



Alpine Analytical Guide to selecting water analysis

Total Coliform

The bare bones analysis, which is required for most loans is the total coliform. This is a test to determine if the water is bacterially safe to drink. The test requires a sterile bottle, which can be obtained from us or another lab. It takes approximately 24 hours to perform this task.

Nitrate + Nitrite

The next most important analysis in the Helena area is nitrate. Some areas around here are much more susceptible to nitrate contamination. Nitrate analysis should be considered in any homes which will have infants or small children.

Fluoride

Most wells in the Helena area have very little fluoride present and users should consider using a fluoride supplement. There are a few pockets of high fluoride that someone would need to treat their drinking water to remove the fluoride. The highest areas include around Clancy, the base of MacDonald Pass and others.

Uranium

Uranium is a major concern in the Clancy area and should be considered for any well in Jefferson County. High uranium has also been detected in northeastern part of the valley, Winston area and the North shore of Canyon Ferry Lake.

Arsenic

Arsenic is a concern in Helena and surrounding areas, some areas being more susceptible to arsenic contamination. If your arsenic levels are at or above 0.010 mg/L or 10 ppb you may want to consider doing an arsenic speciation.

Arsenic Speciation

When planning to remove the arsenic levels from your well water the arsenic speciation will analyze for Arsenic V (which is easily removed) and Arsenic III (which must be converted to arsenic V to be removed).

Drinking Water 101

For the person who is concerned about the quality of their well water, we recommend our "Drinking Water 101" which as the name implies, covers the basics and all of the issues that we are aware of in the area.

It includes: Calcium, Magnesium, Hardness, Nitrate + Nitrite, Sulfate, Specific Conductance, Total Dissolved Solids, Fluoride, pH, Arsenic, Cadmium, Chromium, Iron, Lead, Manganese, Selenium, Uranium and Total Coliform. (Purchased individually \$265)

Drinking Water 151

For the person who wants a little more information about the quality of their well water than the "Drinking Water 101" but not quite as much as the "Drinking Water 201", we offer our "Drinking Water 151".

It includes everything in the "Drinking Water 101" plus: Sodium, Potassium, Alkalinity, Chloride and an Arsenic Speciation if needed. (Purchased individually \$305 to \$335)

Drinking Water 201

For the person that wants to know "everything" about their water. The "Drinking Water 201" is a major step in that direction covering pretty much all of the inorganics.

It includes everything in the "Drinking Water 101" plus: Sodium, Potassium, Alkalinity, Chloride, Aluminum, Antimony, Barium, Beryllium, Boron, Cobalt, Copper, Molybdenum, Mercury, Nickel, Silver, Thallium, Titanium, Vanadium and Zinc. (Purchased individually \$560 to \$590)

*An **Additional Charge** will be added for any samples brought in on **Friday** that are to be analyzed for **Total Coliform, Ecoli or Fecal Coliforms***