

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD072618\  
 Data File : VD059615.D  
 Acq On : 26 Jul 2018 20:37  
 Operator : VA/AP  
 Sample : VSTDCCC050  
 Misc : 5.03g/5ml/MSVOA D/SOIL  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDCCC050EC

Quant Time: Jul 27 04:59:24 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D072418S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 25 07:10:33 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.62  | 168  | 120858   | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 6.68  | 114  | 178692   | 50.00 | ug/l  | 0.02     |
| 63) Chlorobenzene-d5       | 10.68 | 117  | 129590   | 50.00 | ug/l  | 0.01     |
| 72) 1,4-Dichlorobenzene-d4 | 12.90 | 152  | 66240    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 5.99  | 65   | 81243    | 53.47 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 106.94% |          |
| 35) Dibromofluoromethane    | 5.52  | 113  | 74329    | 48.49 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 96.98%  |          |
| 50) Toluene-d8              | 8.69  | 98   | 160761   | 46.23 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 92.46%  |          |
| 62) 4-Bromofluorobenzene    | 11.92 | 95   | 71240    | 45.48 | ug/l    | 0.01     |
| Spiked Amount               |       |      | Recovery | =     | 90.96%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc   | Units  | Qvalue |
|-------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.31 | 85   | 69405    | 52.38  | ug/l   | 97     |
| 3) Chloromethane              | 1.46 | 50   | 33063    | 43.77  | ug/l   | 95     |
| 4) Vinyl Chloride             | 1.53 | 62   | 40167    | 51.10  | ug/l   | 99     |
| 5) Bromomethane               | 1.75 | 94   | 11895    | 78.87  | ug/l   | 88     |
| 6) Chloroethane               | 1.84 | 64   | 21461    | 93.33  | ug/l   | 96     |
| 7) Trichlorofluoromethane     | 2.05 | 101  | 82153    | 61.26  | ug/l   | 95     |
| 8) Diethyl Ether              | 2.31 | 74   | 13227    | 52.04  | ug/l   | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 2.52 | 101  | 42191    | 59.71  | ug/l   | 95     |
| 10) Methyl Iodide             | 2.66 | 142  | 48621    | 52.91  | ug/l   | 100    |
| 11) Tert butyl alcohol        | 3.23 | 59   | 14707    | 242.63 | ug/l # | 93     |
| 12) 1,1-Dichloroethene        | 2.51 | 96   | 31214    | 60.94  | ug/l   | 94     |
| 13) Acrolein                  | 2.44 | 56   | 7189     | 230.21 | ug/l # | 76     |
| 14) Allyl chloride            | 2.88 | 41   | 65967    | 53.12  | ug/l   | 99     |
| 15) Acrylonitrile             | 3.32 | 53   | 37617    | 286.15 | ug/l   | 96     |
| 16) Acetone                   | 2.58 | 43   | 55937    | 243.78 | ug/l   | 99     |
| 17) Carbon Disulfide          | 2.73 | 76   | 105867   | 52.04  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.90 | 43   | 24463    | 53.31  | ug/l   | 96     |
| 19) Methyl tert-butyl Ether   | 3.37 | 73   | 93692    | 54.58  | ug/l   | 95     |
| 20) Methylene Chloride        | 3.03 | 84   | 32565    | 49.77  | ug/l   | 87     |
| 21) trans-1,2-Dichloroethene  | 3.35 | 96   | 32451    | 58.76  | ug/l   | 96     |
| 22) Diisopropyl ether         | 4.04 | 45   | 162883   | 49.88  | ug/l   | 97     |
| 23) Vinyl Acetate             | 3.99 | 43   | 505850   | 244.06 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 3.94 | 63   | 109625   | 53.17  | ug/l   | 98     |
| 25) 2-Butanone                | 4.80 | 43   | 81034    | 231.58 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 4.76 | 77   | 112142   | 53.11  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 4.76 | 96   | 60365    | 54.72  | ug/l   | 99     |
| 28) Bromochloromethane        | 5.11 | 49   | 46459    | 56.95  | ug/l   | 99     |
| 29) Tetrahydrofuran           | 5.16 | 42   | 38704    | 238.89 | ug/l   | 99     |
| 30) Chloroform                | 5.29 | 83   | 137049   | 55.58  | ug/l   | 97     |
| 31) Cyclohexane               | 5.56 | 56   | 70997    | 54.13  | ug/l   | 99     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97   | 131713   | 55.18  | ug/l   | 96     |
| 36) 1,1-Dichloropropene       | 5.72 | 75   | 88928    | 49.60  | ug/l   | 95     |
| 37) Ethyl Acetate             | 4.89 | 43   | 41396    | 44.88  | ug/l   | 96     |
| 38) Carbon Tetrachloride      | 5.70 | 117  | 120492   | 49.07  | ug/l   | 96     |

