First Alert®

Refer to these instructions prior to beginning the test.

before you begin...

1. Contents - One Bacteria Test Vial
   - One Lead / Pesticide Test Packet
   - One Nitrate / Nitrite Test Packet
   - One pH / Hardness / Chlorine Test Packet
2. **Keep tests out of reach of children or pets. Do not ingest anything from this test kit. Do not drink the water sample used for testing.** Store and use at room temperature (60-86°F). Do not use on hot water or water containing bleach or detergents. Do not re-use any part of the test kit.
3. **Do not open packets or vial until you are ready to perform the tests.**
4. **Read and follow all instructions carefully.**

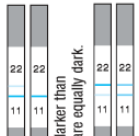
bacteria test instructions

1. Take out the Bacteria Test vial and set upright on a flat surface.
2. Collect water sample or turn on tap to a very slow stream.
3. Carefully twist off cap and fill vial to 1/2 inch below the top (to 5 ml line). DO NOT OVERFILL and DO NOT SPILL the bacterial growth powder in the vial.
4. Replace the cap and twist on tightly. Shake the vial vigorously for 20 seconds.
5. Place the capped vial upright in a warm area (70-90°F) where it cannot be disturbed for 48 hrs.
6. After 48 hrs., observe the color of the liquid without opening the vial:
   Purple Color: Negative Result (No bacteria were detected)
   Yellow Color: Positive Result (It is highly likely that potentially harmful bacteria were detected)
   Note: Results observed after 50 hours may be invalid.
7. For positive results, add bleach to the sample before pouring down the toilet, then wash hands carefully. Negative samples may be poured directly into the toilet. Discard vial in the trash.

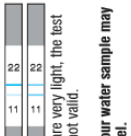
lead / pesticide test instructions

The **Lead Test** can detect dissolved lead at levels below the EPA Action level of 15 parts per billion (ppb). The **Pesticide Test** detects two of the most common pesticides used in the US at or below the EPA Maximum Contaminant Level (atrazine - 3 ppb, and simazine - 4 ppb).

1. Open **Lead / Pesticide** packet and take out all contents. The packet contains a test vial, a dropper pipette, two test strips, and a desiccant (to be discarded).
2. Using dropper, place **exactly TWO dropper-fuls** of water sample into test vial. To pick up sample, tightly squeeze the bulb at the end of the dropper and place the open end into water sample. Release the bulb to pick up sample, then squeeze again to expel sample into vial.
3. Swirl vial gently for several seconds. Place on a flat surface.
4. Place both test strips into the test vial, with arrows pointing DOWN.
5. Wait 10 minutes. Do not disturb strips or vial during this time. Blue lines will appear on the strips.
6. Take the strips out of the vial and read results.
   Negative: Bottom line (next to number 1) is darker than top line (next to number 2).



Positive: Top line (next to number 2) is darker than bottom line (next to number 1), or lines are equally dark.



7. Note: If no lines appear, or both lines are very light, the test did not run properly and the result is not valid.

If a test strip shows a positive result, your water sample may contain lead or pesticides at a toxic level.

nitrate / nitrite test instructions

1. Carefully open **Nitrate / Nitrite Test** packet and take out test strip.
2. Immerse the reagent pads into water sample for 2 seconds, remove, after 1 minute match colors to chart below.
3. Colors are stable for 1 minute.

nitrate / nitrite test instructions cont.

pH / hardness / chlorine test instructions

1. Carefully open **pH / Hardness / Chlorine Test** packet and take out test strip.
2. Immerse the reagent pads into water sample and remove immediately. Hold the strip level for 15 seconds.
3. Match pH, Total Hardness and Total Chlorine pads (in that order) to the color chart.

nitrate / nitrite test instructions

1. Carefully open **Nitrate / Nitrite Test** packet and take out test strip.

http://www.firstalertstore.com/store/products/wt1-water-test-kit.htm

www.firstalertstore.com
Product: Water Test Kit (First Alert WT1)

Water Test Desired Values

EPA maximum contaminant levels or guideline standards

Bacteria	None
Lead	Below 15 ppb
Pesticides	Below 3 ppb atrazine
(atrazine/simazine)	Below 4 ppb simazine
Total Nitrate/Nitrite	Below 10.0 ppm
Nitrite	Below 1.0 ppm
Total Chlorine	Below 4 ppm
pH	6.5 to 8.5
Total Hardness	50 ppm or less

NOTE: If your water tests outside the desired values, call the **Safe Drinking Water Hotline** at 1.800.426.4791.

