

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN111418\  
 Data File : VN052328.D  
 Acq On : 14 Nov 2018 22:02  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 26 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Nov 15 03:54:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N111418W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Nov 15 03:02:37 2018  
 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   | 99    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.530 | 0.544 | -2.6  | 97    | 0.00     |
| 3 P   | Chloromethane               | 0.736 | 0.745 | -1.2  | 98    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.636 | 0.633 | 0.5#  | 99    | 0.00     |
| 5 T   | Bromomethane                | 0.397 | 0.364 | 8.3   | 95    | 0.00     |
| 6 T   | Chloroethane                | 0.360 | 0.347 | 3.6   | 95    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.881 | 0.882 | -0.1  | 100   | 0.00     |
| 8 T   | Diethyl Ether               | 0.336 | 0.336 | 0.0   | 99    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.556 | 0.532 | 4.3   | 97    | 0.00     |
| 10 T  | Methyl Iodide               | 0.747 | 0.750 | -0.4  | 98    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.037 | 0.034 | 8.1   | 96    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.515 | 0.492 | 4.5#  | 97    | 0.00     |
| 13 T  | Acrolein                    | 0.052 | 0.052 | 0.0   | 95    | 0.00     |
| 14 T  | Allyl chloride              | 1.057 | 1.045 | 1.1   | 97    | 0.00     |
| 15 T  | Acrylonitrile               | 0.213 | 0.213 | 0.0   | 98    | 0.00     |
| 16 T  | Acetone                     | 0.194 | 0.166 | 14.4  | 87    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.476 | 1.440 | 2.4   | 96    | 0.00     |
| 18 T  | Methyl Acetate              | 0.579 | 0.539 | 6.9   | 100   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.479 | 1.512 | -2.2  | 99    | 0.00     |
| 20 T  | Methylene Chloride          | 0.647 | 0.605 | 6.5   | 100   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.554 | 0.541 | 2.3   | 98    | 0.00     |
| 22 T  | Diisopropyl ether           | 2.156 | 2.196 | -1.9  | 99    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.463 | 1.531 | -4.6  | 98    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.156 | 1.122 | 2.9   | 98    | 0.00     |
| 25 T  | 2-Butanone                  | 0.274 | 0.264 | 3.6   | 95    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.850 | 0.788 | 7.3   | 91    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.645 | 0.614 | 4.8   | 95    | 0.00     |
| 28 T  | Bromochloromethane          | 0.595 | 0.579 | 2.7   | 98    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.180 | 0.185 | -2.8  | 102   | 0.00     |
| 30 C  | Chloroform                  | 1.102 | 1.119 | -1.5# | 101   | 0.00     |
| 31 T  | Cyclohexane                 | 1.341 | 1.060 | 21.0  | 99    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.939 | 0.918 | 2.2   | 98    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.706 | 0.712 | -0.8  | 101   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 100   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.322 | 0.327 | -1.6  | 98    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.501 | 0.496 | 1.0   | 97    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.364 | 0.366 | -0.5  | 96    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.460 | 0.476 | -3.5  | 98    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.572 | 0.572 | 0.0   | 98    | 0.00     |
| 40 TM | Benzene                     | 1.432 | 1.434 | -0.1  | 98    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.208 | 0.207 | 0.5   | 108   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.511 | 0.515 | -0.8  | 101   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.702 | 0.695 | 1.0   | 101   | 0.00     |
| 44 TM | Trichloroethene             | 0.353 | 0.355 | -0.6  | 98    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.406 | 0.404 | 0.5#  | 100   | 0.00     |

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

|       | Compound                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.235 | 0.235 | 0.0   | 97    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.483 | 0.499 | -3.3  | 101   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.356 | 0.355 | 0.3   | 101   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.003 | 0.003 | 0.0   | 86    | 0.00     |
| 50 S  | Toluene-d8                  | 1.269 | 1.274 | -0.4  | 99    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.353 | 0.375 | -6.2  | 101   | 0.00     |
| 52 CM | Toluene                     | 0.856 | 0.879 | -2.7# | 100   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.487 | 0.499 | -2.5  | 97    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.555 | 0.573 | -3.2  | 98    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.310 | 0.312 | -0.6  | 100   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.408 | 0.436 | -6.9  | 100   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.550 | 0.559 | -1.6  | 98    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.232 | 0.253 | -9.1  | 101   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.243 | 0.252 | -3.7  | 98    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.336 | 0.345 | -2.7  | 99    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.309 | 0.313 | -1.3  | 98    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.417 | 0.438 | -5.0  | 100   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 99    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.355 | 0.341 | 3.9   | 98    | 0.00     |
| 65 PM | Chlorobenzene               | 1.057 | 1.045 | 1.1   | 99    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.360 | 0.370 | -2.8  | 98    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.834 | 1.873 | -2.1# | 98    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.670 | 0.698 | -4.2  | 98    | 0.00     |
| 69 T  | o-Xylene                    | 0.642 | 0.674 | -5.0  | 98    | 0.00     |
| 70 T  | Styrene                     | 1.029 | 1.095 | -6.4  | 98    | 0.00     |
| 71 P  | Bromoform                   | 0.213 | 0.223 | -4.7  | 98    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 98    | 0.00     |
| 73 T  | Isopropylbenzene            | 4.020 | 3.959 | 1.5   | 99    | 0.00     |
| 74 T  | N-amyl acetate              | 1.432 | 1.534 | -7.1  | 100   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.972 | 0.940 | 3.3   | 99    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.848 | 0.833 | 1.8   | 97    | 0.00     |
| 77 T  | Bromobenzene                | 0.935 | 0.924 | 1.2   | 100   | 0.00     |
| 78 T  | n-propylbenzene             | 4.701 | 4.654 | 1.0   | 97    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.747 | 2.693 | 2.0   | 99    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.197 | 3.214 | -0.5  | 97    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.262 | 0.259 | 1.1   | 97    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.814 | 2.732 | 2.9   | 98    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.822 | 2.763 | 2.1   | 98    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.209 | 3.230 | -0.7  | 96    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.845 | 3.860 | -0.4  | 97    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.257 | 3.259 | -0.1  | 96    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.661 | 1.613 | 2.9   | 97    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.652 | 1.602 | 3.0   | 97    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.797 | 2.875 | -2.8  | 95    | 0.00     |

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|      | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.577 | 0.571 | 1.0   | 97    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.609 | 1.569 | 2.5   | 97    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.143 | 0.150 | -4.9  | 106   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.662 | 0.702 | -6.0  | 97    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.368 | 0.353 | 4.1   | 96    | 0.00     |
| 95 T | Naphthalene                 | 1.496 | 1.677 | -12.1 | 96    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.612 | 0.639 | -4.4  | 95    | 0.00     |

(#) = Out of Range

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