**NEW MEXICO ENVIRONMENT DEPARTMENT**
*Ground Water Quality Bureau*

# WELL TEST FORM

www.env.nm.gov

**Please print clearly and legibly and complete sections 1 and 2. Contact information and individual well information will be withheld to the extent provided by law.**

## SECTION 1: WELL OWNER/USER INFORMATION

| Name: | E-mail: | Phone with area code: |
|---|---|---|
| _____ | _____ | _____ |

| Mailing Address (required) : | City: | State: | Zip Code: |
|---|---|---|---|
| _____ | _____ | _____ | _____ |

## SECTION 2: WELL INFORMATION

Physical location of well: ☐ Same as mailing address **OR** physical address:

| Well County? | How deep is your well (ft.)? | Depth to water (ft.)? |
|---|---|---|

| | | | |
|---|---|---|---|
| Is your well permitted by the Office of the State Engineer?<br>• If yes, what is your permit number, if known? _____ | Yes ☐ | No ☐ | Don't know ☐ |
| Does your well have a well identification (ID) tag (a 3in metal tag with a 5-character ID)?<br>• If Yes, what is the ID, if known? _____ | Yes ☐ | No ☐ | Don't know ☐ |
| Is this a shared well?<br>• If yes, how many homes share this well? #_____ | Yes ☐ | No ☐ | Don't know ☐ |
| Is this well the primary source for drinking water?<br>• If yes, how many people drink this water? #_____ | Yes ☐ | No ☐ | Don't know ☐ |
| Is your well greater than 30 years old?<br>• If known, what year was it installed? _____ | Yes ☐ | No ☐ | Don't know ☐ |
| Is your well within 100 ft. of a home septic tank leach field system? | Yes ☐ | No ☐ | Don't know ☐ |
| Do you use any water treatment equipment (ex: screen, reverse osmosis, Britta)?<br>• If yes, please describe: | Yes ☐ | No ☐ | Don't know ☐ |
| Do you suspect any water quality problems?<br>• If yes, please describe: | Yes ☐ | No ☐ | Don't know ☐ |

## SECTION 3: WATER ANALYSIS CONDUCTED BY NMED

| **Test** | **Result** | | | **Drinking Water Standard** |
|---|---|---|---|---|
| pH (units) | | | □Not Tested | Between 6.5 and 8.5* |
| Specific Conductance (µS/cm) | | | □Not Tested | Less than 1000 µS/cm |
| Fluoride (mg/L) | | □Not Detected | □Not Tested | Less than 2.0 mg/L*, Less than 4.0 mg/L** |
| Iron (mg/L) | | □Not Detected | □Not Tested | Less than 0.3 mg/L* |
| Sulfate (mg/L) | | □Not Detected | □Not Tested | Less than 250 mg/L* |
| Nitrate as nitrogen (mg/L) | | □Not Detected | □Not Tested | Less than 10 mg/L** |
| Arsenic Screening (µg/L) | | □Not Detected | □Not Tested | Less than 10 µg/L** |

* National Secondary Drinking Water Standard (Aesthetic) ** National Primary Drinking Water Standard

Sample Number _____

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***Notice:*** *The tests performed by NMED are only for those chemicals or characteristics listed on this form. The tests are not a substitute for a complete laboratory analysis, nor do they include tests for bacteria or other organisms. In addition, if a dirty sample container was used, or if the sample was collected more than 24 hours prior to analysis, the test results may be inaccurate.*

## INTERPRETING YOUR TEST RESULTS

**pH**: The pH indicates whether water is basic, neutral, or acidic. A pH value above 7 is basic and a value below 7 is acidic. The pH of water is important because pH can cause aesthetic problems and can cause metals to leach from plumbing materials.

**Specific Conductance**: Conductivity is alternative method to measure the hardness (total dissolved solids (TDS)) of water. Conductivity refers to the ability of water to conduct an electrical current. The higher the concentration of dissolved minerals and salts in water, the more electricity it conducts. Although there is no state or national standard for conductivity, the Environmental Protection Agency (EPA) recommends TDS concentration in drinking water of less than 1,000 µS/cm. Water with high conductivity can impart an unpleasant taste and odor to water and can cause mineral deposits on plumbing fixtures.

**Sulfate**: Sulfate is a compound of sulfur and oxygen that is commonly found in ground water. It can give an unpleasant taste to drinking water. Individuals not accustomed to drinking water rich in sulfate may experience dehydration and a laxative effect. Populations potentially sensitive to abrupt exposure to high levels of sulfate in drinking water are infants and transient adults (students, visitors, hunters, etc.). The federal aesthetic standard for sulfate is 250 mg/L for drinking water.

**Nitrate as Nitrogen**: Nitrate is a compound of nitrogen and oxygen. There are many possible sources of nitrate contamination including fertilizer, animal waste, septic tanks, refuse dumps, and natural geologic deposits. Generally, the concentration in ground water is low, but higher levels can be dangerous for pregnant women and infants under six months of age to consume. The use of nitrate-contaminated drinking water to prepare infant formula is a well-known risk factor for infant methemoglobinemia (blue-baby syndrome). Cases have occurred after feeding babies formula that was reconstituted with water from private wells. State and federal health standards for nitrate as nitrogen are set at 10 mg/L for drinking water. If your well water has a higher concentration of nitrate than is considered a background concentration, it may indicate other contaminants are present.

**Fluoride**: Fluoride is a naturally occurring mineral that is proven to protect against tooth decay. To protect teeth from decay, the recommended fluoride concentration is from 0.7 to 1.2 mg/L in drinking water. Too much fluoride can cause undesirable effects such as dental fluorosis (brown staining and/or pitting of the permanent teeth as they develop) at concentrations above 2 mg/L and possible skeletal fluorosis (weakening of the bones) at levels above 4 mg/L. NMED recommends a maximum fluoride concentration of 2 mg/L in drinking water. If the fluoride level is below 0.7 mg/L, you should discuss options with your dentist.

**Iron and Manganese**: High iron concentrations in ground water, in the range of 1 to 5 mg/L, can be an indicator that the groundwater is deficient in oxygen. Deficiencies in oxygen in groundwater can be caused by septic tank discharges or by naturally occurring geologic deposits such as humus and peat.

If the water is agitated, such as in a washing machine, sink, tub or toilet, it becomes oxygenated, and the iron and manganese will precipitate as oxides. These oxides range in color from black/gray/brown to red/orange/yellow and can appear as small particles in the water or can cause stains on laundry and porcelain. The federal aesthetic standard for iron is 0.3 mg/L and 0.05 mg/L for manganese. Most of the manganese that we ingest comes from our food (0.7 – 10.9 mg/day in an adult diet, higher for vegetarians). Although manganese is an essential nutrient at low doses, chronic exposure to high doses may be harmful. To protect against any potential neurological effects, the EPA has set a health advisory concentration of 0.3 mg/L for manganese.

**Arsenic**: Arsenic is a semi-metallic element. It is odorless and tasteless. It enters drinking water supplies from natural deposits in the earth or from agricultural and industrial practices. Exposure to high levels of arsenic has been linked to several types of cancer. NMED recommends a maximum arsenic concentration of 0.01 mg/L in drinking water.

## WHAT TO DO IF YOUR TEST RESULTS APPROACH OR EXCEED THE STANDARD

If possible, attempt to locate the source of contamination and take corrective measures. Corrective measures could include disinfecting your well, purifying your water source through treatment, or establishing an alternate safe drinking water source. NMED recommends consulting with companies that specialize in home water treatment systems to find a solution that best meets your needs and budgetary considerations. NMED does not make product recommendations or company endorsements.