

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN062422\  
 Data File : VN073074.D  
 Acq On : 24 Jun 2022 10:38  
 Operator : JC\MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Jun 24 23:32:51 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N062322W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jun 24 04:54:59 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     | 106   | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 2.367 | 2.462 | -4.0    | 104   | 0.00     |
| 3 M  | Chloromethane               | 2.249 | 2.308 | -2.6    | 107   | 0.00     |
| 4 M  | Vinyl Chloride              | 2.013 | 1.989 | 1.2     | 101   | 0.00     |
| 5 M  | Bromomethane                | 0.663 | 0.935 | -41.0#  | 119   | 0.00     |
| 6 M  | Chloroethane                | 1.242 | 1.245 | -0.2    | 100   | 0.00     |
| 7 M  | Trichlorofluoromethane      | 3.654 | 3.666 | -0.3    | 107   | 0.00     |
| 8 T  | Diethyl Ether               | 1.495 | 1.445 | 3.3     | 100   | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 2.019 | 2.126 | -5.3    | 112   | -0.01    |
| 10 M | 1,1-Dichloroethene          | 2.066 | 2.025 | 2.0     | 104   | 0.00     |
| 11   | Methyl Iodide               | 1.971 | 1.703 | 13.6    | 102   | 0.00     |
| 12   | Methyl Acetate              | 4.302 | 3.660 | 14.9    | 91    | 0.00     |
| 13 M | Acrolein                    | 0.434 | 0.524 | -20.7   | 124   | 0.00     |
| 14 M | Acrylonitrile               | 1.639 | 1.510 | 7.9     | 98    | 0.00     |
| 15 M | Acetone                     | 0.452 | 0.388 | 14.2    | 88    | 0.00     |
| 16 M | Carbon Disulfide            | 5.447 | 5.218 | 4.2     | 105   | 0.00     |
| 17   | Allyl chloride              | 3.921 | 4.041 | -3.1    | 113   | 0.00     |
| 18 M | Methylene Chloride          | 2.464 | 2.319 | 5.9     | 101   | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 2.180 | 2.103 | 3.5     | 102   | 0.00     |
| 20 T | Diisopropyl ether           | 8.250 | 7.949 | 3.6     | 104   | 0.00     |
| 21 M | 1,1-Dichloroethane          | 4.329 | 4.101 | 5.3     | 102   | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 2.592 | 2.581 | 0.4     | 107   | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.669 | 0.569 | 14.9    | 94    | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 7.706 | 7.336 | 4.8     | 101   | -0.01    |
| 25 M | Chloroform                  | 4.308 | 4.163 | 3.4     | 103   | -0.01    |
| 26   | Cyclohexane                 | 3.790 | 3.803 | -0.3    | 108   | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 2.892 | 2.810 | 2.8     | 101   | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0     | 105   | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.542 | 0.522 | 3.7     | 105   | 0.00     |
| 30 M | 2-Butanone                  | 0.418 | 0.382 | 8.6     | 96    | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.265 | 0.627 | -136.6# | 244#  | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.666 | 0.631 | 5.3     | 103   | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.564 | 0.548 | 2.8     | 106   | 0.00     |
| 34 M | Benzene                     | 1.688 | 1.657 | 1.8     | 103   | 0.00     |
| 35   | Methacrylonitrile           | 0.372 | 0.387 | -4.0    | 108   | 0.00     |
| 36 M | 1,2-Dichloroethane          | 0.626 | 0.597 | 4.6     | 102   | 0.00     |
| 37 M | Trichloroethene             | 0.420 | 0.410 | 2.4     | 107   | 0.00     |
| 38   | Methylcyclohexane           | 0.642 | 0.672 | -4.7    | 112   | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.437 | 0.424 | 3.0     | 104   | 0.00     |
| 40   | Dibromomethane              | 0.295 | 0.286 | 3.1     | 103   | 0.00     |
| 41 M | Bromodichloromethane        | 0.594 | 0.556 | 6.4     | 103   | 0.00     |
| 42 M | Vinyl Acetate               | 1.292 | 1.264 | 2.2     | 105   | 0.00     |
| 43   | Ethyl Acetate               | 0.787 | 0.771 | 2.0     | 97    | 0.00     |
| 44   | Isopropyl Acetate           | 1.215 | 1.146 | 5.7     | 103   | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.011 | 0.009 | 18.2    | 93    | 0.00     |
| 46   | Methyl methacrylate         | 0.553 | 0.521 | 5.8     | 105   | 0.00     |
| 47   | n-amyl Acetate              | 0.974 | 0.926 | 4.9     | 108   | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.556 | 0.608 | -9.4    | 123   | 0.00     |

