

Data Path : Z:\voasrv\HPCHEM1\MSVOA D\Data\VD070319\  
 Data File : VD063016.D  
 Acq On : 3 Jul 2019 10:43  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 LabSampleId :  
 VSTDCCC050

Quant Time: Jul 04 01:20:44 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D061919S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jun 20 01:50:56 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    | 91    | 0.00     |
| 2 T   | Dichlorodifluoromethane     | 0.647 | 0.600 | 7.3    | 85    | 0.00     |
| 3 P   | Chloromethane               | 0.487 | 0.456 | 6.4    | 89    | 0.00     |
| 4 C   | Vinyl Chloride              | 0.482 | 0.472 | 2.1#   | 87    | 0.00     |
| 5 T   | Bromomethane                | 0.226 | 0.229 | -1.3   | 80    | 0.00     |
| 6 T   | Chloroethane                | 0.218 | 0.237 | -8.7   | 92    | 0.00     |
| 7 T   | Trichlorofluoromethane      | 0.976 | 1.049 | -7.5   | 95    | 0.00     |
| 8 T   | Diethyl Ether               | 0.124 | 0.140 | -12.9  | 91    | 0.00     |
| 9 T   | 1,1,2-Trichlorotrifluoroeth | 0.529 | 0.573 | -8.3   | 100   | 0.00     |
| 10 T  | Methyl Iodide               | 0.698 | 0.713 | -2.1   | 88    | 0.00     |
| 11 T  | Tert butyl alcohol          | 0.025 | 0.028 | -12.0  | 110   | -0.02    |
| 12 CM | 1,1-Dichloroethene          | 0.397 | 0.415 | -4.5#  | 95    | 0.00     |
| 13 T  | Acrolein                    | 0.025 | 0.021 | 16.0   | 79    | 0.00     |
| 14 T  | Allyl chloride              | 0.586 | 0.646 | -10.2  | 95    | 0.00     |
| 15 T  | Acrylonitrile               | 0.058 | 0.065 | -12.1  | 99    | 0.00     |
| 16 T  | Acetone                     | 0.122 | 0.122 | 0.0    | 100   | 0.00     |
| 17 T  | Carbon Disulfide            | 1.268 | 1.183 | 6.7    | 83    | 0.00     |
| 18 T  | Methyl Acetate              | 0.164 | 0.197 | -20.1# | 112   | 0.00     |
| 19 T  | Methyl tert-butyl Ether     | 0.859 | 0.960 | -11.8  | 95    | 0.00     |
| 20 T  | Methylene Chloride          | 0.414 | 0.431 | -4.1   | 96    | 0.00     |
| 21 T  | trans-1,2-Dichloroethene    | 0.423 | 0.434 | -2.6   | 92    | 0.00     |
| 22 T  | Diisopropyl ether           | 1.192 | 1.388 | -16.4  | 104   | 0.00     |
| 23 T  | Vinyl Acetate               | 0.746 | 0.849 | -13.8  | 100   | 0.00     |
| 24 P  | 1,1-Dichloroethane          | 0.776 | 0.846 | -9.0   | 96    | 0.00     |
| 25 T  | 2-Butanone                  | 0.102 | 0.123 | -20.6# | 107   | 0.00     |
| 26 T  | 2,2-Dichloropropane         | 0.823 | 0.963 | -17.0  | 102   | 0.00     |
| 27 T  | cis-1,2-Dichloroethene      | 0.447 | 0.517 | -15.7  | 103   | 0.00     |
| 28 T  | Bromochloromethane          | 0.273 | 0.307 | -12.5  | 102   | 0.00     |
| 29    | Tetrahydrofuran             | 0.048 | 0.056 | -16.7  | 107   | 0.00     |
| 30 C  | Chloroform                  | 0.944 | 1.098 | -16.3# | 103   | 0.00     |
| 31 T  | Cyclohexane                 | 0.510 | 0.537 | -5.3   | 94    | 0.00     |
| 32 T  | 1,1,1-Trichloroethane       | 0.983 | 1.109 | -12.8  | 97    | 0.00     |
| 33 S  | 1,2-Dichloroethane-d4       | 0.543 | 0.576 | -6.1   | 101   | 0.00     |
| 34 I  | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0    | 91    | 0.00     |
| 35 S  | Dibromofluoromethane        | 0.422 | 0.444 | -5.2   | 105   | 0.00     |
| 36 T  | 1,1-Dichloropropene         | 0.473 | 0.504 | -6.6   | 93    | 0.00     |
| 37 T  | Ethyl Acetate               | 0.217 | 0.216 | 0.5    | 99    | 0.00     |
| 38 T  | Carbon Tetrachloride        | 0.712 | 0.776 | -9.0   | 97    | 0.00     |
| 39 T  | Methylcyclohexane           | 0.417 | 0.408 | 2.2    | 87    | 0.00     |
| 40 TM | Benzene                     | 0.950 | 1.060 | -11.6  | 99    | 0.00     |
| 41 T  | Methacrylonitrile           | 0.250 | 0.295 | -18.0  | 107   | 0.00     |
| 42 TM | 1,2-Dichloroethane          | 0.518 | 0.586 | -13.1  | 98    | 0.00     |
| 43 T  | Isopropyl Acetate           | 0.248 | 0.283 | -14.1  | 98    | 0.00     |
| 44 TM | Trichloroethene             | 0.372 | 0.395 | -6.2   | 93    | 0.00     |
| 45 C  | 1,2-Dichloropropane         | 0.236 | 0.244 | -3.4#  | 94    | -0.02    |

