

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\VU091219\  
 Data File : VU034504.D  
 Acq On : 12 Sep 2019 02:49  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 LabSampleId :  
 VSTDCCC050

Quant Time: Sep 12 06:46:11 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\82U090619W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 06 05:10:13 2019  
 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    | 79    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.523 | 0.496 | 5.2    | 82    | 0.00     |
| 3 P   | Chloromethane               | 0.644 | 0.583 | 9.5    | 83    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.652 | 0.628 | 3.7#   | 85    | 0.00     |
| 5 T   | Bromomethane                | 0.360 | 0.370 | -2.8   | 88    | 0.00     |
| 6 T   | Chloroethane                | 0.427 | 0.409 | 4.2    | 85    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.874 | 0.908 | -3.9   | 90    | 0.00     |
| 8 T   | Diethyl Ether               | 0.384 | 0.401 | -4.4   | 89    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.579 | 0.598 | -3.3   | 91    | 0.00     |
| 10 T  | Methyl Iodide               | 0.477 | 0.482 | -1.0   | 76    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.160 | 0.192 | -20.0  | 99    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.544 | 0.559 | -2.8#  | 88    | 0.00     |
| 13 T  | Acrolein                    | 0.134 | 0.085 | 36.6#  | 53    | 0.00     |
| 14 T  | Allyl chloride              | 1.040 | 1.023 | 1.6    | 84    | 0.00     |
| 15 T  | Acrylonitrile               | 0.398 | 0.453 | -13.8  | 90    | 0.00     |
| 16 T  | Acetone                     | 0.391 | 0.361 | 7.7    | 80    | 0.00     |
| 17 T  | Carbon Disulfide            | 1.223 | 1.062 | 13.2   | 76    | 0.00     |
| 18 T  | Methyl Acetate              | 0.953 | 1.026 | -7.7   | 94    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.983 | 2.243 | -13.1  | 92    | 0.00     |
| 20 T  | Methylene Chloride          | 0.709 | 0.729 | -2.8   | 91    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.573 | 0.583 | -1.7   | 87    | 0.00     |
| 22 T  | Diisopropyl ether           | 2.028 | 2.288 | -12.8  | 91    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.652 | 1.846 | -11.7  | 87    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.211 | 1.275 | -5.3   | 90    | 0.00     |
| 25 T  | 2-Butanone                  | 0.523 | 0.583 | -11.5  | 87    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.974 | 0.802 | 17.7   | 70    | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.696 | 0.758 | -8.9   | 92    | 0.00     |
| 28 T  | Bromochloromethane          | 0.557 | 0.619 | -11.1  | 86    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.318 | 0.366 | -15.1  | 89    | 0.00     |
| 30 C  | Chloroform                  | 1.231 | 1.313 | -6.7#  | 92    | 0.00     |
| 31 T  | Cyclohexane                 | 0.886 | 0.865 | 2.4    | 83    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.984 | 1.070 | -8.7   | 93    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.757 | 0.787 | -4.0   | 83    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 78    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.465 | 0.501 | -7.7   | 85    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.542 | 0.579 | -6.8   | 89    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.641 | 0.740 | -15.4  | 91    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.579 | 0.636 | -9.8   | 91    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.580 | 0.596 | -2.8   | 83    | 0.00     |
| 40 TM | Benzene                     | 1.750 | 1.924 | -9.9   | 90    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.342 | 0.413 | -20.8# | 91    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.607 | 0.673 | -10.9  | 91    | 0.00     |
| 43 T  | Isopropyl Acetate           | 1.000 | 1.148 | -14.8  | 91    | 0.00     |
| 44 TM | Trichloroethene             | 0.484 | 0.533 | -10.1  | 91    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.512 | 0.581 | -13.5# | 92    | 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              | 0.321 | 0.361 | -12.5  | 91    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.661 | 0.747 | -13.0  | 93    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.475 | 0.548 | -15.4  | 90    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.010 | 0.012 | -20.0  | 93    | 0.00     |
| 50 S  | Toluene-d8                  | 1.748 | 1.867 | -6.8   | 80    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.692 | 0.808 | -16.8  | 91    | 0.00     |
| 52 CM | Toluene                     | 1.098 | 1.228 | -11.8# | 89    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.685 | 0.751 | -9.6   | 88    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.752 | 0.830 | -10.4  | 87    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.498 | 0.567 | -13.9  | 93    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.672 | 0.812 | -20.8# | 91    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.812 | 0.914 | -12.6  | 92    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.222 | 0.271 | -22.1# | 83    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.517 | 0.607 | -17.4  | 89    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.535 | 0.632 | -18.1  | 95    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.488 | 0.560 | -14.8  | 92    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.675 | 0.711 | -5.3   | 83    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 79    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.434 | 0.479 | -10.4  | 93    | 0.00     |
| 65 PM | Chlorobenzene               | 1.269 | 1.405 | -10.7  | 91    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.484 | 0.545 | -12.6  | 95    | 0.00     |
| 67 C  | Ethyl Benzene               | 2.074 | 2.355 | -13.5# | 91    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.781 | 0.915 | -17.2  | 90    | 0.00     |
| 69 T  | o-Xylene                    | 0.764 | 0.880 | -15.2  | 89    | 0.00     |
| 70 T  | Styrene                     | 1.339 | 1.621 | -21.1# | 92    | 0.00     |
| 71 P  | Bromoform                   | 0.420 | 0.478 | -13.8  | 94    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 81    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.254 | 3.614 | -11.1  | 91    | 0.00     |
| 74 T  | N-amyl acetate              | 1.310 | 1.491 | -13.8  | 89    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.317 | 1.400 | -6.3   | 92    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.091 | 1.152 | -5.6   | 92    | 0.00     |
| 77 T  | Bromobenzene                | 0.910 | 0.981 | -7.8   | 91    | 0.00     |
| 78 T  | n-propylbenzene             | 3.758 | 4.181 | -11.3  | 90    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.293 | 2.533 | -10.5  | 91    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.721 | 3.130 | -15.0  | 90    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.325 | 0.342 | -5.2   | 85    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.639 | 2.900 | -9.9   | 90    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.722 | 3.027 | -11.2  | 91    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.739 | 3.147 | -14.9  | 90    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.214 | 3.602 | -12.1  | 89    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.966 | 3.353 | -13.0  | 89    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.660 | 1.778 | -7.1   | 91    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.732 | 1.786 | -3.1   | 90    | 0.00     |
| 89 T  | n-Butylbenzene              | 2.578 | 2.868 | -11.2  | 85    | 0.00     |

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

|      | Compound                    | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|-----------------------------|-------|-------|--------|-------|----------|
| 90 T | Hexachloroethane            | 0.475 | 0.509 | -7.2   | 91    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.632 | 1.763 | -8.0   | 90    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.242 | 0.276 | -14.0  | 89    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 0.964 | 1.185 | -22.9# | 87    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.571 | 0.567 | 0.7    | 84    | 0.00     |
| 95 T | Naphthalene                 | 2.598 | 3.280 | -26.3# | 85    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.004 | 1.186 | -18.1  | 88    | 0.00     |

(#) = Out of Range

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