

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX123119\  
 Data File : VX014382.D  
 Acq On : 31 Dec 2019 16:03  
 Operator : JC/SP  
 Sample : K6464-05MSD  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 GW-1MSD

Manual Integrations  
 APPROVED

apatel  
 1/2/2020 9:54:37 AM

Quant Time: Jan 01 04:46:38 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 17 03:01:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 452727   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 708056   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 632455   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 301770   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.05  | 65   | 273684   | 53.34  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 106.68% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 232550   | 54.03  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 108.06% |          |
| 50) Toluene-d8              | 8.71  | 98   | 862560   | 51.47  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 102.94% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 298883   | 48.79  | ug/l    | 0.00     |
| Spiked Amount               |       |      |          | 50.000 |         |          |
|                             |       |      | Recovery | =      | 97.58%  |          |

| Target Compounds              | R.T. | QIon | Response | Conc    | Units | Qvalue |
|-------------------------------|------|------|----------|---------|-------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85   | 173459   | 42.827  | ug/l  | 99     |
| 3) Chloromethane              | 1.32 | 50   | 255916   | 47.083  | ug/l  | 99     |
| 4) Vinyl Chloride             | 1.40 | 62   | 269497   | 46.988  | ug/l  | 98     |
| 5) Bromomethane               | 1.63 | 94   | 188735   | 46.364  | ug/l  | 100    |
| 6) Chloroethane               | 1.71 | 64   | 198235   | 56.001  | ug/l  | 96     |
| 7) Trichlorofluoromethane     | 1.92 | 101  | 363730   | 51.230  | ug/l  | 97     |
| 8) Diethyl Ether              | 2.18 | 74   | 171476   | 51.462  | ug/l  | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101  | 212995   | 49.768  | ug/l  | 98     |
| 10) Methyl Iodide             | 2.50 | 142  | 277337   | 49.183  | ug/l  | 99     |
| 11) Tert butyl alcohol        | 3.03 | 59   | 323111   | 291.433 | ug/l  | 99     |
| 12) 1,1-Dichloroethene        | 2.36 | 96   | 218651   | 50.208  | ug/l  | 98     |
| 13) Acrolein                  | 2.28 | 56   | 188077   | 296.346 | ug/l  | 97     |
| 14) Allyl chloride            | 2.72 | 41   | 415859   | 53.482  | ug/l  | 98     |
| 15) Acrylonitrile             | 3.13 | 53   | 752378   | 290.742 | ug/l  | 100    |
| 16) Acetone                   | 2.43 | 43   | 632106   | 189.757 | ug/l  | 99     |
| 17) Carbon Disulfide          | 2.56 | 76   | 510226   | 42.319  | ug/l  | 98     |
| 18) Methyl Acetate            | 2.76 | 43   | 390379   | 59.141  | ug/l  | 99     |
| 19) Methyl tert-butyl Ether   | 3.19 | 73   | 814355   | 56.906  | ug/l  | 97     |
| 20) Methylene Chloride        | 2.84 | 84   | 261396   | 49.831  | ug/l  | 99     |
| 21) trans-1,2-Dichloroethene  | 3.15 | 96   | 232473   | 48.454  | ug/l  | 99     |
| 22) Diisopropyl ether         | 3.84 | 45   | 880530   | 56.827  | ug/l  | 98     |
| 23) Vinyl Acetate             | 3.80 | 43   | 3765880  | 297.823 | ug/l  | 99     |
| 24) 1,1-Dichloroethane        | 3.69 | 63   | 456016   | 52.898  | ug/l  | 99     |
| 25) 2-Butanone                | 4.66 | 43   | 1062348  | 258.674 | ug/l  | 99     |
| 26) 2,2-Dichloropropane       | 4.58 | 77   | 340857   | 50.925  | ug/l  | 98     |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96   | 283991   | 52.338  | ug/l  | 99     |
| 28) Bromochloromethane        | 5.00 | 49   | 181719   | 54.767  | ug/l  | 98     |
| 29) Tetrahydrofuran           | 5.11 | 42   | 685252   | 298.312 | ug/l  | 100    |
| 30) Chloroform                | 5.20 | 83   | 450749   | 55.156  | ug/l  | 99     |
| 31) Cyclohexane               | 5.57 | 56   | 386321   | 50.386  | ug/l  | 99     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97   | 371120   | 53.284  | ug/l  | 99     |
| 36) 1,1-Dichloropropene       | 5.79 | 75   | 317616   | 48.888  | ug/l  | 99     |
| 37) Ethyl Acetate             | 4.82 | 43   | 413670   | 57.660  | ug/l  | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117  | 307934   | 52.029  | ug/l  | 96     |

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 Operator : JC/SP  
 Sample : K6464-05MSD  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 GW-1MSD

