



Private Drinking Water Well Basics

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Texas has stringent licensing requirements that require submitting well drilling completion reports to the State. Groundwater resources may be managed and protected locally through the creation of groundwater conservation districts (GCDs) and Section 59, Article XVI of the Texas Constitution and Texas Water Code §35.001 establishes groundwater management areas to encourage joint planning between GCDs. Private domestic well owners are responsible for the maintenance and monitoring of their own wells to assure safe drinking water.

Where is your well?

The management of a private drinking water supply from a domestic well is the responsibility of the landowner. To protect your water supply, find and record the locations of all well(s) on your property. Maintain a file of all your well records – each well will have a unique well identification number assigned by the driller for reporting. The well tracking number is a 5 or 6-digit number, and can be used for tracking any additional historical information available for your well from the following sources:

- **Texas Water Development Board (TWDB) Groundwater Database**
Registered water-well drillers must submit reports to the state with each well drilled. Of the 1,000,000 plus water wells drilled in Texas over the past 100 years, more than 130,000 have been inventoried and the data entered into the TWDB groundwater database since 2001. You may be able to find your well at: http://wiid.twdb.state.tx.us/ims/wwm_drl/viewer.htm.
- **Texas Commission Environmental Quality (TCEQ) Water Well Report**
Another similar map-based database that may have information about your well is maintained by the TCEQ and is available at: <http://gis3.tceq.state.tx.us/waterwellpublic/index.jsp>. If you don't find your well report online, reports are available for access at the TCEQ Records Services Department in Austin (512-239-0900).
- **Texas Water Development Board (TWDB), Groundwater Management Areas**
Your well may be located within a groundwater conservation or subsidence district, which may provide additional information about your well. Find out at the Texas Alliance for Groundwater Districts (<http://www.texasgroundwater.org/>) or the Texas Water Development Board (<http://www.twdb.state.tx.us/GwRD/GCD/gcdinfo1.htm>).

Pinpoint potential sources of contamination

The wellhead should be at least:

- **50 feet** from any septic tank, cistern, property boundary, and/or nonpotable wells
- **100 feet** from your septic drain field or any leach field
- **150 feet** from any shelter or yard for livestock/pets; feed storage area or pesticide or fertilizer storage
- **250 feet** from a manure stack or liquid waste disposal system.

Test the water

How long has it been since you sampled and analyzed the quality of your drinking water? Do you know what to analyze for and where to go to find a lab? Water companies that sell water are required by Federal law to report the complete water chemistry to the consumer. To analyze your well water for the full list of EPA recommended tests would cost nearly \$4,000, and for that reason you should prioritize your analyses to those contaminants that are most likely to be in your well water.

Once a year, sample and test for:

- *E. coli* or fecal coliform (bacteria from human or warm-blooded animal waste)
- Nitrate
- Total Dissolved Solids (TDS)

There may be other constituents that could be naturally occurring in your area, or the result of past environmental releases. Contaminants such as arsenic and radionuclides are naturally occurring in parts of the state. Our petroleum exploration heritage may have resulted in impact to your drinking water aquifer. Sample your well whenever you suspect contamination; notice a change in color, taste or odor of the water; after pump or well maintenance; and, if there is any change in health of those who drink the water.

To find a laboratory, call your local County Health Department, or select from a list of National Environmental Laboratory Accreditation Program (NELAC) certified drinking water laboratories at: http://www.tceq.state.tx.us/assets/public/compliance/compliance_support/ga/txnelap_lab_list.pdf.

For more information:

To locate a Licensed Well Driller/Pump Installer in your area:
<http://www.license.state.tx.us/LicenseSearch/>.

Texas Ground Water Protection Committee web site includes several sources of additional information at: <http://www.tgpc.state.tx.us/WaterWells.htm>.

For additional information, contact the local County Extension Office, Diane Boellstorff (dboellstorff@tamu.edu, 979-458-3562) or Kristine Uhlman (kuhlman@tamu.edu, 979-845-1641).



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