

Data Path : Z:\voasrv\HPCHEM1\MSVOA F\Data\VF082418\  
 Data File : VF060095.D  
 Acq On : 24 Aug 2018 12:39  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5mL/MSVOA F/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 LabSampleId :  
 VSTDCCC050

Quant Time: Aug 25 04:19:10 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F082118S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 22 04:43:43 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvqRF | CCRF  | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0    | 74    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.658 | 0.725 | -10.2  | 87    | 0.00     |
| 3 P   | Chloromethane               | 0.485 | 0.447 | 7.8    | 77    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.409 | 0.390 | 4.6#   | 74    | 0.00     |
| 5 T   | Bromomethane                | 0.311 | 0.251 | 19.3   | 62    | 0.00     |
| 6 T   | Chloroethane                | 0.161 | 0.173 | -7.5   | 83    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.822 | 1.167 | -42.0# | 101   | 0.00     |
| 8 T   | Diethyl Ether               | 0.147 | 0.137 | 6.8    | 67    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.431 | 0.493 | -14.4  | 84    | 0.00     |
| 10 T  | Methyl Iodide               | 0.570 | 0.461 | 19.1   | 57    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.036 | 0.035 | 2.8    | 71    | -0.01    |
| 12 CM | 1,1-Dichloroethene          | 0.318 | 0.320 | -0.6#  | 73    | 0.00     |
| 13 T  | Acrolein                    | 0.018 | 0.018 | 0.0    | 63    | 0.00     |
| 14 T  | Allyl chloride              | 0.564 | 0.568 | -0.7   | 77    | 0.00     |
| 15 T  | Acrylonitrile               | 0.072 | 0.096 | -33.3# | 106   | -0.01    |
| 16 T  | Acetone                     | 0.180 | 0.213 | -18.3  | 87    | 0.00     |
| 17 T  | Carbon Disulfide            | 0.995 | 0.886 | 11.0   | 73    | 0.00     |
| 18 T  | Methyl Acetate              | 0.348 | 0.304 | 12.6   | 73    | -0.01    |
| 19 T  | Methyl tert-butyl Ether     | 1.018 | 0.958 | 5.9    | 69    | 0.00     |
| 20 T  | Methylene Chloride          | 0.417 | 0.350 | 16.1   | 72    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.356 | 0.327 | 8.1    | 74    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.264 | 1.438 | -13.8  | 84    | -0.01    |
| 23 T  | Vinyl Acetate               | 0.670 | 0.676 | -0.9   | 69    | -0.01    |
| 24 P  | 1,1-Dichloroethane          | 0.781 | 1.102 | -41.1# | 106   | -0.01    |
| 25 T  | 2-Butanone                  | 0.234 | 0.255 | -9.0   | 81    | -0.02    |
| 26 T  | 2,2-Dichloropropane         | 0.808 | 0.980 | -21.3  | 90    | -0.01    |
| 27 T  | cis-1,2-Dichloroethene      | 0.504 | 0.566 | -12.3  | 82    | -0.01    |
| 28 T  | Bromochloromethane          | 0.330 | 0.328 | 0.6    | 77    | -0.01    |
| 29    | Tetrahydrofuran             | 0.088 | 0.087 | 1.1    | 74    | -0.02    |
| 30 C  | Chloroform                  | 1.096 | 1.261 | -15.1# | 86    | -0.01    |
| 31 T  | Cyclohexane                 | 0.595 | 0.623 | -4.7   | 81    | -0.01    |
| 32 T  | 1,1,1-Trichloroethane       | 0.939 | 1.155 | -23.0  | 90    | -0.01    |
| 33 S  | 1,2-Dichloroethane-d4       | 0.684 | 0.731 | -6.9   | 83    | -0.01    |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 76    | -0.02    |
| 35 S  | Dibromofluoromethane        | 0.393 | 0.432 | -9.9   | 84    | -0.01    |
| 36 T  | 1,1-Dichloropropene         | 0.470 | 0.481 | -2.3   | 79    | -0.01    |
| 37 T  | Ethyl Acetate               | 0.281 | 0.282 | -0.4   | 78    | -0.01    |
| 38 T  | Carbon Tetrachloride        | 0.544 | 0.641 | -17.8  | 90    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.441 | 0.421 | 4.5    | 77    | -0.02    |
| 40 TM | Benzene                     | 1.026 | 1.039 | -1.3   | 81    | -0.02    |
| 41 T  | Methacrylonitrile           | 0.142 | 0.127 | 10.6   | 71    | -0.02    |
| 42 TM | 1,2-Dichloroethane          | 0.550 | 0.581 | -5.6   | 83    | -0.01    |
| 43 T  | Isopropyl Acetate           | 0.354 | 0.312 | 11.9   | 66    | -0.01    |
| 44 TM | Trichloroethene             | 0.339 | 0.346 | -2.1   | 81    | -0.01    |
| 45 C  | 1,2-Dichloropropane         | 0.290 | 0.310 | -6.9#  | 79    | -0.01    |

