

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX101218\  
 Data File : VX005327.D  
 Acq On : 13 Oct 2018 07:10  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 50 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC050

Quant Time: Oct 15 01:27:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X101218W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Oct 12 11:28:43 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    | 89    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.391 | 0.419 | -7.2   | 86    | 0.00     |
| 3 P   | Chloromethane               | 0.566 | 0.544 | 3.9    | 87    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.574 | 0.558 | 2.8#   | 91    | 0.00     |
| 5 T   | Bromomethane                | 0.356 | 0.344 | 3.4    | 94    | 0.00     |
| 6 T   | Chloroethane                | 0.342 | 0.357 | -4.4   | 92    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.766 | 0.798 | -4.2   | 94    | 0.00     |
| 8 T   | Diethyl Ether               | 0.327 | 0.342 | -4.6   | 98    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.442 | 0.458 | -3.6   | 92    | 0.00     |
| 10 T  | Methyl Iodide               | 0.440 | 0.576 | -30.9# | 103   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.157 | 0.169 | -7.6   | 100   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.438 | 0.460 | -5.0#  | 96    | 0.00     |
| 13 T  | Acrolein                    | 0.105 | 0.091 | 13.3   | 79    | 0.00     |
| 14 T  | Allyl chloride              | 0.961 | 0.975 | -1.5   | 90    | 0.00     |
| 15 T  | Acrylonitrile               | 0.355 | 0.365 | -2.8   | 100   | 0.00     |
| 16 T  | Acetone                     | 0.321 | 0.323 | -0.6   | 92    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.327 | 1.300 | 2.0    | 92    | 0.00     |
| 18 T  | Methyl Acetate              | 0.913 | 0.992 | -8.7   | 99    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.542 | 1.707 | -10.7  | 99    | 0.00     |
| 20 T  | Methylene Chloride          | 0.520 | 0.551 | -6.0   | 99    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.485 | 0.499 | -2.9   | 99    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.615 | 1.754 | -8.6   | 95    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.411 | 1.510 | -7.0   | 97    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.926 | 0.988 | -6.7   | 101   | 0.00     |
| 25 T  | 2-Butanone                  | 0.469 | 0.491 | -4.7   | 92    | -0.02    |
| 26 T  | 2,2-Dichloropropane         | 0.692 | 0.469 | 32.2#  | 65    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.527 | 0.538 | -2.1   | 97    | 0.00     |
| 28 T  | Bromochloromethane          | 0.422 | 0.437 | -3.6   | 94    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.299 | 0.310 | -3.7   | 88    | 0.00     |
| 30 C  | Chloroform                  | 0.859 | 0.889 | -3.5#  | 94    | 0.00     |
| 31 T  | Cyclohexane                 | 0.763 | 0.803 | -5.2   | 91    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.747 | 0.789 | -5.6   | 97    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.555 | 0.560 | -0.9   | 96    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 93    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.331 | 0.304 | 8.2    | 91    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.484 | 0.446 | 7.9    | 89    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.623 | 0.577 | 7.4    | 91    | -0.01    |
| 38 T  | Carbon Tetrachloride        | 0.487 | 0.453 | 7.0    | 92    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.524 | 0.510 | 2.7    | 93    | 0.00     |
| 40 TM | Benzene                     | 1.453 | 1.348 | 7.2    | 87    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.334 | 0.326 | 2.4    | 94    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.513 | 0.476 | 7.2    | 91    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.830 | 0.878 | -5.8   | 101   | 0.00     |
| 44 TM | Trichloroethene             | 0.416 | 0.368 | 11.5   | 97    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.356 | 0.365 | -2.5#  | 102   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX101218\  
 Data File : VX005327.D  
 Acq On : 13 Oct 2018 07:10  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 50 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC050

Quant Time: Oct 15 01:27:55 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X101218W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Oct 12 11:28:43 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              | 0.235 | 0.232 | 1.3   | 95    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.435 | 0.440 | -1.1  | 99    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.430 | 0.452 | -5.1  | 97    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.010 | 0.010 | 0.0   | 98    | 0.00     |
| 50 S  | Toluene-d8                  | 1.137 | 1.184 | -4.1  | 102   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.574 | 0.618 | -7.7  | 103   | 0.00     |
| 52 CM | Toluene                     | 0.795 | 0.862 | -8.4# | 103   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.471 | 0.475 | -0.8  | 94    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.510 | 0.516 | -1.2  | 96    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.337 | 0.353 | -4.7  | 104   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.491 | 0.560 | -14.1 | 105   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.562 | 0.592 | -5.3  | 105   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.275 | 0.306 | -11.3 | 103   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.462 | 0.493 | -6.7  | 104   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.348 | 0.363 | -4.3  | 99    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.353 | 0.366 | -3.7  | 102   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.427 | 0.449 | -5.2  | 105   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 103   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.403 | 0.404 | -0.2  | 106   | 0.00     |
| 65 PM | Chlorobenzene               | 1.064 | 1.023 | 3.9   | 103   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.379 | 0.370 | 2.4   | 101   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.729 | 1.764 | -2.0# | 104   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.671 | 0.682 | -1.6  | 102   | 0.00     |
| 69 T  | o-Xylene                    | 0.647 | 0.662 | -2.3  | 104   | 0.00     |
| 70 T  | Styrene                     | 1.065 | 1.125 | -5.6  | 104   | 0.00     |
| 71 P  | Bromoform                   | 0.339 | 0.327 | 3.5   | 102   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 104   | 0.00     |
| 73 T  | Isopropylbenzene            | 2.972 | 3.119 | -4.9  | 104   | 0.00     |
| 74 T  | N-amyl acetate              | 1.434 | 1.528 | -6.6  | 108   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.121 | 1.075 | 4.1   | 105   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.970 | 0.990 | -2.1  | 107   | 0.00     |
| 77 T  | Bromobenzene                | 0.850 | 0.845 | 0.6   | 105   | 0.00     |
| 78 T  | n-propylbenzene             | 3.420 | 3.587 | -4.9  | 105   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.095 | 2.119 | -1.1  | 104   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.545 | 2.654 | -4.3  | 103   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.319 | 0.271 | 15.0  | 88    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.483 | 2.513 | -1.2  | 104   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.578 | 2.647 | -2.7  | 104   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.619 | 2.749 | -5.0  | 103   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.050 | 3.186 | -4.5  | 104   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.757 | 2.862 | -3.8  | 102   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.588 | 1.553 | 2.2   | 103   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.625 | 1.585 | 2.5   | 105   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.503 | 2.535 | -1.3  | 102   | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX101218\  
Data File : VX005327.D  
Acq On : 13 Oct 2018 07:10  
Operator : JC/MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 50 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
LabSampleId :  
VSTDCCC050

Quant Time: Oct 15 01:27:55 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X101218W.M  
Quant Title : SW846 8260  
QLast Update : Fri Oct 12 11:28:43 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            | 0.475 | 0.461 | 2.9  | 102   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.621 | 1.592 | 1.8  | 105   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.274 | 0.262 | 4.4  | 103   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.189 | 1.216 | -2.3 | 104   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.628 | 0.589 | 6.2  | 101   | 0.00     |
| 95 T | Naphthalene                 | 3.448 | 3.776 | -9.5 | 106   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.217 | 1.245 | -2.3 | 105   | 0.00     |

(#) = Out of Range

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