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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              | 0.203 | 0.234 | -15.3   | 105   | 0.00     |
| 47 T  | Bromodichloromethane        | 0.527 | 0.631 | -19.7   | 101   | 0.00     |
| 48 T  | Methyl methacrylate         | 0.176 | 0.221 | -25.6#  | 117   | 0.00     |
| 49 T  | 1,4-Dioxane                 | 0.001 | 0.002 | -100.0# | 108   | 0.00     |
| 50 S  | Toluene-d8                  | 0.918 | 0.934 | -1.7    | 94    | 0.00     |
| 51 T  | 4-Methyl-2-Pentanone        | 0.176 | 0.212 | -20.5#  | 110   | 0.00     |
| 52 CM | Toluene                     | 0.639 | 0.692 | -8.3#   | 95    | 0.00     |
| 53 T  | t-1,3-Dichloropropene       | 0.431 | 0.511 | -18.6   | 106   | 0.00     |
| 54 T  | cis-1,3-Dichloropropene     | 0.469 | 0.526 | -12.2   | 99    | 0.00     |
| 55 T  | 1,1,2-Trichloroethane       | 0.219 | 0.235 | -7.3    | 100   | 0.00     |
| 56 T  | Ethyl methacrylate          | 0.234 | 0.271 | -15.8   | 102   | 0.00     |
| 57 T  | 1,3-Dichloropropane         | 0.336 | 0.396 | -17.9   | 105   | 0.00     |
| 58 T  | 2-Chloroethyl Vinyl ether   | 0.120 | 0.131 | -9.2    | 101   | 0.00     |
| 59 T  | 2-Hexanone                  | 0.125 | 0.161 | -28.8#  | 113   | 0.00     |
| 60 T  | Dibromochloromethane        | 0.409 | 0.463 | -13.2   | 101   | 0.00     |
| 61 T  | 1,2-Dibromoethane           | 0.259 | 0.308 | -18.9   | 107   | 0.00     |
| 62 S  | 4-Bromofluorobenzene        | 0.417 | 0.450 | -7.9    | 104   | 0.00     |
| 63 I  | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0     | 96    | 0.00     |
| 64 T  | Tetrachloroethene           | 0.412 | 0.390 | 5.3     | 94    | 0.00     |
| 65 PM | Chlorobenzene               | 0.928 | 0.957 | -3.1    | 97    | 0.00     |
| 66 T  | 1,1,1,2-Tetrachloroethane   | 0.434 | 0.467 | -7.6    | 103   | 0.00     |
| 67 C  | Ethyl Benzene               | 1.666 | 1.794 | -7.7#   | 107   | 0.00     |
| 68 T  | m/p-Xylenes                 | 0.580 | 0.552 | 4.8     | 90    | 0.00     |
| 69 T  | o-Xylene                    | 0.530 | 0.574 | -8.3    | 99    | 0.00     |
| 70 T  | Styrene                     | 0.932 | 0.986 | -5.8    | 100   | 0.00     |
| 71 P  | Bromoform                   | 0.297 | 0.333 | -12.1   | 106   | 0.00     |
