

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU072718\  
 Data File : VU025664.D  
 Acq On : 27 Jul 2018 12:56  
 Operator : MD/SY  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 ICVVU072718

Quant Time: Jul 28 04:24:16 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U072718W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jul 27 13:11:52 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                    | AvqRF | CCRF  | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0    | 120   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.756 | 0.873 | -15.5  | 124   | 0.00     |
| 3 P   | Chloromethane               | 0.722 | 0.761 | -5.4   | 123   | 0.00     |
| 4 C   | Vinyl Chloride              | 0.680 | 0.723 | -6.3#  | 125   | 0.00     |
| 5 T   | Bromomethane                | 0.332 | 0.393 | -18.4  | 135   | 0.00     |
| 6 T   | Chloroethane                | 0.397 | 0.407 | -2.5   | 123   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.983 | 1.053 | -7.1   | 124   | 0.00     |
| 8 T   | Diethyl Ether               | 0.356 | 0.366 | -2.8   | 123   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.569 | 0.583 | -2.5   | 119   | 0.00     |
| 10 T  | Methyl Iodide               | 0.440 | 0.555 | -26.1# | 144   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.171 | 0.167 | 2.3    | 119   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.537 | 0.530 | 1.3#   | 119   | 0.00     |
| 13 T  | Acrolein                    | 0.068 | 0.049 | 27.9#  | 96    | 0.00     |
| 14 T  | Allyl chloride              | 0.965 | 0.964 | 0.1    | 126   | 0.00     |
| 15 T  | Acrylonitrile               | 0.341 | 0.353 | -3.5   | 119   | 0.00     |
| 16 T  | Acetone                     | 0.380 | 0.368 | 3.2    | 115   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.737 | 1.835 | -5.6   | 127   | 0.00     |
| 18 T  | Methyl Acetate              | 0.914 | 0.975 | -6.7   | 118   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.945 | 2.051 | -5.4   | 123   | 0.00     |
| 20 T  | Methylene Chloride          | 0.673 | 0.661 | 1.8    | 120   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.621 | 0.649 | -4.5   | 125   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.901 | 1.989 | -4.6   | 122   | 0.00     |
| 23 T  | Vinyl Acetate               | 1.657 | 1.728 | -4.3   | 121   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.141 | 1.179 | -3.3   | 121   | 0.00     |
| 25 T  | 2-Butanone                  | 0.517 | 0.532 | -2.9   | 120   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 1.037 | 1.106 | -6.7   | 127   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.700 | 0.718 | -2.6   | 122   | 0.00     |
| 28 T  | Bromochloromethane          | 0.510 | 0.561 | -10.0  | 125   | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.310 | 0.308 | 0.6    | 115   | 0.00     |
| 30 C  | Chloroform                  | 1.205 | 1.223 | -1.5#  | 121   | 0.00     |
| 31 T  | Cyclohexane                 | 1.194 | 1.054 | 11.7   | 123   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.085 | 1.126 | -3.8   | 121   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.779 | 0.802 | -3.0   | 122   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 116   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.435 | 0.459 | -5.5   | 123   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.584 | 0.645 | -10.4  | 125   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.606 | 0.639 | -5.4   | 117   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.662 | 0.702 | -6.0   | 121   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.670 | 0.756 | -12.8  | 127   | 0.00     |
| 40 TM | Benzene                     | 1.708 | 1.780 | -4.2   | 121   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.337 | 0.356 | -5.6   | 118   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.658 | 0.684 | -4.0   | 122   | 0.00     |
| 43 T  | Isopropyl Acetate           | 1.001 | 1.046 | -4.5   | 119   | 0.00     |
| 44 TM | Trichloroethene             | 0.476 | 0.509 | -6.9   | 125   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.445 | 0.468 | -5.2#  | 119   | 0.00     |

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 Quant Title : SW846 8260  
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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

|       | Compound                    | AvqRF | CCRF  | %Dev    | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|---------|-------|----------|
| 46 T  | Dibromomethane              | 0.323 | 0.334 | -3.4    | 121   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.616 | 0.651 | -5.7    | 121   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.491 | 0.529 | -7.7    | 119   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.012 | 0.013 | -8.3    | 122   | 0.00     |
| 50 S  | Toluene-d8                  | 1.522 | 1.644 | -8.0    | 122   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.627 | 0.653 | -4.1    | 116   | 0.00     |
| 52 CM | Toluene                     | 1.061 | 1.136 | -7.1#   | 121   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.691 | 0.768 | -11.1   | 125   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.710 | 0.781 | -10.0   | 123   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.441 | 0.460 | -4.3    | 120   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.630 | 0.693 | -10.0   | 123   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.742 | 0.782 | -5.4    | 122   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.260 | 0.261 | -0.4    | 109   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.491 | 0.526 | -7.1    | 119   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.520 | 0.549 | -5.6    | 122   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.490 | 0.518 | -5.7    | 120   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.591 | 0.637 | -7.8    | 123   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0     | 116   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.440 | 0.468 | -6.4    | 121   | 0.00     |
| 65 PM | Chlorobenzene               | 1.289 | 1.361 | -5.6    | 122   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.466 | 0.507 | -8.8    | 120   | 0.00     |
| 67 C  | Ethyl Benzene               | 2.135 | 2.319 | -8.6#   | 123   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.820 | 0.917 | -11.8   | 122   | 0.00     |
| 69 T  | o-Xylene                    | 0.801 | 0.876 | -9.4    | 122   | 0.00     |
| 70 T  | Styrene                     | 1.294 | 1.444 | -11.6   | 121   | 0.00     |
| 71 P  | Bromoform                   | 0.404 | 0.440 | -8.9    | 121   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0     | 116   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.413 | 3.702 | -8.5    | 123   | 0.00     |
| 74 T  | N-amyl acetate              | 1.393 | 1.518 | -9.0    | 122   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.180 | 1.189 | -0.8    | 117   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.102 | 1.022 | 7.3     | 108   | 0.00     |
| 77 T  | Bromobenzene                | 0.941 | 0.968 | -2.9    | 121   | 0.00     |
| 78 T  | n-propylbenzene             | 3.983 | 4.420 | -11.0   | 125   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.333 | 2.514 | -7.8    | 122   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.898 | 3.215 | -10.9   | 123   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.439 | 0.898 | -104.6# | 268#  | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.750 | 3.051 | -10.9   | 124   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.880 | 3.134 | -8.8    | 125   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.937 | 3.294 | -12.2   | 123   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.516 | 3.949 | -12.3   | 126   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.148 | 3.590 | -14.0   | 126   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.747 | 1.867 | -6.9    | 124   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.821 | 1.900 | -4.3    | 124   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.905 | 3.330 | -14.6   | 128   | 0.00     |

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

|      | Compound                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|-----------------------------|-------|-------|--------|-------|----------|
| 90 T | Hexachloroethane            | 0.560 | 0.602 | -7.5   | 125   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.713 | 1.836 | -7.2   | 123   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.280 | 0.299 | -6.8   | 121   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.156 | 1.361 | -17.7  | 130   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.609 | 0.691 | -13.5  | 134   | 0.00     |
| 95 T | Naphthalene                 | 3.272 | 3.941 | -20.4# | 125   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.153 | 1.350 | -17.1  | 127   | 0.00     |

(#) = Out of Range

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