

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY031720\  
 Data File : VY001989.D  
 Acq On : 17 Mar 2020 09:46  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 3/18/2020 11:13:09 AM

Quant Time: Mar 17 16:26:23 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y030420S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Mar 05 04:05:33 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.82  | 168  | 169982   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.71  | 114  | 306482   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.50 | 117  | 272437   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.44 | 152  | 125949   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.17   | 65  | 82615    | 45.53 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.06% |      |
| 35) Dibromofluoromethane  | 7.75   | 113 | 80684    | 48.21 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.42% |      |
| 50) Toluene-d8            | 10.20  | 98  | 334515   | 47.40 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.80% |      |
| 62) 4-Bromofluorobenzene  | 12.50  | 95  | 115635   | 47.12 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.24% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.92 | 85  | 65665   | 41.850  | ug/l | 96     |
| 3) Chloromethane              | 2.13 | 50  | 93609   | 44.250  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.27 | 62  | 98061   | 45.572  | ug/l | 100    |
| 5) Bromomethane               | 2.67 | 94  | 66303   | 53.122  | ug/l | 99     |
| 6) Chloroethane               | 2.82 | 64  | 65384   | 48.372  | ug/l | 93     |
| 7) Trichlorofluoromethane     | 3.15 | 101 | 138016  | 47.294  | ug/l | 96     |
| 8) Diethyl Ether              | 3.55 | 74  | 53648   | 46.644  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.93 | 101 | 91096   | 48.534  | ug/l | 99     |
| 10) Methyl Iodide             | 4.12 | 142 | 106685  | 49.150  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.99 | 59  | 44400   | 233.638 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 3.90 | 96  | 90208   | 47.732  | ug/l | 97     |
| 13) Acrolein                  | 3.75 | 56  | 52294   | 205.071 | ug/l | 96     |
| 14) Allyl chloride            | 4.51 | 41  | 160923  | 48.031  | ug/l | 99     |
| 15) Acrylonitrile             | 5.20 | 53  | 137772  | 224.164 | ug/l | 99     |
| 16) Acetone                   | 3.97 | 43  | 138869  | 262.740 | ug/l | 97     |
| 17) Carbon Disulfide          | 4.22 | 76  | 285132  | 44.881  | ug/l | 98     |
| 18) Methyl Acetate            | 4.51 | 43  | 59084   | 43.507  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.25 | 73  | 242624  | 47.374  | ug/l | 100    |
| 20) Methylene Chloride        | 4.75 | 84  | 101539  | 44.825  | ug/l | 95     |
| 21) trans-1,2-Dichloroethene  | 5.25 | 96  | 103317  | 48.164  | ug/l | 99     |
| 22) Diisopropyl ether         | 6.15 | 45  | 337487  | 49.141  | ug/l | 95     |
| 23) Vinyl Acetate             | 6.09 | 43  | 1057788 | 234.945 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 6.05 | 63  | 182667  | 49.116  | ug/l | 99     |
| 25) 2-Butanone                | 7.02 | 43  | 190862  | 237.459 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 7.01 | 77  | 154407  | 50.583  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 7.02 | 96  | 114956  | 49.266  | ug/l | 99     |
| 28) Bromochloromethane        | 7.36 | 49  | 82895   | 49.449  | ug/l | 100    |
| 29) Tetrahydrofuran           | 7.38 | 42  | 114552  | 214.616 | ug/l | 99     |
| 30) Chloroform                | 7.53 | 83  | 169958  | 48.640  | ug/l | 99     |
| 31) Cyclohexane               | 7.81 | 56  | 181924  | 45.621  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 7.73 | 97  | 148100  | 50.288  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.94 | 75  | 145004  | 49.166  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.10 | 43  | 75408   | 43.992  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 7.92 | 117 | 126793  | 50.326  | ug/l | 99     |

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 3/18/2020 11:13:09 AM

Quant Time: Mar 17 16:26:23 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y030420S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Mar 05 04:05:33 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.21  | 83   | 187366   | 47.899  | ug/l   | 99       |
| 40) Benzene                    | 8.19  | 78   | 427295   | 48.880  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.35  | 41   | 43930m   | 56.947  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.26  | 62   | 108396   | 48.121  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.30  | 43   | 150255   | 46.299  | ug/l   | 100      |
| 44) Trichloroethene            | 8.96  | 130  | 104662   | 49.161  | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 9.24  | 63   | 108986   | 49.595  | ug/l   | 99       |
| 46) Dibromomethane             | 9.33  | 93   | 52749    | 46.580  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.52  | 83   | 131945   | 50.088  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.31  | 41   | 65538    | 45.511  | ug/l   | 94       |
| 49) 1,4-Dioxane                | 9.31  | 88   | 12519    | 806.788 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 10.09 | 43   | 383686   | 229.535 | ug/l   | 100      |
| 52) Toluene                    | 10.26 | 92   | 261772   | 49.294  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.48 | 75   | 143244   | 49.911  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.95  | 75   | 169868   | 49.719  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 10.66 | 97   | 80721    | 48.706  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.52 | 69   | 114892   | 47.296  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.81 | 76   | 140056   | 47.409  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.80  | 63   | 181966   | 209.011 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.85 | 43   | 276634   | 231.863 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.00 | 129  | 87885    | 50.325  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.11 | 107  | 74357    | 47.365  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.74 | 164  | 85509    | 50.049  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.53 | 112  | 273174   | 50.323  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.61 | 131  | 91879    | 51.613  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.61 | 91   | 508575   | 50.235  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.72 | 106  | 377552   | 100.871 | ug/l   | 100      |
| 69) o-Xylene                   | 12.05 | 106  | 179520   | 50.887  | ug/l   | 97       |
| 70) Styrene                    | 12.06 | 104  | 308493   | 51.057  | ug/l   | 100      |
| 71) Bromoform                  | 12.22 | 173  | 48109    | 49.833  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.34 | 105  | 483327   | 50.270  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.16 | 43   | 133714   | 45.251  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.59 | 83   | 96065    | 46.333  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 60153m   | 40.250  | ug/l   |          |
| 77) Bromobenzene               | 12.63 | 156  | 101748   | 49.949  | ug/l   | 96       |
| 78) n-propylbenzene            | 12.69 | 91   | 598634   | 50.468  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.77 | 91   | 325860   | 49.724  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.83 | 105  | 398666   | 50.367  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.39 | 75   | 35712    | 48.269  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.87 | 91   | 342773   | 50.236  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.09 | 119  | 335848   | 51.086  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.13 | 105  | 397468   | 50.600  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.27 | 105  | 497679   | 51.359  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.38 | 119  | 429263   | 51.353  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.38 | 146  | 199607   | 50.005  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.46 | 146  | 200107   | 49.414  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.71 | 91   | 439956   | 50.730  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.97 | 117  | 82126    | 52.079  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.75 | 146  | 177514   | 48.950  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.37 | 75   | 14049    | 43.423  | ug/l   | 98       |

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Quant Title : SW846 8260  
QLast Update : Thu Mar 05 04:05:33 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.02 | 180  | 112016   | 47.630 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.12 | 225  | 57616    | 50.249 | ug/l  | 99       |
| 95) Naphthalene            | 15.25 | 128  | 251049   | 45.004 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.44 | 180  | 99172    | 47.868 | ug/l  | 98       |

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

