

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD071620\  
 Data File : VD065954.D  
 Acq On : 16 Jul 2020 13:45  
 Operator : VA/SY  
 Sample : VD0716SBS01  
 Misc : 5.00G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VD0716SBS01

Manual Integrations  
 APPROVED

MMDadoda  
 7/17/2020 4:43:40 PM

Quant Time: Jul 17 04:00:34 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D070720S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 08 09:45:47 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 360880   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 523797   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 475613   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 248934   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.33   | 65  | 140404   | 43.90 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 87.80%  |      |
| 35) Dibromofluoromethane  | 7.92   | 113 | 155570   | 48.15 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.30%  |      |
| 50) Toluene-d8            | 10.34  | 98  | 579770   | 49.18 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.36%  |      |
| 62) 4-Bromofluorobenzene  | 12.63  | 95  | 203735   | 50.32 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.64% |      |

## Target Compounds

|                               |      |     |        |        |        | Qvalue |
|-------------------------------|------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.99 | 85  | 66141  | 20.616 | ug/l   | 99     |
| 3) Chloromethane              | 2.21 | 50  | 53807  | 16.918 | ug/l   | 97     |
| 4) Vinyl Chloride             | 2.35 | 62  | 49820  | 17.060 | ug/l   | 98     |
| 5) Bromomethane               | 2.76 | 94  | 32826  | 17.746 | ug/l   | 81     |
| 6) Chloroethane               | 2.92 | 64  | 28456  | 16.301 | ug/l   | 90     |
| 7) Trichlorofluoromethane     | 3.27 | 101 | 122529 | 19.577 | ug/l   | 91     |
| 8) Diethyl Ether              | 3.71 | 74  | 32025  | 18.651 | ug/l   | 95     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.10 | 101 | 73510  | 19.636 | ug/l   | 96     |
| 10) Methyl Iodide             | 4.30 | 142 | 70944  | 19.600 | ug/l   | 98     |
| 11) Tert butyl alcohol        | 5.22 | 59  | 20238  | 85.333 | ug/l # | 91     |
| 12) 1,1-Dichloroethene        | 4.06 | 96  | 69608  | 19.903 | ug/l   | 97     |
| 13) Acrolein                  | 3.92 | 56  | 15848  | 79.682 | ug/l   | 96     |
| 14) Allyl chloride            | 4.71 | 41  | 108409 | 18.291 | ug/l   | 98     |
| 15) Acrylonitrile             | 5.42 | 53  | 67803  | 90.191 | ug/l   | 98     |
| 16) Acetone                   | 4.16 | 43  | 66442  | 88.645 | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.41 | 76  | 214369 | 19.236 | ug/l   | 97     |
| 18) Methyl Acetate            | 4.73 | 43  | 29748  | 16.931 | ug/l   | 94     |
| 19) Methyl tert-butyl Ether   | 5.47 | 73  | 139077 | 18.783 | ug/l   | 92     |
| 20) Methylene Chloride        | 4.96 | 84  | 109453 | 21.539 | ug/l   | 94     |
| 21) trans-1,2-Dichloroethene  | 5.47 | 96  | 76733  | 19.500 | ug/l   | 98     |
| 22) Diisopropyl ether         | 6.37 | 45  | 206631 | 18.551 | ug/l   | 96     |
| 23) Vinyl Acetate             | 6.31 | 43  | 565393 | 88.930 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 6.26 | 63  | 124980 | 18.818 | ug/l   | 99     |
| 25) 2-Butanone                | 7.21 | 43  | 87558  | 88.404 | ug/l   | 97     |
| 26) 2,2-Dichloropropane       | 7.21 | 77  | 114461 | 19.700 | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.21 | 96  | 80779  | 19.106 | ug/l   | 98     |
| 28) Bromochloromethane        | 7.54 | 49  | 52640  | 20.981 | ug/l   | 95     |
| 29) Tetrahydrofuran           | 7.56 | 42  | 55061  | 87.427 | ug/l   | 98     |
| 30) Chloroform                | 7.71 | 83  | 127863 | 18.990 | ug/l   | 99     |
| 31) Cyclohexane               | 7.98 | 56  | 120235 | 18.399 | ug/l   | 94     |
| 32) 1,1,1-Trichloroethane     | 7.90 | 97  | 119025 | 19.371 | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.11 | 75  | 103350 | 19.978 | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.30 | 43  | 37851  | 17.462 | ug/l # | 94     |
| 38) Carbon Tetrachloride      | 8.10 | 117 | 111690 | 20.143 | ug/l   | 100    |

