

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN102822\  
 Data File : VN075075.D  
 Acq On : 28 Oct 2022 21:00  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Oct 31 01:51:23 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N102522W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu Oct 27 10:19:47 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   | 89    | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 1.460 | 1.657 | -13.5 | 95    | 0.00     |
| 3 M  | Chloromethane               | 1.921 | 2.070 | -7.8  | 81    | 0.00     |
| 4 M  | Vinyl Chloride              | 2.905 | 3.118 | -7.3  | 89    | 0.00     |
| 5 M  | Bromomethane                | 2.297 | 2.518 | -9.6  | 88    | -0.04    |
| 6 M  | Chloroethane                | 2.241 | 2.358 | -5.2  | 85    | -0.04    |
| 7 M  | Trichlorofluoromethane      | 3.126 | 3.698 | -18.3 | 99    | -0.02    |
| 8 T  | Diethyl Ether               | 1.285 | 1.471 | -14.5 | 97    | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 1.832 | 2.120 | -15.7 | 97    | -0.02    |
| 10 M | 1,1-Dichloroethene          | 1.719 | 1.941 | -12.9 | 101   | -0.02    |
| 11   | Methyl Iodide               | 2.681 | 3.082 | -15.0 | 98    | -0.01    |
| 12   | Methyl Acetate              | 2.912 | 3.361 | -15.4 | 100   | 0.00     |
| 13 M | Acrolein                    | 0.357 | 0.420 | -17.6 | 95    | -0.01    |
| 14 M | Acrylonitrile               | 1.203 | 1.322 | -9.9  | 95    | 0.00     |
| 15 M | Acetone                     | 0.336 | 0.389 | -15.8 | 99    | 0.00     |
| 16 M | Carbon Disulfide            | 3.784 | 4.078 | -7.8  | 94    | 0.00     |
| 17   | Allyl chloride              | 2.303 | 2.576 | -11.9 | 93    | -0.01    |
| 18 M | Methylene Chloride          | 2.153 | 2.496 | -15.9 | 99    | -0.01    |
| 19 M | trans-1,2-Dichloroethene    | 1.911 | 2.109 | -10.4 | 98    | 0.00     |
| 20 T | Diisopropyl ether           | 5.977 | 6.658 | -11.4 | 96    | 0.00     |
| 21 M | 1,1-Dichloroethane          | 3.712 | 4.253 | -14.6 | 100   | -0.01    |
| 22 M | cis-1,2-Dichloroethene      | 2.414 | 2.666 | -10.4 | 96    | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.557 | 0.585 | -5.0  | 95    | 0.02     |
| 24 M | Methyl tert-Butyl Ether     | 7.030 | 8.054 | -14.6 | 101   | 0.00     |
| 25 M | Chloroform                  | 4.101 | 4.576 | -11.6 | 99    | 0.00     |
| 26   | Cyclohexane                 | 2.982 | 3.219 | -7.9  | 97    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 2.743 | 3.047 | -11.1 | 95    | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 96    | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.515 | 0.519 | -0.8  | 97    | 0.00     |
| 30 M | 2-Butanone                  | 0.297 | 0.291 | 2.0   | 91    | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.629 | 0.549 | 12.7  | 84    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.666 | 0.673 | -1.1  | 95    | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.587 | 0.564 | 3.9   | 94    | 0.00     |
| 34 M | Benzene                     | 1.573 | 1.649 | -4.8  | 100   | 0.00     |
| 35   | Methacrylonitrile           | 0.284 | 0.290 | -2.1  | 100   | 0.00     |
| 36 M | 1,2-Dichloroethane          | 0.583 | 0.606 | -3.9  | 98    | 0.00     |
| 37 M | Trichloroethene             | 0.391 | 0.410 | -4.9  | 103   | 0.00     |
| 38   | Methylcyclohexane           | 0.638 | 0.600 | 6.0   | 92    | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.396 | 0.416 | -5.1  | 99    | 0.00     |
| 40   | Dibromomethane              | 0.300 | 0.298 | 0.7   | 99    | 0.00     |
| 41 M | Bromodichloromethane        | 0.585 | 0.598 | -2.2  | 99    | 0.00     |
| 42 M | Vinyl Acetate               | 0.836 | 0.949 | -13.5 | 107   | 0.00     |
| 43   | Ethyl Acetate               | 0.586 | 0.612 | -4.4  | 101   | 0.00     |
| 44   | Isopropyl Acetate           | 0.940 | 0.923 | 1.8   | 94    | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.012 | 0.011 | 8.3   | 97    | 0.00     |
| 46   | Methyl methacrylate         | 0.422 | 0.415 | 1.7   | 89    | 0.00     |
| 47   | n-amyl Acetate              | 0.808 | 0.826 | -2.2  | 100   | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.639 | 0.594 | 7.0   | 95    | 0.00     |

