

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW082820\  
 Data File : VW016396.D  
 Acq On : 28 Aug 2020 12:33  
 Operator : SY/VA  
 Sample : VSTDIC005  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDIC005

Manual Integrations  
 APPROVED

MMDadoda  
 8/31/2020 11:59:24 AM

Quant Time: Aug 28 14:32:10 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082820S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 28 14:25:02 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 182784   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 295102   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 264495   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 131887   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |      |        |      |
|---------------------------|--------|-----|----------|------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 9744     | 5.49 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 10.98% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 10311    | 5.69 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 11.38% |      |
| 50) Toluene-d8            | 10.32  | 98  | 37020    | 5.31 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 10.62% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 14125    | 5.63 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 11.26% |      |

## Target Compounds

|                               |      |     |       |        | Qvalue    |
|-------------------------------|------|-----|-------|--------|-----------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 4483  | 3.639  | ug/l 98   |
| 3) Chloromethane              | 2.21 | 50  | 5021  | 3.931  | ug/l 98   |
| 4) Vinyl Chloride             | 2.36 | 62  | 7605  | 4.240  | ug/l 98   |
| 5) Bromomethane               | 2.78 | 94  | 5394  | 4.753  | ug/l 96   |
| 6) Chloroethane               | 2.92 | 64  | 4172  | 4.094  | ug/l # 83 |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 8723  | 5.642  | ug/l 95   |
| 8) Diethyl Ether              | 3.68 | 74  | 4618  | 4.953  | ug/l 98   |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 8992  | 4.632  | ug/l 97   |
| 10) Methyl Iodide             | 4.27 | 142 | 12554 | 4.434  | ug/l 99   |
| 11) Tert butyl alcohol        | 5.23 | 59  | 4568m | 46.936 | ug/l      |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 8785  | 4.450  | ug/l 98   |
| 13) Acrolein                  | 3.90 | 56  | 2207  | 17.227 | ug/l 88   |
| 14) Allyl chloride            | 4.67 | 41  | 10830 | 4.142  | ug/l 98   |
| 15) Acrylonitrile             | 5.37 | 53  | 8112  | 23.298 | ug/l 98   |
| 16) Acetone                   | 4.14 | 43  | 8935  | 27.372 | ug/l # 88 |
| 17) Carbon Disulfide          | 4.38 | 76  | 24326 | 4.224  | ug/l 98   |
| 18) Methyl Acetate            | 4.68 | 43  | 3785  | 4.851  | ug/l 90   |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 13686 | 5.506  | ug/l # 87 |
| 20) Methylene Chloride        | 4.92 | 84  | 19451 | 7.704  | ug/l 98   |
| 21) trans-1,2-Dichloroethene  | 5.43 | 96  | 10039 | 4.664  | ug/l 92   |
| 22) Diisopropyl ether         | 6.31 | 45  | 21625 | 4.380  | ug/l 93   |
| 23) Vinyl Acetate             | 6.26 | 43  | 63224 | 22.288 | ug/l 99   |
| 24) 1,1-Dichloroethane        | 6.22 | 63  | 16264 | 4.679  | ug/l 95   |
| 25) 2-Butanone                | 7.18 | 43  | 11779 | 26.556 | ug/l 95   |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 14387 | 6.258  | ug/l 92   |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 10674 | 4.772  | ug/l 89   |
| 28) Bromochloromethane        | 7.51 | 49  | 5507  | 4.232  | ug/l 98   |
| 29) Tetrahydrofuran           | 7.53 | 42  | 6541  | 24.527 | ug/l 97   |
| 30) Chloroform                | 7.68 | 83  | 17888 | 4.878  | ug/l 93   |
| 31) Cyclohexane               | 7.96 | 56  | 17125 | 5.369  | ug/l # 81 |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 16059 | 5.174  | ug/l 99   |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 14336 | 4.931  | ug/l 99   |
| 37) Ethyl Acetate             | 7.26 | 43  | 4561  | 4.631  | ug/l # 95 |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 15623 | 5.294  | ug/l 97   |

