

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW010320\  
 Data File : VW014504.D  
 Acq On : 03 Jan 2020 17:46  
 Operator : SY/VA  
 Sample : VW0103SBS01  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW0103SBS01

Manual Integrations  
 APPROVED

apatel  
 1/6/2020 10:43:36 AM

Quant Time: Jan 06 00:55:32 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W010320S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jan 03 16:07:20 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 872370   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 1311849  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 1136949  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.55 | 152  | 556240   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response   | Conc    | Units | Dev(Min) |
|-----------------------------|-------|------|------------|---------|-------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.30  | 65   | 398448     | 52.24   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 104.48% |       |          |
| 35) Dibromofluoromethane    | 7.88  | 113  | 394669     | 52.64   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 105.28% |       |          |
| 50) Toluene-d8              | 10.32 | 98   | 1657140    | 52.96   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 105.92% |       |          |
| 62) 4-Bromofluorobenzene    | 12.62 | 95   | 567216     | 53.45   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 106.90% |       |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units | Qvalue |
|-------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85   | 110194   | 22.372  | ug/l  | 96     |
| 3) Chloromethane              | 2.21 | 50   | 130900   | 21.712  | ug/l  | 97     |
| 4) Vinyl Chloride             | 2.36 | 62   | 189298   | 21.347  | ug/l  | 98     |
| 5) Bromomethane               | 2.77 | 94   | 119541   | 21.822  | ug/l  | 99     |
| 6) Chloroethane               | 2.92 | 64   | 107898   | 21.345  | ug/l  | 98     |
| 7) Trichlorofluoromethane     | 3.25 | 101  | 86137    | 19.414  | ug/l  | 92     |
| 8) Diethyl Ether              | 3.68 | 74   | 88195    | 19.979  | ug/l  | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101  | 173880   | 20.975  | ug/l  | 99     |
| 10) Methyl Iodide             | 4.27 | 142  | 257395   | 20.578  | ug/l  | 99     |
| 11) Tert butyl alcohol        | 5.15 | 59   | 71811    | 109.193 | ug/l  | 97     |
| 12) 1,1-Dichloroethene        | 4.04 | 96   | 180969   | 20.846  | ug/l  | 99     |
| 13) Acrolein                  | 3.89 | 56   | 63345    | 95.154  | ug/l  | 98     |
| 14) Allyl chloride            | 4.66 | 41   | 273284   | 20.600  | ug/l  | 99     |
| 15) Acrylonitrile             | 5.36 | 53   | 198034   | 98.141  | ug/l  | 98     |
| 16) Acetone                   | 4.12 | 43   | 194290   | 90.213  | ug/l  | 99     |
| 17) Carbon Disulfide          | 4.39 | 76   | 542165   | 20.720  | ug/l  | 97     |
| 18) Methyl Acetate            | 4.67 | 43   | 99948    | 19.215  | ug/l  | 99     |
| 19) Methyl tert-butyl Ether   | 5.42 | 73   | 222238   | 20.623  | ug/l  | 99     |
| 20) Methylene Chloride        | 4.92 | 84   | 200580   | 20.347  | ug/l  | 98     |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96   | 188335   | 20.431  | ug/l  | 97     |
| 22) Diisopropyl ether         | 6.31 | 45   | 525037   | 21.144  | ug/l  | 97     |
| 23) Vinyl Acetate             | 6.25 | 43   | 1530501  | 102.069 | ug/l  | 100    |
| 24) 1,1-Dichloroethane        | 6.21 | 63   | 322135   | 20.566  | ug/l  | 98     |
| 25) 2-Butanone                | 7.17 | 43   | 256941   | 92.964  | ug/l  | 97     |
| 26) 2,2-Dichloropropane       | 7.17 | 77   | 175383   | 20.224  | ug/l  | 97     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96   | 199710   | 20.618  | ug/l  | 99     |
| 28) Bromochloromethane        | 7.51 | 49   | 111907   | 18.223  | ug/l  | 98     |
| 29) Tetrahydrofuran           | 7.52 | 42   | 162463   | 94.883  | ug/l  | 100    |
| 30) Chloroform                | 7.67 | 83   | 301796   | 20.604  | ug/l  | 98     |
| 31) Cyclohexane               | 7.95 | 56   | 329918   | 20.268  | ug/l  | 95     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97   | 243172   | 20.642  | ug/l  | 99     |
| 36) 1,1-Dichloropropene       | 8.08 | 75   | 260440   | 20.593  | ug/l  | 99     |
| 37) Ethyl Acetate             | 7.25 | 43   | 112735   | 19.655  | ug/l  | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117  | 225302   | 20.535  | ug/l  | 99     |

