

Data Path : Z:\voasrv\HPCHEM1\MSVOA U\Data\VU121318\  
 Data File : VU028635.D  
 Acq On : 12 Dec 2018 02:30  
 Operator : MD/SY  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 LabSampleId :  
 VSTDCCC050

Quant Time: Dec 12 06:01:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U120618W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Dec 07 00:39:42 2018  
 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    | 103   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.670 | 0.609 | 9.1    | 93    | 0.00     |
| 3 P   | Chloromethane               | 1.232 | 1.016 | 17.5   | 88    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.889 | 0.828 | 6.9#   | 96    | 0.00     |
| 5 T   | Bromomethane                | 0.358 | 0.340 | 5.0    | 105   | -0.01    |
| 6 T   | Chloroethane                | 0.503 | 0.459 | 8.7    | 92    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.936 | 0.879 | 6.1    | 99    | 0.00     |
| 8 T   | Diethyl Ether               | 0.438 | 0.402 | 8.2    | 98    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.560 | 0.535 | 4.5    | 101   | 0.00     |
| 10 T  | Methyl Iodide               | 0.439 | 0.561 | -27.8# | 129   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.170 | 0.166 | 2.4    | 101   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.557 | 0.528 | 5.2#   | 100   | 0.00     |
| 13 T  | Acrolein                    | 0.136 | 0.126 | 7.4    | 96    | 0.00     |
| 14 T  | Allyl chloride              | 1.317 | 1.117 | 15.2   | 92    | 0.00     |
| 15 T  | Acrylonitrile               | 0.472 | 0.470 | 0.4    | 101   | 0.00     |
| 16 T  | Acetone                     | 0.498 | 0.363 | 27.1#  | 80    | 0.00     |
| 17 T  | Carbon Disulfide            | 2.005 | 1.759 | 12.3   | 94    | 0.00     |
| 18 T  | Methyl Acetate              | 1.291 | 1.359 | -5.3   | 107   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 2.110 | 2.040 | 3.3    | 100   | 0.00     |
| 20 T  | Methylene Chloride          | 0.734 | 0.662 | 9.8    | 101   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.627 | 0.592 | 5.6    | 99    | 0.00     |
| 22 T  | Diisopropyl ether           | 2.561 | 2.444 | 4.6    | 98    | 0.00     |
| 23 T  | Vinyl Acetate               | 2.112 | 2.047 | 3.1    | 98    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.341 | 1.244 | 7.2    | 98    | 0.00     |
| 25 T  | 2-Butanone                  | 0.680 | 0.635 | 6.6    | 95    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 1.062 | 0.827 | 22.1#  | 83    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.709 | 0.694 | 2.1    | 102   | 0.00     |
| 28 T  | Bromochloromethane          | 0.609 | 0.596 | 2.1    | 100   | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.437 | 0.438 | -0.2   | 101   | 0.00     |
| 30 C  | Chloroform                  | 1.168 | 1.139 | 2.5#   | 102   | 0.00     |
| 31 T  | Cyclohexane                 | 1.573 | 1.226 | 22.1#  | 97    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.970 | 0.935 | 3.6    | 100   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.763 | 0.714 | 6.4    | 100   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 102   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.315 | 0.315 | 0.0    | 104   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.547 | 0.513 | 6.2    | 97    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.707 | 0.709 | -0.3   | 100   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.441 | 0.433 | 1.8    | 102   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.668 | 0.636 | 4.8    | 100   | 0.00     |
| 40 TM | Benzene                     | 1.611 | 1.586 | 1.6    | 100   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.387 | 0.396 | -2.3   | 102   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.564 | 0.531 | 5.9    | 97    | 0.00     |
| 43 T  | Isopropyl Acetate           | 1.119 | 1.135 | -1.4   | 101   | 0.00     |
| 44 TM | Trichloroethene             | 0.358 | 0.359 | -0.3   | 105   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.453 | 0.459 | -1.3#  | 100   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA U\Data\VU121318\  
 Data File : VU028635.D  
 Acq On : 12 Dec 2018 02:30  
 Operator : MD/SY  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 LabSampleId :  
 VSTDCCC050

