

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD111820\  
 Data File : VD067674.D  
 Acq On : 18 Nov 2020 09:42  
 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  
 11/19/2020 11:07:01 AM

Quant Time: Nov 19 00:32:45 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D110320S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 04 00:56:28 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 291637   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 402919   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 369429   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 188818   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.34   | 65  | 113768   | 44.61 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 89.22% |      |
| 35) Dibromofluoromethane  | 7.92   | 113 | 115454   | 47.56 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.12% |      |
| 50) Toluene-d8            | 10.34  | 98  | 390996   | 45.83 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.66% |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 143588   | 48.75 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.50% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.99 | 85  | 113680 | 47.970  | ug/l   | 99     |
| 3) Chloromethane              | 2.21 | 50  | 73170  | 40.290  | ug/l   | 93     |
| 4) Vinyl Chloride             | 2.36 | 62  | 86576  | 42.759  | ug/l   | 99     |
| 5) Bromomethane               | 2.78 | 94  | 71832  | 43.770  | ug/l   | 98     |
| 6) Chloroethane               | 2.93 | 64  | 54907  | 43.985  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.28 | 101 | 252417 | 48.147  | ug/l   | 93     |
| 8) Diethyl Ether              | 3.71 | 74  | 47897  | 45.341  | ug/l   | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.10 | 101 | 125205 | 47.313  | ug/l   | 98     |
| 10) Methyl Iodide             | 4.30 | 142 | 134948 | 47.579  | ug/l   | 100    |
| 11) Tert butyl alcohol        | 5.21 | 59  | 35087  | 325.378 | ug/l   | 98     |
| 12) 1,1-Dichloroethene        | 4.07 | 96  | 115896 | 47.612  | ug/l   | 94     |
| 13) Acrolein                  | 3.93 | 56  | 23453  | 212.063 | ug/l   | 96     |
| 14) Allyl chloride            | 4.71 | 41  | 120405 | 46.218  | ug/l   | 99     |
| 15) Acrylonitrile             | 5.43 | 53  | 91785  | 235.047 | ug/l   | 97     |
| 16) Acetone                   | 4.16 | 43  | 102426 | 268.412 | ug/l   | 100    |
| 17) Carbon Disulfide          | 4.41 | 76  | 318063 | 42.642  | ug/l   | 100    |
| 18) Methyl Acetate            | 4.71 | 43  | 35549  | 45.081  | ug/l   | 100    |
| 19) Methyl tert-butyl Ether   | 5.48 | 73  | 236540 | 49.265  | ug/l   | 95     |
| 20) Methylene Chloride        | 4.97 | 84  | 127945 | 47.465  | ug/l   | 96     |
| 21) trans-1,2-Dichloroethene  | 5.48 | 96  | 135703 | 47.865  | ug/l   | 97     |
| 22) Diisopropyl ether         | 6.36 | 45  | 245865 | 48.430  | ug/l   | 97     |
| 23) Vinyl Acetate             | 6.31 | 43  | 662914 | 249.459 | ug/l   | 96     |
| 24) 1,1-Dichloroethane        | 6.27 | 63  | 196133 | 47.224  | ug/l   | 98     |
| 25) 2-Butanone                | 7.21 | 43  | 98324  | 241.138 | ug/l   | 100    |
| 26) 2,2-Dichloropropane       | 7.21 | 77  | 221717 | 50.582  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.21 | 96  | 146516 | 49.789  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.55 | 49  | 72561  | 49.117  | ug/l   | 92     |
| 29) Tetrahydrofuran           | 7.56 | 42  | 59455  | 243.425 | ug/l   | 98     |
| 30) Chloroform                | 7.71 | 83  | 247304 | 49.912  | ug/l   | 100    |
| 31) Cyclohexane               | 7.99 | 56  | 163800 | 44.288  | ug/l   | 90     |
| 32) 1,1,1-Trichloroethane     | 7.91 | 97  | 253604 | 49.607  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.11 | 75  | 181175 | 52.531  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.29 | 43  | 47480  | 53.026  | ug/l # | 95     |
| 38) Carbon Tetrachloride      | 8.10 | 117 | 256466 | 57.233  | ug/l   | 97     |

