

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD080818\  
 Data File : VD059707.D  
 Acq On : 8 Aug 2018 11:53  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDCCC050

Quant Time: Aug 08 14:20:23 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D080618S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 08 02:03:19 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.64  | 168  | 215895   | 50.00 | ug/l  | 0.02     |
| 34) 1,4-Difluorobenzene    | 6.68  | 114  | 277862   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.69 | 117  | 222263   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.91 | 152  | 121970   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.01  | 65   | 164461   | 59.22 | ug/l    | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 118.44% |          |
| 35) Dibromofluoromethane    | 5.54  | 113  | 136366   | 54.64 | ug/l    | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 109.28% |          |
| 50) Toluene-d8              | 8.71  | 98   | 296051   | 54.50 | ug/l    | 0.02     |
| Spiked Amount               |       |      | Recovery | =     | 109.00% |          |
| 62) 4-Bromofluorobenzene    | 11.93 | 95   | 135146   | 53.90 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.80% |          |

| Target Compounds              | R.T. | QIon | Response | Conc   | Units | Qvalue |
|-------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.33 | 85   | 158654   | 52.35  | ug/l  | 97     |
| 3) Chloromethane              | 1.48 | 50   | 82120    | 60.81  | ug/l  | 99     |
| 4) Vinyl Chloride             | 1.55 | 62   | 99583    | 63.16  | ug/l  | 98     |
| 5) Bromomethane               | 1.78 | 94   | 37994    | 73.23  | ug/l  | 95     |
| 6) Chloroethane               | 1.87 | 64   | 42703    | 66.64  | ug/l  | 98     |
| 7) Trichlorofluoromethane     | 2.08 | 101  | 157150   | 61.16  | ug/l  | 99     |
| 8) Diethyl Ether              | 2.33 | 74   | 33168    | 70.46  | ug/l  | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.55 | 101  | 87144    | 60.04  | ug/l  | 95     |
| 10) Methyl Iodide             | 2.69 | 142  | 110549   | 66.25  | ug/l  | 95     |
| 11) Tert butyl alcohol        | 3.26 | 59   | 30429    | 301.11 | ug/l  | 99     |
| 12) 1,1-Dichloroethene        | 2.54 | 96   | 70000    | 66.00  | ug/l  | 91     |
| 13) Acrolein                  | 2.46 | 56   | 32581    | 343.26 | ug/l  | 92     |
| 14) Allyl chloride            | 2.91 | 41   | 165528   | 68.21  | ug/l  | 95     |
| 15) Acrylonitrile             | 3.35 | 53   | 78441    | 279.85 | ug/l  | 99     |
| 16) Acetone                   | 2.60 | 43   | 186956   | 358.36 | ug/l  | 98     |
| 17) Carbon Disulfide          | 2.75 | 76   | 265360   | 69.26  | ug/l  | 99     |
| 18) Methyl Acetate            | 2.93 | 43   | 57484    | 59.63  | ug/l  | 94     |
| 19) Methyl tert-butyl Ether   | 3.40 | 73   | 263890   | 65.21  | ug/l  | 96     |
| 20) Methylene Chloride        | 3.06 | 84   | 83624    | 61.74  | ug/l  | 90     |
| 21) trans-1,2-Dichloroethene  | 3.38 | 96   | 88287    | 63.60  | ug/l  | 92     |
| 22) Diisopropyl ether         | 4.07 | 45   | 299883   | 52.54  | ug/l  | 94     |
| 23) Vinyl Acetate             | 4.01 | 43   | 994895   | 274.94 | ug/l  | 100    |
| 24) 1,1-Dichloroethane        | 3.97 | 63   | 200182   | 52.99  | ug/l  | 99     |
| 25) 2-Butanone                | 4.83 | 43   | 192192   | 280.49 | ug/l  | 100    |
| 26) 2,2-Dichloropropane       | 4.78 | 77   | 232788   | 57.70  | ug/l  | 97     |
| 27) cis-1,2-Dichloroethene    | 4.79 | 96   | 100293   | 49.76  | ug/l  | 81     |
| 28) Bromochloromethane        | 5.14 | 49   | 71098    | 50.97  | ug/l  | 89     |
| 29) Tetrahydrofuran           | 5.18 | 42   | 72065    | 271.57 | ug/l  | 94     |
| 30) Chloroform                | 5.31 | 83   | 252339   | 54.80  | ug/l  | 99     |
| 31) Cyclohexane               | 5.59 | 56   | 131405   | 53.23  | ug/l  | 98     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97   | 252175   | 56.30  | ug/l  | 96     |
| 36) 1,1-Dichloropropene       | 5.74 | 75   | 164404   | 53.22  | ug/l  | 97     |
| 37) Ethyl Acetate             | 4.92 | 43   | 79619    | 53.08  | ug/l  | 97     |
| 38) Carbon Tetrachloride      | 5.72 | 117  | 234864   | 56.81  | ug/l  | 93     |

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 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDCCC050

