

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_D\DATA\VD010620\  
 Data File : VD064773.D  
 Acq On : 06 Jan 2020 15:16  
 Operator : VA/SY  
 Sample : VD0106SBS01  
 Misc : 5.00G/5.00ml/MSVOA\_D/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD0106SBS01

Manual Integrations  
 APPROVED

apatel  
 1/7/2020 10:24:06 AM

Quant Time: Jan 07 03:27:48 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D122419S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 24 13:19:06 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 401312   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 578002   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 513634   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 255924   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.34   | 65  | 181599   | 51.32 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.64% |      |
| 35) Dibromofluoromethane  | 7.92   | 113 | 183990   | 51.88 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.76% |      |
| 50) Toluene-d8            | 10.34  | 98  | 683673   | 50.34 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.68% |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 217724   | 50.70 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.40% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.99 | 85  | 63888  | 20.485  | ug/l   | 98     |
| 3) Chloromethane              | 2.21 | 50  | 93966  | 21.543  | ug/l   | 97     |
| 4) Vinyl Chloride             | 2.35 | 62  | 111997 | 21.059  | ug/l   | 99     |
| 5) Bromomethane               | 2.76 | 94  | 78393  | 20.273  | ug/l   | 95     |
| 6) Chloroethane               | 2.92 | 64  | 73323  | 20.576  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.27 | 101 | 185655 | 20.733  | ug/l   | 96     |
| 8) Diethyl Ether              | 3.70 | 74  | 37965  | 21.350  | ug/l   | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 4.09 | 101 | 79505  | 21.439  | ug/l   | 99     |
| 10) Methyl Iodide             | 4.29 | 142 | 77869  | 19.548  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.26 | 59  | 21917  | 108.069 | ug/l   | 95     |
| 12) 1,1-Dichloroethene        | 4.06 | 96  | 75525  | 21.391  | ug/l   | 97     |
| 13) Acrolein                  | 3.92 | 56  | 24305  | 85.993  | ug/l   | 100    |
| 14) Allyl chloride            | 4.71 | 41  | 119916 | 21.784  | ug/l   | 98     |
| 15) Acrylonitrile             | 5.43 | 53  | 80908  | 109.234 | ug/l   | 99     |
| 16) Acetone                   | 4.16 | 43  | 83602  | 107.287 | ug/l   | 94     |
| 17) Carbon Disulfide          | 4.40 | 76  | 232856 | 20.397  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.73 | 43  | 43110  | 21.639  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.48 | 73  | 171203 | 21.831  | ug/l   | 97     |
| 20) Methylene Chloride        | 4.96 | 84  | 90231  | 22.216  | ug/l   | 96     |
| 21) trans-1,2-Dichloroethene  | 5.47 | 96  | 85157  | 21.179  | ug/l   | 97     |
| 22) Diisopropyl ether         | 6.37 | 45  | 232652 | 21.189  | ug/l   | 98     |
| 23) Vinyl Acetate             | 6.31 | 43  | 657430 | 105.554 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 6.26 | 63  | 143235 | 21.730  | ug/l   | 98     |
| 25) 2-Butanone                | 7.22 | 43  | 112096 | 115.241 | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 7.21 | 77  | 130712 | 21.329  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.21 | 96  | 89583  | 20.644  | ug/l   | 95     |
| 28) Bromochloromethane        | 7.56 | 49  | 49117  | 19.169  | ug/l   | 98     |
| 29) Tetrahydrofuran           | 7.57 | 42  | 64590  | 106.777 | ug/l   | 98     |
| 30) Chloroform                | 7.71 | 83  | 149104 | 21.561  | ug/l   | 98     |
| 31) Cyclohexane               | 7.98 | 56  | 136907 | 20.749  | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 7.90 | 97  | 139819 | 21.525  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.11 | 75  | 118338 | 21.271  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.30 | 43  | 45593  | 20.861  | ug/l # | 96     |
| 38) Carbon Tetrachloride      | 8.10 | 117 | 131197 | 22.117  | ug/l   | 95     |

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 Sample : VD0106SBS01  
 Misc : 5.00G/5.00ml/MSVOA\_D/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

