

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_D\DATA\VD122018\  
 Data File : VD060654.D  
 Acq On : 20 Dec 2018 11:26  
 Operator : VA/AP  
 Sample : VSTDIC010  
 Misc : 5.00g/5ml/MSVOA\_D/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDIC010

Manual Integrations  
 APPROVED

apatel  
 12/21/2018 11:32:25 AM

Quant Time: Dec 20 14:57:43 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D122018S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 14:42:21 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 6.41  | 168  | 1508852  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 7.44  | 114  | 2069590  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.28 | 117  | 1715160  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.37 | 152  | 875966   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.78   | 65  | 107119   | 10.40 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 20.80% |      |
| 35) Dibromofluoromethane  | 6.33   | 113 | 151599   | 10.15 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 20.30% |      |
| 50) Toluene-d8            | 9.45   | 98  | 450083   | 10.00 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 20.00% |      |
| 62) 4-Bromofluorobenzene  | 12.42  | 95  | 160249   | 10.47 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 20.94% |      |

## Target Compounds

|                               |      |     |         |        |        | Qvalue |
|-------------------------------|------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.61 | 85  | 191072  | 8.780  | ug/l   | 99     |
| 3) Chloromethane              | 1.77 | 50  | 181340  | 10.143 | ug/l   | 95     |
| 4) Vinyl Chloride             | 1.87 | 62  | 142810  | 9.729  | ug/l   | 95     |
| 5) Bromomethane               | 2.17 | 94  | 35452   | 9.288  | ug/l   | 96     |
| 6) Chloroethane               | 2.27 | 64  | 45212   | 9.278  | ug/l # | 88     |
| 7) Trichlorofluoromethane     | 2.52 | 101 | 161821  | 9.555  | ug/l   | 100    |
| 8) Diethyl Ether              | 2.84 | 74  | 27133   | 9.853  | ug/l   | 88     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.10 | 101 | 106244  | 10.116 | ug/l   | 97     |
| 10) Methyl Iodide             | 3.26 | 142 | 101760  | 8.460  | ug/l # | 88     |
| 11) Tert butyl alcohol        | 3.98 | 59  | 24023   | 51.645 | ug/l # | 90     |
| 12) 1,1-Dichloroethene        | 3.09 | 96  | 88617   | 10.447 | ug/l   | 92     |
| 13) Acrolein                  | 2.99 | 56  | 26269   | 64.562 | ug/l   | 97     |
| 14) Allyl chloride            | 3.54 | 41  | 162118  | 10.051 | ug/l   | 97     |
| 15) Acrylonitrile             | 4.10 | 53  | 135222  | 51.303 | ug/l   | 97     |
| 16) Acetone                   | 3.17 | 43  | 100481  | 52.239 | ug/l   | 99     |
| 17) Carbon Disulfide          | 3.33 | 76  | 277121  | 9.762  | ug/l   | 97     |
| 18) Methyl Acetate            | 3.56 | 43  | 48316   | 10.047 | ug/l   | 100    |
| 19) Methyl tert-butyl Ether   | 4.12 | 73  | 221552  | 9.728  | ug/l   | 96     |
| 20) Methylene Chloride        | 3.73 | 84  | 217957  | 12.660 | ug/l   | 99     |
| 21) trans-1,2-Dichloroethene  | 4.12 | 96  | 178134  | 9.941  | ug/l   | 97     |
| 22) Diisopropyl ether         | 4.86 | 45  | 546299  | 9.984  | ug/l   | 97     |
| 23) Vinyl Acetate             | 4.81 | 43  | 1335571 | 49.695 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 4.76 | 63  | 281931  | 9.834  | ug/l   | 99     |
| 25) 2-Butanone                | 5.62 | 43  | 184625  | 48.508 | ug/l   | 100    |
| 26) 2,2-Dichloropropane       | 5.59 | 77  | 230447  | 10.088 | ug/l   | 96     |
| 27) cis-1,2-Dichloroethene    | 5.60 | 96  | 184005  | 10.019 | ug/l   | 99     |
| 28) Bromochloromethane        | 5.93 | 49  | 116862  | 9.790  | ug/l   | 98     |
| 29) Tetrahydrofuran           | 5.96 | 42  | 104021  | 49.793 | ug/l   | 97     |
| 30) Chloroform                | 6.10 | 83  | 293262  | 10.124 | ug/l   | 97     |
| 31) Cyclohexane               | 6.37 | 56  | 280808  | 10.157 | ug/l   | 99     |
| 32) 1,1,1-Trichloroethane     | 6.29 | 97  | 233307  | 9.698  | ug/l   | 97     |
| 36) 1,1-Dichloropropene       | 6.53 | 75  | 232429  | 10.520 | ug/l   | 96     |
| 37) Ethyl Acetate             | 5.70 | 43  | 96395   | 10.570 | ug/l   | 95     |
| 38) Carbon Tetrachloride      | 6.51 | 117 | 195267  | 9.796  | ug/l   | 99     |

