

In the November 28, 2007 issue of the Water Quality update:

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Well Status Report

Except for Unit Wells 28 and 29, all seasonal wells (6, 8, 10, 17, 27) are currently shutdown for the winter. Seasonal wells typically operate from April to October when the demand for water is higher due to outdoor water uses. Well 28 will be taken out of service when repairs to Well 26 are complete, most likely in December, and after that well is brought back into service. Well 29 will be shutdown at the conclusion of the extended period deep well pump test (see below).

As was previously reported, Wells 10 and 29 were taken out of service during the last week of September. Well 27 was shutdown on October 17, Well 17 on October 31, and Wells 6 and 8 were shutdown on November 14. Currently, 16 wells are meeting the City's demand for water, which, over the last month, has averaged about 27 million gallons per day (MGD). This figure compares with the average of 42 MGD during the month of July when demand reached it peak.

Well 29 Extended Period Deep Well Pump Test Update

Earlier today, the Water Utility concluded the 21-day pump test of the deep well at Unit Well 29. The well is being prepared for its winter shutdown. The purpose of the test pumping is to further investigate groundwater movement and drawdown in the area at maximum pumping rates. The consultants, Montgomery Associates and RMT, will analyze the data and prepare a report for the Water Utility Board. This work will provide valuable information on the long-term operation of an iron and manganese filtration system proposed for the well.

During the pump test, no water entered the drinking water system; all water was diverted to the storm sewer. The utility also collected water quality samples during the pump test. Results will be posted to this listserv after they become available.

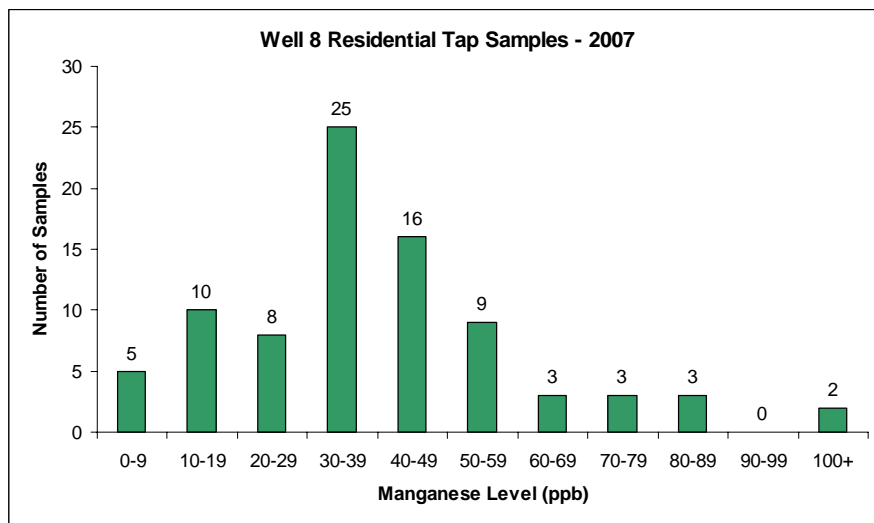
Residential Tap Sample Results – Unit Well 8

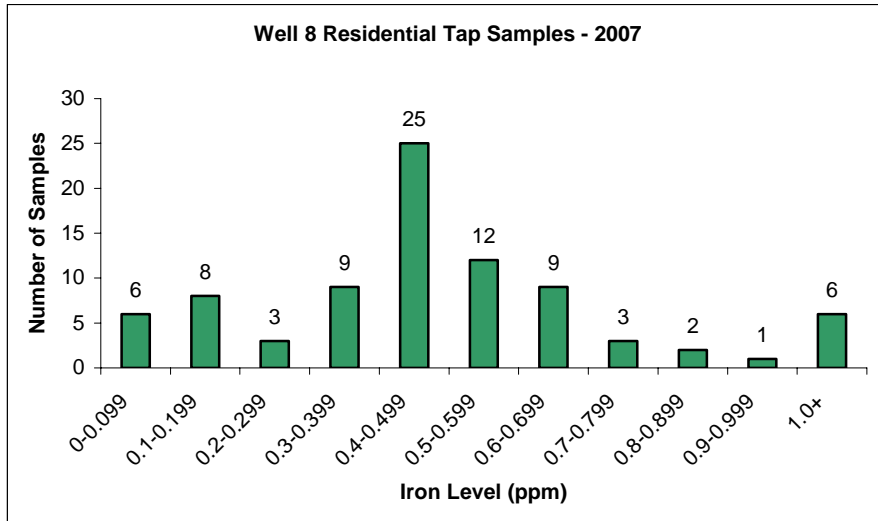
The Water Utility collected 84 residential tap samples from the Well 8 service area during September and October 2007. These samples were tested for manganese and iron. Samples were collected as part of an on-going effort by the utility to better understand and manage the levels of manganese in Madison drinking water. All samples were analyzed by Public Health – Madison and Dane County.

The Well 8 service area was selected for additional sampling because (a) the highest frequency of customer complaints about discolored water come from this service area, (b) manganese and iron levels are at or exceed the secondary standards for these minerals, and (c) sample collection coincided with the utility's on-going evaluation of the uni-directional flushing program.

The area in which samples were collected is bounded by Welch Avenue (east), Atwood Avenue & Williamson Street (north), S Paterson Street (west), and Lake Monona (south). Samples were collected at homes on Jenifer, Rutledge, Spaight, Morrison, Williamson, Walton, Riverside, Helena, Division, Clemons, Center, Lakeland, Maple, Miller, Oakridge, Schiller, Sommers, Welch, Willard, and other streets in the area.

The figures below summarize the results for the 84 samples. Tap samples ranged from 1.6-135 ppb of manganese. The mean and median concentrations were 39 and 36 ppb, respectively, with a standard deviation of 22. Two locations tested above 100 ppb and were re-sampled according to the recommendations in the Water Utility's 2006 Manganese Monitoring Report. The follow-up samples at the two locations that initially tested over 100 ppb manganese measured 58 and 72 ppb. Manganese levels measured at the well have varied from 46-51 ppb in 2007. The well is currently shutdown for the winter.





Water Quality Test Results – September & October 2007

MICROBIOLOGY – In September and October, the Water Utility collected 783 water samples from Water Utility facilities and representative sample locations in the water distribution system. The samples were tested for coliform bacteria – indicators of potential water contamination. No distribution samples tested coliform-positive. Two samples collected at unit wells (one each at Well 8 and 14) initially tested coliform-positive; however, follow-up samples from these wells later tested coliform-negative. A total of 781 samples collected in September and October were found to have no coliform bacteria present.

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<http://lavos.wiscnet.net/mailman/listinfo/drinkingwaterquality>

Sincerely,
 Joseph Grande
 Water Quality Manager
 Madison Water Utility
 266-4654