

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD121818\  
 Data File : VD060618.D  
 Acq On : 18 Dec 2018 13:49  
 Operator : VA/AP  
 Sample : VD1218SBS01  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD1218SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 12/19/2018 2:12:04 PM

Quant Time: Dec 19 02:58:14 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D120518S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 06 01:49:20 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 6.41  | 168  | 1484810  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 7.45  | 114  | 2042011  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.28 | 117  | 1644726  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.37 | 152  | 872078   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.79   | 65  | 530824   | 50.44 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.88% |      |
| 35) Dibromofluoromethane  | 6.32   | 113 | 773187   | 51.55 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.10% |      |
| 50) Toluene-d8            | 9.45   | 98  | 2154041  | 49.63 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.26%  |      |
| 62) 4-Bromofluorobenzene  | 12.43  | 95  | 787994   | 50.74 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.48% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.60 | 85  | 386704  | 23.942  | ug/l   | 97     |
| 3) Chloromethane              | 1.77 | 50  | 355200  | 23.283  | ug/l   | 99     |
| 4) Vinyl Chloride             | 1.87 | 62  | 274656  | 22.558  | ug/l   | 97     |
| 5) Bromomethane               | 2.15 | 94  | 42385   | 13.915  | ug/l   | 97     |
| 6) Chloroethane               | 2.27 | 64  | 70705   | 16.797  | ug/l   | 95     |
| 7) Trichlorofluoromethane     | 2.52 | 101 | 301039  | 21.413  | ug/l   | 100    |
| 8) Diethyl Ether              | 2.83 | 74  | 54327   | 22.373  | ug/l   | 94     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.10 | 101 | 209579  | 22.976  | ug/l   | 98     |
| 10) Methyl Iodide             | 3.25 | 142 | 224544  | 21.059  | ug/l   | 97     |
| 11) Tert butyl alcohol        | 3.97 | 59  | 37341   | 87.333  | ug/l # | 92     |
| 12) 1,1-Dichloroethene        | 3.09 | 96  | 168647  | 22.724  | ug/l   | 89     |
| 13) Acrolein                  | 2.99 | 56  | 39629   | 84.823  | ug/l   | 92     |
| 14) Allyl chloride            | 3.54 | 41  | 312101  | 22.165  | ug/l   | 97     |
| 15) Acrylonitrile             | 4.09 | 53  | 262893  | 108.285 | ug/l   | 96     |
| 16) Acetone                   | 3.17 | 43  | 179295  | 106.283 | ug/l   | 98     |
| 17) Carbon Disulfide          | 3.32 | 76  | 500831  | 20.775  | ug/l   | 98     |
| 18) Methyl Acetate            | 3.57 | 43  | 90973   | 22.691  | ug/l # | 92     |
| 19) Methyl tert-butyl Ether   | 4.13 | 73  | 441279  | 21.441  | ug/l   | 97     |
| 20) Methylene Chloride        | 3.73 | 84  | 361848  | 20.744  | ug/l   | 96     |
| 21) trans-1,2-Dichloroethene  | 4.11 | 96  | 339684  | 21.041  | ug/l   | 98     |
| 22) Diisopropyl ether         | 4.86 | 45  | 1088724 | 21.535  | ug/l   | 99     |
| 23) Vinyl Acetate             | 4.81 | 43  | 2698543 | 107.734 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 4.76 | 63  | 560507  | 21.341  | ug/l   | 100    |
| 25) 2-Butanone                | 5.63 | 43  | 362548  | 109.236 | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 5.59 | 77  | 445998  | 21.982  | ug/l   | 98     |
| 27) cis-1,2-Dichloroethene    | 5.60 | 96  | 354182  | 21.578  | ug/l   | 98     |
| 28) Bromochloromethane        | 5.93 | 49  | 231245  | 19.876  | ug/l   | 95     |
| 29) Tetrahydrofuran           | 5.96 | 42  | 206198  | 109.713 | ug/l   | 98     |
| 30) Chloroform                | 6.11 | 83  | 578267  | 21.855  | ug/l   | 100    |
| 31) Cyclohexane               | 6.37 | 56  | 526175  | 21.224  | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 6.29 | 97  | 471134  | 21.659  | ug/l   | 98     |
| 36) 1,1-Dichloropropene       | 6.52 | 75  | 445147  | 22.302  | ug/l   | 97     |
| 37) Ethyl Acetate             | 5.69 | 43  | 196179  | 22.663  | ug/l   | 97     |
| 38) Carbon Tetrachloride      | 6.50 | 117 | 401775  | 22.421  | ug/l   | 98     |

