

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY121719\  
 Data File : VY000973.D  
 Acq On : 17 Dec 2019 13:14  
 Operator : SY/MD  
 Sample : VY1217SBS01  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY1217SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 12/18/2019 1:02:00 PM

Quant Time: Dec 18 06:06:43 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  | 284423   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.69  | 114  | 502200   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 445983   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.42 | 152  | 212279   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.15   | 65  | 155562   | 51.47 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.94% |      |
| 35) Dibromofluoromethane  | 7.73   | 113 | 152731   | 52.18 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.36% |      |
| 50) Toluene-d8            | 10.18  | 98  | 627661   | 53.64 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.28% |      |
| 62) 4-Bromofluorobenzene  | 12.48  | 95  | 209586   | 47.69 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.38%  |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.90 | 85  | 54874  | 17.923  | ug/l | 95     |
| 3) Chloromethane              | 2.12 | 50  | 74169  | 19.652  | ug/l | 100    |
| 4) Vinyl Chloride             | 2.26 | 62  | 71086  | 19.112  | ug/l | 93     |
| 5) Bromomethane               | 2.64 | 94  | 47452  | 19.625  | ug/l | 95     |
| 6) Chloroethane               | 2.79 | 64  | 45440  | 19.925  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.13 | 101 | 102124 | 20.034  | ug/l | 93     |
| 8) Diethyl Ether              | 3.54 | 74  | 41696  | 21.733  | ug/l | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.91 | 101 | 65444  | 20.790  | ug/l | 97     |
| 10) Methyl Iodide             | 4.10 | 142 | 77831  | 19.638  | ug/l | 98     |
| 11) Tert butyl alcohol        | 4.97 | 59  | 33215  | 109.238 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.88 | 96  | 65483  | 20.998  | ug/l | 97     |
| 13) Acrolein                  | 3.74 | 56  | 28645  | 95.637  | ug/l | 95     |
| 14) Allyl chloride            | 4.48 | 41  | 109465 | 20.471  | ug/l | 97     |
| 15) Acrylonitrile             | 5.18 | 53  | 108872 | 109.894 | ug/l | 99     |
| 16) Acetone                   | 3.96 | 43  | 76683  | 110.606 | ug/l | 98     |
| 17) Carbon Disulfide          | 4.20 | 76  | 198158 | 19.647  | ug/l | 99     |
| 18) Methyl Acetate            | 4.49 | 43  | 61255  | 21.130  | ug/l | 97     |
| 19) Methyl tert-butyl Ether   | 5.23 | 73  | 178023 | 21.375  | ug/l | 96     |
| 20) Methylene Chloride        | 4.72 | 84  | 84734  | 23.186  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 5.23 | 96  | 73742  | 20.804  | ug/l | 97     |
| 22) Diisopropyl ether         | 6.13 | 45  | 231148 | 21.032  | ug/l | 95     |
| 23) Vinyl Acetate             | 6.07 | 43  | 715481 | 107.086 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 6.03 | 63  | 126188 | 20.832  | ug/l | 97     |
| 25) 2-Butanone                | 7.00 | 43  | 133526 | 104.260 | ug/l | 96     |
| 26) 2,2-Dichloropropane       | 7.00 | 77  | 105144 | 20.624  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.00 | 96  | 82551  | 21.545  | ug/l | 98     |
| 28) Bromochloromethane        | 7.35 | 49  | 28768  | 14.446  | ug/l | 97     |
| 29) Tetrahydrofuran           | 7.36 | 42  | 92714  | 109.247 | ug/l | 98     |
| 30) Chloroform                | 7.52 | 83  | 123228 | 20.279  | ug/l | 100    |
| 31) Cyclohexane               | 7.79 | 56  | 128688 | 20.055  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.71 | 97  | 103051 | 20.537  | ug/l | 97     |
| 36) 1,1-Dichloropropene       | 7.93 | 75  | 100455 | 20.118  | ug/l | 100    |
| 37) Ethyl Acetate             | 7.08 | 43  | 61764  | 21.422  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 7.91 | 117 | 87786  | 19.741  | ug/l | 97     |

