

Data Path : Z:\voasrv\HPCHEM1\MSVOA F\Data\VF111318\  
 Data File : VF060713.D  
 Acq On : 13 Nov 2018 14:53  
 Operator : VA/AP  
 Sample : VSTDICV050  
 Misc : 5.00g/5mL/MSVOA-F/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 ICVVF111318

Quant Time: Nov 14 03:41:09 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F111318S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 14 03:11:14 2018  
 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                    | Amount  | Calc.   | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|---------|---------|-------|-------|----------|
| 1 I   | Pentafluorobenzene          | 50.000  | 50.000  | 0.0   | 117   | -0.02    |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 44.098  | 11.8  | 99    | -0.02    |
| 3 P   | Chloromethane               | 50.000  | 46.642  | 6.7   | 104   | -0.03    |
| 4 C   | Vinyl Chloride              | 50.000  | 46.101  | 7.8#  | 102   | -0.02    |
| 5 T   | Bromomethane                | 50.000  | 45.682  | 8.6   | 97    | -0.02    |
| 6 T   | Chloroethane                | 50.000  | 51.747  | -3.5  | 99    | -0.03    |
| 7 T   | Trichlorofluoromethane      | 50.000  | 45.624  | 8.8   | 95    | -0.03    |
| 8 T   | Diethyl Ether               | 50.000  | 46.358  | 7.3   | 100   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 47.550  | 4.9   | 105   | -0.03    |
| 10 T  | Methyl Iodide               | 50.000  | 46.083  | 7.8   | 103   | -0.03    |
| 11 T  | Tert butyl alcohol          | 250.000 | 242.459 | 3.0   | 106   | -0.02    |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 48.965  | 2.1#  | 114   | -0.02    |
| 13 T  | Acrolein                    | 250.000 | 219.200 | 12.3  | 109   | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 46.740  | 6.5   | 107   | -0.02    |
| 15 T  | Acrylonitrile               | 250.000 | 241.515 | 3.4   | 108   | 0.00     |
| 16 T  | Acetone                     | 250.000 | 242.174 | 3.1   | 98    | -0.02    |
| 17 T  | Carbon Disulfide            | 50.000  | 48.162  | 3.7   | 107   | -0.04    |
| 18 T  | Methyl Acetate              | 50.000  | 45.768  | 8.5   | 103   | -0.02    |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 48.455  | 3.1   | 107   | -0.02    |
| 20 T  | Methylene Chloride          | 50.000  | 47.679  | 4.6   | 107   | -0.02    |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 45.142  | 9.7   | 96    | 0.00     |
| 22 T  | Diisopropyl ether           | 50.000  | 48.502  | 3.0   | 108   | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 259.789 | -3.9  | 110   | -0.02    |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 49.411  | 1.2   | 113   | -0.02    |
| 25 T  | 2-Butanone                  | 250.000 | 249.390 | 0.2   | 111   | -0.02    |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 45.666  | 8.7   | 104   | -0.02    |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 47.593  | 4.8   | 106   | -0.02    |
| 28 T  | Bromochloromethane          | 50.000  | 49.562  | 0.9   | 114   | -0.02    |
| 29    | Tetrahydrofuran             | 250.000 | 235.751 | 5.7   | 107   | -0.02    |
| 30 C  | Chloroform                  | 50.000  | 44.815  | 10.4# | 98    | -0.02    |
| 31 T  | Cyclohexane                 | 50.000  | 49.489  | 1.0   | 116   | -0.03    |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 43.905  | 12.2  | 98    | -0.02    |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 45.446  | 9.1   | 108   | -0.02    |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0   | 109   | -0.02    |
| 35 S  | Dibromofluoromethane        | 50.000  | 48.143  | 3.7   | 112   | -0.02    |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 49.866  | 0.3   | 106   | -0.02    |
| 37 T  | Ethyl Acetate               | 50.000  | 48.726  | 2.5   | 106   | 0.00     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 47.214  | 5.6   | 103   | 0.00     |
| 39 T  | Methylcyclohexane           | 50.000  | 48.449  | 3.1   | 103   | -0.02    |
| 40 TM | Benzene                     | 50.000  | 49.822  | 0.4   | 108   | -0.02    |
| 41 T  | Methacrylonitrile           | 50.000  | 55.478  | -11.0 | 112   | -0.02    |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 46.872  | 6.3   | 101   | -0.02    |
| 43 T  | Isopropyl Acetate           | 50.000  | 53.196  | -6.4  | 121   | -0.02    |
| 44 TM | Trichloroethene             | 50.000  | 48.422  | 3.2   | 109   | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 50.621  | -1.2# | 114   | 0.00     |

