

Data Path : Z:\voasrv\HPCHEM1\MSVOA D\Data\VD073118\  
 Data File : VD059648.D  
 Acq On : 31 Jul 2018 12:04  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jul 31 12:28:58 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D072418S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 25 07:10:33 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                    | AvqRF | CCRF  | %Dev    | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|---------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0     | 119   | 0.01     |
| 2 T   | Dichlorodifluoromethane     | 0.638 | 0.527 | 17.4    | 114   | 0.03     |
| 3 P   | Chloromethane               | 0.313 | 0.286 | 8.6     | 127   | 0.03     |
| 4 C   | Vinyl Chloride              | 0.325 | 0.337 | -3.7#   | 127   | 0.02     |
| 5 T   | Bromomethane                | 0.062 | 0.070 | -12.9   | 109   | 0.02     |
| 6 T   | Chloroethane                | 0.095 | 0.190 | -100.0# | 137   | 0.03     |
| 7 T   | Trichlorofluoromethane      | 0.555 | 0.648 | -16.8   | 136   | 0.03     |
| 8 T   | Diethyl Ether               | 0.098 | 0.110 | -12.2   | 134   | 0.03     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.292 | 0.315 | -7.9    | 129   | 0.03     |
| 10 T  | Methyl Iodide               | 0.352 | 0.339 | 3.7     | 111   | 0.03     |
| 11 T  | Tert butyl alcohol          | 0.025 | 0.025 | 0.0     | 121   | 0.01     |
| 12 CM | 1,1-Dichloroethene          | 0.212 | 0.228 | -7.5#   | 122   | 0.03     |
| 13 T  | Acrolein                    | 0.013 | 0.007 | 46.2#   | 73    | 0.02     |
| 14 T  | Allyl chloride              | 0.514 | 0.501 | 2.5     | 115   | 0.03     |
| 15 T  | Acrylonitrile               | 0.054 | 0.058 | -7.4    | 130   | 0.02     |
| 16 T  | Acetone                     | 0.095 | 0.111 | -16.8   | 140   | 0.01     |
| 17 T  | Carbon Disulfide            | 0.842 | 0.724 | 14.0    | 101   | 0.02     |
| 18 T  | Methyl Acetate              | 0.190 | 0.190 | 0.0     | 127   | 0.02     |
| 19 T  | Methyl tert-butyl Ether     | 0.710 | 1.081 | -52.3#  | 195#  | 0.02     |
| 20 T  | Methylene Chloride          | 0.271 | 0.246 | 9.2     | 119   | 0.02     |
| 21 T  | trans-1,2-Dichloroethene    | 0.228 | 0.341 | -49.6#  | 177#  | 0.03     |
| 22 T  | Diisopropyl ether           | 1.351 | 1.356 | -0.4    | 128   | 0.02     |
| 23 T  | Vinyl Acetate               | 0.857 | 0.875 | -2.1    | 129   | 0.03     |
| 24 P  | 1,1-Dichloroethane          | 0.853 | 0.841 | 1.4     | 117   | 0.03     |
| 25 T  | 2-Butanone                  | 0.145 | 0.143 | 1.4     | 131   | 0.02     |
| 26 T  | 2,2-Dichloropropane         | 0.873 | 0.952 | -9.0    | 134   | 0.02     |
| 27 T  | cis-1,2-Dichloroethene      | 0.456 | 0.446 | 2.2     | 119   | 0.02     |
| 28 T  | Bromochloromethane          | 0.337 | 0.336 | 0.3     | 117   | 0.03     |
| 29    | Tetrahydrofuran             | 0.067 | 0.064 | 4.5     | 123   | 0.02     |
| 30 C  | Chloroform                  | 1.020 | 1.084 | -6.3#   | 135   | 0.03     |
| 31 T  | Cyclohexane                 | 0.656 | 0.550 | 16.2    | 123   | 0.02     |
| 32 T  | 1,1,1-Trichloroethane       | 0.988 | 1.044 | -5.7    | 127   | 0.02     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.629 | 0.669 | -6.4    | 129   | 0.01     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0     | 112   | 0.01     |
| 35 S  | Dibromofluoromethane        | 0.429 | 0.474 | -10.5   | 119   | 0.02     |
| 36 T  | 1,1-Dichloropropene         | 0.502 | 0.554 | -10.4   | 134   | 0.02     |
| 37 T  | Ethyl Acetate               | 0.258 | 0.297 | -15.1   | 131   | 0.02     |
| 38 T  | Carbon Tetrachloride        | 0.687 | 0.774 | -12.7   | 127   | 0.03     |
| 39 T  | Methylcyclohexane           | 0.461 | 0.473 | -2.6    | 117   | 0.01     |
| 40 TM | Benzene                     | 1.029 | 1.049 | -1.9    | 117   | 0.02     |
| 41 T  | Methacrylonitrile           | 0.129 | 0.133 | -3.1    | 126   | 0.02     |
| 42 TM | 1,2-Dichloroethane          | 0.620 | 0.724 | -16.8   | 130   | 0.01     |
| 43 T  | Isopropyl Acetate           | 0.358 | 0.383 | -7.0    | 121   | 0.01     |
| 44 TM | Trichloroethene             | 0.373 | 0.395 | -5.9    | 117   | 0.01     |
| 45 C  | 1,2-Dichloropropane         | 0.288 | 0.301 | -4.5#   | 121   | 0.01     |

