

Data Path : Z:\voasrv\HPCHEM1\MSVOA X\Data\VX083119\  
 Data File : VX011942.D  
 Acq On : 31 Aug 2019 10:58  
 Operator : SY/SP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA X/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC050

Quant Time: Sep 01 02:01:36 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X082919S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 30 01:59:05 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                    | AvqRF | CCRF  | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 1.000 | 1.000 | 0.0   | 113   | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.302 | 0.311 | -3.0  | 124   | 0.00     |
| 3 P   | Chloromethane               | 0.350 | 0.320 | 8.6   | 106   | 0.00     |
| 4 C   | Vinyl Chloride              | 0.334 | 0.333 | 0.3#  | 115   | 0.00     |
| 5 T   | Bromomethane                | 0.231 | 0.220 | 4.8   | 113   | 0.00     |
| 6 T   | Chloroethane                | 0.208 | 0.209 | -0.5  | 114   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.580 | 0.620 | -6.9  | 123   | 0.00     |
| 8 T   | Diethyl Ether               | 0.199 | 0.175 | 12.1  | 104   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.378 | 0.409 | -8.2  | 124   | 0.00     |
| 10 T  | Methyl Iodide               | 0.352 | 0.402 | -14.2 | 115   | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.046 | 0.037 | 19.6  | 93    | 0.00     |
| 12 CM | 1,1-Dichloroethene          | 0.351 | 0.366 | -4.3# | 117   | 0.00     |
| 13 T  | Acrolein                    | 0.023 | 0.020 | 13.0  | 103   | 0.00     |
| 14 T  | Allyl chloride              | 0.659 | 0.637 | 3.3   | 109   | 0.00     |
| 15 T  | Acrylonitrile               | 0.110 | 0.095 | 13.6  | 97    | 0.00     |
| 16 T  | Acetone                     | 0.103 | 0.120 | -16.5 | 137   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.007 | 0.963 | 4.4   | 105   | 0.00     |
| 18 T  | Methyl Acetate              | 0.285 | 0.236 | 17.2  | 98    | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 1.138 | 1.036 | 9.0   | 103   | 0.00     |
| 20 T  | Methylene Chloride          | 0.512 | 0.409 | 20.1# | 104   | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.414 | 0.417 | -0.7  | 113   | 0.00     |
| 22 T  | Diisopropyl ether           | 1.345 | 1.256 | 6.6   | 106   | 0.00     |
| 23 T  | Vinyl Acetate               | 0.865 | 0.791 | 8.6   | 100   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.742 | 0.729 | 1.8   | 111   | 0.00     |
| 25 T  | 2-Butanone                  | 0.150 | 0.143 | 4.7   | 106   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.622 | 0.718 | -15.4 | 132   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.487 | 0.486 | 0.2   | 112   | 0.00     |
| 28 T  | Bromochloromethane          | 0.333 | 0.306 | 8.1   | 93    | 0.00     |
| 29 T  | Tetrahydrofuran             | 0.094 | 0.079 | 16.0  | 94    | 0.00     |
| 30 C  | Chloroform                  | 0.793 | 0.780 | 1.6#  | 112   | 0.00     |
| 31 T  | Cyclohexane                 | 0.598 | 0.595 | 0.5   | 116   | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.704 | 0.745 | -5.8  | 120   | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.479 | 0.433 | 9.6   | 100   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 106   | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.321 | 0.330 | -2.8  | 107   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.396 | 0.439 | -10.9 | 118   | 0.00     |
| 37 T  | Ethyl Acetate               | 0.234 | 0.213 | 9.0   | 94    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.459 | 0.529 | -15.3 | 123   | 0.00     |
| 39 T  | Methylcyclohexane           | 0.472 | 0.503 | -6.6  | 117   | 0.00     |
| 40 TM | Benzene                     | 1.182 | 1.229 | -4.0  | 110   | 0.00     |
| 41 T  | Methacrylonitrile           | 0.138 | 0.131 | 5.1   | 99    | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.402 | 0.405 | -0.7  | 105   | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.475 | 0.439 | 7.6   | 97    | 0.00     |
| 44 TM | Trichloroethene             | 0.366 | 0.397 | -8.5  | 115   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.309 | 0.313 | -1.3# | 107   | 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              | 0.184 | 0.178 | 3.3    | 103   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.455 | 0.469 | -3.1   | 108   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.231 | 0.215 | 6.9    | 96    | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.003 | 0.003 | 0.0    | 91    | 0.00     |
