

Data Path : Z:\voasrv\HPCHEM1\MSVOA F\Data\VF041919\  
 Data File : VF062236.D  
 Acq On : 19 Apr 2019 21:01  
 Operator : FY/SY  
 Sample : VSTDCCC050  
 Misc : 5.00q/5mL/MSVOA F/SOIL  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 LabSampleId :  
 VSTDCCC050

Quant Time: Apr 19 23:59:20 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82F041719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Apr 19 03:56:19 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   | 93    | 0.03     |
| 2 T   | Dichlorodifluoromethane     | 0.760 | 0.731 | 3.8   | 94    | 0.00     |
| 3 P   | Chloromethane               | 0.785 | 0.690 | 12.1  | 85    | 0.01     |
| 4 C   | Vinyl Chloride              | 0.675 | 0.635 | 5.9#  | 90    | 0.01     |
| 5 T   | Bromomethane                | 0.392 | 0.399 | -1.8  | 91    | 0.01     |
| 6 T   | Chloroethane                | 0.282 | 0.282 | 0.0   | 89    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.857 | 0.895 | -4.4  | 98    | 0.01     |
| 8 T   | Diethyl Ether               | 0.178 | 0.167 | 6.2   | 86    | 0.01     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.586 | 0.581 | 0.9   | 94    | 0.01     |
| 10 T  | Methyl Iodide               | 1.040 | 1.048 | -0.8  | 93    | 0.01     |
| 11 T  | Tert butyl alcohol          | 0.032 | 0.032 | 0.0   | 98    | 0.03     |
| 12 CM | 1,1-Dichloroethene          | 0.557 | 0.546 | 2.0#  | 94    | 0.01     |
| 13 T  | Acrolein                    | 0.019 | 0.016 | 15.8  | 115   | 0.02     |
| 14 T  | Allyl chloride              | 0.639 | 0.574 | 10.2  | 89    | 0.02     |
| 15 T  | Acrylonitrile               | 0.097 | 0.093 | 4.1   | 92    | 0.03     |
| 16 T  | Acetone                     | 0.110 | 0.100 | 9.1   | 85    | 0.02     |
| 17 T  | Carbon Disulfide            | 1.548 | 1.472 | 4.9   | 87    | 0.02     |
| 18 T  | Methyl Acetate              | 0.302 | 0.242 | 19.9  | 94    | 0.02     |
| 19 T  | Methyl tert-butyl Ether     | 0.983 | 1.041 | -5.9  | 100   | 0.02     |
| 20 T  | Methylene Chloride          | 0.699 | 0.580 | 17.0  | 98    | 0.01     |
| 21 T  | trans-1,2-Dichloroethene    | 0.551 | 0.528 | 4.2   | 89    | 0.02     |
| 22 T  | Diisopropyl ether           | 1.635 | 1.638 | -0.2  | 96    | 0.02     |
| 23 T  | Vinyl Acetate               | 0.779 | 0.775 | 0.5   | 88    | 0.03     |
| 24 P  | 1,1-Dichloroethane          | 0.894 | 0.914 | -2.2  | 101   | 0.02     |
| 25 T  | 2-Butanone                  | 0.219 | 0.200 | 8.7   | 86    | 0.03     |
| 26 T  | 2,2-Dichloropropane         | 0.452 | 0.419 | 7.3   | 94    | 0.04     |
| 27 T  | cis-1,2-Dichloroethene      | 0.713 | 0.715 | -0.3  | 92    | 0.02     |
| 28 T  | Bromochloromethane          | 0.428 | 0.418 | 2.3   | 103   | 0.03     |
| 29 T  | Tetrahydrofuran             | 0.099 | 0.088 | 11.1  | 84    | 0.03     |
| 30 C  | Chloroform                  | 1.099 | 1.169 | -6.4# | 100   | 0.02     |
| 31 T  | Cyclohexane                 | 1.072 | 0.943 | 12.0  | 84    | 0.03     |
| 32 T  | 1,1,1-Trichloroethane       | 0.805 | 0.869 | -8.0  | 129   | 0.03     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.458 | 0.514 | -12.2 | 101   | 0.03     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 90    | 0.02     |
| 35 S  | Dibromofluoromethane        | 0.437 | 0.478 | -9.4  | 103   | 0.02     |
| 36 T  | 1,1-Dichloropropene         | 0.599 | 0.609 | -1.7  | 93    | 0.03     |
| 37 T  | Ethyl Acetate               | 0.283 | 0.269 | 4.9   | 89    | 0.04     |
| 38 T  | Carbon Tetrachloride        | 0.531 | 0.571 | -7.5  | 107   | 0.03     |
| 39 T  | Methylcyclohexane           | 0.718 | 0.677 | 5.7   | 86    | 0.03     |
| 40 TM | Benzene                     | 1.572 | 1.563 | 0.6   | 92    | 0.03     |
| 41 T  | Methacrylonitrile           | 0.163 | 0.150 | 8.0   | 83    | 0.03     |
| 42 TM | 1,2-Dichloroethane          | 0.416 | 0.448 | -7.7  | 99    | 0.03     |
| 43 T  | Isopropyl Acetate           | 0.298 | 0.307 | -3.0  | 97    | 0.02     |
| 44 TM | Trichloroethene             | 0.425 | 0.453 | -6.6  | 97    | 0.03     |
| 45 C  | 1,2-Dichloropropane         | 0.346 | 0.345 | 0.3#  | 93    | 0.02     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA F\Data\VF041919\  
 Data File : VF062236.D  
 Acq On : 19 Apr 2019 21:01  
 Operator : FY/SY  
 Sample : VSTDCCC050  
 Misc : 5.00µ/5mL/MSVOA F/SOIL  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 LabSampleId :  
 VSTDCCC050

