

Data Path : W:\HPCHEM1\MSVOA X\Data\VX032818\  
 Data File : VX000504.D  
 Acq On : 28 Mar 2018 21:49  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC050

Quant Time: Mar 29 05:14:48 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X032018W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 21 04:52:42 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     | 101   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.551 | 0.511 | 7.3     | 97    | 0.00     |
| 3 P   | Chloromethane               | 0.581 | 0.519 | 10.7    | 96    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.613 | 0.651 | -6.2#   | 110   | 0.00     |
| 5 T   | Bromomethane                | 0.771 | 0.924 | -19.8   | 115   | 0.00     |
| 6 T   | Chloroethane                | 0.461 | 0.469 | -1.7    | 116   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 1.107 | 1.199 | -8.3    | 113   | 0.00     |
| 8 T   | Diethyl Ether               | 0.396 | 0.413 | -4.3    | 109   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.617 | 0.632 | -2.4    | 109   | 0.00     |
| 10 T  | Methyl Iodide               | 0.548 | 0.383 | 30.1#   | 63    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.225 | 0.238 | -5.8    | 106   | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.542 | 0.573 | -5.7#   | 106   | 0.00     |
| 13 T  | Acrolein                    | 0.074 | 0.155 | -109.5# | 224#  | 0.00     |
| 14 T  | Allyl chloride              | 1.040 | 1.041 | -0.1    | 105   | 0.00     |
| 15 T  | Acrylonitrile               | 0.455 | 0.484 | -6.4    | 110   | 0.00     |
| 16 T  | Acetone                     | 0.543 | 0.482 | 11.2    | 91    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.583 | 1.524 | 3.7     | 105   | 0.00     |
| 18 T  | Methyl Acetate              | 1.138 | 1.234 | -8.4    | 111   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 2.004 | 2.118 | -5.7    | 108   | 0.00     |
| 20 T  | Methylene Chloride          | 0.627 | 0.650 | -3.7    | 110   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.605 | 0.633 | -4.6    | 110   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.694 | 1.615 | 4.7     | 105   | 0.00     |
| 23 T  | Vinyl Acetate               | 1.606 | 1.507 | 6.2     | 92    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.065 | 1.078 | -1.2    | 101   | 0.00     |
| 25 T  | 2-Butanone                  | 0.610 | 0.574 | 5.9     | 94    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.747 | 0.653 | 12.6    | 85    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.565 | 0.555 | 1.8     | 100   | 0.00     |
| 28 T  | Bromochloromethane          | 0.439 | 0.597 | -36.0#  | 125   | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.375 | 0.382 | -1.9    | 100   | 0.00     |
| 30 C  | Chloroform                  | 0.998 | 1.047 | -4.9#   | 100   | 0.00     |
| 31 T  | Cyclohexane                 | 0.823 | 0.823 | 0.0     | 101   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.901 | 0.931 | -3.3    | 101   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.653 | 0.624 | 4.4     | 91    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0     | 103   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.315 | 0.300 | 4.8     | 94    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.468 | 0.447 | 4.5     | 102   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.640 | 0.612 | 4.4     | 100   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.491 | 0.478 | 2.6     | 101   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.570 | 0.574 | -0.7    | 107   | 0.00     |
| 40 TM | Benzene                     | 1.360 | 1.397 | -2.7    | 106   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.337 | 0.309 | 8.3     | 100   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.534 | 0.544 | -1.9    | 106   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.952 | 0.981 | -3.0    | 105   | 0.00     |
| 44 TM | Trichloroethene             | 0.390 | 0.388 | 0.5     | 108   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.348 | 0.373 | -7.2#   | 110   | 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              | 0.273 | 0.279 | -2.2  | 108   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.481 | 0.517 | -7.5  | 106   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.462 | 0.481 | -4.1  | 105   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.010 | 0.010 | 0.0   | 112   | 0.00     |
| 50 S  | Toluene-d8                  | 1.305 | 1.266 | 3.0   | 101   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.737 | 0.793 | -7.6  | 111   | 0.00     |
| 52 CM | Toluene                     | 0.951 | 1.014 | -6.6# | 114   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.557 | 0.583 | -4.7  | 106   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.540 | 0.605 | -12.0 | 111   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.391 | 0.432 | -10.5 | 116   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.593 | 0.648 | -9.3  | 113   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.625 | 0.684 | -9.4  | 115   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.284 | 0.259 | 8.8   | 91    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.626 | 0.647 | -3.4  | 107   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.400 | 0.448 | -12.0 | 111   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.419 | 0.460 | -9.8  | 113   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.509 | 0.489 | 3.9   | 99    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 111   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.388 | 0.367 | 5.4   | 110   | 0.00     |
| 65 PM | Chlorobenzene               | 1.113 | 1.085 | 2.5   | 110   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.378 | 0.392 | -3.7  | 111   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.886 | 1.876 | 0.5#  | 110   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.742 | 0.742 | 0.0   | 110   | 0.00     |
| 69 T  | o-Xylene                    | 0.719 | 0.721 | -0.3  | 110   | 0.00     |
| 70 T  | Styrene                     | 1.189 | 1.227 | -3.2  | 109   | 0.00     |
| 71 P  | Bromoform                   | 0.336 | 0.328 | 2.4   | 105   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 118   | 0.00     |
| 73 T  | Isopropylbenzene            | 3.313 | 3.052 | 7.9   | 108   | 0.00     |
| 74 T  | N-amyl acetate              | 1.653 | 1.441 | 12.8  | 105   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.172 | 1.123 | 4.2   | 112   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.075 | 0.978 | 9.0   | 107   | 0.00     |
| 77 T  | Bromobenzene                | 0.883 | 0.755 | 14.5  | 107   | 0.00     |
| 78 T  | n-propylbenzene             | 3.950 | 3.602 | 8.8   | 109   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.282 | 2.058 | 9.8   | 109   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.786 | 2.701 | 3.1   | 111   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.332 | 0.304 | 8.4   | 101   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.725 | 2.642 | 3.0   | 114   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.809 | 2.659 | 5.3   | 111   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.920 | 2.811 | 3.7   | 111   | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.476 | 3.314 | 4.7   | 110   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.087 | 3.023 | 2.1   | 111   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.669 | 1.559 | 6.6   | 112   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.752 | 1.660 | 5.3   | 115   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.874 | 2.851 | 0.8   | 115   | 0.00     |

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|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.486 | 0.475 | 2.3  | 109   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.636 | 1.575 | 3.7  | 113   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.327 | 0.296 | 9.5  | 105   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.173 | 1.072 | 8.6  | 112   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.486 | 0.457 | 6.0  | 113   | 0.00     |
| 95 T | Naphthalene                 | 4.085 | 3.936 | 3.6  | 111   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.159 | 1.079 | 6.9  | 111   | 0.00     |

(#) = Out of Range

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