

Data Path : Z:\voasrv\HPCHEM1\MSVOA F\Data\VF031819\  
 Data File : VF061989.D  
 Acq On : 18 Mar 2019 10:55  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5mL/MSVOA-F/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 LabSampleId :  
 VSTDCCC050

Quant Time: Mar 19 02:15:12 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F031619S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Mar 18 07:28:40 2019  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 108   | -0.02    |
| 2 T   | Dichlorodifluoromethane     | 0.533 | 0.522 | 2.1   | 107   | -0.01    |
| 3 P   | Chloromethane               | 0.542 | 0.547 | -0.9  | 115   | 0.00     |
| 4 C   | Vinyl Chloride              | 0.524 | 0.525 | -0.2# | 112   | -0.01    |
| 5 T   | Bromomethane                | 0.368 | 0.376 | -2.2  | 105   | -0.01    |
| 6 T   | Chloroethane                | 0.270 | 0.269 | 0.4   | 104   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.694 | 0.708 | -2.0  | 109   | 0.00     |
| 8 T   | Diethyl Ether               | 0.154 | 0.147 | 4.5   | 97    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.489 | 0.483 | 1.2   | 112   | -0.01    |
| 10 T  | Methyl Iodide               | 0.856 | 0.870 | -1.6  | 108   | -0.01    |
| 11 T  | Tert butyl alcohol          | 0.022 | 0.018 | 18.2  | 79    | -0.02    |
| 12 CM | 1,1-Dichloroethene          | 0.422 | 0.415 | 1.7#  | 109   | 0.00     |
| 13 T  | Acrolein                    | 0.024 | 0.025 | -4.2  | 125   | -0.01    |
| 14 T  | Allyl chloride              | 0.539 | 0.521 | 3.3   | 105   | -0.01    |
| 15 T  | Acrylonitrile               | 0.067 | 0.064 | 4.5   | 101   | -0.01    |
| 16 T  | Acetone                     | 0.081 | 0.089 | -9.9  | 117   | -0.01    |
| 17 T  | Carbon Disulfide            | 1.220 | 1.225 | -0.4  | 109   | -0.01    |
| 18 T  | Methyl Acetate              | 0.165 | 0.179 | -8.5  | 107   | -0.02    |
| 19 T  | Methyl tert-butyl Ether     | 0.765 | 0.734 | 4.1   | 100   | -0.02    |
| 20 T  | Methylene Chloride          | 0.416 | 0.390 | 6.2   | 106   | -0.01    |
| 21 T  | trans-1,2-Dichloroethene    | 0.440 | 0.383 | 13.0  | 93    | -0.01    |
| 22 T  | Diisopropyl ether           | 1.296 | 1.256 | 3.1   | 100   | -0.02    |
| 23 T  | Vinyl Acetate               | 0.511 | 0.512 | -0.2  | 104   | -0.02    |
| 24 P  | 1,1-Dichloroethane          | 0.753 | 0.747 | 0.8   | 105   | -0.01    |
| 25 T  | 2-Butanone                  | 0.160 | 0.150 | 6.3   | 101   | -0.02    |
| 26 T  | 2,2-Dichloropropane         | 0.355 | 0.352 | 0.8   | 105   | -0.02    |
| 27 T  | cis-1,2-Dichloroethene      | 0.555 | 0.531 | 4.3   | 101   | -0.01    |
| 28 T  | Bromochloromethane          | 0.313 | 0.282 | 9.9   | 94    | -0.02    |
| 29    | Tetrahydrofuran             | 0.070 | 0.057 | 18.6  | 86    | -0.02    |
| 30 C  | Chloroform                  | 0.854 | 0.847 | 0.8#  | 109   | -0.03    |
| 31 T  | Cyclohexane                 | 0.738 | 0.721 | 2.3   | 107   | -0.01    |
| 32 T  | 1,1,1-Trichloroethane       | 0.567 | 0.503 | 11.3  | 95    | -0.03    |
| 33 S  | 1,2-Dichloroethane-d4       | 0.360 | 0.356 | 1.1   | 109   | -0.02    |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 104   | -0.02    |
| 35 S  | Dibromofluoromethane        | 0.336 | 0.352 | -4.8  | 115   | -0.02    |
| 36 T  | 1,1-Dichloropropene         | 0.452 | 0.465 | -2.9  | 104   | -0.02    |
| 37 T  | Ethyl Acetate               | 0.203 | 0.173 | 14.8  | 88    | -0.02    |
| 38 T  | Carbon Tetrachloride        | 0.330 | 0.345 | -4.5  | 107   | -0.02    |
| 39 T  | Methylcyclohexane           | 0.530 | 0.547 | -3.2  | 102   | -0.02    |
| 40 TM | Benzene                     | 1.196 | 1.211 | -1.3  | 106   | -0.02    |
| 41 T  | Methacrylonitrile           | 0.108 | 0.097 | 10.2  | 94    | -0.02    |
| 42 TM | 1,2-Dichloroethane          | 0.298 | 0.297 | 0.3   | 102   | -0.02    |
| 43 T  | Isopropyl Acetate           | 0.240 | 0.215 | 10.4  | 90    | -0.03    |
| 44 TM | Trichloroethene             | 0.367 | 0.366 | 0.3   | 103   | -0.02    |
| 45 C  | 1,2-Dichloropropane         | 0.283 | 0.273 | 3.5#  | 96    | -0.02    |

