

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY091719\  
 Data File : VY000053.D  
 Acq On : 17 Sep 2019 11:20  
 Operator : SY/MD  
 Sample : VSTDIC020  
 Misc : 5.00g/5.00ml/MSVOA Y/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDIC020

Manual Integrations  
 APPROVED

MMDadoda  
 9/19/2019 1:29:33 AM

Quant Time: Sep 17 12:18:16 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y091719S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 17 12:06:19 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.79  | 168  | 113277   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.69  | 114  | 225933   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 193442   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.42 | 152  | 82164    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.14   | 65  | 27581    | 22.71 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 45.42% |      |
| 35) Dibromofluoromethane  | 7.72   | 113 | 28812    | 22.15 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 44.30% |      |
| 50) Toluene-d8            | 10.18  | 98  | 106358   | 20.45 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 40.90% |      |
| 62) 4-Bromofluorobenzene  | 12.48  | 95  | 42593    | 22.58 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 45.16% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.90 | 85  | 19167  | 22.737  | ug/l   | 100    |
| 3) Chloromethane              | 2.11 | 50  | 25224  | 18.583  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.25 | 62  | 26877  | 21.282  | ug/l   | 94     |
| 5) Bromomethane               | 2.62 | 94  | 17074  | 20.992  | ug/l   | 93     |
| 6) Chloroethane               | 2.78 | 64  | 17693  | 20.961  | ug/l   | 93     |
| 7) Trichlorofluoromethane     | 3.11 | 101 | 35896  | 21.524  | ug/l   | 89     |
| 8) Diethyl Ether              | 3.53 | 74  | 15754  | 22.854  | ug/l   | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.89 | 101 | 26970  | 23.693  | ug/l   | 92     |
| 10) Methyl Iodide             | 4.08 | 142 | 25002  | 20.199  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 4.98 | 59  | 15794  | 100.881 | ug/l # | 89     |
| 12) 1,1-Dichloroethene        | 3.86 | 96  | 23587  | 22.333  | ug/l   | 88     |
| 13) Acrolein                  | 3.73 | 56  | 12201  | 110.213 | ug/l   | 94     |
| 14) Allyl chloride            | 4.46 | 41  | 37007  | 22.554  | ug/l   | 97     |
| 15) Acrylonitrile             | 5.16 | 53  | 46803  | 107.797 | ug/l   | 99     |
| 16) Acetone                   | 3.95 | 43  | 31076  | 92.549  | ug/l   | 91     |
| 17) Carbon Disulfide          | 4.18 | 76  | 44090  | 20.736  | ug/l   | 96     |
| 18) Methyl Acetate            | 4.48 | 43  | 20688  | 21.478  | ug/l   | 100    |
| 19) Methyl tert-butyl Ether   | 5.21 | 73  | 72961  | 22.532  | ug/l   | 91     |
| 20) Methylene Chloride        | 4.72 | 84  | 29270  | 21.313  | ug/l   | 92     |
| 21) trans-1,2-Dichloroethene  | 5.21 | 96  | 25315  | 21.534  | ug/l   | 92     |
| 22) Diisopropyl ether         | 6.12 | 45  | 82398  | 22.638  | ug/l   | 97     |
| 23) Vinyl Acetate             | 6.06 | 43  | 264962 | 105.685 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 6.03 | 63  | 47842  | 22.130  | ug/l   | 96     |
| 25) 2-Butanone                | 6.99 | 43  | 56493  | 102.190 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 6.98 | 77  | 44114  | 22.112  | ug/l   | 95     |
| 27) cis-1,2-Dichloroethene    | 6.99 | 96  | 32213  | 21.811  | ug/l   | 97     |
| 28) Bromochloromethane        | 7.33 | 49  | 20627  | 21.196  | ug/l   | 94     |
| 29) Tetrahydrofuran           | 7.35 | 42  | 34056  | 103.246 | ug/l   | 98     |
| 30) Chloroform                | 7.51 | 83  | 49325  | 22.076  | ug/l   | 94     |
| 31) Cyclohexane               | 7.78 | 56  | 37960  | 21.325  | ug/l   | 89     |
| 32) 1,1,1-Trichloroethane     | 7.70 | 97  | 38768  | 21.325  | ug/l   | 98     |
| 36) 1,1-Dichloropropene       | 7.92 | 75  | 34779  | 20.773  | ug/l   | 98     |
| 37) Ethyl Acetate             | 7.08 | 43  | 21890  | 19.316  | ug/l   | 96     |
| 38) Carbon Tetrachloride      | 7.90 | 117 | 33025  | 20.870  | ug/l   | 97     |