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 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Oct 31 01:51:23 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N102522W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu Oct 27 10:19:47 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     | 0.672 | 0.652 | 3.0  | 95    | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.440 | 0.453 | -3.0 | 102   | 0.00     |
| 51   | Ethyl methacrylate          | 0.686 | 0.666 | 2.9  | 96    | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.736 | 0.726 | 1.4  | 94    | 0.00     |
| 53 M | Dibromochloromethane        | 0.476 | 0.446 | 6.3  | 98    | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.455 | 0.446 | 2.0  | 97    | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.280 | 0.291 | -3.9 | 102   | 0.00     |
| 56 M | Bromoform                   | 0.350 | 0.301 | 14.0 | 96    | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0  | 93    | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.647 | 0.680 | -5.1 | 94    | 0.00     |
| 59 M | 2-Hexanone                  | 0.496 | 0.517 | -4.2 | 92    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.589 | 0.553 | 6.1  | 93    | 0.00     |
| 61 M | Tetrachloroethene           | 0.334 | 0.342 | -2.4 | 96    | 0.00     |
| 62 M | Toluene                     | 1.942 | 1.996 | -2.8 | 96    | 0.00     |
| 63 S | Toluene-d8                  | 1.678 | 1.679 | -0.1 | 93    | 0.00     |
| 64 M | Chlorobenzene               | 1.204 | 1.192 | 1.0  | 96    | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.460 | 0.472 | -2.6 | 95    | 0.00     |
| 66 M | Ethyl Benzene               | 2.189 | 2.195 | -0.3 | 95    | 0.00     |
| 67 M | m/p-Xylenes                 | 0.878 | 0.867 | 1.3  | 95    | 0.00     |
| 68 M | o-Xylene                    | 0.882 | 0.879 | 0.3  | 95    | 0.00     |
| 69 M | Styrene                     | 1.443 | 1.384 | 4.1  | 95    | 0.00     |
| 70   | Isopropylbenzene            | 2.299 | 2.293 | 0.3  | 97    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.749 | 0.783 | -4.5 | 96    | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.680 | 0.685 | -0.7 | 92    | 0.00     |
| 73   | Bromobenzene                | 0.512 | 0.498 | 2.7  | 96    | 0.00     |
| 74   | n-propylbenzene             | 2.575 | 2.529 | 1.8  | 96    | 0.00     |
| 75   | 2-Chlorotoluene             | 1.567 | 1.603 | -2.3 | 99    | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 1.948 | 1.935 | 0.7  | 97    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.238 | 0.219 | 8.0  | 91    | 0.00     |
| 78   | 4-Chlorotoluene             | 1.522 | 1.519 | 0.2  | 100   | 0.00     |
| 79   | tert-butylbenzene           | 1.739 | 1.681 | 3.3  | 95    | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 1.981 | 1.942 | 2.0  | 96    | 0.00     |
| 81   | sec-Butylbenzene            | 2.445 | 2.385 | 2.5  | 97    | 0.00     |
| 82   | p-Isopropyltoluene          | 2.063 | 1.940 | 6.0  | 95    | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 1.012 | 0.931 | 8.0  | 95    | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.976 | 0.931 | 4.6  | 101   | 0.00     |
| 85   | n-Butylbenzene              | 1.654 | 1.542 | 6.8  | 98    | 0.00     |
| 86 T | Hexachloroethane            | 0.382 | 0.340 | 11.0 | 86    | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 1.001 | 0.961 | 4.0  | 97    | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.157 | 0.152 | 3.2  | 86    | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.442 | 0.414 | 6.3  | 102   | 0.00     |
| 90   | Hexachlorobutadiene         | 0.203 | 0.197 | 3.0  | 100   | 0.00     |
| 91 M | Naphthalene                 | 1.752 | 1.630 | 7.0  | 99    | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 0.448 | 0.422 | 5.8  | 101   | 0.00     |

(#) = Out of Range

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