

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN121818\  
 Data File : VN052974.D  
 Acq On : 18 Dec 2018 21:31  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 26 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Dec 19 04:50:26 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 18 13:03:37 2018  
 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    | 102   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 48.579  | 2.8    | 102   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 49.742  | 0.5    | 102   | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 49.272  | 1.5#   | 102   | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 46.330  | 7.3    | 103   | 0.00     |
| 6 T   | Chloroethane                | 50.000  | 49.989  | 0.0    | 104   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 49.300  | 1.4    | 102   | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 50.237  | -0.5   | 103   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 48.239  | 3.5    | 102   | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 51.867  | -3.7   | 102   | 0.00     |
| 11 T  | Tert butyl alcohol          | 250.000 | 260.316 | -4.1   | 104   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 49.191  | 1.6#   | 101   | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 337.578 | -35.0# | 135   | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 52.339  | -4.7   | 108   | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 254.959 | -2.0   | 104   | 0.00     |
| 16 T  | Acetone                     | 250.000 | 271.394 | -8.6   | 115   | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 44.562  | 10.9   | 96    | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 50.344  | -0.7   | 106   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 51.632  | -3.3   | 105   | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 49.211  | 1.6    | 104   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 48.687  | 2.6    | 102   | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 51.681  | -3.4   | 105   | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 250.363 | -0.1   | 105   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 49.938  | 0.1    | 103   | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 276.377 | -10.6  | 110   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 45.715  | 8.6    | 95    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 49.717  | 0.6    | 103   | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 51.429  | -2.9   | 104   | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 262.675 | -5.1   | 105   | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 49.978  | 0.0#   | 103   | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 50.113  | -0.2   | 103   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 49.353  | 1.3    | 102   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 53.209  | -6.4   | 104   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0    | 102   | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 55.040  | -10.1  | 113   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 48.598  | 2.8    | 102   | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 53.491  | -7.0   | 107   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 48.910  | 2.2    | 101   | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 48.157  | 3.7    | 102   | 0.00     |
| 40 TM | Benzene                     | 50.000  | 49.545  | 0.9    | 103   | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 50.632  | -1.3   | 102   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 49.905  | 0.2    | 103   | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 51.642  | -3.3   | 105   | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 48.193  | 3.6    | 100   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 49.847  | 0.3#   | 103   | 0.00     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN121818\  
 Data File : VN052974.D  
 Acq On : 18 Dec 2018 21:31  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 26 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Dec 19 04:50:26 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 18 13:03:37 2018  
 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   | 49.669  | 0.7   | 103   | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000   | 49.615  | 0.8   | 103   | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000   | 51.978  | -4.0  | 106   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 1000.000 | 994.199 | 0.6   | 106   | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 52.385  | -4.8  | 104   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 270.540 | -8.2  | 107   | 0.00     |
| 52 CM | Toluene                     | 50.000   | 50.137  | -0.3# | 103   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 49.135  | 1.7   | 101   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 49.153  | 1.7   | 100   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 50.268  | -0.5  | 103   | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 52.947  | -5.9  | 107   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 50.744  | -1.5  | 103   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 263.476 | -5.4  | 105   | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 271.233 | -8.5  | 108   | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 49.592  | 0.8   | 102   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 50.834  | -1.7  | 104   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 51.987  | -4.0  | 103   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000  | 0.0   | 104   | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 46.663  | 6.7   | 97    | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 48.981  | 2.0   | 103   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 49.088  | 1.8   | 102   | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 49.361  | 1.3#  | 103   | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 98.290  | 1.7   | 103   | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 50.318  | -0.6  | 104   | 0.00     |
| 70 T  | Styrene                     | 50.000   | 50.615  | -1.2  | 104   | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 49.048  | 1.9   | 101   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000  | 0.0   | 99    | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 51.334  | -2.7  | 104   | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 55.191  | -10.4 | 108   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 54.418  | -8.8  | 114   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 45.999  | 8.0   | 90    | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 51.136  | -2.3  | 104   | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 50.744  | -1.5  | 102   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 48.344  | 3.3   | 102   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 49.715  | 0.6   | 101   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 51.675  | -3.3  | 100   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 50.371  | -0.7  | 102   | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 49.861  | 0.3   | 103   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 50.007  | -0.0  | 100   | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 49.194  | 1.6   | 101   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 49.231  | 1.5   | 100   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 49.707  | 0.6   | 101   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 47.903  | 4.2   | 100   | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 47.123  | 5.8   | 98    | 0.00     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN121818\  
Data File : VN052974.D  
Acq On : 18 Dec 2018 21:31  
Operator : MD\SY  
Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA\_N/WATER  
ALS Vial : 26 Sample Multiplier: 28

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Dec 19 04:50:26 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N121818W.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 18 13:03:37 2018  
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 | 50.013 | -0.0 | 101   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 50.000 | 49.453 | 1.1  | 100   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 50.000 | 49.172 | 1.7  | 99    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 50.000 | 47.746 | 4.5  | 98    | 0.00     |
| 94 T | Hexachlorobutadiene         | 50.000 | 50.540 | -1.1 | 97    | 0.00     |
| 95 T | Naphthalene                 | 50.000 | 48.717 | 2.6  | 100   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 50.000 | 48.482 | 3.0  | 100   | 0.00     |

(#) = Out of Range

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