Data Path : Z:\voasrv\HPCHEM1\MSVOA F\Data\VF031819\  
 Data File : VF061989.D  
 Acq On : 18 Mar 2019 10:55  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5mL/MSVOA-F/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 LabSampleId :  
 VSTDCCC050

Quant Time: Mar 19 02:15:12 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F031619S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Mar 18 07:28:40 2019  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvqRF | CCRF  | %Dev | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|------|-------|----------|
| 46 T  | Dibromomethane              | 0.168 | 0.170 | -1.2 | 98    | -0.02    |
| 47 T  | Bromodichloromethane        | 0.397 | 0.391 | 1.5  | 100   | -0.03    |
| 48 T  | Methyl methacrylate         | 0.155 | 0.142 | 8.4  | 95    | -0.02    |
| 49 T  | 1,4-Dioxane                 | 0.001 | 0.001 | 0.0  | 87    | -0.02    |
| 50 S  | Toluene-d8                  | 0.982 | 1.039 | -5.8 | 113   | -0.02    |
| 51 T  | 4-Methyl-2-Pentanone        | 0.170 | 0.155 | 8.8  | 90    | -0.03    |
| 52 CM | Toluene                     | 0.731 | 0.679 | 7.1# | 98    | -0.02    |
| 53 T  | t-1,3-Dichloropropene       | 0.335 | 0.316 | 5.7  | 94    | -0.03    |
| 54 T  | cis-1,3-Dichloropropene     | 0.437 | 0.443 | -1.4 | 101   | -0.03    |
| 55 T  | 1,1,2-Trichloroethane       | 0.204 | 0.199 | 2.5  | 99    | -0.02    |
| 56 T  | Ethyl methacrylate          | 0.232 | 0.222 | 4.3  | 96    | -0.02    |
| 57 T  | 1,3-Dichloropropane         | 0.340 | 0.329 | 3.2  | 94    | -0.02    |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.042 | 0.035 | 16.7 | 84    | -0.02    |
| 59 T  | 2-Hexanone                  | 0.123 | 0.119 | 3.3  | 98    | -0.02    |
| 60 T  | Dibromochloromethane        | 0.283 | 0.294 | -3.9 | 102   | -0.02    |
| 61 T  | 1,2-Dibromoethane           | 0.219 | 0.206 | 5.9  | 94    | -0.03    |
| 62 S  | 4-Bromofluorobenzene        | 0.390 | 0.398 | -2.1 | 116   | -0.01    |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0  | 104   | -0.02    |
| 64 T  | Tetrachloroethene           | 0.363 | 0.363 | 0.0  | 101   | -0.02    |
| 65 PM | Chlorobenzene               | 0.931 | 0.919 | 1.3  | 102   | -0.02    |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.361 | 0.381 | -5.5 | 106   | -0.02    |
| 67 C  | Ethyl Benzene               | 1.594 | 1.594 | 0.0  | 105   | -0.02    |
| 68 T  | m/p-Xylenes                 | 0.599 | 0.619 | -3.3 | 109   | -0.02    |
| 69 T  | o-Xylene                    | 0.641 | 0.642 | -0.2 | 101   | -0.02    |
| 70 T  | Styrene                     | 0.889 | 0.907 | -2.0 | 106   | -0.02    |
