

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY102419\  
 Data File : VY000404.D  
 Acq On : 24 Oct 2019 13:09  
 Operator : SY/MD  
 Sample : VY1024SBS01  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1024SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 10/25/2019 4:46:27 PM

Quant Time: Oct 25 06:52:54 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y101119S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 17 02:03:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.80  | 168  | 219683   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.70  | 114  | 361738   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 323028   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.42 | 152  | 163283   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.15   | 65  | 130084   | 56.14 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 112.28% |      |
| 35) Dibromofluoromethane  | 7.73   | 113 | 117342   | 53.78 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.56% |      |
| 50) Toluene-d8            | 10.18  | 98  | 467458   | 55.69 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.38% |      |
| 62) 4-Bromofluorobenzene  | 12.48  | 95  | 165586   | 51.93 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.86% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.90 | 85  | 42510  | 22.062  | ug/l   | 97     |
| 3) Chloromethane              | 2.12 | 50  | 65136  | 24.264  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.26 | 62  | 55199  | 20.375  | ug/l   | 96     |
| 5) Bromomethane               | 2.64 | 94  | 34871  | 17.367  | ug/l   | 98     |
| 6) Chloroethane               | 2.79 | 64  | 34919  | 19.976  | ug/l   | 93     |
| 7) Trichlorofluoromethane     | 3.13 | 101 | 77858  | 21.009  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.53 | 74  | 31282  | 23.894  | ug/l   | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.90 | 101 | 48051  | 21.380  | ug/l   | 98     |
| 10) Methyl Iodide             | 4.09 | 142 | 47481  | 15.666  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 4.97 | 59  | 23732  | 97.860  | ug/l   | 98     |
| 12) 1,1-Dichloroethene        | 3.88 | 96  | 46487  | 20.952  | ug/l # | 95     |
| 13) Acrolein                  | 3.74 | 56  | 20139  | 70.833  | ug/l   | 99     |
| 14) Allyl chloride            | 4.49 | 41  | 75197  | 20.452  | ug/l   | 99     |
| 15) Acrylonitrile             | 5.18 | 53  | 74717  | 101.965 | ug/l   | 95     |
| 16) Acetone                   | 3.96 | 43  | 72550  | 96.676  | ug/l   | 98     |
| 17) Carbon Disulfide          | 4.19 | 76  | 136345 | 19.518  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.49 | 43  | 41531  | 22.274  | ug/l   | 93     |
| 19) Methyl tert-butyl Ether   | 5.23 | 73  | 132697 | 21.484  | ug/l   | 100    |
| 20) Methylene Chloride        | 4.72 | 84  | 75276  | 27.303  | ug/l   | 93     |
| 21) trans-1,2-Dichloroethene  | 5.23 | 96  | 53254  | 20.920  | ug/l   | 97     |
| 22) Diisopropyl ether         | 6.13 | 45  | 167443 | 21.532  | ug/l   | 95     |
| 23) Vinyl Acetate             | 6.07 | 43  | 520639 | 102.622 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 6.03 | 63  | 89762  | 21.146  | ug/l   | 98     |
| 25) 2-Butanone                | 7.00 | 43  | 105796 | 100.078 | ug/l   | 100    |
| 26) 2,2-Dichloropropane       | 6.99 | 77  | 83343  | 21.308  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 7.00 | 96  | 62011  | 22.513  | ug/l   | 96     |
| 28) Bromochloromethane        | 7.35 | 49  | 33592  | 18.435  | ug/l   | 95     |
| 29) Tetrahydrofuran           | 7.35 | 42  | 63779  | 99.551  | ug/l   | 98     |
| 30) Chloroform                | 7.52 | 83  | 93711  | 21.922  | ug/l   | 97     |
| 31) Cyclohexane               | 7.79 | 56  | 94914  | 21.409  | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 7.71 | 97  | 84847  | 22.325  | ug/l   | 97     |
| 36) 1,1-Dichloropropene       | 7.93 | 75  | 73170  | 20.660  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.09 | 43  | 44415  | 21.180  | ug/l   | 96     |
| 38) Carbon Tetrachloride      | 7.91 | 117 | 73527  | 21.442  | ug/l   | 94     |

