

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW081219\  
 Data File : VW011884.D  
 Acq On : 13 Aug 2019 06:45  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 51 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 LabSampleId :  
 VSTDCCC050

Quant Time: Aug 13 10:10:34 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W072719S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jul 27 00:23:30 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    | 72    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.279 | 0.231 | 17.2   | 58    | 0.00     |
| 3 P   | Chloromethane               | 0.483 | 0.442 | 8.5    | 68    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.582 | 0.495 | 14.9#  | 59    | 0.00     |
| 5 T   | Bromomethane                | 0.322 | 0.273 | 15.2   | 60    | -0.03    |
| 6 T   | Chloroethane                | 0.332 | 0.305 | 8.1    | 63    | -0.02    |
| 7 T   | Trichlorofluoromethane      | 0.260 | 0.243 | 6.5    | 62    | -0.01    |
| 8 T   | Diethyl Ether               | 0.295 | 0.371 | -25.8# | 85    | -0.01    |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.493 | 0.462 | 6.3    | 63    | -0.01    |
| 10 T  | Methyl Iodide               | 0.697 | 0.748 | -7.3   | 71    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.048 | 0.054 | -12.5  | 91    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.521 | 0.483 | 7.3#   | 63    | 0.00     |
| 13 T  | Acrolein                    | 0.041 | 0.035 | 14.6   | 62    | 0.00     |
| 14 T  | Allyl chloride              | 1.108 | 1.192 | -7.6   | 72    | 0.00     |
| 15 T  | Acrylonitrile               | 0.147 | 0.207 | -40.8# | 94    | 0.00     |
| 16 T  | Acetone                     | 0.183 | 0.174 | 4.9    | 65    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.630 | 1.428 | 12.4   | 58    | -0.01    |
| 18 T  | Methyl Acetate              | 0.410 | 0.686 | -67.3# | 112   | -0.01    |
| 19 T  | Methyl tert-butyl Ether     | 0.826 | 1.101 | -33.3# | 88    | 0.00     |
| 20 T  | Methylene Chloride          | 0.630 | 0.676 | -7.3   | 78    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.561 | 0.592 | -5.5   | 72    | 0.00     |
| 22 T  | Diisopropyl ether           | 2.088 | 2.609 | -25.0# | 84    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.312 | 1.620 | -23.5# | 81    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.118 | 1.280 | -14.5  | 78    | 0.00     |
| 25 T  | 2-Butanone                  | 0.239 | 0.298 | -24.7# | 82    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.688 | 0.567 | 17.6   | 60    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.618 | 0.702 | -13.6  | 78    | 0.00     |
| 28 T  | Bromochloromethane          | 0.496 | 0.670 | -35.1# | 101   | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.137 | 0.197 | -43.8# | 95    | 0.00     |
| 30 C  | Chloroform                  | 1.032 | 1.208 | -17.1# | 81    | 0.00     |
| 31 T  | Cyclohexane                 | 1.073 | 0.938 | 12.6   | 61    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.786 | 0.846 | -7.6   | 73    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.574 | 0.775 | -35.0# | 95    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 79    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.281 | 0.329 | -17.1  | 88    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.520 | 0.485 | 6.7    | 69    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.299 | 0.377 | -26.1# | 91    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.445 | 0.419 | 5.8    | 69    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.572 | 0.500 | 12.6   | 63    | 0.00     |
| 40 TM | Benzene                     | 1.456 | 1.503 | -3.2   | 77    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.179 | 0.235 | -31.3# | 97    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.456 | 0.542 | -18.9  | 88    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.550 | 0.701 | -27.5# | 92    | 0.00     |
| 44 TM | Trichloroethene             | 0.350 | 0.352 | -0.6   | 74    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.390 | 0.433 | -11.0# | 81    | 0.00     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW081219\  
 Data File : VW011884.D  
 Acq On : 13 Aug 2019 06:45  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 51 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 LabSampleId :  
 VSTDCCC050

