

Data Path : Z:\voasrv\HPCHEM1\MSVOA X\Data\VX110918\  
 Data File : VX005874.D  
 Acq On : 09 Nov 2018 21:18  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 12 01:17:04 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X110718W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 07 14:40:53 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    | 89    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.451 | 0.455 | -0.9   | 88    | 0.00     |
| 3 P   | Chloromethane               | 0.592 | 0.612 | -3.4   | 94    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.594 | 0.580 | 2.4#   | 84    | 0.00     |
| 5 T   | Bromomethane                | 0.363 | 0.324 | 10.7   | 80    | 0.00     |
| 6 T   | Chloroethane                | 0.354 | 0.351 | 0.8    | 88    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.788 | 0.809 | -2.7   | 89    | 0.00     |
| 8 T   | Diethyl Ether               | 0.309 | 0.326 | -5.5   | 96    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.453 | 0.438 | 3.3    | 87    | 0.00     |
| 10 T  | Methyl Iodide               | 0.550 | 0.565 | -2.7   | 84    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.165 | 0.167 | -1.2   | 93    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.442 | 0.444 | -0.5#  | 90    | 0.00     |
| 13 T  | Acrolein                    | 0.070 | 0.063 | 10.0   | 74    | 0.00     |
| 14 T  | Allyl chloride              | 0.987 | 0.998 | -1.1   | 88    | 0.00     |
| 15 T  | Acrylonitrile               | 0.341 | 0.363 | -6.5   | 92    | 0.00     |
| 16 T  | Acetone                     | 0.309 | 0.325 | -5.2   | 92    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.318 | 1.304 | 1.1    | 86    | 0.00     |
| 18 T  | Methyl Acetate              | 0.921 | 0.947 | -2.8   | 98    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.508 | 1.608 | -6.6   | 93    | 0.00     |
| 20 T  | Methylene Chloride          | 0.508 | 0.505 | 0.6    | 92    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.466 | 0.483 | -3.6   | 90    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.729 | 1.792 | -3.6   | 91    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.483 | 1.644 | -10.9  | 96    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.922 | 0.945 | -2.5   | 93    | 0.01     |
| 25 T  | 2-Butanone                  | 0.487 | 0.532 | -9.2   | 93    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.677 | 0.673 | 0.6    | 86    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.515 | 0.528 | -2.5   | 89    | 0.00     |
| 28 T  | Bromochloromethane          | 0.412 | 0.474 | -15.0  | 91    | -0.01    |
| 29 T  | Tetrahydrofuran             | 0.312 | 0.346 | -10.9  | 91    | 0.00     |
| 30 C  | Chloroform                  | 0.890 | 0.914 | -2.7#  | 90    | 0.00     |
| 31 T  | Cyclohexane                 | 0.801 | 0.811 | -1.2   | 86    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.742 | 0.781 | -5.3   | 89    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.575 | 0.581 | -1.0   | 88    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 91    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.340 | 0.336 | 1.2    | 86    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.482 | 0.463 | 3.9    | 84    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.634 | 0.645 | -1.7   | 89    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.483 | 0.505 | -4.6   | 93    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.489 | 0.549 | -12.3  | 96    | 0.00     |
| 40 TM | Benzene                     | 1.405 | 1.506 | -7.2   | 94    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.343 | 0.361 | -5.2   | 92    | 0.01     |
| 42 TM | 1,2-Dichloroethane          | 0.503 | 0.526 | -4.6   | 93    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.918 | 0.940 | -2.4   | 87    | 0.00     |
| 44 TM | Trichloroethene             | 0.357 | 0.367 | -2.8   | 93    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.341 | 0.392 | -15.0# | 104   | 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              | 0.214 | 0.220 | -2.8   | 94    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.404 | 0.483 | -19.6  | 106   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.412 | 0.455 | -10.4  | 95    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.009 | 0.010 | -11.1  | 98    | 0.00     |
| 50 S  | Toluene-d8                  | 1.131 | 1.117 | 1.2    | 88    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.579 | 0.610 | -5.4   | 95    | 0.00     |
| 52 CM | Toluene                     | 0.785 | 0.780 | 0.6#   | 89    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.477 | 0.478 | -0.2   | 82    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.486 | 0.513 | -5.6   | 93    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.350 | 0.326 | 6.9    | 88    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.524 | 0.513 | 2.1    | 83    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.588 | 0.552 | 6.1    | 83    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.257 | 0.304 | -18.3  | 99    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.510 | 0.483 | 5.3    | 80    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.378 | 0.354 | 6.3    | 79    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.387 | 0.340 | 12.1   | 78    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.406 | 0.421 | -3.7   | 91    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 80    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.426 | 0.435 | -2.1   | 75    | 0.00     |
| 65 PM | Chlorobenzene               | 1.002 | 1.042 | -4.0   | 80    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.348 | 0.394 | -13.2  | 91    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.606 | 1.824 | -13.6# | 85    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.613 | 0.704 | -14.8  | 91    | 0.00     |
| 69 T  | o-Xylene                    | 0.549 | 0.676 | -23.1# | 95    | 0.00     |
| 70 T  | Styrene                     | 0.906 | 1.142 | -26.0# | 95    | 0.00     |
| 71 P  | Bromoform                   | 0.292 | 0.350 | -19.9  | 96    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 90    | 0.00     |
| 73 T  | Isopropylbenzene            | 2.891 | 3.270 | -13.1  | 94    | 0.00     |
| 74 T  | N-amyl acetate              | 1.473 | 1.660 | -12.7  | 96    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.061 | 1.116 | -5.2   | 94    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.018 | 1.108 | -8.8   | 95    | 0.00     |
| 77 T  | Bromobenzene                | 0.815 | 0.868 | -6.5   | 95    | 0.00     |
| 78 T  | n-propylbenzene             | 3.408 | 3.815 | -11.9  | 94    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.060 | 2.270 | -10.2  | 95    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.457 | 2.800 | -14.0  | 94    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.319 | 0.349 | -9.4   | 95    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.427 | 2.691 | -10.9  | 94    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.486 | 2.732 | -9.9   | 95    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.543 | 2.893 | -13.8  | 93    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.040 | 3.342 | -9.9   | 94    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.693 | 3.020 | -12.1  | 93    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.564 | 1.608 | -2.8   | 94    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.601 | 1.631 | -1.9   | 94    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.495 | 2.659 | -6.6   | 92    | 0.00     |

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

|      | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.450 | 0.499 | -10.9 | 97    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.567 | 1.628 | -3.9  | 95    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.259 | 0.296 | -14.3 | 96    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.103 | 1.197 | -8.5  | 92    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.579 | 0.589 | -1.7  | 91    | 0.00     |
| 95 T | Naphthalene                 | 3.195 | 3.765 | -17.8 | 94    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.124 | 1.242 | -10.5 | 94    | 0.00     |

(#) = Out of Range

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