

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY012420\  
 Data File : VY001382.D  
 Acq On : 24 Jan 2020 15:11  
 Operator : SY/MD  
 Sample : VY0124SBS01  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY0124SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 1/27/2020 12:02:25 PM

Quant Time: Jan 25 04:31:09 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y012120S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jan 23 01:21:47 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.81  | 168  | 198540   | 50.00 | ug/l  | -0.01    |
| 34) 1,4-Difluorobenzene    | 8.71  | 114  | 346062   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.50 | 117  | 305148   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.43 | 152  | 146811   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |       |
|---------------------------|--------|-----|----------|-------|---------|-------|
| 33) 1,2-Dichloroethane-d4 | 8.16   | 65  | 111410   | 51.57 | ug/l    | -0.01 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.14% |       |
| 35) Dibromofluoromethane  | 7.74   | 113 | 102532   | 50.48 | ug/l    | -0.01 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.96% |       |
| 50) Toluene-d8            | 10.19  | 98  | 419165   | 53.12 | ug/l    | 0.00  |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.24% |       |
| 62) 4-Bromofluorobenzene  | 12.49  | 95  | 153742   | 48.92 | ug/l    | 0.00  |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.84%  |       |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.90 | 85  | 36246  | 23.150  | ug/l | 99     |
| 3) Chloromethane              | 2.12 | 50  | 52575  | 22.218  | ug/l | 98     |
| 4) Vinyl Chloride             | 2.26 | 62  | 53922  | 21.854  | ug/l | 95     |
| 5) Bromomethane               | 2.64 | 94  | 33130  | 19.937  | ug/l | 98     |
| 6) Chloroethane               | 2.80 | 64  | 33953  | 21.535  | ug/l | 94     |
| 7) Trichlorofluoromethane     | 3.13 | 101 | 70016  | 22.178  | ug/l | 98     |
| 8) Diethyl Ether              | 3.54 | 74  | 26500  | 19.885  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.91 | 101 | 44211  | 21.990  | ug/l | 100    |
| 10) Methyl Iodide             | 4.10 | 142 | 52050  | 19.629  | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.97 | 59  | 34260  | 115.726 | ug/l | 96     |
| 12) 1,1-Dichloroethene        | 3.88 | 96  | 44854  | 21.278  | ug/l | 91     |
| 13) Acrolein                  | 3.74 | 56  | 20237  | 119.557 | ug/l | 99     |
| 14) Allyl chloride            | 4.50 | 41  | 79162  | 21.058  | ug/l | 99     |
| 15) Acrylonitrile             | 5.18 | 53  | 71489  | 104.796 | ug/l | 100    |
| 16) Acetone                   | 3.96 | 43  | 66816  | 113.258 | ug/l | 97     |
| 17) Carbon Disulfide          | 4.21 | 76  | 140204 | 21.148  | ug/l | 98     |
| 18) Methyl Acetate            | 4.49 | 43  | 36998  | 20.308  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.24 | 73  | 126719 | 20.531  | ug/l | 99     |
| 20) Methylene Chloride        | 4.73 | 84  | 53006  | 17.078  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.23 | 96  | 51083  | 20.862  | ug/l | 96     |
| 22) Diisopropyl ether         | 6.14 | 45  | 162847 | 20.400  | ug/l | 95     |
| 23) Vinyl Acetate             | 6.08 | 43  | 536028 | 103.433 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 6.04 | 63  | 87477  | 20.790  | ug/l | 98     |
| 25) 2-Butanone                | 7.01 | 43  | 102870 | 109.399 | ug/l | 94     |
| 26) 2,2-Dichloropropane       | 7.00 | 77  | 76468  | 20.403  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.00 | 96  | 56021  | 20.471  | ug/l | 99     |
| 28) Bromochloromethane        | 7.35 | 49  | 31870  | 18.367  | ug/l | 97     |
| 29) Tetrahydrofuran           | 7.36 | 42  | 64093  | 104.768 | ug/l | 98     |
| 30) Chloroform                | 7.52 | 83  | 83409  | 20.224  | ug/l | 99     |
| 31) Cyclohexane               | 7.80 | 56  | 90072  | 21.561  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 7.72 | 97  | 73222  | 21.027  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.93 | 75  | 70791  | 21.652  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.10 | 43  | 43892  | 21.973  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.92 | 117 | 63395  | 21.757  | ug/l | 98     |