| 71 P  | Bromoform                   | 0.183 | 0.189 | -3.3 | 100   | -0.02    |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0  | 103   | -0.01    |
| 73 T  | Isopropylbenzene            | 3.454 | 3.578 | -3.6 | 101   | -0.01    |
| 74 T  | N-amyl acetate              | 0.792 | 0.785 | 0.9  | 98    | -0.01    |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.570 | 0.544 | 4.6  | 94    | -0.01    |
| 76 T  | 1,2,3-Trichloropropane      | 0.399 | 0.365 | 8.5  | 90    | -0.01    |
| 77 T  | Bromobenzene                | 0.800 | 0.844 | -5.5 | 106   | -0.02    |
| 78 T  | n-propylbenzene             | 3.972 | 3.987 | -0.4 | 107   | -0.01    |
| 79 T  | 2-Chlorotoluene             | 2.242 | 2.250 | -0.4 | 104   | -0.02    |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.790 | 2.812 | -0.8 | 103   | -0.01    |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.176 | 0.180 | -2.3 | 93    | -0.02    |
| 82 T  | 4-Chlorotoluene             | 2.267 | 2.201 | 2.9  | 97    | -0.02    |
| 83 T  | tert-Butylbenzene           | 2.918 | 3.068 | -5.1 | 105   | -0.01    |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.795 | 2.746 | 1.8  | 100   | -0.02    |
| 85 T  | sec-Butylbenzene            | 3.943 | 3.872 | 1.8  | 102   | -0.01    |
| 86 T  | p-Isopropyltoluene          | 3.290 | 3.417 | -3.9 | 104   | -0.02    |
| 87 T  | 1,3-Dichlorobenzene         | 1.572 | 1.566 | 0.4  | 102   | -0.01    |
| 88 T  | 1,4-Dichlorobenzene         | 1.513 | 1.565 | -3.4 | 105   | -0.01    |
| 89 T  | n-Butylbenzene              | 3.091 | 3.165 | -2.4 | 102   | -0.02    |

Data Path : Z:\voasrv\HPCHEM1\MSVOA F\Data\VF031819\  
Data File : VF061989.D  
Acq On : 18 Mar 2019 10:55  
Operator : VA/AP  
Sample : VSTDCCC050  
Misc : 5.00g/5mL/MSVOA-F/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
LabSampleId :  
VSTDCCC050

Quant Time: Mar 19 02:15:12 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F031619S.M  
Quant Title : SW846 8260  
QLast Update : Mon Mar 18 07:28:40 2019  
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.751 | 0.842 | -12.1 | 108   | -0.01    |
| 91 T | 1,2-Dichlorobenzene         | 1.456 | 1.463 | -0.5  | 104   | -0.02    |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.091 | 0.092 | -1.1  | 96    | -0.02    |
| 93 T | 1,2,4-Trichlorobenzene      | 1.014 | 1.032 | -1.8  | 102   | -0.01    |
| 94 T | Hexachlorobutadiene         | 0.673 | 0.698 | -3.7  | 101   | -0.01    |
| 95 T | Naphthalene                 | 1.824 | 1.899 | -4.1  | 100   | -0.01    |
| 96 T | 1,2,3-Trichlorobenzene      | 0.933 | 0.954 | -2.3  | 99    | -0.01    |

(#) = Out of Range

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