

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW122418\  
 Data File : VW007869.D  
 Acq On : 23 Dec 2018 03:59  
 Operator : SY/AP  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 31 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 12/24/2018 3:15:25 PM

Quant Time: Dec 24 04:09:41 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 06:30:23 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 74546    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 126757   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 113036   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 56667    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.30   | 65  | 44494    | 54.46 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.92% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 40240    | 52.04 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.08% |      |
| 50) Toluene-d8            | 10.32  | 98  | 155538   | 53.35 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.70% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 60239    | 53.49 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.98% |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 27782  | 41.922  | ug/l | 98     |
| 3) Chloromethane              | 2.21 | 50  | 26089  | 64.110  | ug/l | 97     |
| 4) Vinyl Chloride             | 2.37 | 62  | 31035  | 59.911  | ug/l | 93     |
| 5) Bromomethane               | 2.78 | 94  | 20878  | 57.865  | ug/l | 91     |
| 6) Chloroethane               | 2.93 | 64  | 17246  | 62.230  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 22198  | 41.160  | ug/l | 97     |
| 8) Diethyl Ether              | 3.68 | 74  | 20085  | 60.803  | ug/l | 88     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 35470  | 44.658  | ug/l | 98     |
| 10) Methyl Iodide             | 4.26 | 142 | 60572  | 47.955  | ug/l | 96     |
| 11) Tert butyl alcohol        | 5.17 | 59  | 15496  | 281.147 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 35973  | 48.911  | ug/l | 97     |
| 13) Acrolein                  | 3.89 | 56  | 11902  | 270.075 | ug/l | 98     |
| 14) Allyl chloride            | 4.66 | 41  | 54238  | 56.235  | ug/l | 92     |
| 15) Acrylonitrile             | 5.37 | 53  | 40787  | 289.459 | ug/l | 100    |
| 16) Acetone                   | 4.12 | 43  | 34292  | 224.128 | ug/l | 96     |
| 17) Carbon Disulfide          | 4.38 | 76  | 100374 | 44.101  | ug/l | 99     |
| 18) Methyl Acetate            | 4.67 | 43  | 24812  | 68.189  | ug/l | 94     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 63504  | 60.143  | ug/l | 94     |
| 20) Methylene Chloride        | 4.91 | 84  | 48098  | 64.716  | ug/l | 94     |
| 21) trans-1,2-Dichloroethene  | 5.41 | 96  | 39706  | 49.087  | ug/l | 89     |
| 22) Diisopropyl ether         | 6.31 | 45  | 106810 | 59.143  | ug/l | 97     |
| 23) Vinyl Acetate             | 6.26 | 43  | 300930 | 280.461 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 70659  | 53.184  | ug/l | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 50862  | 283.812 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 7.16 | 77  | 44412  | 45.682  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.16 | 96  | 44728  | 51.901  | ug/l | 98     |
| 28) Bromochloromethane        | 7.51 | 49  | 27893  | 61.576  | ug/l | 91     |
| 29) Tetrahydrofuran           | 7.52 | 42  | 33899  | 317.122 | ug/l | 94     |
| 30) Chloroform                | 7.68 | 83  | 75322  | 50.096  | ug/l | 97     |
| 31) Cyclohexane               | 7.95 | 56  | 60564  | 49.794  | ug/l | 95     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 65119  | 47.555  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 57685  | 47.150  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 22912  | 54.265  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 58839  | 40.837  | ug/l | 94     |

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 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA\_W/SOIL  
 ALS Vial : 31 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 12/24/2018 3:15:25 PM

Quant Time: Dec 24 04:09:41 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Dec 20 06:30:23 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 72653    | 47.790   | ug/l   | 98       |
| 40) Benzene                    | 8.32  | 78   | 159629   | 48.895   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.48  | 41   | 15688    | 65.443   | ug/l # | 85       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 51549    | 47.117   | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 47793    | 56.499   | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 46443    | 47.041   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 37772    | 52.142   | ug/l   | 96       |
| 46) Dibromomethane             | 9.46  | 93   | 21550    | 48.327   | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.65  | 83   | 53634    | 45.751   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.44  | 41   | 25457m   | 60.291   | ug/l   |          |
| 49) 1,4-Dioxane                | 9.44  | 88   | 7821     | 1106.232 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 115072   | 287.844  | ug/l   | 97       |
| 52) Toluene                    | 10.39 | 92   | 107791   | 49.211   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 57021    | 48.901   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 63261    | 49.116   | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 31714    | 51.589   | ug/l   | 95       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 40703    | 56.039   | ug/l   | 94       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 52714    | 51.639   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 108909   | 328.414  | ug/l   | 97       |
| 59) 2-Hexanone                 | 10.97 | 43   | 79567    | 283.007  | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.13 | 129  | 36233    | 44.514   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 31002    | 49.800   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.86 | 164  | 39597    | 49.469   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.66 | 112  | 118677   | 48.507   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 41265    | 47.203   | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.73 | 91   | 211376   | 50.348   | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.84 | 106  | 160452   | 98.522   | ug/l   | 98       |
| 69) o-Xylene                   | 12.17 | 106  | 77399    | 50.700   | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 127393   | 50.766   | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 19325    | 42.583   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.47 | 105  | 217877   | 50.866   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 43859    | 59.113   | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 34299    | 53.406   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 26980m   | 61.601   | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 48067    | 48.966   | ug/l   | 94       |
| 78) n-propylbenzene            | 12.81 | 91   | 245160   | 49.168   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 145267   | 50.012   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 184752   | 50.004   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 10452    | 50.092   | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 154148   | 49.841   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 162581   | 50.151   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 185175   | 49.669   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.39 | 105  | 223019   | 49.916   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 198100   | 48.761   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 94268    | 48.366   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 94450    | 48.446   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 180205   | 48.378   | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 29817    | 41.805   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 85378    | 48.926   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 6211     | 47.092   | ug/l   | 97       |

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Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA\_W/SOIL  
ALS Vial : 31 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
12/24/2018 3:15:25 PM

Quant Time: Dec 24 04:09:41 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W122118S.M  
Quant Title : SW846 8260  
QLast Update : Thu Dec 20 06:30:23 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 58788    | 48.532 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 30869    | 47.685 | ug/l  | 98       |
| 95) Naphthalene            | 15.37 | 128  | 121502   | 54.253 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.56 | 180  | 51620    | 49.783 | ug/l  | 99       |

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