Quant Time: Dec 12 06:01:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U120618W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Dec 07 00:39:42 2018  
 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              | 0.269 | 0.268 | 0.4   | 101   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.523 | 0.512 | 2.1   | 101   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.556 | 0.583 | -4.9  | 103   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.009 | 0.008 | 11.1  | 95    | 0.00     |
| 50 S  | Toluene-d8                  | 1.245 | 1.257 | -1.0  | 105   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.706 | 0.724 | -2.5  | 103   | 0.00     |
| 52 CM | Toluene                     | 0.948 | 0.949 | -0.1# | 101   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.623 | 0.606 | 2.7   | 98    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.676 | 0.655 | 3.1   | 98    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.375 | 0.383 | -2.1  | 101   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.642 | 0.694 | -8.1  | 106   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.696 | 0.696 | 0.0   | 103   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.329 | 0.360 | -9.4  | 110   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.559 | 0.561 | -0.4  | 102   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.367 | 0.372 | -1.4  | 105   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.393 | 0.412 | -4.8  | 104   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.465 | 0.464 | 0.2   | 106   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 102   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.334 | 0.344 | -3.0  | 108   | 0.00     |
| 65 PM | Chlorobenzene               | 1.065 | 1.056 | 0.8   | 103   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.340 | 0.369 | -8.5  | 108   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.959 | 1.966 | -0.4# | 103   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.713 | 0.713 | 0.0   | 100   | 0.00     |
| 69 T  | o-Xylene                    | 0.693 | 0.705 | -1.7  | 103   | 0.00     |
| 70 T  | Styrene                     | 1.146 | 1.173 | -2.4  | 104   | 0.00     |
| 71 P  | Bromoform                   | 0.289 | 0.310 | -7.3  | 106   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 103   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.837 | 3.775 | 1.6   | 103   | 0.00     |
| 74 T  | N-amyl acetate              | 2.213 | 2.252 | -1.8  | 105   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.474 | 1.514 | -2.7  | 106   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.277 | 1.337 | -4.7  | 106   | 0.00     |
| 77 T  | Bromobenzene                | 0.897 | 0.900 | -0.3  | 104   | 0.00     |
| 78 T  | n-propylbenzene             | 4.767 | 4.599 | 3.5   | 100   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.746 | 2.709 | 1.3   | 102   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.176 | 3.187 | -0.3  | 103   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.550 | 0.465 | 15.5  | 101   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 3.254 | 3.107 | 4.5   | 101   | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.061 | 3.043 | 0.6   | 103   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.273 | 3.253 | 0.6   | 103   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.933 | 3.875 | 1.5   | 102   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.341 | 3.291 | 1.5   | 102   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.694 | 1.610 | 5.0   | 101   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.753 | 1.635 | 6.7   | 101   | 0.00     |
| 89 T  | n-Butylbenzene              | 3.381 | 3.225 | 4.6   | 98    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA U\Data\VU121318\  
Data File : VU028635.D  
Acq On : 12 Dec 2018 02:30  
Operator : MD/SY  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA U/WATER  
ALS Vial : 29 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
LabSampleId :  
VSTDCCC050

Quant Time: Dec 12 06:01:49 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U120618W.M  
Quant Title : SW846 8260  
QLast Update : Fri Dec 07 00:39:42 2018  
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            | 0.505 | 0.494 | 2.2  | 101   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.695 | 1.651 | 2.6  | 104   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.319 | 0.337 | -5.6 | 106   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.215 | 1.112 | 8.5  | 101   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.555 | 0.509 | 8.3  | 99    | 0.00     |
| 95 T | Naphthalene                 | 4.067 | 4.054 | 0.3  | 105   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.222 | 1.169 | 4.3  | 104   | 0.00     |

(#) = Out of Range

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