

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF053019\  
 Data File : VF062797.D  
 Acq On : 30 May 2019 15:59  
 Operator : FY/SY  
 Sample : VSTDIC075  
 Misc : 5.00g/5mL/MSVOA F/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDIC075

Quant Time: May 31 03:54:40 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F053019S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri May 31 03:15:01 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.08  | 168  | 925806   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.80  | 114  | 1562686  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.93  | 117  | 1263713  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.62 | 152  | 589671   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.05   | 65  | 423912   | 63.45 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 126.90% |      |
| 35) Dibromofluoromethane  | 4.33   | 113 | 756640   | 62.32 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 124.64% |      |
| 50) Toluene-d8            | 7.73   | 98  | 1960445  | 62.22 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 124.44% |      |
| 62) 4-Bromofluorobenzene  | 11.51  | 95  | 761267   | 70.64 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 141.28% |      |

## Target Compounds

|                               |      |     |          |         |        | Qvalue |
|-------------------------------|------|-----|----------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.02 | 85  | 729645   | 54.722  | ug/l   | 96     |
| 3) Chloromethane              | 1.16 | 50  | 606352   | 57.999  | ug/l   | 100    |
| 4) Vinyl Chloride             | 1.21 | 62  | 619885   | 61.545  | ug/l   | 98     |
| 5) Bromomethane               | 1.42 | 94  | 371392   | 62.756  | ug/l   | 100    |
| 6) Chloroethane               | 1.46 | 64  | 246783   | 64.270  | ug/l   | 90     |
| 7) Trichlorofluoromethane     | 1.58 | 101 | 916617   | 64.647  | ug/l   | 92     |
| 8) Diethyl Ether              | 1.72 | 74  | 192582   | 67.299  | ug/l   | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.93 | 101 | 583625   | 63.418  | ug/l   | 99     |
| 10) Methyl Iodide             | 2.01 | 142 | 1177304  | 65.991  | ug/l   | 96     |
| 11) Tert butyl alcohol        | 2.72 | 59  | 131026   | 319.814 | ug/l   | 95     |
| 12) 1,1-Dichloroethene        | 1.89 | 96  | 517132   | 63.766  | ug/l   | 95     |
| 13) Acrolein                  | 2.11 | 56  | 56150    | 355.788 | ug/l   | 96     |
| 14) Allyl chloride            | 2.21 | 41  | 382776   | 64.609  | ug/l   | 93     |
| 15) Acrylonitrile             | 3.11 | 53  | 392180   | 257.619 | ug/l   | 96     |
| 16) Acetone                   | 2.36 | 43  | 521073   | 335.329 | ug/l   | 96     |
| 17) Carbon Disulfide          | 1.94 | 76  | 1524616m | 85.774  | ug/l   |        |
| 18) Methyl Acetate            | 2.48 | 43  | 161235   | 53.393  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 2.57 | 73  | 977596   | 66.366  | ug/l   | 100    |
| 20) Methylene Chloride        | 2.36 | 84  | 511538m  | 55.909  | ug/l   |        |
| 21) trans-1,2-Dichloroethene  | 2.44 | 96  | 552322   | 65.317  | ug/l   | 99     |
| 22) Diisopropyl ether         | 2.96 | 45  | 1165899  | 66.970  | ug/l   | 96     |
| 23) Vinyl Acetate             | 3.37 | 43  | 3888993  | 303.422 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 3.03 | 63  | 843930   | 63.944  | ug/l   | 99     |
| 25) 2-Butanone                | 4.55 | 43  | 1129481  | 305.988 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 3.80 | 77  | 504945   | 64.717  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 3.67 | 96  | 910144   | 66.658  | ug/l   | 94     |
| 28) Bromochloromethane        | 3.93 | 49  | 448549   | 59.865  | ug/l   | 99     |
| 29) Tetrahydrofuran           | 4.29 | 42  | 443382   | 325.125 | ug/l   | 97     |
| 30) Chloroform                | 4.08 | 83  | 1203515  | 62.351  | ug/l   | 99     |
| 31) Cyclohexane               | 3.90 | 56  | 1204927m | 65.683  | ug/l   |        |
| 32) 1,1,1-Trichloroethane     | 4.32 | 97  | 813173   | 76.191  | ug/l   | 97     |
| 36) 1,1-Dichloropropene       | 4.50 | 75  | 995419   | 65.338  | ug/l   | 96     |
| 37) Ethyl Acetate             | 4.32 | 43  | 377006   | 61.404  | ug/l # | 82     |
| 38) Carbon Tetrachloride      | 4.20 | 117 | 728879   | 71.488  | ug/l   | 93     |

