

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY020320\  
 Data File : VY001466.D  
 Acq On : 03 Feb 2020 12:09  
 Operator : SY/MD  
 Sample : VY0203SBS01  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY0203SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 2/4/2020 11:21:45 AM

Quant Time: Feb 03 13:37:37 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y012120S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jan 23 01:21:47 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.81  | 168  | 188232   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.71  | 114  | 326631   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 288949   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.43 | 152  | 134474   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.16   | 65  | 103587   | 50.57 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.14% |      |
| 35) Dibromofluoromethane  | 7.75   | 113 | 97749    | 50.99 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.98% |      |
| 50) Toluene-d8            | 10.19  | 98  | 396780   | 53.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.54% |      |
| 62) 4-Bromofluorobenzene  | 12.48  | 95  | 143290   | 48.31 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.62%  |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.91 | 85  | 32001  | 21.558  | ug/l   | 97     |
| 3) Chloromethane              | 2.13 | 50  | 50465  | 22.494  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.26 | 62  | 51371  | 21.960  | ug/l   | 98     |
| 5) Bromomethane               | 2.66 | 94  | 32936  | 20.905  | ug/l   | 99     |
| 6) Chloroethane               | 2.81 | 64  | 32714  | 21.885  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.15 | 101 | 69364  | 23.175  | ug/l   | 96     |
| 8) Diethyl Ether              | 3.55 | 74  | 26883  | 21.277  | ug/l   | 94     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.93 | 101 | 44600  | 23.399  | ug/l   | 99     |
| 10) Methyl Iodide             | 4.11 | 142 | 52294  | 20.801  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 4.99 | 59  | 38016  | 139.027 | ug/l # | 94     |
| 12) 1,1-Dichloroethene        | 3.89 | 96  | 44276  | 22.154  | ug/l   | 99     |
| 13) Acrolein                  | 3.75 | 56  | 17391  | 107.095 | ug/l   | 99     |
| 14) Allyl chloride            | 4.51 | 41  | 79588  | 22.331  | ug/l   | 99     |
| 15) Acrylonitrile             | 5.20 | 53  | 69779  | 107.891 | ug/l   | 98     |
| 16) Acetone                   | 3.97 | 43  | 67515  | 121.225 | ug/l   | 97     |
| 17) Carbon Disulfide          | 4.22 | 76  | 135501 | 21.558  | ug/l   | 100    |
| 18) Methyl Acetate            | 4.50 | 43  | 36993  | 21.417  | ug/l   | 97     |
| 19) Methyl tert-butyl Ether   | 5.25 | 73  | 124456 | 21.268  | ug/l   | 100    |
| 20) Methylene Chloride        | 4.75 | 84  | 55597  | 19.386  | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 5.25 | 96  | 50755  | 21.863  | ug/l   | 99     |
| 22) Diisopropyl ether         | 6.15 | 45  | 164666 | 21.758  | ug/l   | 95     |
| 23) Vinyl Acetate             | 6.10 | 43  | 530382 | 107.948 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 6.05 | 63  | 89598  | 22.460  | ug/l   | 96     |
| 25) 2-Butanone                | 7.02 | 43  | 100006 | 112.177 | ug/l   | 100    |
| 26) 2,2-Dichloropropane       | 7.01 | 77  | 78618  | 22.125  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.02 | 96  | 55552  | 21.412  | ug/l   | 94     |
| 28) Bromochloromethane        | 7.36 | 49  | 31862  | 19.368  | ug/l   | 95     |
| 29) Tetrahydrofuran           | 7.38 | 42  | 62571  | 107.881 | ug/l   | 98     |
| 30) Chloroform                | 7.53 | 83  | 85404  | 21.842  | ug/l   | 96     |
| 31) Cyclohexane               | 7.81 | 56  | 90524  | 22.856  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 7.73 | 97  | 73735  | 22.334  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 7.94 | 75  | 69948  | 22.667  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.10 | 43  | 42202  | 22.384  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 7.92 | 117 | 63526  | 23.099  | ug/l   | 98     |

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y012120S.M  
 Quant Title : SW846 8260  
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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.20  | 83   | 93650    | 23.690  | ug/l   | 98       |
| 40) Benzene                    | 8.18  | 78   | 210272   | 22.726  | ug/l   | 97       |
| 41) Methacrylonitrile          | 7.34  | 41   | 18819m   | 19.343  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.26  | 62   | 57160    | 22.109  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.30  | 43   | 81707    | 22.287  | ug/l   | 99       |
| 44) Trichloroethene            | 8.95  | 130  | 53723    | 22.626  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.23  | 63   | 53225    | 22.755  | ug/l   | 99       |
| 46) Dibromomethane             | 9.32  | 93   | 27087    | 21.571  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.51  | 83   | 66762    | 22.241  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.30  | 41   | 36153    | 21.693  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 9.31  | 88   | 7307     | 412.638 | ug/l   | 93       |
| 51) 4-Methyl-2-Pentanone       | 10.08 | 43   | 207673   | 109.998 | ug/l   | 100      |
| 52) Toluene                    | 10.25 | 92   | 131517   | 22.423  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 73592    | 22.118  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 9.94  | 75   | 84389    | 22.098  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.65 | 97   | 41566    | 22.427  | ug/l   | 93       |
| 56) Ethyl methacrylate         | 10.52 | 69   | 61060    | 21.797  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.80 | 76   | 71658    | 22.195  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.80  | 63   | 107697   | 111.103 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.84 | 43   | 145795   | 110.926 | ug/l   | 98       |
| 60) Dibromochloromethane       | 10.99 | 129  | 45487    | 21.943  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.09 | 107  | 38635    | 22.050  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.72 | 164  | 43467    | 23.550  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.52 | 112  | 135662   | 22.274  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 46379    | 22.313  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.59 | 91   | 254541   | 22.678  | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.70 | 106  | 188456   | 44.954  | ug/l   | 99       |
| 69) o-Xylene                   | 12.03 | 106  | 90213    | 22.369  | ug/l   | 99       |
| 70) Styrene                    | 12.05 | 104  | 157357   | 22.239  | ug/l   | 99       |
| 71) Bromoform                  | 12.21 | 173  | 25969    | 20.930  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.33 | 105  | 245076   | 23.096  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.14 | 43   | 75420    | 21.714  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.58 | 83   | 50480    | 22.213  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 32997m   | 20.363  | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 52879    | 22.499  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.67 | 91   | 295498   | 23.136  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.76 | 91   | 166381   | 22.803  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 202588   | 22.872  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 18887    | 22.057  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 12.86 | 91   | 174663   | 22.410  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.08 | 119  | 169573   | 22.712  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.12 | 105  | 201074   | 22.612  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.25 | 105  | 248163   | 23.395  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.37 | 119  | 217815   | 23.301  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.37 | 146  | 102862   | 22.725  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.45 | 146  | 102607   | 22.326  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.70 | 91   | 218936   | 23.271  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.97 | 117  | 40277    | 22.731  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.74 | 146  | 92613    | 22.186  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.36 | 75   | 8015     | 20.439  | ug/l   | 97       |

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Quant Title : SW846 8260  
QLast Update : Thu Jan 23 01:21:47 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.01 | 180  | 57484    | 20.518 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.12 | 225  | 29444    | 21.583 | ug/l  | 98       |
| 95) Naphthalene            | 15.24 | 128  | 130912   | 20.435 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.43 | 180  | 49907    | 20.306 | ug/l  | 99       |

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

