

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX091819\  
 Data File : VX012475.D  
 Acq On : 18 Sep 2019 15:47  
 Operator : JC/SP  
 Sample : VX0918WBSD01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX0918WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 9/19/2019 1:04:35 PM

Quant Time: Sep 19 07:12:38 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091719W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 17 15:27:10 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 204332   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 338509   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 301665   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 143583   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 123637   | 42.22 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 84.44% |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 89169    | 43.52 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 87.04% |      |
| 50) Toluene-d8            | 8.71   | 98  | 328740   | 43.35 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 86.70% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 132161   | 41.97 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 83.94% |      |

## Target Compounds

|                               |      |     |        |        |        | Qvalue |
|-------------------------------|------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 25375  | 18.859 | ug/l   | 100    |
| 3) Chloromethane              | 1.32 | 50  | 20785  | 18.503 | ug/l   | 96     |
| 4) Vinyl Chloride             | 1.40 | 62  | 23131  | 19.051 | ug/l   | 98     |
| 5) Bromomethane               | 1.63 | 94  | 10482  | 21.974 | ug/l   | 93     |
| 6) Chloroethane               | 1.71 | 64  | 17425  | 18.340 | ug/l # | 88     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 43487  | 19.538 | ug/l   | 99     |
| 8) Diethyl Ether              | 2.18 | 74  | 18751  | 18.652 | ug/l   | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 30830  | 19.145 | ug/l   | 99     |
| 10) Methyl Iodide             | 2.50 | 142 | 22948  | 19.572 | ug/l   | 96     |
| 11) Tert butyl alcohol        | 3.03 | 59  | 68539  | 88.497 | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 2.36 | 96  | 24269  | 18.892 | ug/l   | 92     |
| 13) Acrolein                  | 2.28 | 56  | 19460  | 74.496 | ug/l   | 95     |
| 14) Allyl chloride            | 2.72 | 41  | 54767  | 18.312 | ug/l   | 99     |
| 15) Acrylonitrile             | 3.13 | 53  | 121184 | 95.494 | ug/l   | 98     |
| 16) Acetone                   | 2.43 | 43  | 134410 | 95.530 | ug/l   | 100    |
| 17) Carbon Disulfide          | 2.56 | 76  | 29503  | 17.459 | ug/l   | 97     |
| 18) Methyl Acetate            | 2.76 | 43  | 56784  | 18.608 | ug/l   | 97     |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 129379 | 18.471 | ug/l   | 95     |
| 20) Methylene Chloride        | 2.84 | 84  | 33002  | 18.621 | ug/l   | 94     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 25451  | 19.078 | ug/l   | 95     |
| 22) Diisopropyl ether         | 3.84 | 45  | 128859 | 18.401 | ug/l   | 97     |
| 23) Vinyl Acetate             | 3.80 | 43  | 541920 | 94.074 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 62533  | 18.663 | ug/l   | 99     |
| 25) 2-Butanone                | 4.66 | 43  | 187459 | 92.281 | ug/l   | 97     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 61448  | 18.648 | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 37282  | 18.708 | ug/l   | 98     |
| 28) Bromochloromethane        | 5.00 | 49  | 34785  | 20.138 | ug/l   | 98     |
| 29) Tetrahydrofuran           | 5.11 | 42  | 108692 | 96.855 | ug/l   | 98     |
| 30) Chloroform                | 5.20 | 83  | 71054  | 18.465 | ug/l   | 100    |
| 31) Cyclohexane               | 5.58 | 56  | 38465  | 19.018 | ug/l   | 96     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 60047  | 18.670 | ug/l   | 100    |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 38749  | 18.835 | ug/l   | 97     |
| 37) Ethyl Acetate             | 4.82 | 43  | 63648  | 20.155 | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 47814  | 18.687 | ug/l   | 94     |

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 Operator : JC/SP  
 Sample : VX0918WBSD01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX0918WBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 9/19/2019 1:04:35 PM

Quant Time: Sep 19 07:12:38 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091719W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 17 15:27:10 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 40255    | 20.128  | ug/l   | 97       |
| 40) Benzene                    | 6.13  | 78   | 128198   | 19.596  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.03  | 41   | 37869    | 18.623  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 57496    | 18.949  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.43  | 43   | 103924   | 18.335  | ug/l   | 99       |
| 44) Trichloroethene            | 7.20  | 130  | 34482    | 20.037  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 38498    | 19.154  | ug/l   | 98       |
| 46) Dibromomethane             | 7.65  | 93   | 24762    | 19.038  | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.89  | 83   | 52890    | 18.263  | ug/l   | 96       |
| 48) Methyl methacrylate        | 7.76  | 41   | 49489    | 18.523  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 23720    | 364.771 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 351608   | 94.595  | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 81734    | 19.389  | ug/l   | 97       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 55167    | 18.325  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 58958    | 18.917  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 41208    | 18.974  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 63535    | 18.711  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 67223    | 19.400  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 182883   | 104.046 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.49  | 43   | 271833   | 93.740  | ug/l   | 98       |
| 60) Dibromochloromethane       | 9.58  | 129  | 40792    | 18.439  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 39536    | 19.932  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.33  | 164  | 30974    | 22.407  | ug/l   | 97       |
| 65) Chlorobenzene              | 10.14 | 112  | 96687    | 19.419  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 40356    | 19.530  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 165131   | 19.304  | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.36 | 106  | 123011   | 39.522  | ug/l   | 99       |
| 69) o-Xylene                   | 10.70 | 106  | 63200    | 19.745  | ug/l   | 99       |
| 70) Styrene                    | 10.71 | 104  | 111227   | 19.640  | ug/l   | 99       |
| 71) Bromoform                  | 10.85 | 173  | 28670    | 18.059  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.01 | 105  | 178691   | 19.835  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.89 | 43   | 91759    | 18.918  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 68417    | 19.360  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 65635m   | 19.900  | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 44360    | 20.190  | ug/l   | 97       |
| 78) n-propylbenzene            | 11.35 | 91   | 196726   | 19.592  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 125293   | 19.181  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 151092   | 19.665  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 19768    | 18.531  | ug/l   | 95       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 144618   | 19.290  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.76 | 119  | 154380   | 18.752  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 154474   | 19.581  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 175142   | 19.306  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 162314   | 19.484  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 82142    | 19.875  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 82549    | 19.444  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 136926   | 18.422  | ug/l   | 98       |
| 90) Hexachloroethane           | 12.59 | 117  | 27141    | 17.769  | ug/l   | 92       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 84534    | 19.569  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 17156    | 18.725  | ug/l   | 98       |

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Sample : VX0918WBSD01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0918WBSD01

Manual Integrations  
APPROVED

MMDadoda  
9/19/2019 1:04:35 PM

Quant Time: Sep 19 07:12:38 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X091719W.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 17 15:27:10 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 54280    | 19.508 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 24737    | 18.863 | ug/l  | 96       |
| 95) Naphthalene            | 13.83 | 128  | 201225   | 20.325 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 56185    | 19.816 | ug/l  | 99       |

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

