



Public water supplies are tested regularly, thus users do not need to be concerned about the quality or safety of their drinking water. Conversely, people who have a private water supply are responsible for all quality and safety aspects of their water supply. If a well's location, construction, maintenance (including water tests), or protection are deficient, safe drinking water can not be reliable.

### Ensuring Safe Drinking Water

Wells and groundwater are often contaminated because of poor location, inadequate construction, delayed or no well maintenance, accidents, and lack of protection. Recent surveys of private wells show about 80 percent are deficient in construction or location. The most common contaminants of health concern are coliform bacteria and nitrate followed by salts (often sodium chloride), petrochemicals, and pesticides. Safe water requires action by the owner or water user to ensure a safe well. Begin with an annual check of the well and water system, including these elements:

1. Check well location and safety of construction (see MF-970) and make necessary improvements.
2. Do annual preventive maintenance including thorough shock chlorination of the well and water system.
3. Test water, keep test reports for reference, and compare reports to detect changes or problems.
4. Develop and carefully follow a plan to protect well and groundwater from contamination (see MF-2396).

### What Tests Are Necessary?

There is no single test for safe drinking water. Tests are for specific contaminants including coliform bacteria, nitrate, fluoride, lead, pesticides, etc. Surveys show about 60 percent of private wells are polluted by bacteria or nitrate, both of which have potentially serious health risks.

Test with a purpose(s) (see MF-871), including to assure safety, detect changes with time (contamination), or document good quality. Test for coliform bacteria, nitrate, total dissolved solids, and pH as part of annual well maintenance. Much more frequent bacteria tests are needed to assure safe, bacteria-free water, especially when a well has a deficiency. Always test for coliform bacteria after any maintenance or repair of the well or water system.

Before using a well for drinking or irrigation test the water's suitability for that purpose. Retest the suitability every 3 to 5 years. Consider testing for specific chemicals that have been stored, used, or spilled near the well.

# Testing to Help Ensure Safe Drinking Water

### Which Labs Are Qualified?

The only way to judge the quality of laboratory service is through independent evaluation. Kansas Department of Health and Environment (KDHE) does laboratory certification for Kansas. We recommend only laboratories certified for the tests you want or need. This leaflet lists laboratories certified for drinking water tests located in Kansas and nearby states. For detailed information about specific chemical certification, contact KDHE, Laboratory Improvement program office (785) 296-1639 or [www.kdhe.state.ks.us/envlab/index.html](http://www.kdhe.state.ks.us/envlab/index.html). All states have a laboratory certification program similar to Kansas. Contacts for surrounding states are listed in the table on the back page.

### Selecting the Laboratory

Because any laboratory certified for the test you want should be equally capable to do the test, price is not a good gauge of quality. Nitrate and bacteria tests from one laboratory may be \$20, yet others may charge \$50. The trade association, American Council of Independent Laboratories, at [www.acil.org](http://www.acil.org) may help in choosing a laboratory. We recommend selecting a laboratory within overnight shipping by U.S. Postal Service or other carrier. The bacteria test must be started within 24 hours of sample collection for accurate results. Ask the lab for the days and times that they start water samples and plan accordingly.

### Collecting and Transporting the Sample

Contact the laboratory to get a sample container. Follow instructions, either from the laboratory or K-State Research and Extension publication MF-963, to collect the sample. After collecting, refrigerate the sample, but do not freeze, and keep it out of the sunlight. Be sure the sample reaches the laboratory so the test can begin within 24 hours.

### Related K-State Water Quality Titles:

- *An Action Program for Safe Drinking Water*, MF-1050
- *Kansas Home\*A\*Syst—Environmental Risk Management for Homes*
- *Organic Chemicals and Radionuclides in Drinking Water*, MF-1142
- *Private Water Well—Owner/Operator Manual*, MF-2409
- *Private Well Maintenance and Protection*, MF-2396
- *Private Wells—Safe Location and Construction*, MF-970
- *Recommended Water Tests for Private Systems*, MF-871
- *Shock Chlorination for Private Water Systems*, MF-911
- *Taking a Water Sample*, MF-963
- *Understanding Your Water Test Report*, MF-912

