

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_F\Data\VF031219\  
 Data File : VF061904.D  
 Acq On : 12 Mar 2019 13:47  
 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: Mar 13 02:14:55 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F030419S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 05 04:50:44 2019  
 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    | 99    | -0.03    |
| 2 T   | Dichlorodifluoromethane     | 0.614 | 0.547 | 10.9   | 89    | 0.00     |
| 3 P   | Chloromethane               | 0.595 | 0.541 | 9.1    | 92    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.565 | 0.528 | 6.5#   | 92    | 0.00     |
| 5 T   | Bromomethane                | 0.385 | 0.370 | 3.9    | 93    | 0.00     |
| 6 T   | Chloroethane                | 0.268 | 0.264 | 1.5    | 93    | -0.01    |
| 7 T   | Trichlorofluoromethane      | 0.690 | 0.690 | 0.0    | 96    | -0.01    |
| 8 T   | Diethyl Ether               | 0.157 | 0.154 | 1.9    | 92    | -0.01    |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.468 | 0.467 | 0.2    | 100   | -0.01    |
| 10 T  | Methyl Iodide               | 0.891 | 0.873 | 2.0    | 96    | -0.02    |
| 11 T  | Tert butyl alcohol          | 0.021 | 0.020 | 4.8    | 98    | -0.02    |
| 12 CM | 1,1-Dichloroethene          | 0.428 | 0.415 | 3.0#   | 96    | -0.01    |
| 13 T  | Acrolein                    | 0.026 | 0.027 | -3.8   | 102   | -0.02    |
| 14 T  | Allyl chloride              | 0.471 | 0.522 | -10.8  | 109   | -0.01    |
| 15 T  | Acrylonitrile               | 0.066 | 0.063 | 4.5    | 97    | -0.01    |
| 16 T  | Acetone                     | 0.076 | 0.096 | -26.3# | 125   | -0.01    |
| 17 T  | Carbon Disulfide            | 1.331 | 1.270 | 4.6    | 91    | -0.02    |
| 18 T  | Methyl Acetate              | 0.192 | 0.202 | -5.2   | 126   | -0.02    |
| 19 T  | Methyl tert-butyl Ether     | 0.723 | 0.722 | 0.1    | 95    | -0.02    |
| 20 T  | Methylene Chloride          | 0.543 | 0.428 | 21.2   | 100   | -0.02    |
| 21 T  | trans-1,2-Dichloroethene    | 0.402 | 0.439 | -9.2   | 114   | -0.01    |
| 22 T  | Diisopropyl ether           | 1.225 | 1.275 | -4.1   | 101   | -0.02    |
| 23 T  | Vinyl Acetate               | 0.547 | 0.531 | 2.9    | 94    | -0.02    |
| 24 P  | 1,1-Dichloroethane          | 0.732 | 0.758 | -3.6   | 102   | -0.01    |
| 25 T  | 2-Butanone                  | 0.155 | 0.148 | 4.5    | 95    | -0.04    |
| 26 T  | 2,2-Dichloropropane         | 0.327 | 0.334 | -2.1   | 101   | -0.03    |
| 27 T  | cis-1,2-Dichloroethene      | 0.558 | 0.546 | 2.2    | 93    | -0.02    |
| 28 T  | Bromochloromethane          | 0.319 | 0.325 | -1.9   | 107   | -0.03    |
| 29    | Tetrahydrofuran             | 0.067 | 0.062 | 7.5    | 96    | -0.03    |
| 30 C  | Chloroform                  | 0.837 | 0.846 | -1.1#  | 97    | -0.02    |
| 31 T  | Cyclohexane                 | 0.767 | 0.711 | 7.3    | 89    | -0.02    |
| 32 T  | 1,1,1-Trichloroethane       | 0.516 | 0.480 | 7.0    | 92    | -0.02    |
| 33 S  | 1,2-Dichloroethane-d4       | 0.364 | 0.398 | -9.3   | 111   | -0.02    |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 99    | -0.03    |
| 35 S  | Dibromofluoromethane        | 0.349 | 0.377 | -8.0   | 111   | -0.03    |
| 36 T  | 1,1-Dichloropropene         | 0.472 | 0.485 | -2.8   | 97    | -0.03    |
| 37 T  | Ethyl Acetate               | 0.198 | 0.182 | 8.1    | 94    | -0.03    |
| 38 T  | Carbon Tetrachloride        | 0.334 | 0.346 | -3.6   | 94    | -0.03    |
| 39 T  | Methylcyclohexane           | 0.558 | 0.563 | -0.9   | 93    | -0.03    |
| 40 TM | Benzene                     | 1.235 | 1.252 | -1.4   | 95    | -0.03    |
| 41 T  | Methacrylonitrile           | 0.109 | 0.102 | 6.4    | 93    | -0.02    |
| 42 TM | 1,2-Dichloroethane          | 0.308 | 0.304 | 1.3    | 90    | -0.02    |
| 43 T  | Isopropyl Acetate           | 0.244 | 0.214 | 12.3   | 81    | -0.03    |
| 44 TM | Trichloroethene             | 0.384 | 0.376 | 2.1    | 91    | -0.03    |
| 45 C  | 1,2-Dichloropropane         | 0.294 | 0.302 | -2.7#  | 97    | -0.02    |

