San Antonio Testing Laboratory
WATER COLLECTION GUIDE 2024

The following guide is a step-by-step procedure to collecting your water samples for routine mineral analysis and bacteria testing for water quality. You may skip the sections of this guide that are not relevant to your testing needs. Please note that some tests require materials provided by the laboratory. If you have questions, call SATL at (210) 229 - 9920, Mon - Fri 8:00 - 5:00. SATL is TCEQ NELAP Certified and a part of TCEQ Drinking Water Lead and Copper Program.

Collect samples in the following order if sampling for all:

1. PFAS 2. Minerals & Metals 2. Bacteria

PFAS

PFAS can be found in a vast array of everyday items and thus chances for cross-contamination during sampling is high. In order to obtain accurate results, it is imperative to take enhanced precautions both while sampling and when preparing to sample. Preparation begins with awareness of the clothes that you plan to wear, the lotions you have applied, the food you eat during breaks, and the sampling supplies themselves.
Read on for our in-depth guidelines on PFAS sampling.

PERSONAL PREPERATION

AVOID: Clothing

- New and unwashed clothing
- Fabric softener laundered clothing
- Dry cleaned clothing
- Chemically treated to be waterproof, water resistant or stain resistant clothing
- UV ray protective clothing
- Teflon® (PTFE), Gore-TEX™, Tyvek®, Carhartt® waterproof products (Rain Defender, DWR, Rugged Flex, & more)
- Anti-fog protection from wipes or sprays

Approved: Clothing

- Clean laundered clothing (without fabric softeners)
- Clothing that has been washed 6 times or more
- Synthetic or cotton clothing
- PVC or polyurethane
- Rubber or neoprene
- Powderless nitrile gloves
- Wet weather gear made from polyurethane or PVC

AVOID: Personal Products

- Lotions, moisturizers, & hand creams
- Most sunscreens & insect repellents (please confirm with the approved list)
- Perfumes, deodorants, & antiperspirants

Approved: Personal Products

- Approved insect repellants and sunscreens (if applied prior to arrival at sampling area)
- Deep Woods Off ®
- Banana Boat® Sport Performance SPF 30
- Neutrogena® Ultra-Sheer Dry-Touch SPF 30
- Always thoroughly wash hands prior to sampling

AVOID: Food

- Chemically treated or recycled paper towels
- Chemical ice packs
- Aluminum foil
- Fast food packaging or wrappers
- Food should not be eaten in or near the sampling area
- Unwashed hands

Approved: Food

- Regular Ice
- PFAS-free water
- Gatorade® & Powerade® if consumed outside of the sampling area

SUPPLIES GUIDELINES

AVOID: Containers

- Used bottles or containers
- Bottles or containers not specified for PFAS Testing
- Glass bottles or containers
- Bottles or containers that have come in contact with carpet or upholstery from buildings or vehicles
- Teflon®-lined cap or lid

Approved: Containers

- New & unused sample bottles obtained from the laboratory & specified for the purpose of PFAS Testing
- Polyproplylene or HDPE container (without a Teflon®-lined cap or lid)
- Container lid that is unlined polyproplylene or HDPE

MINERALS & METALS ANALYSES

REQUIRES: 1000mL Sterile Container *Lab Provided
Label *Lab Provided
Ice Chest *Lab Provided
Sharpie or other marker
Ice

RETURN: Samples for Nitrate and Nitrite must be returned to the laboratory before 48 hours have passed since collection. Please time sample collection accordingly.

1. Prepare materials: Fill provided ice chest with ice and gather required materials. You will be collecting water within the first 1 minute after the tap is opened.

2. Open the faucet and adjust flow to avoid splashing of water.Place the container lid facing up to prevent contamination and collect water in the container provided up to the neck of the bottle (1000mLs).

