

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY011020\  
 Data File : VY001149.D  
 Acq On : 10 Jan 2020 15:23  
 Operator : SY/MD  
 Sample : VSTDIC100  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDIC100

Manual Integrations  
 APPROVED

MMDadoda  
 1/13/2020 12:39:01 PM

Quant Time: Jan 10 15:42:59 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y011020S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jan 10 15:28:29 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.80  | 168  | 223345   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.69  | 114  | 389031   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 342819   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.42 | 152  | 155040   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |        |         |      |
|---------------------------|--------|-----|----------|--------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.15   | 65  | 238073   | 121.82 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 243.64% |      |
| 35) Dibromofluoromethane  | 7.73   | 113 | 216636   | 97.71  | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 195.42% |      |
| 50) Toluene-d8            | 10.18  | 98  | 893644   | 108.13 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 216.26% |      |
| 62) 4-Bromofluorobenzene  | 12.48  | 95  | 341678   | 107.47 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 214.94% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.90 | 85  | 172383  | 106.468 | ug/l | 99     |
| 3) Chloromethane              | 2.12 | 50  | 235708  | 174.797 | ug/l | 99     |
| 4) Vinyl Chloride             | 2.25 | 62  | 250046  | 180.784 | ug/l | 100    |
| 5) Bromomethane               | 2.65 | 94  | 129309  | 138.851 | ug/l | 97     |
| 6) Chloroethane               | 2.79 | 64  | 139160  | 153.842 | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.13 | 101 | 344736  | 107.885 | ug/l | 99     |
| 8) Diethyl Ether              | 3.54 | 74  | 136221  | 116.201 | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.90 | 101 | 224996  | 111.651 | ug/l | 99     |
| 10) Methyl Iodide             | 4.10 | 142 | 310626  | 101.644 | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.97 | 59  | 108299  | 571.286 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.88 | 96  | 230446  | 111.314 | ug/l | 99     |
| 13) Acrolein                  | 3.74 | 56  | 98557   | 553.533 | ug/l | 99     |
| 14) Allyl chloride            | 4.49 | 41  | 397493  | 163.512 | ug/l | 99     |
| 15) Acrylonitrile             | 5.18 | 53  | 340481  | 663.757 | ug/l | 98     |
| 16) Acetone                   | 3.96 | 43  | 271129  | 703.193 | ug/l | 98     |
| 17) Carbon Disulfide          | 4.20 | 76  | 755205  | 120.894 | ug/l | 99     |
| 18) Methyl Acetate            | 4.49 | 43  | 173055  | 144.343 | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.23 | 73  | 650182  | 126.319 | ug/l | 99     |
| 20) Methylene Chloride        | 4.72 | 84  | 252802  | 103.979 | ug/l | 96     |
| 21) trans-1,2-Dichloroethene  | 5.23 | 96  | 263786  | 113.954 | ug/l | 98     |
| 22) Diisopropyl ether         | 6.13 | 45  | 831553  | 166.489 | ug/l | 99     |
| 23) Vinyl Acetate             | 6.07 | 43  | 2660165 | 842.201 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.03 | 63  | 443439  | 135.767 | ug/l | 98     |
| 25) 2-Butanone                | 7.00 | 43  | 426668  | 677.286 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 6.99 | 77  | 390944  | 112.524 | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.00 | 96  | 285657  | 104.726 | ug/l | 98     |
| 28) Bromochloromethane        | 7.35 | 49  | 197190  | 153.278 | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.36 | 42  | 298395  | 700.379 | ug/l | 98     |
| 30) Chloroform                | 7.52 | 83  | 430326  | 109.660 | ug/l | 99     |
| 31) Cyclohexane               | 7.79 | 56  | 445312  | 117.098 | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.71 | 97  | 380178  | 105.110 | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 7.93 | 75  | 356925  | 105.046 | ug/l | 99     |
| 37) Ethyl Acetate             | 7.08 | 43  | 207439  | 137.823 | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.91 | 117 | 330535  | 95.562  | ug/l | 97     |

