

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX061618\  
 Data File : VX002652.D  
 Acq On : 16 Jun 2018 17:39  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 6/19/2018 1:04:49 PM

Quant Time: Jun 18 01:53:57 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X061518W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 01:37:33 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 223533   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 310377   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 306291   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 197329   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 163567   | 48.15 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.30%  |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 131092   | 52.92 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.84% |      |
| 50) Toluene-d8            | 8.72   | 98  | 497730   | 52.92 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.84% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 187376   | 52.57 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.14% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 103239  | 43.505  | ug/l | 98     |
| 3) Chloromethane              | 1.32 | 50  | 112562  | 39.875  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.41 | 62  | 129898  | 44.345  | ug/l | 99     |
| 5) Bromomethane               | 1.64 | 94  | 71128   | 40.243  | ug/l | 99     |
| 6) Chloroethane               | 1.72 | 64  | 87823   | 45.488  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 223083  | 46.875  | ug/l | 97     |
| 8) Diethyl Ether              | 2.19 | 74  | 80529   | 44.488  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 125351  | 47.121  | ug/l | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 109898  | 32.621  | ug/l | 100    |
| 11) Tert butyl alcohol        | 3.08 | 59  | 163899  | 233.401 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 113218  | 45.329  | ug/l | 100    |
| 13) Acrolein                  | 2.30 | 56  | 58787   | 180.534 | ug/l | 98     |
| 14) Allyl chloride            | 2.73 | 41  | 230322  | 46.443  | ug/l | 99     |
| 15) Acrylonitrile             | 3.15 | 53  | 354757  | 231.511 | ug/l | 100    |
| 16) Acetone                   | 2.45 | 43  | 387414  | 258.508 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.57 | 76  | 287534  | 48.538  | ug/l | 98     |
| 18) Methyl Acetate            | 2.78 | 43  | 191046  | 47.850  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.21 | 73  | 421028  | 44.935  | ug/l | 99     |
| 20) Methylene Chloride        | 2.86 | 84  | 128974  | 41.972  | ug/l | 100    |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 122611  | 45.250  | ug/l | 97     |
| 22) Diisopropyl ether         | 3.88 | 45  | 408844  | 45.567  | ug/l | 98     |
| 23) Vinyl Acetate             | 3.83 | 43  | 1764361 | 234.949 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 243444  | 49.991  | ug/l | 99     |
| 25) 2-Butanone                | 4.71 | 43  | 494919  | 251.466 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 171968  | 49.146  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 129279  | 46.891  | ug/l | 95     |
| 28) Bromochloromethane        | 5.03 | 49  | 110954  | 48.652  | ug/l | 97     |
| 29) Tetrahydrofuran           | 5.17 | 42  | 308616  | 239.260 | ug/l | 98     |
| 30) Chloroform                | 5.22 | 83  | 229606  | 48.894  | ug/l | 99     |
| 31) Cyclohexane               | 5.58 | 56  | 192006  | 47.888  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 198373  | 50.508  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 163577  | 49.623  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.87 | 43  | 185399  | 49.691  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 176150  | 53.664  | ug/l | 99     |

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 Acq On : 16 Jun 2018 17:39  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 6/19/2018 1:04:49 PM

