

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN100424\  
 Data File : VN084322.D  
 Acq On : 04 Oct 2024 18:20  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Oct 04 23:02:05 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N090624W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Sep 06 23:42:47 2024  
 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   | 104   | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 2.009 | 1.605 | 20.1  | 84    | 0.00     |
| 3 M  | Chloromethane               | 2.087 | 1.890 | 9.4   | 96    | 0.00     |
| 4 M  | Vinyl Chloride              | 2.146 | 1.901 | 11.4  | 94    | 0.00     |
| 5 M  | Bromomethane                | 1.199 | 1.164 | 2.9   | 102   | 0.05     |
| 6 M  | Chloroethane                | 1.437 | 1.273 | 11.4  | 97    | 0.03     |
| 7 M  | Trichlorofluoromethane      | 3.598 | 3.173 | 11.8  | 96    | 0.03     |
| 8 T  | Diethyl Ether               | 1.222 | 1.083 | 11.4  | 95    | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 1.932 | 1.843 | 4.6   | 105   | 0.01     |
| 10 M | 1,1-Dichloroethene          | 1.865 | 1.666 | 10.7  | 98    | 0.02     |
| 11   | Methyl Iodide               | 2.533 | 2.172 | 14.3  | 93    | 0.00     |
| 12   | Methyl Acetate              | 2.249 | 2.447 | -8.8  | 123   | 0.01     |
| 13 M | Acrolein                    | 0.328 | 0.311 | 5.2   | 93    | 0.00     |
| 14 M | Acrylonitrile               | 0.910 | 0.887 | 2.5   | 106   | 0.00     |
| 15 M | Acetone                     | 0.302 | 0.278 | 7.9   | 107   | 0.00     |
| 16 M | Carbon Disulfide            | 5.269 | 4.414 | 16.2  | 90    | 0.01     |
| 17   | Allyl chloride              | 3.270 | 2.711 | 17.1  | 91    | 0.01     |
| 18 M | Methylene Chloride          | 2.040 | 1.946 | 4.6   | 102   | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 1.932 | 1.730 | 10.5  | 95    | 0.01     |
| 20 T | Diisopropyl ether           | 6.603 | 6.240 | 5.5   | 106   | 0.00     |
| 21 M | 1,1-Dichloroethane          | 3.770 | 3.668 | 2.7   | 106   | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 2.352 | 2.154 | 8.4   | 98    | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.334 | 0.264 | 21.0  | 84    | -0.02    |
| 24 M | Methyl tert-Butyl Ether     | 6.626 | 5.729 | 13.5  | 93    | 0.00     |
| 25 M | Chloroform                  | 3.995 | 3.781 | 5.4   | 102   | 0.00     |
| 26   | Cyclohexane                 | 3.320 | 2.759 | 16.9  | 90    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 2.742 | 2.455 | 10.5  | 93    | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 94    | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.476 | 0.458 | 3.8   | 96    | 0.00     |
| 30 M | 2-Butanone                  | 0.224 | 0.221 | 1.3   | 99    | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.607 | 0.552 | 9.1   | 92    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.635 | 0.619 | 2.5   | 97    | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.550 | 0.532 | 3.3   | 97    | 0.00     |
| 34 M | Benzene                     | 1.428 | 1.475 | -3.3  | 101   | 0.00     |
| 35   | Methacrylonitrile           | 0.252 | 0.261 | -3.6  | 100   | 0.00     |
| 36 M | 1,2-Dichloroethane          | 0.537 | 0.513 | 4.5   | 95    | 0.00     |
| 37 M | Trichloroethene             | 0.335 | 0.338 | -0.9  | 102   | 0.00     |
| 38   | Methylcyclohexane           | 0.570 | 0.477 | 16.3  | 85    | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.344 | 0.372 | -8.1  | 108   | 0.00     |
| 40   | Dibromomethane              | 0.251 | 0.254 | -1.2  | 98    | 0.00     |
| 41 M | Bromodichloromethane        | 0.534 | 0.551 | -3.2  | 104   | 0.00     |
| 42 M | Vinyl Acetate               | 0.922 | 0.800 | 13.2  | 93    | 0.00     |
| 43   | Ethyl Acetate               | 0.451 | 0.410 | 9.1   | 89    | 0.00     |
| 44   | Isopropyl Acetate           | 0.781 | 0.777 | 0.5   | 99    | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.006 | 0.004 | 33.3# | 69    | 0.00     |
| 46   | Methyl methacrylate         | 0.378 | 0.359 | 5.0   | 97    | 0.00     |
| 47   | n-amyl Acetate              | 0.692 | 0.690 | 0.3   | 101   | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.562 | 0.521 | 7.3   | 94    | 0.00     |

