

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX121418\  
 Data File : VX006536.D  
 Acq On : 15 Dec 2018 01:02  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 30 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC050

Quant Time: Dec 15 05:42:31 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112918W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Nov 30 03:55:33 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                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0    | 65    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.490 | 0.471 | 3.9    | 58    | 0.00     |
| 3 P   | Chloromethane               | 0.503 | 0.502 | 0.2    | 64    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.541 | 0.534 | 1.3#   | 63    | 0.00     |
| 5 T   | Bromomethane                | 0.375 | 0.558 | -48.8# | 104   | 0.00     |
| 6 T   | Chloroethane                | 0.332 | 0.346 | -4.2   | 66    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.831 | 0.857 | -3.1   | 67    | 0.00     |
| 8 T   | Diethyl Ether               | 0.315 | 0.358 | -13.7  | 76    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.473 | 0.507 | -7.2   | 71    | 0.00     |
| 10 T  | Methyl Iodide               | 0.712 | 0.829 | -16.4  | 74    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.140 | 0.142 | -1.4   | 68    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.452 | 0.471 | -4.2#  | 70    | 0.00     |
| 13 T  | Acrolein                    | 0.076 | 0.087 | -14.5  | 77    | 0.00     |
| 14 T  | Allyl chloride              | 0.894 | 0.809 | 9.5    | 60    | 0.00     |
| 15 T  | Acrylonitrile               | 0.291 | 0.318 | -9.3   | 71    | 0.00     |
| 16 T  | Acetone                     | 0.240 | 0.258 | -7.5   | 71    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.394 | 1.196 | 14.2   | 56    | 0.00     |
| 18 T  | Methyl Acetate              | 0.801 | 0.871 | -8.7   | 72    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.614 | 1.761 | -9.1   | 73    | 0.00     |
| 20 T  | Methylene Chloride          | 0.510 | 0.561 | -10.0  | 76    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.482 | 0.513 | -6.4   | 71    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.396 | 1.577 | -13.0  | 75    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.191 | 1.306 | -9.7   | 72    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.798 | 0.870 | -9.0   | 74    | 0.00     |
| 25 T  | 2-Butanone                  | 0.342 | 0.389 | -13.7  | 75    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.736 | 0.583 | 20.8#  | 53    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.538 | 0.614 | -14.1  | 76    | 0.00     |
| 28 T  | Bromochloromethane          | 0.349 | 0.374 | -7.2   | 68    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.238 | 0.267 | -12.2  | 75    | 0.00     |
| 30 C  | Chloroform                  | 0.838 | 0.963 | -14.9# | 77    | 0.00     |
| 31 T  | Cyclohexane                 | 0.737 | 0.785 | -6.5   | 71    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.798 | 0.818 | -2.5   | 69    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.510 | 0.565 | -10.8  | 74    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 69    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.324 | 0.327 | -0.9   | 71    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.421 | 0.433 | -2.9   | 73    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.472 | 0.491 | -4.0   | 74    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.495 | 0.449 | 9.3    | 64    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.547 | 0.571 | -4.4   | 74    | 0.00     |
| 40 TM | Benzene                     | 1.261 | 1.361 | -7.9   | 76    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.259 | 0.270 | -4.2   | 76    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.413 | 0.472 | -14.3  | 81    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.786 | 0.781 | 0.6    | 71    | 0.00     |
| 44 TM | Trichloroethene             | 0.382 | 0.396 | -3.7   | 73    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.321 | 0.341 | -6.2#  | 76    | 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) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.231 | 0.254 | -10.0 | 78    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.448 | 0.437 | 2.5   | 69    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.382 | 0.398 | -4.2  | 73    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.009 | 0.010 | -11.1 | 79    | 0.00     |
| 50 S  | Toluene-d8                  | 1.178 | 1.166 | 1.0   | 69    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.458 | 0.494 | -7.9  | 75    | 0.00     |
| 52 CM | Toluene                     | 0.830 | 0.903 | -8.8# | 78    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.524 | 0.484 | 7.6   | 65    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.544 | 0.527 | 3.1   | 69    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.337 | 0.390 | -15.7 | 81    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.527 | 0.575 | -9.1  | 77    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.533 | 0.610 | -14.4 | 81    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.267 | 0.262 | 1.9   | 71    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.350 | 0.370 | -5.7  | 74    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.416 | 0.403 | 3.1   | 68    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.377 | 0.424 | -12.5 | 80    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.444 | 0.462 | -4.1  | 71    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 72    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.377 | 0.407 | -8.0  | 81    | 0.00     |
| 65 PM | Chlorobenzene               | 1.061 | 1.143 | -7.7  | 78    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.412 | 0.402 | 2.4   | 71    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.765 | 1.838 | -4.1# | 76    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.707 | 0.745 | -5.4  | 77    | 0.00     |
| 69 T  | o-Xylene                    | 0.698 | 0.739 | -5.9  | 78    | 0.00     |
| 70 T  | Styrene                     | 1.130 | 1.202 | -6.4  | 77    | 0.00     |
| 71 P  | Bromoform                   | 0.389 | 0.317 | 18.5  | 59    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 73    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.453 | 3.605 | -4.4  | 77    | 0.00     |
| 74 T  | N-amyl acetate              | 1.487 | 1.397 | 6.1   | 71    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.105 | 1.145 | -3.6  | 78    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.965 | 1.047 | -8.5  | 74    | 0.00     |
| 77 T  | Bromobenzene                | 0.958 | 1.002 | -4.6  | 77    | 0.00     |
| 78 T  | n-propylbenzene             | 3.838 | 4.040 | -5.3  | 77    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.281 | 2.395 | -5.0  | 78    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.873 | 2.995 | -4.2  | 78    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.411 | 0.305 | 25.8# | 55    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.652 | 2.752 | -3.8  | 77    | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.065 | 3.069 | -0.1  | 74    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.967 | 3.115 | -5.0  | 79    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.487 | 3.681 | -5.6  | 77    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.140 | 3.290 | -4.8  | 77    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.705 | 1.789 | -4.9  | 77    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.731 | 1.784 | -3.1  | 77    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.679 | 2.768 | -3.3  | 76    | 0.00     |

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|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.640 | 0.520 | 18.8 | 59    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.692 | 1.775 | -4.9 | 79    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.283 | 0.245 | 13.4 | 68    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.235 | 1.255 | -1.6 | 76    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.546 | 0.553 | -1.3 | 74    | 0.00     |
| 95 T | Naphthalene                 | 3.840 | 4.082 | -6.3 | 79    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.223 | 1.266 | -3.5 | 77    | 0.00     |

(#) = Out of Range

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