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 Quant Title : SW846 8260  
 QLast Update : Fri May 31 03:15:01 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 5.66  | 83   | 1303582  | 70.181   | ug/l   | 97       |
| 40) Benzene                    | 4.84  | 78   | 2842427  | 63.239   | ug/l   | 98       |
| 41) Methacrylonitrile          | 4.96  | 41   | 206641   | 61.967   | ug/l   | 94       |
| 42) 1,2-Dichloroethane         | 5.15  | 62   | 573957   | 68.708   | ug/l   | 96       |
| 43) Isopropyl Acetate          | 7.13  | 43   | 533319   | 70.084   | ug/l # | 100      |
| 44) Trichloroethene            | 5.71  | 130  | 823370   | 65.387   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 6.43  | 63   | 738879   | 66.763   | ug/l   | 95       |
| 46) Dibromomethane             | 6.28  | 93   | 503036   | 78.189   | ug/l   | 94       |
| 47) Bromodichloromethane       | 6.58  | 83   | 1001639  | 76.422   | ug/l   | 98       |
| 48) Methyl methacrylate        | 6.91  | 41   | 285231   | 73.529   | ug/l   | 93       |
| 49) 1,4-Dioxane                | 6.90  | 88   | 73901    | 1579.525 | ug/l # | 92       |
| 51) 4-Methyl-2-Pentanone       | 8.42  | 43   | 1731244  | 295.777  | ug/l   | 97       |
| 52) Toluene                    | 7.80  | 92   | 1594278  | 67.771   | ug/l   | 94       |
| 53) t-1,3-Dichloropropene      | 8.44  | 75   | 756212   | 69.698   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 7.48  | 75   | 1083739  | 69.011   | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 8.66  | 97   | 492715   | 68.421   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 8.78  | 69   | 545129   | 73.795   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 9.01  | 76   | 800571   | 68.330   | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 7.47  | 63   | 885894   | 338.631  | ug/l   | 97       |
| 59) 2-Hexanone                 | 9.65  | 43   | 1284037  | 313.540  | ug/l   | 95       |
| 60) Dibromochloromethane       | 8.88  | 129  | 636378   | 73.259   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.15  | 107  | 522862   | 73.521   | ug/l   | 99       |
| 64) Tetrachloroethene          | 8.32  | 164  | 641198   | 60.810   | ug/l   | 93       |
| 65) Chlorobenzene              | 9.95  | 112  | 1671144  | 65.215   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.08 | 131  | 673285   | 67.262   | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.05 | 91   | 2837649  | 63.531   | ug/l   | 96       |
| 68) m/p-Xylenes                | 10.28 | 106  | 2205089  | 132.323  | ug/l   | 95       |
| 69) o-Xylene                   | 10.84 | 106  | 1176622  | 69.655   | ug/l   | 93       |
| 70) Styrene                    | 10.91 | 104  | 1733851  | 69.809   | ug/l   | 99       |
| 71) Bromoform                  | 10.90 | 173  | 361296   | 74.237   | ug/l   | 98       |
| 73) Isopropylbenzene           | 11.23 | 105  | 2783846  | 62.404   | ug/l   | 97       |
| 74) N-amyl acetate             | 11.46 | 43   | 807420   | 63.799   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.78 | 83   | 605329   | 62.798   | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane     | 11.88 | 75   | 402085   | 64.856   | ug/l   | 94       |
| 77) Bromobenzene               | 11.60 | 156  | 759718   | 69.538   | ug/l   | 96       |
| 78) n-propylbenzene            | 11.69 | 91   | 3347417  | 60.463   | ug/l   | 96       |
| 79) 2-Chlorotoluene            | 11.81 | 91   | 1984264  | 65.431   | ug/l   | 91       |
| 80) 1,3,5-Trimethylbenzene     | 11.91 | 105  | 2239666  | 61.583   | ug/l   | 93       |
| 81) trans-1,4-Dichloro-2-buten | 11.95 | 75   | 189773m  | 58.615   | ug/l   |          |
| 82) 4-Chlorotoluene            | 11.98 | 91   | 1949224  | 64.855   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.21 | 119  | 2287368  | 64.752   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 12.28 | 105  | 2095327  | 60.360   | ug/l   | 97       |
| 85) sec-Butylbenzene           | 12.38 | 105  | 2945131  | 61.014   | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 12.53 | 119  | 2411360  | 60.724   | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 12.55 | 146  | 1210348  | 61.701   | ug/l   | 96       |
| 88) 1,4-Dichlorobenzene        | 12.64 | 146  | 1136380  | 62.136   | ug/l   | 95       |
| 89) n-Butylbenzene             | 12.91 | 91   | 2347328  | 57.345   | ug/l   | 97       |
| 90) Hexachloroethane           | 12.99 | 117  | 636446   | 67.501   | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 13.01 | 146  | 1098744  | 63.794   | ug/l   | 96       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.70 | 75   | 69100    | 67.346   | ug/l   | 95       |

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QLast Update : Fri May 31 03:15:01 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.25 | 180  | 727042   | 62.199 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 14.24 | 225  | 510375   | 63.547 | ug/l  | 98       |
| 95) Naphthalene            | 14.51 | 128  | 1344621  | 72.426 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.65 | 180  | 702461   | 67.887 | ug/l  | 96       |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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