Quant Time: Aug 08 14:20:23 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D080618S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Aug 08 02:03:19 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 7.27  | 83   | 133695   | 51.21  | ug/l   | 98       |
| 40) Benzene                    | 6.01  | 78   | 303990   | 50.74  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.12  | 41   | 39542    | 56.39  | ug/l   | 94       |
| 42) 1,2-Dichloroethane         | 6.12  | 62   | 216159   | 58.36  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 7.62  | 43   | 100164   | 51.09  | ug/l   | 97       |
| 44) Trichloroethene            | 6.98  | 130  | 117498   | 53.68  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 7.34  | 63   | 83476    | 52.77  | ug/l   | 96       |
| 46) Dibromomethane             | 7.46  | 93   | 71432    | 52.11  | ug/l   | 91       |
| 47) Bromodichloromethane       | 7.74  | 83   | 185147   | 53.02  | ug/l   | 97       |
| 48) Methyl methacrylate        | 7.50  | 41   | 74032    | 57.21  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 7.49  | 88   | 11012    | 976.69 | ug/l # | 81       |
| 51) 4-Methyl-2-Pentanone       | 8.60  | 43   | 421202   | 294.61 | ug/l   | 98       |
| 52) Toluene                    | 8.80  | 92   | 200359   | 52.43  | ug/l   | 97       |
| 53) t-1,3-Dichloropropene      | 9.18  | 75   | 166141   | 56.24  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 8.35  | 75   | 159080   | 52.28  | ug/l   | 94       |
| 55) 1,1,2-Trichloroethane      | 9.46  | 97   | 73238    | 49.89  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 9.31  | 69   | 89138    | 55.04  | ug/l   | 92       |
| 57) 1,3-Dichloropropane        | 9.66  | 76   | 115289   | 50.62  | ug/l   | 94       |
| 58) 2-Chloroethyl Vinyl ether  | 8.19  | 63   | 207996   | 269.57 | ug/l   | 96       |
| 59) 2-Hexanone                 | 9.78  | 43   | 323158   | 301.00 | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.96  | 129  | 136310   | 58.44  | ug/l   | 97       |
| 61) 1,2-Dibromoethane          | 10.10 | 107  | 91635    | 54.29  | ug/l   | 97       |
| 64) Tetrachloroethene          | 9.52  | 164  | 111210   | 52.84  | ug/l   | 99       |
| 65) Chlorobenzene              | 10.73 | 112  | 251761   | 53.75  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.85 | 131  | 117284   | 57.12  | ug/l   | 97       |
| 67) Ethyl Benzene              | 10.85 | 91   | 430166   | 51.00  | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.01 | 106  | 293174   | 108.65 | ug/l   | 92       |
| 69) o-Xylene                   | 11.40 | 106  | 141761   | 54.04  | ug/l   | 86       |
| 70) Styrene                    | 11.43 | 104  | 241192   | 54.77  | ug/l   | 95       |
| 71) Bromoform                  | 11.60 | 173  | 94490    | 61.08  | ug/l   | 98       |
| 73) Isopropylbenzene           | 11.78 | 105  | 443959   | 54.16  | ug/l   | 97       |
| 74) N-amyl acetate             | 11.64 | 43   | 145640   | 55.54  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.07 | 83   | 79733    | 48.47  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane     | 12.11 | 75   | 101944   | 54.07  | ug/l   | 98       |
| 77) Bromobenzene               | 12.04 | 156  | 127420   | 53.33  | ug/l   | 83       |
| 78) n-propylbenzene            | 12.15 | 91   | 520758   | 51.27  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.22 | 91   | 318938   | 51.99  | ug/l   | 91       |
| 80) 1,3,5-Trimethylbenzene     | 12.32 | 105  | 366581   | 53.69  | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 11.85 | 75   | 26042    | 56.59  | ug/l   | 92       |
| 82) 4-Chlorotoluene            | 12.33 | 91   | 364453   | 50.75  | ug/l   | 83       |
| 83) tert-Butylbenzene          | 12.57 | 119  | 402843   | 52.71  | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene     | 12.62 | 105  | 386334   | 53.39  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 12.75 | 105  | 439004   | 51.73  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 12.89 | 119  | 408414   | 56.43  | ug/l   | 94       |
| 87) 1,3-Dichlorobenzene        | 12.84 | 146  | 211754   | 51.35  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.93 | 146  | 215528   | 52.39  | ug/l   | 96       |
| 89) n-Butylbenzene             | 13.19 | 91   | 384291   | 52.36  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.40 | 117  | 102621   | 54.71  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.19 | 146  | 179999   | 51.83  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.77 | 75   | 19070    | 55.51  | ug/l   | 87       |

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ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
VSTDCCC050

Quant Time: Aug 08 14:20:23 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D080618S.M  
Quant Title : SW846 8260  
QLast Update : Wed Aug 08 02:03:19 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.34 | 180  | 173752   | 55.62 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 14.43 | 225  | 130243   | 53.76 | ug/l  | 98       |
| 95) Naphthalene            | 14.51 | 128  | 238369   | 51.52 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.66 | 180  | 142477   | 52.14 | ug/l  | 99       |

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

