

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN011025\  
 Data File : VN085418.D  
 Acq On : 10 Jan 2025 10:56  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Jan 10 22:39:55 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N122024W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 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   | 111   | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 2.508 | 2.467 | 1.6   | 104   | 0.00     |
| 3 M  | Chloromethane               | 2.533 | 2.328 | 8.1   | 99    | 0.00     |
| 4 M  | Vinyl Chloride              | 2.572 | 2.408 | 6.4   | 103   | 0.00     |
| 5 M  | Bromomethane                | 1.503 | 1.459 | 2.9   | 109   | 0.00     |
| 6 M  | Chloroethane                | 1.623 | 1.572 | 3.1   | 104   | 0.00     |
| 7 M  | Trichlorofluoromethane      | 3.533 | 3.589 | -1.6  | 110   | 0.00     |
| 8 T  | Diethyl Ether               | 1.217 | 1.212 | 0.4   | 115   | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 2.029 | 2.145 | -5.7  | 114   | 0.00     |
| 10 M | 1,1-Dichloroethene          | 1.853 | 1.820 | 1.8   | 111   | 0.00     |
| 11   | Methyl Iodide               | 2.221 | 2.231 | -0.5  | 117   | 0.00     |
| 12   | Methyl Acetate              | 2.768 | 2.787 | -0.7  | 110   | 0.00     |
| 13 M | Acrolein                    | 0.247 | 0.249 | -0.8  | 126   | 0.00     |
| 14 M | Acrylonitrile               | 1.070 | 0.923 | 13.7  | 96    | 0.00     |
| 15 M | Acetone                     | 0.270 | 0.255 | 5.6   | 103   | 0.00     |
| 16 M | Carbon Disulfide            | 5.634 | 5.252 | 6.8   | 103   | 0.00     |
| 17   | Allyl chloride              | 2.998 | 2.893 | 3.5   | 110   | 0.00     |
| 18 M | Methylene Chloride          | 2.208 | 2.158 | 2.3   | 107   | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 1.928 | 1.936 | -0.4  | 112   | 0.00     |
| 20 T | Diisopropyl ether           | 6.871 | 6.952 | -1.2  | 110   | 0.00     |
| 21 M | 1,1-Dichloroethane          | 4.017 | 4.047 | -0.7  | 110   | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 2.295 | 2.309 | -0.6  | 113   | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.353 | 0.252 | 28.6# | 83    | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 6.083 | 6.025 | 1.0   | 111   | -0.01    |
| 25 M | Chloroform                  | 4.072 | 4.034 | 0.9   | 107   | 0.00     |
| 26   | Cyclohexane                 | 3.063 | 3.084 | -0.7  | 114   | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 2.639 | 2.574 | 2.5   | 108   | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 119   | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.521 | 0.505 | 3.1   | 114   | 0.00     |
| 30 M | 2-Butanone                  | 0.275 | 0.222 | 19.3  | 94    | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.660 | 0.648 | 1.8   | 114   | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.677 | 0.644 | 4.9   | 110   | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.593 | 0.554 | 6.6   | 109   | 0.00     |
| 34 M | Benzene                     | 1.646 | 1.562 | 5.1   | 109   | 0.00     |
| 35   | Methacrylonitrile           | 0.304 | 0.260 | 14.5  | 101   | 0.00     |
| 36 M | 1,2-Dichloroethane          | 0.595 | 0.569 | 4.4   | 111   | 0.00     |
| 37 M | Trichloroethene             | 0.362 | 0.350 | 3.3   | 113   | 0.00     |
| 38   | Methylcyclohexane           | 0.539 | 0.506 | 6.1   | 120   | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.419 | 0.390 | 6.9   | 108   | 0.00     |
| 40   | Dibromomethane              | 0.292 | 0.268 | 8.2   | 106   | 0.00     |
| 41 M | Bromodichloromethane        | 0.610 | 0.570 | 6.6   | 107   | 0.00     |
| 42 M | Vinyl Acetate               | 0.971 | 0.841 | 13.4  | 104   | 0.00     |
| 43   | Ethyl Acetate               | 0.569 | 0.483 | 15.1  | 103   | 0.00     |
| 44   | Isopropyl Acetate           | 0.945 | 0.832 | 12.0  | 104   | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.007 | 0.005 | 28.6# | 79    | 0.00     |
| 46   | Methyl methacrylate         | 0.438 | 0.370 | 15.5  | 100   | 0.00     |
| 47   | n-amyl Acetate              | 0.805 | 0.609 | 24.3  | 92    | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.603 | 0.548 | 9.1   | 109   | 0.00     |

