

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN101419\  
 Data File : VN058770.D  
 Acq On : 14 Oct 2019 23:33  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 31 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Oct 15 04:36:12 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N101319W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Oct 12 00:00:30 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   | 87    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.623 | 0.660 | -5.9  | 91    | 0.00     |
| 3 P   | Chloromethane               | 0.740 | 0.745 | -0.7  | 91    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.738 | 0.748 | -1.4# | 90    | 0.00     |
| 5 T   | Bromomethane                | 0.449 | 0.456 | -1.6  | 92    | 0.00     |
| 6 T   | Chloroethane                | 0.455 | 0.476 | -4.6  | 94    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.883 | 0.955 | -8.2  | 99    | 0.00     |
| 8 T   | Diethyl Ether               | 0.326 | 0.320 | 1.8   | 88    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.503 | 0.513 | -2.0  | 93    | 0.00     |
| 10 T  | Methyl Iodide               | 0.687 | 0.684 | 0.4   | 86    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.113 | 0.120 | -6.2  | 97    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.480 | 0.491 | -2.3# | 90    | 0.00     |
| 13 T  | Acrolein                    | 0.091 | 0.075 | 17.6  | 73    | 0.00     |
| 14 T  | Allyl chloride              | 0.969 | 0.959 | 1.0   | 88    | 0.00     |
| 15 T  | Acrylonitrile               | 0.286 | 0.317 | -10.8 | 96    | 0.00     |
| 16 T  | Acetone                     | 0.290 | 0.285 | 1.7   | 86    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.535 | 1.511 | 1.6   | 89    | 0.00     |
| 18 T  | Methyl Acetate              | 0.735 | 0.842 | -14.6 | 102   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.715 | 1.793 | -4.5  | 90    | 0.00     |
| 20 T  | Methylene Chloride          | 0.606 | 0.584 | 3.6   | 91    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.537 | 0.537 | 0.0   | 88    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.884 | 1.976 | -4.9  | 91    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.520 | 1.652 | -8.7  | 88    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.073 | 1.121 | -4.5  | 92    | 0.00     |
| 25 T  | 2-Butanone                  | 0.419 | 0.444 | -6.0  | 92    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.980 | 0.804 | 18.0  | 75    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.626 | 0.629 | -0.5  | 90    | 0.00     |
| 28 T  | Bromochloromethane          | 0.373 | 0.386 | -3.5  | 92    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.271 | 0.299 | -10.3 | 96    | 0.00     |
| 30 C  | Chloroform                  | 1.078 | 1.100 | -2.0# | 92    | 0.00     |
| 31 T  | Cyclohexane                 | 1.027 | 1.007 | 1.9   | 89    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.919 | 0.961 | -4.6  | 90    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.700 | 0.733 | -4.7  | 91    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 86    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.309 | 0.321 | -3.9  | 89    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.506 | 0.516 | -2.0  | 89    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.511 | 0.566 | -10.8 | 93    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.493 | 0.524 | -6.3  | 91    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.587 | 0.592 | -0.9  | 86    | 0.00     |
| 40 TM | Benzene                     | 1.452 | 1.513 | -4.2  | 91    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.239 | 0.225 | 5.9   | 76    | -0.01    |
| 42 TM | 1,2-Dichloroethane          | 0.558 | 0.574 | -2.9  | 91    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.871 | 0.918 | -5.4  | 92    | 0.00     |
| 44 TM | Trichloroethene             | 0.361 | 0.370 | -2.5  | 90    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.389 | 0.413 | -6.2# | 92    | 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              | 0.246 | 0.264 | -7.3  | 93    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.502 | 0.542 | -8.0  | 92    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.395 | 0.433 | -9.6  | 93    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.006 | 0.007 | -16.7 | 96    | 0.00     |
| 50 S  | Toluene-d8                  | 1.235 | 1.262 | -2.2  | 88    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.489 | 0.583 | -19.2 | 96    | 0.00     |
| 52 CM | Toluene                     | 0.888 | 0.926 | -4.3# | 90    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.576 | 0.596 | -3.5  | 88    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.611 | 0.635 | -3.9  | 88    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.363 | 0.369 | -1.7  | 93    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.531 | 0.593 | -11.7 | 92    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.619 | 0.651 | -5.2  | 92    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.256 | 0.284 | -10.9 | 91    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.378 | 0.437 | -15.6 | 94    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.375 | 0.406 | -8.3  | 92    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.364 | 0.385 | -5.8  | 92    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.467 | 0.470 | -0.6  | 87    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 88    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.350 | 0.356 | -1.7  | 92    | 0.00     |
| 65 PM | Chlorobenzene               | 1.015 | 1.043 | -2.8  | 91    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.375 | 0.391 | -4.3  | 91    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.810 | 1.951 | -7.8# | 90    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.679 | 0.722 | -6.3  | 90    | 0.00     |
| 69 T  | o-Xylene                    | 0.657 | 0.683 | -4.0  | 90    | 0.00     |
| 70 T  | Styrene                     | 1.077 | 1.156 | -7.3  | 90    | 0.00     |
| 71 P  | Bromoform                   | 0.275 | 0.309 | -12.4 | 95    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 88    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.621 | 3.756 | -3.7  | 90    | 0.00     |
| 74 T  | N-amyl acetate              | 1.626 | 1.722 | -5.9  | 91    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.193 | 1.246 | -4.4  | 94    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.097 | 1.115 | -1.6  | 94    | 0.00     |
| 77 T  | Bromobenzene                | 0.881 | 0.887 | -0.7  | 91    | 0.00     |
| 78 T  | n-propylbenzene             | 4.220 | 4.489 | -6.4  | 90    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.619 | 2.632 | -0.5  | 91    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.091 | 3.241 | -4.9  | 90    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.409 | 0.410 | -0.2  | 88    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.687 | 2.741 | -2.0  | 90    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.648 | 2.746 | -3.7  | 91    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.069 | 3.275 | -6.7  | 91    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.490 | 3.736 | -7.0  | 91    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.172 | 3.374 | -6.4  | 89    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.624 | 1.631 | -0.4  | 90    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.652 | 1.609 | 2.6   | 90    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.933 | 3.072 | -4.7  | 89    | 0.00     |

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

|      | Compound                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.568 | 0.608 | -7.0 | 94    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.583 | 1.607 | -1.5 | 91    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.279 | 0.282 | -1.1 | 98    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.966 | 0.957 | 0.9  | 87    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.509 | 0.492 | 3.3  | 88    | 0.00     |
| 95 T | Naphthalene                 | 2.775 | 2.812 | -1.3 | 86    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.943 | 0.914 | 3.1  | 86    | 0.00     |

(#) = Out of Range

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