

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD051319\  
 Data File : VD062322.D  
 Acq On : 14 May 2019 00:39  
 Operator : FY/SY  
 Sample : VD0513SBS02  
 Misc : 5.00µ/5mL/MSVOA D/SOIL  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD0513SBS02

Quant Time: May 14 05:14:10 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D050719S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 07 14:26:29 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.06  | 168  | 584384   | 50.00 | ug/l  | 0.04     |
| 34) 1,4-Difluorobenzene    | 8.23  | 114  | 806979   | 50.00 | ug/l  | 0.04     |
| 63) Chlorobenzene-d5       | 12.38 | 117  | 694493   | 50.00 | ug/l  | 0.02     |
| 72) 1,4-Dichlorobenzene-d4 | 14.52 | 152  | 364649   | 50.00 | ug/l  | 0.01     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.46   | 65  | 308885   | 56.88 | ug/l    | 0.04 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 113.76% |      |
| 35) Dibromofluoromethane  | 6.94   | 113 | 344337   | 51.43 | ug/l    | 0.05 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.86% |      |
| 50) Toluene-d8            | 10.43  | 98  | 747223   | 46.29 | ug/l    | 0.03 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.58%  |      |
| 62) 4-Bromofluorobenzene  | 13.57  | 95  | 334622   | 51.62 | ug/l    | 0.02 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.24% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.58 | 85  | 117159 | 20.962  | ug/l   | 99     |
| 3) Chloromethane              | 1.76 | 50  | 77445  | 19.176  | ug/l   | 97     |
| 4) Vinyl Chloride             | 1.86 | 62  | 74005  | 18.646  | ug/l   | 99     |
| 5) Bromomethane               | 2.15 | 94  | 27414  | 29.477  | ug/l # | 94     |
| 6) Chloroethane               | 2.26 | 64  | 39674  | 23.822  | ug/l   | 98     |
| 7) Trichlorofluoromethane     | 2.53 | 101 | 197779 | 25.631  | ug/l   | 100    |
| 8) Diethyl Ether              | 2.89 | 74  | 26908  | 18.081  | ug/l   | 82     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.15 | 101 | 126187 | 21.618  | ug/l   | 95     |
| 10) Methyl Iodide             | 3.31 | 142 | 141553 | 16.045  | ug/l # | 74     |
| 11) Tert butyl alcohol        | 4.09 | 59  | 31013  | 111.875 | ug/l # | 86     |
| 12) 1,1-Dichloroethene        | 3.13 | 96  | 86396  | 19.389  | ug/l   | 90     |
| 13) Acrolein                  | 3.05 | 56  | 24014  | 83.754  | ug/l   | 90     |
| 14) Allyl chloride            | 3.63 | 41  | 137736 | 21.260  | ug/l # | 79     |
| 15) Acrylonitrile             | 4.22 | 53  | 73838  | 101.337 | ug/l   | 95     |
| 16) Acetone                   | 3.23 | 43  | 124254 | 109.101 | ug/l # | 82     |
| 17) Carbon Disulfide          | 3.38 | 76  | 208392 | 16.258  | ug/l   | 98     |
| 18) Methyl Acetate            | 3.66 | 43  | 61678  | 30.160  | ug/l   | 94     |
| 19) Methyl tert-butyl Ether   | 4.26 | 73  | 212307 | 22.229  | ug/l   | 94     |
| 20) Methylene Chloride        | 3.82 | 84  | 100316 | 21.096  | ug/l   | 94     |
| 21) trans-1,2-Dichloroethene  | 4.23 | 96  | 96889  | 19.541  | ug/l   | 99     |
| 22) Diisopropyl ether         | 5.13 | 45  | 308612 | 22.385  | ug/l   | 94     |
| 23) Vinyl Acetate             | 5.07 | 43  | 852412 | 117.186 | ug/l   | 96     |
| 24) 1,1-Dichloroethane        | 4.99 | 63  | 188204 | 22.629  | ug/l   | 96     |
| 25) 2-Butanone                | 6.09 | 43  | 135933 | 109.425 | ug/l   | 94     |
| 26) 2,2-Dichloropropane       | 6.04 | 77  | 198855 | 24.003  | ug/l   | 95     |
| 27) cis-1,2-Dichloroethene    | 6.06 | 96  | 124867 | 22.499  | ug/l   | 92     |
| 28) Bromochloromethane        | 6.44 | 49  | 80844  | 24.706  | ug/l # | 61     |
| 29) Tetrahydrofuran           | 6.47 | 42  | 60675  | 106.005 | ug/l   | 94     |
| 30) Chloroform                | 6.68 | 83  | 243955 | 24.338  | ug/l   | 100    |
| 31) Cyclohexane               | 6.97 | 56  | 106516 | 18.694  | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 6.88 | 97  | 241549 | 25.496  | ug/l   | 95     |
| 36) 1,1-Dichloropropene       | 7.16 | 75  | 142757 | 21.576  | ug/l   | 98     |
| 37) Ethyl Acetate             | 6.21 | 43  | 60675  | 21.624  | ug/l # | 87     |
| 38) Carbon Tetrachloride      | 7.12 | 117 | 214935 | 23.470  | ug/l   | 92     |

