

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN080619\  
 Data File : VN057110.D  
 Acq On : 6 Aug 2019 17:59  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Aug 07 04:40:13 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N072719W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jul 27 01:33:29 2019  
 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   | 62    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.505 | 0.505 | 0.0   | 56    | 0.00     |
| 3 P   | Chloromethane               | 0.605 | 0.542 | 10.4  | 57    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.568 | 0.514 | 9.5#  | 55    | 0.00     |
| 5 T   | Bromomethane                | 0.353 | 0.261 | 26.1# | 47#   | -0.04    |
| 6 T   | Chloroethane                | 0.313 | 0.290 | 7.3   | 57    | -0.06    |
| 7 T   | Trichlorofluoromethane      | 0.743 | 0.742 | 0.1   | 61    | -0.04    |
| 8 T   | Diethyl Ether               | 0.278 | 0.295 | -6.1  | 64    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.461 | 0.463 | -0.4  | 61    | -0.02    |
| 10 T  | Methyl Iodide               | 0.615 | 0.521 | 15.3  | 48#   | -0.01    |
| 11 T  | Tert butyl alcohol          | 0.069 | 0.070 | -1.4  | 59    | 0.05     |
| 12 CM | 1,1-Dichloroethene          | 0.439 | 0.440 | -0.2# | 60    | -0.02    |
| 13 T  | Acrolein                    | 0.038 | 0.029 | 23.7  | 51    | 0.00     |
| 14 T  | Allyl chloride              | 0.715 | 0.699 | 2.2   | 58    | 0.00     |
| 15 T  | Acrylonitrile               | 0.203 | 0.207 | -2.0  | 57    | 0.01     |
| 16 T  | Acetone                     | 0.185 | 0.157 | 15.1  | 48#   | 0.01     |
| 17 T  | Carbon Disulfide            | 1.168 | 0.944 | 19.2  | 50#   | -0.01    |
| 18 T  | Methyl Acetate              | 0.592 | 0.625 | -5.6  | 63    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.310 | 1.448 | -10.5 | 65    | 0.00     |
| 20 T  | Methylene Chloride          | 0.534 | 0.518 | 3.0   | 63    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.467 | 0.459 | 1.7   | 60    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.473 | 1.532 | -4.0  | 63    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.021 | 1.056 | -3.4  | 59    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.869 | 0.894 | -2.9  | 63    | 0.00     |
| 25 T  | 2-Butanone                  | 0.263 | 0.251 | 4.6   | 52    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.661 | 0.688 | -4.1  | 64    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.552 | 0.569 | -3.1  | 64    | 0.00     |
| 28 T  | Bromochloromethane          | 0.409 | 0.393 | 3.9   | 62    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.172 | 0.165 | 4.1   | 53    | 0.00     |
| 30 C  | Chloroform                  | 0.889 | 0.911 | -2.5# | 66    | 0.00     |
| 31 T  | Cyclohexane                 | 0.841 | 0.756 | 10.1  | 56    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.709 | 0.771 | -8.7  | 67    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.512 | 0.552 | -7.8  | 63    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 62    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.320 | 0.348 | -8.7  | 64    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.440 | 0.438 | 0.5   | 61    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.352 | 0.348 | 1.1   | 54    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.416 | 0.449 | -7.9  | 64    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.562 | 0.527 | 6.2   | 56    | 0.00     |
| 40 TM | Benzene                     | 1.355 | 1.372 | -1.3  | 62    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.163 | 0.194 | -19.0 | 73    | 0.02     |
| 42 TM | 1,2-Dichloroethane          | 0.425 | 0.454 | -6.8  | 67    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.582 | 0.620 | -6.5  | 61    | 0.00     |
| 44 TM | Trichloroethene             | 0.373 | 0.380 | -1.9  | 64    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.362 | 0.379 | -4.7# | 65    | 0.00     |

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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) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.219 | 0.233 | -6.4  | 64    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.430 | 0.470 | -9.3  | 65    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.281 | 0.297 | -5.7  | 60    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.006 | 0.006 | 0.0   | 63    | 0.00     |
| 50 S  | Toluene-d8                  | 1.221 | 1.258 | -3.0  | 61    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.346 | 0.357 | -3.2  | 58    | 0.00     |
| 52 CM | Toluene                     | 0.814 | 0.859 | -5.5# | 63    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.446 | 0.484 | -8.5  | 64    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.519 | 0.567 | -9.2  | 65    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.327 | 0.348 | -6.4  | 65    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.439 | 0.488 | -11.2 | 62    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.541 | 0.575 | -6.3  | 65    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.196 | 0.156 | 20.4  | 46#   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.241 | 0.256 | -6.2  | 57    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.335 | 0.374 | -11.6 | 65    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.319 | 0.352 | -10.3 | 65    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.397 | 0.448 | -12.8 | 67    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 63    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.431 | 0.414 | 3.9   | 63    | 0.00     |
| 65 PM | Chlorobenzene               | 1.019 | 1.068 | -4.8  | 66    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.384 | 0.415 | -8.1  | 67    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.761 | 1.855 | -5.3# | 65    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.650 | 0.695 | -6.9  | 64    | 0.00     |
| 69 T  | o-Xylene                    | 0.636 | 0.684 | -7.5  | 66    | 0.00     |
| 70 T  | Styrene                     | 1.014 | 1.157 | -14.1 | 67    | 0.00     |
| 71 P  | Bromoform                   | 0.268 | 0.312 | -16.4 | 67    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 65    | 0.00     |
| 73 T  | Isopropylbenzene            | 4.321 | 4.084 | 5.5   | 66    | 0.00     |
| 74 T  | N-amyl acetate              | 1.255 | 1.298 | -3.4  | 65    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.259 | 1.217 | 3.3   | 68    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.015 | 0.997 | 1.8   | 67    | 0.00     |
| 77 T  | Bromobenzene                | 1.128 | 1.114 | 1.2   | 69    | 0.00     |
| 78 T  | n-propylbenzene             | 4.614 | 4.400 | 4.6   | 64    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.841 | 2.739 | 3.6   | 68    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.547 | 3.491 | 1.6   | 68    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.316 | 0.338 | -7.0  | 64    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.659 | 2.679 | -0.8  | 67    | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.140 | 3.178 | -1.2  | 71    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.413 | 3.430 | -0.5  | 68    | 0.00     |
| 85 T  | sec-Butylbenzene            | 4.050 | 3.982 | 1.7   | 67    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.595 | 3.603 | -0.2  | 67    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.716 | 1.817 | -5.9  | 69    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.652 | 1.721 | -4.2  | 68    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.771 | 2.663 | 3.9   | 61    | 0.00     |

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|      | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.619 | 0.632 | -2.1  | 70    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.688 | 1.835 | -8.7  | 71    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.172 | 0.189 | -9.9  | 67    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.732 | 0.821 | -12.2 | 63    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.703 | 0.698 | 0.7   | 72    | 0.00     |
| 95 T | Naphthalene                 | 1.679 | 2.001 | -19.2 | 64    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.766 | 0.906 | -18.3 | 69    | 0.00     |

(#) = Out of Range

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