

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX030118\  
 Data File : VX000179.D  
 Acq On : 01 Mar 2018 11:48  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 ClientSampleId :  
 VSTDCCC020

Quant Time: Mar 02 03:34:57 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\624X022018W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Feb 21 06:17:26 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.03  | 128  | 27274    | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 6.87  | 114  | 161755   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 10.12 | 117  | 160974   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 6.08   | 65    | 67517    | 31.99    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 50 - 169 | Recovery | =    | 106.63% |
| 60) 4-Bromofluorobenzene  | 11.15  | 95    | 79094    | 30.03    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 56 - 143 | Recovery | =    | 100.10% |
| 63) Toluene-d8            | 8.73   | 98    | 209875   | 30.44    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 66 - 137 | Recovery | =    | 101.47% |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 25040  | 14.79  | ug/l | 98     |
| 3) Chloromethane              | 1.32 | 50  | 24436  | 14.40  | ug/l | 97     |
| 4) Vinyl Chloride             | 1.41 | 62  | 30859  | 15.29  | ug/l | 99     |
| 5) Bromomethane               | 1.65 | 94  | 27348  | 14.70  | ug/l | 95     |
| 6) Chloroethane               | 1.73 | 64  | 20931  | 16.20  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 56487  | 16.15  | ug/l | 96     |
| 8) Diethyl Ether              | 2.19 | 74  | 20045  | 16.42  | ug/l | 91     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 31889  | 16.71  | ug/l | 96     |
| 10) 1,1-Dichloroethene        | 2.38 | 96  | 27599  | 15.14  | ug/l | 89     |
| 11) Methyl Iodide             | 2.52 | 142 | 18195  | 10.27  | ug/l | 98     |
| 12) Methyl Acetate            | 2.78 | 43  | 67587  | 20.75  | ug/l | 99     |
| 13) Acrolein                  | 2.30 | 56  | 9708   | 24.77  | ug/l | 95     |
| 14) Acrylonitrile             | 3.15 | 53  | 127859 | 90.61  | ug/l | 100    |
| 15) Acetone                   | 2.45 | 58  | 46116  | 100.24 | ug/l | 99     |
| 16) Carbon Disulfide          | 2.57 | 76  | 57510  | 11.03  | ug/l | 96     |
| 17) Allyl chloride            | 2.73 | 41  | 51879  | 16.70  | ug/l | 95     |
| 18) Methylene Chloride        | 2.87 | 84  | 31818  | 16.02  | ug/l | 94     |
| 19) trans-1,2-Dichloroethene  | 3.17 | 96  | 29692  | 14.98  | ug/l | 92     |
| 20) Diisopropyl ether         | 3.88 | 45  | 103839 | 21.17  | ug/l | 96     |
| 21) 1,1-Dichloroethane        | 3.71 | 63  | 57595  | 17.81  | ug/l | 98     |
| 22) cis-1,2-Dichloroethene    | 4.60 | 96  | 30062  | 16.32  | ug/l | 97     |
| 23) tert-Butyl Alcohol        | 3.07 | 59  | 74200  | 91.99  | ug/l | # 100  |
| 24) Methyl tert-Butyl Ether   | 3.21 | 73  | 109525 | 17.44  | ug/l | 96     |
| 25) Chloroform                | 5.22 | 83  | 55582  | 17.34  | ug/l | 99     |
| 26) Cyclohexane               | 5.58 | 56  | 40470  | 15.96  | ug/l | # 100  |
| 29) 1,1-Dichloropropene       | 5.81 | 75  | 40003  | 16.98  | ug/l | 97     |
| 30) 2-Butanone                | 4.71 | 43  | 182899 | 100.87 | ug/l | 98     |
| 31) 2,2-Dichloropropane       | 4.59 | 77  | 43775  | 17.28  | ug/l | 100    |
| 32) 1,1,1-Trichloroethane     | 5.51 | 97  | 47735  | 16.75  | ug/l | 97     |
| 33) Carbon Tetrachloride      | 5.79 | 117 | 40231  | 15.90  | ug/l | 94     |
| 34) Benzene                   | 6.15 | 78  | 114089 | 16.83  | ug/l | 94     |
| 35) Methacrylonitrile         | 5.07 | 41  | 30245  | 18.12  | ug/l | 89     |
| 36) 1,2-Dichloroethane        | 6.21 | 62  | 46723  | 18.18  | ug/l | 100    |
| 37) Trichloroethene           | 7.22 | 130 | 33590  | 16.77  | ug/l | 96     |
| 38) Methylcyclohexane         | 7.47 | 83  | 47064  | 16.67  | ug/l | 98     |
| 39) 1,2-Dichloropropane       | 7.52 | 63  | 30786  | 18.19  | ug/l | 93     |
| 40) Dibromomethane            | 7.67 | 93  | 23577  | 18.08  | ug/l | 93     |

