

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD010920\  
 Data File : VD064808.D  
 Acq On : 09 Jan 2020 10:25  
 Operator : VA/SY  
 Sample : VSTDCCC050  
 Misc : 5.00G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 1/10/2020 10:41:52 AM

Quant Time: Jan 09 14:01:40 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D122419S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 24 13:19:06 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 344248   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 505367   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 439824   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 220656   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.33   | 65  | 152987   | 50.40 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.80% |      |
| 35) Dibromofluoromethane  | 7.91   | 113 | 155039   | 50.00 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.00% |      |
| 50) Toluene-d8            | 10.34  | 98  | 591513   | 49.81 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.62%  |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 190546   | 50.75 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.50% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.99 | 85  | 111515  | 41.683  | ug/l | 97     |
| 3) Chloromethane              | 2.21 | 50  | 170008  | 45.438  | ug/l | 97     |
| 4) Vinyl Chloride             | 2.35 | 62  | 204917  | 44.918  | ug/l | 100    |
| 5) Bromomethane               | 2.77 | 94  | 149252  | 44.996  | ug/l | 99     |
| 6) Chloroethane               | 2.93 | 64  | 146439  | 47.906  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.27 | 101 | 335223  | 43.641  | ug/l | 98     |
| 8) Diethyl Ether              | 3.70 | 74  | 70223   | 46.037  | ug/l | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.09 | 101 | 151788  | 47.714  | ug/l | 97     |
| 10) Methyl Iodide             | 4.29 | 142 | 171559  | 50.206  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.25 | 59  | 37230   | 214.005 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 4.06 | 96  | 143011  | 47.219  | ug/l | 96     |
| 13) Acrolein                  | 3.92 | 56  | 47535   | 196.061 | ug/l | 97     |
| 14) Allyl chloride            | 4.71 | 41  | 241671  | 51.179  | ug/l | 99     |
| 15) Acrylonitrile             | 5.43 | 53  | 152049  | 239.311 | ug/l | 99     |
| 16) Acetone                   | 4.16 | 43  | 186858  | 298.707 | ug/l | 94     |
| 17) Carbon Disulfide          | 4.40 | 76  | 431578  | 44.070  | ug/l | 99     |
| 18) Methyl Acetate            | 4.72 | 43  | 78534   | 45.954  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.48 | 73  | 327420  | 48.672  | ug/l | 99     |
| 20) Methylene Chloride        | 4.96 | 84  | 164153  | 53.187  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.47 | 96  | 172379  | 49.977  | ug/l | 99     |
| 22) Diisopropyl ether         | 6.37 | 45  | 486857  | 51.692  | ug/l | 98     |
| 23) Vinyl Acetate             | 6.31 | 43  | 1341784 | 251.141 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.26 | 63  | 297867  | 52.680  | ug/l | 99     |
| 25) 2-Butanone                | 7.22 | 43  | 208972  | 250.447 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 7.21 | 77  | 273578  | 52.040  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 7.21 | 96  | 188470  | 50.631  | ug/l | 98     |
| 28) Bromochloromethane        | 7.54 | 49  | 113118  | 51.465  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.57 | 42  | 120473  | 232.174 | ug/l | 98     |
| 30) Chloroform                | 7.71 | 83  | 307724  | 51.873  | ug/l | 99     |
| 31) Cyclohexane               | 7.98 | 56  | 245300  | 43.340  | ug/l | 94     |
| 32) 1,1,1-Trichloroethane     | 7.90 | 97  | 282619  | 50.722  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.11 | 75  | 236986  | 48.721  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.30 | 43  | 87898   | 45.999  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.10 | 117 | 260938  | 50.310  | ug/l | 93     |

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 Quant Title : SW846 8260  
 QLast Update : Tue Dec 24 13:19:06 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.36  | 83   | 266014   | 45.153  | ug/l   | 99       |
| 40) Benzene                    | 8.35  | 78   | 669627   | 50.429  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.53  | 41   | 41880    | 37.774  | ug/l # | 81       |
| 42) 1,2-Dichloroethane         | 8.43  | 62   | 196769   | 51.280  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.46  | 43   | 172873   | 45.452  | ug/l   | 98       |
| 44) Trichloroethene            | 9.11  | 130  | 192386   | 49.319  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.38  | 63   | 162487   | 51.251  | ug/l   | 97       |
| 46) Dibromomethane             | 9.47  | 93   | 85200    | 48.200  | ug/l   | 96       |
| 47) Bromodichloromethane       | 9.66  | 83   | 237318   | 50.455  | ug/l   | 96       |
| 48) Methyl methacrylate        | 9.46  | 41   | 82693    | 46.175  | ug/l   | 92       |
| 49) 1,4-Dioxane                | 9.46  | 88   | 17971    | 881.713 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43   | 434562   | 231.154 | ug/l   | 100      |
| 52) Toluene                    | 10.40 | 92   | 437635   | 50.235  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.62 | 75   | 221190   | 50.439  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 10.09 | 75   | 260926   | 50.461  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.80 | 97   | 116682   | 48.981  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.66 | 69   | 136614   | 45.920  | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 10.95 | 76   | 197298   | 48.102  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.94  | 63   | 258486   | 228.050 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.98 | 43   | 323864   | 253.818 | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.14 | 129  | 160741   | 48.795  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.25 | 107  | 109911   | 46.779  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.87 | 164  | 161574   | 47.884  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.67 | 112  | 455015   | 49.846  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 177328   | 51.529  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.75 | 91   | 833074   | 50.280  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.86 | 106  | 655306   | 102.469 | ug/l   | 99       |
| 69) o-Xylene                   | 12.18 | 106  | 295676   | 51.186  | ug/l   | 97       |
| 70) Styrene                    | 12.20 | 104  | 518962   | 51.183  | ug/l   | 99       |
| 71) Bromoform                  | 12.37 | 173  | 93142    | 47.461  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.48 | 105  | 799578   | 50.707  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.29 | 43   | 153880   | 45.652  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.74 | 83   | 117779   | 47.547  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.79 | 75   | 74334m   | 42.661  | ug/l   |          |
| 77) Bromobenzene               | 12.77 | 156  | 190864   | 49.261  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.83 | 91   | 938075   | 50.993  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.91 | 91   | 515152   | 50.977  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.97 | 105  | 664817   | 51.325  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.53 | 75   | 39832    | 47.811  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 13.01 | 91   | 541797   | 50.379  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.23 | 119  | 563231   | 50.080  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.27 | 105  | 660318   | 51.186  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.41 | 105  | 772968   | 50.133  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.53 | 119  | 739538   | 50.162  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.52 | 146  | 372975   | 50.496  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.60 | 146  | 358892   | 49.461  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.85 | 91   | 675206   | 50.857  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.12 | 117  | 144356   | 51.259  | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene        | 13.90 | 146  | 310178   | 49.248  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.51 | 75   | 18587    | 46.286  | ug/l   | 89       |

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Quant Title : SW846 8260  
QLast Update : Tue Dec 24 13:19:06 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.17 | 180  | 220310   | 47.506 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.28 | 225  | 137629   | 47.162 | ug/l  | 99       |
| 95) Naphthalene            | 15.41 | 128  | 333787   | 45.496 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.61 | 180  | 186393   | 47.080 | ug/l  | 98       |

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

