

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN072518\  
 Data File : VN050049.D  
 Acq On : 25 Jul 2018 17:41  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jul 26 07:03:34 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N072418W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 24 06:27:04 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   | 112   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.718 | 0.739 | -2.9  | 108   | 0.00     |
| 3 P   | Chloromethane               | 0.781 | 0.715 | 8.5   | 106   | 0.00     |
| 4 C   | Vinyl Chloride              | 0.822 | 0.771 | 6.2#  | 108   | 0.00     |
| 5 T   | Bromomethane                | 0.506 | 0.469 | 7.3   | 116   | 0.00     |
| 6 T   | Chloroethane                | 0.494 | 0.450 | 8.9   | 109   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 1.065 | 1.026 | 3.7   | 114   | 0.00     |
| 8 T   | Diethyl Ether               | 0.355 | 0.349 | 1.7   | 113   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.641 | 0.613 | 4.4   | 115   | 0.00     |
| 10 T  | Methyl Iodide               | 0.822 | 0.818 | 0.5   | 109   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.051 | 0.051 | 0.0   | 114   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.576 | 0.554 | 3.8#  | 113   | 0.00     |
| 13 T  | Acrolein                    | 0.041 | 0.031 | 24.4# | 79    | 0.00     |
| 14 T  | Allyl chloride              | 0.894 | 0.881 | 1.5   | 113   | 0.00     |
| 15 T  | Acrylonitrile               | 0.224 | 0.223 | 0.4   | 113   | 0.00     |
| 16 T  | Acetone                     | 0.182 | 0.171 | 6.0   | 115   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.765 | 1.640 | 7.1   | 111   | 0.00     |
| 18 T  | Methyl Acetate              | 0.833 | 0.667 | 19.9  | 117   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.536 | 1.610 | -4.8  | 115   | 0.00     |
| 20 T  | Methylene Chloride          | 0.700 | 0.627 | 10.4  | 112   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.611 | 0.598 | 2.1   | 114   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.772 | 1.877 | -5.9  | 115   | 0.00     |
| 23 T  | Vinyl Acetate               | 1.252 | 1.311 | -4.7  | 113   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.159 | 1.108 | 4.4   | 113   | 0.00     |
| 25 T  | 2-Butanone                  | 0.266 | 0.270 | -1.5  | 114   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.881 | 0.885 | -0.5  | 120   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.657 | 0.667 | -1.5  | 115   | 0.00     |
| 28 T  | Bromochloromethane          | 0.528 | 0.525 | 0.6   | 114   | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.172 | 0.178 | -3.5  | 114   | 0.00     |
| 30 C  | Chloroform                  | 1.182 | 1.140 | 3.6#  | 115   | 0.00     |
| 31 T  | Cyclohexane                 | 1.112 | 0.945 | 15.0  | 113   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.011 | 0.973 | 3.8   | 113   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.698 | 0.676 | 3.2   | 112   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 110   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.408 | 0.419 | -2.7  | 111   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.563 | 0.606 | -7.6  | 115   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.393 | 0.409 | -4.1  | 113   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.598 | 0.620 | -3.7  | 115   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.580 | 0.654 | -12.8 | 118   | 0.00     |
| 40 TM | Benzene                     | 1.714 | 1.803 | -5.2  | 113   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.184 | 0.185 | -0.5  | 121   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.572 | 0.591 | -3.3  | 115   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.951 | 0.754 | 20.7# | 113   | 0.00     |
| 44 TM | Trichloroethene             | 0.461 | 0.474 | -2.8  | 116   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.454 | 0.472 | -4.0# | 114   | 0.00     |

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 Max. RRF Dev : 20% Max. Rel. Area : 150%

|       | Compound                    | AvqRF | CCRF  | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|--------|-------|----------|
| 46 T  | Dibromomethane              | 0.282 | 0.295 | -4.6   | 113   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.595 | 0.616 | -3.5   | 115   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.338 | 0.373 | -10.4  | 111   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.005 | 0.005 | 0.0    | 116   | 0.00     |
| 50 S  | Toluene-d8                  | 1.501 | 1.580 | -5.3   | 112   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.386 | 0.428 | -10.9  | 113   | 0.00     |
| 52 CM | Toluene                     | 1.012 | 1.122 | -10.9# | 114   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.561 | 0.623 | -11.1  | 115   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.642 | 0.704 | -9.7   | 115   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.401 | 0.422 | -5.2   | 115   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.474 | 0.555 | -17.1  | 115   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.654 | 0.702 | -7.3   | 113   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.221 | 0.255 | -15.4  | 111   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.255 | 0.293 | -14.9  | 113   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.444 | 0.485 | -9.2   | 115   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.398 | 0.421 | -5.8   | 113   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.494 | 0.539 | -9.1   | 113   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 111   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.481 | 0.492 | -2.3   | 115   | 0.00     |
| 65 PM | Chlorobenzene               | 1.263 | 1.291 | -2.2   | 114   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.485 | 0.496 | -2.3   | 116   | 0.00     |
| 67 C  | Ethyl Benzene               | 2.029 | 2.259 | -11.3# | 115   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.767 | 0.876 | -14.2  | 115   | 0.00     |
| 69 T  | o-Xylene                    | 0.732 | 0.835 | -14.1  | 116   | 0.00     |
| 70 T  | Styrene                     | 1.157 | 1.362 | -17.7  | 115   | 0.00     |
| 71 P  | Bromoform                   | 0.353 | 0.370 | -4.8   | 115   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 111   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.878 | 4.104 | -5.8   | 115   | 0.00     |
| 74 T  | N-amyl acetate              | 1.185 | 1.237 | -4.4   | 112   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.186 | 1.093 | 7.8    | 114   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.929 | 0.948 | -2.0   | 120   | 0.00     |
| 77 T  | Bromobenzene                | 1.075 | 1.058 | 1.6    | 114   | 0.00     |
| 78 T  | n-propylbenzene             | 4.334 | 4.762 | -9.9   | 116   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.686 | 2.811 | -4.7   | 115   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.050 | 3.411 | -11.8  | 116   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.293 | 0.314 | -7.2   | 115   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.660 | 2.869 | -7.9   | 115   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.662 | 2.909 | -9.3   | 116   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.074 | 3.511 | -14.2  | 117   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.557 | 3.944 | -10.9  | 117   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.997 | 3.475 | -15.9  | 118   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.822 | 1.876 | -3.0   | 115   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.776 | 1.839 | -3.5   | 116   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.464 | 2.873 | -16.6  | 119   | 0.00     |

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|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.665 | 0.633 | 4.8   | 116   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.821 | 1.840 | -1.0  | 115   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.191 | 0.176 | 7.9   | 113   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.804 | 0.959 | -19.3 | 116   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.558 | 0.589 | -5.6  | 125   | 0.00     |
| 95 T | Naphthalene                 | 1.816 | 2.127 | -17.1 | 113   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.814 | 0.952 | -17.0 | 117   | 0.00     |

(#) = Out of Range

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