

City of Dayton 2018 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 System ¹
Total Hardness as CaCO ₃	333.095	157.909	337.119	142.383	148.61
P. Alk. as CaCO ₃		7.271		6.066	6.28
Total Alk. as CaCO ₃	275.584	96.183	278.593	78.430	84.75
NonCarb. Hard. as CaCO ₃	57.511	61.726	58.527	63.953	63.86
CO ₂ as CaCO ₃	17.506		23.624		
Ca. Hard. as CaCO ₃	205.298	56.408	217.185	65.967	62.58
Mg. Hard. as CaCO ₃	128.182	101.560	120.055	76.406	85.77
Calcium	82.119	22.563	86.874	26.387	25.03
Magnesium	31.148	24.679	29.173	18.567	20.84
Sulfate	40.388	39.791	54.115	52.286	44.67
Chloride	57.417	57.000	54.417	56.917	57.00
Nitrate	1.381	1.401	0.384	0.420	0.93
Nitrite	0.000	0.000	0.000	0.000	0.00
Sodium	26.718	26.402	28.761	25.905	26.43
Potassium	5.038	4.971	5.552	5.227	5.11
Chlorine - Free		1.601		1.488	1.19
Chlorine - Total		1.723		1.581	1.24
Total Organic Carbon	0.698	0.515	0.837	0.615	0.53
Fluoride	0.257	0.907	0.313	0.905	0.90
Cyanide	0.000	0.000	0.000	0.000	0.00
Phenol	0.000	0.000	0.000	0.000	0.00
Silica	10.060	9.892	10.418	8.453	9.24

PHYSICAL TESTS

Turbidity, NTU	3.425	0.031	1.744	0.041	0.065
pH, S.U.	7.518	8.643	7.382	8.621	8.572
Temperature, Co	15.788	16.147	16.304	15.465	15.766
Total Solids, mg/L	442.083	266.667	454.000	260.000	269.000
Conductivity, umhos/cm ²	764.442	439.850	779.508	428.700	443.117

MICROBIOLOGICAL

Total Coliform, % Positive	64.92	0.00	11.56	0.00	0.192
E. coli, % Positive	3.32	0.00	0.00	0.00	0.000
HPC colonies/100ml	512.56	14.28	342.31	13.29	23.386
pg CATP/mL	7.33	0.17	4.60	0.18	0.292
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)

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

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

Treated Water Pumping	Ottawa WTP	Miami WTP	Combined
Max. Daily Plant Flow	49.52 MGD	58.14 MGD	94.54 MGD Jan-18.
Avg. Daily Plant Flow	37.88 MGD	29.39 MGD	67.27 MGD

In 2018 Dayton pumped 24.2 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: Brandon.Turner@daytonohio.gov

**City of Dayton Division of Water Supply & Treatment
2018 Water Quality Data Averages - Continued**

METAL ANALYSES:	Mad River Well Field	Ottawa Plant Eff.	Miami Well Field	Miami Plant Eff.	Distribution System
ppm					
Barium	0.165	0.049	0.141	0.05	0.05
Boron	<0.100	<0.100	<0.100	<0.100	<0.100
Iron	0.407	0.028	0.413	<0.025	<0.025
Lead	<0.003	<0.003	<0.003	<0.003	<0.003
Manganese	<0.025	<0.025	0.091	<0.025	<0.025
Molybdenum	0.004	0.004	0.004	0.005	0.004
Strontium	0.582	0.367	1.173	0.554	0.423
ppm = parts per million					

VOLATILE ORGANIC CHEMICALS, [VOC] including THMs, ppb	<0.50	4.011	<0.50	4.312	21.018
TOTAL TRIHALOGENATED METHANES (THMs) ppb					21.018

Note: THMs are created when chlorine reacts with natural organics.

ppb = parts per billion

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 2017. During the most recent Lead and Copper Rule compliance period (2017) ninety (90%) of the samples collected in "worst case scenario" (not flushed) were below 4.8 ug/L for lead, and below 60 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
phone: 937-333-6093 or email: Brandon.Turner@daytonohio.gov