



INDIVIDUAL WATER SUPPLY WELLS - FACT SHEET #3 RECOMMENDED RESIDENTIAL WATER QUALITY TESTING

Water quality testing is important for new drinking water wells in addition to periodic evaluation of existing wells. The table below lists the recommended testing parameters for new individual residential water supply wells. These tests should be performed following proper well installation and development, and prior to homeowner use. Beyond these initial tests it is recommended to test for coliform bacteria every year and to periodically re-test water quality for other well-specific constituents of concern.

All samples should be analyzed by a laboratory certified by the NYSDOH Environmental Laboratory Approval Program (ELAP) for testing potable water. A current listing of ELAP laboratories may be accessed at <http://www.wadsworth.org/labcert/elap/elap.html> or by contacting your Local Health Department (LHD).

Analysis *	Recommended MCL (1)(2)	Concerns
Coliform Bacteria	Any positive result is unsatisfactory	Indicator of possible disease causing contamination, e.g. Gastro-intestinal illness
Lead	0.015 mg/l	Brain, nerve and kidney damage (especially in children)
Nitrate	10 mg/l as N	Methemoglobinemia (“blue baby syndrome”)
Nitrite	1 mg/l as N	Methemoglobinemia (“blue baby syndrome”)
Iron	0.3 mg/l	Rust-colored staining of fixtures or clothes
Manganese	0.3 mg/l	Black staining of fixtures or clothes
Iron plus manganese	0.5 mg/l	Rusty or black staining of fixtures or clothes
Sodium	No designated limit (3)	Effects on individuals with high blood pressure
pH	No designated limit	Pipe corrosion (lead and copper), metallic-bitter taste
Hardness	No designated limit	Mineral and soap deposits, detergents are less effective
Alkalinity	No designated limit	Inhibits chlorine effectiveness, metallic-bitter taste
Turbidity	5 NTU	Cloudy, “piggybacking” of contaminants, interferes with chlorine and UV-light disinfection

- (1) **MCL means maximum contaminant level. The MCLs listed are based upon requirements for Public Water Supply systems and are also recommended for use on individual residential systems.**
- (2) **mg/l means milligram per liter (parts per million); NTU means Nephelometric Turbidity Units.**
- (3) **Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used by people on moderately restricted sodium diets.**

***Individual Residential Well Water Supply Quality Testing/HUD Mortgage Requirements (July 27,1995)**

Additional tests are recommended for naturally occurring constituents that appear on a regional basis such as: arsenic, barium, fluoride, methane, radium, radon, and uranium. Additional tests may also be appropriate for contaminants associated with potential sources such as: oil storage facilities, junkyards, gasoline stations, landfills, industry, and active or historic agricultural use. Water samples from older existing residences or residences with corrosive water (i.e., pH less than 6.5) should be tested for lead and copper.

Some LHD's may have their own residential water quality testing requirements. Contact the LHD to determine their required analyses and procedures, and to inquire about any local water quality concerns.

