

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN090718\  
 Data File : VN051047.D  
 Acq On : 7 Sep 2018 12:24  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Sep 07 23:24:31 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N082118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 22 05:38:12 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

|       | Compound                    | Amount  | Calc.   | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|---------|---------|--------|-------|----------|
| 1 I   | Pentafluorobenzene          | 50.000  | 50.000  | 0.0    | 92    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 55.283  | -10.6  | 94    | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 46.664  | 6.7    | 89    | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 48.962  | 2.1#   | 91    | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 44.717  | 10.6   | 83    | -0.02    |
| 6 T   | Chloroethane                | 50.000  | 47.689  | 4.6    | 91    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 50.138  | -0.3   | 93    | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 52.741  | -5.5   | 99    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 49.551  | 0.9    | 94    | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 44.071  | 11.9   | 89    | 0.00     |
| 11 T  | Tert butyl alcohol          | 250.000 | 307.285 | -22.9# | 113   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 50.455  | -0.9#  | 93    | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 243.070 | 2.8    | 90    | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 50.801  | -1.6   | 93    | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 286.885 | -14.8  | 105   | 0.00     |
| 16 T  | Acetone                     | 250.000 | 305.887 | -22.4# | 112   | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 46.599  | 6.8    | 91    | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 56.419  | -12.8  | 114   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 55.726  | -11.5  | 99    | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 47.164  | 5.7    | 93    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 49.283  | 1.4    | 92    | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 51.250  | -2.5   | 91    | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 268.593 | -7.4   | 93    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 47.795  | 4.4    | 91    | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 271.782 | -8.7   | 111   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 49.396  | 1.2    | 94    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 50.633  | -1.3   | 93    | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 44.217  | 11.6   | 79    | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 299.832 | -19.9  | 106   | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 48.205  | 3.6#   | 91    | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 48.964  | 2.1    | 92    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 48.362  | 3.3    | 92    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 45.638  | 8.7    | 85    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0    | 89    | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 48.066  | 3.9    | 87    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 51.485  | -3.0   | 91    | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 58.374  | -16.7  | 101   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 50.708  | -1.4   | 92    | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 55.097  | -10.2  | 95    | 0.00     |
| 40 TM | Benzene                     | 50.000  | 51.512  | -3.0   | 91    | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 56.268  | -12.5  | 102   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 51.046  | -2.1   | 91    | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 58.044  | -16.1  | 101   | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 52.147  | -4.3   | 94    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 50.403  | -0.8#  | 91    | 0.00     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN090718\  
 Data File : VN051047.D  
 Acq On : 7 Sep 2018 12:24  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Sep 07 23:24:31 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N082118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 22 05:38:12 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

|       | Compound                    | Amount   | Calc.    | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|----------|----------|--------|-------|----------|
| 46 T  | Dibromomethane              | 50.000   | 52.235   | -4.5   | 94    | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000   | 51.464   | -2.9   | 91    | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000   | 58.746   | -17.5  | 101   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 1000.000 | 1146.925 | -14.7  | 96    | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 48.343   | 3.3    | 85    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 286.459  | -14.6  | 103   | 0.00     |
| 52 CM | Toluene                     | 50.000   | 54.041   | -8.1#  | 93    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 54.084   | -8.2   | 95    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 54.159   | -8.3   | 94    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 53.552   | -7.1   | 96    | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 53.218   | -6.4   | 100   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 54.302   | -8.6   | 95    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 239.431  | 4.2    | 90    | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 302.719  | -21.1# | 109   | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 54.250   | -8.5   | 95    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 55.914   | -11.8  | 98    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 50.229   | -0.5   | 89    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0    | 89    | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 51.195   | -2.4   | 93    | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 51.986   | -4.0   | 94    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 51.889   | -3.8   | 93    | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 54.548   | -9.1#  | 93    | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 113.032  | -13.0  | 94    | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 56.436   | -12.9  | 94    | 0.00     |
| 70 T  | Styrene                     | 50.000   | 51.073   | -2.1   | 93    | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 57.498   | -15.0  | 100   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0    | 91    | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 51.730   | -3.5   | 94    | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 55.981   | -12.0  | 100   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 56.451   | -12.9  | 100   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 50.510   | -1.0   | 100   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 49.509   | 1.0    | 96    | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 52.590   | -5.2   | 93    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 50.373   | -0.7   | 94    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 53.290   | -6.6   | 94    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 56.765   | -13.5  | 103   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 51.492   | -3.0   | 94    | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 52.886   | -5.8   | 95    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 53.983   | -8.0   | 93    | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 53.758   | -7.5   | 96    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 56.323   | -12.6  | 97    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 51.208   | -2.4   | 95    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 50.643   | -1.3   | 96    | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 56.113   | -12.2  | 96    | 0.00     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN090718\  
Data File : VN051047.D  
Acq On : 7 Sep 2018 12:24  
Operator : MD\SY  
Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Sep 07 23:24:31 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N082118W.M  
Quant Title : SW846 8260  
QLast Update : Wed Aug 22 05:38:12 2018  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

|      | Compound                    | Amount | Calc.  | %Dev   | Area% | Dev(min) |
|------|-----------------------------|--------|--------|--------|-------|----------|
| 90 T | Hexachloroethane            | 50.000 | 51.801 | -3.6   | 98    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 50.000 | 51.615 | -3.2   | 96    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 50.000 | 56.505 | -13.0  | 108   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 50.000 | 48.946 | 2.1    | 98    | 0.00     |
| 94 T | Hexachlorobutadiene         | 50.000 | 60.566 | -21.1# | 109   | 0.00     |
| 95 T | Naphthalene                 | 50.000 | 47.824 | 4.4    | 100   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 50.000 | 50.785 | -1.6   | 100   | 0.00     |

(#) = Out of Range

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