

Data Path : Z:\voasrv\HPCHEM1\MSVOA X\Data\VX112118\  
 Data File : VX006136.D  
 Acq On : 21 Nov 2018 20:59  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 22 03:56:54 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112018W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 21 08:15:54 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  | 105   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.372 | 0.353 | 5.1  | 101   | 0.00     |
| 3 P   | Chloromethane               | 0.469 | 0.416 | 11.3 | 95    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.477 | 0.443 | 7.1# | 102   | 0.00     |
| 5 T   | Bromomethane                | 0.331 | 0.286 | 13.6 | 88    | 0.00     |
| 6 T   | Chloroethane                | 0.294 | 0.257 | 12.6 | 102   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.625 | 0.606 | 3.0  | 104   | 0.00     |
| 8 T   | Diethyl Ether               | 0.264 | 0.249 | 5.7  | 104   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.370 | 0.352 | 4.9  | 103   | 0.00     |
| 10 T  | Methyl Iodide               | 0.464 | 0.372 | 19.8 | 79    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.123 | 0.122 | 0.8  | 104   | -0.01    |
| 12 CM | 1,1-Dichloroethene          | 0.361 | 0.337 | 6.6# | 101   | 0.00     |
| 13 T  | Acrolein                    | 0.074 | 0.066 | 10.8 | 98    | 0.00     |
| 14 T  | Allyl chloride              | 0.739 | 0.706 | 4.5  | 102   | 0.00     |
| 15 T  | Acrylonitrile               | 0.272 | 0.257 | 5.5  | 100   | 0.00     |
| 16 T  | Acetone                     | 0.257 | 0.237 | 7.8  | 102   | 0.00     |
| 17 T  | Carbon Disulfide            | 0.975 | 0.974 | 0.1  | 107   | 0.00     |
| 18 T  | Methyl Acetate              | 0.659 | 0.654 | 0.8  | 103   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.248 | 1.230 | 1.4  | 104   | 0.00     |
| 20 T  | Methylene Chloride          | 0.424 | 0.384 | 9.4  | 101   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.378 | 0.368 | 2.6  | 104   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.581 | 1.639 | -3.7 | 103   | 0.00     |
| 23 T  | Vinyl Acetate               | 1.312 | 1.371 | -4.5 | 102   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.745 | 0.723 | 3.0  | 101   | 0.00     |
| 25 T  | 2-Butanone                  | 0.477 | 0.458 | 4.0  | 100   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.614 | 0.571 | 7.0  | 98    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.528 | 0.510 | 3.4  | 101   | 0.00     |
| 28 T  | Bromochloromethane          | 0.434 | 0.437 | -0.7 | 100   | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.298 | 0.300 | -0.7 | 100   | 0.00     |
| 30 C  | Chloroform                  | 0.903 | 0.860 | 4.8# | 102   | 0.00     |
| 31 T  | Cyclohexane                 | 0.778 | 0.768 | 1.3  | 102   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.729 | 0.729 | 0.0  | 103   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.579 | 0.597 | -3.1 | 105   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0  | 104   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.321 | 0.330 | -2.8 | 104   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.455 | 0.437 | 4.0  | 100   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.585 | 0.563 | 3.8  | 101   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.428 | 0.428 | 0.0  | 102   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.518 | 0.529 | -2.1 | 105   | 0.00     |
| 40 TM | Benzene                     | 1.340 | 1.319 | 1.6  | 102   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.323 | 0.321 | 0.6  | 102   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.501 | 0.484 | 3.4  | 102   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.845 | 0.858 | -1.5 | 103   | 0.00     |
| 44 TM | Trichloroethene             | 0.372 | 0.367 | 1.3  | 102   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.355 | 0.346 | 2.5# | 101   | 0.00     |

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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              | 0.243 | 0.233 | 4.1   | 101   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.449 | 0.442 | 1.6   | 102   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.429 | 0.453 | -5.6  | 102   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.010 | 0.010 | 0.0   | 99    | 0.00     |
| 50 S  | Toluene-d8                  | 1.224 | 1.260 | -2.9  | 105   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.606 | 0.614 | -1.3  | 100   | 0.00     |
| 52 CM | Toluene                     | 0.829 | 0.843 | -1.7# | 103   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.469 | 0.477 | -1.7  | 102   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.518 | 0.524 | -1.2  | 101   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.359 | 0.348 | 3.1   | 103   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.493 | 0.533 | -8.1  | 104   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.592 | 0.580 | 2.0   | 102   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.283 | 0.297 | -4.9  | 100   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.481 | 0.486 | -1.0  | 99    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.352 | 0.357 | -1.4  | 103   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.370 | 0.367 | 0.8   | 102   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.459 | 0.471 | -2.6  | 105   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 103   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.411 | 0.415 | -1.0  | 103   | 0.00     |
| 65 PM | Chlorobenzene               | 1.026 | 1.026 | 0.0   | 102   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.352 | 0.359 | -2.0  | 103   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.679 | 1.757 | -4.6# | 101   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.654 | 0.684 | -4.6  | 101   | 0.00     |
| 69 T  | o-Xylene                    | 0.625 | 0.663 | -6.1  | 103   | 0.00     |
| 70 T  | Styrene                     | 1.018 | 1.102 | -8.3  | 101   | 0.00     |
| 71 P  | Bromoform                   | 0.315 | 0.314 | 0.3   | 104   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 102   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.025 | 3.254 | -7.6  | 102   | 0.00     |
| 74 T  | N-amyl acetate              | 1.373 | 1.515 | -10.3 | 104   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.140 | 1.113 | 2.4   | 101   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.029 | 1.041 | -1.2  | 100   | 0.00     |
| 77 T  | Bromobenzene                | 0.847 | 0.862 | -1.8  | 103   | 0.00     |
| 78 T  | n-propylbenzene             | 3.523 | 3.776 | -7.2  | 101   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.131 | 2.224 | -4.4  | 103   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.551 | 2.760 | -8.2  | 102   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.304 | 0.310 | -2.0  | 98    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.487 | 2.626 | -5.6  | 102   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.490 | 2.676 | -7.5  | 101   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.602 | 2.851 | -9.6  | 103   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.046 | 3.295 | -8.2  | 104   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.716 | 2.918 | -7.4  | 101   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.563 | 1.592 | -1.9  | 104   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.620 | 1.606 | 0.9   | 102   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.459 | 2.636 | -7.2  | 103   | 0.00     |

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|      | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.433 | 0.459 | -6.0  | 106   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.598 | 1.589 | 0.6   | 101   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.265 | 0.264 | 0.4   | 102   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.125 | 1.181 | -5.0  | 104   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.548 | 0.536 | 2.2   | 102   | 0.00     |
| 95 T | Naphthalene                 | 3.309 | 3.720 | -12.4 | 104   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.147 | 1.194 | -4.1  | 103   | 0.00     |

(#) = Out of Range

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