

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY122419\  
 Data File : VY001039.D  
 Acq On : 24 Dec 2019 11:58  
 Operator : SY/MD  
 Sample : VY1224SBS01  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1224SBS01

Manual Integrations  
 APPROVED

apatel  
 12/26/2019 12:30:01 PM

Quant Time: Dec 25 03:46:03 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y122319S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Dec 23 12:07:44 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.80  | 168  | 323451   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.69  | 114  | 566322   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 499790   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.42 | 152  | 230247   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.15  | 65   | 161141   | 50.51 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.02% |          |
| 35) Dibromofluoromethane    | 7.73  | 113  | 162972   | 48.87 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.74%  |          |
| 50) Toluene-d8              | 10.18 | 98   | 685933   | 52.63 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.26% |          |
| 62) 4-Bromofluorobenzene    | 12.48 | 95   | 224111   | 47.03 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.06%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units | Qvalue |
|-------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.90 | 85   | 61940    | 21.976  | ug/l  | 99     |
| 3) Chloromethane              | 2.12 | 50   | 81031    | 21.124  | ug/l  | 99     |
| 4) Vinyl Chloride             | 2.25 | 62   | 78766    | 21.144  | ug/l  | 98     |
| 5) Bromomethane               | 2.63 | 94   | 51366    | 20.906  | ug/l  | 92     |
| 6) Chloroethane               | 2.79 | 64   | 49997    | 21.548  | ug/l  | 93     |
| 7) Trichlorofluoromethane     | 3.13 | 101  | 113992   | 20.863  | ug/l  | 97     |
| 8) Diethyl Ether              | 3.54 | 74   | 46336    | 20.775  | ug/l  | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.90 | 101  | 74445    | 20.742  | ug/l  | 96     |
| 10) Methyl Iodide             | 4.09 | 142  | 97971    | 19.756  | ug/l  | 100    |
| 11) Tert butyl alcohol        | 4.96 | 59   | 35455    | 101.079 | ug/l  | 96     |
| 12) 1,1-Dichloroethene        | 3.88 | 96   | 76760    | 21.124  | ug/l  | 96     |
| 13) Acrolein                  | 3.74 | 56   | 42591    | 97.999  | ug/l  | 99     |
| 14) Allyl chloride            | 4.49 | 41   | 116521   | 20.642  | ug/l  | 99     |
| 15) Acrylonitrile             | 5.18 | 53   | 115045   | 103.208 | ug/l  | 99     |
| 16) Acetone                   | 3.95 | 43   | 78257    | 106.484 | ug/l  | 89     |
| 17) Carbon Disulfide          | 4.19 | 76   | 244841   | 20.620  | ug/l  | 96     |
| 18) Methyl Acetate            | 4.49 | 43   | 58470    | 20.737  | ug/l  | 97     |
| 19) Methyl tert-butyl Ether   | 5.23 | 73   | 192791   | 20.556  | ug/l  | 99     |
| 20) Methylene Chloride        | 4.72 | 84   | 96118    | 22.220  | ug/l  | 94     |
| 21) trans-1,2-Dichloroethene  | 5.22 | 96   | 87206    | 21.655  | ug/l  | 97     |
| 22) Diisopropyl ether         | 6.13 | 45   | 238655   | 20.916  | ug/l  | 96     |
| 23) Vinyl Acetate             | 6.07 | 43   | 758057   | 105.200 | ug/l  | 100    |
| 24) 1,1-Dichloroethane        | 6.03 | 63   | 141163   | 20.936  | ug/l  | 98     |
| 25) 2-Butanone                | 7.00 | 43   | 134759   | 104.378 | ug/l  | 97     |
| 26) 2,2-Dichloropropane       | 6.99 | 77   | 116670   | 21.061  | ug/l  | 99     |
| 27) cis-1,2-Dichloroethene    | 6.99 | 96   | 93393    | 21.109  | ug/l  | 98     |
| 28) Bromochloromethane        | 7.35 | 49   | 50479    | 19.187  | ug/l  | 97     |
| 29) Tetrahydrofuran           | 7.36 | 42   | 92868    | 101.123 | ug/l  | 99     |
| 30) Chloroform                | 7.52 | 83   | 132756   | 20.822  | ug/l  | 99     |
| 31) Cyclohexane               | 7.79 | 56   | 146379   | 20.645  | ug/l  | 96     |
| 32) 1,1,1-Trichloroethane     | 7.71 | 97   | 111602   | 20.519  | ug/l  | 99     |
| 36) 1,1-Dichloropropene       | 7.93 | 75   | 115075   | 21.300  | ug/l  | 99     |
| 37) Ethyl Acetate             | 7.09 | 43   | 58978    | 19.715  | ug/l  | 97     |
| 38) Carbon Tetrachloride      | 7.91 | 117  | 98565    | 20.823  | ug/l  | 96     |

