

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY120319\  
 Data File : VY000835.D  
 Acq On : 03 Dec 2019 11:58  
 Operator : SY/MD  
 Sample : VY1203SBS01  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1203SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 12/4/2019 2:06:21 PM

Quant Time: Dec 03 12:29:07 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y112719S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 27 12:40:47 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.80  | 168  | 344636   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.69  | 114  | 607002   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 531955   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.42 | 152  | 251535   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.15   | 65  | 186937   | 51.05 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.10% |      |
| 35) Dibromofluoromethane  | 7.73   | 113 | 182522   | 51.59 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.18% |      |
| 50) Toluene-d8            | 10.18  | 98  | 755905   | 53.45 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.90% |      |
| 62) 4-Bromofluorobenzene  | 12.48  | 95  | 264290   | 49.76 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.52%  |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.90 | 85  | 71290  | 19.216  | ug/l   | 93     |
| 3) Chloromethane              | 2.12 | 50  | 97843  | 21.395  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.25 | 62  | 84651  | 18.782  | ug/l   | 98     |
| 5) Bromomethane               | 2.63 | 94  | 53313  | 18.112  | ug/l   | 96     |
| 6) Chloroethane               | 2.79 | 64  | 51904  | 18.783  | ug/l   | 93     |
| 7) Trichlorofluoromethane     | 3.12 | 101 | 124417 | 20.143  | ug/l   | 98     |
| 8) Diethyl Ether              | 3.53 | 74  | 45687  | 19.653  | ug/l   | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 3.90 | 101 | 76704  | 20.109  | ug/l   | 99     |
| 10) Methyl Iodide             | 4.10 | 142 | 95777  | 19.944  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 4.97 | 59  | 35922  | 97.500  | ug/l # | 89     |
| 12) 1,1-Dichloroethene        | 3.87 | 96  | 77459  | 20.498  | ug/l   | 93     |
| 13) Acrolein                  | 3.73 | 56  | 38888  | 107.151 | ug/l   | 99     |
| 14) Allyl chloride            | 4.48 | 41  | 129980 | 20.061  | ug/l   | 99     |
| 15) Acrylonitrile             | 5.18 | 53  | 118065 | 98.352  | ug/l   | 99     |
| 16) Acetone                   | 3.95 | 43  | 83465  | 99.355  | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.19 | 76  | 243151 | 19.896  | ug/l   | 96     |
| 18) Methyl Acetate            | 4.49 | 43  | 63603  | 18.107  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 5.22 | 73  | 203355 | 20.151  | ug/l   | 97     |
| 20) Methylene Chloride        | 4.72 | 84  | 93875  | 21.199  | ug/l   | 97     |
| 21) trans-1,2-Dichloroethene  | 5.22 | 96  | 85857  | 19.990  | ug/l   | 97     |
| 22) Diisopropyl ether         | 6.13 | 45  | 263493 | 19.786  | ug/l   | 96     |
| 23) Vinyl Acetate             | 6.07 | 43  | 810392 | 100.100 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 6.02 | 63  | 143682 | 19.576  | ug/l   | 99     |
| 25) 2-Butanone                | 7.00 | 43  | 147227 | 94.873  | ug/l   | 97     |
| 26) 2,2-Dichloropropane       | 6.99 | 77  | 120102 | 19.442  | ug/l   | 98     |
| 27) cis-1,2-Dichloroethene    | 6.99 | 96  | 92572  | 19.939  | ug/l   | 100    |
| 28) Bromochloromethane        | 7.35 | 49  | 32838  | 13.726  | ug/l   | 94     |
| 29) Tetrahydrofuran           | 7.35 | 42  | 99552  | 96.810  | ug/l   | 99     |
| 30) Chloroform                | 7.52 | 83  | 137681 | 18.699  | ug/l   | 92     |
| 31) Cyclohexane               | 7.79 | 56  | 148809 | 19.139  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 7.71 | 97  | 118810 | 19.541  | ug/l   | 97     |
| 36) 1,1-Dichloropropene       | 7.93 | 75  | 115793 | 19.186  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.08 | 43  | 66292  | 19.022  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 7.91 | 117 | 104242 | 19.394  | ug/l   | 97     |

