

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN030119\  
 Data File : VN054021.D  
 Acq On : 1 Mar 2019 11:23  
 Operator : JC/SP  
 Sample : VSTDICV020  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 ICVVN030119

Quant Time: Mar 04 15:01:05 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N030119W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Mar 01 11:11:48 2019  
 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   | 103   | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 20.000  | 20.666  | -3.3  | 105   | 0.00     |
| 3 M  | Chloromethane               | 20.000  | 20.915  | -4.6  | 107   | 0.00     |
| 4 M  | Vinyl Chloride              | 20.000  | 20.446  | -2.2  | 105   | 0.00     |
| 5 M  | Bromomethane                | 20.000  | 22.014  | -10.1 | 114   | 0.00     |
| 6 M  | Chloroethane                | 20.000  | 20.705  | -3.5  | 106   | 0.00     |
| 7 M  | Trichlorofluoromethane      | 20.000  | 21.158  | -5.8  | 108   | 0.00     |
| 8 T  | Diethyl Ether               | 20.000  | 20.955  | -4.8  | 107   | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 20.000  | 20.835  | -4.2  | 107   | 0.00     |
| 10 M | 1,1-Dichloroethene          | 20.000  | 20.675  | -3.4  | 106   | 0.00     |
| 11   | Methyl Iodide               | 20.000  | 18.170  | 9.1   | 95    | 0.00     |
| 12   | Methyl Acetate              | 20.000  | 21.420  | -7.1  | 115   | 0.00     |
| 13 M | Acrolein                    | 100.000 | 84.612  | 15.4  | 73    | 0.00     |
| 14 M | Acrylonitrile               | 100.000 | 101.121 | -1.1  | 107   | 0.00     |
| 15 M | Acetone                     | 100.000 | 105.286 | -5.3  | 101   | 0.00     |
| 16 M | Carbon Disulfide            | 20.000  | 20.868  | -4.3  | 110   | 0.00     |
| 17   | Allyl chloride              | 20.000  | 21.563  | -7.8  | 111   | 0.00     |
| 18 M | Methylene Chloride          | 20.000  | 20.470  | -2.3  | 103   | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 20.000  | 20.901  | -4.5  | 108   | 0.00     |
| 20 T | Diisopropyl ether           | 20.000  | 20.630  | -3.1  | 107   | 0.00     |
| 21 M | 1,1-Dichloroethane          | 20.000  | 20.434  | -2.2  | 105   | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 20.000  | 20.532  | -2.7  | 106   | 0.00     |
| 23 M | tert-Butyl Alcohol          | 100.000 | 102.055 | -2.1  | 110   | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 20.000  | 21.324  | -6.6  | 113   | 0.00     |
| 25 M | Chloroform                  | 20.000  | 20.623  | -3.1  | 105   | 0.00     |
| 26   | Cyclohexane                 | 20.000  | 20.990  | -4.9  | 110   | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 30.000  | 30.234  | -0.8  | 103   | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 30.000  | 30.000  | 0.0   | 106   | 0.00     |
| 29   | 1,1-Dichloropropene         | 20.000  | 20.149  | -0.7  | 108   | 0.00     |
| 30 M | 2-Butanone                  | 100.000 | 99.264  | 0.7   | 107   | 0.00     |
| 31   | 2,2-Dichloropropane         | 20.000  | 20.662  | -3.3  | 110   | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 20.000  | 20.195  | -1.0  | 107   | 0.00     |
| 33 M | Carbon Tetrachloride        | 20.000  | 20.243  | -1.2  | 106   | 0.00     |
| 34 M | Benzene                     | 20.000  | 20.089  | -0.4  | 106   | 0.00     |
| 35   | Methacrylonitrile           | 20.000  | 15.967  | 20.2  | 79    | 0.00     |
| 36 M | 1,2-Dichloroethane          | 20.000  | 19.533  | 2.3   | 102   | 0.00     |
| 37 M | Trichloroethene             | 20.000  | 20.176  | -0.9  | 108   | 0.00     |
| 38   | Methylcyclohexane           | 20.000  | 20.189  | -0.9  | 111   | 0.00     |
| 39 M | 1,2-Dichloropropane         | 20.000  | 19.976  | 0.1   | 104   | 0.00     |
| 40   | Dibromomethane              | 20.000  | 19.610  | 2.0   | 104   | 0.00     |
| 41 M | Bromodichloromethane        | 20.000  | 19.875  | 0.6   | 106   | 0.00     |
| 42 M | Vinyl Acetate               | 100.000 | 101.230 | -1.2  | 111   | 0.00     |
| 43   | Ethyl Acetate               | 20.000  | 20.818  | -4.1  | 104   | 0.00     |
| 44   | Isopropyl Acetate           | 20.000  | 19.719  | 1.4   | 108   | 0.00     |
| 45 T | 1,4-Dioxane                 | 400.000 | 400.271 | -0.1  | 105   | 0.00     |