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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| -----                          |       |      |          |         |        |          |
| 39) Methylcyclohexane          | 9.18  | 83   | 41187    | 19.836  | ug/l # | 87       |
| 40) Benzene                    | 8.16  | 78   | 112434   | 20.488  | ug/l   | 93       |
| 41) Methacrylonitrile          | 7.32  | 41   | 13741    | 21.017  | ug/l # | 1        |
| 42) 1,2-Dichloroethane         | 8.24  | 62   | 30172    | 21.425  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.27  | 43   | 43753    | 19.881  | ug/l   | 98       |
| 44) Trichloroethene            | 8.94  | 130  | 28449    | 20.793  | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 9.21  | 63   | 29655    | 21.003  | ug/l   | 93       |
| 46) Dibromomethane             | 9.31  | 93   | 15581    | 19.856  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.50  | 83   | 39193    | 20.932  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.29  | 41   | 18578    | 19.078  | ug/l   | 94       |
| 49) 1,4-Dioxane                | 9.30  | 88   | 6330     | 384.916 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 10.07 | 43   | 120087   | 97.872  | ug/l   | 99       |
| 52) Toluene                    | 10.24 | 92   | 71797    | 20.853  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.46 | 75   | 40986    | 20.792  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.93  | 75   | 47754    | 20.763  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.65 | 97   | 24630    | 19.696  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.51 | 69   | 36016    | 20.557  | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 10.79 | 76   | 41576    | 20.853  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.79  | 63   | 92103    | 98.362  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.83 | 43   | 84768    | 95.466  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.98 | 129  | 25022    | 19.144  | ug/l   | 92       |
| 61) 1,2-Dibromoethane          | 11.09 | 107  | 23412    | 21.240  | ug/l   | 90       |
| 64) Tetrachloroethene          | 10.72 | 164  | 24580    | 20.471  | ug/l   | 91       |
| 65) Chlorobenzene              | 11.51 | 112  | 76432    | 20.456  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 26527    | 20.428  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.59 | 91   | 136827   | 20.151  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.70 | 106  | 104829   | 40.855  | ug/l   | 96       |
| 69) o-Xylene                   | 12.02 | 106  | 51184    | 20.348  | ug/l   | 98       |
| 70) Styrene                    | 12.04 | 104  | 90493    | 20.685  | ug/l   | 98       |
| 71) Bromoform                  | 12.21 | 173  | 15347    | 19.703  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.33 | 105  | 135714   | 21.195  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.14 | 43   | 37662    | 20.045  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.58 | 83   | 32517    | 21.311  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 23553m   | 20.639  | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 28721    | 21.351  | ug/l   | 96       |
| 78) n-propylbenzene            | 12.66 | 91   | 168560   | 21.535  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.75 | 91   | 92487    | 21.142  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 111876   | 20.996  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 12109    | 20.732  | ug/l   | 94       |
| 82) 4-Chlorotoluene            | 12.85 | 91   | 93936    | 20.506  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.07 | 119  | 97264    | 21.214  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.12 | 105  | 110507   | 20.953  | ug/l   | 96       |
| 85) sec-Butylbenzene           | 13.25 | 105  | 145240   | 21.475  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 13.37 | 119  | 121323   | 21.087  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.36 | 146  | 57909    | 21.311  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.44 | 146  | 56731    | 20.793  | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.69 | 91   | 125053   | 21.432  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.96 | 117  | 23959    | 20.891  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.74 | 146  | 52430    | 20.790  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.35 | 75   | 5518     | 18.676  | ug/l   | 97       |

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Quant Title : SW846 8260  
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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.00 | 180  | 32310    | 20.067 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.10 | 225  | 14977    | 20.260 | ug/l  | 97       |
| 95) Naphthalene            | 15.23 | 128  | 90469    | 20.598 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 15.42 | 180  | 29973    | 20.743 | ug/l  | 96       |

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