Please note that this **First Alert® Drinking Water Test Kit** is a screening test and can not be used to certify water as safe or unsafe for drinking. This test kit provides approximate results **ONLY** when used in strict accordance with instructions. First Alert® expressly disclaims any liability resulting from use of this product, failure to follow instructions, or reliance on test results.

M08-0131-001

Lower Big Blue Natural Resources District

Watershed Capital of Nebraska

"Protecting Lives, Protecting Property, Protecting The Future"

Water Quality Home Testing Kits

https://www.businessreport.com/business/louisiana-must-develop-water-budget-water-code-address-future-challenges-expert-says-2

2015 Special Program

Nebraska Department of Environmental Quality

GOOD ENOUGH TO DRINK?

INTRODUCTION

A pivot using water-efficient nozzles.

Since its inception in 1972, the Lower Big Blue Natural Resources District (LBBNRD) has worked hard to improve water quality throughout the District. Partnering with producers and communities to help lower fertilizer use in areas of high nitrate concentration in groundwater and the promotion of agricultural practices like no-till and reduced tillage have been part of those efforts. Additionally, and in cooperation with other agencies, the LBBNRD has worked to increase awareness regarding just how much fertilizer a crop requires. In terms of monitoring and understanding water quality trends, the NRD collects and submits for analysis 400-800 irrigation water samples annually, as well as 30-50 domestic/livestock samples. This discrepancy in volume is one reason the LBBNRD feels domestic well monitoring has been somewhat neglected within the District. While there is certainly tremendous value in knowing the approximate concentration level of nitrates in the groundwater in one's area based on the NRD's monitoring program, it does not compare to knowing the level of water quality in one's specific well. When you consider the possible variables which can exist between the construction, depth and aquifer formations of a domestic well and a neighboring irrigation well, you can see just how difficult it can be to definitively base your home's water quality on a neighboring sample analysis.

A GOOD START

Over the years, the NRD has helped well owners of all kinds to collect and submit water samples for various quality analyses. However, the cost of those tests are passed on to the person requesting it sans any nitrate analysis (NRD has covered that cost). Now, through a special project funded primarily by the Nebraska Department of Environmental Quality's Small 319 Grant, domestic well owners can obtain Water Quality Home Testing Kits free of charge. These kits are an excellent resource for any well owner wanting to begin to gain an understanding of their specific water quality. And, if by using the test kit, a domestic well owner noticed a disconcerting result, a follow-up sample could always be submitted for further testing.

The quality of water inside your home is of utmost importance, but unlike community systems, the responsibility for monitoring an individual domestic well's water quality falls solely on the well owner. The typical cost of similar analyses has ranged from $7.00 to $25.00, but through this grant, over 300 kits will be made available to domestic well owners free of charge.

www.suburbantestinglabs.com

GETTING THE BEST RESULTS

Like any good science endeavor, the keys to getting the most accurate results are taking your time, reading and following the instructions included in the kit, knowing what you want to test and knowing how to make sure you are testing what you want to test. Often, the best locations to collect a water sample are those before any filtration or treatment system. These locations might be a yard hydrant or tap in the basement of the house prior to the water softener. When carried out properly, these test kits will help you find out if your water contains unsafe or undesirable levels of eight common contaminants—bacteria, lead, pesticide (atrazine & simazine), nitrates, nitrites, pH, hardness and chlorine. It is also important to note that each of the tests have slightly different methods and equipment, so it might be wise to read through the entire booklet included with the test kit before beginning. The booklet also includes a list of the contaminants for which you'll be testing, and the Environmental Protection Agency's (EPA's) maximum contaminant levels or MCLs for those contaminants. As mentioned before, using this kit is an excellent place to start, but if any contaminant does appear to exceed the MCL, it might then be prudent to also submit a follow-up sample to the lab.

SUPPORT

As always, the LBBNRD is more than willing to help in any way it can. Whether you need a hand using the test kit properly to obtain the best results, or you've finished the test and would like us to submit a follow-up sample to help in providing as complete a picture as possible. When it comes to knowing what is in your water, you can never be too careful, and if you've never had it tested before, why not take advantage of this opportunity?

For questions or comments, please refer to the information below.

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