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 ClientSampleId :  
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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N030119W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Mar 01 11:11:48 2019  
 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) |
|------|-----------------------------|---------|---------|-------|-------|----------|
| 46   | Methyl methacrylate         | 20.000  | 19.196  | 4.0   | 109   | 0.00     |
| 47   | n-amyl Acetate              | 20.000  | 20.132  | -0.7  | 118   | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 20.000  | 19.662  | 1.7   | 110   | 0.00     |
| 49 T | cis-1,3-Dichloropropene     | 20.000  | 19.786  | 1.1   | 108   | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 20.000  | 19.734  | 1.3   | 103   | 0.00     |
| 51   | Ethyl methacrylate          | 20.000  | 19.848  | 0.8   | 112   | 0.00     |
| 52   | 1,3-Dichloropropane         | 20.000  | 19.939  | 0.3   | 106   | 0.00     |
| 53 M | Dibromochloromethane        | 20.000  | 19.959  | 0.2   | 108   | 0.00     |
| 54 M | 1,2-Dibromoethane           | 20.000  | 19.501  | 2.5   | 104   | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 100.000 | 99.361  | 0.6   | 115   | 0.00     |
| 56 M | Bromoform                   | 20.000  | 19.649  | 1.8   | 108   | 0.00     |
| 57 I | Chlorobenzene-d5            | 30.000  | 30.000  | 0.0   | 105   | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 100.000 | 101.625 | -1.6  | 109   | 0.00     |
| 59 M | 2-Hexanone                  | 100.000 | 100.202 | -0.2  | 109   | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 30.000  | 30.229  | -0.8  | 107   | 0.00     |
| 61 M | Tetrachloroethene           | 20.000  | 20.539  | -2.7  | 103   | 0.00     |
| 62 M | Toluene                     | 20.000  | 20.546  | -2.7  | 107   | 0.00     |
| 63 S | Toluene-d8                  | 30.000  | 30.040  | -0.1  | 104   | 0.00     |
| 64 M | Chlorobenzene               | 20.000  | 20.064  | -0.3  | 106   | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 20.000  | 20.166  | -0.8  | 107   | 0.00     |
| 66 M | Ethyl Benzene               | 20.000  | 20.339  | -1.7  | 108   | 0.00     |
| 67 M | m/p-Xylenes                 | 40.000  | 41.864  | -4.7  | 109   | 0.00     |
| 68 M | o-Xylene                    | 20.000  | 20.696  | -3.5  | 109   | 0.00     |
| 69 M | Styrene                     | 20.000  | 20.744  | -3.7  | 109   | 0.00     |
| 70   | Isopropylbenzene            | 20.000  | 20.761  | -3.8  | 108   | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 20.000  | 20.040  | -0.2  | 107   | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 20.000  | 22.182  | -10.9 | 117   | 0.00     |
| 73   | Bromobenzene                | 20.000  | 20.129  | -0.6  | 106   | 0.00     |
| 74   | n-propylbenzene             | 20.000  | 20.876  | -4.4  | 109   | 0.00     |
| 75   | 2-Chlorotoluene             | 20.000  | 20.637  | -3.2  | 108   | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 20.000  | 21.074  | -5.4  | 110   | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 20.000  | 19.270  | 3.7   | 111   | 0.00     |
| 78   | 4-Chlorotoluene             | 20.000  | 20.961  | -4.8  | 110   | 0.00     |
| 79   | tert-butylbenzene           | 20.000  | 21.025  | -5.1  | 110   | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 20.000  | 21.214  | -6.1  | 110   | 0.00     |
| 81   | sec-Butylbenzene            | 20.000  | 21.140  | -5.7  | 111   | 0.00     |
| 82   | p-Isopropyltoluene          | 20.000  | 21.375  | -6.9  | 112   | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 20.000  | 20.943  | -4.7  | 112   | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 20.000  | 20.807  | -4.0  | 112   | 0.00     |
| 85   | n-Butylbenzene              | 20.000  | 21.069  | -5.3  | 116   | 0.00     |
| 86 T | Hexachloroethane            | 20.000  | 19.853  | 0.7   | 109   | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 20.000  | 21.021  | -5.1  | 111   | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 20.000  | 20.662  | -3.3  | 111   | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 20.000  | 21.596  | -8.0  | 129   | 0.00     |
| 90   | Hexachlorobutadiene         | 20.000  | 22.523  | -12.6 | 119   | 0.00     |

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QLast Update : Fri Mar 01 11:11:48 2019  
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) |
|------|------------------------|--------|--------|-------|------|------------|
| 91 M | Naphthalene            | 20.000 | 22.605 | -13.0 | 135  | 0.00       |
| 92   | 1,2,3-Trichlorobenzene | 20.000 | 21.912 | -9.6  | 125  | 0.00       |

(#) = Out of Range

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