

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX020918\  
 Data File : VX000056.D  
 Acq On : 09 Feb 2018 22:05  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 LabSampled :  
 VSTDCCC050

Quant Time: Feb 10 00:38:18 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X020918W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Feb 09 23:01:05 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) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0    | 91    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.453 | 0.439 | 3.1    | 93    | 0.00     |
| 3 P   | Chloromethane               | 0.461 | 0.452 | 2.0    | 92    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.520 | 0.521 | -0.2#  | 93    | 0.00     |
| 5 T   | Bromomethane                | 0.278 | 0.358 | -28.8# | 128   | 0.00     |
| 6 T   | Chloroethane                | 0.313 | 0.326 | -4.2   | 97    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.906 | 0.897 | 1.0    | 93    | 0.00     |
| 8 T   | Diethyl Ether               | 0.328 | 0.321 | 2.1    | 94    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.512 | 0.502 | 2.0    | 95    | 0.00     |
| 10 T  | Methyl Iodide               | 0.578 | 0.580 | -0.3   | 85    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.209 | 0.227 | -8.6   | 110   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.485 | 0.470 | 3.1#   | 93    | 0.00     |
| 13 T  | Acrolein                    | 0.107 | 0.104 | 2.8    | 93    | 0.00     |
| 14 T  | Allyl chloride              | 0.845 | 0.815 | 3.6    | 95    | 0.00     |
| 15 T  | Acrylonitrile               | 0.364 | 0.378 | -3.8   | 103   | 0.00     |
| 16 T  | Acetone                     | 0.309 | 0.336 | -8.7   | 116   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.413 | 1.383 | 2.1    | 93    | 0.00     |
| 18 T  | Methyl Acetate              | 0.780 | 0.847 | -8.6   | 104   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.660 | 1.643 | 1.0    | 93    | 0.00     |
| 20 T  | Methylene Chloride          | 0.518 | 0.508 | 1.9    | 94    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.522 | 0.510 | 2.3    | 94    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.396 | 1.355 | 2.9    | 95    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.262 | 1.261 | 0.1    | 95    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.868 | 0.839 | 3.3    | 92    | 0.00     |
| 25 T  | 2-Butanone                  | 0.467 | 0.511 | -9.4   | 110   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.743 | 0.696 | 6.3    | 89    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.512 | 0.513 | -0.2   | 94    | 0.00     |
| 28 T  | Bromochloromethane          | 0.288 | 0.275 | 4.5    | 93    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.320 | 0.345 | -7.8   | 108   | 0.00     |
| 30 C  | Chloroform                  | 0.875 | 0.887 | -1.4#  | 96    | 0.00     |
| 31 T  | Cyclohexane                 | 0.713 | 0.704 | 1.3    | 95    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.823 | 0.836 | -1.6   | 96    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.522 | 0.478 | 8.4    | 89    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 95    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.292 | 0.273 | 6.5    | 86    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.435 | 0.421 | 3.2    | 95    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.562 | 0.565 | -0.5   | 102   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.489 | 0.488 | 0.2    | 95    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.529 | 0.513 | 3.0    | 94    | 0.00     |
| 40 TM | Benzene                     | 1.230 | 1.213 | 1.4    | 94    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.289 | 0.289 | 0.0    | 101   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.440 | 0.438 | 0.5    | 96    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.848 | 0.833 | 1.8    | 97    | 0.00     |
| 44 TM | Trichloroethene             | 0.381 | 0.374 | 1.8    | 94    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.299 | 0.301 | -0.7#  | 95    | 0.00     |

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX020918\  
 Data File : VX000056.D  
 Acq On : 09 Feb 2018 22:05  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 LabSampled :  
 VSTDCCC050

Quant Time: Feb 10 00:38:18 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X020918W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Feb 09 23:01:05 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) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.231 | 0.231 | 0.0   | 94    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.449 | 0.446 | 0.7   | 94    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.416 | 0.407 | 2.2   | 97    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.011 | 0.011 | 0.0   | 100   | 0.00     |
| 50 S  | Toluene-d8                  | 1.086 | 0.988 | 9.0   | 88    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.591 | 0.621 | -5.1  | 101   | 0.00     |
| 52 CM | Toluene                     | 0.826 | 0.827 | -0.1# | 94    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.525 | 0.523 | 0.4   | 94    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.510 | 0.522 | -2.4  | 93    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.347 | 0.344 | 0.9   | 95    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.532 | 0.544 | -2.3  | 94    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.539 | 0.543 | -0.7  | 95    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.263 | 0.266 | -1.1  | 96    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.480 | 0.520 | -8.3  | 103   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.399 | 0.411 | -3.0  | 95    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.382 | 0.390 | -2.1  | 94    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.442 | 0.409 | 7.5   | 88    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 94    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.372 | 0.385 | -3.5  | 98    | 0.00     |
| 65 PM | Chlorobenzene               | 1.039 | 1.026 | 1.3   | 94    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.374 | 0.379 | -1.3  | 94    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.723 | 1.713 | 0.6#  | 95    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.686 | 0.689 | -0.4  | 95    | 0.00     |
| 69 T  | o-Xylene                    | 0.662 | 0.664 | -0.3  | 94    | 0.00     |
| 70 T  | Styrene                     | 1.119 | 1.111 | 0.7   | 93    | 0.00     |
| 71 P  | Bromoform                   | 0.354 | 0.366 | -3.4  | 91    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 94    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.173 | 3.064 | 3.4   | 93    | 0.00     |
| 74 T  | N-amyl acetate              | 1.588 | 1.513 | 4.7   | 97    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.079 | 1.057 | 2.0   | 94    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.942 | 0.960 | -1.9  | 98    | 0.00     |
| 77 T  | Bromobenzene                | 0.861 | 0.849 | 1.4   | 94    | 0.00     |
| 78 T  | n-propylbenzene             | 3.679 | 3.574 | 2.9   | 95    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.127 | 2.068 | 2.8   | 93    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.658 | 2.573 | 3.2   | 92    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.381 | 0.375 | 1.6   | 91    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.542 | 2.457 | 3.3   | 94    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.686 | 2.613 | 2.7   | 93    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.720 | 2.682 | 1.4   | 94    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.304 | 3.213 | 2.8   | 94    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.971 | 2.882 | 3.0   | 93    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.622 | 1.560 | 3.8   | 92    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.660 | 1.605 | 3.3   | 93    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.776 | 2.636 | 5.0   | 92    | 0.00     |

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX020918\  
Data File : VX000056.D  
Acq On : 09 Feb 2018 22:05  
Operator : JC/MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
LabSampleId :  
VSTDCCC050

Quant Time: Feb 10 00:38:18 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X020918W.M  
Quant Title : SW846 8260  
QLast Update : Fri Feb 09 23:01:05 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            | 0.520 | 0.502 | 3.5  | 92    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.587 | 1.539 | 3.0  | 92    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.309 | 0.299 | 3.2  | 97    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.214 | 1.153 | 5.0  | 92    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.573 | 0.544 | 5.1  | 89    | 0.00     |
| 95 T | Naphthalene                 | 3.945 | 3.868 | 2.0  | 94    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.181 | 1.138 | 3.6  | 93    | 0.00     |

(#) = Out of Range

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