

ENVIRONMENTAL TESTING - DRINKING WATER FAQ's

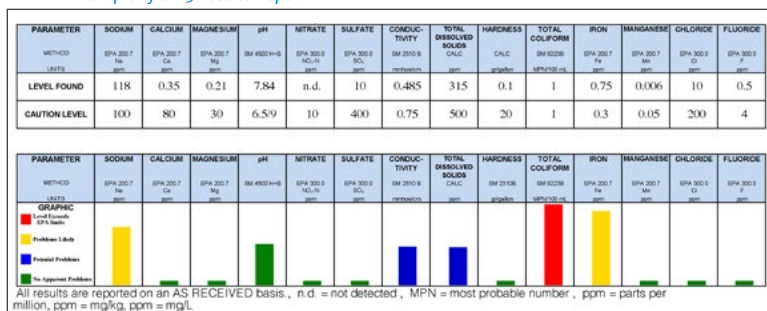
RECOMMENDED TEST PACKAGES

	Required Sample Size	Turnaround Time	Price
W3 WATER QUALITY*	(2) 250mL & 125mL sterile	5 - 7 BD	\$77.00
Total Coliform, Total Hardness, Manganese, E.coli, Conductivity, Sulfate, Sodium, Iron, Chloride, Calcium, Total Dissolved Solids (by calculation), Fluoride, Magnesium, pH, Nitrate Nitrogen			
W3A	(2) 250mL	5 - 7 BD	\$68.20
Total Hardness, Manganese, Conductivity, Sulfate, Sodium, Iron, Chloride, Calcium, Total Dissolved Solids (by calculation), Fluoride, Magnesium, pH, Nitrate Nitrogen			
W4*	250mL & 125mL sterile	3 - 5 BD	\$38.50
Nitrate-Nitrite Nitrogen (EPA 353.2), Total Coliform, E. coli			
W5: FHA LOAN*	(2) 125mL sterile (1) 250mL plastic (1) 1L plastic	5 - 7 BD	\$104.50
Total Coliform, Nitrate Nitrogen, Lead, Fecal Coliform, Nitrite Nitrogen, E. coli			

* Samples must be received at the laboratory within 24 hours of sampling.

- EPA recommends testing private wells annually for E. Coli, Total Coliform, and Nitrate Nitrogen. We recommended using our W4 package.
- If you have never tested your well before or see any changes such as different taste/smell or staining, we recommend either our W3 Water Quality package or W3A package.
- If this is for a real estate transaction, we recommend confirming with your lender exactly what needs to be tested. We most commonly offer our W4 Basic Suitability, or our W5 FHA Loan package.
- Proper containers are required for these packages. Please contact account manager at 402-334-7770 and we will get one sent out.
- We can offer additional testing outside of these packages. Please contact your account manager to learn more.

Example of a W3 Results Report



- Nitrate Nitrogen should be less than 10 mg/L or ppm. No coliform or E. Coli can be present.
- EPA has Primary and Secondary drinking water standards, to compare your results please visit: www.epa.gov/dwstandardsregulations

Second page of your results report includes the EPA standards for drinking water.

SUGGESTED WATER QUALITY GUIDELINES FOR HUMAN CONSUMPTION			
Sodium (Na)	Less than 20 ppm: No adverse effects.	20-80 ppm: Persons on restricted sodium diets should consult a physician concerning use.	More than 80 ppm: Should be used sparingly by persons on low-sodium diets.
Calcium (Ca)	Less than 80 ppm: No adverse effects.	80-150 ppm: Hard water problems such as scale formation can be expected.	More than 150 ppm: May be associated with high levels of sulfate (see sulfate below). Extreme hardness is undesirable for household use.
Magnesium (Mg)	Less than 30 ppm: No adverse effects.	30-80 ppm: Contributes to hardness when associated with high calcium levels.	More than 80 ppm: When associated with high sulfate, is likely to have a laxative effect (magnesium sulfate is Epsom Salts).
pH	Less than 6.5: Corrosive to metal.	6.5-8.5: No adverse effects.	Higher than 8.5: Possible bitter taste, and germicidal activity of chlorine is reduced, corrosive to pipes.
Nitrate Nitrogen (NO ₃ -N)	Less than 2 ppm: No adverse effects.	2-10 ppm: No acute toxicity. Could have some negative health effects in young children.	More than 10 ppm: Increasing probability of health effect in children under 6 months of age due to reduced oxygen carrying capacity of the blood. EPA MCL standard of < 10 ppm.
Sulfate (SO ₄)	Less than 250 ppm: No adverse effects.	250-500 ppm: Likely to have a laxative effect, especially when first introduced. Diarrhea may or may not persist.	More than 500 ppm: Strongly laxative.
Conductivity	Less than 0.30: Extremely pure water can be corrosive metal.	0.30-1.50: No adverse effects.	Greater than 1.50: High levels of dissolved solids (see below).
Total Dissolved Solids (TDS)	Less than 200 ppm: No adverse health or nutritional effects. May be corrosive if extremely pure.	200-1000 ppm: No adverse effects.	More than 1000 ppm: Increasingly adverse effects, especially diarrhea. Water loses esthetic effect.
Hardness	Less than 6 gr/gal: No adverse effects (17.1 mg/L CaCO ₃ = 1 gr/gal).	6-12 gr/gal: Some scale will form in pipes and water heaters. Softening may be desirable.	More than 12 gr/gal: Scale will form rapidly and laundry will not come clean. Softening for household use is desirable.
Total Coliform*	Negative: No coliform bacteria present in 100 ml. of water.		Positive: Coliforms are a bacteria that are naturally present in the environment and can be used to indicate the presence of other potentially harmful bacteria such as Fecal Coliform or E. coli. The presence of Fecal and E. coli may indicate a contamination from human or animal waste. The EPA acceptable level is less than one (<1) MPN (most probable number) per 100 ml. of water.
Iron (Fe)	Less than 0.3 ppm: No adverse effects.	0.3-1.0 ppm: Some staining will occur.	More than 1.0 ppm: Iron oxide (rust) will cause extensive staining and will precipitate out, forming a red sludge. Taste will be bitter.
Manganese (Mn)	Less than 0.05 ppm: No adverse effects.	0.05-0.30 ppm: May cause black or brown staining of pipes, sinks and laundry.	More than 0.30 ppm: Besides the staining effect, will cause a metallic taste. It is harmful for infants 0-6 months at 0.30 to 1.0 mg/L. Greater than 1.0 mg/L is harmful for adults. May cause neurological issues. Refer to State Health Department.
Chloride (Cl)	Less than 200 ppm: No adverse effects.	200-500 ppm: Increasingly salty taste.	More than 500 ppm: Very salty taste.

