

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_F\Data\VF121018\  
 Data File : VF060950.D  
 Acq On : 10 Dec 2018 13:17  
 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: Dec 11 05:52:46 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F112618S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 27 01:36:26 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                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 102   | -0.04    |
| 2 T   | Dichlorodifluoromethane     | 0.748 | 0.609 | 18.6  | 84    | 0.00     |
| 3 P   | Chloromethane               | 0.486 | 0.400 | 17.7  | 94    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.454 | 0.408 | 10.1# | 95    | -0.02    |
| 5 T   | Bromomethane                | 0.320 | 0.288 | 10.0  | 89    | 0.00     |
| 6 T   | Chloroethane                | 0.196 | 0.184 | 6.1   | 92    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.974 | 0.911 | 6.5   | 93    | -0.03    |
| 8 T   | Diethyl Ether               | 0.140 | 0.136 | 2.9   | 99    | -0.02    |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.492 | 0.461 | 6.3   | 95    | 0.00     |
| 10 T  | Methyl Iodide               | 0.748 | 0.715 | 4.4   | 97    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.024 | 0.023 | 4.2   | 91    | -0.02    |
| 12 CM | 1,1-Dichloroethene          | 0.396 | 0.362 | 8.6#  | 94    | 0.00     |
| 13 T  | Acrolein                    | 0.023 | 0.020 | 13.0  | 80    | -0.03    |
| 14 T  | Allyl chloride              | 0.493 | 0.440 | 10.8  | 81    | -0.03    |
| 15 T  | Acrylonitrile               | 0.054 | 0.050 | 7.4   | 94    | -0.03    |
| 16 T  | Acetone                     | 0.109 | 0.130 | -19.3 | 119   | -0.03    |
| 17 T  | Carbon Disulfide            | 1.062 | 0.887 | 16.5  | 88    | -0.02    |
| 18 T  | Methyl Acetate              | 0.199 | 0.203 | -2.0  | 116   | -0.02    |
| 19 T  | Methyl tert-butyl Ether     | 0.892 | 0.866 | 2.9   | 98    | -0.03    |
| 20 T  | Methylene Chloride          | 0.398 | 0.360 | 9.5   | 97    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.382 | 0.363 | 5.0   | 95    | -0.03    |
| 22 T  | Diisopropyl ether           | 1.343 | 1.276 | 5.0   | 96    | -0.03    |
| 23 T  | Vinyl Acetate               | 0.614 | 0.621 | -1.1  | 101   | -0.03    |
| 24 P  | 1,1-Dichloroethane          | 0.799 | 0.797 | 0.3   | 96    | -0.03    |
| 25 T  | 2-Butanone                  | 0.188 | 0.192 | -2.1  | 102   | -0.03    |
| 26 T  | 2,2-Dichloropropane         | 0.518 | 0.518 | 0.0   | 98    | -0.04    |
| 27 T  | cis-1,2-Dichloroethene      | 0.621 | 0.611 | 1.6   | 100   | -0.04    |
| 28 T  | Bromochloromethane          | 0.384 | 0.351 | 8.6   | 98    | -0.04    |
| 29    | Tetrahydrofuran             | 0.080 | 0.068 | 15.0  | 89    | -0.04    |
| 30 C  | Chloroform                  | 1.230 | 1.180 | 4.1#  | 99    | -0.03    |
| 31 T  | Cyclohexane                 | 0.829 | 0.727 | 12.3  | 94    | -0.04    |
| 32 T  | 1,1,1-Trichloroethane       | 0.853 | 0.688 | 19.3  | 77    | -0.04    |
| 33 S  | 1,2-Dichloroethane-d4       | 0.589 | 0.569 | 3.4   | 94    | -0.04    |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 105   | -0.04    |
| 35 S  | Dibromofluoromethane        | 0.397 | 0.375 | 5.5   | 95    | -0.04    |
| 36 T  | 1,1-Dichloropropene         | 0.555 | 0.524 | 5.6   | 96    | -0.04    |
| 37 T  | Ethyl Acetate               | 0.225 | 0.197 | 12.4  | 90    | -0.04    |
| 38 T  | Carbon Tetrachloride        | 0.490 | 0.428 | 12.7  | 81    | -0.03    |
| 39 T  | Methylcyclohexane           | 0.581 | 0.535 | 7.9   | 93    | -0.04    |
| 40 TM | Benzene                     | 1.225 | 1.117 | 8.8   | 94    | -0.04    |
| 41 T  | Methacrylonitrile           | 0.133 | 0.111 | 16.5  | 96    | -0.04    |
| 42 TM | 1,2-Dichloroethane          | 0.447 | 0.446 | 0.2   | 96    | -0.04    |
| 43 T  | Isopropyl Acetate           | 0.307 | 0.267 | 13.0  | 93    | -0.03    |
| 44 TM | Trichloroethene             | 0.401 | 0.386 | 3.7   | 100   | -0.04    |
| 45 C  | 1,2-Dichloropropane         | 0.318 | 0.310 | 2.5#  | 94    | -0.04    |

