

Data Path : Z:\voasrv\HPCHEM1\MSVOA D\Data\VD052319\  
 Data File : VD062524.D  
 Acq On : 23 May 2019 18:22  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00q/5ml/MSVOA D/SOIL  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 LabSampleId :  
 VSTDCCC050

Quant Time: May 24 01:55:31 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D052019S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 21 03:32:39 2019  
 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   | 54    | -0.01    |
| 2 T   | Dichlorodifluoromethane     | 0.556 | 0.445 | 20.0  | 51    | -0.01    |
| 3 P   | Chloromethane               | 0.346 | 0.317 | 8.4   | 54    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.364 | 0.364 | 0.0   | 56    | -0.01    |
| 5 T   | Bromomethane                | 0.157 | 0.175 | -11.5 | 62    | 0.00     |
| 6 T   | Chloroethane                | 0.176 | 0.197 | -11.9 | 59    | -0.02    |
| 7 T   | Trichlorofluoromethane      | 0.842 | 0.749 | 11.0  | 48#   | 0.00     |
| 8 T   | Diethyl Ether               | 0.114 | 0.106 | 7.0   | 53    | -0.01    |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.501 | 0.421 | 16.0  | 45#   | -0.01    |
| 10 T  | Methyl Iodide               | 0.699 | 0.752 | -7.6  | 54    | -0.01    |
| 11 T  | Tert butyl alcohol          | 0.025 | 0.027 | -8.0  | 59    | -0.02    |
| 12 CM | 1,1-Dichloroethene          | 0.370 | 0.308 | 16.8# | 45#   | -0.01    |
| 13 T  | Acrolein                    | 0.021 | 0.023 | -9.5  | 64    | -0.01    |
| 14 T  | Allyl chloride              | 0.546 | 0.512 | 6.2   | 54    | -0.01    |
| 15 T  | Acrylonitrile               | 0.057 | 0.054 | 5.3   | 55    | -0.03    |
| 16 T  | Acetone                     | 0.096 | 0.092 | 4.2   | 49#   | -0.01    |
| 17 T  | Carbon Disulfide            | 1.121 | 0.989 | 11.8  | 48#   | -0.01    |
| 18 T  | Methyl Acetate              | 0.166 | 0.162 | 2.4   | 56    | -0.01    |
| 19 T  | Methyl tert-butyl Ether     | 0.855 | 0.905 | -5.8  | 59    | -0.01    |
| 20 T  | Methylene Chloride          | 0.515 | 0.378 | 26.6# | 49#   | -0.01    |
| 21 T  | trans-1,2-Dichloroethene    | 0.433 | 0.398 | 8.1   | 51    | -0.01    |
| 22 T  | Diisopropyl ether           | 1.162 | 1.131 | 2.7   | 53    | -0.02    |
| 23 T  | Vinyl Acetate               | 0.702 | 0.690 | 1.7   | 52    | -0.02    |
| 24 P  | 1,1-Dichloroethane          | 0.748 | 0.700 | 6.4   | 53    | -0.02    |
| 25 T  | 2-Butanone                  | 0.100 | 0.092 | 8.0   | 49#   | -0.01    |
| 26 T  | 2,2-Dichloropropane         | 0.807 | 0.788 | 2.4   | 52    | -0.01    |
| 27 T  | cis-1,2-Dichloroethene      | 0.467 | 0.420 | 10.1  | 49#   | -0.02    |
| 28 T  | Bromochloromethane          | 0.269 | 0.259 | 3.7   | 52    | -0.01    |
| 29    | Tetrahydrofuran             | 0.048 | 0.043 | 10.4  | 50#   | -0.02    |
| 30 C  | Chloroform                  | 0.954 | 0.969 | -1.6# | 54    | -0.01    |
| 31 T  | Cyclohexane                 | 0.505 | 0.443 | 12.3  | 46#   | -0.01    |
| 32 T  | 1,1,1-Trichloroethane       | 0.963 | 0.977 | -1.5  | 52    | -0.02    |
| 33 S  | 1,2-Dichloroethane-d4       | 0.535 | 0.592 | -10.7 | 58    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 53    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.451 | 0.440 | 2.4   | 50    | -0.01    |
| 36 T  | 1,1-Dichloropropene         | 0.478 | 0.472 | 1.3   | 54    | -0.01    |
| 37 T  | Ethyl Acetate               | 0.186 | 0.191 | -2.7  | 56    | -0.01    |
| 38 T  | Carbon Tetrachloride        | 0.710 | 0.746 | -5.1  | 57    | -0.01    |
| 39 T  | Methylcyclohexane           | 0.394 | 0.386 | 2.0   | 54    | 0.00     |
| 40 TM | Benzene                     | 0.938 | 0.889 | 5.2   | 50    | -0.01    |
| 41 T  | Methacrylonitrile           | 0.233 | 0.230 | 1.3   | 52    | -0.01    |
| 42 TM | 1,2-Dichloroethane          | 0.497 | 0.525 | -5.6  | 57    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.246 | 0.254 | -3.3  | 56    | 0.00     |
| 44 TM | Trichloroethene             | 0.375 | 0.363 | 3.2   | 50#   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.229 | 0.225 | 1.7#  | 54    | 0.00     |