Quant Time: Apr 19 23:59:20 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82F041719S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Apr 19 03:56:19 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              | 0.230 | 0.236 | -2.6  | 91    | 0.02     |
| 47 T  | Bromodichloromethane        | 0.520 | 0.600 | -15.4 | 107   | 0.02     |
| 48 T  | Methyl methacrylate         | 0.196 | 0.201 | -2.6  | 96    | 0.03     |
| 49 T  | 1,4-Dioxane                 | 0.002 | 0.002 | 0.0   | 96    | 0.03     |
| 50 S  | Toluene-d8                  | 1.107 | 1.212 | -9.5  | 98    | 0.02     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.221 | 0.211 | 4.5   | 89    | 0.03     |
| 52 CM | Toluene                     | 0.829 | 0.868 | -4.7# | 94    | 0.02     |
| 53 T  | t-1,3-Dichloropropene       | 0.391 | 0.402 | -2.8  | 94    | 0.03     |
| 54 T  | cis-1,3-Dichloropropene     | 0.528 | 0.534 | -1.1  | 93    | 0.03     |
| 55 T  | 1,1,2-Trichloroethane       | 0.232 | 0.259 | -11.6 | 102   | 0.02     |
| 56 T  | Ethyl methacrylate          | 0.264 | 0.275 | -4.2  | 98    | 0.02     |
| 57 T  | 1,3-Dichloropropane         | 0.375 | 0.397 | -5.9  | 97    | 0.03     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.077 | 0.080 | -3.9  | 92    | 0.03     |
| 59 T  | 2-Hexanone                  | 0.146 | 0.142 | 2.7   | 95    | 0.02     |
| 60 T  | Dibromochloromethane        | 0.345 | 0.393 | -13.9 | 103   | 0.03     |
| 61 T  | 1,2-Dibromoethane           | 0.262 | 0.284 | -8.4  | 99    | 0.03     |
| 62 S  | 4-Bromofluorobenzene        | 0.426 | 0.479 | -12.4 | 106   | 0.02     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 92    | 0.03     |
| 64 T  | Tetrachloroethene           | 0.451 | 0.497 | -10.2 | 103   | 0.03     |
| 65 PM | Chlorobenzene               | 1.066 | 1.147 | -7.6  | 95    | 0.03     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.499 | 0.527 | -5.6  | 98    | 0.03     |
| 67 C  | Ethyl Benzene               | 1.939 | 1.884 | 2.8#  | 92    | 0.03     |
| 68 T  | m/p-Xylenes                 | 0.714 | 0.734 | -2.8  | 98    | 0.03     |
| 69 T  | o-Xylene                    | 0.792 | 0.823 | -3.9  | 96    | 0.03     |
| 70 T  | Styrene                     | 1.118 | 1.219 | -9.0  | 105   | 0.02     |
| 71 P  | Bromoform                   | 0.264 | 0.307 | -16.3 | 110   | 0.03     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 96    | 0.01     |
| 73 T  | Isopropylbenzene            | 4.295 | 4.372 | -1.8  | 96    | 0.02     |