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Quant Time: Dec 25 03:46:03 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y122319S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Dec 23 12:07:44 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.19  | 83   | 153778   | 21.434  | ug/l   | 97       |
| 40) Benzene                    | 8.17  | 78   | 340703   | 20.903  | ug/l   | 95       |
| 41) Methacrylonitrile          | 7.32  | 41   | 21565m   | 16.627  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.25  | 62   | 81297    | 20.862  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.28  | 43   | 109973   | 19.859  | ug/l   | 98       |
| 44) Trichloroethene            | 8.94  | 130  | 89559    | 20.854  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.22  | 63   | 84235    | 20.601  | ug/l   | 100      |
| 46) Dibromomethane             | 9.31  | 93   | 43516    | 20.645  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.50  | 83   | 98949    | 20.267  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.30  | 41   | 47698    | 20.184  | ug/l   | 94       |
| 49) 1,4-Dioxane                | 9.30  | 88   | 13537    | 439.038 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 10.07 | 43   | 296407   | 102.692 | ug/l   | 100      |
| 52) Toluene                    | 10.24 | 92   | 211307   | 21.063  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 108478   | 20.472  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 9.93  | 75   | 132641   | 20.818  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.64 | 97   | 67545    | 21.465  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.51 | 69   | 90942    | 20.307  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.79 | 76   | 116054   | 21.041  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.78  | 63   | 171834   | 99.340  | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.83 | 43   | 203473   | 101.879 | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.98 | 129  | 69997    | 20.825  | ug/l   | 96       |
| 61) 1,2-Dibromoethane          | 11.09 | 107  | 62962    | 20.924  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.72 | 164  | 95532    | 22.092  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.52 | 112  | 215543   | 20.791  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 73668    | 21.533  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.59 | 91   | 399987   | 21.450  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.70 | 106  | 300512   | 42.444  | ug/l   | 99       |
| 69) o-Xylene                   | 12.02 | 106  | 142285   | 21.361  | ug/l   | 99       |
| 70) Styrene                    | 12.04 | 104  | 240706   | 21.253  | ug/l   | 99       |
| 71) Bromoform                  | 12.20 | 173  | 40771    | 21.402  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.33 | 105  | 380263   | 21.342  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.14 | 43   | 94557    | 20.201  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.58 | 83   | 71825    | 20.463  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 48752m   | 17.175  | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 84159    | 21.002  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.67 | 91   | 457157   | 21.057  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.75 | 91   | 255008   | 21.269  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 312073   | 21.368  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 27352    | 20.552  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.85 | 91   | 264856   | 21.268  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 13.07 | 119  | 259349   | 21.154  | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.11 | 105  | 310698   | 21.170  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.25 | 105  | 385560   | 21.332  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.36 | 119  | 338826   | 21.665  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.36 | 146  | 165215   | 21.467  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.44 | 146  | 162436   | 20.922  | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.69 | 91   | 342343   | 21.757  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.95 | 117  | 61004    | 20.704  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.73 | 146  | 151328   | 21.316  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.35 | 75   | 11891    | 20.248  | ug/l   | 98       |

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ALS Vial : 5 Sample Multiplier: 1

Instrument :  
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Quant Title : SW846 8260  
QLast Update : Mon Dec 23 12:07:44 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.00 | 180  | 101538   | 21.189 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.11 | 225  | 50292    | 22.055 | ug/l  | 100      |
| 95) Naphthalene            | 15.23 | 128  | 233594   | 20.728 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.42 | 180  | 90433    | 21.162 | ug/l  | 99       |

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

