

# Testing Recommendations For Residential Wells Neighboring Gas Well Development Sites

Water testing is necessary to ascertain the quality of new drinking water wells, and is further important to periodically evaluate existing well water quality. With the increase in gas well development sites in Chenango/Madison County, concerned residents in proximity to such activities may also wish to conduct testing to determine if contaminants are present in their drinking water well.

The water quality parameters listed below may be useful if measured prior to and after the commencement of such gas drilling activity to assess possible impacts. It typically is recommended to conduct sampling for basic water quality parameters and for contaminants commonly found in groundwater prior to the start of drilling to establish baseline indicators, and such analyses repeated along with testing for more specific contaminants are more likely to occur from such gas drilling activities after the drilling has been completed.

This Health Department recommends testing for total coliform, which can indicate bacteriological contamination, in addition to testing for nitrate (total approx. cost \$40), be conducted annually for anyone served by an individual water well. New residential water wells should be tested for those recommended water quality parameters listed on Individual Water Supply Wells – Fact Sheet #3 prepared by the NYS Health Department (NYSDOH) and which is available from the following website;

[http://www.health.state.ny.us/environmental/water/drinking/part5/append5b/fs3\\_water\\_quality.htm](http://www.health.state.ny.us/environmental/water/drinking/part5/append5b/fs3_water_quality.htm)

All potable water samples should only be analyzed by a laboratory properly certified by the NYSDOH Environmental Laboratory Approval Program (ELAP). A current listing of ELAP certified laboratories is available at: <http://www.wadsworth.org/labcert/elap/elap.html> or by contacting the local Health Department.

## **Basic Parameters:**

pH  
Total Dissolved Solids (TDS)  
Barium  
Chloride  
Sodium  
Sulfate

## **Common Contaminates Found in Groundwater:**

Turbidity  
Total Suspended Solids (TSS)  
Hardness  
Iron  
Hydrogen Sulfide  
Arsenic

## **Potential Gas Well Pollutants:**

Methane/Ethane  
Volatile Organic Compounds (VOC)  
Detergents (Surfactants)  
Strontium  
Calcium  
Total Oil/Grease  
Lead

**Note** that each laboratory may approach baseline testing differently depending on area served and familiarity, and costs may vary accordingly.