

Sewage Screen Collection/Shipping Guidelines



Sample: water/sludge collected in a sterile container (for chlorinated water use a container with sodium thiosulfate neutralizer); swab of solid surface; bulk sample submitted in sterile container.

Method:

- ▲ Quantitative or qualitative selective culture for *E. coli*, fecal coliforms, and *Enterococcus* (fecal streptococci); quantitative cultures will be reported as colony forming units (CFU) per unit area (swabs); CFU/mL (water); or CFU/g (bulk).
- ▲ 24-hour sewage screen (water, swabs) – presence/absence of *E. coli*, fecal coliforms, and *Enterococcus* (fecal streptococci).

Collection:

Sterile screw-top containers and swabs are available free of charge from U. S. Micro-Solutions, call 724-853-4047. Do not use “Q-tips” or other cotton swabs intended for personal use; they are not appropriate for environmental sampling.

Swabs

1. Select a sampling area where fecal contamination is suspected.
 - ▲ *An area between 1 and 4 square inches is recommended for swab cultures.*
 - ▲ *For 24-hour sewage screen, collect 2 swabs.*
2. Wearing gloves, peel down the swab wrapper about 1 inch.
 - ▲ *Apply strict aseptic technique when collecting samples.*
3. Remove the plug from the media tube by twisting; discard the plug.
4. Remove the swab from the wrapper and insert it into the media tube.
5. Squeeze the bottom of the tube until the liquid in the sponge wets the swab.
6. Rub the pre-moistened swab vigorously over the desired sampling area.
7. Insert the swab into the media tube and firmly close the cap.
8. Record the sample number on the tube.
 - ▲ *Record the unit area sampled for each swab.*
9. Maintain sample at 2-8°C after collection.

Water

Potable Water - Distribution System without attachments:

1. Select a tap that is supplying water from a service pipe directly connected with the main, and is not, for example, served from a cistern or storage tank.
2. Open tap fully and let water run for 2 minutes or for a time sufficient to permit clearing of the service line.
3. Reduce water flow to permit filling the sample container without splashing. Collect 100 mL of water.
 - ▲ *For 24-hour sewage screen, collect 200 mL.*
4. Label the sample container with the sample number.
5. Maintain sample at 2-8°C after collection.

Potable Water - Well fitted with a hand pump:

1. Pump water for about 5-10 minutes or until water temperature has stabilized then fill the sample container without splashing. Collect 100 mL of water.
 - ▲ *For 24-hour sewage screen, collect 200 mL.*
2. If no pumping machinery is available, collect a sample directly from the well by means of a sterilized bottle fitted with a weight at the base. Take care to avoid contaminating samples. Collect 100 mL of water.
 - ▲ *For 24-hour sewage screen, collect 200 mL.*
3. Label the sample container with the sample number.
4. Maintain sample at 2-8°C after collection.

Shipping:

1. Clearly label each sample with a Sample Number and complete the Chain of Custody (COC).
2. Place sample in a Ziploc bag and then in a box with an insulated foam liner and ice pack.
3. Insert the completed COC form into a plastic sleeve or Ziploc bag and place in box.
4. Ship samples Monday through Friday for receipt within 24 hours of collection.