

What Test Determines If Well Water is Potable?

By: Gary L. Hix, R.G., CWD/PI, CREI

As a water well inspector, or as a third party water quality sampler, I am frequently asked to determine if the water supplied by a given water well is “potable”. The problem is that I don’t know what the one universally accepted test is to determine whether or not well water is “potable”. The EPA has many water quality testing standards for drinking water for public water

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Sampling for Coliform bacteria

systems, but none of them are defined as the “potable water” test. Arizona has no water quality standards to be met for private or shared water wells and thus no definition of potable water.

Drinking water, also known as **potable water** or **improved drinking water**, is water that is safe to drink or to use for food preparation, without risk of health problems. It is sometimes defined as water that can be consumed without concern for adverse health effects. Potable water does not have to taste good. Conversely, well water may be palatable but it may not be safe to drink. So whose test standard determines what is potable well water, and what is not?

There are at present approximately **90 MCLs** that the EPA has specified as testing standards to be met for **public** water systems providing groundwater from wells. This suite of water quality tests costs at least **\$3,800** and takes **30** days to process. Add to this list seventy or so additional tests that the EPA would like

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to mandate necessary for public water supplies. I don't think that the EPA public water supply standards are a water quality standard that private water well systems would be expected to meet for mortgage financing.

At times I'm instructed by a lender to test the water from a private or shared well for the presence or absence of Coliform bacteria, and nothing more. Some lenders consider this the "potable water" test but there is nothing in any regulation or lender standard procedures to back up this practice. The water may not have any Coliform bacteria but it can contain lethal amounts of arsenic, lead or even volatile organic compounds (VOC's). All of these are known carcinogens. A simple Coliform test is not a proper test to determine if their well water is potable and therefore safe to drink.

Since there are no water quality standards to be met for private or shared water wells in Arizona, then the only requirement for determining if it's "potable" comes

from mortgage lenders. If it's their standard, then they must specify the tests to be performed and make a determination whether the water is safe for their borrower to drink, or not. Any request to test private well water for being potable that is sent to me must specify exactly what tests need to be performed. I cannot tell a borrower that the well water is potable and safe to drink or cook with based on just one Coliform test. It's not that simple. Implying that well water is potable just because there are no Coliform bacteria in it is grossly incorrect and unethical.

We need a consensus of exactly what specific tests should be performed to imply that well water is reasonably safe to drink until there is a standard water quality test to be performed each time a domestic water well supported property is sold or financed. It's "well" past the time that the State of Arizona should adopt a standard water quality testing procedure for the protection of our citizens who purchase or finance homes on domestic water wells.

If You Buy, Sell or Finance Real Estate in Arizona, You Need to Be "Well Informed"

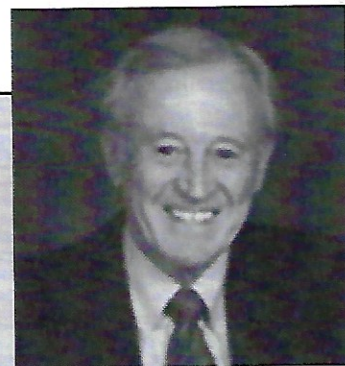
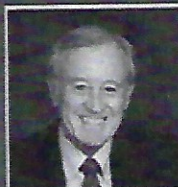
and to be "well Informed" you need to know about domestic water wells.

DOMESTIC WATER WELLS IN ARIZONA

A Guide to for Realtors and Mortgage Lenders



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Gary is a Registered Professional Geologist in Arizona, and a Certified Well Driller / Pump Installer by the National Ground Water Association and, a Certified Professional Geologist by the American Institute of Professional Geologists. He has been a Technical Member of the Arizona State Bar for over twenty years. Gary has authored over 50 articles on subjects related to well drilling, and inspecting issues. He is a Certified Real Estate instructor for water wells and Real Estate transfers. His Arizona DOR accredited CE courses are taught at the Hogan School of Real Estate in Tucson and the Arizona School of Real Estate and Business in Scottsdale.