



Explanation of Private Drinking Water Test Results

The explanations below describe each of the possible results for your drinking water test and provide an interpretation with regards to the suitability for drinking water purposes:

Total Coliform and *E. coli* Absent, Bacterially Safe: Coliform and *E. coli* bacteria were not detected in the sample tested. Sample is considered SATISFACTORY for drinking water purposes.

Total Coliform Present, Bacterially Unsafe: Coliform bacteria were detected in the sample tested. Sample is considered UNSATISFACTORY for drinking water purposes. The presence of coliform bacteria in your drinking water indicates your risk of contracting water-borne illness is increased. Although total coliforms can come from sources other than fecal matter, a positive total coliform sample should be considered an indication of pollution in your well.

***E. coli* Present, Bacterially Unsafe:** *E. coli* bacteria were detected in the sample tested. Sample is considered UNSATISFACTORY for drinking water purposes. The presence of *E. coli* bacteria indicates fecal contamination of the water supply has occurred. An increased risk to the health of those consuming the water may exist, as other disease causing bacteria from feces may have entered the water supply.

UNSATISFACTORY FOR TESTING: Examples of samples that have to be rejected for analysis include samples that have been collected in improper containers, samples that are received in the laboratory more than 48 hours after collection, samples that have detectable chlorine present, samples with insufficient quantity (must be 100 ml), inaccurate or incomplete information on the accompanying sample information form, or a sample collected from a source other than a drinking water supply.

If Your Water Sample is Reported “Unsatisfactory for Drinking Water Purposes”

Until your well is properly disinfected, discontinue use of the water supply for drinking and culinary purposes. Discard any ice prepared with the water. Although unsatisfactory results do not conclusively confirm the presence of pathogenic (disease-causing) organisms in the water, these results should alert one to such a possibility.

Provide emergency disinfection. Disinfect all water used for drinking or culinary purposes by:

1. Boiling vigorously for one (1) full minute before use; or
2. Chemical disinfection: add two (2) drops (double the amount for cloudy or colored water) of regular household chlorine bleach (5.25 percent or higher chlorine) to each quart of water used. Mix thoroughly and allow to stand for 30 minutes before use.

Check for and correct any above-ground structural defects of the water supply that would allow surface water to enter the supply, such as defective seals or covers, surface drainage toward the well, etc.

Total Coliform Bacteria

Coliforms are a group of bacteria found in the intestines of humans and other animals. Coliforms also occur naturally in the environment, including in soil, on vegetation and in surface waters such as lakes, rivers, and streams. Most members of the coliform group do not cause disease. When found in drinking

water, coliform bacteria indicate that contamination of the drinking water supply has occurred and that other disease-causing bacteria could also get into the water supply.

E. coli

Escherichia coli (*E. coli*) is a member of the coliform group of bacteria and is found only in the intestines of warm-blooded animals, including humans. When found in drinking water, *E. coli* indicates the water has been contaminated with human or animal wastes (feces). Possible sources of contamination include leaking septic systems, surface water leaking into structural defects (cracks) in the well's casing or pipes to the house, or runoff from agricultural lots.

Your Department of Health and Senior Services Can Help

Instructions for the proper disinfection of wells are available on the Department of Health and Senior Services Private Drinking Water web page:

<https://health.mo.gov/living/environment/privatedrinkingwater/pdf/disinfecting-well.pdf>

Construction and registration of new wells is regulated by the Department of Natural Resources, Missouri Geological Survey, per the Water Well Drillers' Act. They can be contacted at 573-368-2100 or on-line at: <https://dnr.mo.gov/geology/geosrv/wellhd/wellsanddrilling.htm>

Missouri Department of Health and Senior Services Contacts:

To request a sample collection kit, contact your Local Public Health Agencies (LPHA) or the Bureau of Environmental Epidemiology. For questions regarding the status of your water test or assistance understanding your private drinking water laboratory test report, please contact the agency from which you received your private drinking water sample collection kit.

A listing of **Missouri's LPHAs** may be found on-line at: <https://health.mo.gov/living/lpha/lphas.php>.

For assistance/questions regarding well construction, possible defects, or private water supplies of lodging, daycare, and food establishments, contact:

The Bureau of Environmental Health Services (BEHS)
573-751-6095

To request a bacteria sample collection kit, contact:

State Public Health Laboratory (SPHL)
573-751-4830
<https://health.mo.gov/lab/>

For additional private drinking water assistance, contact:

The Bureau of Environmental Epidemiology
573-751-6102
<https://health.mo.gov/living/environment/privatedrinkingwater/index.php>

