

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN052319\  
 Data File : VN055779.D  
 Acq On : 24 May 2019 1:58  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 42 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: May 24 08:16:02 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N052319W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri May 24 06:41:54 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                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 111   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.337 | 0.284 | 15.7  | 100   | 0.00     |
| 3 P   | Chloromethane               | 0.471 | 0.423 | 10.2  | 103   | 0.00     |
| 4 C   | Vinyl Chloride              | 0.503 | 0.441 | 12.3# | 101   | 0.00     |
| 5 T   | Bromomethane                | 0.315 | 0.289 | 8.3   | 98    | 0.00     |
| 6 T   | Chloroethane                | 0.303 | 0.270 | 10.9  | 99    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.659 | 0.579 | 12.1  | 100   | 0.00     |
| 8 T   | Diethyl Ether               | 0.295 | 0.259 | 12.2  | 100   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.412 | 0.360 | 12.6  | 100   | 0.00     |
| 10 T  | Methyl Iodide               | 0.602 | 0.630 | -4.7  | 112   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.099 | 0.103 | -4.0  | 112   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.425 | 0.391 | 8.0#  | 105   | 0.00     |
| 13 T  | Acrolein                    | 0.071 | 0.059 | 16.9  | 97    | 0.00     |
| 14 T  | Allyl chloride              | 0.729 | 0.640 | 12.2  | 100   | 0.00     |
| 15 T  | Acrylonitrile               | 0.227 | 0.218 | 4.0   | 108   | 0.00     |
| 16 T  | Acetone                     | 0.227 | 0.169 | 25.6# | 84    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.208 | 1.054 | 12.7  | 102   | 0.00     |
| 18 T  | Methyl Acetate              | 0.538 | 0.439 | 18.4  | 104   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.418 | 1.330 | 6.2   | 107   | 0.00     |
| 20 T  | Methylene Chloride          | 0.492 | 0.450 | 8.5   | 107   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.457 | 0.425 | 7.0   | 107   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.418 | 1.306 | 7.9   | 104   | 0.00     |
| 23 T  | Vinyl Acetate               | 1.216 | 1.114 | 8.4   | 102   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.826 | 0.751 | 9.1   | 105   | 0.00     |
| 25 T  | 2-Butanone                  | 0.317 | 0.285 | 10.1  | 101   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.714 | 0.469 | 34.3# | 77    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.533 | 0.501 | 6.0   | 106   | 0.00     |
| 28 T  | Bromochloromethane          | 0.393 | 0.367 | 6.6   | 104   | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.201 | 0.191 | 5.0   | 107   | 0.00     |
| 30 C  | Chloroform                  | 0.823 | 0.773 | 6.1#  | 107   | 0.00     |
| 31 T  | Cyclohexane                 | 0.775 | 0.706 | 8.9   | 105   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.735 | 0.678 | 7.8   | 106   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.516 | 0.490 | 5.0   | 105   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 110   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.316 | 0.320 | -1.3  | 111   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.436 | 0.397 | 8.9   | 105   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.421 | 0.402 | 4.5   | 106   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.454 | 0.421 | 7.3   | 106   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.540 | 0.505 | 6.5   | 107   | 0.00     |
| 40 TM | Benzene                     | 1.313 | 1.252 | 4.6   | 107   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.213 | 0.192 | 9.9   | 104   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.429 | 0.394 | 8.2   | 104   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.708 | 0.683 | 3.5   | 109   | 0.00     |
| 44 TM | Trichloroethene             | 0.366 | 0.370 | -1.1  | 112   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.342 | 0.327 | 4.4#  | 106   | 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                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 46 T  | Dibromomethane              | 0.224 | 0.218 | 2.7    | 107   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.460 | 0.430 | 6.5    | 105   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.326 | 0.313 | 4.0    | 105   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.007 | 0.007 | 0.0    | 113   | 0.00     |
| 50 S  | Toluene-d8                  | 1.213 | 1.216 | -0.2   | 111   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.418 | 0.408 | 2.4    | 107   | 0.00     |
| 52 CM | Toluene                     | 0.826 | 0.808 | 2.2#   | 109   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.491 | 0.457 | 6.9    | 101   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.544 | 0.503 | 7.5    | 102   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.331 | 0.329 | 0.6    | 110   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.511 | 0.513 | -0.4   | 108   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.538 | 0.523 | 2.8    | 109   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.195 | 0.194 | 0.5    | 106   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.296 | 0.290 | 2.0    | 105   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.385 | 0.383 | 0.5    | 109   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.343 | 0.346 | -0.9   | 111   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.416 | 0.429 | -3.1   | 112   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 111   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.422 | 0.425 | -0.7   | 117   | 0.00     |
| 65 PM | Chlorobenzene               | 1.001 | 0.988 | 1.3    | 112   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.399 | 0.380 | 4.8    | 110   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.795 | 1.800 | -0.3#  | 114   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.679 | 0.716 | -5.4   | 119   | 0.00     |
| 69 T  | o-Xylene                    | 0.673 | 0.660 | 1.9    | 112   | 0.00     |
| 70 T  | Styrene                     | 1.090 | 1.105 | -1.4   | 110   | 0.00     |
| 71 P  | Bromoform                   | 0.341 | 0.345 | -1.2   | 111   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 118   | 0.00     |
| 73 T  | Isopropylbenzene            | 4.186 | 3.512 | 16.1   | 114   | 0.00     |
| 74 T  | N-amyl acetate              | 1.536 | 1.275 | 17.0   | 107   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.241 | 1.006 | 18.9   | 107   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.988 | 0.836 | 15.4   | 109   | 0.00     |
| 77 T  | Bromobenzene                | 1.067 | 1.734 | -62.5# | 208#  | 0.00     |
| 78 T  | n-propylbenzene             | 4.346 | 3.811 | 12.3   | 114   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.693 | 2.248 | 16.5   | 110   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.474 | 3.015 | 13.2   | 116   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.372 | 0.291 | 21.8   | 96    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.554 | 2.215 | 13.3   | 110   | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.078 | 2.518 | 18.2   | 111   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.395 | 3.559 | -4.8   | 137   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.826 | 3.204 | 16.3   | 109   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.472 | 2.995 | 13.7   | 111   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.689 | 1.560 | 7.6    | 113   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.606 | 1.511 | 5.9    | 115   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.661 | 2.369 | 11.0   | 110   | 0.00     |

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|------|-----------------------------|-------|-------|--------|-------|----------|
| 90 T | Hexachloroethane            | 0.661 | 0.555 | 16.0   | 108   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.686 | 1.535 | 9.0    | 113   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.222 | 0.195 | 12.2   | 111   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.847 | 0.920 | -8.6   | 126   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.669 | 0.586 | 12.4   | 116   | 0.00     |
| 95 T | Naphthalene                 | 2.313 | 2.897 | -25.2# | 142   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.891 | 0.946 | -6.2   | 125   | 0.00     |

(#) = Out of Range

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