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 Quant Title : SW846 8260  
 QLast Update : Tue May 07 14:26:29 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 8.88  | 83   | 124977   | 19.714  | ug/l   | 91       |
| 40) Benzene                    | 7.46  | 78   | 303336   | 20.303  | ug/l   | 96       |
| 41) Methacrylonitrile          | 6.47  | 41   | 79192    | 23.095  | ug/l # | 75       |
| 42) 1,2-Dichloroethane         | 7.59  | 62   | 160453   | 25.347  | ug/l   | 90       |
| 43) Isopropyl Acetate          | 9.26  | 43   | 80622    | 20.259  | ug/l   | 99       |
| 44) Trichloroethene            | 8.56  | 130  | 115555   | 20.297  | ug/l   | 80       |
| 45) 1,2-Dichloropropane        | 8.95  | 63   | 73806    | 19.971  | ug/l   | 98       |
| 46) Dibromomethane             | 9.08  | 93   | 66648    | 22.177  | ug/l   | 96       |
| 47) Bromodichloromethane       | 9.38  | 83   | 182092   | 24.771  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.14  | 41   | 59877    | 24.428  | ug/l   | 87       |
| 49) 1,4-Dioxane                | 9.10  | 88   | 11106    | 419.932 | ug/l   | 90       |
| 51) 4-Methyl-2-Pentanone       | 10.32 | 43   | 315457   | 123.320 | ug/l   | 95       |
| 52) Toluene                    | 10.53 | 92   | 208411   | 21.439  | ug/l   | 94       |
| 53) t-1,3-Dichloropropene      | 10.93 | 75   | 138401   | 21.784  | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene    | 10.05 | 75   | 156341   | 22.557  | ug/l # | 85       |
| 55) 1,1,2-Trichloroethane      | 11.20 | 97   | 77336    | 22.484  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 11.06 | 69   | 77882    | 21.790  | ug/l # | 85       |
| 57) 1,3-Dichloropropane        | 11.42 | 76   | 121059   | 23.297  | ug/l   | 96       |
| 58) 2-Chloroethyl Vinyl ether  | 9.87  | 63   | 214969   | 110.108 | ug/l   | 93       |
| 59) 2-Hexanone                 | 11.55 | 43   | 218141   | 115.702 | ug/l   | 90       |
| 60) Dibromochloromethane       | 11.70 | 129  | 134779   | 22.674  | ug/l   | 94       |
| 61) 1,2-Dibromoethane          | 11.81 | 107  | 91867    | 21.969  | ug/l   | 99       |
| 64) Tetrachloroethene          | 11.27 | 164  | 113094   | 20.825  | ug/l   | 87       |
| 65) Chlorobenzene              | 12.40 | 112  | 284650   | 22.006  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 12.52 | 131  | 128065   | 22.749  | ug/l   | 92       |
| 67) Ethyl Benzene              | 12.53 | 91   | 499979   | 23.088  | ug/l   | 93       |
| 68) m/p-Xylenes                | 12.68 | 106  | 322291   | 40.906  | ug/l   | 82       |
| 69) o-Xylene                   | 13.05 | 106  | 149677   | 20.434  | ug/l   | 76       |
| 70) Styrene                    | 13.08 | 104  | 262839   | 21.183  | ug/l   | 94       |
| 71) Bromoform                  | 13.24 | 173  | 88142    | 22.504  | ug/l   | 96       |
| 73) Isopropylbenzene           | 13.41 | 105  | 478536   | 21.893  | ug/l   | 95       |
| 74) N-amyl acetate             | 13.27 | 43   | 116462   | 20.322  | ug/l   | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 13.70 | 83   | 87174    | 21.067  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 13.74 | 75   | 94843    | 21.886  | ug/l   | 97       |
| 77) Bromobenzene               | 13.67 | 156  | 137853   | 22.529  | ug/l   | 84       |
| 78) n-propylbenzene            | 13.78 | 91   | 582399   | 22.336  | ug/l   | 96       |
| 79) 2-Chlorotoluene            | 13.85 | 91   | 335415   | 22.461  | ug/l   | 96       |
| 80) 1,3,5-Trimethylbenzene     | 13.94 | 105  | 398371   | 21.643  | ug/l   | 89       |
| 81) trans-1,4-Dichloro-2-buten | 13.48 | 75   | 21265    | 17.382  | ug/l # | 68       |
| 82) 4-Chlorotoluene            | 13.95 | 91   | 387332   | 22.042  | ug/l   | 83       |
| 83) tert-Butylbenzene          | 14.20 | 119  | 447967   | 21.653  | ug/l   | 92       |
| 84) 1,2,4-Trimethylbenzene     | 14.25 | 105  | 390569   | 21.145  | ug/l   | 90       |
| 85) sec-Butylbenzene           | 14.37 | 105  | 492691   | 21.721  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 14.50 | 119  | 433844   | 21.407  | ug/l   | 93       |
| 87) 1,3-Dichlorobenzene        | 14.46 | 146  | 229564   | 20.538  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 14.54 | 146  | 227421   | 20.707  | ug/l   | 99       |
| 89) n-Butylbenzene             | 14.81 | 91   | 400745   | 22.031  | ug/l   | 92       |
| 90) Hexachloroethane           | 15.01 | 117  | 120203   | 21.810  | ug/l   | 90       |
| 91) 1,2-Dichlorobenzene        | 14.82 | 146  | 198341   | 21.546  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 15.39 | 75   | 16126    | 23.740  | ug/l   | 81       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.95 | 180  | 145141   | 21.661 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 16.05 | 225  | 114725   | 23.021 | ug/l  | 98       |
| 95) Naphthalene            | 16.12 | 128  | 226645   | 24.228 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 16.27 | 180  | 113530   | 26.949 | ug/l  | 99       |

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

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