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 1/27/2020 12:02:25 PM

Quant Time: Jan 25 04:31:09 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y012120S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jan 23 01:21:47 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.19  | 83   | 94241    | 22.501  | ug/l   | 96       |
| 40) Benzene                    | 8.18  | 78   | 202910   | 20.699  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.35  | 41   | 26312m   | 25.526  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.25  | 62   | 57259    | 20.904  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.29  | 43   | 83597    | 21.523  | ug/l   | 99       |
| 44) Trichloroethene            | 8.95  | 130  | 52555    | 20.892  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.23  | 63   | 52551    | 21.206  | ug/l   | 99       |
| 46) Dibromomethane             | 9.32  | 93   | 27369    | 20.572  | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.51  | 83   | 66103    | 20.785  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.30  | 41   | 37432    | 21.199  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.32  | 88   | 8043     | 428.698 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 10.08 | 43   | 214075   | 107.022 | ug/l   | 99       |
| 52) Toluene                    | 10.25 | 92   | 130957   | 21.074  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 71400    | 20.254  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 9.94  | 75   | 83370    | 20.605  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 10.66 | 97   | 41550    | 21.159  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.52 | 69   | 62342    | 21.005  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.80 | 76   | 71188    | 20.811  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.80  | 63   | 110365   | 107.463 | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.84 | 43   | 155033   | 111.331 | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.99 | 129  | 44317    | 20.178  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.10 | 107  | 38717    | 20.856  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.72 | 164  | 41923    | 21.508  | ug/l   | 93       |
| 65) Chlorobenzene              | 11.52 | 112  | 135870   | 21.124  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.60 | 131  | 45848    | 20.887  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.60 | 91   | 252463   | 21.298  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.71 | 106  | 188550   | 42.589  | ug/l   | 100      |
| 69) o-Xylene                   | 12.03 | 106  | 89665    | 21.053  | ug/l   | 98       |
| 70) Styrene                    | 12.05 | 104  | 156835   | 20.988  | ug/l   | 99       |
| 71) Bromoform                  | 12.22 | 173  | 27022    | 20.623  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.33 | 105  | 240670   | 20.775  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.15 | 43   | 78828    | 20.788  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.59 | 83   | 51851    | 20.899  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 37898m   | 21.422  | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 64233    | 25.033  | ug/l   | 77       |
| 78) n-propylbenzene            | 12.67 | 91   | 296313   | 21.251  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.76 | 91   | 164479   | 20.648  | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 205918   | 21.295  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.39 | 75   | 18855    | 20.169  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.86 | 91   | 174309   | 20.486  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.08 | 119  | 172856   | 21.207  | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.13 | 105  | 208382   | 21.464  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.26 | 105  | 248110   | 21.424  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.38 | 119  | 220484   | 21.604  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.37 | 146  | 102282   | 20.698  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.45 | 146  | 104035   | 20.734  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.70 | 91   | 221026   | 21.519  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.97 | 117  | 40727    | 21.053  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.75 | 146  | 93845    | 20.592  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.36 | 75   | 8967     | 20.945  | ug/l   | 94       |

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QLast Update : Thu Jan 23 01:21:47 2020  
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| Internal Standards         | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|----------------------------|-------|------|----------|---------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.02 | 180  | 62303    | 20.369  | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.12 | 225  | 31617    | 21.229  | ug/l  | 98       |
| 95) Naphthalene            | 15.24 | 128  | 726117   | 103.818 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.43 | 180  | 55606    | 20.724  | ug/l  | 99       |

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

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