

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY041620\  
 Data File : VY002355.D  
 Acq On : 16 Apr 2020 10:24  
 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  
 4/17/2020 11:51:53 AM

Quant Time: Apr 17 07:15:53 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y040820S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Apr 08 15:15:02 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.80  | 168  | 164476   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.70  | 114  | 291335   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 256343   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.43 | 152  | 112514   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.15   | 65  | 74506    | 40.73 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 81.46% |      |
| 35) Dibromofluoromethane  | 7.73   | 113 | 82684    | 47.70 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.40% |      |
| 50) Toluene-d8            | 10.18  | 98  | 344969   | 47.54 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.08% |      |
| 62) 4-Bromofluorobenzene  | 12.48  | 95  | 111842   | 46.72 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.44% |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.91 | 85  | 86990  | 52.331  | ug/l | 96     |
| 3) Chloromethane              | 2.12 | 50  | 104633 | 50.014  | ug/l | 98     |
| 4) Vinyl Chloride             | 2.26 | 62  | 115295 | 51.776  | ug/l | 100    |
| 5) Bromomethane               | 2.66 | 94  | 71096  | 51.702  | ug/l | 98     |
| 6) Chloroethane               | 2.80 | 64  | 66197  | 51.546  | ug/l | 96     |
| 7) Trichlorofluoromethane     | 3.14 | 101 | 148906 | 51.780  | ug/l | 97     |
| 8) Diethyl Ether              | 3.54 | 74  | 60614  | 49.580  | ug/l | 94     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.91 | 101 | 104558 | 53.525  | ug/l | 99     |
| 10) Methyl Iodide             | 4.10 | 142 | 122075 | 53.762  | ug/l | 97     |
| 11) Tert butyl alcohol        | 4.97 | 59  | 39352  | 194.536 | ug/l | 97     |
| 12) 1,1-Dichloroethene        | 3.88 | 96  | 108793 | 54.780  | ug/l | 94     |
| 13) Acrolein                  | 3.74 | 56  | 50175  | 212.752 | ug/l | 99     |
| 14) Allyl chloride            | 4.49 | 41  | 154860 | 48.287  | ug/l | 96     |
| 15) Acrylonitrile             | 5.18 | 53  | 136468 | 218.284 | ug/l | 99     |
| 16) Acetone                   | 3.96 | 43  | 128637 | 267.020 | ug/l | 94     |
| 17) Carbon Disulfide          | 4.21 | 76  | 348274 | 52.803  | ug/l | 98     |
| 18) Methyl Acetate            | 4.49 | 43  | 61247  | 40.987  | ug/l | 95     |
| 19) Methyl tert-butyl Ether   | 5.24 | 73  | 245643 | 47.048  | ug/l | 96     |
| 20) Methylene Chloride        | 4.72 | 84  | 114687 | 48.435  | ug/l | 94     |
| 21) trans-1,2-Dichloroethene  | 5.23 | 96  | 117522 | 52.720  | ug/l | 96     |
| 22) Diisopropyl ether         | 6.13 | 45  | 309797 | 48.001  | ug/l | 97     |
| 23) Vinyl Acetate             | 6.08 | 43  | 913956 | 222.217 | ug/l | 97     |
| 24) 1,1-Dichloroethane        | 6.03 | 63  | 186651 | 50.845  | ug/l | 98     |
| 25) 2-Butanone                | 7.00 | 43  | 166916 | 218.937 | ug/l | 93     |
| 26) 2,2-Dichloropropane       | 6.99 | 77  | 153340 | 49.935  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 7.00 | 96  | 127707 | 52.554  | ug/l | 94     |
| 28) Bromochloromethane        | 7.35 | 49  | 70539  | 44.513  | ug/l | 94     |
| 29) Tetrahydrofuran           | 7.35 | 42  | 99555  | 197.545 | ug/l | 95     |
| 30) Chloroform                | 7.52 | 83  | 179308 | 51.816  | ug/l | 96     |
| 31) Cyclohexane               | 7.79 | 56  | 187584 | 48.680  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 7.71 | 97  | 150330 | 52.193  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.92 | 75  | 150342 | 52.391  | ug/l | 97     |
| 37) Ethyl Acetate             | 7.08 | 43  | 65755  | 40.110  | ug/l | 95     |
| 38) Carbon Tetrachloride      | 7.91 | 117 | 131026 | 53.380  | ug/l | 97     |

