

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_F\DATA\VF121918\  
 Data File : VF061081.D  
 Acq On : 19 Dec 2018 13:21  
 Operator : VA/AP  
 Sample : J6386-20  
 Misc : 6.37g/5mL/MSVOA-F/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 P001-SS008-0612-01

Quant Time: Dec 20 02:22:00 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F121918S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 00:56:59 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.87  | 168  | 2883     | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.60  | 114  | 3704     | 50.00 | ug/l  | 0.01     |
| 63) Chlorobenzene-d5       | 9.79  | 117  | 2143     | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 12.56 | 152  | 344      | 50.00 | ug/l  | 0.01     |

|                             |        |     |          |       |        |      |
|-----------------------------|--------|-----|----------|-------|--------|------|
| System Monitoring Compounds |        |     |          |       |        |      |
| 33) 1,2-Dichloroethane-d4   | 4.83   | 65  | 1121     | 30.23 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 60.46% |      |
| 35) Dibromofluoromethane    | 4.11   | 113 | 1062     | 35.79 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 71.58% |      |
| 50) Toluene-d8              | 7.56   | 98  | 3172     | 37.72 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 75.44% |      |
| 62) 4-Bromofluorobenzene    | 11.41  | 95  | 637      | 16.43 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 32.86% |      |

| Target Compounds              |      |     |     |         |        | Qvalue |
|-------------------------------|------|-----|-----|---------|--------|--------|
| 3) Chloromethane              | 1.11 | 50  | 91  | 2.479   | ug/l # | 1      |
| 4) Vinyl Chloride             | 1.20 | 62  | 64  | 1.879   | ug/l # | 37     |
| 5) Bromomethane               | 1.32 | 94  | 687 | 29.085  | ug/l # | 3      |
| 6) Chloroethane               | 1.32 | 64  | 376 | 23.962  | ug/l # | 1      |
| 7) Trichlorofluoromethane     | 1.43 | 101 | 69  | 1.061   | ug/l # | 19     |
| 8) Diethyl Ether              | 1.54 | 74  | 61  | 6.851   | ug/l   | 46     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.77 | 101 | 74  | 2.195   | ug/l # | 21     |
| 10) Methyl Iodide             | 1.90 | 142 | 74  | 1.392   | ug/l # | 24     |
| 11) Tert butyl alcohol        | 2.61 | 59  | 96  | 64.156  | ug/l # | 1      |
| 12) 1,1-Dichloroethene        | 1.79 | 96  | 280 | 11.018  | ug/l # | 1      |
| 13) Acrolein                  | 1.97 | 56  | 131 | 121.156 | ug/l   | 99     |
| 14) Allyl chloride            | 2.11 | 41  | 317 | 11.986  | ug/l # | 82     |
| 15) Acrylonitrile             | 2.93 | 53  | 339 | 97.973  | ug/l # | 30     |
| 16) Acetone                   | 2.35 | 43  | 404 | 54.501  | ug/l   | 100    |
| 18) Methyl Acetate            | 2.50 | 43  | 597 | 38.927  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 2.40 | 73  | 137 | 2.429   | ug/l # | 59     |
| 20) Methylene Chloride        | 2.22 | 84  | 148 | 1.929   | ug/l # | 1      |
| 21) trans-1,2-Dichloroethene  | 2.36 | 96  | 166 | 6.107   | ug/l # | 1      |
| 22) Diisopropyl ether         | 2.81 | 45  | 534 | 6.062   | ug/l # | 1      |
| 23) Vinyl Acetate             | 3.18 | 43  | 642 | 15.797  | ug/l # | 78     |
| 24) 1,1-Dichloroethane        | 2.85 | 63  | 265 | 5.077   | ug/l # | 88     |
| 25) 2-Butanone                | 4.33 | 43  | 126 | 10.481  | ug/l # | 57     |
| 26) 2,2-Dichloropropane       | 3.45 | 77  | 76  | 2.537   | ug/l # | 62     |
| 27) cis-1,2-Dichloroethene    | 3.58 | 96  | 62  | 1.490   | ug/l   | 1      |
| 29) Tetrahydrofuran           | 4.05 | 42  | 308 | 62.946  | ug/l # | 37     |
| 31) Cyclohexane               | 3.68 | 56  | 81  | 1.496   | ug/l # | 15     |
| 36) 1,1-Dichloropropene       | 4.25 | 75  | 63  | 1.409   | ug/l # | 43     |
| 37) Ethyl Acetate             | 4.12 | 43  | 230 | 11.556  | ug/l # | 21     |
| 40) Benzene                   | 4.71 | 78  | 162 | 1.685   | ug/l # | 49     |
| 41) Methacrylonitrile         | 4.73 | 41  | 369 | 39.080  | ug/l # | 27     |
| 42) 1,2-Dichloroethane        | 4.86 | 62  | 72  | 1.971   | ug/l   | 77     |
| 43) Isopropyl Acetate         | 6.96 | 43  | 192 | 8.894   | ug/l # | 45     |
| 44) Trichloroethene           | 5.40 | 130 | 65  | 2.144   | ug/l   | 1      |
| 48) Methyl methacrylate       | 6.74 | 41  | 107 | 7.100   | ug/l # | 19     |

