

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN020720\  
 Data File : VN060032.D  
 Acq On : 7 Feb 2020 16:06  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Feb 07 23:56:14 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011320W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jan 18 03:09:32 2020  
 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     | 95    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.534 | 0.452 | 15.4    | 72    | 0.00     |
| 3 P   | Chloromethane               | 0.572 | 0.455 | 20.5    | 75    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.655 | 0.603 | 7.9#    | 82    | 0.00     |
| 5 T   | Bromomethane                | 0.400 | 0.370 | 7.5     | 86    | 0.00     |
| 6 T   | Chloroethane                | 0.310 | 0.292 | 5.8     | 89    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.787 | 0.740 | 6.0     | 88    | 0.00     |
| 8 T   | Diethyl Ether               | 0.276 | 0.274 | 0.7     | 92    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.438 | 0.444 | -1.4    | 94    | 0.00     |
| 10 T  | Methyl Iodide               | 0.708 | 0.570 | 19.5    | 75    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.093 | 0.084 | 9.7     | 84    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.457 | 0.408 | 10.7#   | 85    | 0.00     |
| 13 T  | Acrolein                    | 0.066 | 0.132 | -100.0# | 197#  | 0.00     |
| 14 T  | Allyl chloride              | 0.617 | 0.588 | 4.7     | 89    | 0.00     |
| 15 T  | Acrylonitrile               | 0.213 | 0.221 | -3.8    | 94    | 0.00     |
| 16 T  | Acetone                     | 0.224 | 0.190 | 15.2    | 92    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.303 | 0.930 | 28.6#   | 67    | 0.00     |
| 18 T  | Methyl Acetate              | 0.649 | 0.681 | -4.9    | 99    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.491 | 1.549 | -3.9    | 98    | 0.00     |
| 20 T  | Methylene Chloride          | 0.557 | 0.491 | 11.8    | 93    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.486 | 0.444 | 8.6     | 86    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.397 | 1.472 | -5.4    | 99    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.082 | 1.103 | -1.9    | 101   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.854 | 0.864 | -1.2    | 96    | 0.00     |
| 25 T  | 2-Butanone                  | 0.314 | 0.291 | 7.3     | 90    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.821 | 0.842 | -2.6    | 99    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.559 | 0.563 | -0.7    | 95    | 0.00     |
| 28 T  | Bromochloromethane          | 0.341 | 0.328 | 3.8     | 92    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.195 | 0.189 | 3.1     | 92    | 0.00     |
| 30 C  | Chloroform                  | 0.885 | 0.932 | -5.3#   | 99    | 0.00     |
| 31 T  | Cyclohexane                 | 0.822 | 0.689 | 16.2    | 82    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.818 | 0.836 | -2.2    | 96    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.555 | 0.576 | -3.8    | 97    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0     | 95    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.298 | 0.310 | -4.0    | 96    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.435 | 0.417 | 4.1     | 90    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.408 | 0.386 | 5.4     | 93    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.474 | 0.469 | 1.1     | 95    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.537 | 0.493 | 8.2     | 87    | 0.00     |
| 40 TM | Benzene                     | 1.299 | 1.265 | 2.6     | 94    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.201 | 0.199 | 1.0     | 95    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.440 | 0.471 | -7.0    | 102   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.702 | 0.702 | 0.0     | 95    | 0.00     |
| 44 TM | Trichloroethene             | 0.354 | 0.349 | 1.4     | 91    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.321 | 0.339 | -5.6#   | 100   | 0.00     |

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

|       | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.227 | 0.238 | -4.8  | 99    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.457 | 0.496 | -8.5  | 103   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.314 | 0.304 | 3.2   | 91    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.006 | 0.006 | 0.0   | 90    | 0.00     |
| 50 S  | Toluene-d8                  | 1.155 | 1.161 | -0.5  | 94    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.406 | 0.411 | -1.2  | 96    | 0.00     |
| 52 CM | Toluene                     | 0.820 | 0.824 | -0.5# | 95    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.510 | 0.557 | -9.2  | 101   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.537 | 0.573 | -6.7  | 98    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.325 | 0.347 | -6.8  | 103   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.496 | 0.508 | -2.4  | 96    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.516 | 0.556 | -7.8  | 100   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.150 | 0.167 | -11.3 | 95    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.299 | 0.300 | -0.3  | 90    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.370 | 0.407 | -10.0 | 103   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.340 | 0.357 | -5.0  | 98    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.416 | 0.452 | -8.7  | 102   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 99    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.408 | 0.360 | 11.8  | 80    | 0.00     |
| 65 PM | Chlorobenzene               | 0.983 | 1.011 | -2.8  | 100   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.380 | 0.399 | -5.0  | 104   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.784 | 1.796 | -0.7# | 99    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.674 | 0.677 | -0.4  | 98    | 0.00     |
| 69 T  | o-Xylene                    | 0.660 | 0.663 | -0.5  | 99    | 0.00     |
| 70 T  | Styrene                     | 1.104 | 1.115 | -1.0  | 96    | 0.00     |
| 71 P  | Bromoform                   | 0.304 | 0.330 | -8.6  | 103   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 106   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.667 | 3.455 | 5.8   | 101   | 0.00     |
| 74 T  | N-amyl acetate              | 1.423 | 1.306 | 8.2   | 96    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.063 | 1.050 | 1.2   | 106   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.841 | 0.919 | -9.3  | 113   | 0.00     |
| 77 T  | Bromobenzene                | 0.929 | 0.874 | 5.9   | 100   | 0.00     |
| 78 T  | n-propylbenzene             | 4.116 | 3.979 | 3.3   | 103   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.448 | 2.335 | 4.6   | 104   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.084 | 2.905 | 5.8   | 101   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.392 | 0.380 | 3.1   | 101   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.456 | 2.398 | 2.4   | 103   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.667 | 2.520 | 5.5   | 101   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.051 | 2.922 | 4.2   | 102   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.504 | 3.404 | 2.9   | 102   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.243 | 3.159 | 2.6   | 104   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.613 | 1.580 | 2.0   | 104   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.609 | 1.572 | 2.3   | 103   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.765 | 2.816 | -1.8  | 106   | 0.00     |

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|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.607 | 0.601 | 1.0  | 105   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.595 | 1.548 | 2.9  | 103   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.257 | 0.213 | 17.1 | 98    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.958 | 0.971 | -1.4 | 100   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.528 | 0.512 | 3.0  | 103   | 0.00     |
| 95 T | Naphthalene                 | 2.726 | 2.543 | 6.7  | 92    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.933 | 0.932 | 0.1  | 101   | 0.00     |

(#) = Out of Range

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