

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD112119\  
 Data File : VD064323.D  
 Acq On : 21 Nov 2019 14:33  
 Operator : VA/SY  
 Sample : VD1121SBS01  
 Misc : 5.00G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD1121SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 11/23/2019 6:11:35 AM

Quant Time: Nov 22 01:13:08 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D110819S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 12 02:43:24 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 637144   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 895104   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 772514   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 375212   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.34   | 65  | 257715   | 49.18 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.36%  |      |
| 35) Dibromofluoromethane  | 7.92   | 113 | 257706   | 50.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.32% |      |
| 50) Toluene-d8            | 10.34  | 98  | 970603   | 50.08 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.16% |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 322520   | 48.05 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.10%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.99 | 85  | 101340  | 19.178  | ug/l | 99     |
| 3) Chloromethane              | 2.21 | 50  | 131279  | 23.161  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.35 | 62  | 152227  | 25.115  | ug/l | 95     |
| 5) Bromomethane               | 2.76 | 94  | 97633   | 25.509  | ug/l | 93     |
| 6) Chloroethane               | 2.92 | 64  | 97750   | 25.239  | ug/l | 95     |
| 7) Trichlorofluoromethane     | 3.27 | 101 | 252731  | 25.718  | ug/l | 98     |
| 8) Diethyl Ether              | 3.71 | 74  | 57673   | 21.344  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.09 | 101 | 123155  | 21.926  | ug/l | 99     |
| 10) Methyl Iodide             | 4.29 | 142 | 116482  | 19.461  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.24 | 59  | 38189   | 104.341 | ug/l | 96     |
| 12) 1,1-Dichloroethene        | 4.06 | 96  | 116218  | 21.708  | ug/l | 94     |
| 13) Acrolein                  | 3.92 | 56  | 21277   | 68.718  | ug/l | 95     |
| 14) Allyl chloride            | 4.70 | 41  | 187106  | 19.766  | ug/l | 95     |
| 15) Acrylonitrile             | 5.43 | 53  | 127096  | 110.334 | ug/l | 98     |
| 16) Acetone                   | 4.17 | 43  | 103865  | 83.668  | ug/l | 92     |
| 17) Carbon Disulfide          | 4.40 | 76  | 320327  | 19.213  | ug/l | 100    |
| 18) Methyl Acetate            | 4.72 | 43  | 75484   | 21.771  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 5.48 | 73  | 269805  | 21.110  | ug/l | 94     |
| 20) Methylene Chloride        | 4.97 | 84  | 131344  | 20.946  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.47 | 96  | 124676  | 20.554  | ug/l | 98     |
| 22) Diisopropyl ether         | 6.37 | 45  | 360426  | 20.521  | ug/l | 95     |
| 23) Vinyl Acetate             | 6.31 | 43  | 1025868 | 104.785 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.27 | 63  | 213451  | 20.931  | ug/l | 99     |
| 25) 2-Butanone                | 7.22 | 43  | 156844  | 97.795  | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 7.21 | 77  | 199426  | 19.941  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 7.21 | 96  | 139825  | 21.496  | ug/l | 96     |
| 28) Bromochloromethane        | 7.54 | 49  | 56543   | 15.926  | ug/l | 96     |
| 29) Tetrahydrofuran           | 7.57 | 42  | 106067  | 110.073 | ug/l | 99     |
| 30) Chloroform                | 7.71 | 83  | 231969  | 22.238  | ug/l | 100    |
| 31) Cyclohexane               | 7.98 | 56  | 204153  | 19.850  | ug/l | 91     |
| 32) 1,1,1-Trichloroethane     | 7.90 | 97  | 212276  | 21.253  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.11 | 75  | 175962  | 21.300  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.30 | 43  | 74893   | 21.505  | ug/l | 97     |
| 38) Carbon Tetrachloride      | 8.10 | 117 | 187190  | 21.177  | ug/l | 98     |

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 Sample : VD1121SBS01  
 Misc : 5.00G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD1121SBS01

Manual Integrations  
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MMDadoda  
 11/23/2019 6:11:35 AM