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 Acq On : 03 Jan 2020 17:46  
 Operator : SY/VA  
 Sample : VW0103SBSD01  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW0103SBSD01

Manual Integrations  
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apatel  
 1/6/2020 10:43:36 AM

Quant Time: Jan 06 00:55:32 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W010320S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jan 03 16:07:20 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 327138   | 20.157  | ug/l   | 99       |
| 40) Benzene                    | 8.32  | 78   | 748819   | 20.927  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.48  | 41   | 59679    | 18.665  | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 192437   | 20.724  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.42  | 43   | 205677   | 19.747  | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 198529   | 20.504  | ug/l   | 92       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 183682   | 20.919  | ug/l   | 100      |
| 46) Dibromomethane             | 9.46  | 93   | 89810    | 20.719  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.64  | 83   | 220633   | 20.616  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.43  | 41   | 91293    | 17.953  | ug/l   | 93       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 31896    | 393.416 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 533369   | 98.612  | ug/l   | 100      |
| 52) Toluene                    | 10.38 | 92   | 469652   | 20.863  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 228377   | 20.611  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 275270   | 20.326  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 126634   | 20.003  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 163709   | 19.898  | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 225967   | 20.309  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 232085   | 92.751  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.96 | 43   | 364301   | 97.743  | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.13 | 129  | 142718   | 19.980  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 119949   | 19.960  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.86 | 164  | 172602   | 20.969  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.65 | 112  | 480320   | 20.621  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 161909   | 20.645  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.73 | 91   | 869528   | 20.715  | ug/l   | 97       |
| 68) m/p-Xylenes                | 11.84 | 106  | 676313   | 42.097  | ug/l   | 98       |
| 69) o-Xylene                   | 12.16 | 106  | 309043   | 20.825  | ug/l   | 99       |
| 70) Styrene                    | 12.18 | 104  | 522904   | 20.832  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 82787    | 19.353  | ug/l # | 98       |
| 73) Isopropylbenzene           | 12.46 | 105  | 850454   | 20.837  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.27 | 43   | 186502   | 20.380  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 145778   | 19.789  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.76 | 75   | 109006m  | 20.727  | ug/l   |          |
| 77) Bromobenzene               | 12.74 | 156  | 195968   | 20.673  | ug/l   | 100      |
| 78) n-propylbenzene            | 12.80 | 91   | 1020716  | 21.268  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 574217   | 21.025  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 722766   | 21.091  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 45150    | 19.128  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 597573   | 21.060  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 628928   | 20.962  | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 721545   | 21.158  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.38 | 105  | 870956   | 20.972  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.49 | 119  | 802975   | 21.212  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 389404   | 21.125  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 385759   | 21.198  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.82 | 91   | 749979   | 21.335  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.09 | 117  | 137239   | 20.753  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 338529   | 20.895  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.48 | 75   | 23122    | 19.820  | ug/l   | 96       |

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Sample : VW0103SBSD01  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VW0103SBSD01

Manual Integrations  
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apatel  
1/6/2020 10:43:36 AM

Quant Time: Jan 06 00:55:32 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W010320S.M  
Quant Title : SW846 8260  
QLast Update : Fri Jan 03 16:07:20 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 242330   | 22.149 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.23 | 225  | 156890   | 21.398 | ug/l  | 98       |
| 95) Naphthalene            | 15.36 | 128  | 377643   | 20.239 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 204468   | 21.440 | ug/l  | 99       |

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