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Quant Time: Jan 07 03:27:48 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D122419S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 24 13:19:06 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.36  | 83   | 139751   | 20.740  | ug/l   | 98       |
| 40) Benzene                    | 8.36  | 78   | 325086   | 21.405  | ug/l   | 95       |
| 41) Methacrylonitrile          | 7.53  | 41   | 23621m   | 18.628  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.43  | 62   | 97441    | 22.203  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.46  | 43   | 94664    | 21.761  | ug/l   | 99       |
| 44) Trichloroethene            | 9.11  | 130  | 92540    | 20.742  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.39  | 63   | 80620    | 22.233  | ug/l   | 100      |
| 46) Dibromomethane             | 9.48  | 93   | 44238    | 21.882  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.67  | 83   | 113875   | 21.168  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.46  | 41   | 43104    | 21.044  | ug/l   | 91       |
| 49) 1,4-Dioxane                | 9.46  | 88   | 9547     | 409.543 | ug/l # | 86       |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43   | 235171   | 109.373 | ug/l   | 100      |
| 52) Toluene                    | 10.41 | 92   | 209272   | 21.003  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.63 | 75   | 109299   | 21.792  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.09 | 75   | 127411   | 21.544  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.80 | 97   | 59955    | 22.005  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.67 | 69   | 71662    | 21.061  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.95 | 76   | 102014   | 21.746  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.94  | 63   | 145896   | 112.542 | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.99 | 43   | 164966   | 113.040 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.14 | 129  | 80307    | 21.315  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.25 | 107  | 57786    | 21.504  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.88 | 164  | 85607    | 21.725  | ug/l   | 96       |
| 65) Chlorobenzene              | 11.67 | 112  | 222392   | 20.862  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.75 | 131  | 85001    | 21.151  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.75 | 91   | 396526   | 20.493  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.86 | 106  | 306425   | 41.029  | ug/l   | 98       |
| 69) o-Xylene                   | 12.18 | 106  | 139024   | 20.609  | ug/l   | 100      |
| 70) Styrene                    | 12.20 | 104  | 242371   | 20.469  | ug/l   | 98       |
| 71) Bromoform                  | 12.37 | 173  | 49312    | 21.516  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.48 | 105  | 383459   | 20.967  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.30 | 43   | 82013    | 20.978  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.74 | 83   | 61916    | 21.551  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.79 | 75   | 42455m   | 21.008  | ug/l   |          |
| 77) Bromobenzene               | 12.77 | 156  | 93720    | 20.855  | ug/l   | 100      |
| 78) n-propylbenzene            | 12.83 | 91   | 449556   | 21.070  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.91 | 91   | 250051   | 21.334  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.97 | 105  | 317009   | 21.101  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.53 | 75   | 21046    | 21.781  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 13.01 | 91   | 260447   | 20.880  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.23 | 119  | 265668   | 20.367  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.28 | 105  | 311656   | 20.829  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.41 | 105  | 374117   | 20.921  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 13.53 | 119  | 353977   | 20.701  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.53 | 146  | 177571   | 20.728  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.60 | 146  | 178400   | 21.198  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.86 | 91   | 321986   | 20.910  | ug/l   | 98       |
| 90) Hexachloroethane           | 14.12 | 117  | 68633    | 21.012  | ug/l   | 96       |
| 91) 1,2-Dichlorobenzene        | 13.90 | 146  | 156287   | 21.395  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.52 | 75   | 10341    | 22.203  | ug/l   | 89       |

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Sample : VD0106SBSD01  
Misc : 5.00G/5.00ml/MSVOA\_D/SOIL  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
VD0106SBSD01

Manual Integrations  
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apatel  
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Quant Time: Jan 07 03:27:48 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D122419S.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 24 13:19:06 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.18 | 180  | 111931   | 20.810 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.28 | 225  | 64484    | 19.052 | ug/l  | 96       |
| 95) Naphthalene            | 15.41 | 128  | 176125   | 20.698 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 15.61 | 180  | 94909    | 20.669 | ug/l  | 99       |

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

