Quality and Reliability since 1882
Madison Water Utility

www.madisonwater.org • 119 E. Olin Avenue • Madison, WI 53713-1431 • 608.266.4651

UNIT WELL #14

Drilled in 1960, Well 14 has a pumping capacity of 2450 gallons per minute; however, the pump typically delivers 1440 gallons per minute through the use of a variable frequency drive. It operates year-round and serves Madison's West side neighborhoods including Spring Harbor, Old Middleton Greenway, Sunset Village, and Regent. Well 14 also serves the Village of Shorewood Hills and parts of the University of Wisconsin campus. In 2022, Well 14 pumped 627 million gallons compared to its 5-year average of 735 million gallons annually.

Unless otherwise noted, data contained in this report, which is updated annually, are from 2022.

Bacteria

In 2022, four quarterly samples were collected from Well 14 and tested for coliform bacteria, an indicator group of bacteria used to determine drinking water safety. Each sample was collected and tested prior to any disinfection. None of these samples had coliform bacteria present. The Water Utility chlorinates all drinking water to protect against bacteria and viruses that can be present in groundwater and to provide additional protection as the water travels through water mains and premise plumbing.

Hardness and Other Minerals

Like all groundwater, water from Well 14 contains calcium and magnesium that contributes to its hardness (497 mg/L [ppm] or 29 grains per gallon). Other naturally occurring constituents that are present in water from Well 14 can be found in the Inorganics Table.

Iron, Lead, and Manganese

Water from Well 14 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 14. The level is well below the existing drinking water standard of 100 µg/L for total chromium. More information can be found on the chromium page.

Sodium

The level of sodium in Well 14 water exceeds an EPA guideline which recommends drinking water not to exceed 20 mg/L sodium. These guidelines are intended for higher risk populations including individuals with high blood pressure or on severe sodium restricted diets. In 2022, sodium at Well 14 measured 63 mg/L. Road salt application likely contributes to elevated sodium levels in water pumped from some Madison wells.

Radionuclides

In 2020, water from Well 14 was tested for radium-226, radium-228, and other gross measures of radiation in water. Combined radium (226+228) measured 1.1 picocuries per liter (pCi/L) – well below the maximum contaminant level (MCL) of 5 pCi/L.

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.

Human-made Contaminants

Madison Water Utility annually tests all of its wells for human-made contaminants that may be present in groundwater. A small amount of tetrachloroethylene (PCE) has been found at Well 14 since the early 1990's. The level has been stable or slightly decreasing over the last decade. Two disinfection by-products (DBP) was also detected at Well 14 in 2022. DBPs form when chlorine reacts with impurities in groundwater. Chlorine is added to disinfect water and to guard against bacterial growth in water mains.

Periodic testing over the last five years has also found small amounts (0.1 µg/L) of 1,4-dioxane at Well 14; an MCL has yet to be established. 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.

Per- and Polyfluoroalkyl Substances (PFAS)

Three different PFAS were found at Well 14 in 2022. The combined PFAS level is **estimated at 8.4 ng/L or parts per trillion (ppt)**. In 2022, the Wisconsin Department of Natural Resources (DNR) adopted drinking water standards for PFOA & PFOS set at 70 ppt. In March 2023, the US Environmental Protection Agency (EPA) proposed standards for six PFAS contaminants. Our website, madisonwater.org, has more detailed information about PFAS in drinking water.

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 7:45 a.m. to 4:00 p.m.

Click here to view water quality reports for other Madison municipal wells.