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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              | 0.207 | 0.211 | -1.9   | 54    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.527 | 0.578 | -9.7   | 57    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.166 | 0.171 | -3.0   | 52    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.001 | 0.001 | 0.0    | 50    | 0.00     |
| 50 S  | Toluene-d8                  | 0.987 | 0.958 | 2.9    | 51    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.163 | 0.163 | 0.0    | 53    | 0.00     |
| 52 CM | Toluene                     | 0.642 | 0.651 | -1.4#  | 54    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.439 | 0.465 | -5.9   | 56    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.458 | 0.480 | -4.8   | 53    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.218 | 0.224 | -2.8   | 58    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.233 | 0.232 | 0.4    | 53    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.334 | 0.340 | -1.8   | 55    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.119 | 0.122 | -2.5   | 59    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.118 | 0.124 | -5.1   | 54    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.418 | 0.465 | -11.2  | 58    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.268 | 0.262 | 2.2    | 51    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.432 | 0.451 | -4.4   | 54    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 50    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.419 | 0.440 | -5.0   | 52    | 0.00     |
| 65 PM | Chlorobenzene               | 0.962 | 1.000 | -4.0   | 55    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.444 | 0.519 | -16.9  | 60    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.656 | 1.797 | -8.5#  | 55    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.594 | 0.580 | 2.4    | 49#   | 0.00     |
| 69 T  | o-Xylene                    | 0.561 | 0.594 | -5.9   | 55    | 0.00     |
| 70 T  | Styrene                     | 0.954 | 1.033 | -8.3   | 57    | 0.00     |
| 71 P  | Bromoform                   | 0.295 | 0.359 | -21.7# | 62    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 58    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.152 | 3.007 | 4.6    | 53    | 0.00     |
| 74 T  | N-amyl acetate              | 0.778 | 0.740 | 4.9    | 57    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.569 | 0.511 | 10.2   | 55    | 0.02     |
| 76 T  | 1,2,3-Trichloropropane      | 0.589 | 0.599 | -1.7   | 61    | 0.00     |
| 77 T  | Bromobenzene                | 0.894 | 0.854 | 4.5    | 55    | 0.02     |
| 78 T  | n-propylbenzene             | 3.651 | 3.352 | 8.2    | 57    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.215 | 2.039 | 7.9    | 58    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.729 | 2.555 | 6.4    | 54    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.166 | 0.165 | 0.6    | 60    | 0.02     |
| 82 T  | 4-Chlorotoluene             | 2.551 | 2.420 | 5.1    | 55    | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.027 | 2.717 | 10.2   | 53    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.796 | 2.593 | 7.3    | 55    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.156 | 3.001 | 4.9    | 56    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.860 | 2.843 | 0.6    | 57    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.579 | 1.570 | 0.6    | 56    | 0.02     |
| 88 T  | 1,4-Dichlorobenzene         | 1.524 | 1.533 | -0.6   | 59    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.760 | 2.657 | 3.7    | 58    | 0.00     |

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|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.790 | 0.845 | -7.0 | 63    | 0.02     |
| 91 T | 1,2-Dichlorobenzene         | 1.343 | 1.373 | -2.2 | 64    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.108 | 0.109 | -0.9 | 58    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.057 | 1.003 | 5.1  | 54    | 0.02     |
| 94 T | Hexachlorobutadiene         | 0.781 | 0.753 | 3.6  | 58    | 0.00     |
| 95 T | Naphthalene                 | 1.444 | 1.487 | -3.0 | 58    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.867 | 0.771 | 11.1 | 51    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 5