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 Quant Title : SW846 8260  
 QLast Update : Wed Jul 25 07:10:33 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 7.26  | 83   | 78925    | 47.87  | ug/l   | 96       |
| 40) Benzene                    | 5.98  | 78   | 169788   | 46.17  | ug/l   | 97       |
| 41) Methacrylonitrile          | 5.10  | 41   | 20922    | 45.45  | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 6.10  | 62   | 106501   | 48.07  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 7.60  | 43   | 54643    | 42.72  | ug/l   | 98       |
| 44) Trichloroethene            | 6.96  | 130  | 65236    | 48.91  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 7.33  | 63   | 45375    | 44.06  | ug/l   | 95       |
| 46) Dibromomethane             | 7.44  | 93   | 41680    | 47.89  | ug/l   | 97       |
| 47) Bromodichloromethane       | 7.72  | 83   | 102893   | 49.50  | ug/l   | 98       |
| 48) Methyl methacrylate        | 7.48  | 41   | 38408    | 45.28  | ug/l   | 95       |
| 49) 1,4-Dioxane                | 7.47  | 88   | 7040     | 889.76 | ug/l # | 80       |
| 51) 4-Methyl-2-Pentanone       | 8.58  | 43   | 186922   | 218.85 | ug/l   | 98       |
| 52) Toluene                    | 8.79  | 92   | 111353   | 45.67  | ug/l   | 90       |
| 53) t-1,3-Dichloropropene      | 9.17  | 75   | 84284    | 44.95  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 8.34  | 75   | 89125    | 47.87  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.44  | 97   | 42693    | 46.61  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.30  | 69   | 49682    | 47.80  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.65  | 76   | 67737    | 46.54  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.17  | 63   | 103054   | 211.03 | ug/l   | 96       |
| 59) 2-Hexanone                 | 9.77  | 43   | 140913   | 207.71 | ug/l   | 97       |
| 60) Dibromochloromethane       | 9.94  | 129  | 73089    | 48.06  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 10.08 | 107  | 49465    | 45.57  | ug/l   | 92       |
| 64) Tetrachloroethene          | 9.49  | 164  | 62465    | 53.19  | ug/l   | 98       |
| 65) Chlorobenzene              | 10.70 | 112  | 132634   | 49.93  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.83 | 131  | 62291    | 53.91  | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.84 | 91   | 246893   | 54.06  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.00 | 106  | 152908   | 100.26 | ug/l   | 92       |
| 69) o-Xylene                   | 11.39 | 106  | 75867    | 51.27  | ug/l   | 90       |
| 70) Styrene                    | 11.42 | 104  | 125765   | 51.25  | ug/l   | 99       |
| 71) Bromoform                  | 11.59 | 173  | 47743    | 50.74  | ug/l   | 99       |
| 73) Isopropylbenzene           | 11.77 | 105  | 224251   | 47.92  | ug/l   | 99       |
| 74) N-amyl acetate             | 11.64 | 43   | 72679    | 45.33  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.06 | 83   | 47651    | 49.88  | ug/l   | 96       |
| 76) 1,2,3-Trichloropropane     | 12.10 | 75   | 51965    | 47.44  | ug/l   | 97       |
| 77) Bromobenzene               | 12.03 | 156  | 69593    | 50.80  | ug/l   | 89       |
| 78) n-propylbenzene            | 12.15 | 91   | 281725   | 49.55  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.21 | 91   | 176665   | 52.12  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.31 | 105  | 187082   | 50.64  | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 11.84 | 75   | 12660    | 45.20  | ug/l   | 85       |
| 82) 4-Chlorotoluene            | 12.32 | 91   | 196455   | 51.25  | ug/l   | 93       |
| 83) tert-Butylbenzene          | 12.56 | 119  | 202875   | 48.78  | ug/l   | 92       |
| 84) 1,2,4-Trimethylbenzene     | 12.62 | 105  | 191829   | 48.84  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 12.75 | 105  | 234115   | 49.26  | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 12.88 | 119  | 200242   | 49.99  | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 12.84 | 146  | 107929   | 46.58  | ug/l   | 93       |
| 88) 1,4-Dichlorobenzene        | 12.92 | 146  | 110702   | 49.60  | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.19 | 91   | 190890   | 49.36  | ug/l   | 98       |
| 90) Hexachloroethane           | 13.39 | 117  | 56033    | 52.35  | ug/l   | 86       |
| 91) 1,2-Dichlorobenzene        | 13.18 | 146  | 91151    | 46.89  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.76 | 75   | 11102    | 57.64  | ug/l   | 66       |

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Quant Title : SW846 8260  
QLast Update : Wed Jul 25 07:10:33 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.33 | 180  | 83538    | 51.89 | ug/l  | 95       |
| 94) Hexachlorobutadiene    | 14.43 | 225  | 70877    | 55.82 | ug/l  | 98       |
| 95) Naphthalene            | 14.51 | 128  | 113613   | 49.62 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 14.65 | 180  | 76063    | 52.22 | ug/l  | 97       |

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

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