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Quant Time: Apr 17 07:15:53 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y040820S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Apr 08 15:15:02 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.19  | 83   | 207736   | 53.217  | ug/l   | 96       |
| 40) Benzene                    | 8.17  | 78   | 462022   | 53.067  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.34  | 41   | 44103m   | 45.605  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.25  | 62   | 100550   | 46.622  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.28  | 43   | 125123   | 41.850  | ug/l   | 96       |
| 44) Trichloroethene            | 8.94  | 130  | 131318   | 51.302  | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 9.22  | 63   | 111600   | 51.662  | ug/l   | 99       |
| 46) Dibromomethane             | 9.31  | 93   | 56118    | 49.685  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.50  | 83   | 133927   | 51.677  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.30  | 41   | 54875    | 40.933  | ug/l   | 92       |
| 49) 1,4-Dioxane                | 9.30  | 88   | 14316    | 896.029 | ug/l   | 94       |
| 51) 4-Methyl-2-Pentanone       | 10.08 | 43   | 318359   | 204.347 | ug/l   | 96       |
| 52) Toluene                    | 10.25 | 92   | 281509   | 53.652  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 139948   | 49.562  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 9.93  | 75   | 176332   | 51.942  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.65 | 97   | 82905    | 50.136  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.52 | 69   | 112759   | 47.777  | ug/l   | 92       |
| 57) 1,3-Dichloropropane        | 10.80 | 76   | 143147   | 49.250  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.79  | 63   | 275898   | 225.743 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.84 | 43   | 232451   | 214.983 | ug/l   | 95       |
| 60) Dibromochloromethane       | 10.99 | 129  | 90783    | 51.486  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.10 | 107  | 78404    | 49.804  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.72 | 164  | 139834   | 53.955  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.52 | 112  | 289815   | 54.388  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 94304    | 53.603  | ug/l   | 97       |
| 67) Ethyl Benzene              | 11.59 | 91   | 529418   | 54.272  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.70 | 106  | 398789   | 109.147 | ug/l   | 97       |
| 69) o-Xylene                   | 12.03 | 106  | 185695   | 54.135  | ug/l   | 98       |
| 70) Styrene                    | 12.05 | 104  | 323763   | 54.403  | ug/l   | 98       |
| 71) Bromoform                  | 12.21 | 173  | 48666    | 50.867  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.33 | 105  | 500063   | 56.573  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.14 | 43   | 112469   | 44.824  | ug/l   | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.59 | 83   | 57128    | 53.419  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 58679m   | 44.912  | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 106941   | 54.991  | ug/l   | 95       |
| 78) n-propylbenzene            | 12.67 | 91   | 607135   | 55.227  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.76 | 91   | 323722   | 54.185  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 404247   | 55.298  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 34045    | 50.681  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 12.86 | 91   | 335459   | 53.573  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 13.08 | 119  | 340453   | 55.600  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.13 | 105  | 399376   | 54.710  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.26 | 105  | 503473   | 55.195  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.38 | 119  | 433563   | 55.225  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.37 | 146  | 205181   | 54.441  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.45 | 146  | 202490   | 52.929  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.70 | 91   | 440243   | 54.707  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.97 | 117  | 81293    | 54.339  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.75 | 146  | 181184   | 52.906  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.36 | 75   | 11334    | 43.820  | ug/l   | 94       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.02 | 180  | 111579   | 49.846 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.12 | 225  | 60257    | 53.446 | ug/l  | 100      |
| 95) Naphthalene            | 15.24 | 128  | 223809   | 45.664 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.43 | 180  | 92400    | 47.538 | ug/l  | 99       |

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

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