

Data Path : W:\HPCHEM1\MSVOA X\Data\VX051618\  
 Data File : VX001780.D  
 Acq On : 16 May 2018 22:17  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC050

Quant Time: May 17 04:41:29 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X051518W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 15 01:36:22 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    | 93    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.502 | 0.475 | 5.4    | 89    | 0.00     |
| 3 P   | Chloromethane               | 0.542 | 0.537 | 0.9    | 98    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.586 | 0.569 | 2.9#   | 94    | 0.00     |
| 5 T   | Bromomethane                | 0.295 | 0.221 | 25.1#  | 84    | 0.00     |
| 6 T   | Chloroethane                | 0.369 | 0.369 | 0.0    | 94    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.852 | 0.820 | 3.8    | 92    | 0.00     |
| 8 T   | Diethyl Ether               | 0.351 | 0.345 | 1.7    | 96    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.513 | 0.496 | 3.3    | 95    | 0.00     |
| 10 T  | Methyl Iodide               | 0.472 | 0.675 | -43.0# | 130   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.119 | 0.128 | -7.6   | 106   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.494 | 0.467 | 5.5#   | 93    | 0.00     |
| 13 T  | Acrolein                    | 0.084 | 0.079 | 6.0    | 95    | 0.00     |
| 14 T  | Allyl chloride              | 0.913 | 0.908 | 0.5    | 95    | 0.00     |
| 15 T  | Acrylonitrile               | 0.299 | 0.307 | -2.7   | 99    | 0.00     |
| 16 T  | Acetone                     | 0.263 | 0.269 | -2.3   | 102   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.289 | 1.142 | 11.4   | 88    | 0.00     |
| 18 T  | Methyl Acetate              | 0.770 | 0.836 | -8.6   | 102   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.666 | 1.635 | 1.9    | 93    | 0.00     |
| 20 T  | Methylene Chloride          | 0.563 | 0.540 | 4.1    | 96    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.544 | 0.507 | 6.8    | 91    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.752 | 1.764 | -0.7   | 97    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.263 | 1.165 | 7.8    | 93    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.961 | 0.947 | 1.5    | 96    | 0.00     |
| 25 T  | 2-Butanone                  | 0.403 | 0.435 | -7.9   | 102   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.774 | 0.627 | 19.0   | 77    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.620 | 0.609 | 1.8    | 95    | 0.00     |
| 28 T  | Bromochloromethane          | 0.427 | 0.469 | -9.8   | 97    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.263 | 0.280 | -6.5   | 100   | 0.00     |
| 30 C  | Chloroform                  | 1.009 | 1.002 | 0.7#   | 95    | 0.00     |
| 31 T  | Cyclohexane                 | 0.842 | 0.855 | -1.5   | 94    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.872 | 0.875 | -0.3   | 93    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.670 | 0.565 | 15.7   | 82    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 93    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.422 | 0.380 | 10.0   | 85    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.576 | 0.552 | 4.2    | 91    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.600 | 0.620 | -3.3   | 98    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.603 | 0.600 | 0.5    | 92    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.673 | 0.674 | -0.1   | 91    | 0.00     |
| 40 TM | Benzene                     | 1.696 | 1.717 | -1.2   | 95    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.347 | 0.356 | -2.6   | 98    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.613 | 0.591 | 3.6    | 92    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.939 | 0.949 | -1.1   | 93    | 0.00     |
| 44 TM | Trichloroethene             | 0.526 | 0.522 | 0.8    | 93    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.416 | 0.437 | -5.0#  | 98    | 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                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.292 | 0.289 | 1.0   | 94    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.542 | 0.562 | -3.7  | 94    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.494 | 0.515 | -4.3  | 94    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.010 | 0.012 | -20.0 | 119   | 0.00     |
| 50 S  | Toluene-d8                  | 1.511 | 1.426 | 5.6   | 85    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.595 | 0.656 | -10.3 | 99    | 0.00     |
| 52 CM | Toluene                     | 1.090 | 1.121 | -2.8# | 94    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.638 | 0.656 | -2.8  | 91    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.562 | 0.583 | -3.7  | 95    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.417 | 0.401 | 3.8   | 91    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.591 | 0.588 | 0.5   | 89    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.697 | 0.656 | 5.9   | 89    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.304 | 0.333 | -9.5  | 94    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.426 | 0.440 | -3.3  | 93    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.427 | 0.430 | -0.7  | 89    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.436 | 0.422 | 3.2   | 89    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.544 | 0.451 | 17.1  | 77    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 87    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.651 | 0.669 | -2.8  | 90    | 0.00     |
| 65 PM | Chlorobenzene               | 1.375 | 1.353 | 1.6   | 88    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.486 | 0.519 | -6.8  | 92    | 0.00     |
| 67 C  | Ethyl Benzene               | 2.198 | 2.232 | -1.5# | 88    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.867 | 0.901 | -3.9  | 88    | 0.00     |
| 69 T  | o-Xylene                    | 0.831 | 0.868 | -4.5  | 89    | 0.00     |
| 70 T  | Styrene                     | 1.370 | 1.431 | -4.5  | 87    | 0.00     |
| 71 P  | Bromoform                   | 0.396 | 0.427 | -7.8  | 89    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 85    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.293 | 3.548 | -7.7  | 89    | 0.00     |
| 74 T  | N-amyl acetate              | 1.579 | 1.745 | -10.5 | 93    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.988 | 1.032 | -4.5  | 91    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.951 | 1.011 | -6.3  | 88    | 0.00     |
| 77 T  | Bromobenzene                | 0.968 | 1.001 | -3.4  | 88    | 0.00     |
| 78 T  | n-propylbenzene             | 3.710 | 3.877 | -4.5  | 87    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.219 | 2.326 | -4.8  | 89    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.701 | 2.928 | -8.4  | 88    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.272 | 0.286 | -5.1  | 83    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.614 | 2.676 | -2.4  | 87    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.688 | 2.865 | -6.6  | 89    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.797 | 3.028 | -8.3  | 88    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.318 | 3.532 | -6.4  | 88    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.071 | 3.240 | -5.5  | 88    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.789 | 1.796 | -0.4  | 87    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.850 | 1.794 | 3.0   | 86    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.656 | 2.588 | 2.6   | 82    | 0.00     |

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Max. RRF Dev : 20% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.477 | 0.526 | -10.3 | 89    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.783 | 1.814 | -1.7  | 89    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.211 | 0.231 | -9.5  | 88    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.421 | 1.352 | 4.9   | 81    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.763 | 0.722 | 5.4   | 82    | 0.00     |
| 95 T | Naphthalene                 | 3.694 | 3.927 | -6.3  | 86    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.431 | 1.419 | 0.8   | 85    | 0.00     |

(#) = Out of Range

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