

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX120418\  
 Data File : VX006288.D  
 Acq On : 04 Dec 2018 19:34  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC050

Quant Time: Dec 05 01:21:40 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112918W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Nov 30 03:55:33 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                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 93    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.490 | 0.496 | -1.2  | 88    | 0.00     |
| 3 P   | Chloromethane               | 0.503 | 0.440 | 12.5  | 80    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.541 | 0.501 | 7.4#  | 84    | 0.00     |
| 5 T   | Bromomethane                | 0.375 | 0.326 | 13.1  | 87    | 0.00     |
| 6 T   | Chloroethane                | 0.332 | 0.331 | 0.3   | 90    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.831 | 0.801 | 3.6   | 89    | 0.00     |
| 8 T   | Diethyl Ether               | 0.315 | 0.300 | 4.8   | 91    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.473 | 0.456 | 3.6   | 92    | 0.00     |
| 10 T  | Methyl Iodide               | 0.712 | 0.492 | 30.9# | 63    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.140 | 0.120 | 14.3  | 82    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.452 | 0.429 | 5.1#  | 91    | 0.00     |
| 13 T  | Acrolein                    | 0.076 | 0.064 | 15.8  | 81    | 0.00     |
| 14 T  | Allyl chloride              | 0.894 | 0.804 | 10.1  | 85    | 0.00     |
| 15 T  | Acrylonitrile               | 0.291 | 0.264 | 9.3   | 85    | 0.00     |
| 16 T  | Acetone                     | 0.240 | 0.223 | 7.1   | 88    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.394 | 1.231 | 11.7  | 83    | 0.00     |
| 18 T  | Methyl Acetate              | 0.801 | 0.767 | 4.2   | 90    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.614 | 1.544 | 4.3   | 91    | 0.00     |
| 20 T  | Methylene Chloride          | 0.510 | 0.464 | 9.0   | 90    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.482 | 0.452 | 6.2   | 89    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.396 | 1.368 | 2.0   | 93    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.191 | 1.151 | 3.4   | 90    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.798 | 0.779 | 2.4   | 94    | 0.00     |
| 25 T  | 2-Butanone                  | 0.342 | 0.321 | 6.1   | 88    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.736 | 0.667 | 9.4   | 87    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.538 | 0.537 | 0.2   | 95    | 0.00     |
| 28 T  | Bromochloromethane          | 0.349 | 0.349 | 0.0   | 91    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.238 | 0.218 | 8.4   | 87    | 0.00     |
| 30 C  | Chloroform                  | 0.838 | 0.823 | 1.8#  | 94    | 0.00     |
| 31 T  | Cyclohexane                 | 0.737 | 0.699 | 5.2   | 91    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.798 | 0.777 | 2.6   | 94    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.510 | 0.508 | 0.4   | 95    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 93    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.324 | 0.334 | -3.1  | 97    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.421 | 0.407 | 3.3   | 92    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.472 | 0.436 | 7.6   | 88    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.495 | 0.482 | 2.6   | 92    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.547 | 0.526 | 3.8   | 91    | 0.00     |
| 40 TM | Benzene                     | 1.261 | 1.237 | 1.9   | 93    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.259 | 0.237 | 8.5   | 89    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.413 | 0.408 | 1.2   | 93    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.786 | 0.716 | 8.9   | 87    | 0.00     |
| 44 TM | Trichloroethene             | 0.382 | 0.373 | 2.4   | 92    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.321 | 0.313 | 2.5#  | 93    | 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                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|------|-------|----------|
| 46 T  | Dibromomethane              | 0.231 | 0.226 | 2.2  | 93    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.448 | 0.438 | 2.2  | 92    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.382 | 0.349 | 8.6  | 86    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.009 | 0.008 | 11.1 | 83    | 0.00     |
| 50 S  | Toluene-d8                  | 1.178 | 1.155 | 2.0  | 92    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.458 | 0.413 | 9.8  | 84    | 0.00     |
| 52 CM | Toluene                     | 0.830 | 0.785 | 5.4# | 90    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.524 | 0.478 | 8.8  | 86    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.544 | 0.518 | 4.8  | 90    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.337 | 0.325 | 3.6  | 90    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.527 | 0.481 | 8.7  | 86    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.533 | 0.519 | 2.6  | 92    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.267 | 0.254 | 4.9  | 92    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.350 | 0.306 | 12.6 | 82    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.416 | 0.389 | 6.5  | 88    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.377 | 0.358 | 5.0  | 91    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.444 | 0.423 | 4.7  | 87    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0  | 89    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.377 | 0.371 | 1.6  | 91    | 0.00     |
| 65 PM | Chlorobenzene               | 1.061 | 1.052 | 0.8  | 89    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.412 | 0.408 | 1.0  | 90    | 0.00     |
| 67 C  | Ethyl Benzene               | 1.765 | 1.713 | 2.9# | 88    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.707 | 0.681 | 3.7  | 87    | 0.00     |
| 69 T  | o-Xylene                    | 0.698 | 0.670 | 4.0  | 87    | 0.00     |
| 70 T  | Styrene                     | 1.130 | 1.081 | 4.3  | 86    | 0.00     |
| 71 P  | Bromoform                   | 0.389 | 0.360 | 7.5  | 83    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0  | 85    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.453 | 3.531 | -2.3 | 87    | 0.00     |
| 74 T  | N-amyl acetate              | 1.487 | 1.387 | 6.7  | 82    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.105 | 1.088 | 1.5  | 87    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.965 | 1.019 | -5.6 | 84    | 0.00     |
| 77 T  | Bromobenzene                | 0.958 | 0.957 | 0.1  | 86    | 0.00     |
| 78 T  | n-propylbenzene             | 3.838 | 3.882 | -1.1 | 86    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.281 | 2.272 | 0.4  | 86    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.873 | 2.903 | -1.0 | 87    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.411 | 0.375 | 8.8  | 78    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.652 | 2.621 | 1.2  | 85    | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.065 | 3.072 | -0.2 | 87    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.967 | 3.009 | -1.4 | 89    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.487 | 3.569 | -2.4 | 87    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.140 | 3.148 | -0.3 | 85    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.705 | 1.700 | 0.3  | 86    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.731 | 1.691 | 2.3  | 85    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.679 | 2.681 | -0.1 | 86    | 0.00     |

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|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.640 | 0.626 | 2.2  | 83    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.692 | 1.674 | 1.1  | 87    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.283 | 0.255 | 9.9  | 82    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.235 | 1.221 | 1.1  | 86    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.546 | 0.543 | 0.5  | 85    | 0.00     |
| 95 T | Naphthalene                 | 3.840 | 3.852 | -0.3 | 87    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.223 | 1.221 | 0.2  | 87    | 0.00     |

(#) = Out of Range

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