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|-------------------------------|-------|------|----------|--------|--------|----------|
| -----                         |       |      |          |        |        |          |
| 51) 4-Methyl-2-Pentanone      | 8.28  | 43   | 566      | 38.229 | ug/l # | 38       |
| 53) t-1,3-Dichloropropene     | 8.20  | 75   | 76       | 2.137  | ug/l # | 42       |
| 56) Ethyl methacrylate        | 8.70  | 69   | 62       | 3.003  | ug/l # | 38       |
| 59) 2-Hexanone                | 9.51  | 43   | 711      | 66.405 | ug/l   | 84       |
| 67) Ethyl Benzene             | 9.91  | 91   | 229      | 2.839  | ug/l # | 47       |
| 68) m/p-Xylenes               | 10.14 | 106  | 65       | 2.290  | ug/l # | 35       |
| 73) Isopropylbenzene          | 11.23 | 105  | 278      | 9.378  | ug/l # | 49       |
| 74) N-amyl acetate            | 11.36 | 43   | 354      | 53.787 | ug/l # | 33       |
| 75) 1,1,2,2-Tetrachloroethane | 11.62 | 83   | 61       | 12.398 | ug/l # | 23       |
| 77) Bromobenzene              | 11.53 | 156  | 60       | 9.402  | ug/l # | 1        |
| 78) n-propylbenzene           | 11.59 | 91   | 177      | 4.234  | ug/l # | 55       |
| 79) 2-Chlorotoluene           | 11.71 | 91   | 125      | 6.147  | ug/l # | 42       |
| 82) 4-Chlorotoluene           | 11.92 | 91   | 79       | 3.755  | ug/l # | 43       |
| 83) tert-Butylbenzene         | 12.13 | 119  | 68       | 2.707  | ug/l # | 29       |
| 84) 1,2,4-Trimethylbenzene    | 12.27 | 105  | 64       | 2.629  | ug/l # | 29       |
| 85) sec-Butylbenzene          | 12.29 | 105  | 60       | 1.830  | ug/l # | 58       |
| 86) p-Isopropyltoluene        | 12.45 | 119  | 79       | 2.903  | ug/l # | 50       |
| 87) 1,3-Dichlorobenzene       | 12.49 | 146  | 143      | 9.359  | ug/l # | 25       |
| 88) 1,4-Dichlorobenzene       | 12.49 | 146  | 143      | 12.204 | ug/l # | 25       |
| 89) n-Butylbenzene            | 12.86 | 91   | 89       | 2.931  | ug/l # | 26       |
| 91) 1,2-Dichlorobenzene       | 12.94 | 146  | 63       | 5.522  | ug/l # | 23       |
| 93) 1,2,4-Trichlorobenzene    | 14.17 | 180  | 79       | 9.764  | ug/l # | 12       |
| 95) Naphthalene               | 14.46 | 128  | 344      | 23.284 | ug/l # | 9        |
| -----                         |       |      |          |        |        |          |

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

