

City of Dayton **2008 Water Quality Averages & Pumping Data Summary**

Sheet 1 of 2 sheets

Chemical Analysis mg/l	Mad River Well Field	Ottawa Water Plant Effluent	Miami Well Field	Miami Water Plant Effluent	Distribution System¹
Total Hardness as CaCO3	329.12	159.94	338.93	145.17	152.5 ²
P. Alk. as CaCO3		5.97		3.52	5.0
Total Alk. as CaCO3	270.11	92.97	280.10	75.79	84.5
NonCarb. Hard. as CaCO3	59.01	66.98	58.83	69.39	68.0
CO2 as CaCO3	17.89		19.73		
Ca. Hard. as CaCO3	207.11	62.57	220.07	68.41	66.8
Mg. Hard. as CaCO3	122.25	97.25	118.89	76.70	85.8
Calcium	82.81	25.02	88.03	27.36	26.7
Magnesium	29.71	23.63	28.89	18.64	20.8
Sulfate	48.72	48.06	58.93	55.62	50.4
Chloride	51.86	54.00	51.88	51.88	53.9
Nitrate & Nitrite	1.240	1.260	0.470	0.370	1.0
Nitrite	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	29.20	27.60	25.74	26.00	26.6
Potassium	3.25	3.04	2.77	2.73	2.9
Chlorine - Free		1.53		1.46	1.125
Chlorine - Total		1.65		1.62	1.213
Total Organic Carbon	0.77	0.64	0.89	0.71	0.65
Fluoride	0.27	0.96	0.33	0.97	0.97
Cyanide	<0.01	<0.01	<0.01	<0.01	<0.01
Phenol	<0.05	<0.05	<0.05	<0.05	<0.05
Silica	8.70	8.50	9.41	7.31	8.08

PHYSICAL TESTS

Turbidity, NTU	2.07	0.04	2.10	0.04	0.09
pH, S.U.	7.52	8.77	7.47	8.64	8.49
Temperature, Co	14.1	14.5	16.3	14.7	16.0
Total Solids, mg/L	447.0	267.71	471.0	247	264
Conductivity, umhos/cm2	793.0	457.71	827	447	455

MICROBIOLOGICAL

Total Coliform, % Positive	51.12	0.00	9.79	0.00	0.00
E. coli, % Positive		0.00		0.00	0.00
HPC colonies/100ml	90.10	20.80	68.80	10.40	29.09
Cryptosporidium & Giardia	None Detected		None 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)

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

² 152.5 mg/l hardness is equivalent to 8.9 grains per gallon.

<u>Treated Water Pumping</u>	<u>Ottawa WTP</u>	<u>Miami WTP</u>	<u>Combined</u>
Max. Daily Plant Flow			80.66 MG-Aug. 2
Avg. Daily Plant Flow	36.30 MG (million gallons)	23.19 MG	59.49 MG
Avg. Daily Treated	44.31 MG	25.42 MG	69.73 MG MG

In 2008 Dayton pumped 21.74 billion gallons of treated water into the distribution system.

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