

WATER BACTERIOLOGY

Collection and testing information for
coliform analysis of drinking water



**Tarrant County Public Health
North Texas Regional Laboratory
1101 S. Main Street
Fort Worth, Texas 76104
817-321-4750**



**Certificate Number:
T104704339-12-4**

Tarrant County Public Health North Texas Regional Laboratory is a NELAP Accredited Laboratory for the microbiological analysis of drinking water for Total Coliform and *E. coli* Enumeration using the Colilert-18 Method/SM 9223 and 9223B. All test results meet the requirements of the 2009 TNI Standard.



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<http://health.tarrantcounty.com>

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Remember

Follow the proper procedure for testing. Unless your sample is collected in the bottle provided by our laboratory and every precaution is taken to avoid contamination, the results of the lab analysis are without value and your drinking water may be **UNSAFE**.

Guidelines and Regulations...

concerning water sampling are set out in the State of Texas "Drinking Water Standards" and the Federal "Safe Drinking Water Act."

Fees

Coliform Presence/Absence Test:

\$20/sample

Coliform Enumeration Test:

\$25/sample

Duplicate Record Fee:

\$5/report

Weekend/Holiday Service Charge:

additional \$10.00/sample

We accept cash and checks only. We do not accept credit cards. Please retain your "Receipt for Services" form with the attached cash register receipt as your record of payment.

The following holidays are observed by the laboratory:

New Year's Day

Martin Luther King Jr. Day

Presidents' Day

Cesar Chavez Day (4th Monday in March)

Good Friday

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Eve

Christmas Day

A positive report indicating that total coliform organisms are present means the water may be unsafe to drink. If *E. coli* is present in the water sample, the water may have fecal contamination. The presence of total coliform or *E. coli* in drinking water indicates possible contamination and potential health risk.

A negative report indicating that coliform organisms are absent means the water is considered bacteriologically safe to drink at the time of sampling.

Remember that other factors such as chemical composition may also affect the safety, taste, and/or appearance of the water. For information regarding chemical testing in our laboratory, please refer to the *Tarrant County Public Health Laboratory Water Chemistry* pamphlet.

Finally, what to do if...

UNSUITABLE FOR ANALYSIS—

If the report you received from the lab indicates a problem with your sampling, review the Sample Carefully section of this brochure. If you follow the guidelines listed in this brochure for proper sampling, you can avoid most of the reasons for an unsuitable sample.

If your report indicates the presence of coliform organisms, you should resubmit samples according to regulatory guidelines if you are public water system. If you are a private well owner, treat your well system with chlorine bleach and then submit another sample for analysis. A water disinfection brochure is mailed with all positive coliform test reports. If you have additional questions regarding coliform testing, call the lab at 817-321-4778.



Find the Proper Location

Use an outside faucet which does not leak (avoid rubber hoses, fire hydrants and dirty areas).

- Remember to take only one sample per location, per time.
- Flame the mouth of the tap with a propane torch or swab the mouth of the tap with a 10% bleach solution. Run the water 2 - 3 minutes to clear the line.
- Adjust the flow to a slow, steady stream.

Sample Carefully

Carefully remove the cap of the water bottle and fill to the 120 ml line located at the top of the bottle. **Do not** rinse out white powder and do not overfill or underfill the bottle.



- IMPORTANT** - Do not touch the inside of the bottle or put the bottle on the ground. If you feel unsure about the quality of the sample, recollect with a new sample bottle.
- After filling the bottle, replace the cap securely. Identify the sample using the preprinted label provided by the lab. The

sample site, the date and the time of collection must be completed for acceptance. Place the label in an upright position on the side of the bottle.

- After collection, keep the sample cold with ice or ice packs and transport to the lab within 24 hours. **Do not freeze samples.** It is preferable, but not required, to place the sample in a recloseable plastic bag to protect the label and reduce the chance of contaminating the sample.



Get it to the Lab

Fill out your portion of the form **completely and accurately.**

- If the sample is for a Public Water System, be sure to include you PWS ID#.
- All samples from public drinking water systems must have a pre-collection chlorine residual documented on the form whether the water source is chlorinated or non-chlorinated. In addition, all samples submitted will be tested by the lab for any chlorine residual just prior to testing.
- Read the following sample acceptance checklist to make sure the lab has no reason to reject your sample before analysis. Samples can be rejected if the following acceptance criteria are not met before submission:

- Your sample **MUST** be collected in the bottle provided by the TCPH lab. The sample must be kept cold with ice or ice



packs and be transported to the lab within 24 hours from the time of collection. Frozen samples cannot be accepted.

- The sample submission form must be complete and accurate. Use only indelible ink to complete the form (ex. ballpoint pen) to prevent smearing of information. If you are submitting compliance samples for a Public Water System, it is critical that all information is provided or TCEQ will not accept your sample results as valid.
- The sample volume must be to the level of the 120 mL fill line. However, do not overfill the bottle either. The water line

must be visible below the neck of the bottle. Overfilled bottles do not allow for sample agitation prior to testing.

- Samples must be labeled properly. Supply all information requested on the label and use indelible ink only (ballpoint pen).
- Samples must arrive in the lab before 4 p.m. to be accepted for testing.
- The documented chlorine residual on any sample must be 10 mg/L or less to be accepted for testing.
- After the sample has been accepted for testing, a chlorine residual test will be performed as well as the coliform testing by the lab. If the sample shows **any** chlorine residual, the coliform test will be invalidated and the report will be marked as “Unsuitable, Please Resubmit-Excessive Chlorine Residual”.
- If the sample is extremely turbid or discolored, or has excessive silt, the sample cannot be accepted for testing.

- If the sample bottle is leaking or cracked, the sample cannot be accepted for testing.

The laboratory accepts samples Monday - Thursday for the routine \$20 per sample fee. Samples must be received in the laboratory no later than 4 p.m. For an additional weekend/holiday service charge of \$10 (\$30 total), the lab will accept samples on Fridays and the day before Tarrant County holidays if submitted by 4 p.m. The laboratory is closed for all Tarrant County holidays; see back of brochure for a complete listing of the holidays.

Know What to Expect



- Test results will be ready within 48 hours of submission. You may call for a verbal result **after 48 hours.** To inquire about your sample, please have readily available the name written in the address window of the submission form and the exact date of submission.
- The lab will mail the yellow copy of the submission form to the address you indicated. Please allow 7-10 business days for mail delivery.
- For an additional \$5 fee, you can request a duplicate record of your report that can be faxed, emailed, or picked up at the lab after 3 p.m. the day after sample submission.
- The MMO-MUG test for total coliforms and *E. coli* is the test performed on the majority of the samples submitted to lab.
- The key words to this report are:

Total Coliform:	<input type="checkbox"/> Present	<input type="checkbox"/> Absent
<i>E. coli</i> :	<input type="checkbox"/> Present	<input type="checkbox"/> Absent