

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN122418\  
 Data File : VN053172.D  
 Acq On : 24 Dec 2018 9:19  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Dec 24 22:43:26 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 18 13:03:37 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvqRF | CCRF  | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0    | 89    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.506 | 0.492 | 2.8    | 89    | 0.00     |
| 3 P   | Chloromethane               | 0.613 | 0.643 | -4.9   | 94    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.621 | 0.610 | 1.8#   | 89    | 0.00     |
| 5 T   | Bromomethane                | 0.430 | 0.396 | 7.9    | 89    | 0.00     |
| 6 T   | Chloroethane                | 0.368 | 0.367 | 0.3    | 90    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.774 | 0.778 | -0.5   | 90    | 0.00     |
| 8 T   | Diethyl Ether               | 0.292 | 0.300 | -2.7   | 92    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.493 | 0.508 | -3.0   | 95    | 0.00     |
| 10 T  | Methyl Iodide               | 0.693 | 0.624 | 10.0   | 77    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.031 | 0.029 | 6.5    | 83    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.477 | 0.468 | 1.9#   | 88    | 0.00     |
| 13 T  | Acrolein                    | 0.028 | 0.034 | -21.4  | 106   | 0.00     |
| 14 T  | Allyl chloride              | 0.738 | 0.765 | -3.7   | 93    | 0.00     |
| 15 T  | Acrylonitrile               | 0.172 | 0.175 | -1.7   | 91    | 0.00     |
| 16 T  | Acetone                     | 0.099 | 0.096 | 3.0    | 89    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.554 | 1.337 | 14.0   | 81    | 0.00     |
| 18 T  | Methyl Acetate              | 0.466 | 0.479 | -2.8   | 97    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.275 | 1.300 | -2.0   | 90    | 0.00     |
| 20 T  | Methylene Chloride          | 0.543 | 0.558 | -2.8   | 94    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.512 | 0.504 | 1.6    | 90    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.576 | 1.705 | -8.2   | 96    | 0.00     |
| 23 T  | Vinyl Acetate               | 0.906 | 0.977 | -7.8   | 99    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.936 | 0.972 | -3.8   | 93    | 0.00     |
| 25 T  | 2-Butanone                  | 0.167 | 0.175 | -4.8   | 91    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.715 | 0.725 | -1.4   | 92    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.580 | 0.597 | -2.9   | 92    | 0.00     |
| 28 T  | Bromochloromethane          | 0.406 | 0.407 | -0.2   | 88    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.125 | 0.129 | -3.2   | 90    | 0.00     |
| 30 C  | Chloroform                  | 0.920 | 0.947 | -2.9#  | 92    | 0.00     |
| 31 T  | Cyclohexane                 | 1.036 | 0.908 | 12.4   | 93    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.784 | 0.781 | 0.4    | 90    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.507 | 0.502 | 1.0    | 84    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 86    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.228 | 0.292 | -28.1# | 110   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.480 | 0.502 | -4.6   | 92    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.268 | 0.288 | -7.5   | 90    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.440 | 0.459 | -4.3   | 90    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.583 | 0.601 | -3.1   | 92    | 0.00     |
| 40 TM | Benzene                     | 1.427 | 1.509 | -5.7   | 92    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.155 | 0.188 | -21.3  | 103   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.422 | 0.439 | -4.0   | 90    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.595 | 0.523 | 12.1   | 86    | 0.00     |
| 44 TM | Trichloroethene             | 0.413 | 0.412 | 0.2    | 87    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.372 | 0.402 | -8.1#  | 94    | 0.00     |

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 Max. RRF Dev : 25% Max. Rel. Area : 150%

|       | Compound                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.217 | 0.225 | -3.7  | 90    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.460 | 0.490 | -6.5  | 92    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.260 | 0.272 | -4.6  | 90    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.003 | 0.003 | 0.0   | 91    | 0.00     |
| 50 S  | Toluene-d8                  | 1.226 | 1.265 | -3.2  | 86    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.259 | 0.284 | -9.7  | 91    | 0.00     |
| 52 CM | Toluene                     | 0.885 | 0.951 | -7.5# | 93    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.484 | 0.505 | -4.3  | 90    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.556 | 0.593 | -6.7  | 91    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.309 | 0.329 | -6.5  | 92    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.409 | 0.432 | -5.6  | 90    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.529 | 0.570 | -7.8  | 92    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.224 | 0.221 | 1.3   | 82    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.176 | 0.196 | -11.4 | 94    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.353 | 0.371 | -5.1  | 90    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.313 | 0.330 | -5.4  | 90    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.430 | 0.453 | -5.3  | 88    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 88    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.542 | 0.490 | 9.6   | 80    | 0.00     |
| 65 PM | Chlorobenzene               | 1.108 | 1.167 | -5.3  | 94    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.385 | 0.406 | -5.5  | 93    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.906 | 2.033 | -6.7# | 95    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.725 | 0.771 | -6.3  | 95    | 0.00     |
| 69 T  | o-Xylene                    | 0.695 | 0.753 | -8.3  | 95    | 0.00     |
| 70 T  | Styrene                     | 1.134 | 1.252 | -10.4 | 96    | 0.00     |
| 71 P  | Bromoform                   | 0.278 | 0.282 | -1.4  | 88    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 89    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.912 | 4.108 | -5.0  | 95    | 0.00     |
| 74 T  | N-amyl acetate              | 1.086 | 1.089 | -0.3  | 88    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.767 | 0.854 | -11.3 | 104   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.842 | 0.751 | 10.8  | 78    | 0.00     |
| 77 T  | Bromobenzene                | 1.017 | 1.056 | -3.8  | 94    | 0.00     |
| 78 T  | n-propylbenzene             | 4.455 | 4.737 | -6.3  | 96    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.762 | 2.772 | -0.4  | 96    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.189 | 3.315 | -4.0  | 95    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.261 | 0.263 | -0.8  | 87    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.703 | 2.863 | -5.9  | 97    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.820 | 2.894 | -2.6  | 95    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.206 | 3.347 | -4.4  | 94    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.814 | 3.892 | -2.0  | 94    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.296 | 3.399 | -3.1  | 94    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.800 | 1.865 | -3.6  | 94    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.823 | 1.859 | -2.0  | 96    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.836 | 2.879 | -1.5  | 95    | 0.00     |

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|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.506 | 0.537 | -6.1 | 96    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.694 | 1.748 | -3.2 | 94    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.133 | 0.126 | 5.3  | 86    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.006 | 0.860 | 14.5 | 88    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.584 | 0.550 | 5.8  | 103   | 0.00     |
| 95 T | Naphthalene                 | 2.223 | 1.767 | 20.5 | 83    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.937 | 0.753 | 19.6 | 86    | 0.00     |

(#) = Out of Range

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