

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN032420\  
 Data File : VN060685.D  
 Acq On : 24 Mar 2020 20:09  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Mar 25 08:24:40 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N031820W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 18 08:49:09 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    | 87    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.484 | 0.495 | -2.3   | 85    | 0.00     |
| 3 P   | Chloromethane               | 0.904 | 0.845 | 6.5    | 82    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.707 | 0.668 | 5.5#   | 82    | 0.00     |
| 5 T   | Bromomethane                | 0.305 | 0.304 | 0.3    | 87    | 0.00     |
| 6 T   | Chloroethane                | 0.407 | 0.412 | -1.2   | 85    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.871 | 0.880 | -1.0   | 87    | 0.00     |
| 8 T   | Diethyl Ether               | 0.350 | 0.359 | -2.6   | 88    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.504 | 0.515 | -2.2   | 87    | 0.00     |
| 10 T  | Methyl Iodide               | 0.449 | 0.458 | -2.0   | 92    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.101 | 0.107 | -5.9   | 94    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.541 | 0.532 | 1.7#   | 86    | 0.00     |
| 13 T  | Acrolein                    | 0.112 | 0.158 | -41.1# | 123   | 0.00     |
| 14 T  | Allyl chloride              | 0.952 | 0.918 | 3.6    | 86    | 0.00     |
| 15 T  | Acrylonitrile               | 0.297 | 0.323 | -8.8   | 93    | 0.00     |
| 16 T  | Acetone                     | 0.243 | 0.261 | -7.4   | 94    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.646 | 1.586 | 3.6    | 84    | 0.00     |
| 18 T  | Methyl Acetate              | 0.684 | 0.737 | -7.7   | 92    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.861 | 1.865 | -0.2   | 88    | 0.00     |
| 20 T  | Methylene Chloride          | 0.598 | 0.600 | -0.3   | 87    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.577 | 0.572 | 0.9    | 87    | 0.00     |
| 22 T  | Diisopropyl ether           | 2.012 | 2.099 | -4.3   | 89    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.641 | 1.779 | -8.4   | 92    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.097 | 1.129 | -2.9   | 89    | 0.00     |
| 25 T  | 2-Butanone                  | 0.393 | 0.430 | -9.4   | 94    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.863 | 0.837 | 3.0    | 85    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.656 | 0.664 | -1.2   | 88    | 0.00     |
| 28 T  | Bromochloromethane          | 0.525 | 0.548 | -4.4   | 89    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.278 | 0.296 | -6.5   | 93    | 0.00     |
| 30 C  | Chloroform                  | 1.051 | 1.071 | -1.9#  | 89    | 0.00     |
| 31 T  | Cyclohexane                 | 1.106 | 1.057 | 4.4    | 86    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.906 | 0.928 | -2.4   | 87    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.686 | 0.691 | -0.7   | 87    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 88    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.302 | 0.302 | 0.0    | 87    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.484 | 0.488 | -0.8   | 87    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.523 | 0.540 | -3.3   | 92    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.434 | 0.435 | -0.2   | 85    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.575 | 0.574 | 0.2    | 86    | 0.00     |
| 40 TM | Benzene                     | 1.462 | 1.468 | -0.4   | 88    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.223 | 0.247 | -10.8  | 97    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.499 | 0.510 | -2.2   | 89    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.863 | 0.898 | -4.1   | 91    | 0.00     |
| 44 TM | Trichloroethene             | 0.368 | 0.369 | -0.3   | 86    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.386 | 0.395 | -2.3#  | 89    | 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              | 0.233 | 0.243 | -4.3  | 89    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.484 | 0.504 | -4.1  | 90    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.384 | 0.409 | -6.5  | 92    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.005 | 0.005 | 0.0   | 93    | 0.00     |
| 50 S  | Toluene-d8                  | 1.235 | 1.217 | 1.5   | 85    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.491 | 0.538 | -9.6  | 93    | 0.00     |
| 52 CM | Toluene                     | 0.883 | 0.896 | -1.5# | 88    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.557 | 0.575 | -3.2  | 88    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.611 | 0.614 | -0.5  | 88    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.340 | 0.349 | -2.6  | 89    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.529 | 0.571 | -7.9  | 89    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.589 | 0.612 | -3.9  | 90    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.263 | 0.260 | 1.1   | 82    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.354 | 0.394 | -11.3 | 93    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.351 | 0.374 | -6.6  | 90    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.341 | 0.358 | -5.0  | 89    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.453 | 0.453 | 0.0   | 88    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 89    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.393 | 0.367 | 6.6   | 84    | 0.00     |
| 65 PM | Chlorobenzene               | 0.991 | 0.976 | 1.5   | 88    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.359 | 0.359 | 0.0   | 89    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.843 | 1.820 | 1.2#  | 86    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.685 | 0.676 | 1.3   | 86    | 0.00     |
| 69 T  | o-Xylene                    | 0.654 | 0.648 | 0.9   | 86    | 0.00     |
| 70 T  | Styrene                     | 1.069 | 1.096 | -2.5  | 88    | 0.00     |
| 71 P  | Bromoform                   | 0.268 | 0.289 | -7.8  | 90    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 93    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.752 | 3.525 | 6.1   | 87    | 0.00     |
| 74 T  | N-amyl acetate              | 1.734 | 1.756 | -1.3  | 93    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.135 | 1.128 | 0.6   | 93    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.079 | 0.923 | 14.5  | 83    | 0.00     |
| 77 T  | Bromobenzene                | 0.904 | 0.856 | 5.3   | 89    | 0.00     |
| 78 T  | n-propylbenzene             | 4.433 | 4.191 | 5.5   | 87    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.649 | 2.443 | 7.8   | 87    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.184 | 2.997 | 5.9   | 87    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.420 | 0.403 | 4.0   | 88    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.698 | 2.559 | 5.2   | 88    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.640 | 2.491 | 5.6   | 88    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.150 | 3.026 | 3.9   | 88    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.550 | 3.364 | 5.2   | 87    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.192 | 3.016 | 5.5   | 87    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.595 | 1.538 | 3.6   | 90    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.602 | 1.543 | 3.7   | 90    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.882 | 2.763 | 4.1   | 87    | 0.00     |

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

|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.464 | 0.471 | -1.5 | 91    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.525 | 1.503 | 1.4  | 90    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.255 | 0.242 | 5.1  | 96    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.936 | 0.948 | -1.3 | 91    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.459 | 0.417 | 9.2  | 85    | 0.00     |
| 95 T | Naphthalene                 | 2.816 | 2.926 | -3.9 | 93    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.922 | 0.912 | 1.1  | 91    | 0.00     |

(#) = Out of Range

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