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX030118\  
 Data File : VX000179.D  
 Acq On : 01 Mar 2018 11:48  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 ClientSampleId :  
 VSTDCCC020

Quant Time: Mar 02 03:34:57 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\624X022018W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Wed Feb 21 06:17:26 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 41) Bromodichloromethane       | 7.91  | 83   | 43080    | 17.38  | ug/l  | 98       |
| 42) Vinyl Acetate              | 3.83  | 43   | 485720   | 105.10 | ug/l  | 98       |
| 43) Ethyl Acetate              | 4.87  | 43   | 58424    | 18.34  | ug/l  | 99       |
| 44) Isopropyl Acetate          | 6.48  | 43   | 88537    | 18.95  | ug/l  | 97       |
| 45) 1,4-Dioxane                | 7.76  | 88   | 20530    | 349.32 | ug/l  | 99       |
| 46) Methyl methacrylate        | 7.79  | 41   | 41413    | 18.22  | ug/l  | 94       |
| 47) n-amyl Acetate             | 10.91 | 43   | 78923    | 19.35  | ug/l  | 98       |
| 48) t-1,3-Dichloropropene      | 8.45  | 75   | 50770    | 17.60  | ug/l  | 99       |
| 49) cis-1,3-Dichloropropene    | 9.05  | 75   | 49443    | 17.61  | ug/l  | 94       |
| 50) 1,1,2-Trichloroethane      | 9.23  | 97   | 35116    | 18.34  | ug/l  | 96       |
| 51) Ethyl methacrylate         | 9.19  | 69   | 53234    | 18.15  | ug/l  | 95       |
| 52) 1,3-Dichloropropane        | 9.38  | 76   | 56457    | 18.39  | ug/l  | 100      |
| 53) Dibromochloromethane       | 9.59  | 129  | 35857    | 16.83  | ug/l  | 99       |
| 54) 1,2-Dibromoethane          | 9.68  | 107  | 37386    | 17.52  | ug/l  | 99       |
| 55) 2-Chloroethyl vinyl ether  | 8.32  | 63   | 105996   | 82.76  | ug/l  | 99       |
| 56) Bromoform                  | 10.87 | 173  | 28502    | 16.52  | ug/l  | 96       |
| 58) 4-Methyl-2-Pentanone       | 8.66  | 43   | 342842   | 97.24  | ug/l  | 99       |
| 59) 2-Hexanone                 | 9.51  | 43   | 293947   | 98.45  | ug/l  | 98       |
| 61) Tetrachloroethene          | 9.34  | 164  | 30553    | 15.63  | ug/l  | 94       |
| 62) Toluene                    | 8.79  | 91   | 141058   | 16.84  | ug/l  | 99       |
| 64) Chlorobenzene              | 10.15 | 112  | 97305    | 17.19  | ug/l  | 96       |
| 65) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 33429    | 16.68  | ug/l  | 98       |
| 66) Ethyl Benzene              | 10.26 | 91   | 165091   | 17.27  | ug/l  | 99       |
| 67) m/p-Xylenes                | 10.37 | 106  | 128843   | 34.38  | ug/l  | 99       |
| 68) o-Xylene                   | 10.71 | 106  | 63655    | 17.49  | ug/l  | 96       |
| 69) Styrene                    | 10.72 | 104  | 103411   | 17.15  | ug/l  | 98       |
| 70) Isopropylbenzene           | 11.02 | 105  | 173384   | 17.62  | ug/l  | 100      |
| 71) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 63815    | 18.85  | ug/l  | 99       |