| 72 I  | 1,4-Dichlorobenzene-d4      | 1.000 | 1.000 | 0.0     | 99    | 0.00     |
| 73 T  | Isopropylbenzene            | 3.206 | 3.076 | 4.1     | 96    | 0.00     |
| 74 T  | N-amyl acetate              | 0.779 | 0.908 | -16.6   | 109   | 0.00     |
| 75 P  | 1,1,2,2-Tetrachloroethane   | 0.522 | 0.566 | -8.4    | 113   | 0.00     |
| 76 T  | 1,2,3-Trichloropropane      | 0.577 | 0.635 | -10.1   | 109   | 0.00     |
| 77 T  | Bromobenzene                | 0.862 | 0.914 | -6.0    | 102   | 0.00     |
| 78 T  | n-propylbenzene             | 3.731 | 3.851 | -3.2    | 107   | 0.00     |
| 79 T  | 2-Chlorotoluene             | 2.132 | 2.179 | -2.2    | 102   | 0.00     |
| 80 T  | 1,3,5-Trimethylbenzene      | 2.693 | 2.783 | -3.3    | 105   | 0.00     |
| 81 T  | trans-1,4-Dichloro-2-butene | 0.151 | 0.175 | -15.9   | 115   | 0.00     |
| 82 T  | 4-Chlorotoluene             | 2.567 | 2.573 | -0.2    | 103   | 0.00     |
| 83 T  | tert-Butylbenzene           | 3.002 | 3.192 | -6.3    | 105   | 0.00     |
| 84 T  | 1,2,4-Trimethylbenzene      | 2.760 | 2.807 | -1.7    | 99    | 0.00     |
| 85 T  | sec-Butylbenzene            | 3.262 | 3.300 | -1.2    | 103   | 0.00     |
| 86 T  | p-Isopropyltoluene          | 2.984 | 2.963 | 0.7     | 95    | 0.00     |
| 87 T  | 1,3-Dichlorobenzene         | 1.546 | 1.600 | -3.5    | 102   | 0.00     |
| 88 T  | 1,4-Dichlorobenzene         | 1.553 | 1.612 | -3.8    | 103   | 0.00     |
| 89 T  | n-Butylbenzene              | 2.793 | 2.882 | -3.2    | 106   | 0.00     |

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

|      | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 90 T | Hexachloroethane            | 0.802 | 0.852 | -6.2  | 101   | 0.00     |
| 91 T | 1,2-Dichlorobenzene         | 1.322 | 1.377 | -4.2  | 104   | 0.00     |
| 92 T | 1,2-Dibromo-3-Chloropropane | 0.102 | 0.116 | -13.7 | 109   | 0.00     |
| 93 T | 1,2,4-Trichlorobenzene      | 1.033 | 1.056 | -2.2  | 105   | 0.00     |
| 94 T | Hexachlorobutadiene         | 0.789 | 0.809 | -2.5  | 103   | 0.00     |
| 95 T | Naphthalene                 | 1.448 | 1.559 | -7.7  | 104   | 0.00     |
| 96 T | 1,2,3-Trichlorobenzene      | 0.794 | 0.862 | -8.6  | 110   | 0.00     |

(#) = Out of Range

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