

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW083119\  
 Data File : VW012412.D  
 Acq On : 31 Aug 2019 20:17  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 9/3/2019 2:42:01 AM

Quant Time: Sep 01 04:49:51 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Aug 26 07:18:31 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 204623   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 333801   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 299112   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 147954   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 132437   | 54.45 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.90% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 102894   | 51.64 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.28% |      |
| 50) Toluene-d8            | 10.32  | 98  | 403463   | 49.94 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.88%  |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 145437   | 51.07 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.14% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 62107   | 49.294  | ug/l | 95     |
| 3) Chloromethane              | 2.21 | 50  | 105727  | 54.163  | ug/l | 98     |
| 4) Vinyl Chloride             | 2.36 | 62  | 126564  | 52.974  | ug/l | 99     |
| 5) Bromomethane               | 2.73 | 94  | 67714m  | 55.963  | ug/l |        |
| 6) Chloroethane               | 2.90 | 64  | 76198   | 56.536  | ug/l | 92     |
| 7) Trichlorofluoromethane     | 3.24 | 101 | 70197   | 58.513  | ug/l | 98     |
| 8) Diethyl Ether              | 3.68 | 74  | 62834   | 55.179  | ug/l | 95     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 106898  | 52.421  | ug/l | 98     |
| 10) Methyl Iodide             | 4.27 | 142 | 155987  | 56.535  | ug/l | 98     |
| 11) Tert butyl alcohol        | 5.16 | 59  | 44982   | 307.286 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 106967  | 52.116  | ug/l | 96     |
| 13) Acrolein                  | 3.89 | 56  | 34490   | 250.299 | ug/l | 98     |
| 14) Allyl chloride            | 4.67 | 41  | 243720  | 55.544  | ug/l | 99     |
| 15) Acrylonitrile             | 5.36 | 53  | 164498  | 291.446 | ug/l | 100    |
| 16) Acetone                   | 4.12 | 43  | 168264  | 270.612 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.38 | 76  | 309678  | 49.924  | ug/l | 99     |
| 18) Methyl Acetate            | 4.67 | 43  | 89306   | 57.989  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 208100  | 62.697  | ug/l | 100    |
| 20) Methylene Chloride        | 4.91 | 84  | 129905  | 55.264  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 120290  | 54.653  | ug/l | 98     |
| 22) Diisopropyl ether         | 6.31 | 45  | 485149  | 59.650  | ug/l | 98     |
| 23) Vinyl Acetate             | 6.25 | 43  | 1433332 | 286.359 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 252048  | 56.915  | ug/l | 100    |
| 25) 2-Butanone                | 7.17 | 43  | 235786  | 279.056 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 134421  | 53.628  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 134140  | 57.044  | ug/l | 98     |
| 28) Bromochloromethane        | 7.51 | 49  | 104783  | 54.288  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.52 | 42  | 148718  | 293.371 | ug/l | 99     |
| 30) Chloroform                | 7.68 | 83  | 236153  | 58.287  | ug/l | 99     |
| 31) Cyclohexane               | 7.95 | 56  | 208381  | 47.561  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 184042  | 57.421  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 182955  | 53.039  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 104196  | 55.123  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 164253  | 55.015  | ug/l | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW083119\  
 Data File : VW012412.D  
 Acq On : 31 Aug 2019 20:17  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 9/3/2019 2:42:01 AM

Quant Time: Sep 01 04:49:51 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Aug 26 07:18:31 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 193927   | 50.043   | ug/l   | 98       |
| 40) Benzene                    | 8.32  | 78   | 516931   | 54.882   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.48  | 41   | 58487    | 52.645   | ug/l   | 95       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 175824   | 59.561   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.42  | 43   | 197002   | 56.265   | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 124291   | 54.282   | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 141098   | 55.662   | ug/l   | 96       |
| 46) Dibromomethane             | 9.46  | 93   | 65116    | 57.734   | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.65  | 83   | 174183   | 58.028   | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.43  | 41   | 97132    | 58.287   | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 19375    | 1122.128 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 513252   | 288.201  | ug/l   | 99       |
| 52) Toluene                    | 10.38 | 92   | 316407   | 55.918   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 177228   | 57.963   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 207846   | 56.298   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 90583    | 56.764   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 135769   | 58.458   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 174746   | 57.947   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 336870   | 282.617  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.97 | 43   | 358536   | 284.532  | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 105582   | 59.402   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 85238    | 57.335   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.86 | 164  | 109859   | 56.651   | ug/l   | 98       |
| 65) Chlorobenzene              | 11.66 | 112  | 323990   | 55.009   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 117108   | 56.995   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 620880   | 54.724   | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.84 | 106  | 445020   | 108.891  | ug/l   | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 208854   | 55.216   | ug/l   | 99       |
| 70) Styrene                    | 12.18 | 104  | 366938   | 56.046   | ug/l   | 98       |
| 71) Bromoform                  | 12.35 | 173  | 59026    | 57.659   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.46 | 105  | 580020   | 52.318   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 186046   | 55.544   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 107098   | 52.694   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 76321m   | 52.965   | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 131233   | 54.716   | ug/l   | 97       |
| 78) n-propylbenzene            | 12.80 | 91   | 711722   | 52.587   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 413371   | 53.796   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 502705   | 54.266   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 34354    | 52.272   | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 433356   | 53.862   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 422900   | 53.892   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 504330   | 54.196   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.38 | 105  | 590323   | 52.508   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 541185   | 53.902   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 254692   | 54.291   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 251779   | 54.052   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.82 | 91   | 528207   | 52.903   | ug/l   | 99       |
| 90) Hexachloroethane           | 14.09 | 117  | 95804    | 54.387   | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 226375   | 55.006   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.48 | 75   | 18778    | 54.804   | ug/l   | 96       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW083119\  
Data File : VW012412.D  
Acq On : 31 Aug 2019 20:17  
Operator : SY/VA  
Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
9/3/2019 2:42:01 AM

Quant Time: Sep 01 04:49:51 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082319S.M  
Quant Title : SW846 8260  
QLast Update : Mon Aug 26 07:18:31 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 159799   | 56.188 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 105125   | 55.980 | ug/l  | 99       |
| 95) Naphthalene            | 15.36 | 128  | 286250   | 51.181 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 140607   | 56.666 | ug/l  | 100      |

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