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 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                    | Amount   | Calc.    | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|----------|----------|-------|-------|----------|
| 46 T  | Dibromomethane              | 50.000   | 49.534   | 0.9   | 105   | 0.00     |
| 47 T  | Bromodichloromethane        | 50.000   | 48.923   | 2.2   | 99    | 0.00     |
| 48 T  | Methyl methacrylate         | 50.000   | 51.794   | -3.6  | 117   | -0.02    |
| 49 T  | 1,4-Dioxane                 | 1000.000 | 1053.550 | -5.4  | 121   | 0.00     |
| 50 S  | Toluene-d8                  | 50.000   | 56.193   | -12.4 | 125   | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 251.335  | -0.5  | 113   | 0.00     |
| 52 CM | Toluene                     | 50.000   | 47.855   | 4.3#  | 106   | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 48.260   | 3.5   | 108   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 48.849   | 2.3   | 115   | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 48.042   | 3.9   | 102   | 0.00     |
| 56 T  | Ethyl methacrylate          | 50.000   | 51.413   | -2.8  | 111   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 49.660   | 0.7   | 112   | -0.02    |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 236.382  | 5.4   | 100   | 0.00     |
| 59 T  | 2-Hexanone                  | 250.000  | 279.138  | -11.7 | 130   | 0.00     |
| 60 T  | Dibromochloromethane        | 50.000   | 48.101   | 3.8   | 103   | -0.02    |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 50.298   | -0.6  | 105   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 53.451   | -6.9  | 113   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0   | 117   | 0.00     |
| 64 T  | Tetrachloroethene           | 50.000   | 46.906   | 6.2   | 100   | -0.02    |
| 65 PM | Chlorobenzene               | 50.000   | 47.524   | 5.0   | 107   | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 45.616   | 8.8   | 98    | 0.00     |
| 67 C  | Ethyl Benzene               | 50.000   | 46.028   | 7.9#  | 104   | 0.00     |
| 68 T  | m/p-Xylenes                 | 100.000  | 94.169   | 5.8   | 108   | 0.00     |
| 69 T  | o-Xylene                    | 50.000   | 48.445   | 3.1   | 109   | 0.00     |
| 70 T  | Styrene                     | 50.000   | 47.607   | 4.8   | 108   | 0.00     |
| 71 P  | Bromoform                   | 50.000   | 48.181   | 3.6   | 101   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0   | 116   | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 46.492   | 7.0   | 103   | 0.00     |
| 74 T  | N-amyl acetate              | 50.000   | 54.386   | -8.8  | 129   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 48.288   | 3.4   | 104   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 44.643   | 10.7  | 107   | 0.00     |
| 77 T  | Bromobenzene                | 50.000   | 47.944   | 4.1   | 106   | 0.00     |
| 78 T  | n-propylbenzene             | 50.000   | 44.644   | 10.7  | 107   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 45.520   | 9.0   | 103   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 45.934   | 8.1   | 102   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 44.341   | 11.3  | 99    | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 45.261   | 9.5   | 105   | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 44.890   | 10.2  | 97    | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 43.760   | 12.5  | 99    | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 44.934   | 10.1  | 101   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 43.964   | 12.1  | 97    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 44.581   | 10.8  | 102   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 46.516   | 7.0   | 103   | 0.00     |
| 89 T  | n-Butylbenzene              | 50.000   | 43.728   | 12.5  | 102   | 0.00     |

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Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound                    | Amount | Calc.  | %Dev | Area% | Dev(min) |
|------|-----------------------------|--------|--------|------|-------|----------|
| 90 T | Hexachloroethane            | 50.000 | 46.095 | 7.8  | 98    | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 50.000 | 44.454 | 11.1 | 102   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 50.000 | 45.229 | 9.5  | 95    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 50.000 | 43.987 | 12.0 | 96    | 0.00     |
| 94 T | Hexachlorobutadiene         | 50.000 | 44.861 | 10.3 | 94    | 0.00     |
| 95 T | Naphthalene                 | 50.000 | 49.332 | 1.3  | 101   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 50.000 | 45.375 | 9.3  | 94    | 0.00     |

(#) = Out of Range

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