

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX112822\  
 Data File : VX033091.D  
 Acq On : 28 Nov 2022 15:10  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC020

Quant Time: Nov 29 03:44:21 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   | 110   | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 2.655  | 2.391 | 9.9   | 93    | 0.00     |
| 3 M  | Chloromethane               | 2.635  | 2.469 | 6.3   | 98    | 0.00     |
| 4 M  | Vinyl Chloride              | 2.979  | 2.934 | 1.5   | 103   | 0.00     |
| 5 M  | Bromomethane                | 2.645  | 1.873 | 29.2# | 77    | 0.00     |
| 6 M  | Chloroethane                | 2.353  | 2.141 | 9.0   | 99    | 0.00     |
| 7 M  | Trichlorofluoromethane      | 5.743  | 5.771 | -0.5  | 106   | 0.00     |
| 8 T  | Diethyl Ether               | 1.857  | 1.772 | 4.6   | 102   | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 3.055  | 3.045 | 0.3   | 106   | 0.00     |
| 10 M | 1,1-Dichloroethene          | 2.918  | 2.842 | 2.6   | 105   | 0.00     |
| 11   | Methyl Iodide               | 3.138  | 2.333 | 25.7# | 87    | 0.00     |
| 12   | Methyl Acetate              | 4.323  | 3.890 | 10.0  | 96    | 0.00     |
| 13 M | Acrolein                    | 0.576  | 0.568 | 1.4   | 111   | 0.00     |
| 14 M | Acrylonitrile               | 1.550  | 1.417 | 8.6   | 100   | 0.00     |
| 15 M | Acetone                     | 0.403  | 0.390 | 3.2   | 102   | 0.01     |
| 16 M | Carbon Disulfide            | 7.265  | 7.220 | 0.6   | 111   | 0.00     |
| 17   | Allyl chloride              | 4.637  | 4.389 | 5.3   | 105   | 0.00     |
| 18 M | Methylene Chloride          | 3.366  | 3.142 | 6.7   | 101   | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 3.215  | 3.077 | 4.3   | 105   | 0.00     |
| 20 T | Diisopropyl ether           | 10.398 | 9.559 | 8.1   | 102   | 0.00     |
| 21 M | 1,1-Dichloroethane          | 5.837  | 5.466 | 6.4   | 100   | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 3.754  | 3.559 | 5.2   | 105   | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.503  | 0.584 | -16.1 | 114   | 0.02     |
| 24 M | Methyl tert-Butyl Ether     | 10.450 | 9.700 | 7.2   | 103   | 0.00     |
| 25 M | Chloroform                  | 6.510  | 6.170 | 5.2   | 105   | 0.00     |
| 26   | Cyclohexane                 | 5.098  | 4.853 | 4.8   | 105   | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 2.894  | 2.892 | 0.1   | 109   | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000  | 1.000 | 0.0   | 111   | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.665  | 0.634 | 4.7   | 105   | 0.00     |
| 30 M | 2-Butanone                  | 0.310  | 0.281 | 9.4   | 100   | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.569  | 0.639 | -12.3 | 124   | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.837  | 0.796 | 4.9   | 105   | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.735  | 0.716 | 2.6   | 109   | -0.01    |
| 34 M | Benzene                     | 1.875  | 1.782 | 5.0   | 104   | 0.00     |
| 35   | Methacrylonitrile           | 0.351  | 0.319 | 9.1   | 101   | -0.01    |
| 36 M | 1,2-Dichloroethane          | 0.772  | 0.726 | 6.0   | 101   | 0.00     |
| 37 M | Trichloroethene             | 0.524  | 0.507 | 3.2   | 106   | 0.00     |
| 38   | Methylcyclohexane           | 0.745  | 0.723 | 3.0   | 107   | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.475  | 0.454 | 4.4   | 106   | 0.00     |
| 40   | Dibromomethane              | 0.362  | 0.349 | 3.6   | 106   | 0.00     |
| 41 M | Bromodichloromethane        | 0.691  | 0.675 | 2.3   | 110   | 0.00     |
| 42 M | Vinyl Acetate               | 1.192  | 1.091 | 8.5   | 102   | 0.00     |
| 43   | Ethyl Acetate               | 0.624  | 0.564 | 9.6   | 98    | 0.00     |
| 44   | Isopropyl Acetate           | 1.046  | 0.924 | 11.7  | 99    | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.010  | 0.010 | 0.0   | 111   | 0.00     |
| 46   | Methyl methacrylate         | 0.526  | 0.474 | 9.9   | 100   | 0.00     |
| 47   | n-amyl Acetate              | 0.930  | 0.832 | 10.5  | 100   | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.708  | 0.657 | 7.2   | 107   | 0.00     |