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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.227 | 0.249 | -9.7  | 83    | -0.01    |
| 47 T  | Bromodichloromethane        | 0.549 | 0.627 | -14.2 | 88    | -0.01    |
| 48 T  | Methyl methacrylate         | 0.234 | 0.215 | 8.1   | 68    | -0.01    |
| 49 T  | 1,4-Dioxane                 | 0.002 | 0.002 | 0.0   | 80    | -0.01    |
| 50 S  | Toluene-d8                  | 1.115 | 1.134 | -1.7  | 81    | -0.01    |
| 51 T  | 4-Methyl-2-Pentanone        | 0.305 | 0.293 | 3.9   | 74    | -0.01    |
| 52 CM | Toluene                     | 0.747 | 0.787 | -5.4# | 86    | -0.01    |
| 53 T  | t-1,3-Dichloropropene       | 0.498 | 0.516 | -3.6  | 81    | -0.01    |
| 54 T  | cis-1,3-Dichloropropene     | 0.555 | 0.600 | -8.1  | 79    | -0.01    |
| 55 T  | 1,1,2-Trichloroethane       | 0.277 | 0.300 | -8.3  | 80    | -0.01    |
| 56 T  | Ethyl methacrylate          | 0.335 | 0.327 | 2.4   | 70    | -0.01    |
| 57 T  | 1,3-Dichloropropane         | 0.487 | 0.524 | -7.6  | 78    | -0.01    |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.027 | 0.028 | -3.7  | 85    | -0.01    |
| 59 T  | 2-Hexanone                  | 0.247 | 0.251 | -1.6  | 78    | -0.01    |
| 60 T  | Dibromochloromethane        | 0.409 | 0.436 | -6.6  | 80    | -0.01    |
| 61 T  | 1,2-Dibromoethane           | 0.325 | 0.344 | -5.8  | 80    | -0.01    |
| 62 S  | 4-Bromofluorobenzene        | 0.590 | 0.625 | -5.9  | 84    | -0.01    |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 78    | -0.01    |
| 64 T  | Tetrachloroethene           | 0.337 | 0.318 | 5.6   | 75    | -0.01    |
| 65 PM | Chlorobenzene               | 0.944 | 0.966 | -2.3  | 83    | -0.01    |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.358 | 0.374 | -4.5  | 84    | -0.01    |
| 67 C  | Ethyl Benzene               | 1.629 | 1.713 | -5.2# | 87    | -0.01    |
| 68 T  | m/p-Xylenes                 | 0.600 | 0.615 | -2.5  | 85    | -0.01    |
| 69 T  | o-Xylene                    | 0.638 | 0.654 | -2.5  | 79    | -0.01    |
| 70 T  | Styrene                     | 0.979 | 1.016 | -3.8  | 84    | -0.01    |
| 71 P  | Bromoform                   | 0.250 | 0.269 | -7.6  | 85    | -0.01    |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 81    | -0.01    |
| 73 T  | Isopropylbenzene            | 3.010 | 3.187 | -5.9  | 87    | -0.01    |
| 74 T  | N-amyl acetate              | 0.935 | 0.909 | 2.8   | 74    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.657 | 0.676 | -2.9  | 82    | -0.01    |
| 76 T  | 1,2,3-Trichloropropane      | 0.510 | 0.504 | 1.2   | 82    | 0.00     |
| 77 T  | Bromobenzene                | 0.819 | 0.843 | -2.9  | 84    | -0.01    |
| 78 T  | n-propylbenzene             | 3.715 | 4.087 | -10.0 | 91    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.184 | 2.246 | -2.8  | 85    | -0.01    |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.622 | 2.791 | -6.4  | 87    | -0.01    |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.233 | 0.227 | 2.6   | 76    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.371 | 2.539 | -7.1  | 89    | -0.01    |
| 83 T  | tert-Butylbenzene           | 2.557 | 2.748 | -7.5  | 89    | -0.01    |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.788 | 2.915 | -4.6  | 87    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.560 | 3.679 | -3.3  | 86    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.954 | 3.244 | -9.8  | 89    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.513 | 1.621 | -7.1  | 88    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.504 | 1.573 | -4.6  | 88    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.870 | 3.372 | -17.5 | 92    | 0.00     |

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Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.664 | 0.730 | -9.9 | 89    | -0.01    |
| 91 T | 1,2-Dichlorobenzene         | 1.455 | 1.518 | -4.3 | 85    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.134 | 0.134 | 0.0  | 78    | -0.01    |
| 93 T | 1,2,4-Trichlorobenzene      | 1.072 | 1.137 | -6.1 | 81    | -0.01    |
| 94 T | Hexachlorobutadiene         | 0.667 | 0.717 | -7.5 | 86    | -0.01    |
| 95 T | Naphthalene                 | 1.633 | 1.795 | -9.9 | 78    | -0.01    |
| 96 T | 1,2,3-Trichlorobenzene      | 1.023 | 1.086 | -6.2 | 81    | -0.01    |

(#) = Out of Range

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