

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN091119\  
 Data File : VN057923.D  
 Acq On : 11 Sep 2019 14:18  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 66 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Sep 12 02:08:47 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091019W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 10 03:02:13 2019  
 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                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 94    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.691 | 0.751 | -8.7  | 102   | 0.00     |
| 3 P   | Chloromethane               | 0.705 | 0.652 | 7.5   | 94    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.746 | 0.671 | 10.1# | 89    | 0.00     |
| 5 T   | Bromomethane                | 0.454 | 0.341 | 24.9  | 76    | 0.00     |
| 6 T   | Chloroethane                | 0.475 | 0.420 | 11.6  | 89    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.939 | 0.843 | 10.2  | 88    | 0.00     |
| 8 T   | Diethyl Ether               | 0.392 | 0.382 | 2.6   | 97    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.592 | 0.570 | 3.7   | 92    | 0.00     |
| 10 T  | Methyl Iodide               | 0.659 | 0.546 | 17.1  | 77    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.123 | 0.131 | -6.5  | 95    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.532 | 0.495 | 7.0#  | 93    | 0.00     |
| 13 T  | Acrolein                    | 0.104 | 0.083 | 20.2  | 74    | 0.00     |
| 14 T  | Allyl chloride              | 1.042 | 0.903 | 13.3  | 87    | 0.00     |
| 15 T  | Acrylonitrile               | 0.337 | 0.349 | -3.6  | 98    | 0.00     |
| 16 T  | Acetone                     | 0.332 | 0.300 | 9.6   | 83    | 0.00     |
| 17 T  | Carbon Disulfide            | 0.979 | 0.731 | 25.3# | 84    | 0.00     |
| 18 T  | Methyl Acetate              | 0.885 | 0.979 | -10.6 | 105   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 2.216 | 2.270 | -2.4  | 95    | 0.00     |
| 20 T  | Methylene Chloride          | 0.722 | 0.660 | 8.6   | 94    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.576 | 0.538 | 6.6   | 93    | 0.00     |
| 22 T  | Diisopropyl ether           | 2.443 | 2.488 | -1.8  | 94    | 0.00     |
| 23 T  | Vinyl Acetate               | 1.732 | 1.781 | -2.8  | 91    | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 1.335 | 1.311 | 1.8   | 94    | 0.00     |
| 25 T  | 2-Butanone                  | 0.480 | 0.479 | 0.2   | 91    | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 1.057 | 0.482 | 54.4# | 42#   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.771 | 0.742 | 3.8   | 93    | 0.00     |
| 28 T  | Bromochloromethane          | 0.667 | 0.679 | -1.8  | 95    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.296 | 0.304 | -2.7  | 96    | 0.00     |
| 30 C  | Chloroform                  | 1.396 | 1.362 | 2.4#  | 93    | 0.00     |
| 31 T  | Cyclohexane                 | 1.001 | 0.904 | 9.7   | 90    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 1.107 | 1.068 | 3.5   | 91    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 1.013 | 1.060 | -4.6  | 97    | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 96    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.461 | 0.458 | 0.7   | 95    | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.580 | 0.518 | 10.7  | 91    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.599 | 0.580 | 3.2   | 95    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.529 | 0.505 | 4.5   | 91    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.610 | 0.532 | 12.8  | 88    | 0.00     |
| 40 TM | Benzene                     | 1.746 | 1.654 | 5.3   | 93    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.272 | 0.254 | 6.6   | 90    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.698 | 0.676 | 3.2   | 94    | 0.00     |
| 43 T  | Isopropyl Acetate           | 1.008 | 1.009 | -0.1  | 94    | 0.00     |
| 44 TM | Trichloroethene             | 0.428 | 0.404 | 5.6   | 94    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.508 | 0.484 | 4.7#  | 92    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN091119\  
 Data File : VN057923.D  
 Acq On : 11 Sep 2019 14:18  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 66 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 LabSampleId :  
 VSTDCCC050