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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              | 0.185 | 0.178 | 3.8   | 93    | -0.02    |
| 47 T  | Bromodichloromethane        | 0.408 | 0.411 | -0.7  | 94    | -0.02    |
| 48 T  | Methyl methacrylate         | 0.155 | 0.145 | 6.5   | 87    | -0.02    |
| 49 T  | 1,4-Dioxane                 | 0.001 | 0.001 | 0.0   | 81    | -0.02    |
| 50 S  | Toluene-d8                  | 1.037 | 1.101 | -6.2  | 109   | -0.02    |
| 51 T  | 4-Methyl-2-Pentanone        | 0.169 | 0.160 | 5.3   | 92    | -0.02    |
| 52 CM | Toluene                     | 0.730 | 0.734 | -0.5# | 95    | -0.02    |
| 53 T  | t-1,3-Dichloropropene       | 0.337 | 0.330 | 2.1   | 93    | -0.02    |
| 54 T  | cis-1,3-Dichloropropene     | 0.465 | 0.474 | -1.9  | 96    | -0.02    |
| 55 T  | 1,1,2-Trichloroethane       | 0.210 | 0.205 | 2.4   | 94    | -0.02    |
| 56 T  | Ethyl methacrylate          | 0.237 | 0.229 | 3.4   | 92    | -0.02    |
| 57 T  | 1,3-Dichloropropane         | 0.344 | 0.337 | 2.0   | 88    | -0.03    |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.038 | 0.038 | 0.0   | 103   | -0.03    |
| 59 T  | 2-Hexanone                  | 0.122 | 0.122 | 0.0   | 101   | -0.02    |
| 60 T  | Dibromochloromethane        | 0.300 | 0.288 | 4.0   | 91    | -0.03    |
| 61 T  | 1,2-Dibromoethane           | 0.231 | 0.222 | 3.9   | 90    | -0.02    |
| 62 S  | 4-Bromofluorobenzene        | 0.406 | 0.431 | -6.2  | 107   | -0.02    |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 100   | -0.02    |
| 64 T  | Tetrachloroethene           | 0.384 | 0.364 | 5.2   | 88    | -0.03    |
| 65 PM | Chlorobenzene               | 0.961 | 0.924 | 3.9   | 91    | -0.02    |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.372 | 0.374 | -0.5  | 98    | -0.02    |
| 67 C  | Ethyl Benzene               | 1.592 | 1.586 | 0.4#  | 94    | -0.02    |
| 68 T  | m/p-Xylenes                 | 0.610 | 0.588 | 3.6   | 97    | -0.02    |
| 69 T  | o-Xylene                    | 0.657 | 0.637 | 3.0   | 91    | -0.02    |
| 70 T  | Styrene                     | 0.924 | 0.848 | 8.2   | 89    | -0.02    |
| 71 P  | Bromoform                   | 0.197 | 0.185 | 6.1   | 89    | -0.02    |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 99    | -0.01    |
| 73 T  | Isopropylbenzene            | 3.442 | 3.454 | -0.3  | 95    | -0.02    |
| 74 T  | N-amyl acetate              | 0.792 | 0.771 | 2.7   | 92    | -0.02    |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.572 | 0.552 | 3.5   | 93    | -0.02    |
| 76 T  | 1,2,3-Trichloropropane      | 0.390 | 0.371 | 4.9   | 93    | -0.02    |
| 77 T  | Bromobenzene                | 0.828 | 0.778 | 6.0   | 91    | -0.01    |
| 78 T  | n-propylbenzene             | 3.887 | 3.736 | 3.9   | 91    | -0.01    |
| 79 T  | 2-Chlorotoluene             | 2.222 | 2.164 | 2.6   | 95    | -0.01    |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.764 | 2.631 | 4.8   | 90    | -0.02    |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.179 | 0.193 | -7.8  | 110   | -0.01    |
| 82 T  | 4-Chlorotoluene             | 2.273 | 2.195 | 3.4   | 91    | -0.01    |
| 83 T  | tert-Butylbenzene           | 2.935 | 2.887 | 1.6   | 91    | -0.02    |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.709 | 2.686 | 0.8   | 91    | -0.01    |
| 85 T  | sec-Butylbenzene            | 3.819 | 3.835 | -0.4  | 93    | -0.01    |
| 86 T  | p-Isopropyltoluene          | 3.246 | 3.280 | -1.0  | 99    | -0.01    |
| 87 T  | 1,3-Dichlorobenzene         | 1.573 | 1.552 | 1.3   | 97    | -0.02    |
| 88 T  | 1,4-Dichlorobenzene         | 1.517 | 1.492 | 1.6   | 96    | -0.02    |
| 89 T  | n-Butylbenzene              | 3.102 | 3.094 | 0.3   | 96    | -0.01    |

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

|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.781 | 0.802 | -2.7 | 94    | -0.01    |
| 91 T | 1,2-Dichlorobenzene         | 1.490 | 1.454 | 2.4  | 95    | -0.01    |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.088 | 0.093 | -5.7 | 100   | -0.01    |
| 93 T | 1,2,4-Trichlorobenzene      | 1.045 | 1.018 | 2.6  | 97    | -0.02    |
| 94 T | Hexachlorobutadiene         | 0.723 | 0.669 | 7.5  | 91    | -0.01    |
| 95 T | Naphthalene                 | 1.861 | 1.847 | 0.8  | 94    | -0.01    |
| 96 T | 1,2,3-Trichlorobenzene      | 0.965 | 0.969 | -0.4 | 94    | -0.01    |

(#) = Out of Range

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