

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW012919\  
 Data File : VW008442.D  
 Acq On : 29 Jan 2019 10:21  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 30 01:07:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W012419S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jan 25 11:07:41 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) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0    | 73    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.253 | 0.302 | -19.4  | 75    | 0.00     |
| 3 P   | Chloromethane               | 0.408 | 0.363 | 11.0   | 63    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.520 | 0.556 | -6.9#  | 72    | 0.00     |
| 5 T   | Bromomethane                | 0.335 | 0.385 | -14.9  | 81    | 0.00     |
| 6 T   | Chloroethane                | 0.318 | 0.375 | -17.9  | 81    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.389 | 0.454 | -16.7  | 75    | 0.00     |
| 8 T   | Diethyl Ether               | 0.249 | 0.248 | 0.4    | 69    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.452 | 0.523 | -15.7  | 79    | 0.00     |
| 10 T  | Methyl Iodide               | 0.714 | 0.841 | -17.8  | 80    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.040 | 0.034 | 15.0   | 62    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.458 | 0.514 | -12.2# | 78    | 0.00     |
| 13 T  | Acrolein                    | 0.034 | 0.031 | 8.8    | 73    | 0.00     |
| 14 T  | Allyl chloride              | 0.869 | 0.877 | -0.9   | 69    | 0.00     |
| 15 T  | Acrylonitrile               | 0.108 | 0.100 | 7.4    | 64    | 0.00     |
| 16 T  | Acetone                     | 0.110 | 0.123 | -11.8  | 80    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.462 | 1.528 | -4.5   | 71    | 0.00     |
| 18 T  | Methyl Acetate              | 0.294 | 0.267 | 9.2    | 62    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 0.757 | 0.756 | 0.1    | 69    | 0.00     |
| 20 T  | Methylene Chloride          | 0.508 | 0.510 | -0.4   | 75    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.515 | 0.554 | -7.6   | 75    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.647 | 1.581 | 4.0    | 67    | 0.00     |
| 23 T  | Vinyl Acetate               | 0.973 | 0.890 | 8.5    | 63    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.932 | 0.962 | -3.2   | 71    | 0.00     |
| 25 T  | 2-Butanone                  | 0.153 | 0.147 | 3.9    | 66    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.630 | 0.682 | -8.3   | 76    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.561 | 0.605 | -7.8   | 75    | 0.00     |
| 28 T  | Bromochloromethane          | 0.428 | 0.368 | 14.0   | 66    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.097 | 0.085 | 12.4   | 59    | 0.00     |
| 30 C  | Chloroform                  | 0.917 | 0.952 | -3.8#  | 71    | 0.00     |
| 31 T  | Cyclohexane                 | 0.964 | 0.904 | 6.2    | 68    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.792 | 0.868 | -9.6   | 76    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.491 | 0.505 | -2.9   | 75    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 69    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.292 | 0.349 | -19.5  | 81    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.472 | 0.533 | -12.9  | 71    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.209 | 0.199 | 4.8    | 60    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.475 | 0.564 | -18.7  | 76    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.620 | 0.681 | -9.8   | 70    | 0.00     |
| 40 TM | Benzene                     | 1.311 | 1.437 | -9.6   | 70    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.124 | 0.123 | 0.8    | 63    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.380 | 0.396 | -4.2   | 68    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.434 | 0.409 | 5.8    | 59    | 0.00     |
| 44 TM | Trichloroethene             | 0.356 | 0.413 | -16.0  | 75    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.327 | 0.345 | -5.5#  | 68    | 0.00     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW012919\  
 Data File : VW008442.D  
 Acq On : 29 Jan 2019 10:21  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jan 30 01:07:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W012419S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jan 25 11:07:41 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) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 46 T  | Dibromomethane              | 0.168 | 0.175 | -4.2   | 68    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.445 | 0.480 | -7.9   | 70    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.212 | 0.207 | 2.4    | 63    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.003 | 0.003 | 0.0    | 70    | 0.00     |
| 50 S  | Toluene-d8                  | 1.172 | 1.381 | -17.8  | 80    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.214 | 0.199 | 7.0    | 60    | 0.00     |
| 52 CM | Toluene                     | 0.865 | 0.936 | -8.2#  | 70    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.473 | 0.492 | -4.0   | 66    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.537 | 0.570 | -6.1   | 68    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.233 | 0.245 | -5.2   | 68    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.327 | 0.312 | 4.6    | 62    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.418 | 0.430 | -2.9   | 67    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.159 | 0.153 | 3.8    | 70    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.151 | 0.155 | -2.6   | 65    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.300 | 0.316 | -5.3   | 68    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.231 | 0.242 | -4.8   | 68    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.451 | 0.496 | -10.0  | 76    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 67    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.339 | 0.398 | -17.4  | 74    | 0.00     |
| 65 PM | Chlorobenzene               | 1.021 | 1.174 | -15.0  | 72    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.365 | 0.416 | -14.0  | 71    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.876 | 2.133 | -13.7# | 71    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.728 | 0.824 | -13.2  | 70    | 0.00     |
| 69 T  | o-Xylene                    | 0.692 | 0.774 | -11.8  | 70    | 0.00     |
| 70 T  | Styrene                     | 1.142 | 1.248 | -9.3   | 68    | 0.00     |
| 71 P  | Bromoform                   | 0.205 | 0.216 | -5.4   | 65    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 64    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.728 | 4.371 | -17.2  | 70    | 0.00     |
| 74 T  | N-amyl acetate              | 0.960 | 0.939 | 2.2    | 59    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.590 | 0.625 | -5.9   | 64    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.435 | 0.454 | -4.4   | 63    | 0.00     |
| 77 T  | Bromobenzene                | 0.814 | 0.955 | -17.3  | 71    | 0.00     |
| 78 T  | n-propylbenzene             | 4.477 | 5.215 | -16.5  | 69    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.526 | 2.883 | -14.1  | 68    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.116 | 3.634 | -16.6  | 70    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.220 | 0.230 | -4.5   | 62    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.690 | 3.018 | -12.2  | 67    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.773 | 3.290 | -18.6  | 71    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.167 | 3.682 | -16.3  | 70    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.960 | 4.664 | -17.8  | 70    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.468 | 4.115 | -18.7  | 70    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.644 | 1.923 | -17.0  | 70    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.634 | 1.884 | -15.3  | 69    | 0.00     |
| 89 T  | n-Butylbenzene              | 3.405 | 3.936 | -15.6  | 68    | 0.00     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW012919\  
Data File : VW008442.D  
Acq On : 29 Jan 2019 10:21  
Operator : SY/VA  
Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA\_W/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
LabSampleId :  
VSTDCCC050

Quant Time: Jan 30 01:07:42 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W012419S.M  
Quant Title : SW846 8260  
QLast Update : Fri Jan 25 11:07:41 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            | 0.678 | 0.804 | -18.6  | 70    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.455 | 1.646 | -13.1  | 68    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.112 | 0.110 | 1.8    | 60    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.038 | 1.201 | -15.7  | 70    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.626 | 0.760 | -21.4# | 74    | 0.00     |
| 95 T | Naphthalene                 | 1.823 | 1.980 | -8.6   | 64    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.881 | 1.005 | -14.1  | 68    | 0.00     |

(#) = Out of Range

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