

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX091518\  
 Data File : VX004597.D  
 Acq On : 15 Sep 2018 20:53  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 9/17/2018 6:27:29 PM

Quant Time: Sep 17 08:44:19 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 12 02:17:23 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 270080   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 346470   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 325672   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 195429   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 174337   | 50.06 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.12% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 152795   | 48.19 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.38%  |      |
| 50) Toluene-d8            | 8.72   | 98  | 518989   | 48.81 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.62%  |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 191560   | 50.47 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.94% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 120619  | 47.65  | ug/l | 95     |
| 3) Chloromethane              | 1.32 | 50  | 154254  | 44.28  | ug/l | 95     |
| 4) Vinyl Chloride             | 1.40 | 62  | 169596  | 47.44  | ug/l | 94     |
| 5) Bromomethane               | 1.64 | 94  | 60121   | 39.92  | ug/l | 91     |
| 6) Chloroethane               | 1.71 | 64  | 113423  | 49.06  | ug/l | 97     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 221521  | 46.74  | ug/l | 93     |
| 8) Diethyl Ether              | 2.19 | 74  | 107719  | 50.69  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 144176  | 47.95  | ug/l | 98     |
| 10) Methyl Iodide             | 2.51 | 142 | 107339  | 31.58  | ug/l | 96     |
| 11) Tert butyl alcohol        | 3.08 | 59  | 190801  | 229.62 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 138194  | 48.97  | ug/l | 95     |
| 13) Acrolein                  | 2.29 | 56  | 94683   | 288.65 | ug/l | 97     |
| 14) Allyl chloride            | 2.73 | 41  | 264242  | 45.55  | ug/l | 98     |
| 15) Acrylonitrile             | 3.15 | 53  | 472286  | 236.02 | ug/l | 99     |
| 16) Acetone                   | 2.45 | 43  | 354239  | 208.41 | ug/l | 94     |
| 17) Carbon Disulfide          | 2.57 | 76  | 396276  | 48.58  | ug/l | 97     |
| 18) Methyl Acetate            | 2.78 | 43  | 231910  | 48.63  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 507728  | 51.28  | ug/l | 100    |
| 20) Methylene Chloride        | 2.85 | 84  | 163081  | 46.77  | ug/l | 90     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 148907  | 47.75  | ug/l | 96     |
| 22) Diisopropyl ether         | 3.87 | 45  | 520937  | 49.85  | ug/l | 94     |
| 23) Vinyl Acetate             | 3.82 | 43  | 2138015 | 252.84 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 290740  | 49.28  | ug/l | 99     |
| 25) 2-Butanone                | 4.70 | 43  | 618129  | 228.51 | ug/l | 92     |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 171319  | 42.28  | ug/l | 96     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 176835  | 50.80  | ug/l | 97     |
| 28) Bromochloromethane        | 5.02 | 49  | 140692  | 52.14  | ug/l | 95     |
| 29) Tetrahydrofuran           | 5.15 | 42  | 403163  | 247.14 | ug/l | 99     |
| 30) Chloroform                | 5.21 | 83  | 280299  | 48.67  | ug/l | 98     |
| 31) Cyclohexane               | 5.57 | 56  | 262239  | 52.06  | ug/l | 92     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 230733  | 49.74  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 215882  | 51.32  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.86 | 43  | 230743  | 48.23  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 206687  | 50.31  | ug/l | 95     |

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 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
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Manual Integrations  
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MMDadoda  
 9/17/2018 6:27:29 PM

Quant Time: Sep 17 08:44:19 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 12 02:17:23 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 227904   | 51.92  | ug/l   | 96       |
| 40) Benzene                    | 6.14  | 78   | 615634   | 49.33  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.06  | 41   | 130338   | 49.45  | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 197169   | 47.63  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 6.46  | 43   | 324061   | 51.00  | ug/l   | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 157830   | 48.68  | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 150453   | 50.10  | ug/l   | 99       |
| 46) Dibromomethane             | 7.66  | 93   | 94155    | 49.63  | ug/l   | 98       |
| 47) Bromodichloromethane       | 7.90  | 83   | 179551   | 50.04  | ug/l   | 98       |
| 48) Methyl methacrylate        | 7.78  | 41   | 162610   | 51.71  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 7.76  | 88   | 74392    | 999.52 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1036283  | 231.10 | ug/l   | 99       |
| 52) Toluene                    | 8.79  | 92   | 362343   | 49.28  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 201342   | 48.04  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.44  | 75   | 221268   | 51.79  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 9.22  | 97   | 145422   | 45.93  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 224136   | 50.04  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 243256   | 47.29  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 559573   | 245.35 | ug/l   | 95       |
| 59) 2-Hexanone                 | 9.50  | 43   | 786075   | 228.54 | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.59  | 129  | 148356   | 49.77  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 150240   | 49.67  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 181490   | 44.63  | ug/l   | 99       |
| 65) Chlorobenzene              | 10.14 | 112  | 404704   | 50.03  | ug/l   | 96       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 143249   | 51.35  | ug/l   | 100      |
| 67) Ethyl Benzene              | 10.25 | 91   | 684801   | 52.06  | ug/l   | 97       |
| 68) m/p-Xylenes                | 10.36 | 106  | 535934   | 105.77 | ug/l   | 98       |
| 69) o-Xylene                   | 10.70 | 106  | 260924   | 53.56  | ug/l   | 99       |
| 70) Styrene                    | 10.71 | 104  | 436203   | 54.05  | ug/l   | 98       |
| 71) Bromoform                  | 10.86 | 173  | 117793   | 51.43  | ug/l # | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 697287   | 54.18  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 293850   | 54.24  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 211864   | 51.03  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 198580m  | 50.51  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 184777   | 51.94  | ug/l   | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 795428   | 53.75  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 468282   | 52.17  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 584099   | 53.98  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 61616    | 49.95  | ug/l   | 93       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 546698   | 52.19  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 570725   | 55.41  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 598476   | 54.18  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 710200   | 54.10  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 633121   | 54.62  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 338494   | 51.00  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 342203   | 49.90  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 543180   | 51.42  | ug/l   | 98       |
| 90) Hexachloroethane           | 12.60 | 117  | 98566    | 53.11  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 345444   | 51.42  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 47111    | 53.15  | ug/l   | 96       |

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Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
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9/17/2018 6:27:29 PM

Quant Time: Sep 17 08:44:19 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X091118W.M  
Quant Title : SW846 8260  
QLast Update : Wed Sep 12 02:17:23 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 256416   | 53.90 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 125934   | 50.68 | ug/l  | 97       |
| 95) Naphthalene            | 13.83 | 128  | 854378   | 64.04 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 262529   | 53.72 | ug/l  | 98       |

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

