

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD100318\  
 Data File : VD060114.D  
 Acq On : 3 Oct 2018 12:08  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

apatel  
 10/4/2018 4:44:48 PM

Quant Time: Oct 04 04:40:26 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D100118S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 02 06:56:35 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 6.40  | 168  | 1649063  | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 7.43  | 114  | 2267681  | 50.00 | ug/l  | 0.01     |
| 63) Chlorobenzene-d5       | 11.28 | 117  | 1827520  | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 13.38 | 152  | 938076   | 50.00 | ug/l  | 0.01     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.78   | 65  | 660126   | 52.81 | ug/l    | 0.02 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.62% |      |
| 35) Dibromofluoromethane  | 6.32   | 113 | 915341   | 53.15 | ug/l    | 0.02 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.30% |      |
| 50) Toluene-d8            | 9.45   | 98  | 2635662  | 53.67 | ug/l    | 0.01 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.34% |      |
| 62) 4-Bromofluorobenzene  | 12.42  | 95  | 967504   | 52.62 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.24% |      |

## Target Compounds

|                               |      |     |         |         | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|
| 2) Dichlorodifluoromethane    | 1.59 | 85  | 859548m | 55.411  | ug/l   |
| 3) Chloromethane              | 1.75 | 50  | 769198  | 54.991  | ug/l   |
| 4) Vinyl Chloride             | 1.84 | 62  | 630258  | 55.058  | ug/l   |
| 5) Bromomethane               | 2.14 | 94  | 106324  | 73.972  | ug/l   |
| 6) Chloroethane               | 2.25 | 64  | 191123  | 61.183  | ug/l   |
| 7) Trichlorofluoromethane     | 2.50 | 101 | 750163  | 54.730  | ug/l   |
| 8) Diethyl Ether              | 2.82 | 74  | 160222  | 56.847  | ug/l   |
| 9) 1,1,2-Trichlorotrifluoroet | 3.08 | 101 | 473898  | 55.499  | ug/l   |
| 10) Methyl Iodide             | 3.24 | 142 | 509960  | 56.316  | ug/l   |
| 11) Tert butyl alcohol        | 3.96 | 59  | 238949  | 266.538 | ug/l   |
| 12) 1,1-Dichloroethene        | 3.06 | 96  | 383219  | 56.968  | ug/l   |
| 13) Acrolein                  | 2.97 | 56  | 124021  | 224.415 | ug/l   |
| 14) Allyl chloride            | 3.53 | 41  | 768124  | 54.979  | ug/l   |
| 15) Acrylonitrile             | 4.08 | 53  | 1007860 | 271.610 | ug/l   |
| 16) Acetone                   | 3.15 | 43  | 650678  | 286.870 | ug/l   |
| 17) Carbon Disulfide          | 3.31 | 76  | 1285268 | 56.816  | ug/l   |
| 18) Methyl Acetate            | 3.54 | 43  | 272851  | 55.968  | ug/l   |
| 19) Methyl tert-butyl Ether   | 4.12 | 73  | 1587208 | 53.664  | ug/l   |
| 20) Methylene Chloride        | 3.71 | 84  | 1038907 | 58.961  | ug/l   |
| 21) trans-1,2-Dichloroethene  | 4.09 | 96  | 912070  | 52.497  | ug/l   |
| 22) Diisopropyl ether         | 4.84 | 45  | 3338794 | 53.511  | ug/l   |
| 23) Vinyl Acetate             | 4.79 | 43  | 9488939 | 270.553 | ug/l   |
| 24) 1,1-Dichloroethane        | 4.75 | 63  | 1479246 | 52.288  | ug/l   |
| 25) 2-Butanone                | 5.61 | 43  | 1608524 | 283.865 | ug/l   |
| 26) 2,2-Dichloropropane       | 5.58 | 77  | 1186935 | 55.344  | ug/l   |
| 27) cis-1,2-Dichloroethene    | 5.58 | 96  | 964899  | 52.419  | ug/l   |
| 28) Bromochloromethane        | 5.92 | 49  | 732225  | 53.262  | ug/l   |
| 29) Tetrahydrofuran           | 5.95 | 42  | 857823  | 260.626 | ug/l   |
| 30) Chloroform                | 6.09 | 83  | 1553524 | 54.287  | ug/l   |
| 31) Cyclohexane               | 6.36 | 56  | 1393659 | 51.462  | ug/l   |
| 32) 1,1,1-Trichloroethane     | 6.28 | 97  | 1262491 | 53.848  | ug/l   |
| 36) 1,1-Dichloropropene       | 6.52 | 75  | 1145342 | 52.855  | ug/l   |
| 37) Ethyl Acetate             | 5.69 | 43  | 749978  | 52.142  | ug/l   |
| 38) Carbon Tetrachloride      | 6.49 | 117 | 1076507 | 54.735  | ug/l   |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD100318\  
 Data File : VD060114.D  
 Acq On : 3 Oct 2018 12:08  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
 APPROVED

