

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF022519\  
 Data File : VF061739.D  
 Acq On : 25 Feb 2019 19:58  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00µ/5mL/MSVOA-F/SOIL  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 LabSampleId :  
 VSTDCCC050

Quant Time: Feb 26 04:54:38 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F021319S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Feb 14 03:27:56 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                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 115   | -0.03    |
| 2 T   | Dichlorodifluoromethane     | 0.574 | 0.536 | 6.6   | 120   | 0.00     |
| 3 P   | Chloromethane               | 0.602 | 0.562 | 6.6   | 111   | 0.00     |
| 4 C   | Vinyl Chloride              | 0.560 | 0.531 | 5.2#  | 114   | 0.00     |
| 5 T   | Bromomethane                | 0.385 | 0.398 | -3.4  | 116   | 0.00     |
| 6 T   | Chloroethane                | 0.276 | 0.268 | 2.9   | 115   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.676 | 0.696 | -3.0  | 124   | 0.00     |
| 8 T   | Diethyl Ether               | 0.170 | 0.158 | 7.1   | 108   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.487 | 0.487 | 0.0   | 122   | 0.00     |
| 10 T  | Methyl Iodide               | 0.931 | 0.946 | -1.6  | 118   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.021 | 0.019 | 9.5   | 104   | -0.02    |
| 12 CM | 1,1-Dichloroethene          | 0.428 | 0.447 | -4.4# | 125   | 0.00     |
| 13 T  | Acrolein                    | 0.027 | 0.027 | 0.0   | 115   | 0.00     |
| 14 T  | Allyl chloride              | 0.526 | 0.535 | -1.7  | 116   | 0.00     |
| 15 T  | Acrylonitrile               | 0.075 | 0.062 | 17.3  | 98    | -0.03    |
| 16 T  | Acetone                     | 0.079 | 0.072 | 8.9   | 105   | -0.02    |
| 17 T  | Carbon Disulfide            | 1.347 | 1.318 | 2.2   | 115   | -0.02    |
| 18 T  | Methyl Acetate              | 0.177 | 0.184 | -4.0  | 136   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 0.732 | 0.754 | -3.0  | 121   | 0.00     |
| 20 T  | Methylene Chloride          | 0.475 | 0.425 | 10.5  | 120   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.466 | 0.469 | -0.6  | 120   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.262 | 1.311 | -3.9  | 123   | -0.02    |
| 23 T  | Vinyl Acetate               | 0.616 | 0.580 | 5.8   | 112   | -0.02    |
| 24 P  | 1,1-Dichloroethane          | 0.764 | 0.783 | -2.5  | 125   | 0.00     |
| 25 T  | 2-Butanone                  | 0.172 | 0.159 | 7.6   | 111   | -0.02    |
| 26 T  | 2,2-Dichloropropane         | 0.324 | 0.351 | -8.3  | 129   | -0.02    |
| 27 T  | cis-1,2-Dichloroethene      | 0.611 | 0.587 | 3.9   | 115   | -0.02    |
| 28 T  | Bromochloromethane          | 0.366 | 0.361 | 1.4   | 107   | -0.02    |
| 29    | Tetrahydrofuran             | 0.078 | 0.068 | 12.8  | 106   | -0.03    |
| 30 C  | Chloroform                  | 0.869 | 0.910 | -4.7# | 121   | -0.02    |
| 31 T  | Cyclohexane                 | 0.827 | 0.807 | 2.4   | 116   | -0.03    |
| 32 T  | 1,1,1-Trichloroethane       | 0.569 | 0.564 | 0.9   | 108   | -0.02    |
| 33 S  | 1,2-Dichloroethane-d4       | 0.367 | 0.373 | -1.6  | 115   | -0.03    |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 118   | -0.02    |
| 35 S  | Dibromofluoromethane        | 0.371 | 0.366 | 1.3   | 121   | -0.02    |
| 36 T  | 1,1-Dichloropropene         | 0.495 | 0.490 | 1.0   | 124   | -0.03    |
| 37 T  | Ethyl Acetate               | 0.230 | 0.193 | 16.1  | 111   | -0.03    |
| 38 T  | Carbon Tetrachloride        | 0.342 | 0.357 | -4.4  | 132   | -0.02    |
| 39 T  | Methylcyclohexane           | 0.586 | 0.598 | -2.0  | 124   | -0.02    |
| 40 TM | Benzene                     | 1.296 | 1.249 | 3.6   | 118   | -0.02    |
| 41 T  | Methacrylonitrile           | 0.118 | 0.104 | 11.9  | 109   | -0.02    |
| 42 TM | 1,2-Dichloroethane          | 0.310 | 0.314 | -1.3  | 122   | -0.03    |
| 43 T  | Isopropyl Acetate           | 0.272 | 0.226 | 16.9  | 108   | -0.02    |
| 44 TM | Trichloroethene             | 0.419 | 0.408 | 2.6   | 122   | -0.02    |
| 45 C  | 1,2-Dichloropropane         | 0.313 | 0.317 | -1.3# | 122   | -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                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.193 | 0.195 | -1.0  | 118   | -0.03    |