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Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Jun 24 23:32:51 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N062322W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jun 24 04:54:59 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     | 0.602 | 0.661 | -9.8   | 121   | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.428 | 0.409 | 4.4    | 102   | 0.00     |
| 51   | Ethyl methacrylate          | 0.725 | 0.686 | 5.4    | 103   | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.736 | 0.712 | 3.3    | 105   | 0.00     |
| 53 M | Dibromochloromethane        | 0.445 | 0.419 | 5.8    | 106   | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.449 | 0.425 | 5.3    | 103   | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.310 | 0.305 | 1.6    | 103   | 0.00     |
| 56 M | Bromoform                   | 0.326 | 0.294 | 9.8    | 106   | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 104   | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.873 | 0.832 | 4.7    | 97    | 0.00     |
| 59 M | 2-Hexanone                  | 0.666 | 0.632 | 5.1    | 98    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.574 | 0.582 | -1.4   | 110   | 0.00     |
| 61 M | Tetrachloroethene           | 0.388 | 0.396 | -2.1   | 108   | 0.00     |
| 62 M | Toluene                     | 1.994 | 2.010 | -0.8   | 104   | 0.00     |
| 63 S | Toluene-d8                  | 1.625 | 1.650 | -1.5   | 104   | 0.00     |
| 64 M | Chlorobenzene               | 1.200 | 1.195 | 0.4    | 105   | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.456 | 0.455 | 0.2    | 106   | 0.00     |
| 66 M | Ethyl Benzene               | 2.197 | 2.157 | 1.8    | 104   | 0.00     |
| 67 M | m/p-Xylenes                 | 0.824 | 0.831 | -0.8   | 106   | 0.00     |
| 68 M | o-Xylene                    | 0.832 | 0.842 | -1.2   | 106   | 0.00     |
| 69 M | Styrene                     | 1.331 | 1.300 | 2.3    | 103   | 0.00     |
| 70   | Isopropylbenzene            | 2.128 | 2.167 | -1.8   | 107   | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.735 | 0.717 | 2.4    | 103   | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.563 | 0.668 | -18.7  | 121   | 0.00     |
| 73   | Bromobenzene                | 0.496 | 0.493 | 0.6    | 107   | 0.00     |
| 74   | n-propylbenzene             | 2.412 | 2.436 | -1.0   | 110   | 0.00     |
| 75   | 2-Chlorotoluene             | 1.508 | 1.519 | -0.7   | 108   | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 1.769 | 1.763 | 0.3    | 107   | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.178 | 0.223 | -25.3# | 146   | 0.00     |
| 78   | 4-Chlorotoluene             | 1.451 | 1.439 | 0.8    | 107   | 0.00     |
| 79   | tert-butylbenzene           | 1.564 | 1.525 | 2.5    | 104   | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 1.736 | 1.743 | -0.4   | 107   | 0.00     |
| 81   | sec-Butylbenzene            | 2.108 | 2.108 | 0.0    | 108   | 0.00     |
| 82   | p-Isopropyltoluene          | 1.712 | 1.730 | -1.1   | 109   | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 0.874 | 0.906 | -3.7   | 112   | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.873 | 0.864 | 1.0    | 107   | 0.00     |
| 85   | n-Butylbenzene              | 1.393 | 1.383 | 0.7    | 115   | 0.00     |
| 86 T | Hexachloroethane            | 0.335 | 0.319 | 4.8    | 108   | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 0.914 | 0.907 | 0.8    | 107   | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.187 | 0.175 | 6.4    | 101   | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.480 | 0.475 | 1.0    | 114   | 0.00     |
| 90   | Hexachlorobutadiene         | 0.194 | 0.209 | -7.7   | 121   | 0.00     |
| 91 M | Naphthalene                 | 1.874 | 1.860 | 0.7    | 110   | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 0.489 | 0.496 | -1.4   | 115   | 0.00     |

(#) = Out of Range

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