

Client Guideline

Water Sampling for Microbiological Analysis

The information in this guideline is provided as a resource to enable development of a sampling plan for your operation prior to sampling and sending your samples to PrimusLabs for analysis. This is not a complete procedure however, but it is based upon the requirements of Compendium of Methods for the Microbiological Examination of Foods and the Standard Methods for the Examination of Water and Wastewater (SMEWW).

If interested in additional resources or materials, please contact a microbiologist at microbiologists@primuslabs.com.

Comments:

- Do not open sterile sample container until you start sampling.
- At no time should the sampler's fingers come in contact with the inside of the sample container.
- Change gloves between each sample.
- Collect samples for microbiological examination in sterile containers.
 If necessary, ensure the sample container contains sodium thiosulfate. Contact the microbiology lab for instructions.
- If sampling open tanks, rivers, reservoirs or other sources that require dipping the container into the source, sterile bottles are required as sample containers.
- Samples should be taken just prior to sending them to the lab, as analysis should begin within 24 hours of sampling.

Did you know? PrimusLabs can collect GPS points and information regarding water sources sampled repeatedly for more enhanced trending and monitoring of your lab results. Contact us today if you are interested in learning more!

Supplies:

Alcohol Wipes	Cooler with Gel Ice Packs/Blue Ice
Disposable Gloves (Latex or Nitrile)	Sharpie or Permanent Marker
Sterile water sample container (w/ Sodium Thiosulfate)	
Customers can contact us for no-charge sampling supplies at SupplyRequest@PrimusLabs.com	

PROCEDURE

Preparation

- 1. Using the permanent maker, record the following information on an unopened sample container date, sample time, and sample location.
- 2. Proceed to sample area.
- 3. Before opening sample container, put on new latex or nitrile gloves.

Collecting Distribution System Samples

- 1. If the water sample is to be taken from a distribution system tap without attachments, 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. Disinfect the tap with an alcohol wipe. Open tap fully and let water run to waste for at least 3 minutes or for a time sufficient to permit flushing of the entire service line, whichever is longer.
- 3. Slowly fill to above the 100 mL line indicated on the container. Do not let the container overflow if sodium thiosulfate is used.



Client Guideline

Water Sampling for Microbiological Analysis (continued)

Collecting Open Water Source Samples

(e.g. rivers, streams, canals, reservoirs, or springs)

- 1. Samples shall be representative of the water that is the source of supply to consumers. It is undesirable to take samples too near the bank or too far from the point of drain off, or at depth above or below the point of drain off.
- 2. Grasp a bottle by its base and plunge into the water source with the neck facing down.
- 3. Turn the bottle until the neck is pointing slightly upward and the mouth is directed toward the current (if any) and allow bottle to fill. After filling, remove bottle from water with the neck pointing up, there should be no air gap.
- 4. Tightly cap the bottle.
 - Note: Stream studies may be short-term high intensity efforts. Select bacteriological sampling locations to include a
 baseline location upstream from the study area, industrial and municipal waste falling into the primary stream study
 area.

Transportation to the Laboratory

- 1. Place the sample in the cooler and place a sufficient amount of gel ice packs to keep the sample cold during transport to the laboratory.
- 2. Transport or ship the samples to the laboratory. If shipping, please be aware of hold times for water samples. Contact the laboratory with any questions.

The analytical results for any tested samples are representative only of the actual sample sent to PrimusLabs.com (please see the Disclaimer of Warranties provided with the final approved results or on our web site — www.primuslabs.com)

PL.CG.WS.051920.R0 Page 2 of 2 www.PrimusLabs.com