| 47 T  | Bromodichloromethane        | 0.422 | 0.425 | -0.7  | 119   | -0.02    |
| 48 T  | Methyl methacrylate         | 0.164 | 0.153 | 6.7   | 114   | -0.02    |
| 49 T  | 1,4-Dioxane                 | 0.002 | 0.001 | 50.0# | 101   | -0.02    |
| 50 S  | Toluene-d8                  | 1.067 | 1.072 | -0.5  | 117   | -0.02    |
| 51 T  | 4-Methyl-2-Pentanone        | 0.195 | 0.169 | 13.3  | 107   | -0.03    |
| 52 CM | Toluene                     | 0.786 | 0.759 | 3.4#  | 125   | -0.02    |
| 53 T  | t-1,3-Dichloropropene       | 0.351 | 0.347 | 1.1   | 122   | -0.02    |
| 54 T  | cis-1,3-Dichloropropene     | 0.468 | 0.496 | -6.0  | 130   | -0.02    |
| 55 T  | 1,1,2-Trichloroethane       | 0.231 | 0.225 | 2.6   | 116   | -0.02    |
| 56 T  | Ethyl methacrylate          | 0.257 | 0.234 | 8.9   | 114   | -0.02    |
| 57 T  | 1,3-Dichloropropane         | 0.385 | 0.366 | 4.9   | 117   | -0.02    |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.044 | 0.033 | 25.0  | 94    | -0.02    |
| 59 T  | 2-Hexanone                  | 0.136 | 0.116 | 14.7  | 107   | -0.02    |
| 60 T  | Dibromochloromethane        | 0.321 | 0.327 | -1.9  | 121   | -0.02    |
| 61 T  | 1,2-Dibromoethane           | 0.250 | 0.240 | 4.0   | 117   | -0.03    |
| 62 S  | 4-Bromofluorobenzene        | 0.432 | 0.403 | 6.7   | 116   | -0.02    |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 115   | -0.03    |
| 64 T  | Tetrachloroethene           | 0.409 | 0.431 | -5.4  | 126   | -0.02    |
| 65 PM | Chlorobenzene               | 1.015 | 1.028 | -1.3  | 123   | -0.02    |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.398 | 0.408 | -2.5  | 123   | -0.02    |
| 67 C  | Ethyl Benzene               | 1.687 | 1.675 | 0.7#  | 123   | -0.02    |
| 68 T  | m/p-Xylenes                 | 0.646 | 0.657 | -1.7  | 126   | -0.02    |
| 69 T  | o-Xylene                    | 0.689 | 0.738 | -7.1  | 126   | -0.02    |
| 70 T  | Styrene                     | 0.975 | 0.965 | 1.0   | 122   | -0.02    |
| 71 P  | Bromoform                   | 0.216 | 0.210 | 2.8   | 114   | -0.02    |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 117   | -0.02    |
| 73 T  | Isopropylbenzene            | 3.560 | 3.620 | -1.7  | 123   | -0.02    |
| 74 T  | N-amyl acetate              | 0.854 | 0.819 | 4.1   | 113   | -0.02    |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.638 | 0.573 | 10.2  | 108   | -0.02    |
| 76 T  | 1,2,3-Trichloropropane      | 0.434 | 0.407 | 6.2   | 113   | -0.02    |
| 77 T  | Bromobenzene                | 0.879 | 0.896 | -1.9  | 127   | -0.02    |
| 78 T  | n-propylbenzene             | 4.085 | 4.139 | -1.3  | 124   | -0.02    |
| 79 T  | 2-Chlorotoluene             | 2.288 | 2.272 | 0.7   | 117   | -0.02    |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.845 | 3.041 | -6.9  | 128   | -0.02    |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.208 | 0.204 | 1.9   | 114   | -0.02    |
| 82 T  | 4-Chlorotoluene             | 2.375 | 2.459 | -3.5  | 127   | -0.02    |
| 83 T  | tert-Butylbenzene           | 3.151 | 3.240 | -2.8  | 119   | -0.02    |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.827 | 2.994 | -5.9  | 131   | -0.02    |
| 85 T  | sec-Butylbenzene            | 4.075 | 4.120 | -1.1  | 120   | -0.02    |
| 86 T  | p-Isopropyltoluene          | 3.420 | 3.385 | 1.0   | 120   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.715 | 1.652 | 3.7   | 120   | -0.02    |
| 88 T  | 1,4-Dichlorobenzene         | 1.649 | 1.679 | -1.8  | 126   | 0.00     |
| 89 T  | n-Butylbenzene              | 3.230 | 3.176 | 1.7   | 119   | 0.00     |

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|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.795 | 0.864 | -8.7 | 125   | -0.02    |
| 91 T | 1,2-Dichlorobenzene         | 1.631 | 1.582 | 3.0  | 119   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.101 | 0.102 | -1.0 | 115   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.169 | 1.151 | 1.5  | 121   | -0.02    |
| 94 T | Hexachlorobutadiene         | 0.722 | 0.758 | -5.0 | 126   | -0.02    |
| 95 T | Naphthalene                 | 2.045 | 1.975 | 3.4  | 113   | -0.02    |
| 96 T | 1,2,3-Trichlorobenzene      | 1.073 | 1.093 | -1.9 | 120   | -0.02    |

(#) = Out of Range

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