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 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC020

Quant Time: Nov 29 03:44:21 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) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 49 T | cis-1,3-Dichloropropene     | 0.748 | 0.727 | 2.8  | 110   | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.498 | 0.475 | 4.6  | 108   | 0.00     |
| 51   | Ethyl methacrylate          | 0.744 | 0.668 | 10.2 | 101   | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.814 | 0.764 | 6.1  | 102   | 0.00     |
| 53 M | Dibromochloromethane        | 0.542 | 0.524 | 3.3  | 112   | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.537 | 0.504 | 6.1  | 106   | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.360 | 0.307 | 14.7 | 95    | 0.00     |
| 56 M | Bromoform                   | 0.388 | 0.359 | 7.5  | 109   | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0  | 111   | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.587 | 0.533 | 9.2  | 98    | 0.00     |
| 59 M | 2-Hexanone                  | 0.432 | 0.396 | 8.3  | 98    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.574 | 0.574 | 0.0  | 114   | 0.00     |
| 61 M | Tetrachloroethene           | 0.419 | 0.402 | 4.1  | 108   | 0.00     |
| 62 M | Toluene                     | 1.951 | 1.834 | 6.0  | 105   | 0.00     |
| 63 S | Toluene-d8                  | 1.012 | 1.008 | 0.4  | 111   | 0.00     |
| 64 M | Chlorobenzene               | 1.206 | 1.156 | 4.1  | 107   | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.459 | 0.443 | 3.5  | 107   | 0.00     |
| 66 M | Ethyl Benzene               | 2.189 | 2.097 | 4.2  | 107   | 0.00     |
| 67 M | m/p-Xylenes                 | 0.852 | 0.817 | 4.1  | 108   | 0.00     |
| 68 M | o-Xylene                    | 0.836 | 0.785 | 6.1  | 105   | 0.00     |
| 69 M | Styrene                     | 1.389 | 1.292 | 7.0  | 104   | 0.00     |
| 70   | Isopropylbenzene            | 2.231 | 2.138 | 4.2  | 107   | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.677 | 0.641 | 5.3  | 104   | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.588 | 0.578 | 1.7  | 105   | 0.00     |
| 73   | Bromobenzene                | 0.542 | 0.517 | 4.6  | 106   | 0.00     |
| 74   | n-propylbenzene             | 2.535 | 2.442 | 3.7  | 108   | 0.00     |
| 75   | 2-Chlorotoluene             | 1.535 | 1.488 | 3.1  | 108   | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 1.886 | 1.813 | 3.9  | 107   | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.179 | 0.165 | 7.8  | 110   | 0.00     |
| 78   | 4-Chlorotoluene             | 1.768 | 1.685 | 4.7  | 107   | 0.00     |
| 79   | tert-butylbenzene           | 1.833 | 1.777 | 3.1  | 109   | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 1.844 | 1.783 | 3.3  | 106   | 0.00     |
| 81   | sec-Butylbenzene            | 2.207 | 2.159 | 2.2  | 110   | 0.00     |
| 82   | p-Isopropyltoluene          | 1.860 | 1.817 | 2.3  | 109   | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 0.995 | 0.959 | 3.6  | 106   | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.999 | 0.967 | 3.2  | 107   | 0.00     |
| 85   | n-Butylbenzene              | 1.576 | 1.527 | 3.1  | 109   | 0.00     |
| 86 T | Hexachloroethane            | 0.305 | 0.299 | 2.0  | 115   | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 0.989 | 0.952 | 3.7  | 107   | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.144 | 0.135 | 6.2  | 110   | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.607 | 0.580 | 4.4  | 109   | 0.00     |
| 90   | Hexachlorobutadiene         | 0.244 | 0.246 | -0.8 | 114   | 0.00     |
| 91 M | Naphthalene                 | 2.049 | 1.903 | 7.1  | 103   | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 0.611 | 0.578 | 5.4  | 104   | 0.00     |

(#) = Out of Range

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