Quant Time: Aug 13 10:10:34 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W072719S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jul 27 00:23:30 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) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 46 T  | Dibromomethane              | 0.178 | 0.212 | -19.1  | 87    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.467 | 0.535 | -14.6  | 84    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.264 | 0.347 | -31.4# | 93    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.003 | 0.003 | 0.0    | 94    | 0.00     |
| 50 S  | Toluene-d8                  | 1.148 | 1.275 | -11.1  | 84    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.286 | 0.382 | -33.6# | 95    | 0.00     |
| 52 CM | Toluene                     | 0.879 | 0.922 | -4.9#  | 77    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.487 | 0.553 | -13.6  | 82    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.579 | 0.634 | -9.5   | 79    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.252 | 0.303 | -20.2# | 88    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.369 | 0.471 | -27.6# | 89    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.477 | 0.569 | -19.3  | 87    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.168 | 0.242 | -44.0# | 102   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.202 | 0.260 | -28.7# | 89    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.280 | 0.334 | -19.3  | 86    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.239 | 0.287 | -20.1# | 87    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.409 | 0.477 | -16.6  | 88    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 82    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.326 | 0.339 | -4.0   | 82    | 0.00     |
| 65 PM | Chlorobenzene               | 1.005 | 1.027 | -2.2   | 79    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.350 | 0.378 | -8.0   | 82    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.915 | 1.910 | 0.3#   | 76    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.696 | 0.694 | 0.3    | 76    | 0.00     |
| 69 T  | o-Xylene                    | 0.647 | 0.673 | -4.0   | 78    | 0.00     |
| 70 T  | Styrene                     | 1.119 | 1.190 | -6.3   | 80    | 0.00     |
| 71 P  | Bromoform                   | 0.179 | 0.213 | -19.0  | 87    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 84    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.730 | 3.549 | 4.9    | 75    | 0.00     |
| 74 T  | N-amyl acetate              | 1.168 | 1.357 | -16.2  | 87    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.702 | 0.825 | -17.5  | 91    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.529 | 0.682 | -28.9# | 107   | 0.00     |
| 77 T  | Bromobenzene                | 0.824 | 0.854 | -3.6   | 81    | 0.00     |
| 78 T  | n-propylbenzene             | 4.540 | 4.335 | 4.5    | 75    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.615 | 2.588 | 1.0    | 79    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.127 | 3.110 | 0.5    | 77    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.230 | 0.252 | -9.6   | 82    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.744 | 2.723 | 0.8    | 78    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.615 | 2.572 | 1.6    | 77    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.150 | 3.164 | -0.4   | 79    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.731 | 3.534 | 5.3    | 74    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.385 | 3.218 | 4.9    | 74    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.617 | 1.618 | -0.1   | 79    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.608 | 1.597 | 0.7    | 79    | 0.00     |
| 89 T  | n-Butylbenzene              | 3.378 | 3.100 | 8.2    | 72    | 0.00     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW081219\  
Data File : VW011884.D  
Acq On : 13 Aug 2019 06:45  
Operator : SY/VA  
Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 51 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
LabSampleId :  
VSTDCCC050

Quant Time: Aug 13 10:10:34 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W072719S.M  
Quant Title : SW846 8260  
QLast Update : Sat Jul 27 00:23:30 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                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|-----------------------------|-------|-------|--------|-------|----------|
| 90 T | Hexachloroethane            | 0.599 | 0.602 | -0.5   | 78    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.430 | 1.486 | -3.9   | 82    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.120 | 0.147 | -22.5# | 93    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.008 | 1.017 | -0.9   | 78    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.628 | 0.572 | 8.9    | 72    | 0.00     |
| 95 T | Naphthalene                 | 1.787 | 2.188 | -22.4# | 89    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.883 | 0.959 | -8.6   | 84    | 0.00     |

(#) = Out of Range

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