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 Quant Title : SW846 8260  
 QLast Update : Wed Nov 04 00:56:28 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.36  | 83   | 210273   | 51.800  | ug/l   | 99       |
| 40) Benzene                    | 8.36  | 78   | 500184   | 53.540  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.53  | 41   | 26812    | 50.095  | ug/l # | 72       |
| 42) 1,2-Dichloroethane         | 8.43  | 62   | 156067   | 54.069  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.46  | 43   | 90661    | 51.197  | ug/l   | 98       |
| 44) Trichloroethene            | 9.11  | 130  | 156917   | 51.083  | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 9.39  | 63   | 105062   | 52.014  | ug/l   | 96       |
| 46) Dibromomethane             | 9.48  | 93   | 67672    | 52.692  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.66  | 83   | 183690   | 52.623  | ug/l   | 96       |
| 48) Methyl methacrylate        | 9.46  | 41   | 43574    | 47.657  | ug/l   | 89       |
| 49) 1,4-Dioxane                | 9.47  | 88   | 12282    | 942.034 | ug/l # | 93       |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43   | 223287   | 263.650 | ug/l   | 98       |
| 52) Toluene                    | 10.41 | 92   | 341315   | 54.545  | ug/l   | 97       |
| 53) t-1,3-Dichloropropene      | 10.63 | 75   | 164196   | 54.922  | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene    | 10.10 | 75   | 188489   | 53.065  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.81 | 97   | 91674    | 53.949  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.66 | 69   | 93762    | 53.432  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.95 | 76   | 147436   | 53.918  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.94  | 63   | 224171   | 273.944 | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.99 | 43   | 168415   | 284.409 | ug/l   | 98       |
| 60) Dibromochloromethane       | 11.14 | 129  | 137147   | 54.560  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.25 | 107  | 89478    | 52.466  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.88 | 164  | 142457   | 52.068  | ug/l   | 94       |
| 65) Chlorobenzene              | 11.67 | 112  | 377734   | 53.081  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.75 | 131  | 148755   | 53.037  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.75 | 91   | 657991   | 54.034  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.86 | 106  | 512411   | 108.161 | ug/l   | 98       |
| 69) o-Xylene                   | 12.18 | 106  | 232026   | 54.856  | ug/l   | 100      |
| 70) Styrene                    | 12.20 | 104  | 403404   | 54.733  | ug/l   | 99       |
| 71) Bromoform                  | 12.37 | 173  | 78014    | 54.539  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.48 | 105  | 658561   | 53.967  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.29 | 43   | 79886    | 49.751  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.74 | 83   | 84981    | 51.070  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.79 | 75   | 53243m   | 46.743  | ug/l   |          |
| 77) Bromobenzene               | 12.77 | 156  | 156770   | 52.311  | ug/l   | 98       |
| 78) n-propylbenzene            | 12.83 | 91   | 752533   | 53.914  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.91 | 91   | 429110   | 54.120  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.96 | 105  | 569804   | 54.661  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.53 | 75   | 26027    | 46.391  | ug/l   | 93       |
| 82) 4-Chlorotoluene            | 13.01 | 91   | 454772   | 53.479  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.23 | 119  | 481947   | 54.551  | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.27 | 105  | 558321   | 53.806  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.41 | 105  | 641661   | 53.801  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.52 | 119  | 612049   | 53.143  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.52 | 146  | 296224   | 51.801  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.60 | 146  | 295054   | 50.956  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.85 | 91   | 530992   | 53.377  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.12 | 117  | 113200   | 52.193  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.90 | 146  | 258358   | 52.202  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.51 | 75   | 15069    | 51.147  | ug/l   | 96       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.17 | 180  | 176645   | 52.587 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.27 | 225  | 115095   | 51.196 | ug/l  | 98       |
| 95) Naphthalene            | 15.41 | 128  | 277420   | 53.516 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.60 | 180  | 149165   | 51.856 | ug/l  | 100      |

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

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