

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW053119\  
 Data File : VW010629.D  
 Acq On : 31 May 2019 11:29  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 6/4/2019 8:44:27 AM

Quant Time: Jun 01 05:00:04 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  | 139219   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 226658   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 200886   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 99615    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 63100    | 43.91 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 87.82%  |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 68759    | 50.00 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.00% |      |
| 50) Toluene-d8            | 10.32  | 98  | 262551   | 49.97 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.94%  |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 99572    | 47.58 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.16%  |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 58664  | 47.284  | ug/l   | 100    |
| 3) Chloromethane              | 2.21 | 50  | 59976  | 41.003  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.35 | 62  | 68245  | 40.279  | ug/l   | 99     |
| 5) Bromomethane               | 2.75 | 94  | 48497  | 41.607  | ug/l   | 95     |
| 6) Chloroethane               | 2.91 | 64  | 47782  | 43.931  | ug/l   | 100    |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 130106 | 52.012  | ug/l   | 95     |
| 8) Diethyl Ether              | 3.68 | 74  | 36509  | 46.043  | ug/l   | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 79957  | 51.904  | ug/l   | 97     |
| 10) Methyl Iodide             | 4.27 | 142 | 85807  | 48.733  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 5.16 | 59  | 30153  | 233.283 | ug/l # | 93     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 74264  | 50.502  | ug/l   | 98     |
| 13) Acrolein                  | 3.89 | 56  | 15629  | 203.350 | ug/l   | 100    |
| 14) Allyl chloride            | 4.67 | 41  | 99677  | 46.828  | ug/l   | 99     |
| 15) Acrylonitrile             | 5.37 | 53  | 69976  | 210.719 | ug/l   | 98     |
| 16) Acetone                   | 4.12 | 43  | 75742  | 258.224 | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.38 | 76  | 199513 | 45.487  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.67 | 43  | 28832  | 40.191  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 170054 | 45.362  | ug/l   | 97     |
| 20) Methylene Chloride        | 4.92 | 84  | 75800  | 43.370  | ug/l   | 96     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 84255  | 49.952  | ug/l   | 99     |
| 22) Diisopropyl ether         | 6.31 | 45  | 202558 | 46.410  | ug/l   | 97     |
| 23) Vinyl Acetate             | 6.26 | 43  | 577159 | 221.376 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 6.22 | 63  | 129243 | 49.621  | ug/l   | 99     |
| 25) 2-Butanone                | 7.17 | 43  | 93953  | 223.822 | ug/l   | 93     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 131063 | 52.827  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 91636  | 49.971  | ug/l   | 100    |
| 28) Bromochloromethane        | 7.51 | 49  | 43554  | 46.705  | ug/l   | 92     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 55993  | 197.126 | ug/l   | 99     |
| 30) Chloroform                | 7.68 | 83  | 141547 | 50.383  | ug/l   | 100    |
| 31) Cyclohexane               | 7.96 | 56  | 124815 | 45.749  | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 137267 | 51.120  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75  | 112726 | 53.388  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.25 | 43  | 39676  | 44.189  | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 124557 | 54.686  | ug/l   | 100    |

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 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
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MMDadoda  
 6/4/2019 8:44:27 AM

Quant Time: Jun 01 05:00:04 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   | 150505   | 53.204  | ug/l   | 97       |
| 40) Benzene                    | 8.32  | 78   | 311646   | 53.104  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.48  | 41   | 22975    | 43.065  | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 84303    | 50.261  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 77844    | 43.397  | ug/l   | 98       |
| 44) Trichloroethene            | 9.09  | 130  | 95853    | 55.016  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 71716    | 51.454  | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 40845    | 50.110  | ug/l   | 95       |
| 47) Bromodichloromethane       | 9.65  | 83   | 103807   | 50.678  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.43  | 41   | 35156    | 42.840  | ug/l   | 95       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 11278    | 846.990 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 197004   | 216.739 | ug/l   | 99       |
| 52) Toluene                    | 10.39 | 92   | 212280   | 53.862  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 102353   | 49.338  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 121964   | 51.478  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 59292    | 50.584  | ug/l   | 95       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 74325    | 45.977  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 98572    | 50.204  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 165582   | 231.250 | ug/l   | 97       |
| 59) 2-Hexanone                 | 10.97 | 43   | 146228   | 225.523 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 75502    | 50.896  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 59195    | 49.854  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.86 | 164  | 78244    | 55.874  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.66 | 112  | 233492   | 54.537  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 83347    | 54.345  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.73 | 91   | 407785   | 53.948  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.84 | 106  | 322151   | 108.657 | ug/l   | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 150888   | 53.715  | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 254196   | 53.334  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 40701    | 48.191  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.47 | 105  | 418085   | 52.890  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 76131    | 42.028  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 64394    | 44.787  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 45237m   | 44.738  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 95051    | 53.733  | ug/l   | 94       |
| 78) n-propylbenzene            | 12.80 | 91   | 478795   | 51.975  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 275782   | 51.623  | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 349361   | 52.183  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 20206    | 41.705  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 284915   | 51.382  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 318228   | 54.417  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 344442   | 51.657  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.39 | 105  | 430702   | 52.628  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 393017   | 53.056  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 183970   | 53.009  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 185317   | 53.220  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.83 | 91   | 369818   | 52.487  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 73838    | 51.498  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 167758   | 53.051  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 10915    | 40.827  | ug/l   | 92       |

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ALS Vial : 2 Sample Multiplier: 1

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Manual Integrations  
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MMDadoda  
6/4/2019 8:44:27 AM

Quant Time: Jun 01 05:00:04 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  | 118412   | 55.036 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 68224    | 59.356 | ug/l  | 98       |
| 95) Naphthalene            | 15.37 | 128  | 207111   | 45.858 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.56 | 180  | 98610    | 53.264 | ug/l  | 100      |

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

