

WELL WATER TEST KIT



Quick Easy to Read Results at Home



TEST YOUR DRINKING WATER IN MINUTES



Other Water Contaminant Tests to Consider

The following chart provides a quick reference for a number of primary water contaminants^A, that are routinely tested in public water systems due to their set health limits. These should be among those considered for additional testing in private wells. The chart also includes some secondary^B and other water contaminants which well owners may encounter. These tend to be more noticeable (by color, taste or smell) and a nuisance, but in typical concentrations are not currently known to cause health risks. Please refer to the CDC and EPA public health information sites listed in this brochure for detailed information on exposure (dose, frequency, length of exposure, toxicity, and route), susceptibility and health effects of these contaminants.

A,B This table includes only a partial listing of potential drinking water contaminants that could exist in private water wells. Please refer to the EPA National Primary and Secondary Drinking Water Regulations for a more comprehensive listing.

- I. Water Softeners/salts (e.g. NaCl , KCl) may be used for “cation exchange” to balance hard water problems
- II. Concentrated Animal Feeding Operations (CAFOs)
- III. Tests for lead can be performed on groundwater (at the well) or on the distribution system (at the tap). In older homes with possible lead plumbing and/or corrosion issues, distribution system tests are recommended to more accurately determine lead levels.
- IV. Gross-alpha and gross-beta tests are a preliminary test for radionuclides. If samples generate a positive detect, further clarifying tests can be performed.

| CONTAMINANT | CONTAMINANT SOURCE/POSSIBLE INDICATORS |
|--|---|
| STANDARD SYSTEM TESTS | |
| Water hardness, pH ^a (e.g., Calcium, Ca ²⁺ , Magnesium, Mg ²⁺), Alkalinity, Corrosivity ^a | Natural properties of the source water or surface water intrusion/System corrosion and staining of toilet, bathtub, or sinks. Formation of scale (white-colored hard water deposits) on plumbing fixtures |
| BIOLOGICAL CONTAMINANTS, MICROORGANISMS (M) | |
| Total/Fecal Coliform ^a , <i>E. coli</i> ^a , <i>cryptosporidium</i> ^a | Surface water intrusion in areas of intensive agriculture, livestock, CAFOs ^a , construction, development, flooding or leaking septic tanks/ Water may be cloudy, taste salty or gritty; recurring gastrointestinal problems |
| Turbidity ^a , Total Dissolved Solids (TDS) ^a | |
| Iron bacteria, Iron ^a (Fe ²⁺) | Naturally occurring but more likely to be present in corroding systems where iron source is high/ Red or brown staining; slimy, stringy brown growth in toilet; low water pressure |
| Hydrogen Sulfide (H ₂ S) gas | Surface water intrusion creates a favorable environment for anaerobic bacteria, supplying decaying vegetation/Water has rotten egg smell |
| INORGANIC CHEMICALS (IOCs), METALS | |
| Arsenic (As) ^a | Naturally occurring, detected in Louisiana Alluvial Aquifers (Red and Mississippi Rivers). Runoff from orchards, industrial sources (e.g., electronics production, glass), waste sites or treated wood sites |
| Cadmium (Cd) ^a | Naturally occurring, but man-made sources include manufacturing (batteries, pigments, coatings, plating, metal production) and phosphate fertilizers |
| Chromium (Cr) ^a | Naturally occurring, other potential sources include industrial wastewater (e.g., steel, pulp mills) |
| Copper (Cu ²⁺) ^{a,b} | Naturally occurring, or caused by system corrosion/ Blue or green stains on fixtures and laundry |
| Lead (Pb) ^{a,c} | Naturally occurring or caused by system corrosion/ Older homes with lead plumbing or solder ^c ; possibly in homes located near historical highways (leaded gasoline run-off pre-1980s), industrial areas (battery production), landfills, agriculture, or gasoline storage (above or below ground) |
| Manganese (Mn ²⁺) ^a | Naturally occurring/ Brown or black stains on fixtures and laundry |
| Nitrates/Nitrites (NO ₃ ⁻ , NO ₂ ⁻) ^a | May occur naturally, but man-made sources include areas of intensive agriculture (runoff from fertilizer use), CAFOs ^a , landfills, dumps, sewage and leaking septic tanks |
| ORGANIC CHEMICALS (OCs) - *likely very rare and limited to a small area | |
| Dioxin ^{a,*} , PCBs ^{a,*} (Polychlorinated Biphenyls) | Emissions from waste incineration or combustion, landfills, chemical industrial discharge, older submersible pumps, underground waste; persistent in the environment |
| Pesticides: Herbicides (e.g., Atrazine ^a); Insecticides (e.g., DDT, organophosphates); Fungicides; Rodenticides | Nearby agricultural or residential areas, gardens, cattle or lumber (to control weeds, bugs, or other pests); may be introduced through back-flow or flooding; some are no longer used yet persist in the environment (e.g. lead arsenate, chlordane ^a) |
| Volatile Organic Chemicals (VOCs) ^{a,*} (e.g., Benzene ^a , Penta- chlorophenol ^a , Trichloro- ethane ^a , Vinyl Chloride ^a) | Sources tend to be industrial, and may include paints, solvents, gas stations, dry cleaners, industrial waste sites and buried fuel tanks. Sources may also include pesticide application |
| RADIONUCLIDES ^a | |
| Radium ^a , Uranium ^a , Radon gas | Naturally occurring from erosion of natural deposits, but in rare cases may be introduced from man-made sources. In Louisiana this would mainly include oil pits or waste ponds, drilling pipes or equipment |