10.318 | 1.3    | 84    | 0.00     |
| 25 M | Chloroform                  | 6.510  | 5.971  | 8.3    | 78    | 0.00     |
| 26   | Cyclohexane                 | 5.098  | 3.665  | 28.1#  | 61    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 2.894  | 2.913  | -0.7   | 84    | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000  | 1.000  | 0.0    | 73    | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.665  | 0.586  | 11.9   | 64    | 0.00     |
| 30 M | 2-Butanone                  | 0.310  | 0.365  | -17.7  | 85    | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.569  | 0.579  | -1.8   | 74    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.837  | 0.769  | 8.1    | 67    | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.735  | 0.699  | 4.9    | 70    | 0.00     |
| 34 M | Benzene                     | 1.875  | 1.932  | -3.0   | 74    | 0.00     |
| 35   | Methacrylonitrile           | 0.351  | 0.408  | -16.2  | 85    | 0.00     |
| 36 M | 1,2-Dichloroethane          | 0.772  | 0.880  | -14.0  | 81    | 0.00     |
| 37 M | Trichloroethene             | 0.524  | 0.506  | 3.4    | 70    | 0.00     |
| 38   | Methylcyclohexane           | 0.745  | 0.636  | 14.6   | 62    | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.475  | 0.515  | -8.4   | 79    | 0.00     |
| 40   | Dibromomethane              | 0.362  | 0.428  | -18.2  | 85    | 0.00     |
| 41 M | Bromodichloromethane        | 0.691  | 0.865  | -25.2# | 92    | 0.00     |
| 42 M | Vinyl Acetate               | 1.192  | 1.309  | -9.8   | 80    | 0.00     |
| 43   | Ethyl Acetate               | 0.624  | 0.735  | -17.8  | 83    | 0.00     |
| 44   | Isopropyl Acetate           | 1.046  | 1.158  | -10.7  | 82    | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.010  | 0.012  | -20.0  | 89    | 0.00     |
| 46   | Methyl methacrylate         | 0.526  | 0.576  | -9.5   | 80    | 0.00     |
| 47   | n-amyl Acetate              | 0.930  | 0.962  | -3.4   | 76    | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.708  | 0.830  | -17.2  | 89    | 0.00     |

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 MSVOA\_X  
 LabSampleId :  
 VSTDCCC020

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 QLast Update : Fri Nov 11 05:24:06 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                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|-----------------------------|-------|-------|--------|-------|----------|
| 49 T | cis-1,3-Dichloropropene     | 0.748 | 0.884 | -18.2  | 88    | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.498 | 0.591 | -18.7  | 88    | 0.00     |
| 51   | Ethyl methacrylate          | 0.744 | 0.816 | -9.7   | 81    | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.814 | 0.965 | -18.6  | 85    | 0.00     |
| 53 M | Dibromochloromethane        | 0.542 | 0.723 | -33.4# | 101   | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.537 | 0.651 | -21.2  | 90    | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.360 | 0.379 | -5.3   | 77    | 0.00     |
| 56 M | Bromoform                   | 0.388 | 0.533 | -37.4# | 106   | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 77    | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.587 | 0.669 | -14.0  | 85    | 0.00     |
| 59 M | 2-Hexanone                  | 0.432 | 0.493 | -14.1  | 85    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.574 | 0.550 | 4.2    | 76    | 0.00     |
| 61 M | Tetrachloroethene           | 0.419 | 0.380 | 9.3    | 71    | 0.00     |
| 62 M | Toluene                     | 1.951 | 1.862 | 4.6    | 74    | 0.00     |
| 63 S | Toluene-d8                  | 1.012 | 0.966 | 4.5    | 74    | 0.00     |
| 64 M | Chlorobenzene               | 1.206 | 1.210 | -0.3   | 78    | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.459 | 0.504 | -9.8   | 85    | 0.00     |
| 66 M | Ethyl Benzene               | 2.189 | 2.021 | 7.7    | 72    | 0.00     |
| 67 M | m/p-Xylenes                 | 0.852 | 0.788 | 7.5    | 72    | 0.00     |
| 68 M | o-Xylene                    | 0.836 | 0.793 | 5.1    | 74    | 0.00     |
| 69 M | Styrene                     | 1.389 | 1.345 | 3.2    | 75    | 0.00     |
| 70   | Isopropylbenzene            | 2.231 | 2.007 | 10.0   | 70    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.677 | 0.791 | -16.8  | 89    | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.588 | 0.626 | -6.5   | 79    | 0.00     |
| 73   | Bromobenzene                | 0.542 | 0.545 | -0.6   | 78    | 0.00     |
| 74   | n-propylbenzene             | 2.535 | 2.260 | 10.8   | 69    | 0.00     |
| 75   | 2-Chlorotoluene             | 1.535 | 1.444 | 5.9    | 73    | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 1.886 | 1.714 | 9.1    | 70    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.179 | 0.222 | -24.0  | 102   | 0.00     |
| 78   | 4-Chlorotoluene             | 1.768 | 1.615 | 8.7    | 71    | 0.00     |
| 79   | tert-butylbenzene           | 1.833 | 1.660 | 9.4    | 71    | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 1.844 | 1.714 | 7.0    | 71    | 0.00     |
| 81   | sec-Butylbenzene            | 2.207 | 1.945 | 11.9   | 69    | 0.00     |
| 82   | p-Isopropyltoluene          | 1.860 | 1.673 | 10.1   | 70    | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 0.995 | 0.969 | 2.6    | 75    | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.999 | 0.967 | 3.2    | 75    | 0.00     |
| 85   | n-Butylbenzene              | 1.576 | 1.366 | 13.3   | 68    | 0.00     |
| 86 T | Hexachloroethane            | 0.305 | 0.315 | -3.3   | 84    | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 0.989 | 0.989 | 0.0    | 77    | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.144 | 0.174 | -20.8  | 99    | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.607 | 0.568 | 6.4    | 74    | 0.00     |
| 90   | Hexachlorobutadiene         | 0.244 | 0.218 | 10.7   | 70    | 0.00     |
| 91 M | Naphthalene                 | 2.049 | 2.106 | -2.8   | 80    | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 0.611 | 0.596 | 2.5    | 75    | 0.00     |

(#) = Out of Range

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