Quant Time: Jun 18 01:53:57 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X061518W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 01:37:33 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units | Dev(Min) |
|--------------------------------|-------|------|----------|----------|-------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 196031   | 50.870   | ug/l  | 96       |
| 40) Benzene                    | 6.15  | 78   | 491524   | 49.728   | ug/l  | 99       |
| 41) Methacrylonitrile          | 5.07  | 41   | 105511   | 50.085   | ug/l  | 98       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 191629   | 50.076   | ug/l  | 100      |
| 43) Isopropyl Acetate          | 6.47  | 43   | 304185   | 49.208   | ug/l  | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 142787   | 50.050   | ug/l  | 97       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 131628   | 50.599   | ug/l  | 99       |
| 46) Dibromomethane             | 7.67  | 93   | 88654    | 50.947   | ug/l  | 98       |
| 47) Bromodichloromethane       | 7.90  | 83   | 165668   | 53.978   | ug/l  | 100      |
| 48) Methyl methacrylate        | 7.78  | 41   | 157788   | 49.949   | ug/l  | 97       |
| 49) 1,4-Dioxane                | 7.76  | 88   | 62642    | 1047.132 | ug/l  | 97       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1012188  | 255.019  | ug/l  | 99       |
| 52) Toluene                    | 8.79  | 92   | 319944   | 50.744   | ug/l  | 100      |
| 53) t-1,3-Dichloropropene      | 8.44  | 75   | 196711   | 48.494   | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 9.05  | 75   | 180699   | 46.842   | ug/l  | 99       |
| 55) 1,1,2-Trichloroethane      | 9.22  | 97   | 130950   | 51.399   | ug/l  | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 202096   | 51.546   | ug/l  | 98       |
| 57) 1,3-Dichloropropane        | 9.38  | 76   | 214420   | 49.762   | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 478427   | 252.290  | ug/l  | 99       |
| 59) 2-Hexanone                 | 9.50  | 43   | 796658   | 266.365  | ug/l  | 98       |
| 60) Dibromochloromethane       | 9.59  | 129  | 137330   | 48.075   | ug/l  | 99       |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 138231   | 52.388   | ug/l  | 100      |
| 64) Tetrachloroethene          | 9.34  | 164  | 161865   | 47.608   | ug/l  | 98       |
| 65) Chlorobenzene              | 10.14 | 112  | 371109   | 49.336   | ug/l  | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 134984   | 52.637   | ug/l  | 100      |
| 67) Ethyl Benzene              | 10.26 | 91   | 638032   | 50.289   | ug/l  | 99       |
| 68) m/p-Xylenes                | 10.37 | 106  | 491384   | 100.404  | ug/l  | 100      |
| 69) o-Xylene                   | 10.70 | 106  | 242010   | 50.331   | ug/l  | 97       |
| 70) Styrene                    | 10.71 | 104  | 407021   | 51.471   | ug/l  | 99       |
| 71) Bromoform                  | 10.86 | 173  | 104778   | 45.375   | ug/l  | 100      |
| 73) Isopropylbenzene           | 11.02 | 105  | 663217   | 50.253   | ug/l  | 99       |
| 74) N-amyl acetate             | 6.47  | 43   | 304185   | 46.390   | ug/l  | # 99     |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 197214   | 50.602   | ug/l  | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 194666m  | 52.279   | ug/l  |          |
| 77) Bromobenzene               | 11.26 | 156  | 182857   | 49.733   | ug/l  | 96       |
| 78) n-propylbenzene            | 11.37 | 91   | 756454   | 49.978   | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 11.43 | 91   | 444830   | 49.225   | ug/l  | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 560415   | 50.247   | ug/l  | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.08 | 75   | 49826    | 43.418   | ug/l  | 95       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 527757   | 49.494   | ug/l  | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 551550   | 51.333   | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 578133   | 50.799   | ug/l  | 98       |
| 85) sec-Butylbenzene           | 11.95 | 105  | 683764   | 51.179   | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 615911   | 50.951   | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 12.03 | 146  | 333981   | 49.532   | ug/l  | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 335519   | 48.904   | ug/l  | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 548902   | 51.472   | ug/l  | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 86767    | 46.254   | ug/l  | 100      |
| 91) 1,2-Dichlorobenzene        | 12.40 | 146  | 342587   | 50.481   | ug/l  | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.01 | 75   | 44309    | 54.277   | ug/l  | 96       |

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Data File : VX002652.D  
Acq On : 16 Jun 2018 17:39  
Operator : JC/MD  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
6/19/2018 1:04:49 PM

Quant Time: Jun 18 01:53:57 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X061518W.M  
Quant Title : SW846 8260  
QLast Update : Sat Jun 16 01:37:33 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 250039   | 50.766 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 135176   | 52.100 | ug/l  | 100      |
| 95) Naphthalene            | 13.84 | 128  | 692831   | 52.275 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 256248   | 51.801 | ug/l  | 99       |

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

