

Data Path : Z:\voasrv\HPCHEM1\MSVOA D\Data\VD121619\  
 Data File : VD064534.D  
 Acq On : 16 Dec 2019 20:21  
 Operator : VA/SY  
 Sample : VSTDCCC050  
 Misc : 5.00G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 LabSampleId :  
 VSTDCCC050

Quant Time: Dec 17 04:16:28 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D112719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Nov 29 07:18:03 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    | 81    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.453 | 0.416 | 8.2    | 78    | 0.00     |
| 3 P   | Chloromethane               | 0.571 | 0.563 | 1.4    | 84    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.660 | 0.671 | -1.7#  | 83    | 0.00     |
| 5 T   | Bromomethane                | 0.488 | 0.485 | 0.6    | 86    | 0.00     |
| 6 T   | Chloroethane                | 0.441 | 0.454 | -2.9   | 85    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 1.097 | 1.138 | -3.7   | 85    | 0.00     |
| 8 T   | Diethyl Ether               | 0.228 | 0.239 | -4.8   | 86    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.470 | 0.481 | -2.3   | 85    | 0.00     |
| 10 T  | Methyl Iodide               | 0.497 | 0.555 | -11.7  | 80    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.029 | 0.028 | 3.4    | 76    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.451 | 0.458 | -1.6#  | 83    | 0.00     |
| 13 T  | Acrolein                    | 0.039 | 0.042 | -7.7   | 91    | 0.00     |
| 14 T  | Allyl chloride              | 0.703 | 0.731 | -4.0   | 84    | 0.00     |
| 15 T  | Acrylonitrile               | 0.100 | 0.104 | -4.0   | 85    | 0.00     |
| 16 T  | Acetone                     | 0.091 | 0.081 | 11.0   | 68    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.427 | 1.351 | 5.3    | 76    | 0.00     |
| 18 T  | Methyl Acetate              | 0.267 | 0.266 | 0.4    | 84    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.034 | 1.106 | -7.0   | 85    | 0.00     |
| 20 T  | Methylene Chloride          | 0.526 | 0.526 | 0.0    | 87    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.510 | 0.534 | -4.7   | 85    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.388 | 1.508 | -8.6   | 87    | 0.00     |
| 23 T  | Vinyl Acetate               | 0.819 | 0.882 | -7.7   | 84    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.835 | 0.909 | -8.9   | 87    | 0.00     |
| 25 T  | 2-Butanone                  | 0.129 | 0.128 | 0.8    | 79    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.726 | 0.771 | -6.2   | 86    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.556 | 0.592 | -6.5   | 86    | 0.00     |
| 28 T  | Bromochloromethane          | 0.285 | 0.313 | -9.8   | 83    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.082 | 0.085 | -3.7   | 85    | 0.00     |
| 30 C  | Chloroform                  | 0.865 | 0.953 | -10.2# | 89    | 0.00     |
| 31 T  | Cyclohexane                 | 0.818 | 0.783 | 4.3    | 82    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.802 | 0.862 | -7.5   | 87    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.453 | 0.463 | -2.2   | 85    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 84    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.315 | 0.316 | -0.3   | 84    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.473 | 0.475 | -0.4   | 86    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.201 | 0.200 | 0.5    | 83    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.499 | 0.512 | -2.6   | 84    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.587 | 0.586 | 0.2    | 82    | 0.00     |
| 40 TM | Benzene                     | 1.314 | 1.348 | -2.6   | 85    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.115 | 0.106 | 7.8    | 67    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.383 | 0.400 | -4.4   | 87    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.395 | 0.408 | -3.3   | 84    | 0.00     |
| 44 TM | Trichloroethene             | 0.396 | 0.398 | -0.5   | 85    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.314 | 0.336 | -7.0#  | 87    | 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              | 0.177 | 0.186 | -5.1  | 86    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.456 | 0.498 | -9.2  | 89    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.181 | 0.188 | -3.9  | 85    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.002 | 0.002 | 0.0   | 90    | 0.00     |
| 50 S  | Toluene-d8                  | 1.187 | 1.199 | -1.0  | 86    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.195 | 0.200 | -2.6  | 84    | 0.00     |
| 52 CM | Toluene                     | 0.856 | 0.902 | -5.4# | 88    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.434 | 0.465 | -7.1  | 86    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.516 | 0.561 | -8.7  | 88    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.243 | 0.249 | -2.5  | 86    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.310 | 0.335 | -8.1  | 87    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.413 | 0.437 | -5.8  | 88    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.123 | 0.130 | -5.7  | 93    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.135 | 0.139 | -3.0  | 84    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.329 | 0.349 | -6.1  | 88    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.242 | 0.251 | -3.7  | 86    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.381 | 0.393 | -3.1  | 89    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 87    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.381 | 0.376 | 1.3   | 85    | 0.00     |
| 65 PM | Chlorobenzene               | 1.043 | 1.075 | -3.1  | 90    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.386 | 0.414 | -7.3  | 91    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.855 | 1.934 | -4.3# | 90    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.707 | 0.741 | -4.8  | 90    | 0.00     |
| 69 T  | o-Xylene                    | 0.653 | 0.698 | -6.9  | 91    | 0.00     |
| 70 T  | Styrene                     | 1.135 | 1.243 | -9.5  | 94    | 0.00     |
| 71 P  | Bromoform                   | 0.231 | 0.244 | -5.6  | 92    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 93    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.596 | 3.601 | -0.1  | 92    | 0.00     |
| 74 T  | N-amyl acetate              | 0.816 | 0.944 | -15.7 | 103   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.595 | 0.582 | 2.2   | 89    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.411 | 0.418 | -1.7  | 98    | 0.00     |
| 77 T  | Bromobenzene                | 0.888 | 0.911 | -2.6  | 93    | 0.00     |
| 78 T  | n-propylbenzene             | 4.149 | 4.157 | -0.2  | 92    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.283 | 2.296 | -0.6  | 92    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.939 | 3.033 | -3.2  | 94    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.189 | 0.182 | 3.7   | 87    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.417 | 2.434 | -0.7  | 93    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.555 | 2.626 | -2.8  | 94    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.955 | 3.097 | -4.8  | 97    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.506 | 3.545 | -1.1  | 92    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.310 | 3.420 | -3.3  | 94    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.685 | 1.694 | -0.5  | 93    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.664 | 1.672 | -0.5  | 92    | 0.00     |
| 89 T  | n-Butylbenzene              | 3.006 | 3.062 | -1.9  | 92    | 0.00     |

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|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.619 | 0.640 | -3.4 | 94    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.440 | 1.469 | -2.0 | 92    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.100 | 0.099 | 1.0  | 97    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.103 | 1.090 | 1.2  | 91    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.681 | 0.684 | -0.4 | 90    | 0.00     |
| 95 T | Naphthalene                 | 1.841 | 1.859 | -1.0 | 92    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.942 | 0.948 | -0.6 | 91    | 0.00     |

(#) = Out of Range

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