| 50 S  | Toluene-d8                  | 1.146 | 1.193 | -4.1   | 105   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.242 | 0.221 | 8.7    | 96    | 0.00     |
| 52 CM | Toluene                     | 0.782 | 0.827 | -5.8#  | 112   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.466 | 0.474 | -1.7   | 107   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.523 | 0.535 | -2.3   | 108   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.269 | 0.265 | 1.5    | 106   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.373 | 0.354 | 5.1    | 100   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.446 | 0.438 | 1.8    | 104   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.178 | 0.179 | -0.6   | 99    | 0.00     |
| 59 T  | 2-Hexanone                  | 0.172 | 0.167 | 2.9    | 102   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.361 | 0.368 | -1.9   | 108   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.266 | 0.261 | 1.9    | 104   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.503 | 0.482 | 4.2    | 104   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0    | 101   | 0.00     |
| 64 T  | Tetrachloroethene           | 0.402 | 0.433 | -7.7   | 111   | 0.00     |
| 65 PM | Chlorobenzene               | 0.969 | 1.049 | -8.3   | 111   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.392 | 0.428 | -9.2   | 112   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.648 | 1.832 | -11.2# | 113   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.636 | 0.711 | -11.8  | 113   | 0.00     |
| 69 T  | o-Xylene                    | 0.620 | 0.679 | -9.5   | 112   | 0.00     |
| 70 T  | Styrene                     | 1.093 | 1.193 | -9.1   | 110   | 0.00     |
| 71 P  | Bromoform                   | 0.277 | 0.290 | -4.7   | 106   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0    | 102   | 0.00     |
| 73 T  | Isopropylbenzene            | 2.873 | 3.200 | -11.4  | 117   | 0.00     |
| 74 T  | N-amyl acetate              | 0.853 | 0.791 | 7.3    | 96    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.588 | 0.566 | 3.7    | 100   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.492 | 0.429 | 12.8   | 90    | 0.00     |
| 77 T  | Bromobenzene                | 0.833 | 0.887 | -6.5   | 112   | 0.00     |
| 78 T  | n-propylbenzene             | 3.258 | 3.655 | -12.2  | 116   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 1.961 | 2.132 | -8.7   | 114   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.480 | 2.737 | -10.4  | 114   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.196 | 0.193 | 1.5    | 104   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.366 | 2.555 | -8.0   | 113   | 0.00     |
| 83 T  | tert-Butylbenzene           | 2.516 | 2.865 | -13.9  | 119   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.541 | 2.749 | -8.2   | 113   | 0.00     |
| 85 T  | sec-Butylbenzene            | 2.923 | 3.288 | -12.5  | 117   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.834 | 3.206 | -13.1  | 117   | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.549 | 1.685 | -8.8   | 114   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.565 | 1.685 | -7.7   | 113   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.507 | 2.822 | -12.6  | 118   | 0.00     |

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

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|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.548 | 0.603 | -10.0 | 116   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.440 | 1.519 | -5.5  | 110   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.117 | 0.114 | 2.6   | 100   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.212 | 1.325 | -9.3  | 114   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.810 | 0.921 | -13.7 | 119   | 0.00     |
| 95 T | Naphthalene                 | 2.081 | 2.083 | -0.1  | 101   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 1.096 | 1.170 | -6.8  | 110   | 0.00     |

(#) = Out of Range

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