

RESIDENTIAL WATER SUPPLY TESTING

If you get your drinking water from a private water supply, such as water wells, cisterns, springs, ponds, rainwater or other water sources, the U.S. Environmental Protection Agency (EPA) highly recommends periodic testing of your water. For more information from the EPA, go to <https://www.epa.gov/ground-water-and-drinking-water/home-drinking-water-testing-fact-sheet>.

LCRA Environmental Laboratory Services (ELS) is certified by the Texas Commission on Environmental Quality (TCEQ) under the National Environmental Laboratory Accreditation Program (NELAP) for drinking water testing and offers the general public affordable testing of their residential water supply for common contaminants identified by the EPA. LCRA ELS can test your water for any or all of these contaminants.

Common Contaminants

TOTAL COLIFORM – Coliforms are common bacteria found in the environment and are generally not harmful. However, their presence in drinking water may indicate contamination from disease-causing germs. **Fecal coliform** and ***E. coli*** are bacteria found in human or animal wastes. These bacteria in drinking water can cause short-term effects, such as diarrhea, cramps, nausea, headaches or other symptoms. When testing for bacteria, a result of 0 colonies per 100 mL of a sample or “Absent” is acceptable. If you have installed new plumbing or if you suspect contamination, you should disinfect your water supply prior to sampling.

NITRATE – High levels of nitrate (10 mg/L or greater) may cause blood disorders and is of special concern to infants and the elderly. High nitrate may indicate contamination of the water from sewage, fertilizer or other similar materials.

NITRITE – High levels of nitrite (1 mg/L or greater) may cause blood disorders and is of special concern to infants. Nitrite readily converts to nitrate.

LEAD – Lead is an element of primary concern because it can be toxic in very small amounts. The limit for safe drinking water is 0.015 mg/L. Any detectable amount of lead means it is possible for your water to exceed the limits depending on the length of time the water has been stagnant in the water line.

TOTAL DISSOLVED SOLIDS (TDS) – TDS is a measurement of dissolved minerals and is a good general indicator of water quality. Results greater than 1000 mg/L indicate a treatment system (reverse osmosis or distillation) may be required to reduce the TDS to an acceptable level.

TOTAL ORGANIC CARBON (TOC) – Organic substances such as insecticides, herbicides, and other agricultural or industrial chemicals may enter water sources via rainfall runoff or accidental spills and leaks from domestic and industrial wastes. TOC is a screening tool used to determine if water has been contaminated with these types of materials. A TOC result of 5 mg/L or greater may indicate a need for additional testing to determine the source of the contamination.

FLUORIDE – Federal regulations require fluoride, which occurs naturally in your water supply, not exceed a concentration of 4.0 mg/L in drinking water. Federal regulations also require that the secondary standard limit for fluoride in your drinking water not exceed 2.0 mg/L, since this level could possibly cause adverse effects in the development of permanent teeth for young children.

CHLORIDE – Chloride values of 300 mg/L or greater can be very corrosive to pipes and cause an unpleasant, salty taste in the water.

IRON – This element causes rust stains on sinks and fixtures, gives water a reddish color, and gives water a bad taste and smell. An iron result of less than 0.3 mg/L is considered acceptable for good water quality.

SULFATE – This compound along with Chloride comprises the majority of dissolved salts. Sulfate values of 300 mg/L or greater can produce a laxative effect, bitter taste and have a bad smell.

CALCIUM – Calcium is the main cause of hard water and scaling. High values are common in central Texas due to the limestone formations where most of our groundwater originates. Calcium values of 50 mg/L or greater indicate hard water. (Calcium and Magnesium are required to perform a Hardness calculation.)

Sample Collection and Shipping Instructions

If you have installed new plumbing or if you suspect contamination, TCEQ recommends disinfecting your water supply system prior to sampling. Bacteria could be in your well housing or water lines, which may result in a false positive test for your groundwater. TCEQ recommends the following procedure for disinfecting most wells or cisterns.

For more information, go to <https://www.tceq.texas.gov/response/safewell.html>

SAMPLING INSTRUCTIONS:

- Submit a sample for bacteriological testing to determine if disinfection was successful.
- Collect samples on the same day you deliver or ship them to LCRA ELS.