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 Sample : VSTDIC005  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleID :  
 VSTDIC005

Manual Integrations  
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 8/31/2020 11:59:24 AM

Quant Time: Aug 28 14:32:10 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W082820S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 28 14:25:02 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 16446    | 4.707   | ug/l   | 98       |
| 40) Benzene                    | 8.33  | 78   | 37757    | 4.645   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.49  | 41   | 2682     | 4.788   | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 11781    | 5.382   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 9349     | 5.006   | ug/l   | 96       |
| 44) Trichloroethene            | 9.10  | 130  | 11598    | 4.981   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 8913     | 4.680   | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 5269     | 5.181   | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.65  | 83   | 13390    | 5.070   | ug/l # | 99       |
| 48) Methyl methacrylate        | 9.45  | 41   | 4685     | 5.411   | ug/l   | 92       |
| 49) 1,4-Dioxane                | 9.49  | 88   | 1437     | 112.758 | ug/l # | 97       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 23333    | 24.874  | ug/l   | 95       |
| 52) Toluene                    | 10.39 | 92   | 25204    | 4.830   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 12514    | 5.101   | ug/l   | 90       |
| 54) cis-1,3-Dichloropropene    | 10.08 | 75   | 14665    | 4.866   | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 7680     | 5.254   | ug/l   | 90       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 7973     | 4.822   | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 12284    | 4.969   | ug/l   | 95       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 21093    | 27.969  | ug/l   | 97       |
| 59) 2-Hexanone                 | 10.97 | 43   | 15036    | 23.518  | ug/l   | 97       |
| 60) Dibromochloromethane       | 11.13 | 129  | 8819     | 5.011   | ug/l   | 96       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 7374     | 5.238   | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.86 | 164  | 9605     | 5.425   | ug/l   | 93       |
| 65) Chlorobenzene              | 11.66 | 112  | 28616    | 5.220   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 10222    | 5.292   | ug/l   | 96       |
| 67) Ethyl Benzene              | 11.73 | 91   | 47802    | 4.874   | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.84 | 106  | 37293    | 9.898   | ug/l   | 97       |
| 69) o-Xylene                   | 12.16 | 106  | 16915    | 5.038   | ug/l   | 95       |
| 70) Styrene                    | 12.18 | 104  | 27113    | 4.664   | ug/l   | 97       |
| 71) Bromoform                  | 12.35 | 173  | 5110     | 5.812   | ug/l # | 93       |
| 73) Isopropylbenzene           | 12.46 | 105  | 45940    | 4.567   | ug/l   | 98       |
| 74) N-amyl acetate             | 12.27 | 43   | 8025     | 4.517   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 8223     | 4.935   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 6257m    | 5.191   | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 11764    | 5.238   | ug/l   | 96       |
| 78) n-propylbenzene            | 12.80 | 91   | 56636    | 4.735   | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 33845    | 4.886   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 41800    | 4.820   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 2556     | 5.076   | ug/l   | 94       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 35737    | 4.967   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 34501    | 4.864   | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 42023    | 4.922   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.38 | 105  | 49209    | 4.802   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 44774    | 4.795   | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 23160    | 5.240   | ug/l   | 94       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 22744    | 5.170   | ug/l   | 93       |
| 89) n-Butylbenzene             | 13.82 | 91   | 41685    | 4.849   | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 8746     | 5.014   | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 20095    | 5.157   | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 1442     | 5.493   | ug/l   | 92       |

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Sample : VSTDICC005  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDICC005

Manual Integrations  
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MMDadoda  
8/31/2020 11:59:24 AM

Quant Time: Aug 28 14:32:10 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W082820S.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 28 14:25:02 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 11850    | 5.032 | ug/l  | 90       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 8158     | 5.723 | ug/l  | 99       |
| 95) Naphthalene            | 15.37 | 128  | 19687    | 4.571 | ug/l  | 97       |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 10947    | 5.421 | ug/l  | 98       |

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

