

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD072919\  
 Data File : VD063197.D  
 Acq On : 29 Jul 2019 14:08  
 Operator : VA/AP  
 Sample : VSTDICV050  
 Misc : 5.00µl/5ml/MSVOA D/SOIL  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 ICVVD072919

Quant Time: Jul 30 03:10:24 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D072919S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 30 03:04:50 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.04  | 168  | 1053488  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.21  | 114  | 1434502  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 12.37 | 117  | 1079215  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 14.51 | 152  | 637736   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.44  | 65   | 568333   | 48.62 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.24%  |          |
| 35) Dibromofluoromethane    | 6.91  | 113  | 648822   | 52.98 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.96% |          |
| 50) Toluene-d8              | 10.41 | 98   | 1404444  | 51.24 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.48% |          |
| 62) 4-Bromofluorobenzene    | 13.55 | 95   | 613210   | 49.09 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.18%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units  | Qvalue |
|-------------------------------|------|------|----------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.57 | 85   | 569179   | 44.200  | ug/l   | 92     |
| 3) Chloromethane              | 1.73 | 50   | 466575   | 46.634  | ug/l   | 95     |
| 4) Vinyl Chloride             | 1.83 | 62   | 504358   | 48.695  | ug/l   | 99     |
| 5) Bromomethane               | 2.14 | 94   | 269824   | 51.654  | ug/l   | 98     |
| 6) Chloroethane               | 2.26 | 64   | 237504   | 49.666  | ug/l   | 94     |
| 7) Trichlorofluoromethane     | 2.52 | 101  | 993291   | 49.433  | ug/l   | 97     |
| 8) Diethyl Ether              | 2.86 | 74   | 126870   | 45.115  | ug/l   | 92     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.14 | 101  | 560028   | 50.315  | ug/l   | 96     |
| 10) Methyl Iodide             | 3.29 | 142  | 753982   | 46.891  | ug/l   | 97     |
| 11) Tert butyl alcohol        | 4.06 | 59   | 110914   | 216.211 | ug/l   | 94     |
| 12) 1,1-Dichloroethene        | 3.11 | 96   | 403606   | 49.394  | ug/l   | 85     |
| 13) Acrolein                  | 3.01 | 56   | 114801   | 232.530 | ug/l   | 99     |
| 14) Allyl chloride            | 3.60 | 41   | 634327   | 48.730  | ug/l   | 90     |
| 15) Acrylonitrile             | 4.19 | 53   | 312591   | 235.037 | ug/l   | 90     |
| 16) Acetone                   | 3.21 | 43   | 603897   | 265.151 | ug/l   | 99     |
| 17) Carbon Disulfide          | 3.36 | 76   | 1335688  | 48.837  | ug/l   | 98     |
| 18) Methyl Acetate            | 3.62 | 43   | 190031   | 43.438  | ug/l   | 94     |
| 19) Methyl tert-butyl Ether   | 4.23 | 73   | 929436   | 50.355  | ug/l   | 97     |
| 20) Methylene Chloride        | 3.80 | 84   | 426609   | 46.339  | ug/l   | 93     |
| 21) trans-1,2-Dichloroethene  | 4.20 | 96   | 458522   | 50.011  | ug/l   | 93     |
| 22) Diisopropyl ether         | 5.10 | 45   | 1281009  | 49.257  | ug/l   | 95     |
| 23) Vinyl Acetate             | 5.04 | 43   | 3980594  | 248.999 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 4.96 | 63   | 821589   | 49.458  | ug/l   | 97     |
| 25) 2-Butanone                | 6.06 | 43   | 586533   | 256.607 | ug/l   | 94     |
| 26) 2,2-Dichloropropane       | 6.01 | 77   | 862814   | 50.400  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 6.03 | 96   | 460793   | 46.877  | ug/l   | 98     |
| 28) Bromochloromethane        | 6.42 | 49   | 326770   | 49.371  | ug/l # | 93     |
| 29) Tetrahydrofuran           | 6.45 | 42   | 252961   | 233.752 | ug/l   | 99     |
| 30) Chloroform                | 6.65 | 83   | 938972   | 45.547  | ug/l   | 97     |
| 31) Cyclohexane               | 6.94 | 56   | 533592   | 51.245  | ug/l   | 95     |
| 32) 1,1,1-Trichloroethane     | 6.85 | 97   | 987186   | 49.506  | ug/l   | 97     |
| 36) 1,1-Dichloropropene       | 7.14 | 75   | 660115   | 50.423  | ug/l   | 98     |
| 37) Ethyl Acetate             | 6.17 | 43   | 264711   | 45.007  | ug/l # | 97     |
| 38) Carbon Tetrachloride      | 7.10 | 117  | 1022172  | 51.863  | ug/l   | 98     |

