

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY020720\  
 Data File : VY001554.D  
 Acq On : 07 Feb 2020 15:15  
 Operator : SY/MD  
 Sample : VY0207SBS01  
 Misc : 5.00G/5ML/MSVOA Y/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VY0207SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 2/10/2020 11:27:19 AM

Quant Time: Feb 08 02:59:14 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y020420S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Feb 04 15:10:08 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.81  | 168  | 202739   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.71  | 114  | 351178   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.50 | 117  | 313715   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.43 | 152  | 147641   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.16   | 65  | 107653   | 52.74 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.48% |      |
| 35) Dibromofluoromethane  | 7.74   | 113 | 98819    | 48.80 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.60%  |      |
| 50) Toluene-d8            | 10.19  | 98  | 416091   | 54.31 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.62% |      |
| 62) 4-Bromofluorobenzene  | 12.49  | 95  | 149548   | 49.55 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.10%  |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.91 | 85  | 35072  | 17.672  | ug/l | 95     |
| 3) Chloromethane              | 2.13 | 50  | 45751  | 22.057  | ug/l | 96     |
| 4) Vinyl Chloride             | 2.26 | 62  | 49597  | 23.028  | ug/l | 93     |
| 5) Bromomethane               | 2.65 | 94  | 31796  | 23.474  | ug/l | 95     |
| 6) Chloroethane               | 2.80 | 64  | 30586  | 23.560  | ug/l | 96     |
| 7) Trichlorofluoromethane     | 3.14 | 101 | 64583  | 18.116  | ug/l | 99     |
| 8) Diethyl Ether              | 3.55 | 74  | 24250  | 20.158  | ug/l | 90     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.92 | 101 | 40173  | 18.729  | ug/l | 100    |
| 10) Methyl Iodide             | 4.11 | 142 | 48045  | 17.579  | ug/l | 98     |
| 11) Tert butyl alcohol        | 4.99 | 59  | 30373  | 113.909 | ug/l | 96     |
| 12) 1,1-Dichloroethene        | 3.90 | 96  | 40156  | 18.839  | ug/l | 93     |
| 13) Acrolein                  | 3.75 | 56  | 20498  | 106.050 | ug/l | 99     |
| 14) Allyl chloride            | 4.51 | 41  | 71398  | 21.896  | ug/l | 96     |
| 15) Acrylonitrile             | 5.19 | 53  | 65933  | 119.551 | ug/l | 100    |
| 16) Acetone                   | 3.97 | 43  | 63056  | 106.790 | ug/l | 97     |
| 17) Carbon Disulfide          | 4.21 | 76  | 132314 | 19.499  | ug/l | 100    |
| 18) Methyl Acetate            | 4.51 | 43  | 32272  | 25.612  | ug/l | 94     |
| 19) Methyl tert-butyl Ether   | 5.25 | 73  | 113826 | 20.080  | ug/l | 97     |
| 20) Methylene Chloride        | 4.74 | 84  | 49493  | 18.422  | ug/l | 89     |
| 21) trans-1,2-Dichloroethene  | 5.24 | 96  | 45802  | 19.329  | ug/l | 97     |
| 22) Diisopropyl ether         | 6.14 | 45  | 145231 | 22.481  | ug/l | 97     |
| 23) Vinyl Acetate             | 6.09 | 43  | 479646 | 116.630 | ug/l | 96     |
| 24) 1,1-Dichloroethane        | 6.05 | 63  | 79290  | 20.405  | ug/l | 98     |
| 25) 2-Butanone                | 7.01 | 43  | 92494  | 120.744 | ug/l | 92     |
| 26) 2,2-Dichloropropane       | 7.01 | 77  | 70482  | 18.952  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 7.01 | 96  | 51144  | 19.761  | ug/l | 97     |
| 28) Bromochloromethane        | 7.36 | 49  | 29933  | 22.612  | ug/l | 90     |
| 29) Tetrahydrofuran           | 7.37 | 42  | 58955  | 128.403 | ug/l | 93     |
| 30) Chloroform                | 7.53 | 83  | 75528  | 19.189  | ug/l | 95     |
| 31) Cyclohexane               | 7.80 | 56  | 84742  | 21.320  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 7.72 | 97  | 66585  | 18.658  | ug/l | 97     |
| 36) 1,1-Dichloropropene       | 7.94 | 75  | 64748  | 20.154  | ug/l | 98     |
| 37) Ethyl Acetate             | 7.10 | 43  | 38603  | 24.822  | ug/l | 96     |
| 38) Carbon Tetrachloride      | 7.92 | 117 | 56223  | 18.089  | ug/l | 98     |

