

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX122118\  
 Data File : VX006760.D  
 Acq On : 22 Dec 2018 08:25  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 51 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 12/22/2018 11:20:30 AM

Quant Time: Dec 22 09:45:45 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 19 15:20:58 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 563758   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 885194   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 798316   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 398633   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 312305   | 51.40 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.80% |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 286999   | 51.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.54% |      |
| 50) Toluene-d8            | 8.71   | 98  | 1046542  | 49.59 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.18%  |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 366108   | 47.37 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.74%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 227490  | 44.110  | ug/l | 100    |
| 3) Chloromethane              | 1.33 | 50  | 252952  | 45.525  | ug/l | 98     |
| 4) Vinyl Chloride             | 1.41 | 62  | 276190  | 47.594  | ug/l | 99     |
| 5) Bromomethane               | 1.64 | 94  | 239876  | 44.068  | ug/l | 98     |
| 6) Chloroethane               | 1.72 | 64  | 178158  | 44.339  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 445390  | 49.228  | ug/l | 97     |
| 8) Diethyl Ether              | 2.19 | 74  | 172927  | 48.122  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 252223  | 47.480  | ug/l | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 350080  | 46.038  | ug/l | 100    |
| 11) Tert butyl alcohol        | 3.07 | 59  | 350272  | 258.316 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 246700  | 48.977  | ug/l | 99     |
| 13) Acrolein                  | 2.30 | 56  | 192546  | 210.489 | ug/l | 97     |
| 14) Allyl chloride            | 2.73 | 41  | 395161  | 46.607  | ug/l | 99     |
| 15) Acrylonitrile             | 3.15 | 53  | 799959  | 265.705 | ug/l | 100    |
| 16) Acetone                   | 2.45 | 43  | 681206  | 244.031 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.57 | 76  | 564976  | 42.384  | ug/l | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 465977  | 56.769  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 878773  | 52.565  | ug/l | 99     |
| 20) Methylene Chloride        | 2.86 | 84  | 281686  | 48.800  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 264072  | 47.316  | ug/l | 98     |
| 22) Diisopropyl ether         | 3.87 | 45  | 818990  | 52.801  | ug/l | 94     |
| 23) Vinyl Acetate             | 3.82 | 43  | 3266590 | 257.467 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 450462  | 48.650  | ug/l | 99     |
| 25) 2-Butanone                | 4.70 | 43  | 1009085 | 256.990 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 171157  | 23.930  | ug/l | 92     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 305290  | 49.579  | ug/l | 97     |
| 28) Bromochloromethane        | 5.02 | 49  | 211180  | 54.262  | ug/l | 100    |
| 29) Tetrahydrofuran           | 5.15 | 42  | 698996  | 270.283 | ug/l | 98     |
| 30) Chloroform                | 5.22 | 83  | 485240  | 50.607  | ug/l | 97     |
| 31) Cyclohexane               | 5.57 | 56  | 401162  | 47.690  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 409864  | 50.623  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 352882  | 48.133  | ug/l | 100    |
| 37) Ethyl Acetate             | 4.85 | 43  | 395793  | 51.868  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 348455  | 48.906  | ug/l | 95     |

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 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 51 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
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 12/22/2018 11:20:30 AM

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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 19 15:20:58 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units | Dev(Min) |
|--------------------------------|-------|------|----------|----------|-------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 434078   | 44.973   | ug/l  | 99       |
| 40) Benzene                    | 6.14  | 78   | 1095914  | 49.177   | ug/l  | 100      |
| 41) Methacrylonitrile          | 5.06  | 41   | 218741   | 53.993   | ug/l  | 99       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 371078   | 48.866   | ug/l  | 100      |
| 43) Isopropyl Acetate          | 6.46  | 43   | 607600   | 52.332   | ug/l  | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 320078   | 47.454   | ug/l  | 96       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 274859   | 50.683   | ug/l  | 98       |
| 46) Dibromomethane             | 7.66  | 93   | 199172   | 49.931   | ug/l  | 100      |
| 47) Bromodichloromethane       | 7.90  | 83   | 336664   | 50.836   | ug/l  | 96       |
| 48) Methyl methacrylate        | 7.77  | 41   | 317277   | 53.737   | ug/l  | 98       |
| 49) 1,4-Dioxane                | 7.75  | 88   | 155886   | 1009.275 | ug/l  | 98       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1965812  | 266.104  | ug/l  | 99       |
| 52) Toluene                    | 8.79  | 92   | 700706   | 48.670   | ug/l  | 97       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 325548   | 45.835   | ug/l  | 96       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 375157   | 48.138   | ug/l  | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 299164   | 50.766   | ug/l  | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 433739   | 52.076   | ug/l  | 98       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 473915   | 49.985   | ug/l  | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 1136249  | 256.639  | ug/l  | 99       |
| 59) 2-Hexanone                 | 9.49  | 43   | 1476060  | 261.147  | ug/l  | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 291101   | 47.359   | ug/l  | 96       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 316228   | 50.480   | ug/l  | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 308006   | 48.724   | ug/l  | 98       |
| 65) Chlorobenzene              | 10.14 | 112  | 811936   | 48.075   | ug/l  | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 283309   | 53.766   | ug/l  | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 1339733  | 48.545   | ug/l  | 98       |
| 68) m/p-Xylenes                | 10.36 | 106  | 1052933  | 96.688   | ug/l  | 100      |
| 69) o-Xylene                   | 10.70 | 106  | 516186   | 48.001   | ug/l  | 98       |
| 70) Styrene                    | 10.71 | 104  | 829215   | 48.740   | ug/l  | 99       |
| 71) Bromoform                  | 10.86 | 173  | 208148   | 44.347   | ug/l  | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 1375775  | 50.448   | ug/l  | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 544535   | 55.784   | ug/l  | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 437495   | 53.942   | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 387875m  | 52.357   | ug/l  |          |
| 77) Bromobenzene               | 11.26 | 156  | 367692   | 49.871   | ug/l  | 100      |
| 78) n-propylbenzene            | 11.36 | 91   | 1519414  | 50.595   | ug/l  | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 891411   | 48.981   | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 1122102  | 49.955   | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 84666    | 36.069   | ug/l  | 93       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 1026467  | 49.170   | ug/l  | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 1140426  | 50.728   | ug/l  | 100      |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 1151459  | 48.736   | ug/l  | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 1359453  | 49.321   | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 1219520  | 50.332   | ug/l  | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 652591   | 49.112   | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 643725   | 47.257   | ug/l  | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 1016260  | 49.284   | ug/l  | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 174403   | 46.256   | ug/l  | 98       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 648144   | 48.761   | ug/l  | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 89394    | 53.268   | ug/l  | 99       |

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Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 51 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050

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APPROVED

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12/22/2018 11:20:30 AM

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Quant Title : SW846 8260  
QLast Update : Wed Dec 19 15:20:58 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 451651   | 49.258 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 195763   | 45.297 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 1490682  | 50.938 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 463159   | 48.924 | ug/l  | 98       |

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

