

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN061618\  
 Data File : VN049309.D  
 Acq On : 16 Jun 2018 14:35  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jun 18 03:28:59 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061618W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 01:02:01 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   | 95    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.575 | 0.516 | 10.3  | 95    | 0.00     |
| 3 P   | Chloromethane               | 0.743 | 0.660 | 11.2  | 96    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.790 | 0.722 | 8.6#  | 97    | 0.00     |
| 5 T   | Bromomethane                | 0.415 | 0.354 | 14.7  | 91    | 0.00     |
| 6 T   | Chloroethane                | 0.471 | 0.454 | 3.6   | 99    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.985 | 0.931 | 5.5   | 99    | 0.00     |
| 8 T   | Diethyl Ether               | 0.344 | 0.316 | 8.1   | 94    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.625 | 0.581 | 7.0   | 96    | 0.00     |
| 10 T  | Methyl Iodide               | 0.651 | 0.722 | -10.9 | 105   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.039 | 0.032 | 17.9  | 87    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.573 | 0.533 | 7.0#  | 97    | 0.00     |
| 13 T  | Acrolein                    | 0.041 | 0.033 | 19.5  | 75    | 0.00     |
| 14 T  | Allyl chloride              | 0.905 | 0.810 | 10.5  | 90    | 0.00     |
| 15 T  | Acrylonitrile               | 0.195 | 0.177 | 9.2   | 91    | 0.00     |
| 16 T  | Acetone                     | 0.161 | 0.123 | 23.6# | 81    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.797 | 1.580 | 12.1  | 94    | 0.00     |
| 18 T  | Methyl Acetate              | 0.491 | 0.438 | 10.8  | 95    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.462 | 1.403 | 4.0   | 94    | 0.00     |
| 20 T  | Methylene Chloride          | 0.673 | 0.615 | 8.6   | 96    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.607 | 0.575 | 5.3   | 97    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.808 | 1.816 | -0.4  | 99    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.178 | 1.140 | 3.2   | 92    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.157 | 1.090 | 5.8   | 97    | 0.00     |
| 25 T  | 2-Butanone                  | 0.216 | 0.183 | 15.3  | 85    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.934 | 0.563 | 39.7# | 62    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.675 | 0.644 | 4.6   | 96    | 0.00     |
| 28 T  | Bromochloromethane          | 0.513 | 0.496 | 3.3   | 93    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.139 | 0.127 | 8.6   | 91    | 0.00     |
| 30 C  | Chloroform                  | 1.151 | 1.102 | 4.3#  | 98    | 0.00     |
| 31 T  | Cyclohexane                 | 1.133 | 0.974 | 14.0  | 98    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.982 | 0.946 | 3.7   | 99    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.663 | 0.658 | 0.8   | 97    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 98    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.405 | 0.396 | 2.2   | 96    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.573 | 0.560 | 2.3   | 98    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.312 | 0.294 | 5.8   | 91    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.593 | 0.565 | 4.7   | 97    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.615 | 0.591 | 3.9   | 96    | 0.00     |
| 40 TM | Benzene                     | 1.757 | 1.673 | 4.8   | 97    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.168 | 0.159 | 5.4   | 89    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.543 | 0.509 | 6.3   | 97    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.595 | 0.555 | 6.7   | 95    | 0.00     |
| 44 TM | Trichloroethene             | 0.464 | 0.445 | 4.1   | 97    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.460 | 0.437 | 5.0#  | 97    | 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              | 0.267 | 0.248 | 7.1   | 95    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.586 | 0.560 | 4.4   | 97    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.280 | 0.259 | 7.5   | 88    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.004 | 0.004 | 0.0   | 91    | 0.00     |
| 50 S  | Toluene-d8                  | 1.540 | 1.524 | 1.0   | 96    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.312 | 0.288 | 7.7   | 92    | 0.00     |
| 52 CM | Toluene                     | 1.031 | 1.034 | -0.3# | 98    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.561 | 0.506 | 9.8   | 89    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.662 | 0.603 | 8.9   | 90    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.384 | 0.356 | 7.3   | 96    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.443 | 0.434 | 2.0   | 94    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.637 | 0.607 | 4.7   | 96    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.136 | 0.136 | 0.0   | 92    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.201 | 0.182 | 9.5   | 90    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.429 | 0.411 | 4.2   | 96    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.357 | 0.342 | 4.2   | 97    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.509 | 0.515 | -1.2  | 97    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 97    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.512 | 0.518 | -1.2  | 105   | 0.00     |
| 65 PM | Chlorobenzene               | 1.288 | 1.235 | 4.1   | 98    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.485 | 0.460 | 5.2   | 98    | 0.00     |
| 67 C  | Ethyl Benzene               | 2.136 | 2.162 | -1.2# | 98    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.802 | 0.825 | -2.9  | 98    | 0.00     |
| 69 T  | o-Xylene                    | 0.772 | 0.794 | -2.8  | 97    | 0.00     |
| 70 T  | Styrene                     | 1.218 | 1.304 | -7.1  | 98    | 0.00     |
| 71 P  | Bromoform                   | 0.314 | 0.296 | 5.7   | 94    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 96    | 0.00     |
| 73 T  | Isopropylbenzene            | 4.390 | 4.174 | 4.9   | 99    | 0.00     |
| 74 T  | N-amyl acetate              | 1.075 | 0.975 | 9.3   | 94    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.097 | 0.854 | 22.2# | 92    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.853 | 0.746 | 12.5  | 91    | 0.00     |
| 77 T  | Bromobenzene                | 1.160 | 1.024 | 11.7  | 97    | 0.00     |
| 78 T  | n-propylbenzene             | 4.820 | 4.750 | 1.5   | 98    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 3.054 | 2.823 | 7.6   | 98    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.451 | 3.412 | 1.1   | 98    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.270 | 0.202 | 25.2# | 79    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.947 | 2.814 | 4.5   | 98    | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.057 | 2.890 | 5.5   | 99    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.428 | 3.460 | -0.9  | 99    | 0.00     |
| 85 T  | sec-Butylbenzene            | 4.069 | 3.874 | 4.8   | 98    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.399 | 3.316 | 2.4   | 97    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.908 | 1.796 | 5.9   | 98    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.891 | 1.744 | 7.8   | 97    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.655 | 2.609 | 1.7   | 96    | 0.00     |

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|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.772 | 0.647 | 16.2  | 98    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.871 | 1.736 | 7.2   | 96    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.153 | 0.126 | 17.6  | 90    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.784 | 0.710 | 9.4   | 93    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.833 | 0.535 | 35.8# | 94    | 0.00     |
| 95 T | Naphthalene                 | 1.562 | 1.307 | 16.3  | 89    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.829 | 0.715 | 13.8  | 93    | 0.00     |

(#) = Out of Range

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