| 72) 1,2,3-Trichloropropane     | 11.30 | 75   | 76618    | 25.23  | ug/l  | 83       |
| 73) Bromobenzene               | 11.26 | 156  | 43513    | 16.87  | ug/l  | 93       |
| 74) n-propylbenzene            | 11.37 | 91   | 206110   | 17.87  | ug/l  | 100      |
| 75) 2-Chlorotoluene            | 11.43 | 91   | 119033   | 17.95  | ug/l  | 99       |
| 76) 1,3,5-Trimethylbenzene     | 11.52 | 105  | 146961   | 17.62  | ug/l  | 71       |
| 77) t-1,4-Dichloro-2-butene    | 11.09 | 75   | 17693    | 16.47  | ug/l  | 90       |
| 78) 4-Chlorotoluene            | 11.52 | 91   | 145066   | 18.26  | ug/l  | 98       |
| 79) tert-butylbenzene          | 12.07 | 119  | 163676   | 19.72  | ug/l  | 97       |
| 80) 1,2,4-Trimethylbenzene     | 11.82 | 105  | 152931   | 17.98  | ug/l  | 97       |
| 81) sec-Butylbenzene           | 11.96 | 105  | 188719   | 18.39  | ug/l  | 99       |
| 82) p-Isopropyltoluene         | 12.07 | 119  | 163676   | 17.88  | ug/l  | 98       |
| 83) 1,3-Dichlorobenzene        | 12.04 | 146  | 86510    | 17.61  | ug/l  | 97       |
| 84) 1,4-Dichlorobenzene        | 12.10 | 146  | 87604    | 17.11  | ug/l  | 99       |
| 85) n-Butylbenzene             | 12.40 | 91   | 161230   | 18.78  | ug/l  | 99       |
| 86) Hexachloroethane           | 12.60 | 117  | 25503    | 16.68  | ug/l  | 95       |
| 87) 1,2-Dichlorobenzene        | 12.40 | 146  | 84570    | 17.38  | ug/l  | 98       |
| 88) 1,2-Dibromo-3-Chloropropan | 13.01 | 75   | 18001    | 19.01  | ug/l  | 89       |
| 89) 1,2,4-Trichlorobenzene     | 13.65 | 180  | 60668    | 16.97  | ug/l  | 99       |
| 90) Hexachlorobutadiene        | 13.79 | 225  | 25604    | 16.62  | ug/l  | 97       |
| 91) Naphthalene                | 13.84 | 128  | 218692   | 17.51  | ug/l  | 100      |
| 92) 1,2,3-Trichlorobenzene     | 14.03 | 180  | 61303    | 17.06  | ug/l  | 97       |

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX030118\  
Data File : VX000179.D  
Acq On : 01 Mar 2018 11:48  
Operator : JC/MD  
Sample : VSTDCCC020  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
ClientSampleId :  
VSTDCCC020

Quant Time: Mar 02 03:34:57 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\624X022018W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Wed Feb 21 06:17:26 2018  
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
|--------------------|------|------|----------|------|-------|----------|

-----

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

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX030118\  
Data File : VX000179.D  
Acq On : 01 Mar 2018 11:48  
Operator : JC/MD  
Sample : VSTDCCC020  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
ClientSampleId :  
VSTDCCC020

Quant Time: Mar 02 03:34:57 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\624X022018W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Wed Feb 21 06:17:26 2018  
Response via : Initial Calibration

