

Data Path : Z:\voasrv\HPCHEM1\MSVOA N\Data\VN082318\  
 Data File : VN050837.D  
 Acq On : 23 Aug 2018 8:31  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Aug 24 01:17:58 2018  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N082118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 22 05:38:12 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

|       | Compound                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 104   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.669 | 0.703 | -5.1  | 100   | 0.00     |
| 3 P   | Chloromethane               | 0.825 | 0.753 | 8.7   | 99    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.782 | 0.762 | 2.6#  | 102   | 0.00     |
| 5 T   | Bromomethane                | 0.503 | 0.429 | 14.7  | 101   | 0.00     |
| 6 T   | Chloroethane                | 0.452 | 0.425 | 6.0   | 101   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 1.001 | 0.981 | 2.0   | 103   | 0.00     |
| 8 T   | Diethyl Ether               | 0.340 | 0.329 | 3.2   | 103   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.625 | 0.616 | 1.4   | 106   | 0.00     |
| 10 T  | Methyl Iodide               | 0.496 | 0.468 | 5.6   | 99    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.038 | 0.035 | 7.9   | 93    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.562 | 0.552 | 1.8#  | 103   | 0.00     |
| 13 T  | Acrolein                    | 0.021 | 0.017 | 19.0  | 78    | 0.00     |
| 14 T  | Allyl chloride              | 0.875 | 0.859 | 1.8   | 101   | 0.00     |
| 15 T  | Acrylonitrile               | 0.195 | 0.185 | 5.1   | 98    | 0.00     |
| 16 T  | Acetone                     | 0.163 | 0.137 | 16.0  | 100   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.883 | 1.694 | 10.0  | 99    | 0.00     |
| 18 T  | Methyl Acetate              | 0.568 | 0.515 | 9.3   | 103   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.413 | 1.440 | -1.9  | 102   | 0.00     |
| 20 T  | Methylene Chloride          | 0.678 | 0.628 | 7.4   | 103   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.607 | 0.593 | 2.3   | 103   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.744 | 1.799 | -3.2  | 103   | 0.00     |
| 23 T  | Vinyl Acetate               | 1.123 | 1.146 | -2.0  | 100   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.120 | 1.083 | 3.3   | 103   | 0.00     |
| 25 T  | 2-Butanone                  | 0.243 | 0.210 | 13.6  | 99    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.900 | 0.876 | 2.7   | 105   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.655 | 0.653 | 0.3   | 104   | 0.00     |
| 28 T  | Bromochloromethane          | 0.476 | 0.455 | 4.4   | 97    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.139 | 0.137 | 1.4   | 98    | 0.00     |
| 30 C  | Chloroform                  | 1.109 | 1.073 | 3.2#  | 103   | 0.00     |
| 31 T  | Cyclohexane                 | 1.112 | 0.990 | 11.0  | 104   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.952 | 0.927 | 2.6   | 105   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.602 | 0.571 | 5.1   | 100   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 102   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.398 | 0.392 | 1.5   | 102   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.590 | 0.615 | -4.2  | 105   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.339 | 0.332 | 2.1   | 96    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.596 | 0.602 | -1.0  | 104   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.638 | 0.688 | -7.8  | 106   | 0.00     |
| 40 TM | Benzene                     | 1.779 | 1.821 | -2.4  | 103   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.183 | 0.183 | 0.0   | 103   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.532 | 0.536 | -0.8  | 102   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.583 | 0.606 | -3.9  | 103   | 0.00     |
| 44 TM | Trichloroethene             | 0.469 | 0.477 | -1.7  | 104   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.468 | 0.470 | -0.4# | 103   | 0.00     |

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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

|       | Compound                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.275 | 0.275 | 0.0   | 102   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.575 | 0.590 | -2.6  | 104   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.297 | 0.305 | -2.7  | 100   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.004 | 0.004 | 0.0   | 96    | 0.00     |
| 50 S  | Toluene-d8                  | 1.487 | 1.504 | -1.1  | 102   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.348 | 0.334 | 4.0   | 99    | 0.00     |
| 52 CM | Toluene                     | 1.054 | 1.127 | -6.9# | 105   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.573 | 0.594 | -3.7  | 103   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.656 | 0.703 | -7.2  | 105   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.391 | 0.392 | -0.3  | 103   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.444 | 0.475 | -7.0  | 100   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.646 | 0.660 | -2.2  | 102   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.189 | 0.208 | -10.1 | 100   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.232 | 0.222 | 4.3   | 99    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.438 | 0.451 | -3.0  | 103   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.378 | 0.388 | -2.6  | 102   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.494 | 0.502 | -1.6  | 102   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 101   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.475 | 0.472 | 0.6   | 102   | 0.00     |
| 65 PM | Chlorobenzene               | 1.307 | 1.332 | -1.9  | 104   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.478 | 0.492 | -2.9  | 104   | 0.00     |
| 67 C  | Ethyl Benzene               | 2.125 | 2.291 | -7.8# | 104   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.806 | 0.898 | -11.4 | 105   | 0.00     |
| 69 T  | o-Xylene                    | 0.775 | 0.847 | -9.3  | 103   | 0.00     |
| 70 T  | Styrene                     | 1.212 | 1.370 | -13.0 | 103   | 0.00     |
| 71 P  | Bromoform                   | 0.329 | 0.335 | -1.8  | 101   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 98    | 0.00     |
| 73 T  | Isopropylbenzene            | 4.140 | 4.402 | -6.3  | 104   | 0.00     |
| 74 T  | N-amyl acetate              | 1.040 | 1.054 | -1.3  | 98    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.116 | 1.015 | 9.1   | 99    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.876 | 0.804 | 8.2   | 98    | 0.00     |
| 77 T  | Bromobenzene                | 1.125 | 1.093 | 2.8   | 101   | 0.00     |
| 78 T  | n-propylbenzene             | 4.625 | 5.010 | -8.3  | 103   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.881 | 2.948 | -2.3  | 102   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.341 | 3.599 | -7.7  | 102   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.259 | 0.260 | -0.4  | 98    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.844 | 2.959 | -4.0  | 102   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.893 | 3.055 | -5.6  | 102   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.360 | 3.637 | -8.2  | 101   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.791 | 4.080 | -7.6  | 103   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.230 | 3.601 | -11.5 | 103   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.909 | 1.925 | -0.8  | 101   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.879 | 1.848 | 1.6   | 100   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.584 | 2.870 | -11.1 | 102   | 0.00     |

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|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.669 | 0.636 | 4.9  | 105   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.842 | 1.833 | 0.5  | 100   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.149 | 0.136 | 8.7  | 93    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.802 | 0.881 | -9.9 | 99    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.601 | 0.578 | 3.8  | 103   | 0.00     |
| 95 T | Naphthalene                 | 1.582 | 1.695 | -7.1 | 96    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.781 | 0.849 | -8.7 | 100   | 0.00     |

(#) = Out of Range

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