

Data Path : Z:\voasrv\HPCHEM1\MSVOA F\Data\VF042619\  
 Data File : VF062303.D  
 Acq On : 26 Apr 2019 12:57  
 Operator : FY/SY  
 Sample : VSTDCCC050  
 Misc : 5.00g/5mL/MSVOA F/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 LabSampleId :  
 VSTDCCC050

Quant Time: Apr 27 00:50:22 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82F042419S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Apr 25 08:40:59 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                    | Amount  | Calc.   | %Dev   | Area% | Dev(min) |
|-------|-----------------------------|---------|---------|--------|-------|----------|
| 1 I   | Pentafluorobenzene          | 50.000  | 50.000  | 0.0    | 87    | 0.01     |
| 2 T   | Dichlorodifluoromethane     | 50.000  | 50.136  | -0.3   | 98    | 0.00     |
| 3 P   | Chloromethane               | 50.000  | 45.308  | 9.4    | 90    | 0.00     |
| 4 C   | Vinyl Chloride              | 50.000  | 46.773  | 6.5#   | 92    | 0.00     |
| 5 T   | Bromomethane                | 50.000  | 51.237  | -2.5   | 95    | 0.00     |
| 6 T   | Chloroethane                | 50.000  | 55.358  | -10.7  | 100   | 0.00     |
| 7 T   | Trichlorofluoromethane      | 50.000  | 54.070  | -8.1   | 102   | 0.01     |
| 8 T   | Diethyl Ether               | 50.000  | 49.752  | 0.5    | 105   | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 50.000  | 51.897  | -3.8   | 101   | 0.01     |
| 10 T  | Methyl Iodide               | 50.000  | 50.228  | -0.5   | 97    | 0.01     |
| 11 T  | Tert butyl alcohol          | 250.000 | 279.115 | -11.6  | 105   | 0.01     |
| 12 CM | 1,1-Dichloroethene          | 50.000  | 51.734  | -3.5#  | 96    | 0.01     |
| 13 T  | Acrolein                    | 250.000 | 289.692 | -15.9  | 99    | 0.00     |
| 14 T  | Allyl chloride              | 50.000  | 48.070  | 3.9    | 96    | 0.01     |
| 15 T  | Acrylonitrile               | 250.000 | 255.269 | -2.1   | 91    | 0.01     |
| 16 T  | Acetone                     | 250.000 | 309.665 | -23.9# | 117   | 0.01     |
| 17 T  | Carbon Disulfide            | 50.000  | 48.340  | 3.3    | 94    | 0.00     |
| 18 T  | Methyl Acetate              | 50.000  | 54.877  | -9.8   | 106   | 0.01     |
| 19 T  | Methyl tert-butyl Ether     | 50.000  | 53.453  | -6.9   | 96    | 0.01     |
