

**City of Dayton**      **2010 Water Quality Averages & Pumping Data Summary**

Sheet 1 of 2 sheets

<b>Chemical Analysis mg/l</b>	<b>Mad River Well Field</b>	<b>Ottawa Water Plant Effluent</b>	<b>Miami Well Field</b>	<b>Miami Water Plant Effluent</b>	<b>Distribution System<sup>1</sup></b>
Total Hardness as CaCO3	346.5	160.1	355.8	151.3	<b>155</b>
P. Alk. as CaCO3		7.7		4.1	<b>5.7</b>
Total Alk. as CaCO3	274.3	85.8	280.3	72.1	<b>76.8</b>
NonCarb. Hard. as CaCO3	72.2	74.4	75.5	79.2	<b>78.0</b>
CO2 as CaCO3	15.4		26.9		
Ca. Hard. as CaCO3	218.2	59.7	232.9	76.2	<b>71.2</b>
Mg. Hard. as CaCO3	128.1	100.4	123.6	75.3	<b>83.5</b>
Calcium	87.3	23.9	93.2	30.5	<b>28.5</b>
Magnesium	31.1	24.4	30.0	18.3	<b>20.3</b>
Sulfate	57.7	54.2	70.4	65.4	<b>61.9</b>
Chloride	60.6	59.4	57.7	57.3	<b>58.6</b>
Nitrate & Nitrite	1.15	1.03	0.68	0.54	<b>0.79</b>
Nitrite	<0.10	<0.10	<0.10	<0.10	<b>&lt;0.10</b>
Sodium	31.0	30.8	32.4	30.8	<b>30.3</b>
Potassium	2.8	2.7	3.5	3.3	<b>3.0</b>
Chlorine - Free		1.55		1.58	<b>1.11</b>
Chlorine - Total		1.69		1.82	<b>1.21</b>
Total Organic Carbon	0.76	0.63	0.96	0.77	<b>0.66</b>
Fluoride	0.26	0.97	0.31	0.99	<b>0.96</b>
Cyanide	<0.01	<0.01	<0.01	<0.01	<b>&lt;0.01</b>
Phenol	<0.05	<0.05	<0.05	<0.05	<b>&lt;0.05</b>
Silica	8.76	8.81	9.87	7.35	<b>8.05</b>
<b>Physical Tests</b>					
Turbidity, NTU	2.32	0.05	1.27	0.04	<b>0.08</b>
pH, S.U.	7.54	8.81	7.47	8.63	<b>8.56</b>
Temperature, Co	14.5	14.4	16.6	14.7	<b>15.6</b>
Total Solids, mg/L	453	281	456	269	<b>268</b>
Conductivity, umhos/cm2	815	477	806	462	<b>475</b>
<b>Microbiological</b>					
Total Coliform, % Positive	58.83	0.00	4.54	0.00	<b>0.13</b>
E. coli, % Positive		0.00		0.00	<b>0.00</b>
HPC colonies/100ml	1694.2	9.7	180.4	1.3	<b>26.6</b>
Cryptosporidium & Giardia	Not detected	Not detected	Not detected	Not detected	

The Mad River Well Field provides water to the Ottawa Water Treatment Plant. The Miami Well Field provides water to the Miami Water Treatment Plant.

NTU = Nephelometric Turbidity Units (measure of "cloudiness")      S.U. = Standard Units

< = less than (indicated) detection limit      HPC = Heterotrophic Plate Count

mg/l = milligrams per liter (or parts per million)

<sup>1</sup>Distribution System data averages are for samples collected at sites throughout the water distribution system.

<b>Treated Water Pumping</b>	<b>Ottawa WTP</b>	<b>Miami WTP</b>	<b>Combined</b>
(In million gallons per day)			
Max. Daily Plant Flow			<b>88.0 - July 24</b>
Avg. Daily Plant Flow	<b>35.6</b>	<b>29.4</b>	<b>65</b>

In 2010 Dayton pumped 23.7 billion gallons of treated water into the distribution system.

Dayton's Lime Plant produced 23,692 tons of calcium oxide (quick lime) for water softening in 2010.

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