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D072919S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 30 03:04:50 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 8.85  | 83   | 553610   | 50.755   | ug/l   | 92       |
| 40) Benzene                    | 7.44  | 78   | 1421164  | 51.796   | ug/l   | 97       |
| 41) Methacrylonitrile          | 6.43  | 41   | 336267   | 47.796   | ug/l # | 82       |
| 42) 1,2-Dichloroethane         | 7.57  | 62   | 682213   | 46.915   | ug/l   | 96       |
| 43) Isopropyl Acetate          | 9.24  | 43   | 373792   | 49.752   | ug/l   | 97       |
| 44) Trichloroethene            | 8.53  | 130  | 551346   | 49.590   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 8.93  | 63   | 362030   | 51.912   | ug/l   | 94       |
| 46) Dibromomethane             | 9.06  | 93   | 276029   | 47.602   | ug/l   | 91       |
| 47) Bromodichloromethane       | 9.37  | 83   | 703431   | 47.588   | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.11  | 41   | 244476   | 50.173   | ug/l   | 91       |
| 49) 1,4-Dioxane                | 9.08  | 88   | 41598    | 1007.807 | ug/l # | 81       |
| 51) 4-Methyl-2-Pentanone       | 10.30 | 43   | 1203102  | 235.463  | ug/l   | 96       |
| 52) Toluene                    | 10.51 | 92   | 882795   | 48.375   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.91 | 75   | 634386   | 49.780   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 10.03 | 75   | 687554   | 51.336   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 11.19 | 97   | 291700   | 47.329   | ug/l   | 96       |
| 56) Ethyl methacrylate         | 11.04 | 69   | 347434   | 51.480   | ug/l   | 91       |
| 57) 1,3-Dichloropropane        | 11.40 | 76   | 459646   | 47.334   | ug/l   | 92       |
| 58) 2-Chloroethyl Vinyl ether  | 9.85  | 63   | 822255   | 234.145  | ug/l   | 96       |
| 59) 2-Hexanone                 | 11.53 | 43   | 899186   | 244.203  | ug/l   | 93       |
| 60) Dibromochloromethane       | 11.68 | 129  | 571693   | 49.135   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.81 | 107  | 383708   | 50.454   | ug/l   | 92       |
| 64) Tetrachloroethene          | 11.25 | 164  | 491976   | 57.222   | ug/l   | 99       |
| 65) Chlorobenzene              | 12.40 | 112  | 1094125  | 52.708   | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 12.50 | 131  | 498290   | 54.495   | ug/l   | 95       |
| 67) Ethyl Benzene              | 12.52 | 91   | 1813210  | 51.419   | ug/l   | 97       |
| 68) m/p-Xylenes                | 12.66 | 106  | 1442523  | 111.545  | ug/l   | 97       |
| 69) o-Xylene                   | 13.05 | 106  | 662539   | 55.789   | ug/l   | 91       |
| 70) Styrene                    | 13.07 | 104  | 1182394  | 56.142   | ug/l   | 97       |
| 71) Bromoform                  | 13.23 | 173  | 360211   | 54.171   | ug/l   | 99       |
| 73) Isopropylbenzene           | 13.40 | 105  | 1885575  | 47.109   | ug/l   | 98       |
| 74) N-amyl acetate             | 13.26 | 43   | 519206   | 49.068   | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 13.70 | 83   | 331785   | 48.799   | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 13.72 | 75   | 363661   | 47.475   | ug/l   | 99       |
| 77) Bromobenzene               | 13.67 | 156  | 573936   | 50.335   | ug/l   | 91       |
| 78) n-propylbenzene            | 13.77 | 91   | 2345931  | 49.251   | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 13.83 | 91   | 1393216  | 50.479   | ug/l   | 93       |
| 80) 1,3,5-Trimethylbenzene     | 13.93 | 105  | 1749431  | 50.675   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 13.47 | 75   | 100140   | 47.080   | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 13.94 | 91   | 1595664  | 49.126   | ug/l   | 95       |
| 83) tert-Butylbenzene          | 14.19 | 119  | 2022737  | 51.315   | ug/l   | 93       |
| 84) 1,2,4-Trimethylbenzene     | 14.24 | 105  | 1757830  | 49.228   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 14.36 | 105  | 2047137  | 49.293   | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 14.48 | 119  | 1779772  | 44.900   | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 14.45 | 146  | 992734   | 49.163   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 14.53 | 146  | 975261   | 47.762   | ug/l   | 96       |
| 89) n-Butylbenzene             | 14.80 | 91   | 1665587  | 48.651   | ug/l   | 97       |
| 90) Hexachloroethane           | 15.00 | 117  | 496966   | 48.122   | ug/l   | 93       |
| 91) 1,2-Dichlorobenzene        | 14.81 | 146  | 816612   | 46.416   | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 15.38 | 75   | 67568    | 48.788   | ug/l   | 92       |

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Sample : VSTDICV050  
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ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
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Quant Time: Jul 30 03:10:24 2019  
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Quant Title : SW846 8260  
QLast Update : Tue Jul 30 03:04:50 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.94 | 180  | 692065   | 49.586 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 16.04 | 225  | 515618   | 50.979 | ug/l  | 97       |
| 95) Naphthalene            | 16.12 | 128  | 974890   | 49.420 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 16.26 | 180  | 538609   | 48.850 | ug/l  | 97       |

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