| 20 T  | Methylene Chloride          | 50.000  | 49.955  | 0.1    | 94    | 0.01     |
| 21 T  | trans-1,2-Dichloroethene    | 50.000  | 49.274  | 1.5    | 97    | 0.01     |
| 22 T  | Diisopropyl ether           | 50.000  | 50.086  | -0.2   | 99    | 0.00     |
| 23 T  | Vinyl Acetate               | 250.000 | 251.749 | -0.7   | 95    | 0.01     |
| 24 P  | 1,1-Dichloroethane          | 50.000  | 51.438  | -2.9   | 100   | 0.01     |
| 25 T  | 2-Butanone                  | 250.000 | 248.256 | 0.7    | 97    | 0.01     |
| 26 T  | 2,2-Dichloropropane         | 50.000  | 53.570  | -7.1   | 101   | 0.02     |
| 27 T  | cis-1,2-Dichloroethene      | 50.000  | 47.907  | 4.2    | 92    | 0.00     |
| 28 T  | Bromochloromethane          | 50.000  | 44.691  | 10.6   | 80    | 0.01     |
| 29 T  | Tetrahydrofuran             | 250.000 | 237.470 | 5.0    | 91    | 0.01     |
| 30 C  | Chloroform                  | 50.000  | 51.277  | -2.6#  | 97    | 0.02     |
| 31 T  | Cyclohexane                 | 50.000  | 47.273  | 5.5    | 89    | 0.01     |
| 32 T  | 1,1,1-Trichloroethane       | 50.000  | 43.979  | 12.0   | 82    | 0.01     |
| 33 S  | 1,2-Dichloroethane-d4       | 50.000  | 52.890  | -5.8   | 93    | 0.02     |
| 34 I  | 1,4-Difluorobenzene         | 50.000  | 50.000  | 0.0    | 86    | 0.01     |
| 35 S  | Dibromofluoromethane        | 50.000  | 50.350  | -0.7   | 85    | 0.01     |
| 36 T  | 1,1-Dichloropropene         | 50.000  | 51.953  | -3.9   | 95    | 0.01     |
| 37 T  | Ethyl Acetate               | 50.000  | 49.555  | 0.9    | 96    | 0.02     |
| 38 T  | Carbon Tetrachloride        | 50.000  | 49.381  | 1.2    | 99    | 0.02     |
| 39 T  | Methylcyclohexane           | 50.000  | 51.701  | -3.4   | 94    | 0.00     |
| 40 TM | Benzene                     | 50.000  | 50.362  | -0.7   | 96    | 0.01     |
| 41 T  | Methacrylonitrile           | 50.000  | 54.304  | -8.6   | 98    | 0.01     |
| 42 TM | 1,2-Dichloroethane          | 50.000  | 58.386  | -16.8  | 108   | 0.01     |
| 43 T  | Isopropyl Acetate           | 50.000  | 49.273  | 1.5    | 97    | 0.01     |
| 44 TM | Trichloroethene             | 50.000  | 50.994  | -2.0   | 97    | 0.02     |
| 45 C  | 1,2-Dichloropropane         | 50.000  | 52.024  | -4.0#  | 101   | 0.01     |