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 Sample : VSTDICC100  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
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 1/13/2020 12:39:01 PM

Quant Time: Jan 10 15:42:59 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y011020S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jan 10 15:28:29 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.19  | 83   | 483200   | 102.953  | ug/l   | 98       |
| 40) Benzene                    | 8.17  | 78   | 1041598  | 100.377  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.33  | 41   | 97280m   | 130.389  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.25  | 62   | 292122   | 114.656  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.28  | 43   | 399886   | 134.479  | ug/l   | 99       |
| 44) Trichloroethene            | 8.94  | 130  | 270557   | 88.718   | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.22  | 63   | 256623   | 109.144  | ug/l   | 98       |
| 46) Dibromomethane             | 9.31  | 93   | 141462   | 102.888  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.50  | 83   | 345713   | 110.417  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.30  | 41   | 185405   | 143.098  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.30  | 88   | 34483    | 1694.350 | ug/l   | 94       |
| 51) 4-Methyl-2-Pentanone       | 10.07 | 43   | 1012858  | 706.714  | ug/l   | 100      |
| 52) Toluene                    | 10.24 | 92   | 669607   | 104.533  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 388335   | 117.311  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 9.93  | 75   | 434560   | 111.805  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.64 | 97   | 205141   | 103.968  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.51 | 69   | 322260   | 123.252  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.79 | 76   | 357833   | 114.733  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.78  | 63   | 515894   | 549.248  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.83 | 43   | 718166   | 748.978  | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.99 | 129  | 239851   | 106.576  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.09 | 107  | 201764   | 105.568  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.72 | 164  | 214521   | 70.738   | ug/l   | 97       |
| 65) Chlorobenzene              | 11.52 | 112  | 678512   | 94.265   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 233307   | 92.235   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.59 | 91   | 1240343  | 98.296   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.70 | 106  | 933965   | 187.558  | ug/l   | 98       |
| 69) o-Xylene                   | 12.03 | 106  | 447766   | 94.726   | ug/l   | 99       |
| 70) Styrene                    | 12.04 | 104  | 797353   | 99.254   | ug/l   | 100      |
| 71) Bromoform                  | 12.20 | 173  | 145163   | 95.989   | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.33 | 105  | 1199179  | 103.045  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.14 | 43   | 379829   | 155.179  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.58 | 83   | 251765   | 118.200  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 161952m  | 101.218  | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 259352   | 92.952   | ug/l   | 98       |
| 78) n-propylbenzene            | 12.67 | 91   | 1433155  | 103.724  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.75 | 91   | 830757   | 107.777  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 991422   | 100.368  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 103060   | 125.805  | ug/l # | 97       |
| 82) 4-Chlorotoluene            | 12.85 | 91   | 887329   | 110.988  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.07 | 119  | 821321   | 98.250   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.12 | 105  | 968334   | 97.895   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.25 | 105  | 1182330  | 100.559  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.36 | 119  | 1001795  | 94.920   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.36 | 146  | 474157   | 90.644   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.44 | 146  | 494104   | 93.639   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.69 | 91   | 1012889  | 100.833  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.95 | 117  | 199919   | 101.315  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.74 | 146  | 449668   | 93.581   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.35 | 75   | 43049    | 112.607  | ug/l   | 99       |

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Sample : VSTDICC100  
Misc : 5.00G/5ML/MSVOA Y/SOIL  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDICC100

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Quant Title : SW846 8260  
QLast Update : Fri Jan 10 15:28:29 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.00 | 180  | 277503   | 84.311 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.11 | 225  | 138514   | 83.215 | ug/l  | 99       |
| 95) Naphthalene            | 15.23 | 128  | 662931   | 87.590 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.42 | 180  | 248786   | 84.787 | ug/l  | 99       |

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