Quant Time: Sep 12 02:08:47 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091019W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 10 03:02:13 2019  
 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                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 46 T  | Dibromomethane              | 0.307 | 0.304 | 1.0   | 96    | 0.00     |
| 47 T  | Bromodichloromethane        | 0.613 | 0.603 | 1.6   | 88    | 0.00     |
| 48 T  | Methyl methacrylate         | 0.511 | 0.505 | 1.2   | 93    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.009 | 0.009 | 0.0   | 99    | 0.00     |
| 50 S  | Toluene-d8                  | 1.792 | 1.866 | -4.1  | 96    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.596 | 0.640 | -7.4  | 94    | 0.00     |
| 52 CM | Toluene                     | 1.100 | 1.044 | 5.1#  | 92    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.646 | 0.581 | 10.1  | 80    | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.713 | 0.634 | 11.1  | 80    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.466 | 0.455 | 2.4   | 91    | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.701 | 0.710 | -1.3  | 91    | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.803 | 0.796 | 0.9   | 93    | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.330 | 0.339 | -2.7  | 84    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.447 | 0.467 | -4.5  | 91    | 0.00     |
| 60 T  | Dibromochloromethane        | 0.433 | 0.436 | -0.7  | 87    | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.440 | 0.439 | 0.2   | 93    | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.683 | 0.670 | 1.9   | 97    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 95    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.369 | 0.380 | -3.0  | 104   | 0.00     |
| 65 PM | Chlorobenzene               | 1.309 | 1.248 | 4.7   | 91    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.454 | 0.453 | 0.2   | 90    | 0.00     |
| 67 C  | Ethyl Benzene               | 2.293 | 2.273 | 0.9#  | 92    | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.840 | 0.837 | 0.4   | 92    | 0.00     |
| 69 T  | o-Xylene                    | 0.835 | 0.837 | -0.2  | 92    | 0.00     |
| 70 T  | Styrene                     | 1.437 | 1.465 | -1.9  | 91    | 0.00     |
| 71 P  | Bromoform                   | 0.283 | 0.290 | -2.5  | 86    | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0   | 95    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.880 | 3.749 | 3.4   | 91    | 0.00     |
| 74 T  | N-amyl acetate              | 1.689 | 1.697 | -0.5  | 92    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 1.306 | 1.237 | 5.3   | 91    | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 1.131 | 1.027 | 9.2   | 87    | 0.00     |
| 77 T  | Bromobenzene                | 0.967 | 0.888 | 8.2   | 93    | 0.00     |
| 78 T  | n-propylbenzene             | 4.455 | 4.390 | 1.5   | 91    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.816 | 2.620 | 7.0   | 91    | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 3.278 | 3.218 | 1.8   | 91    | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.321 | 0.240 | 25.2# | 65    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.892 | 2.764 | 4.4   | 91    | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.914 | 2.779 | 4.6   | 89    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 3.332 | 3.304 | 0.8   | 92    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.862 | 3.793 | 1.8   | 90    | 0.00     |
| 86 T  | p-Isopropyltoluene          | 3.403 | 3.402 | 0.0   | 89    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.776 | 1.708 | 3.8   | 92    | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.802 | 1.682 | 6.7   | 91    | 0.00     |
| 89 T  | n-Butylbenzene              | 3.214 | 3.070 | 4.5   | 86    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN091119\  
Data File : VN057923.D  
Acq On : 11 Sep 2019 14:18  
Operator : JC/SP  
Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA\_N/WATER  
ALS Vial : 66 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
LabSampleId :  
VSTDCCC050

Quant Time: Sep 12 02:08:47 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091019W.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 10 03:02:13 2019  
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                    | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 90 T | Hexachloroethane            | 0.506 | 0.503 | 0.6  | 88    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.774 | 1.681 | 5.2  | 90    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.216 | 0.228 | -5.6 | 94    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.159 | 1.043 | 10.0 | 92    | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.491 | 0.445 | 9.4  | 91    | 0.00     |
| 95 T | Naphthalene                 | 3.341 | 3.254 | 2.6  | 99    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.128 | 0.998 | 11.5 | 95    | 0.00     |

(#) = Out of Range

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