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 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleID :  
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Manual Integrations  
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 7/17/2020 4:43:40 PM

Quant Time: Jul 17 04:00:34 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D070720S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 08 09:45:47 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.36  | 83   | 129130   | 20.331  | ug/l   | 96       |
| 40) Benzene                    | 8.35  | 78   | 288441   | 20.182  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.54  | 41   | 25723m   | 20.440  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.43  | 62   | 74245    | 18.338  | ug/l   | 96       |
| 43) Isopropyl Acetate          | 8.45  | 43   | 71284    | 17.668  | ug/l   | 93       |
| 44) Trichloroethene            | 9.11  | 130  | 85914    | 20.460  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.39  | 63   | 67115    | 18.921  | ug/l   | 97       |
| 46) Dibromomethane             | 9.47  | 93   | 36021    | 19.505  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.66  | 83   | 97784    | 19.739  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.46  | 41   | 38259    | 18.836  | ug/l   | 100      |
| 49) 1,4-Dioxane                | 9.46  | 88   | 8230     | 375.062 | ug/l   | 92       |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43   | 187167   | 91.758  | ug/l   | 100      |
| 52) Toluene                    | 10.40 | 92   | 190951   | 21.001  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.62 | 75   | 90046    | 19.332  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 10.09 | 75   | 110309   | 19.599  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.80 | 97   | 50347    | 19.787  | ug/l   | 94       |
| 56) Ethyl methacrylate         | 10.66 | 69   | 59884    | 19.269  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.95 | 76   | 83725    | 18.816  | ug/l   | 96       |
| 58) 2-Chloroethyl Vinyl ether  | 9.94  | 63   | 158209   | 105.116 | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.98 | 43   | 132748   | 94.628  | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.14 | 129  | 68378    | 19.670  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.25 | 107  | 47886    | 18.876  | ug/l   | 96       |
| 64) Tetrachloroethene          | 10.88 | 164  | 76617    | 22.151  | ug/l   | 93       |
| 65) Chlorobenzene              | 11.67 | 112  | 201674   | 21.042  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 73920    | 20.620  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.74 | 91   | 354893   | 20.843  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.86 | 106  | 276252   | 42.704  | ug/l   | 100      |
| 69) o-Xylene                   | 12.18 | 106  | 124310   | 21.095  | ug/l   | 99       |
| 70) Styrene                    | 12.20 | 104  | 218789   | 21.507  | ug/l   | 98       |
| 71) Bromoform                  | 12.36 | 173  | 41464    | 20.441  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.48 | 105  | 350811   | 20.193  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.29 | 43   | 68815    | 17.652  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.73 | 83   | 52428    | 18.177  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.78 | 75   | 37058m   | 17.746  | ug/l   |          |
| 77) Bromobenzene               | 12.76 | 156  | 85171    | 20.213  | ug/l   | 96       |
| 78) n-propylbenzene            | 12.82 | 91   | 411484   | 20.202  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.91 | 91   | 228734   | 19.795  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.96 | 105  | 292557   | 20.588  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.53 | 75   | 18430    | 18.964  | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 13.01 | 91   | 238159   | 19.645  | ug/l   | 97       |
| 83) tert-Butylbenzene          | 13.23 | 119  | 247526   | 20.445  | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene     | 13.27 | 105  | 289333   | 20.455  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.40 | 105  | 345659   | 20.146  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.52 | 119  | 323814   | 20.634  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.52 | 146  | 164838   | 20.905  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.60 | 146  | 161700   | 20.556  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.84 | 91   | 292448   | 19.845  | ug/l   | 100      |
| 90) Hexachloroethane           | 14.11 | 117  | 61811    | 19.532  | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene        | 13.89 | 146  | 139095   | 20.183  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.50 | 75   | 9081     | 18.829  | ug/l   | 98       |

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Acq On : 16 Jul 2020 13:45  
Operator : VA/SY  
Sample : VD0716SBSD01  
Misc : 5.00G/5.00ml/MSVOA D/SOIL  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
VD0716SBSD01

Manual Integrations  
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MMDadoda  
7/17/2020 4:43:40 PM

Quant Time: Jul 17 04:00:34 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D070720S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jul 08 09:45:47 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.17 | 180  | 104404   | 21.256 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 15.27 | 225  | 62158    | 20.921 | ug/l  | 99       |
| 95) Naphthalene            | 15.40 | 128  | 157404   | 19.108 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.60 | 180  | 87684    | 20.697 | ug/l  | 99       |

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

