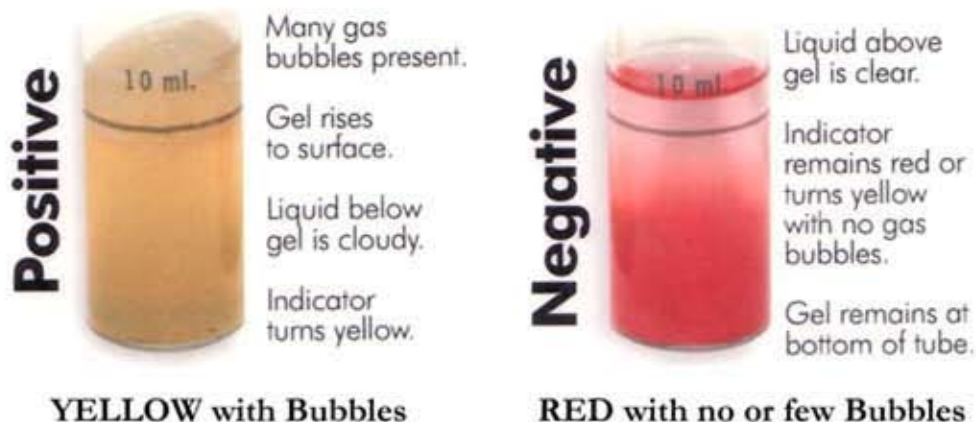


coliform bacteria

Fecal coliform bacteria are naturally present in the human digestive tract but are rare or absent in unpolluted waters. Coliform bacteria should not be found in well water or other sources of drinking water. Their presence in water serves as a reliable indication of sewage or fecal contamination. Although coliform bacteria themselves are not pathogenic, they occur with intestinal pathogens that are dangerous to human health. This presence/absence total coliform test detects all coliform bacteria strains and may indicate fecal contamination.

The coliform test in this kit will indicate if you have above or below 20 coliform colonies per 100 mL of well or river water. Even if the result of the coliform test for your well water is negative, this is not proof that your water is safe to drink. You should always have a professional lab test your drinking water for the presence of coliform bacteria.

See chart for significant levels.



significant levels of coliform bacteria

Fecal coliform bacteria per 100 mL water

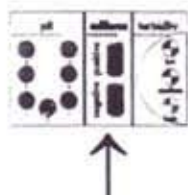
Desirable	Permissible	Water Use
0	0	Potable and well water (for drinking)
<200	<1,000	Primary contact (for swimming)
<1,000	<5,000	Secondary contact (for boating & fishing)

*For specific requirements, consult your state, regional, or local health department, or regional USEPA office.

For more information on coliform bacteria, including more extensive tests that you can perform and potential causes of high levels of coliform bacteria, visit the coliform bacteria page on the Earth Force website at:

www.earthforce.org/green/coliform

coliform, continued



5. Compare the appearance of the tube to the picture on the Coliform color chart. Record the result as negative or positive.

reactions

negative:

- Liquid above gel is clear.
- Gel remains at bottom of tube.
- Indicator remains red or turns yellow with no gas bubbles.
- Indicates less than 20 total coliform colonies per 100 mL of water.

positive:

- Many gas bubbles present.
- Gel rises to surface.
- Liquid below gel is cloudy.
- Indicator turns yellow.
- Indicates more than 20 total coliform colonies per 100 mL of water.

coliform bacteria procedure



1. Pour the water sample into the large test tube containing a tablet (3599) until it is filled to the 10 mL line. Don't worry if you overfill or underfill a little.



2. Replace the cap on the test tube.



3. Stand the tube upright, with the tablet flat on the bottom of the tube.



4. Incubate by storing the tube upright, at room temperature, out of direct sunlight, for 48 hours. Store the tubes where the temperature will be fairly constant and between 70° to 80°F (21° to 27° C). Do not disturb, handle, or shake tubes during the incubation period.

coliform test disposal



1. One tube at a time, remove the cap and add approximately 1 mL (1/3 teaspoon or 20 drops) of household chlorine bleach and immediately recap.



2. Let the tubes stand upright for about 4 hours.



3. Dispose of the closed tubes in the trash. Do not open tubes.

NEVER re-use tubes after coliform bacteria testing.