

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY030220\  
 Data File : VY001809.D  
 Acq On : 02 Mar 2020 10:31  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 3/3/2020 11:11:39 AM

Quant Time: Mar 02 11:20:56 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y021720S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Feb 17 12:19:53 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.81  | 168  | 184198   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.71  | 114  | 330052   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.50 | 117  | 292917   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.44 | 152  | 137868   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |       |
|---------------------------|--------|-----|----------|-------|--------|-------|
| 33) 1,2-Dichloroethane-d4 | 8.16   | 65  | 90525    | 45.69 | ug/l   | 0.00  |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.38% |       |
| 35) Dibromofluoromethane  | 7.74   | 113 | 88598    | 46.87 | ug/l   | -0.01 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.74% |       |
| 50) Toluene-d8            | 10.19  | 98  | 359806   | 48.58 | ug/l   | 0.00  |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.16% |       |
| 62) 4-Bromofluorobenzene  | 12.49  | 95  | 128236   | 44.57 | ug/l   | 0.00  |
| Spiked Amount             | 50.000 |     | Recovery | =     | 89.14% |       |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.91 | 85  | 87586   | 48.780  | ug/l | 100    |
| 3) Chloromethane              | 2.13 | 50  | 111961  | 46.360  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.27 | 62  | 113524  | 46.605  | ug/l | 98     |
| 5) Bromomethane               | 2.66 | 94  | 70368   | 46.222  | ug/l | 97     |
| 6) Chloroethane               | 2.81 | 64  | 69982   | 46.623  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.15 | 101 | 153155  | 49.126  | ug/l | 98     |
| 8) Diethyl Ether              | 3.55 | 74  | 60617   | 49.322  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.93 | 101 | 99510   | 50.783  | ug/l | 100    |
| 10) Methyl Iodide             | 4.12 | 142 | 119252  | 49.726  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.99 | 59  | 49803   | 213.254 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 3.90 | 96  | 99062   | 49.566  | ug/l | 98     |
| 13) Acrolein                  | 3.76 | 56  | 54174   | 270.730 | ug/l | 97     |
| 14) Allyl chloride            | 4.51 | 41  | 174310  | 49.006  | ug/l | 99     |
| 15) Acrylonitrile             | 5.19 | 53  | 162252  | 257.559 | ug/l | 99     |
| 16) Acetone                   | 3.97 | 43  | 190024  | 277.181 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.22 | 76  | 303577  | 45.497  | ug/l | 99     |
| 18) Methyl Acetate            | 4.51 | 43  | 74713   | 50.043  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.25 | 73  | 271769  | 48.840  | ug/l | 99     |
| 20) Methylene Chloride        | 4.75 | 84  | 112939  | 46.379  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.25 | 96  | 111067  | 48.708  | ug/l | 100    |
| 22) Diisopropyl ether         | 6.15 | 45  | 354111  | 48.478  | ug/l | 99     |
| 23) Vinyl Acetate             | 6.09 | 43  | 1158062 | 243.052 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 6.05 | 63  | 195518  | 50.080  | ug/l | 99     |
| 25) 2-Butanone                | 7.01 | 43  | 239912  | 257.609 | ug/l | 97     |
| 26) 2,2-Dichloropropane       | 7.01 | 77  | 165084  | 48.602  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 7.01 | 96  | 122395  | 48.628  | ug/l | 99     |
| 28) Bromochloromethane        | 7.36 | 49  | 87203   | 53.620  | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.37 | 42  | 136299  | 242.138 | ug/l | 100    |
| 30) Chloroform                | 7.53 | 83  | 185123  | 48.529  | ug/l | 99     |
| 31) Cyclohexane               | 7.80 | 56  | 191404  | 45.982  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 7.72 | 97  | 158969  | 49.583  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.94 | 75  | 152586  | 48.399  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.10 | 43  | 91257   | 48.498  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.92 | 117 | 134035  | 48.403  | ug/l | 99     |

