

## UNIT WELL #13

Drilled in 1959, Unit Well 13 has a pumping capacity of 2300 gallons per minute. It operates year-round and serves Madison's Northside. During winter months, when seasonal wells are shut down, Well 13 may also serve Maple Bluff; Sherman Avenue neighborhoods south of Northport Dr and west of Packers Ave; and areas of the Isthmus between Ingersoll St and the Yahara River. In 2013, Well 13 pumped 690 million gallons of water compared to the 5-year average of 746 million gallons annually.

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

### *Bacteria*

In 2013, forty-nine water samples were collected from Well 13 and tested for coliform bacteria, an indicator group of bacteria used in determining drinking water safety. None of these samples were found to have coliform bacteria present. Most samples (45) were from 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 13 contains calcium and magnesium that contributes to its hardness (383 mg/L [ppm] or 22 grains per gallon). Other naturally occurring constituents that are present in water from Well 13 can be found in the [Inorganics Table](#).

### *Iron and Manganese*

Water from Well 13 contains low levels of iron and manganese. Both minerals are well below the US EPA [secondary standards](#), which are 0.3 mg/L for iron and 50 µg/L for manganese.

### *Chromium*

Low levels of naturally occurring chromium, including hexavalent chromium, have been found at Well 13. 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.

### *Lead*

Madison's groundwater supply does not contain significant amounts of naturally occurring lead.

### ***Radionuclides***

In 2009, water from Well 13 was tested for radium-226, radium-228, and uranium in addition to other gross measures of radiation in the water. Combined radium measured 1.5 picocuries per liter (pCi/L) while uranium tested at 1.2 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 wells for man-made contaminants that may be present in groundwater. Except for a single disinfection by-product (DBP), no other volatile organic compound (VOC) was detected at Well 13 in 2013. DBPs form when chlorine interacts with impurities in groundwater. Chlorine is added to disinfect the water and guard against microbial growth in water mains.

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.