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 Misc : 5.00g/5ml/MSVOA\_D/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
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 ClientSampleID :  
 VSTDIC010

Manual Integrations  
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apatel  
 12/21/2018 11:32:25 AM

Quant Time: Dec 20 14:57:43 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D122018S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 14:42:21 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 8.04  | 83   | 251536   | 9.706   | ug/l   | 100      |
| 40) Benzene                    | 6.79  | 78   | 596092   | 10.398  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.93  | 41   | 51981m   | 9.618   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 6.90  | 62   | 141904   | 9.959   | ug/l   | 97       |
| 43) Isopropyl Acetate          | 8.35  | 43   | 114684   | 9.259   | ug/l # | 95       |
| 44) Trichloroethene            | 7.74  | 130  | 170037   | 9.912   | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 8.10  | 63   | 143982   | 10.341  | ug/l   | 98       |
| 46) Dibromomethane             | 8.22  | 93   | 82413    | 10.205  | ug/l   | 93       |
| 47) Bromodichloromethane       | 8.48  | 83   | 184449   | 9.447   | ug/l   | 97       |
| 48) Methyl methacrylate        | 8.25  | 41   | 72912    | 9.671   | ug/l   | 93       |
| 49) 1,4-Dioxane                | 8.22  | 88   | 13169    | 186.549 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 9.34  | 43   | 371484   | 48.904  | ug/l   | 98       |
| 52) Toluene                    | 9.55  | 92   | 371862   | 10.213  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 9.91  | 75   | 158492   | 9.561   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.10  | 75   | 200768   | 9.265   | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 10.18 | 97   | 98379    | 10.189  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.03 | 69   | 84870    | 8.593   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.38 | 76   | 154213   | 10.015  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.92  | 63   | 281105   | 53.940  | ug/l   | 95       |
| 59) 2-Hexanone                 | 10.48 | 43   | 257608   | 47.729  | ug/l   | 95       |
| 60) Dibromochloromethane       | 10.64 | 129  | 119758   | 9.148   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 10.76 | 107  | 99112    | 9.543   | ug/l   | 97       |
| 64) Tetrachloroethene          | 10.25 | 164  | 156052   | 9.409   | ug/l   | 98       |
| 65) Chlorobenzene              | 11.31 | 112  | 386705   | 9.596   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.42 | 131  | 130326   | 9.868   | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.43 | 91   | 711067   | 10.270  | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.56 | 106  | 501938   | 19.962  | ug/l   | 97       |
| 69) o-Xylene                   | 11.93 | 106  | 228948   | 9.392   | ug/l   | 84       |
| 70) Styrene                    | 11.95 | 104  | 380395   | 9.671   | ug/l   | 95       |
| 71) Bromoform                  | 12.12 | 173  | 76539    | 8.606   | ug/l   | 96       |
| 73) Isopropylbenzene           | 12.27 | 105  | 644486   | 9.609   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.14 | 43   | 148347   | 9.337   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.56 | 83   | 104085   | 9.362   | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.60 | 75   | 101592   | 9.413   | ug/l   | 99       |
| 77) Bromobenzene               | 12.54 | 156  | 171675   | 9.605   | ug/l   | 96       |
| 78) n-propylbenzene            | 12.64 | 91   | 852253   | 9.973   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.71 | 91   | 454039   | 9.799   | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene     | 12.79 | 105  | 521173   | 10.098  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.34 | 75   | 26778    | 8.543   | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.80 | 91   | 540417   | 10.636  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.04 | 119  | 581000   | 9.877   | ug/l   | 89       |
| 84) 1,2,4-Trimethylbenzene     | 13.09 | 105  | 528310   | 9.854   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.22 | 105  | 697894   | 9.531   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.34 | 119  | 584129   | 10.203  | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 13.31 | 146  | 320124   | 9.852   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.39 | 146  | 320151   | 9.984   | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.64 | 91   | 614375   | 10.505  | ug/l   | 97       |
| 90) Hexachloroethane           | 13.86 | 117  | 132954   | 9.139   | ug/l   | 94       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 275643   | 10.683  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.22 | 75   | 11420    | 8.694   | ug/l   | 84       |

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Sample : VSTDICC010  
Misc : 5.00g/5ml/MSVOA\_D/SOIL  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
VSTDICC010

Manual Integrations  
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apatel  
12/21/2018 11:32:25 AM

Quant Time: Dec 20 14:57:43 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D122018S.M  
Quant Title : SW846 8260  
QLast Update : Thu Dec 20 14:42:21 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.78 | 180  | 201179   | 9.414 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 14.88 | 225  | 147299   | 9.576 | ug/l  | 98       |
| 95) Naphthalene            | 14.97 | 128  | 221256   | 8.504 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 15.12 | 180  | 155623   | 9.253 | ug/l  | 97       |

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

