

# The Truman Lab

## Quick Surface Water Collection Guide: Bacteria

### 1.0 SCOPE AND APPLICABILITY

This guide provides abbreviated instructions for personnel when collecting surface water samples to be analyzed for total coliforms and *E. coli*. For more in-depth information, visit <https://www.hstcc.org/water-testing>. The full standard operating procedure may be read in addition to this guide for further clarification.

### 1.1 GENERAL CONSIDERATIONS

- The Chain of Custody form and other applicable forms must be completed with samples.
- **All samples must be labeled with the date, time of collection in 24-hour time, and sample order number. Samplers must also initial the cap of each collection bottle and circle the Sample Order Number.** The sample order number will be assigned in chronological order. For example, the first sample of the sampling day will be labeled “1”. This ordering will reset every sampling day.
- Samples must not be taken on a Friday or the day preceding a federal holiday, as many require a 24-hour incubation time before analysis. Samples should be delivered before 4 p.m. to provide sufficient time for pre-analysis procedures.
- Ensure health and safety precautions are met before sampling.

### 2.0 PROCEDURE

**2.1.1** Use sterile, non-fluorescent 120mL bottles that are to be filled with 100mL of sample. Bottles must be obtained from The Truman Lab. Bottles may contain sodium thiosulfate. When collecting stream samples, try to select a point in the main flow to obtain a more accurate sample. Avoid backwater areas and the shoreline when possible. Do not disturb the water upstream of where the sample is being taken.

**2.1.2** Remove the cap of the sample container. Do not allow the inside of the bottle, cap, or the bottle threads to come in contact with hands or surfaces.

**2.1.3** Holding the bottle by the base, plunge it (neck down) below the water. Collect samples at a depth of six inches to one foot below the surface. Turn the bottle until the neck points *slightly* upward. If a current is present, point the mouth into the current. Because surface waters are not suspected to be chlorinated, loss of the sodium thiosulfate is of no concern if the bottles contain it. Fill the bottle to just above the 100mL line, taking care not to over or underfill the bottle. If the sample is over or under filled, carefully adjust the volume of water by pouring or filling until there is 100mL of sample. Replace the cap. Samples cannot be analyzed if there is less than 100mL of water.

**2.1.4** Using a permanent marker, label the bottle with the sample order number (circled), date, and time of collection in 24-hour time. Initial the cap. Complete the Chain of Custody form and deliver with the sample. Keep the sample refrigerated or in an ice chest until delivery to The Truman Lab. If the sample is kept in an ice chest, place the sample in a plastic bag first to avoid contact with melting water. Deliver samples within 5 hours from time of collection and before 4:00 p.m.

# The Truman Lab



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## Chain of Custody

Client Name:		Client Phone:		Client Email:		Client Address:			
Sampler Name:		Hand-Delivered?	Matrix Code: Surface Water = SW Drinking Water = DW Waste Water = WW Soil = SO Other = O		Sample Type (ST): Grab = GS Composite = CS Modified = MS Other = O	Container Type (CT): Plastic = P Glass = G Other = O	LAB USE ONLY		
Sampler Signature:		Mailed?							Sample Batch Number:
Sample Order #	Collection Date	Collection Time	Collection Location / Site Number	Matrix Code	Analysis Requested		Unique Sample Number	Preservative	ST / CT
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
1. Relinquished By:		1. Received By:		Date:	Time:	Comments:		Approved By:	
2. Relinquished By:		2. Received By:		Date:	Time:				

## Instructions

- 1) The patterned boxes shall be completed by laboratory staff. Non-patterned boxes shall be completed by the sampler. When samples change custody, the **Relinquished By** and **Received By** sections must be completed by both parties exchanging the samples. If two samples are **Duplicates** of each other, circle the **Sample Order #** of both samples on this form.
- 2) If the **Collection Location** is different from the provided **Client Address** and a **Site Number** is not prefilled, list the **Coordinates** of the sampling location (if available).
- 3) Using a permanent marker, label each sample container with the **Sample Order #** (if a **Unique Sample Number** is not prefilled), **Date**, and **Time** of collection. Circle the **Sample Order #** on the container. Initial the bottle cap. For example, the first sample collected will be labeled "1", circled, and this sample information will correspond with the other sections on this form for **Sample Order #1**. The sample will be labeled by laboratory staff with the **Unique Sample Number** upon receipt at the laboratory.