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**KDHE Certified Laboratories in Kansas and Nearby States for Drinking Water Testing**  
**Coliform Bacteria (B), Lead (L), Metals/Minerals (M), Nitrate (N), Organic (O), Radiochemistry (R), Trihalomethane (T), and Unregulated Organics (U)**

| Laboratory Name, Location Address and City                 | Mail Address and City                      | Telephone                      | B | L | M | N | O | R | T | U | Renew   |
|------------------------------------------------------------|--------------------------------------------|--------------------------------|---|---|---|---|---|---|---|---|---------|
| Analytical Management Lab Inc, Olathe, KS 66062-2760       | 15130 S. Keeler, Suite B                   | (913)829-0101                  | – | L | M | – | O | – | T | U | 4/2004  |
| Continental Analytical Services Inc, Salina, KS 67401-6675 | 1804 Glendale Road (800-535-3076)          | (785)827-1273                  | B | L | M | N | O | – | T | U | ???     |
| Dean's Water Lab Inc, 401S. Alleghany, El Dorado, KS 67042 | P O Box 610, Andover, 67002-9780           | (316)733-2682                  | B | – | – | – | – | – | – | – | 10/2004 |
| Environmental Lab Inc, 821 N. Washington St. Auburn, KS    | P.O Box 120 Auburn, KS 66402-0120          | (785)233-1860                  | B | – | – | N | – | – | – | – | 4/2004  |
| General Laboratories Inc, Hutchinson, KS 67501-4501        | 1202 North Main Street                     | (620)663-8314                  | B | – | – | – | – | – | – | – | 10/2004 |
| Hazen Research Inc, Golden, CO 80403-1895                  | 4601 Indiana Street                        | (303)279-4501                  | – | – | – | – | – | R | – | – | 10/2004 |
| Keystone Laboratories Inc, Kansas City, KS 66103-1359      | 1304 Adams Street                          | (913)321-7856                  | B | – | – | N | – | – | – | – | 4/2004  |
| M D Chemical & Testing Inc, Topeka, KS 66619-0321          | Forbes Field, Bldg 281, Suite AB, PO 19321 | (785)862-3500                  | – | L | M | N | – | – | – | – | 4/2004  |
| Midwest Laboratories, Inc,* Omaha, NE 68144                | 13611 "B" Street                           | (402)334-7770                  | B | L | M | N | – | – | – | – | 12/2003 |
| Olsen Agricultural Laboratory Inc,* McCook, NE 69001-0370  | 210 East First Street / P O Box 370        | (308)345-3670                  | B | L | M | N | – | – | – | – | 12/2003 |
| Pace Analytical Services Inc, Lenexa, KS 66219-2406        | 9608 Loiret Boulevard                      | (913)599-5665                  | B | – | M | N | O | – | T | U | 4/2004  |
| Pace Analytical Services, Inc, Broken Arrow, OK 74012      | 1700 West Albany Street                    | (918)251-2858                  | – | – | – | – | O | R | T | U | 10/2004 |
| Paragon Analytics Inc, Fort Collins, CO 80524              | 225 Commerce Drive                         | (970)490-1511                  | – | – | M | N | O | R | – | U | 7/2004  |
| SDK Laboratories Inc, 1000 Corey Road (877-464-0623)       | P O Box 886, Hutchinson, KS 67504-0886     | (620)665-5661                  | B | – | – | N | – | – | – | – | 10/2004 |
| Servi-Tech Laboratories Inc, 1816 East Wyatt Earp Blvd.    | P O Box 1397, Dodge City, KS 67801-1397    | (620)227-7123<br>(800)557-7509 | B | – | M | N | – | – | – | – | 10/2004 |
| Servi-Tech Laboratories Inc,* 1602 Park West Drive         | P O Box 169, Hastings, NE 68902-0169       | (402)463-3522<br>(800)468-5411 | – | L | M | N | – | – | – | – | 12/2003 |
| STL - Denver, Arvada, CO 80002-4517                        | 4955 Yarrow Street                         | (303)726-0100                  | – | L | M | N | O | – | T | U | 4/2004  |
| STL - St. Louis, 13715 Rider Trail North                   | Earth City, MO 63045-1205                  | (314)298-8566                  | – | – | – | – | – | R | – | – | 10/2004 |

\*Certified through State of Nebraska, Nebraska Health and Human Services System

Laboratory Certification Program: National EPA Web site: [www.epa.gov/safewater/faq/sco.html](http://www.epa.gov/safewater/faq/sco.html); Adjacent states: Colorado (303)692-3291 Web site: [www.cdphe.state.co.us/lr/certification/sdwlist.pdf](http://www.cdphe.state.co.us/lr/certification/sdwlist.pdf); Missouri (573) 526-3832 Web site: [www.dnr.state.mo.us/wpscd/pdwp/labs/clabs.htm](http://www.dnr.state.mo.us/wpscd/pdwp/labs/clabs.htm); Nebraska (402) 471-8426; and Oklahoma (405)702-1024 Web site: [www.deq.state.ok.us/csdnew/labcert.htm](http://www.deq.state.ok.us/csdnew/labcert.htm)

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