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Quant Time: Dec 18 06:06:43 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) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.19  | 83   | 128477   | 19.420  | ug/l   | 98       |
| 40) Benzene                    | 8.17  | 78   | 300549   | 20.664  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.32  | 41   | 25545m   | 16.810  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.24  | 62   | 75797    | 19.816  | ug/l   | 97       |
| 43) Isopropyl Acetate          | 8.28  | 43   | 109572   | 20.166  | ug/l   | 98       |
| 44) Trichloroethene            | 8.94  | 130  | 78168    | 20.912  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.22  | 63   | 76949    | 21.062  | ug/l   | 96       |
| 46) Dibromomethane             | 9.31  | 93   | 40390    | 21.159  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.50  | 83   | 93050    | 20.750  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.30  | 41   | 47022    | 19.681  | ug/l   | 94       |
| 49) 1,4-Dioxane                | 9.31  | 88   | 11155    | 412.425 | ug/l # | 94       |
| 51) 4-Methyl-2-Pentanone       | 10.07 | 43   | 298192   | 106.220 | ug/l   | 99       |
| 52) Toluene                    | 10.24 | 92   | 185177   | 20.563  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 101069   | 20.978  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.93  | 75   | 116062   | 20.381  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.64 | 97   | 59185    | 20.986  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.51 | 69   | 83287    | 20.644  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.79 | 76   | 105637   | 21.491  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.78  | 63   | 157409   | 96.763  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.83 | 43   | 201077   | 98.296  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.99 | 129  | 62670    | 20.642  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.09 | 107  | 56650    | 21.314  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.72 | 164  | 82194    | 21.212  | ug/l   | 99       |
| 65) Chlorobenzene              | 11.51 | 112  | 194574   | 20.989  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 64490    | 20.642  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.59 | 91   | 349823   | 20.262  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.70 | 106  | 267035   | 41.207  | ug/l   | 99       |
| 69) o-Xylene                   | 12.02 | 106  | 126909   | 21.004  | ug/l   | 96       |
| 70) Styrene                    | 12.04 | 104  | 218266   | 21.096  | ug/l   | 97       |
| 71) Bromoform                  | 12.20 | 173  | 35779    | 20.306  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.33 | 105  | 336039   | 19.881  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.14 | 43   | 94483    | 20.084  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.58 | 83   | 68688    | 20.625  | ug/l   | 96       |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 58606m   | 24.367  | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 75406    | 20.581  | ug/l   | 97       |
| 78) n-propylbenzene            | 12.67 | 91   | 408484   | 19.793  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.75 | 91   | 222899   | 19.550  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 276410   | 19.751  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 25050    | 20.459  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.85 | 91   | 237666   | 20.233  | ug/l   | 97       |
| 83) tert-Butylbenzene          | 13.07 | 119  | 232870   | 19.792  | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.12 | 105  | 275993   | 19.712  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.25 | 105  | 340758   | 19.914  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.36 | 119  | 300085   | 20.162  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.36 | 146  | 146434   | 20.374  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.44 | 146  | 146010   | 20.517  | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.69 | 91   | 299276   | 19.888  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.95 | 117  | 54749    | 19.969  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.74 | 146  | 130246   | 20.147  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.36 | 75   | 11892    | 21.329  | ug/l   | 95       |

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Sample : VY1217SBSD01  
Misc : 5.00G/5ML/MSVOA Y/SOIL  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
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12/18/2019 1:02:00 PM

Quant Time: Dec 18 06:06:43 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) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.00 | 180  | 90071    | 20.589 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.11 | 225  | 41864    | 19.302 | ug/l  | 97       |
| 95) Naphthalene            | 15.23 | 128  | 210815   | 20.754 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.42 | 180  | 80238    | 20.534 | ug/l  | 99       |

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