TO COLLECT SAMPLES FOR TOTAL COLIFORM:

- Use the small, plastic, 125-mL, STERILIZED bottle.
- Do Not Touch any portion of the inside of the bottle or cap (if possible, use latex gloves).
- Unscrew and remove the aerator screen on your faucet (if present).
- Using a swab with bleach to wipe the inside and outside of the faucet opening. This will eliminate any bacteria present on your faucet which may contaminate your sample.
- Turn on the cold-water faucet, rinse the outside lip well and let it run for about two minutes.
- Remove the cap from the sample bottle (do not set the cap down) and fill the bottle **ONLY TO THE NECK OF THE BOTTLE**.
- Recap the bottle tightly.

TO COLLECT SAMPLES FOR OTHER WATER TESTS:

- Use the larger, 500-mL or 1000-mL plastic bottle.
- Unscrew and remove the aerator screen on your faucet (if present).
- Turn on the cold-water faucet and let it run for about two minutes.
- Remove the cap from the sample bottle and fill one-half of the bottle.
- Recap the bottle and shake a few times.
- Pour all of the water out.
- Then, refill the bottle a second time to the neck of the bottle.
- Recap the bottle tightly.

SHIPPING INSTRUCTIONS:

Carefully complete bottle labels with your name, date and time of sample collection, and the sample location (i.e. well head, kitchen faucet, outdoor faucet, etc.). Place the bottle(s) and **ice** with the completed instruction sheet (inside plastic baggie) in the ice chest. Seal the box and either deliver or ship the kit to:

**LCRA-ENVIRONMENTAL LABORATORY SERVICES
3505 MONTOPOLIS DRIVE, EL-101
AUSTIN, TX 78744**

We accept samples Monday through Friday from 8 a.m. to 4 p.m. Bacteria samples are accepted through Thursday 2 p.m. only. For holiday schedules or questions, call 800-776-5272, ext. 6022 or 512-730-6022, Monday through Friday, 8 a.m. to 5 p.m.

Request for Testing

[See instructions on Page 2 for sample collection.]

Please complete and return one form for each sample location (i.e., kitchen sink, outdoor faucet, well head, etc).

Name:		E-Mail:	
Address:			
City:	State:	Zip:	
Home Phone: ()	Work Phone: ()	MATRIX: Circle One AQ = Aqueous DW = Drinking Water	
Sample Collection Date:		Sample Collection Time:	
Sample Location:			

TEST REQUESTED	PRICE	QUANTITY	TOTAL
Total Coliform – E.coli (Presence/Absence)	\$45		
Method 300.0 (Chloride, Fluoride, Nitrite, Nitrate, Sulfate)	\$60		
Method 200.7 (Iron, Calcium, Magnesium, Hardness, calculation)	\$60		
Method 200.8 - LIST METALS	\$60		
Total Dissolved Solids	\$46		
Total Organic Carbon (TOC)	\$40		
pH	\$42		
Other (Write in):	\$		
Other (Write in):	\$		
Other (Write in):	\$		
Other (Write in):	\$		
Subtotal Analytical Cost			\$

MISCELLANEOUS CHARGES	PRICE	TOTAL
Bottle Kit/cooler shipment	\$20	
Sampling Services	\$125/hr.	
Weekend/After-hours surcharge (applies to all analytical services)	\$250	

Turnaround Time Requested	PRICE MULTIPLIER	TOTAL
Normal Turnaround (7-10 Working Days)	1 x List Price	\$
Rush Turnaround (4-6 Working Days)	2 x cost of service	\$
Urgent Turnaround (2-3 Working Days)	3 x cost of service	\$
Total Analytical Cost		

NOTE: Relinquishing sample(s) to ELS obligates the submitter to all ELS Standard Terms and Conditions stated on the back of this form.

For Laboratory Use Only:

Sample Relinquished By	Date/Time	Received Temp.: °C	ICE: Y / N
Sample Received By:	Date/Time	Derived Temp.: °C	Thermometer: _____

Payment Information:

Amount received : \$	Check No.	Payment Received By:	Date Payment Received:	Work Order No.
Visa/MC Approval No.				
Comments:				