

## GRAND RAPIDS/SARATOGA AREA DRINKING WATER PROGRAM

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Fifty-three residents participated in a drinking water testing program recently. Residents could purchase analysis bottles from October 1 to October 22, 2003. On October 22, samples were collected and taken to the Agri-Source Lab for testing. Educational programs on analysis results were offered on November 5. Participants received information on the meaning of their analysis results and appropriate treatment methods, if needed.

The drinking water analysis package cost \$42 and included analysis for bacteria, nitrate, pH, calcium, magnesium, copper, iron, manganese, lead and hardness.

9% of the samples were found to have fecal coliform bacteria, an indicator of bacterial contamination in the plumbing system. However, no samples had the more serious *E. coli* bacteria.

The average amount of nitrate in the samples was 3.59 milligrams per liter (mg/L). 9% of the samples had unsafe readings above 10 mg/L.

The average pH was 6.66 and 60% of the samples were in the neutral range of 6.5 to 7.49 pH. 36% of the samples were in the acidic range below 6.5 pH.



All samples were found to have safe levels of copper. All samples had manganese in the ideal low range of 0 – 50 micrograms per liter (ug/L).

Iron is a common problem in this area, and 72% of the samples were in the high iron range above 300 ug/L. The average amount of iron in the samples was 294 ug/L. Iron is not generally a health problem but can cause staining and odor problems.

25% of the samples had unsafe levels of lead above 15 ug/L. Lead is usually leached out of plumbing fixtures by acidic water. Lead can cause long-term health problems.

The lab unfortunately had problems in their calcium, magnesium and hardness tests. Participants are being offered a second test at no charge to retest for these factors and the other metals.

