

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU070918\  
 Data File : VU025279.D  
 Acq On : 09 Jul 2018 17:52  
 Operator : MD/SY  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VICVVU070918

Quant Time: Jul 10 10:40:04 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U070918W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 10 09:34:16 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   | 109   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 44.645  | 10.7  | 113   | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 47.044  | 5.9   | 115   | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 45.437  | 9.1#  | 115   | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 59.535  | -19.1 | 123   | 0.00     |
| 6 T   | Chloroethane                | 50.000  | 46.387  | 7.2   | 113   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 44.663  | 10.7  | 112   | 0.00     |
| 8 T   | Diethyl Ether               | 50.000  | 45.759  | 8.5   | 115   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 44.856  | 10.3  | 114   | 0.00     |
| 10 T  | Methyl Iodide               | 50.000  | 42.797  | 14.4  | 110   | 0.00     |
| 11 T  | Tert butyl alcohol          | 250.000 | 231.792 | 7.3   | 118   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 45.586  | 8.8#  | 118   | 0.00     |
| 13 T  | Acrolein                    | 250.000 | 245.988 | 1.6   | 97    | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 43.110  | 13.8  | 116   | 0.00     |
| 15 T  | Acrylonitrile               | 250.000 | 225.237 | 9.9   | 115   | 0.00     |
| 16 T  | Acetone                     | 250.000 | 229.155 | 8.3   | 122   | 0.00     |
| 17 T  | Carbon Disulfide            | 50.000  | 44.508  | 11.0  | 114   | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 45.901  | 8.2   | 117   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 46.696  | 6.6   | 118   | 0.00     |
| 20 T  | Methylene Chloride          | 50.000  | 45.541  | 8.9   | 115   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 43.483  | 13.0  | 113   | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 45.621  | 8.8   | 115   | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 233.527 | 6.6   | 116   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 46.255  | 7.5   | 114   | 0.00     |
| 25 T  | 2-Butanone                  | 250.000 | 224.993 | 10.0  | 116   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 44.840  | 10.3  | 119   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 44.254  | 11.5  | 114   | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 45.506  | 9.0   | 98    | 0.00     |
| 29 T  | Tetrahydrofuran             | 250.000 | 223.882 | 10.4  | 114   | 0.00     |
| 30 C  | Chloroform                  | 50.000  | 45.703  | 8.6#  | 112   | 0.00     |
| 31 T  | Cyclohexane                 | 50.000  | 44.268  | 11.5  | 112   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 46.201  | 7.6   | 113   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 44.006  | 12.0  | 99    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0   | 109   | 0.00     |
| 35 S  | Dibromofluoromethane        | 50.000  | 44.626  | 10.7  | 100   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 44.738  | 10.5  | 113   | 0.00     |
| 37 T  | Ethyl Acetate               | 50.000  | 46.381  | 7.2   | 115   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 47.158  | 5.7   | 114   | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 43.883  | 12.2  | 110   | 0.00     |
| 40 TM | Benzene                     | 50.000  | 45.222  | 9.6   | 116   | 0.00     |
| 41 T  | Methacrylonitrile           | 50.000  | 45.472  | 9.1   | 114   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 45.692  | 8.6   | 114   | 0.00     |
| 43 T  | Isopropyl Acetate           | 50.000  | 45.406  | 9.2   | 115   | 0.00     |
| 44 TM | Trichloroethene             | 50.000  | 44.639  | 10.7  | 116   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 45.469  | 9.1#  | 114   | 0.00     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU070918\  
 Data File : VU025279.D  
 Acq On : 09 Jul 2018 17:52  
 Operator : MD/SY  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VICVVU070918

Quant Time: Jul 10 10:40:04 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U070918W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 10 09:34:16 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   | 45.122  | 9.8   | 113   | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000   | 46.671  | 6.7   | 113   | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000   | 46.684  | 6.6   | 116   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 1000.000 | 931.075 | 6.9   | 117   | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 43.682  | 12.6  | 98    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 225.564 | 9.8   | 116   | 0.00     |
| 52 CM | Toluene                     | 50.000   | 46.278  | 7.4#  | 116   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 46.084  | 7.8   | 114   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 46.324  | 7.4   | 117   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 45.581  | 8.8   | 116   | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 45.578  | 8.8   | 115   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 45.616  | 8.8   | 114   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 196.053 | 21.6# | 96    | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 223.570 | 10.6  | 117   | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 47.675  | 4.7   | 115   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 46.081  | 7.8   | 114   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 44.398  | 11.2  | 98    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000  | 0.0   | 108   | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 44.909  | 10.2  | 110   | 0.00     |
| 65 PM | Chlorobenzene               | 50.000   | 45.205  | 9.6   | 115   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 46.847  | 6.3   | 113   | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 45.378  | 9.2#  | 114   | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 91.761  | 8.2   | 112   | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 45.762  | 8.5   | 113   | 0.00     |
| 70 T  | Styrene                     | 50.000   | 46.733  | 6.5   | 114   | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 42.940  | 14.1  | 116   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000  | 0.0   | 108   | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 44.465  | 11.1  | 113   | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 46.382  | 7.2   | 116   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 44.895  | 10.2  | 115   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 47.328  | 5.3   | 117   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 45.126  | 9.7   | 114   | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 45.306  | 9.4   | 112   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 47.174  | 5.7   | 112   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 45.122  | 9.8   | 112   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 45.415  | 9.2   | 114   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 43.876  | 12.2  | 112   | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 44.529  | 10.9  | 113   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 44.650  | 10.7  | 111   | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 45.266  | 9.5   | 112   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 45.584  | 8.8   | 112   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 43.706  | 12.6  | 112   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 45.503  | 9.0   | 112   | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 44.227  | 11.5  | 110   | 0.00     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU070918\  
Data File : VU025279.D  
Acq On : 09 Jul 2018 17:52  
Operator : MD/SY  
Sample : VSTDICV050  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VICVVU070918

Quant Time: Jul 10 10:40:04 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U070918W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jul 10 09:34:16 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 | 45.877 | 8.2  | 111   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 50.000 | 44.423 | 11.2 | 112   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 50.000 | 45.795 | 8.4  | 114   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 50.000 | 42.020 | 16.0 | 112   | 0.00     |
| 94 T | Hexachlorobutadiene         | 50.000 | 42.780 | 14.4 | 115   | 0.00     |
| 95 T | Naphthalene                 | 50.000 | 45.274 | 9.5  | 118   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 50.000 | 43.026 | 13.9 | 113   | 0.00     |

(#) = Out of Range

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