PIXIS Home

Real Estate Transaction Kit

Arsenic, Nitrate, Total Coliform/*E.coli*

According to Oregon Revised Statute (ORS) 448.271(1), when selling real estate that includes a domestic well, property owners are required to test the water for arsenic, nitrate, and total coliform bacteria. Domestic wells are defined as those used for drinking water and other household purposes. Test results must be reported by the seller to the real estate buyer and the Drinking Water Program within 90 days of receipt of the report.

Pixis Labs is accredited with the State of Oregon Drinking Water Program. As an analytical lab, we provide high quality test results, and non-biased informative opinions. This allows our clients to make sophisticated and informed decisions to protect their family's health.

Real Estate Transaction Kit

Parameter	Analytical Method	Individual Test Price	Kit Price
Arsenic	EPA 200.8	$45.00	
Nitrate	EPA 300.0	$45.00	
Total Coliform/ *E. coli*	SM 9230B	$45.00	
			$90.00

You may pick up sampling bottles and instructions at the lab, or arrange for us to ship bottles and instructions to you for a small fee.

For more information, please contact Customer Service at customerservice@pixislabs.com or call (503) 254-1794.

For more information, please refer to the Health Effects of Common Toxic Metals Table below.

(continued on next page)

Health Effects

Arsenic, Nitrate, Total Coliform/*E.coli*

Parameter	MCL mg/L	Background	Health Effects
Arsenic	0.01	Arsenic occurs naturally in soil and minerals; common arsenic compounds can dissolve in water. Therefore, many residences have the potential for high levels of arsenic in their drinking water, particularly from private wells, as a result of the geology of the area.	Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea, vomiting, **and** decreased production of red and white blood cells. There is some evidence that long-term exposure to arsenic in children may result in lower IQ scores. **Cancer Effects:** *Known to be a Human Carcinogen.*
Nitrate	10	Naturally occurring levels of nitrate in surface and groundwater do not generally exceed 2 milligrams per liter (mg/l). Sources of nitrate in water include fertilizers, septic systems, animal feedlots, industrial wastes, and food processing waste. Nitrate is formed by microbes in some plants which remove nitrogen from air and oxidize it to nitrate.	Adults receive more nitrate exposure from food than from water. Infants, however, receive the greatest exposure from drinking water because most of their food is in liquid form. Nitrate can interfere with the ability of the blood to carry oxygen to vital tissues of the body in infants age six months old or younger. Pregnant women may be less able to tolerate nitrate, and nitrate in the milk of nursing mothers may affect infants directly.
Total Coliform Bacteria/ *E. coli*	Absent	Most coliforms live in the intestinal tract of humans and other warm-blooded animals, so they are found in significant numbers wherever fecal waste or contamination is present. They can be found in shallow and unprotected wells, springs and, less often, in deep and protected wells. Water that contains total coliforms should immediately be tested further for fecal coliforms or *E. coli.*	Ingesting water contaminated with fecal coliform bacteria generally range from no ill effects to cramps and diarrhea. However, the presence of any fecal coliform in drinking water means that other disease-causing organisms may also be present. Immediate attention is required as many diseases can be spread through fecal waste exposure.

EPA's Maximum Contaminant Level (MCL). MLCs are the maximum permissible level of a contaminant in water delivered to users of a public water system.

mg/L = milligrams per liter is equivalent to parts per million (ppm)

References:

1. Agency of Toxic Substances and Disease Registry http://www.atsdr.cdc.gov/az/a.html
2. Oregon Drinking Water Program
   http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/Pages/dwt.aspx
3. Oregon Department of Environmental Quality
   http://www.deq.state.or.us/wq/dwp/wellowners.htm