| 74 T  | N-amyl acetate              | 1.135 | 1.087 | 4.2   | 102   | 0.02     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.739 | 0.751 | -1.6  | 96    | 0.02     |
| 76 T  | 1,2,3-Trichloropropane      | 0.508 | 0.520 | -2.4  | 98    | 0.02     |
| 77 T  | Bromobenzene                | 0.920 | 1.079 | -17.3 | 113   | 0.02     |
| 78 T  | n-propylbenzene             | 4.531 | 4.436 | 2.1   | 96    | 0.02     |
| 79 T  | 2-Chlorotoluene             | 2.748 | 2.813 | -2.4  | 99    | 0.02     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.577 | 3.661 | -2.3  | 98    | 0.02     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.259 | 0.224 | 13.5  | 82    | 0.02     |
| 82 T  | 4-Chlorotoluene             | 2.656 | 2.673 | -0.6  | 99    | 0.02     |
| 83 T  | tert-Butylbenzene           | 3.699 | 3.823 | -3.4  | 99    | 0.01     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.462 | 3.471 | -0.3  | 99    | 0.02     |
| 85 T  | sec-Butylbenzene            | 4.803 | 4.818 | -0.3  | 95    | 0.02     |
| 86 T  | p-Isopropyltoluene          | 4.074 | 4.151 | -1.9  | 98    | 0.02     |
| 87 T  | 1,3-Dichlorobenzene         | 1.707 | 1.827 | -7.0  | 107   | 0.02     |
| 88 T  | 1,4-Dichlorobenzene         | 1.647 | 1.729 | -5.0  | 103   | 0.02     |
| 89 T  | n-Butylbenzene              | 3.906 | 3.664 | 6.2   | 99    | 0.01     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA F\Data\VF041919\  
Data File : VF062236.D  
Acq On : 19 Apr 2019 21:01  
Operator : FY/SY  
Sample : VSTDCCC050  
Misc : 5.00g/5mL/MSVOA F/SOIL  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
LabSampleId :  
VSTDCCC050

Quant Time: Apr 19 23:59:20 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82F041719S.M  
Quant Title : SW846 8260  
QLast Update : Fri Apr 19 03:56:19 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            | 1.046 | 1.108 | -5.9  | 99    | 0.02     |
| 91 T | 1,2-Dichlorobenzene         | 1.649 | 1.767 | -7.2  | 106   | 0.02     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.145 | 0.145 | 0.0   | 93    | 0.02     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.379 | 1.482 | -7.5  | 106   | 0.01     |
| 94 T | Hexachlorobutadiene         | 0.946 | 1.067 | -12.8 | 107   | 0.01     |
| 95 T | Naphthalene                 | 2.412 | 2.676 | -10.9 | 107   | 0.01     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.324 | 1.471 | -11.1 | 104   | 0.02     |

(#) = Out of Range

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