

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY011520\  
 Data File : VY001211.D  
 Acq On : 15 Jan 2020 12:43  
 Operator : SY/MD  
 Sample : L1126-05MSD  
 Misc : 5.22G/5ML/MSVOA Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 BW-1-3.0MSD

Manual Integrations  
 APPROVED

MMDadoda  
 1/16/2020 9:36:11 AM

Quant Time: Jan 16 08:04:49 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y011020S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jan 10 16:01:58 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.80  | 168  | 169780   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.69  | 114  | 299412   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 248584   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.42 | 152  | 101980   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.15   | 65  | 90934    | 50.71 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.42% |      |
| 35) Dibromofluoromethane  | 7.73   | 113 | 84998    | 48.49 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.98%  |      |
| 50) Toluene-d8            | 10.18  | 98  | 337309   | 49.94 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.88%  |      |
| 62) 4-Bromofluorobenzene  | 12.48  | 95  | 117783   | 42.65 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 85.30%  |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.90 | 85  | 66279  | 50.831  | ug/l | 97     |
| 3) Chloromethane              | 2.12 | 50  | 103012 | 54.809  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.25 | 62  | 107991 | 57.034  | ug/l | 96     |
| 5) Bromomethane               | 2.65 | 94  | 70440  | 69.258  | ug/l | 98     |
| 6) Chloroethane               | 2.80 | 64  | 66953  | 61.206  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.13 | 101 | 130825 | 49.638  | ug/l | 98     |
| 8) Diethyl Ether              | 3.54 | 74  | 55390  | 54.086  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.90 | 101 | 82526  | 48.646  | ug/l | 99     |
| 10) Methyl Iodide             | 4.10 | 142 | 121473 | 52.312  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.96 | 59  | 49362  | 273.599 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 3.88 | 96  | 89058  | 51.311  | ug/l | 98     |
| 13) Acrolein                  | 3.74 | 56  | 40758  | 250.940 | ug/l | 99     |
| 14) Allyl chloride            | 4.49 | 41  | 155677 | 53.144  | ug/l | 99     |
| 15) Acrylonitrile             | 5.18 | 53  | 142294 | 277.820 | ug/l | 99     |
| 16) Acetone                   | 3.96 | 43  | 142386 | 341.904 | ug/l | 98     |
| 17) Carbon Disulfide          | 4.20 | 76  | 274279 | 48.826  | ug/l | 100    |
| 18) Methyl Acetate            | 4.49 | 43  | 75239  | 54.644  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.23 | 73  | 262897 | 54.759  | ug/l | 97     |
| 20) Methylene Chloride        | 4.73 | 84  | 106457 | 55.457  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.23 | 96  | 101023 | 51.332  | ug/l | 96     |
| 22) Diisopropyl ether         | 6.13 | 45  | 325202 | 54.353  | ug/l | 96     |
| 23) Vinyl Acetate             | 6.07 | 43  | 994840 | 259.989 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 6.03 | 63  | 176568 | 53.905  | ug/l | 98     |
| 25) 2-Butanone                | 7.00 | 43  | 201152 | 310.351 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 6.99 | 77  | 150967 | 50.120  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 7.00 | 96  | 115528 | 53.573  | ug/l | 100    |
| 28) Bromochloromethane        | 7.35 | 49  | 75951  | 56.467  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.36 | 42  | 124580 | 280.476 | ug/l | 98     |
| 30) Chloroform                | 7.52 | 83  | 169387 | 52.778  | ug/l | 99     |
| 31) Cyclohexane               | 7.79 | 56  | 153581 | 44.284  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 7.71 | 97  | 145442 | 51.074  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.93 | 75  | 132129 | 48.417  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.09 | 43  | 83736  | 52.284  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.91 | 117 | 122700 | 49.061  | ug/l | 98     |

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 ALS Vial : 5 Sample Multiplier: 1

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 MSVOA\_Y  
 ClientSampleId :  
 BW-1-3.0MSD

Manual Integrations  
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MMDadoda  
 1/16/2020 9:36:11 AM

Quant Time: Jan 16 08:04:49 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y011020S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jan 10 16:01:58 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.19  | 83   | 140838   | 38.067   | ug/l   | 99       |
| 40) Benzene                    | 8.17  | 78   | 416230   | 52.251   | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.33  | 41   | 39559m   | 52.583   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.25  | 62   | 115921   | 51.969   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.28  | 43   | 165431   | 54.018   | ug/l   | 99       |
| 44) Trichloroethene            | 8.94  | 130  | 104579   | 50.382   | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.22  | 63   | 104109   | 52.865   | ug/l   | 99       |
| 46) Dibromomethane             | 9.31  | 93   | 57086    | 53.127   | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.50  | 83   | 136555   | 52.146   | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.30  | 41   | 76959    | 54.304   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.30  | 88   | 16109    | 1231.041 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 10.07 | 43   | 422923   | 272.161  | ug/l   | 100      |
| 52) Toluene                    | 10.24 | 92   | 254941   | 50.178   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 150408   | 51.328   | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 9.93  | 75   | 171219   | 51.824   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.64 | 97   | 85160    | 53.460   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.51 | 69   | 129529   | 53.157   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.79 | 76   | 146957   | 53.738   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.78  | 63   | 197938   | 230.961  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.83 | 43   | 316249   | 290.389  | ug/l   | 98       |
| 60) Dibromochloromethane       | 10.99 | 129  | 96239    | 52.472   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.09 | 107  | 80064    | 51.474   | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.72 | 164  | 84014    | 52.429   | ug/l   | 98       |
| 65) Chlorobenzene              | 11.52 | 112  | 260567   | 52.458   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 95592    | 55.838   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.59 | 91   | 465823   | 51.266   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.70 | 106  | 352990   | 102.983  | ug/l   | 99       |
| 69) o-Xylene                   | 12.03 | 106  | 170251   | 51.805   | ug/l   | 100      |
| 70) Styrene                    | 12.04 | 104  | 301631   | 52.310   | ug/l   | 99       |
| 71) Bromoform                  | 12.20 | 173  | 58594    | 55.500   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.33 | 105  | 418810   | 54.628   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.14 | 43   | 159336   | 66.595   | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.58 | 83   | 105001   | 65.097   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 68645m   | 62.879   | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 99221    | 58.571   | ug/l   | 99       |
| 78) n-propylbenzene            | 12.67 | 91   | 477744   | 51.806   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.75 | 91   | 287670   | 54.318   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 337593   | 52.775   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 41276    | 64.115   | ug/l # | 97       |
| 82) 4-Chlorotoluene            | 12.85 | 91   | 301782   | 53.376   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.07 | 119  | 273893   | 50.957   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.12 | 105  | 339412   | 53.430   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.25 | 105  | 356394   | 46.090   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.37 | 119  | 314591   | 46.858   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.36 | 146  | 168244   | 52.515   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.44 | 146  | 171532   | 52.022   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.69 | 91   | 274019   | 40.524   | ug/l   | 99       |
| 90) Hexachloroethane           | 13.95 | 117  | 61078    | 46.559   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.74 | 146  | 160388   | 53.867   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.36 | 75   | 18614    | 63.974   | ug/l   | 99       |

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ALS Vial : 5 Sample Multiplier: 1

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1/16/2020 9:36:11 AM

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Quant Title : SW846 8260  
QLast Update : Fri Jan 10 16:01:58 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.00 | 180  | 70752    | 36.065 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.11 | 225  | 29170    | 29.515 | ug/l  | 98       |
| 95) Naphthalene            | 15.23 | 128  | 234842   | 51.420 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.42 | 180  | 63950    | 36.988 | ug/l  | 99       |

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

