

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW090118\  
 Data File : VW005056.D  
 Acq On : 01 Sep 2018 00:39  
 Operator : SY/AP  
 Sample : VSTDIC020  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDIC020

Manual Integrations  
 APPROVED

apatel  
 9/4/2018 9:36:56 AM

Quant Time: Sep 01 03:21:30 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W090118S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Sep 01 03:06:58 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.96  | 168  | 501446   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 727955   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 722145   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 395700   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |        |      |
|-----------------------------|--------|-----|----------|-------|--------|------|
| System Monitoring Compounds |        |     |          |       |        |      |
| 33) 1,2-Dichloroethane-d4   | 8.31   | 65  | 78893    | 22.39 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 44.78% |      |
| 35) Dibromofluoromethane    | 7.89   | 113 | 79219    | 21.39 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 42.78% |      |
| 50) Toluene-d8              | 10.33  | 98  | 357680   | 18.01 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 36.02% |      |
| 62) 4-Bromofluorobenzene    | 12.62  | 95  | 127539   | 17.65 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 35.30% |      |

|                               |      |     |        |        |        |     |
|-------------------------------|------|-----|--------|--------|--------|-----|
| Target Compounds              |      |     |        | Qvalue |        |     |
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 79550  | 18.46  | ug/l   | 96  |
| 3) Chloromethane              | 2.22 | 50  | 110490 | 17.92  | ug/l   | 99  |
| 4) Vinyl Chloride             | 2.36 | 62  | 107630 | 17.55  | ug/l   | 99  |
| 5) Bromomethane               | 2.76 | 94  | 75269  | 18.65  | ug/l   | 100 |
| 6) Chloroethane               | 2.92 | 64  | 64477  | 17.59  | ug/l   | 99  |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 121138 | 19.05  | ug/l   | 98  |
| 8) Diethyl Ether              | 3.69 | 74  | 44773  | 23.72  | ug/l   | 96  |
| 9) 1,1,2-Trichlorotrifluoroet | 4.07 | 101 | 83345  | 20.83  | ug/l   | 99  |
| 10) Methyl Iodide             | 4.28 | 142 | 102746 | 18.73  | ug/l   | 99  |
| 11) Tert butyl alcohol        | 5.18 | 59  | 29887  | 116.47 | ug/l # | 90  |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 74877  | 20.11  | ug/l   | 100 |
| 13) Acrolein                  | 3.90 | 56  | 25118  | 87.99  | ug/l   | 99  |
| 14) Allyl chloride            | 4.68 | 41  | 115216 | 20.00  | ug/l   | 99  |
| 15) Acrylonitrile             | 5.38 | 53  | 90918  | 97.52  | ug/l   | 99  |
| 16) Acetone                   | 4.13 | 43  | 78912  | 100.43 | ug/l   | 91  |
| 17) Carbon Disulfide          | 4.39 | 76  | 255271 | 16.76  | ug/l   | 98  |
| 18) Methyl Acetate            | 4.68 | 43  | 47698  | 24.35  | ug/l   | 99  |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 189543 | 23.14  | ug/l   | 100 |
| 20) Methylene Chloride        | 4.92 | 84  | 121945 | 18.56  | ug/l   | 97  |
| 21) trans-1,2-Dichloroethene  | 5.43 | 96  | 93019  | 22.54  | ug/l   | 98  |
| 22) Diisopropyl ether         | 6.32 | 45  | 258264 | 21.91  | ug/l   | 99  |
| 23) Vinyl Acetate             | 6.26 | 43  | 675993 | 111.38 | ug/l   | 99  |
| 24) 1,1-Dichloroethane        | 6.22 | 63  | 155123 | 21.61  | ug/l   | 99  |
| 25) 2-Butanone                | 7.18 | 43  | 136029 | 109.53 | ug/l   | 97  |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 126567 | 20.31  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene    | 7.18 | 96  | 99471  | 22.04  | ug/l   | 97  |
| 28) Bromochloromethane        | 7.52 | 49  | 67576  | 21.88  | ug/l   | 98  |
| 29) Tetrahydrofuran           | 7.54 | 42  | 69648  | 109.91 | ug/l   | 99  |
| 30) Chloroform                | 7.68 | 83  | 160768 | 22.59  | ug/l   | 99  |
| 31) Cyclohexane               | 7.96 | 56  | 154286 | 20.65  | ug/l   | 95  |
| 32) 1,1,1-Trichloroethane     | 7.88 | 97  | 142284 | 21.97  | ug/l   | 98  |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 132804 | 21.19  | ug/l   | 99  |
| 37) Ethyl Acetate             | 7.26 | 43  | 50335  | 21.93  | ug/l   | 99  |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 126242 | 20.71  | ug/l   | 97  |

