

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN112221\  
 Data File : VN069619.D  
 Acq On : 22 Nov 2021 19:10  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Nov 23 03:54:39 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N111021W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Nov 10 14:36:17 2021  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | Amount  | Calc.   | %Dev  | Area% | Dev(min) |
|------|-----------------------------|---------|---------|-------|-------|----------|
| 1 I  | Bromochloromethane          | 30.000  | 30.000  | 0.0   | 101   | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 20.000  | 20.739  | -3.7  | 91    | 0.00     |
| 3 M  | Chloromethane               | 20.000  | 21.550  | -7.8  | 97    | 0.00     |
| 4 M  | Vinyl Chloride              | 20.000  | 20.411  | -2.1  | 92    | 0.00     |
| 5 M  | Bromomethane                | 20.000  | 18.415  | 7.9   | 83    | 0.00     |
| 6 M  | Chloroethane                | 20.000  | 19.382  | 3.1   | 85    | 0.00     |
| 7 M  | Trichlorofluoromethane      | 20.000  | 18.483  | 7.6   | 81    | 0.00     |
| 8 T  | Diethyl Ether               | 20.000  | 20.602  | -3.0  | 96    | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 20.000  | 20.776  | -3.9  | 94    | -0.01    |
| 10 M | 1,1-Dichloroethene          | 20.000  | 20.489  | -2.4  | 95    | -0.01    |
| 11   | Methyl Iodide               | 20.000  | 20.667  | -3.3  | 101   | 0.00     |
| 12   | Methyl Acetate              | 20.000  | 20.830  | -4.1  | 96    | 0.00     |
| 13 M | Acrolein                    | 100.000 | 112.473 | -12.5 | 117   | 0.00     |
| 14 M | Acrylonitrile               | 100.000 | 103.971 | -4.0  | 102   | 0.00     |
| 15 M | Acetone                     | 100.000 | 82.261  | 17.7  | 66    | 0.00     |
| 16 M | Carbon Disulfide            | 20.000  | 18.470  | 7.7   | 90    | 0.00     |
| 17   | Allyl chloride              | 20.000  | 19.934  | 0.3   | 96    | 0.00     |
| 18 M | Methylene Chloride          | 20.000  | 20.204  | -1.0  | 96    | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 20.000  | 20.294  | -1.5  | 96    | 0.00     |
| 20 T | Diisopropyl ether           | 20.000  | 20.466  | -2.3  | 98    | 0.00     |
| 21 M | 1,1-Dichloroethane          | 20.000  | 20.808  | -4.0  | 98    | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 20.000  | 19.972  | 0.1   | 94    | 0.00     |
| 23 M | tert-Butyl Alcohol          | 100.000 | 96.102  | 3.9   | 97    | 0.01     |
| 24 M | Methyl tert-Butyl Ether     | 20.000  | 19.975  | 0.1   | 95    | 0.00     |
| 25 M | Chloroform                  | 20.000  | 22.986  | -14.9 | 108   | 0.00     |
| 26   | Cyclohexane                 | 20.000  | 19.884  | 0.6   | 93    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 30.000  | 31.609  | -5.4  | 101   | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 30.000  | 30.000  | 0.0   | 97    | 0.00     |
| 29   | 1,1-Dichloropropene         | 20.000  | 19.978  | 0.1   | 92    | 0.00     |
| 30 M | 2-Butanone                  | 100.000 | 97.463  | 2.5   | 89    | 0.00     |
| 31   | 2,2-Dichloropropane         | 20.000  | 17.921  | 10.4  | 87    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 20.000  | 20.248  | -1.2  | 96    | 0.00     |
| 33 M | Carbon Tetrachloride        | 20.000  | 19.891  | 0.5   | 95    | 0.00     |
| 34 M | Benzene                     | 20.000  | 20.682  | -3.4  | 96    | 0.00     |
| 35   | Methacrylonitrile           | 20.000  | 19.818  | 0.9   | 98    | 0.00     |
| 36 M | 1,2-Dichloroethane          | 20.000  | 21.142  | -5.7  | 97    | 0.00     |
| 37 M | Trichloroethene             | 20.000  | 19.871  | 0.6   | 95    | 0.00     |
| 38   | Methylcyclohexane           | 20.000  | 18.900  | 5.5   | 89    | 0.00     |
| 39 M | 1,2-Dichloropropane         | 20.000  | 20.998  | -5.0  | 98    | 0.00     |
| 40   | Dibromomethane              | 20.000  | 20.064  | -0.3  | 95    | 0.00     |
| 41 M | Bromodichloromethane        | 20.000  | 20.099  | -0.5  | 99    | 0.00     |
| 42 M | Vinyl Acetate               | 100.000 | 100.492 | -0.5  | 96    | 0.00     |
| 43   | Ethyl Acetate               | 20.000  | 20.364  | -1.8  | 101   | 0.00     |
| 44   | Isopropyl Acetate           | 20.000  | 20.283  | -1.4  | 98    | 0.00     |
| 45 T | 1,4-Dioxane                 | 400.000 | 378.994 | 5.3   | 93    | 0.00     |
| 46   | Methyl methacrylate         | 20.000  | 19.790  | 1.1   | 97    | 0.00     |
| 47   | n-amyl Acetate              | 20.000  | 15.428  | 22.9  | 83    | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 20.000  | 17.570  | 12.1  | 90    | 0.00     |