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 MSVOA\_N  
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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Sat Dec 21 02:03:07 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     | 0.648 | 0.616 | 4.9  | 113   | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.382 | 0.366 | 4.2  | 108   | 0.00     |
| 51   | Ethyl methacrylate          | 0.578 | 0.487 | 15.7 | 104   | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.667 | 0.616 | 7.6  | 105   | 0.00     |
| 53 M | Dibromochloromethane        | 0.448 | 0.404 | 9.8  | 103   | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.370 | 0.334 | 9.7  | 105   | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.298 | 0.243 | 18.5 | 99    | 0.00     |
| 56 M | Bromoform                   | 0.292 | 0.246 | 15.8 | 99    | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0  | 112   | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.608 | 0.529 | 13.0 | 93    | 0.00     |
| 59 M | 2-Hexanone                  | 0.442 | 0.365 | 17.4 | 89    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.486 | 0.454 | 6.6  | 104   | 0.00     |
| 61 M | Tetrachloroethene           | 0.335 | 0.358 | -6.9 | 117   | 0.00     |
| 62 M | Toluene                     | 1.843 | 1.853 | -0.5 | 109   | 0.00     |
| 63 S | Toluene-d8                  | 1.465 | 1.436 | 2.0  | 107   | 0.00     |
| 64 M | Chlorobenzene               | 1.112 | 1.085 | 2.4  | 108   | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.403 | 0.397 | 1.5  | 106   | 0.00     |
| 66 M | Ethyl Benzene               | 1.939 | 1.871 | 3.5  | 109   | 0.00     |
| 67 M | m/p-Xylenes                 | 0.728 | 0.720 | 1.1  | 107   | 0.00     |
| 68 M | o-Xylene                    | 0.693 | 0.661 | 4.6  | 107   | 0.00     |
| 69 M | Styrene                     | 1.171 | 1.112 | 5.0  | 104   | 0.00     |
| 70   | Isopropylbenzene            | 1.740 | 1.721 | 1.1  | 112   | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.617 | 0.538 | 12.8 | 96    | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.525 | 0.487 | 7.2  | 108   | 0.00     |
| 73   | Bromobenzene                | 0.430 | 0.405 | 5.8  | 102   | 0.00     |
| 74   | n-propylbenzene             | 2.168 | 2.073 | 4.4  | 107   | 0.00     |
| 75   | 2-Chlorotoluene             | 1.306 | 1.258 | 3.7  | 107   | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 1.485 | 1.423 | 4.2  | 105   | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.215 | 0.176 | 18.1 | 98    | 0.00     |
| 78   | 4-Chlorotoluene             | 1.328 | 1.248 | 6.0  | 105   | 0.00     |
| 79   | tert-butylbenzene           | 1.214 | 1.175 | 3.2  | 112   | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 1.478 | 1.452 | 1.8  | 109   | 0.00     |
| 81   | sec-Butylbenzene            | 1.753 | 1.708 | 2.6  | 112   | 0.00     |
| 82   | p-Isopropyltoluene          | 1.444 | 1.392 | 3.6  | 113   | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 0.802 | 0.753 | 6.1  | 103   | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.776 | 0.732 | 5.7  | 109   | 0.00     |
| 85   | n-Butylbenzene              | 1.247 | 1.162 | 6.8  | 113   | 0.00     |
| 86 T | Hexachloroethane            | 0.310 | 0.290 | 6.5  | 102   | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 0.762 | 0.713 | 6.4  | 104   | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.113 | 0.097 | 14.2 | 97    | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.361 | 0.347 | 3.9  | 113   | 0.00     |
| 90   | Hexachlorobutadiene         | 0.180 | 0.175 | 2.8  | 110   | 0.00     |
| 91 M | Naphthalene                 | 1.159 | 0.982 | 15.3 | 105   | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 0.361 | 0.347 | 3.9  | 113   | 0.00     |

(#) = Out of Range

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