E-coli and Total Coliform Bacteria

Description
E-coli is one of the most common species of coliform bacteria. It is a normal component of the large intestines in humans and other warm-blooded animals and is found in human sewage in high numbers. E-coli is used as an indicator organism because it is easily cultured, and its presence in water in defined amounts indicates that sewage may be present. If sewage is present in water, pathogenic or disease-causing organisms may also be present.

Problems
Total Coliform Bacteria by itself is an indication that surface water is getting into your well water. Surface water wells (dug wells) less than 30’ deep will usually always have coliform bacteria. Properly drilled or deep wells have a far less occurrence of coliform bacteria. These wells draw the water from what is known as ground water (below 30’ deep).

Health Risks
Coliform bacteria by itself can cause upset stomachs and diarrhea. Generally speaking, permanent residents can build a tolerance to it and as guests come and go, they may have the symptoms listed above. E-coli on the other hand is much more serious. Whenever we receive a positive E-coli hit, a do not use order is issued to our customers until the issue is resolved.

Treatment Options
There are two treatment options, the first is to disinfect the well and the household plumbing and re-test. This option is fine for cleaning up the water in the well, but is considered as a short-term solution because as soon as new water is introduced, the coliform and E-coli bacteria will simply come back and re-contaminate the well. The second treatment option is to install an ultraviolet light that will disinfect the water after any water purification equipment in your home. Ultraviolet lights work great long-term. They should be serviced and the bulb replaced one time a year.

Sources
McBride’s Water Advantage, LLC
New Hampshire Department of Environmental Services
Environmental Protection Agency