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Quant Time: Dec 19 02:58:14 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D120518S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 06 01:49:20 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 8.04  | 83   | 504815   | 22.185  | ug/l   | 97       |
| 40) Benzene                    | 6.80  | 78   | 1151510  | 22.573  | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.94  | 41   | 116619m  | 24.991  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 6.89  | 62   | 288881   | 22.273  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.35  | 43   | 226120   | 21.161  | ug/l # | 99       |
| 44) Trichloroethene            | 7.74  | 130  | 340537   | 22.337  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 8.11  | 63   | 272773   | 21.620  | ug/l   | 98       |
| 46) Dibromomethane             | 8.21  | 93   | 159861   | 21.930  | ug/l   | 97       |
| 47) Bromodichloromethane       | 8.49  | 83   | 385772   | 22.304  | ug/l   | 99       |
| 48) Methyl methacrylate        | 8.24  | 41   | 139397   | 22.047  | ug/l   | 96       |
| 49) 1,4-Dioxane                | 8.23  | 88   | 25001    | 436.282 | ug/l # | 92       |
| 51) 4-Methyl-2-Pentanone       | 9.35  | 43   | 722558   | 108.704 | ug/l   | 100      |
| 52) Toluene                    | 9.55  | 92   | 701577   | 22.004  | ug/l   | 96       |
| 53) t-1,3-Dichloropropene      | 9.92  | 75   | 318654   | 22.421  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.10  | 75   | 416125   | 22.285  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.18 | 97   | 190104   | 21.410  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.02 | 69   | 178643   | 22.231  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.38 | 76   | 306840   | 22.355  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.92  | 63   | 520839   | 108.324 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.49 | 43   | 525667   | 113.141 | ug/l   | 98       |
| 60) Dibromochloromethane       | 10.63 | 129  | 251523   | 22.657  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 10.75 | 107  | 197636   | 21.841  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.25 | 164  | 310012   | 21.287  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.31 | 112  | 762290   | 21.908  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.42 | 131  | 258871   | 23.083  | ug/l   | 97       |
| 67) Ethyl Benzene              | 11.42 | 91   | 1361850  | 22.946  | ug/l   | 96       |
| 68) m/p-Xylenes                | 11.56 | 106  | 980033   | 44.634  | ug/l   | 96       |
| 69) o-Xylene                   | 11.93 | 106  | 456711   | 21.826  | ug/l   | 90       |
| 70) Styrene                    | 11.95 | 104  | 741761   | 22.085  | ug/l   | 97       |
| 71) Bromoform                  | 12.11 | 173  | 159925   | 21.374  | ug/l   | 98       |
| 73) Isopropylbenzene           | 12.28 | 105  | 1301821  | 21.095  | ug/l   | 98       |
| 74) N-amyl acetate             | 12.13 | 43   | 305719   | 20.498  | ug/l   | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.56 | 83   | 211594   | 21.417  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane     | 12.59 | 75   | 207542   | 21.004  | ug/l   | 99       |
| 77) Bromobenzene               | 12.54 | 156  | 347501   | 21.423  | ug/l   | 89       |
| 78) n-propylbenzene            | 12.63 | 91   | 1663362  | 21.323  | ug/l   | 96       |
| 79) 2-Chlorotoluene            | 12.70 | 91   | 884601   | 20.898  | ug/l   | 94       |
| 80) 1,3,5-Trimethylbenzene     | 12.79 | 105  | 1008865  | 21.395  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.34 | 75   | 55357    | 20.087  | ug/l   | 92       |
| 82) 4-Chlorotoluene            | 12.81 | 91   | 1019777  | 21.449  | ug/l   | 97       |
| 83) tert-Butylbenzene          | 13.05 | 119  | 1158782  | 21.917  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.09 | 105  | 997856   | 20.437  | ug/l   | 97       |
| 85) sec-Butylbenzene           | 13.22 | 105  | 1381756  | 20.968  | ug/l   | 95       |
| 86) p-Isopropyltoluene         | 13.34 | 119  | 1114600  | 21.337  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.31 | 146  | 627042   | 21.350  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.39 | 146  | 621912   | 21.585  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.65 | 91   | 1180094  | 20.309  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.85 | 117  | 271595   | 20.736  | ug/l   | 80       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 523760   | 21.822  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.23 | 75   | 25283    | 21.121  | ug/l   | 80       |

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Quant Title : SW846 8260  
QLast Update : Thu Dec 06 01:49:20 2018  
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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.79 | 180  | 398670   | 21.248 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 14.88 | 225  | 305713   | 22.084 | ug/l  | 99       |
| 95) Naphthalene            | 14.96 | 128  | 475259   | 21.292 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.11 | 180  | 312668   | 20.914 | ug/l  | 99       |

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

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