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 Quant Title : SW846 8260  
 QLast Update : Wed Nov 27 12:40:47 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.19  | 83   | 152499   | 19.071  | ug/l   | 96       |
| 40) Benzene                    | 8.17  | 78   | 346549   | 19.713  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.33  | 41   | 29404m   | 16.009  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.24  | 62   | 89403    | 19.337  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.28  | 43   | 123551   | 18.813  | ug/l   | 99       |
| 44) Trichloroethene            | 8.94  | 130  | 90915    | 20.123  | ug/l   | 92       |
| 45) 1,2-Dichloropropane        | 9.22  | 63   | 87333    | 19.777  | ug/l   | 97       |
| 46) Dibromomethane             | 9.31  | 93   | 44431    | 19.257  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.50  | 83   | 104568   | 19.293  | ug/l   | 91       |
| 48) Methyl methacrylate        | 9.30  | 41   | 55677    | 19.280  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.30  | 88   | 12100    | 370.124 | ug/l # | 87       |
| 51) 4-Methyl-2-Pentanone       | 10.07 | 43   | 320862   | 94.561  | ug/l   | 100      |
| 52) Toluene                    | 10.24 | 92   | 216329   | 19.874  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 115182   | 19.780  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.93  | 75   | 135532   | 19.691  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.64 | 97   | 67227    | 19.722  | ug/l   | 94       |
| 56) Ethyl methacrylate         | 10.51 | 69   | 94315    | 19.341  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.79 | 76   | 116668   | 19.637  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.78  | 63   | 196693   | 100.036 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.83 | 43   | 222733   | 90.083  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.99 | 129  | 70304    | 19.159  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.09 | 107  | 61868    | 19.258  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.72 | 164  | 94024    | 20.344  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.52 | 112  | 220647   | 19.955  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 74634    | 20.028  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.59 | 91   | 407462   | 19.786  | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.70 | 106  | 308734   | 39.942  | ug/l   | 100      |
| 69) o-Xylene                   | 12.03 | 106  | 144755   | 20.085  | ug/l   | 100      |
| 70) Styrene                    | 12.04 | 104  | 247491   | 20.055  | ug/l   | 99       |
| 71) Bromoform                  | 12.20 | 173  | 41257    | 19.630  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.33 | 105  | 388507   | 19.398  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.14 | 43   | 104412   | 18.730  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.58 | 83   | 73934    | 18.735  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 66034m   | 23.171  | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 85593    | 19.716  | ug/l   | 98       |
| 78) n-propylbenzene            | 12.67 | 91   | 477469   | 19.525  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.75 | 91   | 261357   | 19.346  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 322387   | 19.441  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 29248    | 20.159  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.85 | 91   | 275483   | 19.792  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.07 | 119  | 272093   | 19.516  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.12 | 105  | 325385   | 19.613  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.25 | 105  | 399310   | 19.694  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.37 | 119  | 349755   | 19.832  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.36 | 146  | 168048   | 19.732  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.44 | 146  | 165271   | 19.599  | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.69 | 91   | 353355   | 19.817  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.96 | 117  | 65504    | 20.163  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.74 | 146  | 153539   | 20.043  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.36 | 75   | 13966    | 21.139  | ug/l   | 91       |

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Sample : VY1203SBSD01  
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ALS Vial : 5 Sample Multiplier: 1

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MSVOA\_Y  
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Quant Title : SW846 8260  
QLast Update : Wed Nov 27 12:40:47 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.00 | 180  | 104951   | 20.247 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.11 | 225  | 51272    | 19.950 | ug/l  | 99       |
| 95) Naphthalene            | 15.23 | 128  | 240719   | 20.000 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.42 | 180  | 92479    | 19.973 | ug/l  | 100      |

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