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 Quant Title : SW846 8260  
 QLast Update : Thu Oct 17 02:03:07 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 39) Methylcyclohexane          | 9.19  | 83   | 95582    | 20.620  | ug/l  | 95       |
| 40) Benzene                    | 8.17  | 78   | 219634   | 21.459  | ug/l  | 99       |
| 41) Methacrylonitrile          | 7.32  | 41   | 18765m   | 18.799  | ug/l  |          |
| 42) 1,2-Dichloroethane         | 8.25  | 62   | 64233    | 21.971  | ug/l  | 100      |
| 43) Isopropyl Acetate          | 8.28  | 43   | 82439    | 20.675  | ug/l  | 100      |
| 44) Trichloroethene            | 8.94  | 130  | 61206    | 21.313  | ug/l  | 100      |
| 45) 1,2-Dichloropropane        | 9.22  | 63   | 53963    | 21.485  | ug/l  | 97       |
| 46) Dibromomethane             | 9.31  | 93   | 30246    | 21.542  | ug/l  | 96       |
| 47) Bromodichloromethane       | 9.50  | 83   | 73095    | 22.090  | ug/l  | 98       |
| 48) Methyl methacrylate        | 9.30  | 41   | 35704    | 20.432  | ug/l  | 100      |
| 49) 1,4-Dioxane                | 9.31  | 88   | 8279     | 393.255 | ug/l  | 99       |
| 51) 4-Methyl-2-Pentanone       | 10.08 | 43   | 218407   | 106.198 | ug/l  | 100      |
| 52) Toluene                    | 10.25 | 92   | 137131   | 21.103  | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 74171    | 20.915  | ug/l  | 96       |
| 54) cis-1,3-Dichloropropene    | 9.93  | 75   | 84657    | 21.021  | ug/l  | 99       |
| 55) 1,1,2-Trichloroethane      | 10.65 | 97   | 42223    | 20.682  | ug/l  | 94       |
| 56) Ethyl methacrylate         | 10.51 | 69   | 60675    | 20.852  | ug/l  | 99       |
| 57) 1,3-Dichloropropane        | 10.80 | 76   | 77407    | 22.078  | ug/l  | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.79  | 63   | 149373   | 128.698 | ug/l  | 98       |
| 59) 2-Hexanone                 | 10.83 | 43   | 155623   | 107.805 | ug/l  | 99       |
| 60) Dibromochloromethane       | 10.99 | 129  | 50431    | 22.288  | ug/l  | 97       |
| 61) 1,2-Dibromoethane          | 11.09 | 107  | 41989    | 21.421  | ug/l  | 98       |
| 64) Tetrachloroethene          | 10.72 | 164  | 62322    | 20.266  | ug/l  | 97       |
| 65) Chlorobenzene              | 11.52 | 112  | 145083   | 21.282  | ug/l  | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 52530    | 21.935  | ug/l  | 99       |
| 67) Ethyl Benzene              | 11.60 | 91   | 266300   | 21.072  | ug/l  | 98       |
| 68) m/p-Xylenes                | 11.70 | 106  | 207205   | 42.889  | ug/l  | 98       |
| 69) o-Xylene                   | 12.03 | 106  | 96422    | 20.921  | ug/l  | 99       |
| 70) Styrene                    | 12.05 | 104  | 165666   | 21.314  | ug/l  | 99       |
| 71) Bromoform                  | 12.20 | 173  | 29668    | 21.551  | ug/l  | # 97     |
| 73) Isopropylbenzene           | 12.33 | 105  | 258520   | 20.305  | ug/l  | 99       |
| 74) N-amyl acetate             | 12.14 | 43   | 71671    | 22.930  | ug/l  | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.58 | 83   | 51498    | 21.543  | ug/l  | 96       |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 41290m   | 20.565  | ug/l  |          |
| 77) Bromobenzene               | 12.61 | 156  | 59753    | 21.091  | ug/l  | 95       |
| 78) n-propylbenzene            | 12.67 | 91   | 312205   | 20.424  | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 12.75 | 91   | 171135   | 20.272  | ug/l  | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 217400   | 20.364  | ug/l  | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 17708    | 19.297  | ug/l  | 96       |
| 82) 4-Chlorotoluene            | 12.86 | 91   | 182756   | 20.480  | ug/l  | 99       |
| 83) tert-Butylbenzene          | 13.08 | 119  | 187251   | 20.712  | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.12 | 105  | 214312   | 20.340  | ug/l  | 97       |
| 85) sec-Butylbenzene           | 13.25 | 105  | 267882   | 20.482  | ug/l  | 99       |
| 86) p-Isopropyltoluene         | 13.37 | 119  | 237996   | 20.873  | ug/l  | 99       |
| 87) 1,3-Dichlorobenzene        | 13.37 | 146  | 116859   | 20.935  | ug/l  | 99       |
| 88) 1,4-Dichlorobenzene        | 13.45 | 146  | 119122   | 21.351  | ug/l  | 97       |
| 89) n-Butylbenzene             | 13.70 | 91   | 233425   | 20.716  | ug/l  | 99       |
| 90) Hexachloroethane           | 13.96 | 117  | 43687    | 20.691  | ug/l  | 100      |
| 91) 1,2-Dichlorobenzene        | 13.74 | 146  | 109697   | 21.715  | ug/l  | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.36 | 75   | 8527     | 18.808  | ug/l  | 95       |

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Quant Title : SW846 8260  
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Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.01 | 180  | 75533    | 21.476 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.11 | 225  | 39442    | 20.722 | ug/l  | 99       |
| 95) Naphthalene            | 15.23 | 128  | 164733   | 20.988 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.42 | 180  | 68467    | 21.600 | ug/l  | 98       |

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

