

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN083023\  
 Data File : VN079109.D  
 Acq On : 30 Aug 2023 11:27  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Aug 31 02:14:16 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                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000 | 0.0   | 83    | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 1.893 | 1.811 | 4.3   | 79    | 0.00     |
| 3 M  | Chloromethane               | 2.269 | 2.210 | 2.6   | 80    | 0.00     |
| 4 M  | Vinyl Chloride              | 2.245 | 2.239 | 0.3   | 82    | 0.00     |
| 5 M  | Bromomethane                | 1.386 | 1.425 | -2.8  | 87    | 0.00     |
| 6 M  | Chloroethane                | 1.459 | 1.709 | -17.1 | 99    | 0.00     |
| 7 M  | Trichlorofluoromethane      | 3.024 | 2.967 | 1.9   | 84    | 0.00     |
| 8 T  | Diethyl Ether               | 1.137 | 0.971 | 14.6  | 70    | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 1.579 | 1.575 | 0.3   | 82    | 0.00     |
| 10 M | 1,1-Dichloroethene          | 1.589 | 1.414 | 11.0  | 71    | 0.01     |
| 11   | Methyl Iodide               | 1.918 | 1.860 | 3.0   | 80    | 0.00     |
| 12   | Methyl Acetate              | 3.725 | 3.694 | 0.8   | 81    | 0.00     |
| 13 M | Acrolein                    | 0.260 | 0.233 | 10.4  | 78    | 0.00     |
| 14 M | Acrylonitrile               | 0.979 | 0.982 | -0.3  | 80    | -0.01    |
| 15 M | Acetone                     | 0.300 | 0.258 | 14.0  | 72    | 0.00     |
| 16 M | Carbon Disulfide            | 4.566 | 3.853 | 15.6  | 68    | 0.00     |
| 17   | Allyl chloride              | 2.913 | 2.432 | 16.5  | 69    | 0.00     |
| 18 M | Methylene Chloride          | 1.900 | 1.956 | -2.9  | 84    | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 1.788 | 1.632 | 8.7   | 77    | 0.00     |
| 20 T | Diisopropyl ether           | 6.336 | 6.146 | 3.0   | 78    | 0.00     |
| 21 M | 1,1-Dichloroethane          | 3.516 | 3.427 | 2.5   | 79    | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 2.047 | 1.902 | 7.1   | 73    | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.365 | 0.330 | 9.6   | 71    | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 5.641 | 5.124 | 9.2   | 72    | 0.00     |
| 25 M | Chloroform                  | 3.542 | 3.539 | 0.1   | 83    | 0.00     |
| 26   | Cyclohexane                 | 2.572 | 2.350 | 8.6   | 74    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 2.430 | 2.355 | 3.1   | 80    | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 75    | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.456 | 0.471 | -3.3  | 74    | 0.00     |
| 30 M | 2-Butanone                  | 0.267 | 0.271 | -1.5  | 76    | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.504 | 0.498 | 1.2   | 72    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.545 | 0.584 | -7.2  | 79    | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.472 | 0.502 | -6.4  | 77    | 0.00     |
| 34 M | Benzene                     | 1.368 | 1.482 | -8.3  | 79    | 0.00     |
| 35   | Methacrylonitrile           | 0.285 | 0.277 | 2.8   | 70    | 0.00     |
| 36 M | 1,2-Dichloroethane          | 0.512 | 0.569 | -11.1 | 83    | 0.00     |
| 37 M | Trichloroethene             | 0.340 | 0.345 | -1.5  | 76    | 0.00     |
| 38   | Methylcyclohexane           | 0.402 | 0.404 | -0.5  | 73    | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.368 | 0.390 | -6.0  | 80    | 0.00     |
| 40   | Dibromomethane              | 0.247 | 0.277 | -12.1 | 82    | 0.00     |
| 41 M | Bromodichloromethane        | 0.497 | 0.560 | -12.7 | 83    | 0.00     |
| 42 M | Vinyl Acetate               | 0.753 | 0.749 | 0.5   | 71    | 0.00     |
| 43   | Ethyl Acetate               | 0.518 | 0.062 | 88.0# | 9#    | 0.26     |
| 44   | Isopropyl Acetate           | 0.913 | 0.929 | -1.8  | 74    | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.007 | 0.008 | -14.3 | 85    | 0.00     |
| 46   | Methyl methacrylate         | 0.402 | 0.419 | -4.2  | 75    | 0.00     |
| 47   | n-amyl Acetate              | 0.701 | 0.681 | 2.9   | 69    | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.529 | 0.544 | -2.8  | 75    | 0.00     |

