

How to Use your Water Testing Kit for Iron Bacteria and Sulfate-Reducing Bacteria*

*Instructions for sulfate-reducing bacteria on back



Your kit includes:
(1) WHITE label bottle

How to collect your water sample:



1 Choose a sample location.

- It is recommended to sample from your pressure tank tap if possible. If that is not possible, sample from your kitchen faucet. **Sample from the cold water faucet.**
- If you are monitoring performance of any water treatment device for iron or iron bacteria, collect sample after your treatment system.

Previously unsafe water samples that have been chlorinated should be pumped until they are free of chlorine before sampling.



2 Collect your water sample.

- Collect your sample right away in the morning (before a lot of water has been used for the day). Let the cold water run 2-5 minutes at a medium flow. Do NOT touch or turn off the tap until the sample has been collected.
- Take the cap off the sample bottle. Put the cap on a clean surface, open side up.
- Fill bottle to the fill line (on bottle label).
- Screw the cap on tight. Be careful not to touch the lip of the bottle or inside of the cap. Make sure that the sticker tab on the bottle does not go under the lid.



3 Fill out form and return water sample to us!

- Fill out the water sample testing form.
- Refrigerate sample or keep it cool (don't freeze) until you drop off.
- Return your sample during the times listed below with 24 hours of sample collection. **We highly recommend to drop off your sample as soon as possible after collection to get an accurate test result.**

Where to drop off your water sample:

Hours: Monday-Thursday (no Fridays), 8am-4pm
*Varies around holidays

Location: Eau Claire City-County Health Department
720 Second Ave. (ground floor)
Eau Claire WI, 54703

Questions?

Call: (715) 839-2870

Email: ECHDlab@eauclairecounty.gov

How to find the source of Hydrogen Sulfide and Sulfur Bacteria in Well Water

It's important to find the source before testing your water. Hydrogen sulfide gas can give water a "rotten egg" taste or odor. This gas can occur in wells anywhere and be naturally occurring, produced by "sulfur bacteria" in groundwater, well, or plumbing system, reactions inside of the water heater, or from pollution (which is rare).

How to find the source:

After you have been away from your home for a few hours, smell the water coming out of the hot and cold water faucets. Determine which faucets have the "rotten egg" odor.

Is there a smell from the cold water faucet?

NO →

The problem is likely in the water heater.

YES ↓

Is there a smell from faucets NOT connected to the water softener?

NO →

The problem is likely sulfur bacteria in the water softener.

YES ↓

Is the smell less noticeable after the water runs for a few minutes?

NO →

The problem is likely hydrogen sulfide gas in the groundwater.

YES ↓

The problem is likely sulfur bacteria in the well or plumbing system.

See the next page for next steps once you've identified the source.

What you can do

Hydrogen Sulfide and Sulfur Bacteria in Well Water

If the problem is in the water heater:

- **Replace or remove the magnesium anode.** You may wish to consult with a water heater dealer to determine if a replacement anode made of a different material, such as aluminum, can be installed. A replacement anode may provide corrosion protection without contributing to the production of hydrogen sulfide gas.
- **Disinfect and flush the water heater with a chlorine bleach solution.** Chlorination can kill sulfur bacteria. If all bacteria are not destroyed by chlorination, the problem may return within a few weeks.
- **Increase the water heater temperature to 160 degrees Fahrenheit (71 degrees Celsius) for several hours.** This will destroy the sulfur bacteria. Flushing to remove the dead bacteria after treatment should control the odor problem.

*Unless you are very familiar with water heater operation and maintenance, have a plumber or water system professional do the work. Increasing the water heater temperature can be dangerous! Consult the manufacture or dealer regarding an operable pressure relief valve, and for other recommendations. Be sure to lower the thermostat setting and make certain the water temperature is reduced following treatment to prevent injury from scalding hot water and to avoid high energy costs.

If the problem is in the well, plumbing system, or water softener:

- **You can proceed with testing or disinfect the well and plumbing system with a strong chlorine solution.** You can hire a licensed well professional to do this for you or follow instructions on our website. Sulfur bacteria can be difficult to remove once established in a well so multiple disinfections may be necessary or pre-work (such as scrubbing the well casing or using treatment chemicals) may be necessary by a professional.
- If the bacteria are in the water softener or other treatment devices, contact the installer or manufacturer for disinfection instructions.

If the problem is in groundwater:

Installing home water treatment or drilling a new well in a different formation are both options. Options for water treatment can include activated carbon filters, oxidizing media filtration, aeration and filtration, continuous chlorination and filtration, or ozonation and filtration.