

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN072319\  
 Data File : VN056869.D  
 Acq On : 23 Jul 2019 9:11  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jul 24 01:30:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N072219W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 23 01:46:34 2019  
 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                    | Amount  | Calc.   | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|---------|---------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 50.000  | 50.000  | 0.0   | 114   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 48.218  | 3.6   | 104   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 45.591  | 8.8   | 99    | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 48.369  | 3.3#  | 102   | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 46.206  | 7.6   | 105   | 0.01     |
| 6 T   | Chloroethane                | 50.000  | 47.415  | 5.2   | 105   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 48.771  | 2.5   | 108   | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 46.301  | 7.4   | 104   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 49.750  | 0.5   | 110   | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 49.121  | 1.8   | 107   | 0.00     |
| 11 T  | Tert butyl alcohol          | 250.000 | 254.374 | -1.7  | 109   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 48.501  | 3.0#  | 108   | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 227.467 | 9.0   | 97    | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 47.861  | 4.3   | 106   | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 247.648 | 0.9   | 105   | 0.00     |
| 16 T  | Acetone                     | 250.000 | 284.793 | -13.9 | 134   | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 47.666  | 4.7   | 105   | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 48.518  | 3.0   | 106   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 47.916  | 4.2   | 104   | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 45.601  | 8.8   | 103   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 48.998  | 2.0   | 108   | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 48.057  | 3.9   | 104   | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 246.762 | 1.3   | 105   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 47.741  | 4.5   | 105   | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 269.240 | -7.7  | 116   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 51.102  | -2.2  | 114   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 47.910  | 4.2   | 105   | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 47.932  | 4.1   | 105   | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 250.042 | -0.0  | 107   | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 46.294  | 7.4#  | 104   | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 47.384  | 5.2   | 106   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 48.393  | 3.2   | 106   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 47.269  | 5.5   | 109   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0   | 108   | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 51.131  | -2.3  | 111   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 52.016  | -4.0  | 107   | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 55.135  | -10.3 | 107   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 50.818  | -1.6  | 105   | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 53.243  | -6.5  | 110   | 0.00     |
| 40 TM | Benzene                     | 50.000  | 49.984  | 0.0   | 104   | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 49.513  | 1.0   | 103   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 49.669  | 0.7   | 104   | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 51.142  | -2.3  | 105   | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 51.319  | -2.6  | 106   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 49.121  | 1.8#  | 103   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN072319\  
 Data File : VN056869.D  
 Acq On : 23 Jul 2019 9:11  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jul 24 01:30:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N072219W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 23 01:46:34 2019  
 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                    | Amount   | Calc.    | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|----------|----------|-------|-------|----------|
| 46 T  | Dibromomethane              | 50.000   | 50.541   | -1.1  | 106   | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000   | 51.319   | -2.6  | 105   | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000   | 50.958   | -1.9  | 103   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 1000.000 | 1095.251 | -9.5  | 109   | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 51.007   | -2.0  | 110   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 266.684  | -6.7  | 107   | 0.00     |
| 52 CM | Toluene                     | 50.000   | 51.476   | -3.0# | 104   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 53.622   | -7.2  | 106   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 52.602   | -5.2  | 106   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 49.755   | 0.5   | 104   | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 54.607   | -9.2  | 108   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 50.848   | -1.7  | 105   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 245.910  | 1.6   | 107   | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 288.521  | -15.4 | 115   | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 53.278   | -6.6  | 106   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 52.413   | -4.8  | 104   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 52.955   | -5.9  | 111   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0   | 106   | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 52.180   | -4.4  | 109   | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 50.793   | -1.6  | 105   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 49.619   | 0.8   | 104   | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 52.284   | -4.6# | 105   | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 106.272  | -6.3  | 106   | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 51.447   | -2.9  | 103   | 0.00     |
| 70 T  | Styrene                     | 50.000   | 50.739   | -1.5  | 106   | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 52.557   | -5.1  | 103   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0   | 113   | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 51.156   | -2.3  | 105   | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 46.143   | 7.7   | 108   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 50.156   | -0.3  | 105   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 47.155   | 5.7   | 111   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 46.612   | 6.8   | 106   | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 49.416   | 1.2   | 112   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 50.718   | -1.4  | 106   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 52.881   | -5.8  | 110   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 50.839   | -1.7  | 110   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 48.284   | 3.4   | 110   | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 52.456   | -4.9  | 110   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 48.537   | 2.9   | 111   | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 47.941   | 4.1   | 111   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 50.027   | -0.1  | 115   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 49.690   | 0.6   | 112   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 50.501   | -1.0  | 114   | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 55.092   | -10.2 | 119   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN072319\  
Data File : VN056869.D  
Acq On : 23 Jul 2019 9:11  
Operator : JC/SP  
Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Jul 24 01:30:15 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N072219W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jul 23 01:46:34 2019  
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                    | Amount | Calc.  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|--------|--------|-------|-------|----------|
| 90 T | Hexachloroethane            | 50.000 | 44.912 | 10.2  | 106   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 50.000 | 47.853 | 4.3   | 109   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 50.000 | 48.113 | 3.8   | 112   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 50.000 | 50.274 | -0.5  | 126   | 0.00     |
| 94 T | Hexachlorobutadiene         | 50.000 | 56.038 | -12.1 | 118   | 0.00     |
| 95 T | Naphthalene                 | 50.000 | 47.463 | 5.1   | 116   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 50.000 | 50.324 | -0.6  | 120   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 6