3. Close the bottle and record the date, time, and location of sampling on the label provided along with the initials of the sample collector.
Example: 11/01/23, 3:45 pm, Kitchen Sink, MH

4. Place all filled containers into the ice chest with ice to maintain the temperature between 0 - 6 degrees celsius.

5. Return the ice chest with the containers back to the laboratory within one to two days to ensure holding time requirements for analysis with the expection of Nitrate and Nitrite which needs to be brought in before 48 hours.

BACTERIA ANALYSES FROM A METAL FAUCET

FAUCET TYPE: Metal vs non-metal faucets require different sterilizing before sample collection.

REQUIRES: 120mL Sterile Container with Sodium thiosulfate preservative *Lab Provided
Label *Lab Provided
Ice Chest *Lab Provided
Sharpie or other marker
Isopropyl Alcohol (rubbing alcohol)
A long-tipped lighter

RETURN: Samples must be returned within 24 hours of collection (or 30 hours for State compliant samples). The lab does not accept bacterias on Fridays or the day before holidays. Please time sample collection accordingly.

CAUTION: ALCOHOL IS A FLAMMABLE LIQUID. DO NOT BEND OVER THE SINK/FAUCET WHILE PERFORMING STEPS WITH THE LIGHTER.

1. Prepare all necessary materials before breaking the container seal. Unscrew the screen and aerator. Allow water to flow for 3 - 5 minutes, then turn water off.

2. Pour a tablespoon of Isopropyl Alcohol (rubbing alcohol available in grocery stores) from the bottle onto the faucet. Allow excess to drip off.

3. Carefully apply flame from lighter to the faucet where alcohol was applied. Please be careful as alcohol is FLAMMABLE and this will produce an almost invisible blue colored flame. Do not try to put out the flame by any means, including blowing on it.

4. Wait 20-30 seconds for the flame to burn out on its own. Once the flame has burned out, turn on the faucet and adjust to avoid splashing water.

5. Open the container and place lid face up to prevent contamination. Fill the container over the 100mL mark on the container but under the 120mL mark, taking care to avoid overfilling. The preservative will only work for the first 100mL of water. If overfilled, the sample is invalid and the results will be inaccurate.

6. Close the container and record the date, time, and location of sampling on the label provided along with the initials of the sample collector.
   Example: 11/01/23, 3:45 pm, Kitchen Sink, MH

7. Place samples in the ice chest with ice, maintaining the temperature between 0 - 6 degrees celsius. Return to the laboratory.

BACTERIA ANALYSES FROM A NON-METAL FAUCET

FAUCET TYPE: Metal vs non-metal faucets require different sterilizing before sample collection.

REQUIRES: 120mL Sterile Container with Sodium thiosulfate preservative *Lab Provided
Label *Lab Provided
Ice Chest *Lab Provided
Sharpie or other marker
Container that can fit faucet head
Gloves *Lab can provide, inquire if needed
Bleach

RETURN: Samples must be returned within 24 hours of collection (or 30 hours for State compliant samples). The lab does not accept bacterias on Fridays or the day before holidays. Please time sample collection accordingly.

1. Prepare all necessary materials before breaking the container seal. Unscrew the screen and aerator. Allow water to flow for 3 - 5 minutes, then turn water off.

2. Using gloves, pour commercially available Bleach into a container big enough to completely dip the faucet head into for 15 minutes.

3. After soaking for 15 minutes, remove the container and open the faucet and adjust to prevent water from splashing. Allow water to run for another 15 minutes.

4. Open the container and place lid face up to prevent contamination. Fill the container over the 100mL mark on the container but under the 120mL mark, taking care to avoid overfilling. The preservative will only work for100mL of water. If overfilled, the sample is invalid and the results inaccurate.

5. Close the container and record the date, time, and location of sampling on the label provided along with the initials of the sample collector.
   Example: 11/01/23, 3:45 pm, Kitchen Sink, MH

6. Place the containers in the ice chest (lab provided if requested with containers) and fill with ice to maintain the temperature between 0 - 6 degrees celsius. Return to the laboratory.