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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                    | Amount   | Calc.    | %Dev  | Area% | Dev(min) |
|-------|-----------------------------|----------|----------|-------|-------|----------|
| 46 T  | Dibromomethane              | 50.000   | 58.652   | -17.3 | 109   | 0.01     |
| 47 T  | Bromodichloromethane        | 50.000   | 57.438   | -14.9 | 109   | 0.01     |
| 48 T  | Methyl methacrylate         | 50.000   | 50.749   | -1.5  | 102   | 0.01     |
| 49 T  | 1,4-Dioxane                 | 1000.000 | 1020.456 | -2.0  | 101   | 0.01     |
| 50 S  | Toluene-d8                  | 50.000   | 46.094   | 7.8   | 80    | 0.01     |
| 51 T  | 4-Methyl-2-Pentanone        | 250.000  | 236.840  | 5.3   | 94    | 0.01     |
| 52 CM | Toluene                     | 50.000   | 46.497   | 7.0#  | 90    | 0.01     |
| 53 T  | t-1,3-Dichloropropene       | 50.000   | 51.935   | -3.9  | 100   | 0.01     |
| 54 T  | cis-1,3-Dichloropropene     | 50.000   | 50.255   | -0.5  | 95    | 0.01     |
| 55 T  | 1,1,2-Trichloroethane       | 50.000   | 50.863   | -1.7  | 98    | 0.01     |
| 56 T  | Ethyl methacrylate          | 50.000   | 45.096   | 9.8   | 89    | 0.01     |
| 57 T  | 1,3-Dichloropropane         | 50.000   | 52.627   | -5.3  | 103   | 0.01     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 250.000  | 224.336  | 10.3  | 80    | 0.01     |
| 59 T  | 2-Hexanone                  | 250.000  | 265.062  | -6.0  | 101   | 0.01     |
| 60 T  | Dibromochloromethane        | 50.000   | 52.263   | -4.5  | 98    | 0.01     |
| 61 T  | 1,2-Dibromoethane           | 50.000   | 52.307   | -4.6  | 98    | 0.01     |
| 62 S  | 4-Bromofluorobenzene        | 50.000   | 45.325   | 9.3   | 83    | 0.00     |
| 63 I  | Chlorobenzene-d5            | 50.000   | 50.000   | 0.0   | 90    | 0.01     |
| 64 T  | Tetrachloroethene           | 50.000   | 49.652   | 0.7   | 97    | 0.01     |
| 65 PM | Chlorobenzene               | 50.000   | 51.893   | -3.8  | 103   | 0.01     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 50.000   | 54.887   | -9.8  | 105   | 0.01     |
| 67 C  | Ethyl Benzene               | 50.000   | 52.479   | -5.0# | 105   | 0.01     |
| 68 T  | m/p-Xylenes                 | 100.000  | 104.298  | -4.3  | 104   | 0.01     |
| 69 T  | o-Xylene                    | 50.000   | 48.363   | 3.3   | 94    | 0.01     |
| 70 T  | Styrene                     | 50.000   | 46.677   | 6.6   | 94    | 0.01     |
| 71 P  | Bromoform                   | 50.000   | 49.688   | 0.6   | 94    | 0.01     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 50.000   | 50.000   | 0.0   | 88    | 0.00     |
| 73 T  | Isopropylbenzene            | 50.000   | 52.795   | -5.6  | 95    | 0.01     |
| 74 T  | N-amyl acetate              | 50.000   | 42.245   | 15.5  | 88    | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 50.000   | 51.281   | -2.6  | 91    | 0.01     |
| 76 T  | 1,2,3-Trichloropropane      | 50.000   | 51.536   | -3.1  | 96    | 0.01     |
| 77 T  | Bromobenzene                | 50.000   | 52.296   | -4.6  | 96    | 0.01     |
| 78 T  | n-propylbenzene             | 50.000   | 49.701   | 0.6   | 94    | 0.00     |
| 79 T  | 2-Chlorotoluene             | 50.000   | 52.098   | -4.2  | 97    | 0.01     |
| 80 T  | 1,3,5-Trimethylbenzene      | 50.000   | 53.688   | -7.4  | 98    | 0.01     |
| 81 T  | trans-1,4-Dichloro-2-butene | 50.000   | 47.465   | 5.1   | 101   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 50.000   | 50.624   | -1.2  | 94    | 0.00     |
| 83 T  | tert-Butylbenzene           | 50.000   | 54.016   | -8.0  | 101   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 50.000   | 51.507   | -3.0  | 100   | 0.00     |
| 85 T  | sec-Butylbenzene            | 50.000   | 53.708   | -7.4  | 99    | 0.01     |
| 86 T  | p-Isopropyltoluene          | 50.000   | 52.723   | -5.4  | 101   | 0.01     |
| 87 T  | 1,3-Dichlorobenzene         | 50.000   | 49.827   | 0.3   | 99    | 0.01     |
| 88 T  | 1,4-Dichlorobenzene         | 50.000   | 52.996   | -6.0  | 101   | 0.01     |
| 89 T  | n-Butylbenzene              | 50.000   | 51.213   | -2.4  | 100   | 0.00     |

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

|      | Compound                    | Amount | Calc.  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|--------|--------|-------|-------|----------|
| 90 T | Hexachloroethane            | 50.000 | 56.396 | -12.8 | 102   | 0.01     |
| 91 T | 1,2-Dichlorobenzene         | 50.000 | 50.932 | -1.9  | 99    | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 50.000 | 52.529 | -5.1  | 95    | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 50.000 | 52.340 | -4.7  | 99    | 0.00     |
| 94 T | Hexachlorobutadiene         | 50.000 | 55.361 | -10.7 | 101   | 0.00     |
| 95 T | Naphthalene                 | 50.000 | 51.944 | -3.9  | 95    | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 50.000 | 54.963 | -9.9  | 102   | 0.01     |

(#) = Out of Range

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