

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD022120\  
 Data File : VD065267.D  
 Acq On : 21 Feb 2020 11:00  
 Operator : VA/SY  
 Sample : VSTDCCC050  
 Misc : 5.00G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 2/24/2020 11:08:45 AM

Quant Time: Feb 22 02:27:31 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D021820S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Feb 19 03:26:54 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 497860   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 740672   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 667647   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 326052   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.33   | 65  | 203438   | 45.42 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.84% |      |
| 35) Dibromofluoromethane  | 7.92   | 113 | 211670   | 46.87 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 93.74% |      |
| 50) Toluene-d8            | 10.34  | 98  | 833065   | 48.25 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.50% |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 261847   | 47.88 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.76% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.99 | 85  | 218097  | 52.230  | ug/l | 99     |
| 3) Chloromethane              | 2.21 | 50  | 260212  | 48.958  | ug/l | 96     |
| 4) Vinyl Chloride             | 2.36 | 62  | 264415  | 48.924  | ug/l | 94     |
| 5) Bromomethane               | 2.78 | 94  | 160262  | 49.043  | ug/l | 95     |
| 6) Chloroethane               | 2.93 | 64  | 163559  | 49.578  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 3.27 | 101 | 371333  | 47.990  | ug/l | 98     |
| 8) Diethyl Ether              | 3.71 | 74  | 110770  | 47.426  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.09 | 101 | 241829  | 49.490  | ug/l | 99     |
| 10) Methyl Iodide             | 4.30 | 142 | 270078  | 53.233  | ug/l | 98     |
| 11) Tert butyl alcohol        | 5.24 | 59  | 54672   | 204.278 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 4.06 | 96  | 228762  | 49.559  | ug/l | 96     |
| 13) Acrolein                  | 3.92 | 56  | 78210   | 237.051 | ug/l | 97     |
| 14) Allyl chloride            | 4.71 | 41  | 370419  | 49.417  | ug/l | 99     |
| 15) Acrylonitrile             | 5.44 | 53  | 240198  | 232.283 | ug/l | 99     |
| 16) Acetone                   | 4.16 | 43  | 274174  | 250.425 | ug/l | 94     |
| 17) Carbon Disulfide          | 4.40 | 76  | 768378  | 49.652  | ug/l | 98     |
| 18) Methyl Acetate            | 4.73 | 43  | 110538  | 44.891  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.48 | 73  | 459188  | 47.704  | ug/l | 100    |
| 20) Methylene Chloride        | 4.97 | 84  | 253829  | 52.290  | ug/l | 93     |
| 21) trans-1,2-Dichloroethene  | 5.47 | 96  | 263653  | 50.244  | ug/l | 100    |
| 22) Diisopropyl ether         | 6.37 | 45  | 721576  | 49.935  | ug/l | 99     |
| 23) Vinyl Acetate             | 6.31 | 43  | 1992340 | 250.094 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.27 | 63  | 437098  | 48.767  | ug/l | 99     |
| 25) 2-Butanone                | 7.22 | 43  | 324419  | 234.203 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 7.21 | 77  | 382250  | 49.154  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.21 | 96  | 275092  | 49.492  | ug/l | 99     |
| 28) Bromochloromethane        | 7.56 | 49  | 158368  | 47.626  | ug/l | 100    |
| 29) Tetrahydrofuran           | 7.57 | 42  | 191779  | 236.290 | ug/l | 99     |
| 30) Chloroform                | 7.71 | 83  | 436026  | 48.287  | ug/l | 97     |
| 31) Cyclohexane               | 7.98 | 56  | 418624  | 47.537  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 7.91 | 97  | 391495  | 48.457  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 8.11 | 75  | 358154  | 49.697  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.30 | 43  | 132108  | 43.849  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 8.10 | 117 | 359766  | 49.038  | ug/l | 98     |

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 Quant Title : SW846 8260  
 QLast Update : Wed Feb 19 03:26:54 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.36  | 83   | 435227   | 51.369  | ug/l   | 98       |
| 40) Benzene                    | 8.36  | 78   | 1012043  | 49.752  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.54  | 41   | 90665m   | 52.120  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.43  | 62   | 264162   | 47.237  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.46  | 43   | 252400   | 46.070  | ug/l   | 98       |
| 44) Trichloroethene            | 9.11  | 130  | 276655   | 49.064  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.39  | 63   | 248984   | 49.224  | ug/l   | 98       |
| 46) Dibromomethane             | 9.48  | 93   | 126179   | 48.483  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.67  | 83   | 332119   | 48.424  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.46  | 41   | 133131   | 52.571  | ug/l   | 95       |
| 49) 1,4-Dioxane                | 9.47  | 88   | 27530    | 901.922 | ug/l   | 94       |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43   | 654487   | 235.202 | ug/l   | 99       |
| 52) Toluene                    | 10.41 | 92   | 650611   | 51.672  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.63 | 75   | 313023   | 49.239  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 10.10 | 75   | 381606   | 49.710  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.81 | 97   | 175707   | 47.967  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.67 | 69   | 211475   | 50.018  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.95 | 76   | 306887   | 49.224  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.95  | 63   | 291323   | 218.553 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.99 | 43   | 494138   | 248.068 | ug/l   | 97       |
| 60) Dibromochloromethane       | 11.14 | 129  | 224789   | 47.945  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.25 | 107  | 168092   | 48.466  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.88 | 164  | 235802   | 49.798  | ug/l   | 95       |
| 65) Chlorobenzene              | 11.68 | 112  | 662799   | 49.470  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.75 | 131  | 247268   | 49.456  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.75 | 91   | 1208279  | 51.492  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.86 | 106  | 930901   | 103.692 | ug/l   | 100      |
| 69) o-Xylene                   | 12.18 | 106  | 416066   | 52.311  | ug/l   | 98       |
| 70) Styrene                    | 12.20 | 104  | 735662   | 52.095  | ug/l   | 100      |
| 71) Bromoform                  | 12.37 | 173  | 130277   | 46.957  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.48 | 105  | 1144682  | 53.029  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.30 | 43   | 227147   | 47.356  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.74 | 83   | 183391   | 47.074  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.79 | 75   | 124788m  | 44.983  | ug/l   |          |
| 77) Bromobenzene               | 12.77 | 156  | 267207   | 49.850  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.83 | 91   | 1369123  | 52.779  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.91 | 91   | 742348   | 51.083  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.97 | 105  | 930124   | 52.316  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.54 | 75   | 59397    | 46.230  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 13.01 | 91   | 784313   | 50.838  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.23 | 119  | 779292   | 52.298  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.28 | 105  | 923181   | 51.878  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.41 | 105  | 1112739  | 51.824  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.53 | 119  | 1030608  | 52.487  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.53 | 146  | 511808   | 49.390  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.61 | 146  | 500436   | 48.931  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.86 | 91   | 957703   | 52.929  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.12 | 117  | 196203   | 49.211  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.90 | 146  | 435267   | 48.920  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.52 | 75   | 26162    | 43.577  | ug/l   | 93       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.18 | 180  | 297485   | 51.114 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.28 | 225  | 183127   | 49.050 | ug/l  | 99       |
| 95) Naphthalene            | 15.41 | 128  | 480553   | 50.790 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.61 | 180  | 255090   | 50.185 | ug/l  | 99       |

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

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