

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW121618\  
 Data File : VW007473.D  
 Acq On : 13 Dec 2018 07:50  
 Operator : SY/AP  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 49 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 12/14/2018 11:24:09 AM

Quant Time: Dec 13 08:21:07 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W121118S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 11 02:58:16 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 79922    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 134943   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 121920   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 59874    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 46877    | 52.87 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.74% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 43541    | 53.30 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.60% |      |
| 50) Toluene-d8            | 10.32  | 98  | 164970   | 53.86 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.72% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 62904    | 55.86 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.72% |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 25633  | 45.896  | ug/l | 98     |
| 3) Chloromethane              | 2.22 | 50  | 21855  | 46.724  | ug/l | 98     |
| 4) Vinyl Chloride             | 2.37 | 62  | 27291  | 49.718  | ug/l | 94     |
| 5) Bromomethane               | 2.78 | 94  | 19373  | 52.529  | ug/l | 92     |
| 6) Chloroethane               | 2.93 | 64  | 16340  | 54.078  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 23555  | 47.731  | ug/l | 99     |
| 8) Diethyl Ether              | 3.68 | 74  | 20051  | 51.912  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 37914  | 46.561  | ug/l | 95     |
| 10) Methyl Iodide             | 4.26 | 142 | 68549  | 50.828  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.17 | 59  | 14904  | 244.747 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 38777  | 49.460  | ug/l | 97     |
| 13) Acrolein                  | 3.89 | 56  | 10531  | 261.353 | ug/l | 96     |
| 14) Allyl chloride            | 4.67 | 41  | 56991  | 49.315  | ug/l | 100    |
| 15) Acrylonitrile             | 5.37 | 53  | 42361  | 260.159 | ug/l | 99     |
| 16) Acetone                   | 4.12 | 43  | 37010  | 238.967 | ug/l | 98     |
| 17) Carbon Disulfide          | 4.37 | 76  | 115184 | 48.454  | ug/l | 98     |
| 18) Methyl Acetate            | 4.67 | 43  | 21650  | 51.505  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 63963  | 54.081  | ug/l | 99     |
| 20) Methylene Chloride        | 4.91 | 84  | 43271  | 51.184  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 43501  | 49.600  | ug/l | 96     |
| 22) Diisopropyl ether         | 6.31 | 45  | 115160 | 51.843  | ug/l | 97     |
| 23) Vinyl Acetate             | 6.25 | 43  | 323864 | 260.663 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 75286  | 50.147  | ug/l | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 52360  | 258.965 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 46265  | 46.563  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 48875  | 50.895  | ug/l | 99     |
| 28) Bromochloromethane        | 7.51 | 49  | 30274  | 53.610  | ug/l | 98     |
| 29) Tetrahydrofuran           | 7.52 | 42  | 33356  | 260.595 | ug/l | 97     |
| 30) Chloroform                | 7.67 | 83  | 82609  | 50.563  | ug/l | 99     |
| 31) Cyclohexane               | 7.95 | 56  | 61839  | 44.895  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 71751  | 50.080  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 61378  | 49.860  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 22608  | 49.378  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 67063  | 50.069  | ug/l | 99     |

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 ALS Vial : 49 Sample Multiplier: 1

Instrument :  
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 ClientSampleId :  
 VSTDCCC050

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 12/14/2018 11:24:09 AM

Quant Time: Dec 13 08:21:07 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W121118S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 11 02:58:16 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 73670    | 49.423   | ug/l   | 94       |
| 40) Benzene                    | 8.32  | 78   | 173144   | 50.683   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.49  | 41   | 16002    | 61.375   | ug/l   | 91       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 55545    | 51.759   | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 47268    | 52.265   | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 49786    | 51.035   | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 41428    | 52.404   | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 23668    | 52.719   | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.65  | 83   | 60847    | 51.671   | ug/l   | 95       |
| 48) Methyl methacrylate        | 9.43  | 41   | 23272    | 50.103   | ug/l   | 93       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 8175     | 1122.255 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 117854   | 275.793  | ug/l   | 98       |
| 52) Toluene                    | 10.39 | 92   | 116352   | 52.629   | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 60421    | 52.851   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 68135    | 51.555   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 32675    | 53.477   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 41382    | 56.347   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 55436    | 55.276   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 98126    | 289.735  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.97 | 43   | 81685    | 286.672  | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.13 | 129  | 42087    | 54.581   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 33022    | 54.688   | ug/l   | 95       |
| 64) Tetrachloroethene          | 10.87 | 164  | 43560    | 49.683   | ug/l   | 93       |
| 65) Chlorobenzene              | 11.66 | 112  | 129854   | 51.099   | ug/l   | 95       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 46343    | 51.779   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 226085   | 51.747   | ug/l   | 94       |
| 68) m/p-Xylenes                | 11.84 | 106  | 175011   | 103.039  | ug/l   | 100      |
| 69) o-Xylene                   | 12.17 | 106  | 83884    | 52.881   | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 138961   | 54.236   | ug/l   | 98       |
| 71) Bromoform                  | 12.35 | 173  | 23840    | 52.041   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.47 | 105  | 230202   | 50.177   | ug/l   | 98       |
| 74) N-amyl acetate             | 12.27 | 43   | 44016    | 52.790   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 36267    | 53.373   | ug/l   | 95       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 27402m   | 55.506   | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 52580    | 51.705   | ug/l   | 96       |
| 78) n-propylbenzene            | 12.81 | 91   | 269024   | 52.105   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 158603   | 50.768   | ug/l   | 96       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 199151   | 51.662   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 10870    | 48.639   | ug/l   | 93       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 165652   | 50.303   | ug/l   | 97       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 175821   | 51.763   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 199954   | 50.406   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.39 | 105  | 238828   | 51.506   | ug/l   | 95       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 213483   | 51.249   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 101962   | 50.288   | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 102124   | 50.101   | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.83 | 91   | 196127   | 50.787   | ug/l   | 98       |
| 90) Hexachloroethane           | 14.10 | 117  | 37975    | 51.235   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 93991    | 51.757   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 6932     | 50.835   | ug/l   | 95       |

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Sample : VSTDCCC050  
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ALS Vial : 49 Sample Multiplier: 1

Instrument :  
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ClientSampleId :  
VSTDCCC050

Manual Integrations  
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12/14/2018 11:24:09 AM

Quant Time: Dec 13 08:21:07 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W121118S.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 11 02:58:16 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 62027    | 49.631 | ug/l  | 96       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 31720    | 47.836 | ug/l  | 98       |
| 95) Naphthalene            | 15.37 | 128  | 126132   | 52.757 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 54576    | 50.271 | ug/l  | 96       |

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