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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 39) Methylcyclohexane          | 9.20  | 83   | 198009   | 47.342  | ug/l  | 98       |
| 40) Benzene                    | 8.18  | 78   | 458506   | 49.450  | ug/l  | 99       |
| 41) Methacrylonitrile          | 7.35  | 41   | 48851m   | 51.705  | ug/l  |          |
| 42) 1,2-Dichloroethane         | 8.25  | 62   | 116286   | 46.036  | ug/l  | 99       |
| 43) Isopropyl Acetate          | 8.29  | 43   | 171464   | 48.027  | ug/l  | 99       |
| 44) Trichloroethene            | 8.96  | 130  | 113096   | 48.862  | ug/l  | 98       |
| 45) 1,2-Dichloropropane        | 9.23  | 63   | 117265   | 50.500  | ug/l  | 96       |
| 46) Dibromomethane             | 9.32  | 93   | 59711    | 49.163  | ug/l  | 99       |
| 47) Bromodichloromethane       | 9.51  | 83   | 143954   | 49.110  | ug/l  | 99       |
| 48) Methyl methacrylate        | 9.30  | 41   | 75729    | 46.901  | ug/l  | 97       |
| 49) 1,4-Dioxane                | 9.32  | 88   | 16337    | 952.362 | ug/l  | 99       |
| 51) 4-Methyl-2-Pentanone       | 10.08 | 43   | 449153   | 244.860 | ug/l  | 100      |
| 52) Toluene                    | 10.25 | 92   | 282701   | 48.879  | ug/l  | 100      |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 159577   | 49.244  | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 9.94  | 75   | 186318   | 49.956  | ug/l  | 97       |
| 55) 1,1,2-Trichloroethane      | 10.66 | 97   | 89700    | 50.087  | ug/l  | 99       |
| 56) Ethyl methacrylate         | 10.52 | 69   | 133621   | 49.735  | ug/l  | 98       |
| 57) 1,3-Dichloropropane        | 10.80 | 76   | 156969   | 49.329  | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.80  | 63   | 241556   | 238.167 | ug/l  | 100      |
| 59) 2-Hexanone                 | 10.85 | 43   | 348074   | 252.902 | ug/l  | 99       |
| 60) Dibromochloromethane       | 11.00 | 129  | 98217    | 49.743  | ug/l  | 100      |
| 61) 1,2-Dibromoethane          | 11.10 | 107  | 85365    | 50.412  | ug/l  | 100      |
| 64) Tetrachloroethene          | 10.73 | 164  | 89470    | 48.657  | ug/l  | 98       |
| 65) Chlorobenzene              | 11.53 | 112  | 291320   | 49.815  | ug/l  | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.60 | 131  | 97004    | 49.172  | ug/l  | 100      |
| 67) Ethyl Benzene              | 11.60 | 91   | 540179   | 49.774  | ug/l  | 99       |
| 68) m/p-Xylenes                | 11.71 | 106  | 402830   | 99.368  | ug/l  | 98       |
| 69) o-Xylene                   | 12.04 | 106  | 190971   | 49.551  | ug/l  | 97       |
| 70) Styrene                    | 12.05 | 104  | 332758   | 49.680  | ug/l  | 99       |
| 71) Bromoform                  | 12.22 | 173  | 56250    | 49.894  | ug/l  | 100      |
| 73) Isopropylbenzene           | 12.34 | 105  | 513730   | 48.912  | ug/l  | 99       |
| 74) N-amyl acetate             | 12.15 | 43   | 157461   | 46.976  | ug/l  | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.60 | 83   | 114909   | 51.239  | ug/l  | 99       |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 88051m   | 55.675  | ug/l  |          |
| 77) Bromobenzene               | 12.62 | 156  | 109137   | 47.933  | ug/l  | 97       |
| 78) n-propylbenzene            | 12.68 | 91   | 631441   | 49.363  | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 12.77 | 91   | 348442   | 48.567  | ug/l  | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.82 | 105  | 422754   | 48.625  | ug/l  | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.39 | 75   | 41305    | 49.549  | ug/l  | 96       |
| 82) 4-Chlorotoluene            | 12.86 | 91   | 369132   | 48.783  | ug/l  | 99       |
| 83) tert-Butylbenzene          | 13.08 | 119  | 349146   | 48.015  | ug/l  | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.13 | 105  | 420358   | 48.497  | ug/l  | 99       |
| 85) sec-Butylbenzene           | 13.26 | 105  | 526728   | 49.252  | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 13.38 | 119  | 452661   | 48.722  | ug/l  | 98       |
| 87) 1,3-Dichlorobenzene        | 13.38 | 146  | 214854   | 48.656  | ug/l  | 99       |
| 88) 1,4-Dichlorobenzene        | 13.45 | 146  | 217294   | 48.681  | ug/l  | 99       |
| 89) n-Butylbenzene             | 13.70 | 91   | 464670   | 48.947  | ug/l  | 100      |
| 90) Hexachloroethane           | 13.97 | 117  | 85882    | 49.063  | ug/l  | 99       |
| 91) 1,2-Dichlorobenzene        | 13.75 | 146  | 196264   | 48.162  | ug/l  | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.37 | 75   | 17044    | 46.051  | ug/l  | 94       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.02 | 180  | 124905   | 46.253 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.13 | 225  | 60850    | 45.309 | ug/l  | 99       |
| 95) Naphthalene            | 15.25 | 128  | 303389   | 48.725 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.44 | 180  | 112157   | 47.208 | ug/l  | 99       |

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

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