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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                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.244 | 0.259 | -6.1  | 122   | 0.01     |
| 47 T  | Bromodichloromethane        | 0.582 | 0.662 | -13.7 | 127   | 0.01     |
| 48 T  | Methyl methacrylate         | 0.237 | 0.282 | -19.0 | 131   | 0.01     |
| 49 T  | 1,4-Dioxane                 | 0.002 | 0.002 | 0.0   | 120   | 0.02     |
| 50 S  | Toluene-d8                  | 0.973 | 0.959 | 1.4   | 111   | 0.01     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.239 | 0.251 | -5.0  | 125   | 0.01     |
| 52 CM | Toluene                     | 0.682 | 0.692 | -1.5# | 117   | 0.01     |
| 53 T  | t-1,3-Dichloropropene       | 0.525 | 0.585 | -11.4 | 132   | 0.01     |
| 54 T  | cis-1,3-Dichloropropene     | 0.521 | 0.556 | -6.7  | 124   | 0.01     |
| 55 T  | 1,1,2-Trichloroethane       | 0.256 | 0.264 | -3.1  | 118   | 0.01     |
| 56 T  | Ethyl methacrylate          | 0.291 | 0.320 | -10.0 | 123   | 0.01     |
| 57 T  | 1,3-Dichloropropane         | 0.407 | 0.441 | -8.4  | 125   | 0.01     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.137 | 0.155 | -13.1 | 122   | 0.01     |
| 59 T  | 2-Hexanone                  | 0.190 | 0.195 | -2.6  | 126   | 0.01     |
| 60 T  | Dibromochloromethane        | 0.426 | 0.464 | -8.9  | 124   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.304 | 0.327 | -7.6  | 124   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.438 | 0.456 | -4.1  | 121   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 112   | 0.01     |
| 64 T  | Tetrachloroethene           | 0.453 | 0.470 | -3.8  | 118   | 0.01     |
| 65 PM | Chlorobenzene               | 1.025 | 1.040 | -1.5  | 115   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.446 | 0.496 | -11.2 | 128   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.762 | 1.910 | -8.4# | 125   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.588 | 0.617 | -4.9  | 124   | 0.00     |
| 69 T  | o-Xylene                    | 0.571 | 0.606 | -6.1  | 124   | 0.00     |
| 70 T  | Styrene                     | 0.947 | 1.027 | -8.4  | 129   | 0.01     |
| 71 P  | Bromoform                   | 0.363 | 0.402 | -10.7 | 122   | 0.01     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 119   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.532 | 3.460 | 2.0   | 133   | 0.00     |
| 74 T  | N-amyl acetate              | 1.210 | 1.182 | 2.3   | 127   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.721 | 0.692 | 4.0   | 120   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.827 | 0.806 | 2.5   | 120   | 0.00     |
| 77 T  | Bromobenzene                | 1.034 | 1.031 | 0.3   | 124   | 0.01     |
| 78 T  | n-propylbenzene             | 4.292 | 4.146 | 3.4   | 124   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.559 | 2.556 | 0.1   | 127   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.789 | 2.848 | -2.1  | 131   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.211 | 0.213 | -0.9  | 126   | 0.01     |
| 82 T  | 4-Chlorotoluene             | 2.894 | 2.936 | -1.5  | 130   | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.140 | 3.164 | -0.8  | 129   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.965 | 3.029 | -2.2  | 129   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.588 | 3.524 | 1.8   | 127   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.024 | 3.084 | -2.0  | 132   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.749 | 1.738 | 0.6   | 125   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.685 | 1.677 | 0.5   | 122   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.919 | 3.024 | -3.6  | 133   | 0.00     |

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|      | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.808 | 0.822 | -1.7  | 126   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.467 | 1.409 | 4.0   | 125   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.145 | 0.162 | -11.7 | 136   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.215 | 1.245 | -2.5  | 130   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.959 | 0.997 | -4.0  | 129   | 0.00     |
| 95 T | Naphthalene                 | 1.728 | 1.693 | 2.0   | 128   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.100 | 1.098 | 0.2   | 129   | 0.00     |

(#) = Out of Range

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