

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_W\DATA\VW120518\  
 Data File : VW007255.D  
 Acq On : 06 Dec 2018 02:49  
 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

apatel  
 12/6/2018 12:56:18 PM

Quant Time: Dec 06 07:24:20 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W120418S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 05 01:35:23 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 90856    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 148871   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 130699   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 65338    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 48822    | 57.72 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 115.44% |      |
| 35) Dibromofluoromethane  | 7.89   | 113 | 46558    | 54.62 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.24% |      |
| 50) Toluene-d8            | 10.33  | 98  | 200007   | 53.26 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.52% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 74001    | 52.21 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.42% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 41438  | 41.687  | ug/l   | 100    |
| 3) Chloromethane              | 2.22 | 50  | 51929  | 41.252  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.36 | 62  | 36424  | 46.213  | ug/l   | 100    |
| 5) Bromomethane               | 2.76 | 94  | 23483  | 59.457  | ug/l   | 96     |
| 6) Chloroethane               | 2.92 | 64  | 21222  | 47.988  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 70400  | 45.814  | ug/l   | 95     |
| 8) Diethyl Ether              | 3.69 | 74  | 22021  | 51.411  | ug/l   | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.07 | 101 | 41317  | 44.510  | ug/l   | 99     |
| 10) Methyl Iodide             | 4.28 | 142 | 41520  | 52.506  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.17 | 59  | 17977  | 220.403 | ug/l # | 84     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 40296  | 46.322  | ug/l   | 97     |
| 13) Acrolein                  | 3.90 | 56  | 15703  | 264.930 | ug/l   | 95     |
| 14) Allyl chloride            | 4.68 | 41  | 62470  | 44.801  | ug/l   | 93     |
| 15) Acrylonitrile             | 5.37 | 53  | 47556  | 265.582 | ug/l   | 100    |
| 16) Acetone                   | 4.12 | 43  | 41527  | 207.370 | ug/l   | 95     |
| 17) Carbon Disulfide          | 4.39 | 76  | 127724 | 44.542  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.68 | 43  | 23726  | 51.905  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 109059 | 53.247  | ug/l   | 99     |
| 20) Methylene Chloride        | 4.92 | 84  | 53133  | 53.000  | ug/l   | 98     |
| 21) trans-1,2-Dichloroethene  | 5.43 | 96  | 47185  | 48.577  | ug/l   | 97     |
| 22) Diisopropyl ether         | 6.32 | 45  | 133251 | 53.233  | ug/l   | 96     |
| 23) Vinyl Acetate             | 6.26 | 43  | 359634 | 263.305 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 6.23 | 63  | 80812  | 50.370  | ug/l   | 100    |
| 25) 2-Butanone                | 7.17 | 43  | 56887  | 245.059 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 68902  | 44.690  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 52719  | 50.629  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.51 | 49  | 31723  | 54.836  | ug/l   | 99     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 37518  | 261.540 | ug/l   | 99     |
| 30) Chloroform                | 7.68 | 83  | 86333  | 51.777  | ug/l   | 98     |
| 31) Cyclohexane               | 7.96 | 56  | 72102  | 42.952  | ug/l   | 99     |
| 32) 1,1,1-Trichloroethane     | 7.88 | 97  | 78729  | 50.173  | ug/l   | 100    |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 67063  | 46.297  | ug/l   | 100    |
| 37) Ethyl Acetate             | 7.26 | 43  | 25358  | 48.395  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 68091  | 46.055  | ug/l   | 96     |

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apatel  
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Quant Time: Dec 06 07:24:20 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W120418S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 05 01:35:23 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 83191    | 42.901   | ug/l   | 98       |
| 40) Benzene                    | 8.33  | 78   | 197761   | 49.788   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.49  | 41   | 13689    | 43.617   | ug/l # | 85       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 56908    | 51.263   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 51679    | 50.782   | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 54006    | 48.370   | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 44645    | 48.300   | ug/l   | 94       |
| 46) Dibromomethane             | 9.46  | 93   | 24270    | 50.530   | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.65  | 83   | 64127    | 50.756   | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.44  | 41   | 25647    | 48.558   | ug/l   | 93       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 9137     | 1088.965 | ug/l   | 93       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 133821   | 266.838  | ug/l   | 100      |
| 52) Toluene                    | 10.39 | 92   | 133648   | 48.370   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 61114    | 48.112   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 73247    | 49.205   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 34035    | 49.817   | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 46284    | 51.935   | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.94 | 76   | 58772    | 50.953   | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 95240    | 266.062  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.97 | 43   | 87683    | 241.185  | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.13 | 129  | 43606    | 51.931   | ug/l   | 95       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 33271    | 50.773   | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.87 | 164  | 48949    | 51.261   | ug/l   | 89       |
| 65) Chlorobenzene              | 11.66 | 112  | 143972   | 49.323   | ug/l   | 91       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 46462    | 51.539   | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.73 | 91   | 260945   | 49.048   | ug/l   | 94       |
| 68) m/p-Xylenes                | 11.84 | 106  | 206537   | 98.958   | ug/l   | 97       |
| 69) o-Xylene                   | 12.17 | 106  | 94594    | 48.510   | ug/l   | 90       |
| 70) Styrene                    | 12.18 | 104  | 155591   | 48.743   | ug/l   | 96       |
| 71) Bromoform                  | 12.35 | 173  | 23711    | 52.542   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.47 | 105  | 257752   | 48.503   | ug/l   | 96       |
| 74) N-amyl acetate             | 12.27 | 43   | 48157    | 51.112   | ug/l   | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 38440    | 55.697   | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 22604m   | 44.679   | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 58384    | 50.898   | ug/l   | 97       |
| 78) n-propylbenzene            | 12.81 | 91   | 300874   | 47.523   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 180118   | 50.380   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 225551   | 49.614   | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 11621    | 49.509   | ug/l   | 91       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 188589   | 49.584   | ug/l   | 97       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 202790   | 51.044   | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 219033   | 47.199   | ug/l   | 92       |
| 85) sec-Butylbenzene           | 13.39 | 105  | 265935   | 46.888   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 235268   | 46.598   | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 117624   | 49.951   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 120148   | 50.512   | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.83 | 91   | 220801   | 46.799   | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 38420    | 49.935   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 108684   | 53.314   | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 7647     | 57.196   | ug/l   | 93       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 71404    | 50.543 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 38640    | 50.720 | ug/l  | 97       |
| 95) Naphthalene            | 15.38 | 128  | 130791   | 51.657 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 62150    | 52.172 | ug/l  | 98       |

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

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