apatel  
 10/4/2018 4:44:48 PM

Quant Time: Oct 04 04:40:26 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D100118S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Oct 02 06:56:35 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units | Dev(Min) |
|--------------------------------|-------|------|----------|----------|-------|----------|
| 39) Methylcyclohexane          | 8.03  | 83   | 1277547  | 51.888   | ug/l  | 98       |
| 40) Benzene                    | 6.78  | 78   | 2960703  | 52.225   | ug/l  | 100      |
| 41) Methacrylonitrile          | 5.92  | 41   | 423528m  | 52.095   | ug/l  |          |
| 42) 1,2-Dichloroethane         | 6.89  | 62   | 851091   | 52.364   | ug/l  | 100      |
| 43) Isopropyl Acetate          | 8.35  | 43   | 1014779  | 53.627   | ug/l  | 98       |
| 44) Trichloroethene            | 7.74  | 130  | 923339   | 52.614   | ug/l  | 97       |
| 45) 1,2-Dichloropropane        | 8.10  | 63   | 774630   | 52.184   | ug/l  | 100      |
| 46) Dibromomethane             | 8.21  | 93   | 513339   | 53.415   | ug/l  | 96       |
| 47) Bromodichloromethane       | 8.48  | 83   | 1112890  | 54.348   | ug/l  | 100      |
| 48) Methyl methacrylate        | 8.24  | 41   | 593822   | 55.091   | ug/l  | 99       |
| 49) 1,4-Dioxane                | 8.22  | 88   | 115763   | 1091.533 | ug/l  | 91       |
| 51) 4-Methyl-2-Pentanone       | 9.34  | 43   | 3249630  | 272.269  | ug/l  | 99       |
| 52) Toluene                    | 9.55  | 92   | 1902726  | 52.114   | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 9.91  | 75   | 1010729  | 54.550   | ug/l  | 99       |
| 54) cis-1,3-Dichloropropene    | 9.09  | 75   | 1230825  | 53.795   | ug/l  | 98       |
| 55) 1,1,2-Trichloroethane      | 10.18 | 97   | 645235   | 54.058   | ug/l  | 99       |
| 56) Ethyl methacrylate         | 10.03 | 69   | 734189   | 55.723   | ug/l  | 99       |
| 57) 1,3-Dichloropropane        | 10.38 | 76   | 955218   | 52.473   | ug/l  | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.92  | 63   | 1820376  | 248.802  | ug/l  | 97       |
| 59) 2-Hexanone                 | 10.48 | 43   | 2388008  | 278.242  | ug/l  | 100      |
| 60) Dibromochloromethane       | 10.64 | 129  | 797392   | 54.449   | ug/l  | 96       |
| 61) 1,2-Dibromoethane          | 10.76 | 107  | 674587   | 53.191   | ug/l  | 99       |
| 64) Tetrachloroethene          | 10.25 | 164  | 844577   | 52.765   | ug/l  | 98       |
| 65) Chlorobenzene              | 11.31 | 112  | 2060934  | 52.128   | ug/l  | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.42 | 131  | 709667   | 53.807   | ug/l  | 98       |
| 67) Ethyl Benzene              | 11.43 | 91   | 3361381  | 52.476   | ug/l  | 99       |
| 68) m/p-Xylenes                | 11.57 | 106  | 2445412  | 102.175  | ug/l  | 99       |
| 69) o-Xylene                   | 11.93 | 106  | 1258042  | 53.142   | ug/l  | 94       |