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 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC020

Quant Time: Nov 23 03:54:39 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N111021W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Nov 10 14:36:17 2021  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | Amount  | Calc.   | %Dev  | Area% | Dev(min) |
|------|-----------------------------|---------|---------|-------|-------|----------|
| 49 T | cis-1,3-Dichloropropene     | 20.000  | 18.722  | 6.4   | 93    | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 20.000  | 19.730  | 1.3   | 95    | 0.00     |
| 51   | Ethyl methacrylate          | 20.000  | 18.318  | 8.4   | 93    | 0.00     |
| 52   | 1,3-Dichloropropane         | 20.000  | 20.271  | -1.4  | 96    | 0.00     |
| 53 M | Dibromochloromethane        | 20.000  | 18.880  | 5.6   | 98    | 0.00     |
| 54 M | 1,2-Dibromoethane           | 20.000  | 19.491  | 2.5   | 95    | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 100.000 | 99.577  | 0.4   | 112   | 0.00     |
| 56 M | Bromoform                   | 20.000  | 17.299  | 13.5  | 97    | 0.00     |
| 57 I | Chlorobenzene-d5            | 30.000  | 30.000  | 0.0   | 95    | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 100.000 | 108.048 | -8.0  | 99    | 0.00     |
| 59 M | 2-Hexanone                  | 100.000 | 96.247  | 3.8   | 88    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 30.000  | 28.769  | 4.1   | 93    | 0.00     |
| 61 M | Tetrachloroethene           | 20.000  | 20.834  | -4.2  | 93    | 0.00     |
| 62 M | Toluene                     | 20.000  | 20.598  | -3.0  | 92    | 0.00     |
| 63 S | Toluene-d8                  | 30.000  | 31.049  | -3.5  | 96    | 0.00     |
| 64 M | Chlorobenzene               | 20.000  | 19.710  | 1.4   | 91    | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 20.000  | 20.518  | -2.6  | 95    | 0.00     |
| 66 M | Ethyl Benzene               | 20.000  | 19.779  | 1.1   | 89    | 0.00     |
| 67 M | m/p-Xylenes                 | 40.000  | 39.113  | 2.2   | 88    | 0.00     |
| 68 M | o-Xylene                    | 20.000  | 19.452  | 2.7   | 88    | 0.00     |
| 69 M | Styrene                     | 20.000  | 18.618  | 6.9   | 87    | 0.00     |
| 70   | Isopropylbenzene            | 20.000  | 19.324  | 3.4   | 88    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 20.000  | 20.397  | -2.0  | 95    | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 20.000  | 18.223  | 8.9   | 87    | 0.00     |
| 73   | Bromobenzene                | 20.000  | 19.245  | 3.8   | 91    | 0.00     |
| 74   | n-propylbenzene             | 20.000  | 18.533  | 7.3   | 86    | 0.00     |
| 75   | 2-Chlorotoluene             | 20.000  | 18.992  | 5.0   | 88    | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 20.000  | 19.268  | 3.7   | 88    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 20.000  | 15.437  | 22.8  | 88    | 0.00     |
| 78   | 4-Chlorotoluene             | 20.000  | 18.462  | 7.7   | 87    | 0.00     |
| 79   | tert-butylbenzene           | 20.000  | 18.785  | 6.1   | 89    | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 20.000  | 18.766  | 6.2   | 86    | 0.00     |
| 81   | sec-Butylbenzene            | 20.000  | 18.080  | 9.6   | 84    | 0.00     |
| 82   | p-Isopropyltoluene          | 20.000  | 17.753  | 11.2  | 85    | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 20.000  | 18.208  | 9.0   | 87    | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 20.000  | 17.620  | 11.9  | 84    | 0.00     |
| 85   | n-Butylbenzene              | 20.000  | 15.517  | 22.4  | 79    | 0.00     |
| 86 T | Hexachloroethane            | 20.000  | 17.814  | 10.9  | 92    | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 20.000  | 18.738  | 6.3   | 87    | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 20.000  | 18.206  | 9.0   | 95    | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 20.000  | 14.560  | 27.2  | 80    | 0.00     |
| 90   | Hexachlorobutadiene         | 20.000  | 19.701  | 1.5   | 94    | 0.00     |
| 91 M | Naphthalene                 | 20.000  | 11.921  | 40.4# | 71    | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 20.000  | 14.572  | 27.1  | 79    | 0.00     |

(#) = Out of Range

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