

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN020320\  
 Data File : VN059983.D  
 Acq On : 3 Feb 2020 18:27  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Feb 04 04:16:17 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   | 100   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.534 | 0.498 | 6.7   | 83    | 0.00     |
| 3 P   | Chloromethane               | 0.572 | 0.499 | 12.8  | 87    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.655 | 0.661 | -0.9# | 95    | 0.00     |
| 5 T   | Bromomethane                | 0.400 | 0.369 | 7.8   | 91    | 0.00     |
| 6 T   | Chloroethane                | 0.310 | 0.314 | -1.3  | 101   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.787 | 0.772 | 1.9   | 97    | 0.00     |
| 8 T   | Diethyl Ether               | 0.276 | 0.289 | -4.7  | 103   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.438 | 0.451 | -3.0  | 100   | 0.00     |
| 10 T  | Methyl Iodide               | 0.708 | 0.653 | 7.8   | 91    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.093 | 0.096 | -3.2  | 101   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.457 | 0.431 | 5.7#  | 95    | 0.00     |
| 13 T  | Acrolein                    | 0.066 | 0.069 | -4.5  | 108   | 0.00     |
| 14 T  | Allyl chloride              | 0.617 | 0.632 | -2.4  | 101   | 0.00     |
| 15 T  | Acrylonitrile               | 0.213 | 0.246 | -15.5 | 110   | 0.00     |
| 16 T  | Acetone                     | 0.224 | 0.249 | -11.2 | 127   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.303 | 1.044 | 19.9  | 80    | 0.00     |
| 18 T  | Methyl Acetate              | 0.649 | 0.755 | -16.3 | 116   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.491 | 1.635 | -9.7  | 109   | 0.00     |
| 20 T  | Methylene Chloride          | 0.557 | 0.519 | 6.8   | 104   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.486 | 0.473 | 2.7   | 97    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.397 | 1.524 | -9.1  | 109   | 0.00     |
| 23 T  | Vinyl Acetate               | 1.082 | 1.201 | -11.0 | 116   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.854 | 0.899 | -5.3  | 106   | 0.00     |
| 25 T  | 2-Butanone                  | 0.314 | 0.349 | -11.1 | 114   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.821 | 0.829 | -1.0  | 103   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.559 | 0.584 | -4.5  | 104   | 0.00     |
| 28 T  | Bromochloromethane          | 0.341 | 0.345 | -1.2  | 103   | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.195 | 0.216 | -10.8 | 111   | 0.00     |
| 30 C  | Chloroform                  | 0.885 | 0.960 | -8.5# | 108   | 0.00     |
| 31 T  | Cyclohexane                 | 0.822 | 0.720 | 12.4  | 91    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.818 | 0.864 | -5.6  | 104   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.555 | 0.599 | -7.9  | 106   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 101   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.298 | 0.313 | -5.0  | 104   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.435 | 0.431 | 0.9   | 99    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.408 | 0.439 | -7.6  | 112   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.474 | 0.481 | -1.5  | 103   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.537 | 0.485 | 9.7   | 91    | 0.00     |
| 40 TM | Benzene                     | 1.299 | 1.299 | 0.0   | 103   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.201 | 0.194 | 3.5   | 99    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.440 | 0.483 | -9.8  | 112   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.702 | 0.763 | -8.7  | 110   | 0.00     |
| 44 TM | Trichloroethene             | 0.354 | 0.364 | -2.8  | 101   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.321 | 0.342 | -6.5# | 107   | 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              | 0.227 | 0.244 | -7.5  | 108   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.457 | 0.498 | -9.0  | 110   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.314 | 0.332 | -5.7  | 106   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.006 | 0.005 | 16.7  | 90    | 0.00     |
| 50 S  | Toluene-d8                  | 1.155 | 1.163 | -0.7  | 100   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.406 | 0.458 | -12.8 | 114   | 0.00     |
| 52 CM | Toluene                     | 0.820 | 0.842 | -2.7# | 103   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.510 | 0.560 | -9.8  | 108   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.537 | 0.582 | -8.4  | 106   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.325 | 0.353 | -8.6  | 111   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.496 | 0.533 | -7.5  | 107   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.516 | 0.576 | -11.6 | 111   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.150 | 0.177 | -18.0 | 106   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.299 | 0.349 | -16.7 | 112   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.370 | 0.411 | -11.1 | 110   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.340 | 0.371 | -9.1  | 108   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.416 | 0.447 | -7.5  | 108   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 105   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.408 | 0.373 | 8.6   | 88    | 0.00     |
| 65 PM | Chlorobenzene               | 0.983 | 1.021 | -3.9  | 108   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.380 | 0.400 | -5.3  | 110   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.784 | 1.800 | -0.9# | 105   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.674 | 0.681 | -1.0  | 104   | 0.00     |
| 69 T  | o-Xylene                    | 0.660 | 0.662 | -0.3  | 105   | 0.00     |
| 70 T  | Styrene                     | 1.104 | 1.132 | -2.5  | 104   | 0.00     |
| 71 P  | Bromoform                   | 0.304 | 0.340 | -11.8 | 113   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 108   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.667 | 3.537 | 3.5   | 105   | 0.00     |
| 74 T  | N-amyl acetate              | 1.423 | 1.455 | -2.2  | 109   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.063 | 1.124 | -5.7  | 115   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.841 | 0.954 | -13.4 | 120   | 0.00     |
| 77 T  | Bromobenzene                | 0.929 | 0.926 | 0.3   | 108   | 0.00     |
| 78 T  | n-propylbenzene             | 4.116 | 4.000 | 2.8   | 105   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.448 | 2.380 | 2.8   | 108   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.084 | 2.945 | 4.5   | 104   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.392 | 0.412 | -5.1  | 112   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.456 | 2.474 | -0.7  | 109   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.667 | 2.604 | 2.4   | 107   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.051 | 2.990 | 2.0   | 107   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.504 | 3.397 | 3.1   | 104   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.243 | 3.142 | 3.1   | 106   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.613 | 1.627 | -0.9  | 109   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.609 | 1.632 | -1.4  | 110   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.765 | 2.747 | 0.7   | 106   | 0.00     |

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

|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.607 | 0.586 | 3.5  | 104   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.595 | 1.599 | -0.3 | 108   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.257 | 0.248 | 3.5  | 116   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.958 | 0.992 | -3.5 | 104   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.528 | 0.502 | 4.9  | 103   | 0.00     |
| 95 T | Naphthalene                 | 2.726 | 2.843 | -4.3 | 105   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.933 | 0.965 | -3.4 | 107   | 0.00     |

(#) = Out of Range

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