| 70) Styrene                    | 11.96 | 104  | 2114134  | 53.402   | ug/l  | 98       |
| 71) Bromoform                  | 12.12 | 173  | 609281   | 57.049   | ug/l  | 99       |
| 73) Isopropylbenzene           | 12.27 | 105  | 3225679  | 52.122   | ug/l  | 99       |
| 74) N-amyl acetate             | 12.14 | 43   | 1304808  | 57.560   | ug/l  | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.56 | 83   | 729636   | 54.004   | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 12.60 | 75   | 752703   | 55.717   | ug/l  | 100      |
| 77) Bromobenzene               | 12.54 | 156  | 962201   | 53.504   | ug/l  | 90       |
| 78) n-propylbenzene            | 12.64 | 91   | 4065255  | 52.902   | ug/l  | 96       |
| 79) 2-Chlorotoluene            | 12.71 | 91   | 2307199  | 54.097   | ug/l  | 96       |
| 80) 1,3,5-Trimethylbenzene     | 12.80 | 105  | 2591768  | 54.111   | ug/l  | 97       |
| 81) trans-1,4-Dichloro-2-buten | 12.34 | 75   | 227500   | 59.932   | ug/l  | 96       |
| 82) 4-Chlorotoluene            | 12.80 | 91   | 2592335  | 53.739   | ug/l  | 95       |
| 83) tert-Butylbenzene          | 13.04 | 119  | 2991396  | 54.424   | ug/l  | 96       |
| 84) 1,2,4-Trimethylbenzene     | 13.09 | 105  | 2634381  | 52.186   | ug/l  | 97       |
| 85) sec-Butylbenzene           | 13.22 | 105  | 3463856  | 53.300   | ug/l  | 98       |
| 86) p-Isopropyltoluene         | 13.34 | 119  | 2760558  | 51.789   | ug/l  | 97       |
| 87) 1,3-Dichlorobenzene        | 13.31 | 146  | 1667495  | 53.219   | ug/l  | 97       |
| 88) 1,4-Dichlorobenzene        | 13.39 | 146  | 1622174  | 51.544   | ug/l  | 97       |
| 89) n-Butylbenzene             | 13.64 | 91   | 2789357  | 53.629   | ug/l  | 99       |
| 90) Hexachloroethane           | 13.86 | 117  | 716721   | 58.098   | ug/l  | 76       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 1409854  | 53.514   | ug/l  | 96       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.22 | 75   | 104427   | 57.887   | ug/l  | 79       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD100318\  
Data File : VD060114.D  
Acq On : 3 Oct 2018 12:08  
Operator : VA/AP  
Sample : VSTDCCC050  
Misc : 5.00g/5ml/MSVOA D/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

apatel  
10/4/2018 4:44:48 PM

Quant Time: Oct 04 04:40:26 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D100118S.M  
Quant Title : SW846 8260  
QLast Update : Tue Oct 02 06:56:35 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.78 | 180  | 1194002  | 53.395 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 14.88 | 225  | 795772   | 53.537 | ug/l  | 99       |
| 95) Naphthalene            | 14.97 | 128  | 1796331  | 54.193 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.12 | 180  | 1024955  | 52.690 | ug/l  | 97       |

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

