

**City of Dayton**      **2024 Water Quality Averages & Pumping Data Summary**

Sheet 1 of 2 sheets

<b>Chemical Analysis mg/l</b>	Mad River Well Field	Ottawa Water Plant Effluent	Miami Well Field	Miami Water Plant Effluent	Distribution System <sup>1</sup>
Total Hardness as CaCO <sub>3</sub>	317.22	151.87	310.45	134.02	<b>141.63</b>
P. Alk. as CaCO <sub>3</sub>		6.06		4.03	<b>5.02</b>
Total Alk. as CaCO <sub>3</sub>	283.53	104.67	267.41	79.89	<b>90.48</b>
NonCarb. Hard. as CaCO <sub>3</sub>	34.37	51.25	42.35	54.18	<b>52.06</b>
CO <sub>2</sub> as CaCO <sub>3</sub>	22.00		21.75		
Ca. Hard. as CaCO <sub>3</sub>	200.01	55.97	176.98	63.85	<b>58.71</b>
Mg. Hard. as CaCO <sub>3</sub>	118.53	96.04	111.50	67.48	<b>83.34</b>
Calcium	80.12	22.35	79.30	25.57	<b>22.62</b>
Magnesium	28.77	23.31	27.06	22.37	<b>20.26</b>
Sulfate	38.374	37.943	58.640	57.402	<b>46.81</b>
Chloride	50.772	53.380	51.385	53.525	<b>58.12</b>
Nitrate	1.10	1.08	0.597	0.61	<b>0.81</b>
Nitrite	0.12	0.12	0.099	0.10	<b>0.12</b>
Sodium	25.41	25.04	28.147	28.31	<b>26.22</b>
Potassium	2.49	2.47	2.867	3.04	<b>2.70</b>
Chlorine - Free		1.62		1.50	<b>1.21</b>
Chlorine - Total		1.73		1.61	<b>1.28</b>
Total Organic Carbon	0.88	0.61	1.04	0.83	<b>0.49</b>
Fluoride	0.27	0.90	0.35	0.93	<b>0.90</b>
Cyanide	0	0	0	0	<b>0.00</b>
Phenol	0.00	0.002666667	0.01	0.01	<b>0.04</b>
Silica	10.11	10.17	9.68	7.38	<b>8.92</b>

**PHYSICAL TESTS**

Turbidity, NTU	2.05	0.03	3.09	0.03	<b>0.07</b>
pH, S.U.	7.41	8.66	7.41	8.61	<b>8.59</b>
Temperature, Co	16.07	15.83	17.63	16.48	<b>16.66</b>
Total Solids, mg/L	422.42	253.75	412.67	269.50	<b>275.50</b>
Conductivity, umhos/cm <sup>2</sup>	730.91	441.25	745.18	440.25	<b>468.42</b>

**MICROBIOLOGICAL**

Total Coliform, % Positive	55.72	0.00	8.86	0.00	<b>0.133</b>
E. coli, % Positive	1.03	0.00	0.52	0.00	<b>0.000</b>
HPC colonies/100ml	706.42	38.00	476.42	35.17	<b>100.735</b>
pg CATP/mL	87.75	0.38	4.76	0.35	<b>0.470</b>
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)

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

<sup>2</sup> 156 mg/l hardness is equivalent to 9.12 grains per gallon.

<u>Treated Water Pumping</u>	<u>Ottawa WTP</u>	<u>Miami WTP</u>	<u>Combined</u>
Max. Daily Plant Flow, MGD	54.72	28.82	78.95 Jun-21.
Avg. Daily Plant Flow, MGD	42.55	22.52	65.46

In 2024 Dayton pumped 23.38 billion gallons of treated water into the distribution system.

For more information: City of Dayton Water Lab, 3210 Chuck Wagner Lane, Dayton OH 45414  
phone: 937-333-6093 or email: Miyah.Bayless@daytonohio.gov

**City of Dayton Division of Water Supply & Treatment  
2024 Water Quality Data Averages - Continued**

METAL ANALYSES: mg/L	Mad River Well Field	Ottawa Plant Eff.	Miami Well Field	Miami Plant Eff.	Distribution System
Barium	0.147	0.041	0.122	0.047	0.044
Boron	0.032	0.031	0.048	0.043	0.037
Iron	0.598	<0.003	0.339	<0.003	<0.003
Lead	<0.003	<0.003	<0.003	<0.003	<0.003
Manganese	0.016	<0.005	0.038	<0.005	<0.005
Molybdenum	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
Strontium	0.572	0.317	1.240	0.524	0.425

VOLATILE ORGANIC CHEMICALS, [VOC] including THMs, ug/L	<0.50	3.68	<0.50	5.632	21.122
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TOTAL TRIHALOGENATED METHANES (THMs) ug/L	21.07
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Note: THMs are created when chlorine reacts with natural organic matter.

Not detected for flushed samples: Aluminum, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Cobalt, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Titanium, Vanadium, Zinc, Nitrogen/Phosphorus Pesticides, Acid Extractable & Base Neutral Compounds, Alpha Radiation.

Lead and copper were not detected in most of the samples collected at residences in 2023. During the most recent Lead and Copper Rule compliance period (2023) ninety (90%) of the samples collected in "worst case scenario" (not flushed) were below 3 ug/L for lead, and below 40 ug/L for copper. All of the samples were below the lead action level, 15 ug/l.

For more information: City of Dayton Water Lab, 3210 Chuck Wagner Lane, Dayton OH 45414  
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