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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                    | AvgRF | CCRF  | %Dev    | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|---------|-------|----------|
| 46 T  | Dibromomethane              | 0.216 | 0.208 | 3.7     | 94    | -0.04    |
| 47 T  | Bromodichloromethane        | 0.573 | 0.583 | -1.7    | 100   | -0.03    |
| 48 T  | Methyl methacrylate         | 0.204 | 0.188 | 7.8     | 92    | -0.04    |
| 49 T  | 1,4-Dioxane                 | 0.001 | 0.002 | -100.0# | 93    | -0.04    |
| 50 S  | Toluene-d8                  | 1.168 | 1.083 | 7.3     | 94    | -0.04    |
| 51 T  | 4-Methyl-2-Pentanone        | 0.208 | 0.191 | 8.2     | 97    | -0.03    |
| 52 CM | Toluene                     | 0.861 | 0.774 | 10.1#   | 99    | -0.04    |
| 53 T  | t-1,3-Dichloropropene       | 0.466 | 0.455 | 2.4     | 100   | -0.03    |
| 54 T  | cis-1,3-Dichloropropene     | 0.577 | 0.544 | 5.7     | 92    | -0.04    |
| 55 T  | 1,1,2-Trichloroethane       | 0.251 | 0.234 | 6.8     | 95    | -0.04    |
| 56 T  | Ethyl methacrylate          | 0.279 | 0.267 | 4.3     | 91    | -0.03    |
| 57 T  | 1,3-Dichloropropane         | 0.439 | 0.417 | 5.0     | 93    | -0.04    |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.028 | 0.034 | -21.4   | 126   | -0.04    |
| 59 T  | 2-Hexanone                  | 0.146 | 0.144 | 1.4     | 104   | -0.03    |
| 60 T  | Dibromochloromethane        | 0.374 | 0.359 | 4.0     | 95    | -0.03    |
| 61 T  | 1,2-Dibromoethane           | 0.271 | 0.257 | 5.2     | 96    | -0.04    |
| 62 S  | 4-Bromofluorobenzene        | 0.531 | 0.489 | 7.9     | 94    | -0.03    |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0     | 95    | -0.04    |
| 64 T  | Tetrachloroethene           | 0.382 | 0.356 | 6.8     | 93    | -0.03    |
| 65 PM | Chlorobenzene               | 0.973 | 0.970 | 0.3     | 90    | -0.03    |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.418 | 0.425 | -1.7    | 97    | -0.04    |
| 67 C  | Ethyl Benzene               | 1.811 | 1.739 | 4.0#    | 90    | -0.03    |
| 68 T  | m/p-Xylenes                 | 0.651 | 0.594 | 8.8     | 90    | -0.03    |
| 69 T  | o-Xylene                    | 0.718 | 0.664 | 7.5     | 89    | -0.04    |
| 70 T  | Styrene                     | 0.996 | 0.946 | 5.0     | 91    | -0.03    |
| 71 P  | Bromoform                   | 0.202 | 0.192 | 5.0     | 89    | -0.03    |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0     | 101   | -0.03    |
| 73 T  | Isopropylbenzene            | 3.951 | 3.960 | -0.2    | 98    | -0.03    |
| 74 T  | N-amyl acetate              | 0.912 | 0.859 | 5.8     | 92    | -0.03    |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.650 | 0.634 | 2.5     | 94    | -0.03    |
| 76 T  | 1,2,3-Trichloropropane      | 0.473 | 0.465 | 1.7     | 96    | -0.03    |
| 77 T  | Bromobenzene                | 0.866 | 0.786 | 9.2     | 84    | -0.03    |
| 78 T  | n-propylbenzene             | 4.627 | 4.405 | 4.8     | 93    | -0.03    |
| 79 T  | 2-Chlorotoluene             | 2.653 | 2.627 | 1.0     | 97    | -0.03    |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.208 | 3.066 | 4.4     | 93    | -0.03    |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.232 | 0.226 | 2.6     | 96    | -0.03    |
| 82 T  | 4-Chlorotoluene             | 2.792 | 2.618 | 6.2     | 95    | -0.03    |
| 83 T  | tert-Butylbenzene           | 3.267 | 3.318 | -1.6    | 101   | -0.03    |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.201 | 3.138 | 2.0     | 93    | -0.03    |
| 85 T  | sec-Butylbenzene            | 4.473 | 4.413 | 1.3     | 98    | -0.03    |
| 86 T  | p-Isopropyltoluene          | 3.750 | 3.488 | 7.0     | 94    | -0.03    |
| 87 T  | 1,3-Dichlorobenzene         | 1.648 | 1.503 | 8.8     | 90    | -0.03    |
| 88 T  | 1,4-Dichlorobenzene         | 1.606 | 1.528 | 4.9     | 94    | -0.03    |
| 89 T  | n-Butylbenzene              | 3.792 | 3.758 | 0.9     | 96    | -0.03    |

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

|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.903 | 0.927 | -2.7 | 97    | -0.03    |
| 91 T | 1,2-Dichlorobenzene         | 1.560 | 1.505 | 3.5  | 93    | -0.03    |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.126 | 0.125 | 0.8  | 96    | -0.03    |
| 93 T | 1,2,4-Trichlorobenzene      | 1.090 | 1.051 | 3.6  | 94    | -0.03    |
| 94 T | Hexachlorobutadiene         | 0.727 | 0.734 | -1.0 | 100   | -0.03    |
| 95 T | Naphthalene                 | 2.404 | 1.995 | 17.0 | 90    | -0.02    |
| 96 T | 1,2,3-Trichlorobenzene      | 1.012 | 1.010 | 0.2  | 97    | -0.03    |

(#) = Out of Range

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