Manual Integrations  
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apatel  
 1/2/2020 9:54:37 AM

Quant Time: Jan 01 04:46:38 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 17 03:01:07 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units | Dev(Min) |
|--------------------------------|-------|------|----------|----------|-------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 375459   | 46.804   | ug/l  | 97       |
| 40) Benzene                    | 6.14  | 78   | 1021003  | 51.076   | ug/l  | 99       |
| 41) Methacrylonitrile          | 5.03  | 41   | 227942   | 57.262   | ug/l  | 98       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 354844   | 52.367   | ug/l  | 100      |
| 43) Isopropyl Acetate          | 6.43  | 43   | 685977   | 57.776   | ug/l  | 100      |
| 44) Trichloroethene            | 7.20  | 130  | 268171   | 48.569   | ug/l  | 100      |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 275260   | 53.724   | ug/l  | 99       |
| 46) Dibromomethane             | 7.65  | 93   | 174480   | 51.507   | ug/l  | 100      |
| 47) Bromodichloromethane       | 7.89  | 83   | 349715   | 54.816   | ug/l  | 97       |
| 48) Methyl methacrylate        | 7.76  | 41   | 331420   | 57.004   | ug/l  | 99       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 128107   | 1082.759 | ug/l  | 98       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 2165439  | 290.408  | ug/l  | 99       |
| 52) Toluene                    | 8.78  | 92   | 633048   | 50.103   | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 382395   | 54.663   | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 426135   | 54.679   | ug/l  | 100      |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 274326   | 54.172   | ug/l  | 99       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 444506   | 55.880   | ug/l  | 100      |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 457856   | 53.738   | ug/l  | 99       |
| 59) 2-Hexanone                 | 9.48  | 43   | 1634678  | 272.331  | ug/l  | 99       |
| 60) Dibromochloromethane       | 9.57  | 129  | 282842   | 56.190   | ug/l  | 100      |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 279453   | 53.935   | ug/l  | 99       |
| 64) Tetrachloroethene          | 9.33  | 164  | 242636   | 43.355   | ug/l  | 99       |
| 65) Chlorobenzene              | 10.14 | 112  | 682473   | 50.751   | ug/l  | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 261840   | 54.532   | ug/l  | 100      |
| 67) Ethyl Benzene              | 10.25 | 91   | 1201035  | 51.949   | ug/l  | 100      |
| 68) m/p-Xylenes                | 10.35 | 106  | 909135   | 102.241  | ug/l  | 100      |
| 69) o-Xylene                   | 10.70 | 106  | 451439   | 51.765   | ug/l  | 100      |
| 70) Stvrene                    | 10.71 | 104  | 751781   | 50.979   | ug/l  | 99       |
| 71) Bromoform                  | 10.85 | 173  | 214914   | 55.683   | ug/l  | 100      |
| 73) Isopropylbenzene           | 11.01 | 105  | 1186875  | 55.861   | ug/l  | 100      |
| 74) N-amyl acetate             | 10.89 | 43   | 592759   | 59.518   | ug/l  | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 433979   | 58.915   | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 348046m  | 53.126   | ug/l  |          |
| 77) Bromobenzene               | 11.25 | 156  | 306463   | 52.424   | ug/l  | 99       |
| 78) n-propylbenzene            | 11.35 | 91   | 1315472  | 55.197   | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 783274   | 54.067   | ug/l  | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 977021   | 54.639   | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 139247   | 59.992   | ug/l  | 99       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 889640   | 52.941   | ug/l  | 99       |
| 83) tert-Butylbenzene          | 11.76 | 119  | 988372   | 56.798   | ug/l  | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 978879   | 54.664   | ug/l  | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 1121511  | 54.593   | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 1031046  | 54.868   | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 524654   | 51.209   | ug/l  | 99       |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 521573   | 50.067   | ug/l  | 100      |
| 89) n-Butylbenzene             | 12.39 | 91   | 857917   | 53.506   | ug/l  | 99       |
| 90) Hexachloroethane           | 12.59 | 117  | 184310   | 54.606   | ug/l  | 98       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 541752   | 52.528   | ug/l  | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 91087    | 55.879   | ug/l  | 98       |
| 93) 1,2,4-Trichlorobenzene     | 13.64 | 180  | 342974   | 51.164   | ug/l  | 97       |

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Sample : K6464-05MSD  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
GW-1MSD

Manual Integrations  
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apatel  
1/2/2020 9:54:37 AM

Quant Time: Jan 01 04:46:38 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 17 03:01:07 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 94) Hexachlorobutadiene    | 13.78 | 225  | 162533   | 50.450 | ug/l  | 96       |
| 95) Naphthalene            | 13.83 | 128  | 1121729  | 56.955 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 359954   | 54.396 | ug/l  | 99       |

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

