

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW052019\  
 Data File : VW010475.D  
 Acq On : 21 May 2019 05:00  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 5/21/2019 11:29:16 AM

Quant Time: May 21 07:35:29 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W052019S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 21 06:38:43 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 130139   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 250670   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 228628   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 108421   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 81059    | 60.35 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 120.70% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 81416    | 53.53 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.06% |      |
| 50) Toluene-d8            | 10.32  | 98  | 293394   | 50.49 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.98% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 116311   | 50.25 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.50% |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 49645  | 42.779  | ug/l | 98     |
| 3) Chloromethane              | 2.21 | 50  | 62775  | 45.910  | ug/l | 100    |
| 4) Vinyl Chloride             | 2.35 | 62  | 66864  | 42.217  | ug/l | 99     |
| 5) Bromomethane               | 2.75 | 94  | 54233  | 49.774  | ug/l | 95     |
| 6) Chloroethane               | 2.90 | 64  | 49241  | 48.431  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 108597 | 46.443  | ug/l | 98     |
| 8) Diethyl Ether              | 3.68 | 74  | 44704  | 60.311  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 4.05 | 101 | 66359  | 46.082  | ug/l | 100    |
| 10) Methyl Iodide             | 4.26 | 142 | 81214  | 49.342  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.16 | 59  | 37759  | 312.510 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 65795  | 47.865  | ug/l | 97     |
| 13) Acrolein                  | 3.89 | 56  | 15919  | 223.770 | ug/l | 98     |
| 14) Allyl chloride            | 4.67 | 41  | 103834 | 52.185  | ug/l | 99     |
| 15) Acrylonitrile             | 5.36 | 53  | 92827  | 299.033 | ug/l | 98     |
| 16) Acetone                   | 4.12 | 43  | 71926  | 262.323 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.37 | 76  | 196440 | 47.911  | ug/l | 99     |
| 18) Methyl Acetate            | 4.67 | 43  | 45605  | 68.008  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 214047 | 61.081  | ug/l | 97     |
| 20) Methylene Chloride        | 4.91 | 84  | 82835  | 51.656  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 83835  | 53.171  | ug/l | 95     |
| 22) Diisopropyl ether         | 6.31 | 45  | 235540 | 57.732  | ug/l | 98     |
| 23) Vinyl Acetate             | 6.25 | 43  | 677675 | 278.066 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 136088 | 55.895  | ug/l | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 115600 | 294.606 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 97241  | 41.929  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 98525  | 57.477  | ug/l | 96     |
| 28) Bromochloromethane        | 7.51 | 49  | 55388  | 63.540  | ug/l | 96     |
| 29) Tetrahydrofuran           | 7.52 | 42  | 80019  | 301.367 | ug/l | 99     |
| 30) Chloroform                | 7.68 | 83  | 150149 | 57.174  | ug/l | 99     |
| 31) Cyclohexane               | 7.95 | 56  | 109209 | 42.821  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 129937 | 51.767  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 105256 | 45.075  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 53794  | 54.173  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.06 | 117 | 112842 | 44.796  | ug/l | 98     |

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 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
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MMDadoda  
 5/21/2019 11:29:16 AM

Quant Time: May 21 07:35:29 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W052019S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 21 06:38:43 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 130027   | 41.562   | ug/l   | 99       |
| 40) Benzene                    | 8.32  | 78   | 326959   | 50.376   | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.48  | 41   | 32200    | 54.575   | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 100823   | 54.352   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.42  | 43   | 107676   | 54.278   | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 94006    | 48.788   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 80076    | 51.949   | ug/l   | 100      |
| 46) Dibromomethane             | 9.46  | 93   | 49472    | 54.880   | ug/l   | 100      |
| 47) Bromodichloromethane       | 9.64  | 83   | 120191   | 53.056   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.43  | 41   | 48043    | 52.936   | ug/l   | 98       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 16221    | 1101.521 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 270111   | 268.704  | ug/l   | 100      |
| 52) Toluene                    | 10.39 | 92   | 215612   | 49.467   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 115214   | 50.217   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 132827   | 50.693   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 71112    | 54.857   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 94410    | 52.807   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 118582   | 54.610   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 232442   | 293.530  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.97 | 43   | 185580   | 258.798  | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 89408    | 54.497   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 71845    | 54.712   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.86 | 164  | 82698    | 51.889   | ug/l   | 98       |
| 65) Chlorobenzene              | 11.66 | 112  | 239679   | 49.189   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 88499    | 50.702   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 401737   | 46.699   | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.84 | 106  | 317077   | 93.969   | ug/l   | 100      |
| 69) o-Xylene                   | 12.16 | 106  | 153852   | 48.125   | ug/l   | 99       |
| 70) Styrene                    | 12.18 | 104  | 268505   | 49.500   | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 51250    | 53.319   | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.47 | 105  | 394879   | 45.897   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 97731    | 49.571   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 82393    | 52.651   | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 57044m   | 51.833   | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 99210    | 51.529   | ug/l   | 99       |
| 78) n-propylbenzene            | 12.80 | 91   | 450082   | 44.890   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 276587   | 47.568   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 346065   | 47.493   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 24030    | 45.570   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 289459   | 47.961   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 296626   | 46.603   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 345904   | 47.663   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.38 | 105  | 391488   | 43.951   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 357752   | 44.373   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 181900   | 48.156   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 183454   | 48.406   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 320699   | 41.819   | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 73526    | 47.116   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 172795   | 50.205   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 14368    | 49.378   | ug/l   | 98       |

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Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 34 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDCCC050EC

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MMDadoda  
5/21/2019 11:29:16 AM

Quant Time: May 21 07:35:29 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W052019S.M  
Quant Title : SW846 8260  
QLast Update : Tue May 21 06:38:43 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 105346   | 44.986 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 51244    | 40.962 | ug/l  | 98       |
| 95) Naphthalene            | 15.37 | 128  | 236216   | 48.054 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.56 | 180  | 90979    | 45.151 | ug/l  | 98       |

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

