San Antonio Testing Laboratory WATER COLLECTION GUIDE 2023

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. Minerals & Metals 2. Bacteria

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: 100mL 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 6 hours of collection (or 24 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 container only to the 100mL mark on the container, 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.
- 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.

BACTERIA ANALYSES FROM A NON-METAL FAUCET

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

REQUIRES: 100mL 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 6 hours of collection (or 24 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 container only to the 100mL mark on the container, 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 inaccurate.
- 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.