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 Sample : VSTDIC020  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDIC020

Manual Integrations  
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apatel  
 9/4/2018 9:36:56 AM

Quant Time: Sep 01 03:21:30 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W090118S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Sep 01 03:06:58 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 149270   | 17.44  | ug/l   | 98       |
| 40) Benzene                    | 8.33  | 78   | 399715   | 19.99  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.49  | 41   | 27199    | 20.12  | ug/l   | 92       |
| 42) 1,2-Dichloroethane         | 8.41  | 62   | 99806    | 21.97  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 87446    | 19.47  | ug/l   | 97       |
| 44) Trichloroethene            | 9.10  | 130  | 108731   | 21.11  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 99030    | 21.47  | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 47591    | 21.56  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.65  | 83   | 120835   | 22.12  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.44  | 41   | 40725    | 17.48  | ug/l   | 96       |
| 49) 1,4-Dioxane                | 9.46  | 88   | 14891    | 334.47 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 294024   | 88.63  | ug/l   | 100      |
| 52) Toluene                    | 10.40 | 92   | 268376   | 18.15  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 116328   | 20.33  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 10.08 | 75   | 144285   | 21.48  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 74212    | 20.81  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 77889    | 16.93  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.94 | 76   | 122049   | 20.89  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 206858   | 103.34 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.98 | 43   | 197442   | 82.80  | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.13 | 129  | 82519    | 21.12  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 66175    | 19.99  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.87 | 164  | 102879   | 19.28  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.66 | 112  | 300218   | 18.74  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 93056    | 20.99  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.74 | 91   | 496758   | 18.11  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.85 | 106  | 410418   | 36.82  | ug/l   | 100      |
| 69) o-Xylene                   | 12.17 | 106  | 185958   | 18.28  | ug/l   | 98       |
| 70) Styrene                    | 12.19 | 104  | 311616   | 18.44  | ug/l   | 100      |
| 71) Bromoform                  | 12.35 | 173  | 49165    | 20.06  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.47 | 105  | 497465   | 18.53  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.28 | 43   | 83770    | 16.83  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 78570    | 19.50  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 52578m   | 18.57  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 123074   | 18.69  | ug/l   | 97       |
| 78) n-propylbenzene            | 12.81 | 91   | 606755   | 18.37  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 357328   | 18.74  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 435758   | 18.43  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 21346    | 17.27  | ug/l   | 95       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 380532   | 18.77  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 356864   | 17.96  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 449205   | 18.70  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.39 | 105  | 533380   | 18.32  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 472220   | 18.13  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 257683   | 18.57  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.59 | 146  | 254200   | 18.51  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 429176   | 17.59  | ug/l   | 98       |
| 90) Hexachloroethane           | 14.10 | 117  | 77771    | 18.92  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 226764   | 18.58  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 11839    | 17.14  | ug/l   | 98       |

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Sample : VSTDICC020  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDICC020

Manual Integrations  
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apatel  
9/4/2018 9:36:56 AM

Quant Time: Sep 01 03:21:30 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W090118S.M  
Quant Title : SW846 8260  
QLast Update : Sat Sep 01 03:06:58 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 147442   | 17.34 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 93483    | 17.58 | ug/l  | 99       |
| 95) Naphthalene            | 15.38 | 128  | 222197   | 16.05 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 126237   | 16.87 | ug/l  | 99       |

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

