

UNIT WELL #20

Drilled in 1973, Well 20 has a pumping capacity of 2000 gallons per minute. It operates year-round and primarily serves Madison's Southwest neighborhoods south of Raymond Rd. It also supplies water to the Allied Drive, Dunn's Marsh, Nakoma, and Arbor Hills neighborhoods and seasonally supplies water to homes and businesses between Schroeder Road and Raymond Road. In 2013, Well 20 pumped 722 million gallons compared to its five-year average of 605 million gallons annually.

Unless otherwise noted, data contained in this report, which is updated annually, are from 2013.

Bacteria

In 2013, fifty-two water samples were collected from Well 20 and tested for coliform bacteria, an indicator group of bacteria used in determining drinking water safety. None of the samples had coliform bacteria present. A majority of the samples (48) were chlorinated water while four samples were untreated groundwater. The Water Utility chlorinates drinking water to protect against bacteria and viruses that can be present in groundwater.

Hardness and Other Minerals

Like all groundwater, water from Well 20 contains calcium and magnesium that contributes to its hardness (285 mg/L [ppm] or 17 grains per gallon). Other naturally occurring constituents that are present in water from Well 20 can be found in the [Inorganics Table](#).

Iron, Lead, and Manganese

Water from Well 20 does not contain significant amounts of iron, lead, or manganese.

Chromium

Low levels of naturally occurring chromium, including hexavalent chromium, have been found at Well 20. The level is well below the existing drinking water standard of 100 µg/L for total chromium. The utility performs semi-annual testing for total and hexavalent chromium. More information, including complete test results, can be found on the [chromium](#) page.

Radionuclides

In 2009, water from Well 20 was tested for radium-226, radium-228, and uranium in addition to other gross measures of radiation in the water. Combined radium measured 0.9 picocuries per liter (pCi/L) while uranium tested at 0.7 micrograms per liter (µg/L). These levels are below the maximum contaminant level (MCL) of 5 pCi/L combined radium and 30 µg/L uranium.

Naturally occurring, radioactive elements are found in rock, soil, water, and air. They derive from the creation of our planet and enter our bodies when we drink water, breathe air, and eat foods that contain them. Everyone is exposed to some level of radiation in everyday life. For example, uranium and thorium are found in rock and soil. In time, they decay to other elements including radium, which later decays to radon gas. Radon is the largest contributor to our daily exposure of radiation from the natural world. More information is available from the Agency for Toxic Substances and Disease Registry ([ATSDR](#)).

See [ATSDR](#) for more information on radon.

Man-made Contaminants

Madison Water Utility annually tests all of its municipal wells for man-made contaminants that may be present in groundwater. None of the volatile organic compounds (VOC) tested were detected at Well 20 in 2013.

The [Volatile Organic Compounds](#) table shows the list of substances that were tested, the results, and how the detected levels compare with the maximum contaminant levels (MCL) established by the EPA.

Additional Information

Information on routine [water quality monitoring](#) activities, including current test results and links to additional resources, is available at [madisonwater.org](#). In addition, you can sign-up to receive periodic updates on Madison drinking water quality or the water main flushing program through the [City of Madison](#) website.

If you have questions about the information in this report or on our website, our staff would be happy to answer them. Please call the Water Quality line at 266-4654 weekdays from 7:30 a.m. to 4:00 p.m.

Click [here](#) to view water quality reports for other Madison municipal wells.