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 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Aug 31 02:14:16 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                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 49 T | cis-1,3-Dichloropropene     | 0.567 | 0.607 | -7.1  | 78    | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.334 | 0.374 | -12.0 | 80    | 0.00     |
| 51   | Ethyl methacrylate          | 0.516 | 0.518 | -0.4  | 72    | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.598 | 0.662 | -10.7 | 81    | 0.00     |
| 53 M | Dibromochloromethane        | 0.365 | 0.395 | -8.2  | 81    | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.343 | 0.354 | -3.2  | 76    | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.239 | 0.236 | 1.3   | 77    | 0.00     |
| 56 M | Bromoform                   | 0.258 | 0.273 | -5.8  | 79    | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 76    | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.595 | 0.613 | -3.0  | 79    | 0.00     |
| 59 M | 2-Hexanone                  | 0.436 | 0.437 | -0.2  | 76    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.438 | 0.441 | -0.7  | 77    | 0.00     |
| 61 M | Tetrachloroethene           | 0.290 | 0.308 | -6.2  | 80    | 0.00     |
| 62 M | Toluene                     | 1.638 | 1.711 | -4.5  | 79    | 0.00     |
| 63 S | Toluene-d8                  | 1.401 | 1.452 | -3.6  | 79    | 0.00     |
| 64 M | Chlorobenzene               | 0.985 | 0.998 | -1.3  | 76    | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.377 | 0.388 | -2.9  | 77    | 0.00     |
| 66 M | Ethyl Benzene               | 1.713 | 1.687 | 1.5   | 75    | 0.00     |
| 67 M | m/p-Xylenes                 | 0.639 | 0.660 | -3.3  | 77    | 0.00     |
| 68 M | o-Xylene                    | 0.630 | 0.637 | -1.1  | 77    | 0.00     |
| 69 M | Styrene                     | 1.023 | 1.040 | -1.7  | 76    | 0.00     |
| 70   | Isopropylbenzene            | 1.526 | 1.552 | -1.7  | 77    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.572 | 0.622 | -8.7  | 83    | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.469 | 0.505 | -7.7  | 84    | 0.00     |
| 73   | Bromobenzene                | 0.389 | 0.398 | -2.3  | 78    | 0.00     |
| 74   | n-propylbenzene             | 1.730 | 1.820 | -5.2  | 79    | 0.00     |
| 75   | 2-Chlorotoluene             | 1.097 | 1.140 | -3.9  | 79    | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 1.210 | 1.288 | -6.4  | 80    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.174 | 0.168 | 3.4   | 74    | 0.00     |
| 78   | 4-Chlorotoluene             | 1.051 | 1.071 | -1.9  | 77    | 0.00     |
| 79   | tert-butylbenzene           | 1.022 | 1.056 | -3.3  | 80    | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 1.190 | 1.271 | -6.8  | 80    | 0.00     |
| 81   | sec-Butylbenzene            | 1.349 | 1.434 | -6.3  | 79    | 0.00     |
| 82   | p-Isopropyltoluene          | 1.101 | 1.158 | -5.2  | 76    | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 0.627 | 0.661 | -5.4  | 82    | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.616 | 0.599 | 2.8   | 72    | 0.00     |
| 85   | n-Butylbenzene              | 0.866 | 0.865 | 0.1   | 74    | 0.00     |
| 86 T | Hexachloroethane            | 0.225 | 0.245 | -8.9  | 84    | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 0.642 | 0.652 | -1.6  | 76    | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.103 | 0.100 | 2.9   | 70    | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.254 | 0.206 | 18.9  | 58    | 0.00     |
| 90   | Hexachlorobutadiene         | 0.132 | 0.130 | 1.5   | 68    | 0.00     |
| 91 M | Naphthalene                 | 0.731 | 0.525 | 28.2# | 51    | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 0.254 | 0.206 | 18.9  | 58    | 0.00     |

(#) = Out of Range

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