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 QLast Update : Fri Sep 06 23:42:47 2024  
 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     | 0.584 | 0.558 | 4.5  | 97    | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.320 | 0.340 | -6.3 | 106   | 0.00     |
| 51   | Ethyl methacrylate          | 0.546 | 0.520 | 4.8  | 93    | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.577 | 0.588 | -1.9 | 101   | 0.00     |
| 53 M | Dibromochloromethane        | 0.383 | 0.406 | -6.0 | 108   | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.331 | 0.351 | -6.0 | 106   | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.218 | 0.207 | 5.0  | 85    | 0.00     |
| 56 M | Bromoform                   | 0.244 | 0.252 | -3.3 | 106   | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0  | 95    | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.476 | 0.516 | -8.4 | 107   | 0.00     |
| 59 M | 2-Hexanone                  | 0.359 | 0.366 | -1.9 | 102   | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.517 | 0.510 | 1.4  | 96    | 0.00     |
| 61 M | Tetrachloroethene           | 0.317 | 0.328 | -3.5 | 107   | 0.00     |
| 62 M | Toluene                     | 1.724 | 1.714 | 0.6  | 100   | 0.00     |
| 63 S | Toluene-d8                  | 1.389 | 1.429 | -2.9 | 98    | 0.00     |
| 64 M | Chlorobenzene               | 1.068 | 1.067 | 0.1  | 100   | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.372 | 0.379 | -1.9 | 103   | 0.00     |
| 66 M | Ethyl Benzene               | 1.961 | 1.827 | 6.8  | 97    | 0.00     |
| 67 M | m/p-Xylenes                 | 0.721 | 0.695 | 3.6  | 98    | 0.00     |
| 68 M | o-Xylene                    | 0.698 | 0.677 | 3.0  | 97    | 0.00     |
| 69 M | Styrene                     | 1.180 | 1.148 | 2.7  | 99    | 0.00     |
| 70   | Isopropylbenzene            | 1.843 | 1.710 | 7.2  | 96    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.503 | 0.536 | -6.6 | 105   | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.441 | 0.452 | -2.5 | 102   | 0.00     |
| 73   | Bromobenzene                | 0.423 | 0.429 | -1.4 | 103   | 0.00     |
| 74   | n-propylbenzene             | 2.157 | 2.072 | 3.9  | 99    | 0.00     |
| 75   | 2-Chlorotoluene             | 1.346 | 1.303 | 3.2  | 99    | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 1.539 | 1.475 | 4.2  | 97    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.187 | 0.178 | 4.8  | 99    | 0.00     |
| 78   | 4-Chlorotoluene             | 1.365 | 1.315 | 3.7  | 99    | 0.00     |
| 79   | tert-butylbenzene           | 1.346 | 1.246 | 7.4  | 92    | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 1.555 | 1.489 | 4.2  | 98    | 0.00     |
| 81   | sec-Butylbenzene            | 1.839 | 1.721 | 6.4  | 98    | 0.00     |
| 82   | p-Isopropyltoluene          | 1.547 | 1.430 | 7.6  | 97    | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 0.815 | 0.799 | 2.0  | 101   | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.814 | 0.778 | 4.4  | 98    | 0.00     |
| 85   | n-Butylbenzene              | 1.365 | 1.217 | 10.8 | 96    | 0.00     |
| 86 T | Hexachloroethane            | 0.293 | 0.278 | 5.1  | 99    | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 0.791 | 0.771 | 2.5  | 101   | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.111 | 0.097 | 12.6 | 89    | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.433 | 0.359 | 17.1 | 86    | 0.00     |
| 90   | Hexachlorobutadiene         | 0.179 | 0.177 | 1.1  | 105   | 0.00     |
| 91 M | Naphthalene                 | 1.416 | 1.069 | 24.5 | 78    | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 0.433 | 0.359 | 17.1 | 86    | 0.00     |

(#) = Out of Range

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