Quant Time: Nov 22 01:13:08 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D110819S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 12 02:43:24 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.36  | 83   | 216624   | 20.723  | ug/l   | 96       |
| 40) Benzene                    | 8.35  | 78   | 470395   | 20.835  | ug/l   | 97       |
| 41) Methacrylonitrile          | 7.53  | 41   | 43793    | 20.007  | ug/l   | 92       |
| 42) 1,2-Dichloroethane         | 8.43  | 62   | 142682   | 21.042  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.46  | 43   | 149061   | 20.773  | ug/l   | 99       |
| 44) Trichloroethene            | 9.11  | 130  | 147602   | 21.782  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.39  | 63   | 118314   | 21.530  | ug/l   | 100      |
| 46) Dibromomethane             | 9.48  | 93   | 64766    | 22.015  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.67  | 83   | 165818   | 20.925  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.46  | 41   | 67857    | 19.339  | ug/l   | 89       |
| 49) 1,4-Dioxane                | 9.46  | 88   | 15127    | 428.129 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43   | 364649   | 105.970 | ug/l   | 100      |
| 52) Toluene                    | 10.41 | 92   | 312789   | 21.069  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.62 | 75   | 161290   | 20.316  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 10.09 | 75   | 188475   | 20.344  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.80 | 97   | 85747    | 21.485  | ug/l   | 93       |
| 56) Ethyl methacrylate         | 10.67 | 69   | 116732   | 20.909  | ug/l # | 93       |
| 57) 1,3-Dichloropropane        | 10.95 | 76   | 151294   | 21.737  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.94  | 63   | 229054   | 101.285 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.99 | 43   | 244881   | 100.028 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.14 | 129  | 117480   | 21.096  | ug/l   | 96       |
| 61) 1,2-Dibromoethane          | 11.25 | 107  | 85985    | 21.510  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.88 | 164  | 126272   | 21.253  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.67 | 112  | 332363   | 21.157  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.75 | 131  | 123097   | 20.608  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.75 | 91   | 597456   | 21.026  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.86 | 106  | 462020   | 42.420  | ug/l   | 99       |
| 69) o-Xylene                   | 12.18 | 106  | 212895   | 21.076  | ug/l   | 99       |
| 70) Styrene                    | 12.20 | 104  | 375113   | 21.274  | ug/l   | 98       |
| 71) Bromoform                  | 12.37 | 173  | 71211    | 20.948  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.48 | 105  | 594434   | 21.584  | ug/l   | 98       |
| 74) N-amyl acetate             | 12.30 | 43   | 135740   | 20.872  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.74 | 83   | 93306    | 22.484  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.79 | 75   | 57907m   | 19.160  | ug/l   |          |
| 77) Bromobenzene               | 12.77 | 156  | 141909   | 21.210  | ug/l   | 98       |
| 78) n-propylbenzene            | 12.83 | 91   | 682318   | 21.685  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.91 | 91   | 372187   | 20.951  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.97 | 105  | 481164   | 21.262  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.53 | 75   | 31477    | 20.689  | ug/l   | 94       |
| 82) 4-Chlorotoluene            | 13.01 | 91   | 383361   | 20.690  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 13.23 | 119  | 419949   | 21.045  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.27 | 105  | 486261   | 21.765  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.41 | 105  | 571602   | 21.328  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.53 | 119  | 533006   | 20.919  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.53 | 146  | 262585   | 21.142  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.60 | 146  | 260564   | 21.496  | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.86 | 91   | 494067   | 21.463  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.12 | 117  | 97175    | 20.637  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.90 | 146  | 228726   | 21.758  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.52 | 75   | 14818    | 19.971  | ug/l   | 93       |

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Acq On : 21 Nov 2019 14:33  
Operator : VA/SY  
Sample : VD1121SBS01  
Misc : 5.00G/5.00ml/MSVOA D/SOIL  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
VD1121SBS01

Manual Integrations  
APPROVED

MMDadoda  
11/23/2019 6:11:35 AM

Quant Time: Nov 22 01:13:08 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D110819S.M  
Quant Title : SW846 8260  
QLast Update : Tue Nov 12 02:43:24 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.17 | 180  | 173300   | 21.370 | ug/l  | 96       |
| 94) Hexachlorobutadiene    | 15.28 | 225  | 110268   | 21.052 | ug/l  | 97       |
| 95) Naphthalene            | 15.41 | 128  | 288941   | 21.736 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.61 | 180  | 147129   | 21.344 | ug/l  | 98       |

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