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| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.19  | 83   | 85137    | 20.126  | ug/l   | 98       |
| 40) Benzene                    | 8.18  | 78   | 185833   | 20.280  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.35  | 41   | 22270m   | 30.897  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.25  | 62   | 50469    | 19.769  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.29  | 43   | 73619    | 23.908  | ug/l   | 94       |
| 44) Trichloroethene            | 8.95  | 130  | 47827    | 19.363  | ug/l   | 94       |
| 45) 1,2-Dichloropropane        | 9.23  | 63   | 47618    | 21.520  | ug/l   | 99       |
| 46) Dibromomethane             | 9.32  | 93   | 24708    | 19.886  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.51  | 83   | 57991    | 19.155  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.30  | 41   | 32972    | 23.592  | ug/l   | 94       |
| 49) 1,4-Dioxane                | 9.32  | 88   | 6760     | 411.964 | ug/l # | 93       |
| 51) 4-Methyl-2-Pentanone       | 10.08 | 43   | 193207   | 127.408 | ug/l   | 96       |
| 52) Toluene                    | 10.25 | 92   | 117013   | 20.125  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 65231    | 19.783  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.94  | 75   | 73978    | 19.542  | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane      | 10.65 | 97   | 36968    | 20.737  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.52 | 69   | 54135    | 21.350  | ug/l   | 92       |
| 57) 1,3-Dichloropropane        | 10.80 | 76   | 63356    | 20.161  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.79  | 63   | 107442   | 115.185 | ug/l   | 96       |
| 59) 2-Hexanone                 | 10.84 | 43   | 138396   | 125.520 | ug/l   | 96       |
| 60) Dibromochloromethane       | 10.99 | 129  | 39971    | 19.022  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.10 | 107  | 35600    | 20.275  | ug/l   | 97       |
| 64) Tetrachloroethene          | 10.72 | 164  | 39345    | 19.124  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.52 | 112  | 119693   | 19.431  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.60 | 131  | 41237    | 19.128  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.60 | 91   | 225779   | 19.824  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.70 | 106  | 169622   | 39.672  | ug/l   | 98       |
| 69) o-Xylene                   | 12.03 | 106  | 80060    | 19.860  | ug/l   | 98       |
| 70) Styrene                    | 12.05 | 104  | 139150   | 19.960  | ug/l   | 98       |
| 71) Bromoform                  | 12.21 | 173  | 24229    | 20.183  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.33 | 105  | 216453   | 19.223  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.15 | 43   | 68954    | 23.566  | ug/l   | 95       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.59 | 83   | 45427    | 21.234  | ug/l   | 96       |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75   | 31380m   | 19.764  | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 47286    | 19.404  | ug/l   | 95       |
| 78) n-propylbenzene            | 12.67 | 91   | 263353   | 19.536  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.76 | 91   | 146867   | 19.113  | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 180872   | 19.073  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 16566    | 20.189  | ug/l   | 94       |
| 82) 4-Chlorotoluene            | 12.86 | 91   | 154630   | 19.193  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.08 | 119  | 154873   | 19.321  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.13 | 105  | 180617   | 19.244  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.26 | 105  | 221599   | 19.663  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.38 | 119  | 196300   | 19.765  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.37 | 146  | 92732    | 19.857  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.45 | 146  | 93247    | 19.930  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.70 | 91   | 197307   | 20.135  | ug/l   | 98       |
| 90) Hexachloroethane           | 13.97 | 117  | 35408    | 18.575  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.75 | 146  | 85189    | 20.129  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.37 | 75   | 7296     | 18.473  | ug/l   | 88       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.02 | 180  | 55422    | 19.433 | ug/l  | 95       |
| 94) Hexachlorobutadiene    | 15.12 | 225  | 27213    | 18.800 | ug/l  | 100      |
| 95) Naphthalene            | 15.25 | 128  | 129010   | 19.247 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.43 | 180  | 49761    | 19.766 | ug/l  | 98       |

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

